Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology Technical Appendix

Environmental Statement

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Approved by: Ruari Lean, Rebecca Sherwood

Signed: [redacted]

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Appendix 13.1

Ornithology Technical Appendix

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	18th April 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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1 INTRODUCTION

1. The proposed Norfolk Vanguard project will comprise offshore wind turbines, offshore converter station, inter-array cables, interconnector cables and offshore and onshore export cables taking power to an onshore converter station. The Norfolk Vanguard site comprises two distinct areas, Norfolk Vanguard East (NV East; 297km^2) and Norfolk Vanguard West (NV West; 295km^2), respectively located approximately 70km and 47km offshore at their nearest points to the coast.

2. The offshore ornithological assessment is informed using baseline site characterisation data collected by digital aerial survey methods, conducted by APEM. Further details of the survey methods, analysis of the data collected and the results obtained are provided in relevant sections of this technical report.

3. The aim of this report is to present full details of the baseline information from the site-specific surveys which have been used to undertake the offshore ornithology Environmental Impact Assessment (EIA) and Habitats Regulations Assessment (HRA).

4. Sections on aerial survey methodology (section 3) and image analysis (section 4.1) were supplied by the aerial survey contractor (APEM).

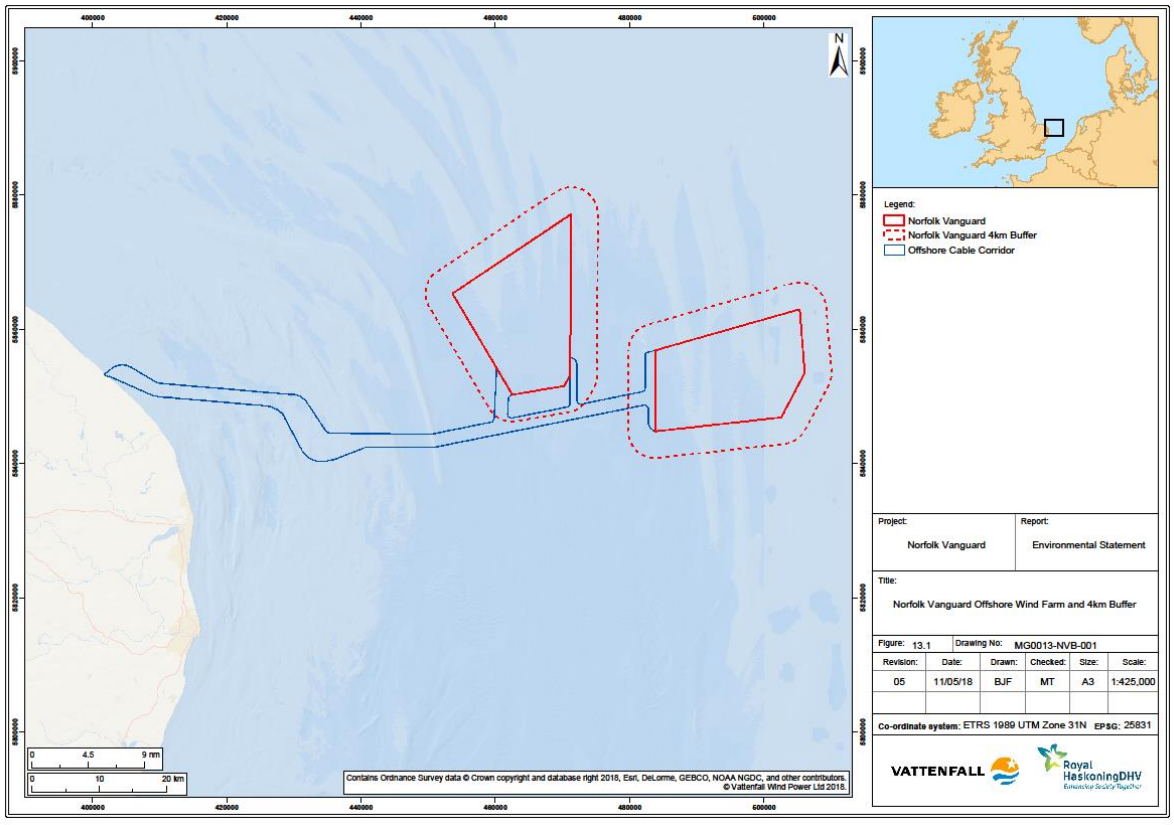


Figure 13.1. Location of the proposed Norfolk Vanguard windfarm site boundary and 4km buffer that the aerial surveys were conducted over, within the East Anglia Zone.

2 DATA SOURCES

5. APEM has undertaken monthly aerial surveys across the two areas as detailed in Table 1. The NV East surveys conducted between March 2012 and February 2014 were conducted for what was then referred to as the proposed East Anglia FOUR wind farm. This site is almost identical in extent to NV East. In total there are 32 months of data for NV East and 24 for NV West.

Table 1. Months when aerial surveys were conducted at Norfolk Vanguard. Note that NV east data collected prior to September 2015 was badged as East Anglia FOUR (the previous site in this location).

Month	East					West		
	2012	2013	2014	2015	2016	2015	2016	2017
Jan		X	X		X		X	X
Feb		X	X		X		X	X
Mar	X	X			X		X	X
Apr	X	X			X		X	X
May	X	X					X	X
Jun	X	X					X	X
Jul	X	X					X	X
Aug	X	X					X	X
Sep	X	X		X		X	X	
Oct	X	X		X		X	X	
Nov	X	X		X		X	X	
Dec	X	X		X		X	X	

3 SURVEY METHODS

6. Aerial surveys were undertaken using either Vulcan Air P68 Observer or Britten-Norman Islander twin engine survey aircraft. These surveys involved digital still image collection using a GPS-linked bespoke flight management system.

7. Survey of the NV East and NV West sites comprised High Resolution still images taken on a grid system with a resolution of 2 cm Ground Sampling Distance (GSD) to represent a high intensity sampling regime. The Survey Area incorporates the proposed NV East and NV West footprints plus a 4 km buffer surrounding each footprint.

8. Survey data comprised species, count (number of individual birds), sex (where possible), age (where possible), flight height, flight direction, position (longitude and latitude), date and time stamp of image collection.

9. Where identification to species level was not possible, reference was made to aerial data collected within the Survey Area where species were identified in order to apportion records at group level to species level (this process of apportionment is described in a later section).

3.1 Species Identification

10. There are occasions when it is not possible to identify a particular bird on the aerial survey image to species level and the image is therefore assigned to a higher level group e.g. 'small

gulls' or 'black-backed gulls'. Methods for assigning these unidentified birds to appropriate species categories are discussed in the data analysis section.

4 DATA ANALYSIS

4.1 Image Analysis

11. The images were analysed to enumerate birds to species level, where possible. Internal QA was carried out by APEM on each survey. Images were assessed in batches with a different staff member responsible for each batch. Each image containing birds and / or marine mammals was reviewed and checked by APEM's dedicated QA Manager, ensuring that 100% of birds recorded were subject to internal QA to ensure the species identification is correct. Images containing no birds and / or marine mammals were removed and kept separately for further internal QA. Of these 'blank' images, 10% were randomly selected for internal QA by a different staff member to that which initially analysed the imagery. If there was less than 90% agreement, the entire batch would be re-analysed as part of the QA procedures. Following internal QA, external QA was carried out by the British Trust for Ornithology (BTO), who provide an independent third party assessment of 10% of the birds recorded in each survey. Birds identified from the images were 'snagged' (i.e. located within the images) and categorised normally to species, but sometimes to standard JNCC categories.

4.2 Bird Abundance and Density Estimates

12. Raw data were supplied as plane GPS track logs, containing details for each image location and observation logs, containing details of all objects (seabird, marine mammal, vessel, etc.) recorded. The two datasets were merged using the image ID to obtain a single dataset. All non-bird records were removed prior to analysis. Analysis was conducted for each survey separately. Bird locations were assigned to the following sub-zones; wind farm, wind farm plus 2 km buffer and wind farm plus 4km buffer (not that each buffer width also included the wind farm data).

13. Density and abundance was estimated using design based methods, with the density estimated for the surveyed area (i.e. the sum of all the image footprints) and multiplied up to the total area to obtain an abundance estimate. This makes the assumption that the surveyed sample is representative of the unsurveyed region, thus the design of survey is important (hence 'design based').

14. Confidence intervals for each species were obtained using a bootstrap resampling method. For each survey, images were drawn randomly (with replacement) from the dataset until the same number of images as the original sample was obtained (e.g. if the survey for a particular month comprised 350 images, each resampled dataset also contained 350 images, drawn with replacement from the original dataset). This process was repeated 1,000 times and the density and abundance calculated for each resampled dataset. The upper and lower 95% confidence limits were calculated across the 1,000 samples to estimate sampling variation. The width of the confidence interval obtained using this method reflects the degree of aggregation in the species, with highly aggregated species estimated with lower precision (i.e. species observed frequently

as individuals will have a small range of estimated densities, while species recorded in occasional large groups will have a wide range of estimated densities).

15. The bootstrap resampled values were also used to obtain representative density and abundance values for each calendar month. This was achieved by combining the bootstrap samples for each month (e.g. 1,000 samples for the first January survey and 1,000 samples for the second January survey, etc.) from which the overall median and 95% confidence intervals for that month were extracted. This ensured that the values for each month were derived from all of the data available. In addition to the overall monthly medians (and confidence intervals) calculated in this manner, a mean value for each month was also calculated as the average of the individual survey estimates for that month.

16. For the displacement assessment the (typically higher) monthly mean values were used which ensured the assessment was precautionary. For the collision risk assessment the complete bootstrap sample was used for stochastic runs (see section 4.7) and the median for runs which did not include uncertainty in density. This ensured correspondence between the collision results calculated either with or without the inclusion of uncertainty in seabird density, and that all collision predictions accurately reflected the observed densities.

17. Birds were recorded as either sitting on the sea surface ('sitting') or in flight ('flying'). Analysis was conducted on each subset separately and also combined across both ('all birds'). The combined estimates have been used as the overall densities and abundances required for displacement analysis, while birds in flight have been used for the collision risk modelling.

18. All analysis and data manipulation was conducted using the R programming language (R Development Core Team 2012).

4.3 Assignment of unidentified birds to species

19. To avoid underestimating species abundance due to the omission of birds which could not be positively identified to species level, the density of each unidentified bird grouping (e.g. large gulls, small gulls, etc.) was estimated (using the methods described above) and then added proportionately to each member species of that group. The proportions were calculated from the ratios of positively identified birds in that group. This was undertaken on a survey by survey basis, using the ratio from the largest area (i.e. within the 4km buffer) to ensure the largest possible sample size for estimation.

20. The unidentified groups and the species of which they comprise are listed in Table 2.

Table 2. Bird species which could be included in relevant unidentified groups. Note that 'Black-backed gulls' were assigned to species before 'Large Gulls'.

Species	Unidentified Group
Red-throated diver	Divers
Black- throated diver	
Great northern diver	
Sabine's gull	Small gulls

Species	Unidentified Group
Kittiwake	
Black-headed gull	
Little gull	
Common gull	
Great black-backed gull	Black-backed gulls
Lesser black-backed gull	
Great black-backed gull	Large gulls
Lesser black-backed gull	
Herring gull	
Common tern	'Commic' Tern
Arctic tern	
Guillemot	Guillemot / Razorbill
Razorbill	

21. For common tern and Arctic tern no species-specific identification is possible (size and plumage features are so close that it is impossible to separate them) and as a result there is no information on which to apportion these two species. They remain grouped in the data as 'commic' tern.

4.4 Availability Bias

22. Guillemots and razorbills spend a proportion of their time foraging beneath the water surface and therefore some individuals present in a given area will not be observable in aerial images. Density and abundance estimates need to be adjusted to allow for these unobserved individuals.

23. A fixed species specific correction factor was applied to the number of each auk species recorded on the sea surface. The values used were those recommended by JNCC in its submission during the examination phase of East Anglia ONE (JNCC 2013), referred to as Method C, which stated that 24% of guillemot and 17% of razorbills are underwater at any time (these percentages do not include birds in flight).

24. Density and abundance for guillemot and razorbill are presented both with and without the application of this method, with the former being used in the assessment.

4.5 Spatial Distributions

25. Maps of the wind farm sites and bird locations are provided in Appendix 13.1 Annex 8. For species recorded in low numbers these figures plot all the observations (i.e. obtained across all surveys), while more commonly recorded species are combined by season (using the definitions in Furness 2015). Note that for the latter, where months contain overlapping seasons (e.g. breeding and migration) these have been assigned to migration, since for almost all species the wind farms are located beyond foraging range of breeding colonies. The exception to this is lesser black-backed gull for which birds breeding at colonies in East Anglia may be present. The seasons used are detailed in Table 3.

Table 3. Species specific seasonal definitions and biologically defined minimum population sizes (in brackets) have been taken from Furness (2015).

Species	Breeding	Migration-free breeding	Migration - autumn	Winter	Migration - spring	Non-breeding
Red-throated diver	Mar-Aug	May-Aug	Sep-Nov (13,277)	Dec-Jan (10,177)	Feb-Apr (13,277)	
Black-throated diver*	Apr-Aug	May-Aug				Aug-Apr
Great northern diver	-	-	Sep-Nov	Dec-Feb	Mar-May	Sep-May (200)
Fulmar	Jan-Aug	Apr-Aug	Sep-Oct (957,502)	Nov (568,736	Dec-Mar (957,502)	-
Gannet	Mar-Sep	Apr-Aug	Sep-Nov (456,298)	-	Dec-Mar (248,385)	-
Arctic skua	May-Jul	Jun-Jul	Aug-Oct (6,427)	-	Apr-May (1,227)	-
Great skua	May-Aug	May-Jul	Aug-Oct (19,556)	Nov-Feb (143)	Mar-Apr (8,485)	-
Puffin	Apr-Aug	May-Jun	Jul-Aug	Sep-Feb	Mar-Apr	Mid-Aug-Mar (231,957)
Razorbill	Apr-Jul	Apr-Jul	Aug-Oct (591,874)	Nov-Dec (218,622)	Jan-Mar (591,874)	-
Guillemot	Mar-Jul	Mar-Jun	Jul-Oct	Nov	Dec-Feb	Aug-Feb (1,617,306)
Commic tern**	May-Aug	Jun	Jul-Sep (308,841)	-	Apr-May (308,841)	-
Kittiwake	Mar-Aug	May-Jul	Aug-Dec (829,937)	-	Jan-Apr (627,816)	-
Little gull (Not included in Furness 2015)	Apr-Jul	May-Jul	-	-	-	Aug-Apr
Lesser black-backed gull	Apr-Aug	May-Jul	Aug-Oct (209,007)	Nov-Feb (39,314)	Mar-Apr (197,483)	-
Herring gull	Mar-Aug	May-Jul	Aug-Nov	Dec	Jan-Apr	Sep-Feb (466,511)
Great black-backed gull	Mar-Aug	May-Jul	Aug-Nov	Dec	Jan-Apr	Sep-Mar (91,399)

* Not included in Furness (2015). Natural England (2012) states: Breeding black-throated divers migrate to saltwater habitats from August, returning to their breeding sites from April. Birds are also seen in small numbers on eastward passage through the English Channel in April and May.

** commic tern' is used to include common terns and Arctic terns, as these species are not readily identified to species from the survey data

4.6 Flight Height

26. Where flying birds were captured in a suitable orientation, their dimensions (body length and wingspan) were estimated. Using these values the height of the bird above the sea surface was estimated by comparison with the length of museum specimens.

4.7 Collision Risk Modelling

27. Collision risk modelling (CRM) was conducted using scripted versions (in R) of the Band CRM Options 1 and 2. Following a review of their data collection and analysis methods, the aerial survey contractors advised Vattenfall that the flight height estimates were not sufficiently reliable for use in collision risk modelling. Consequently, and in agreement with Natural England, the collision mortalities used for impact assessment were those calculated using option 2 of the Band model, with flight heights obtained from the BTO generic flight height dataset (Johnston et al. 2014a,b). Option 1 collision estimates have also been calculated and are provided in this technical appendix for information.

28. Natural England advised that uncertainty in seabird density, flight height (derived from the seabird flight height data in Johnston et al. 2014a,b) and avoidance rates should be included in the collision mortality estimates. In addition, it is evident that the values for nocturnal activity used in the Band CRM for most species are a significant over-estimate (e.g. Furness et al. subm.). Therefore, uncertainty in this parameter has also been incorporated for gannet, kittiwake, lesser black-backed gull, great black-backed gull and herring gull.

29. Since uncertainty in the parameters identified above will contribute to the overall uncertainty in collision mortality the most efficient approach for estimating mortality is to run the CRM as a stochastic simulation using different, randomly generated, values for each parameter on each simulation. This permits the uncertainty in all of the parameters to be incorporated in a single set of results which can be summarised as the mean, median and upper and lower 95% confidence range.

30. In order for the stochastic outputs to be validated against their deterministic counterparts (i.e. those which can be obtained using the Band 2012 spreadsheet), the model was also run using single values for each of the parameters, set to the industry standard and Natural England advised values.

31. To undertake the multiple CRM simulations required, the equations set out in the Excel implementation of the Band (2012) model were scripted in R. The first step in running the simulations was to generate the randomised input parameters. The following sections provide technical details for how this was undertaken.

32. For each parameter slightly different approaches for generating the random values are appropriate. Seabird densities were generated during the bootstrap resampling process detailed in section 4.2. This process produced 1,000 resamples for each survey (i.e. 24 months for NV West and 32 months for NV East). The density parameter for each month used in each iteration of the CRM simulation were drawn at random from all the bootstrap samples for that month and site (i.e. for each calendar month at each site all the bootstrap resamples were pooled for that month and site, providing 2,000 samples for each month at NV West and either 2,000 (May to August) or 3,000 for NV East).

33. This approach ensured that the seabird densities for each month directly reflected the survey data. The mean collision estimate obtained using this approach corresponds to that obtained

from a deterministic collision mortality calculation using the standard 'mean of the medians (or means)' approach.

34. Randomised avoidance rates were generated from a beta distribution using the mean and SD values recommended in the SNCB response (JNCC et al. 2014) to Cook et al. (2014). The beta distribution was selected as it is bounded at zero and one (as are avoidance rates) and also produces distributions with realistic peaks and tails (e.g. compared with the 'flat' uniform distribution which generates all values within a range with an equal probability).

35. Random values for the proportion of birds at potential collision height (PCH) for use with option 2 of the CRM were also generated from the beta distribution. The BTO dataset (Johnston et al. 2014a,b) provided the median and upper and lower 95% confidence values. From these the standard deviation was calculated (as the upper or lower confidence value multiplied by 1.96 and offset from the median). As the confidence intervals obtained in this manner were slightly asymmetrical, the larger of the two SD values obtained (from the upper or lower confidence interval) was adopted for subsequent simulation.

36. Recent advice from Natural England has suggested that CRM should use the following upper and lower nocturnal activity rates of 0% and 25% for gannet and 25% and 50% for kittiwake, lesser black-backed gull, great black-backed gull and herring gull. This is a revision to the previous guidance to use only the higher of each pair of values.

37. However, for gannet, a review of evidence from tracking studies has revealed that appropriate (and still precautionary) values for the breeding season and nonbreeding season respectively are 4.3% (SE 2.7%) and 2.3% (SE 0.4%) Furness et al. (subm.). A similar review and analysis has been conducted for kittiwake which has identified values for the breeding season and nonbreeding season respectively of 20% (SE 5%) and 17% (SE 1.5%) Furness et al. (in prep.). Therefore, as these evidence based seasonal values represent a significant improvement over the previously categorical values applied these have been used in the stochastic simulations, using beta distributions defined by the mean and standard errors. For the large gulls stochastic runs used nocturnal values of either 25% or 50%, selected at random for each iteration.

38. Collision mortalities are presented as the median and confidence intervals calculated across all simulations. The median collision has been presented rather than the mean because the collision outputs are strongly influenced by the skewed distributions of seabird densities, characterised by large numbers of low estimates with occasional high ones (see Technical Appendix 13.1 Annex 3 for histograms illustrating this pattern). Appendix 13.1 Annex 6 presents boxplots of monthly collision estimates including all sources of uncertainty assessed which illustrate the skew in the collision estimates.

39. To obtain robust stochastic CRM outputs 5,000 simulations for both NV East and NV west were conducted with the following combinations of parameter uncertainty:

    a. Uncertainty in seabird density, avoidance rate, flight height (Option 2 only), nocturnal activity (gannet, kittiwake, large gulls only);

b. Uncertainty in seabird density only;

c. Uncertainty in avoidance rate only;

d. Uncertainty in flight height (Option 2) only;

e. Uncertainty in nocturnal activity only;

f. No uncertainty in any parameter (i.e. a deterministic run)

40. The final deterministic run was included to permit comparison between the stochastic outputs and those typically obtained using the excel version of the Band model.

41. The input parameters for the collision modelling are provided in Appendix 13.1 Annex 3. The outputs are presented in full in Appendix 13.1 Annexes 4 (East) and 5 (West) and graphical outputs in Annex 6.

5 ORNITHOLOGY BASELINE

5.1 Overview of Bird Species Recorded

42. The following bird species (Table 4) were recorded during surveys within the 4km buffers of either NV East or NV west.

Table 4. Bird species recorded during surveys of the Norfolk Vanguard site between March 2012 and August 2018. Groups in italics were those that could not be identified to species level. These have been attributed to species for analysis (see text for methods).

Species	**Site**	
	NV East	**NV West**
Red-breasted Merganser	X	
Common Scoter		X
Red-throated Diver	X	X
Black-throated Diver	X	
Great Northern Diver	X	
Diver Species	*X*	
Fulmar	X	X
Gannet	X	X
Cormorant	X	X
Arctic Skua	X	X
Great Skua	X	X
Pomarine Skua	X	
Puffin	X	
Razorbill	X	X
Little Auk	X	
Guillemot	X	X
Guillemot/Razorbill	*X*	*X*

Species	Site	
	NV East	NV West
Black Tern	X	
Sandwich Tern	X	X
Commic Tern	X	X
Little Tern	X	
Tern Species		*X*
Kittiwake	X	X
Black-headed Gull	X	X
Little Gull	X	X
Common Gull	X	X
Small Gull Species	*X*	*X*
Lesser Black-backed Gull	X	X
Herring Gull	X	X
Great Black-backed Gull	X	X
Black-backed Gull Species		X
Large Gull Species	*X*	*X*

43. This Technical Appendix has eight annexes containing additional data and analyses.

44. Appendix 13.1 Annex 1 provides tables of the median, mean and 95% confidence intervals for seabird density and abundance calculated for each calendar month for each species recorded. These are presented for NV West and NV East separately. For each species density and abundance are presented for all individuals observed (i.e. in flight and on the sea) and also for birds in flight only and on the sea only. For guillemot and razorbill additional tables are provided with the inclusion of adjustment for availability bias (birds on the sea multiplied by species-specific correction factors) and for species which were include in higher level groupings (e.g. large gulls, terns, etc.) the unidentified individuals were added to the relevant species using the proportions of identified species.

45. Appendix 13.1 Annex 2 provides tables of density and abundance for each of the 56 for NV East (incorporating the surveys of the former East Anglia FOUR site) and NV West. For each species density and abundance are presented for all individuals observed (in flight and on the sea), in flight only and on the sea only. For guillemot and razorbill additional tables are provided with the inclusion of adjustment for availability bias (birds on the sea multiplied by a correction factor) and for species which were include in higher level groupings (e.g. large gulls, terns, etc.) the unidentified individuals were added to the relevant species using the proportions of identified species.

46. Appendix 13.1 Annex 3 provides tables of the input parameters used for the collision risk modelling and histograms of the bootstrapped flight densities.

47. Appendix 13.1 Annexes 4 and 5 provide the monthly collision mortality predictions (including uncertainty and using options 1 and 2) for NV East and NV West respectively. For each site

collisions were calculated on the basis that all turbines would be installed on that site (i.e. all 1800MW). Thus, these two sets of outputs capture the range of worst case development scenarios for collision risk (i.e. any split across the two developments would produce a collision estimate between the two site values). All nine turbine options are included (9, 10, 11, 12, 13, 14, 15, 17, 20 MW). Of these the 9MW turbine is the worst case and the 15MW is the base case.

48. Appendix 13.1 Annex 6 provides boxplots of the worst case collision mortality (for the 9MW turbine) in each month for each site obtained using option 2 and modelled with uncertainty in seabird densities, avoidance rates, flight heights and nocturnal activity. These outputs correspond to those in tables 10, 28, 46, 64, 82 and 100 in Appendix 13.1 Annexes 4 and 5.

49. Appendix 13.1 Annex 7 provides graphs of population abundance on both NV East and NV West, with and without the 4km buffer with design based confidence intervals. These are for all birds observed (i.e. both in flight and on the water) and include assignment of unidentified birds (see above for details) and for availability bias in razorbill and guillemot.

50. Appendix 13.1 Annex 8 provides additional information on lesser black-backed gull foraging ranges, flight directions and age ratios.

51. Appendix 13.1 Annex 9 provides maps illustrating where birds were recorded on both NV East and NV West during all aerial surveys combined. It should be noted that since the number of surveys was higher across NV East (32 surveys) than NV West (24 surveys), all else being equal, the number of observations (and hence dots on these maps) will be up to 33% higher on the NV East figures than for NV West. Thus caution is required when comparing the two sites and the figures should not be considered to provide measures of relative abundance across the two sites.

5.2 Summary species accounts

5.2.1 Red-breasted merganser

52. Red-breasted mergansers were only recorded in the NV East 4km buffer in October (Annex 1 Table 1.1a.) The estimated mean peak wind farm and 4km buffer population was 6 individuals.

5.2.2 Common scoter

53. Common scoters were recorded in February in the NV West 4km buffer only (Annex 1 Table 26.1). The estimated mean peak wind farm and 4km buffer population was 6 individuals.

5.2.3 Red-throated diver

54. Red-throated divers were recorded between November and May on NV East (Annex 1 Table 2.1a) and November and May on NV West (Annex 1 Table 27.1a). The estimated NV East and NV West mean peak wind farm population estimates, including unidentified birds, were 77 (March,) and 141 (January), respectively. Figure 13.9.1 provides locations for all diver species recorded.

5.2.4 Black-throated diver

55. Black-throated divers were recorded in low numbers in March and April on NV East only (Annex 1 Table 3.1a). The estimated NV East mean peak wind farm population estimate, including unidentified birds, was 18 (March). Figure 13.9.1 provides locations for all diver species recorded.

5.2.5 Great Northern Diver

56. Great Northern divers were recorded on the NV East site only in March, April and December (Annex 1 Table 4.1a). The estimated NV East mean peak wind farm population, including unidentified birds, was 42 (March). Figure 13.9.1 provides locations for all diver species recorded.

5.2.6 Fulmar

57. Fulmars were recorded in all months on both NV East (Annex 1 Table 5.1a) and NV West (Annex 1 Table 28.1a). The estimated NV East and NV West mean peak wind farm populations were 362 (September) and 590 (October) respectively. Figure 13.9.2 provides locations for all fulmars recorded.

5.2.7 Gannet

58. Gannets were recorded in all months on NV East (Annex 1 Table 6.1a) and all months on NV West (Table 29.1a). The estimated NV East and NV West mean peak wind farm populations were 1,135 (November) and 531 (November) respectively. Figure 13.9.3 provides locations for all gannets recorded.

5.2.8 Cormorant

59. Cormorant were recorded in April and November on the NV East site (Annex 1 Table 7.1a) and December on the NV West site (Table 30.1a). The estimated NV East and NV West mean peak wind farm populations were 12 (April) and 9 (December) respectively.

5.2.9 Arctic skua

60. Arctic skuas were recorded in very low numbers in August and September on NV East (Annex 1 Table 9.1a) and September on NV West (Annex 1 Table 32.1a). The estimated NV East and NV West mean peak wind farm populations were 15 (September) and 0, respectively (although an estimate of 6 was obtained for the NV West 4k buffer in September). Figure 13.9.4 provides locations for all skua species recorded.

5.2.10 Great skua

61. Great skua were recorded on both NV East and NV West in September and October and in February on NV West and March on NV East (Annex 1 Tables 10.1a and 33.1a respectively). The estimated NV East and NV West mean peak wind farm populations were 15 (September) and 9 (September) respectively. Figure 13.9.4 provides locations for all skua species recorded.

5.2.11 Puffin

62. Puffins were recorded in all months except June on NV East and in July only on NV West (Annex 1 Table 11.1a and Table 34.1a). The estimated NV East mean peak wind farm population was 86 individuals (November) while the mean peak in the NV West 4km buffer was 6. Figure 13.9.5 provides locations for all puffins recorded.

5.2.12 Razorbill

63. Razorbills were recorded in all months on both NV East (Table 12.1a) and NV West (Table 35.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds and adjusting for availability bias, were 526 (March) and 239 (September), respectively. Figure 13.9.6 provides locations for all razorbills recorded and Figure 13.9.8 provides locations for all razorbills and guillemots which could not be assigned to species.

5.2.13 Little auk

64. Little auks were recorded in January and November on NV East only (Annex 1 Table 13.1a). The estimated NV East mean peak wind farm population was 48 (November).

5.2.14 Guillemot

65. Guillemots were recorded in all months on both NV East (Annex 1 Table 14.1a) and NV West (Annex 1 Table 36.1a). The estimated NV East and NV west mean peak wind farm populations, including unidentified birds and adjusting for availability bias, were 1,649 (March) and 1,699 (January), respectively. Figure 13.9.7 provides locations for all guillemots recorded and Figure 13.9.8 provides locations for all razorbills and guillemots which could not be assigned to species.

5.2.15 Black tern

66. Black terns were recorded in September on NV East only (Annex 1 Table 16.1a). The estimated NV East mean peak wind farm population was 3 individuals. Figure 13.9.9 provides locations for all tern species recorded.

5.2.16 Sandwich tern

67. Sandwich terns were recorded in September on NV east and in April and June on NV West (Annex 1 Table 17.1a and Table 37.1a). The estimated NV East and NV West mean peak wind farm populations were 3 and 0 individuals respectively (although the mean peak in the NV West 2km buffer was 14). Figure 13.9.9 provides locations for all tern species recorded.

5.2.17 Commic tern

68. Commic terns (common tern and Arctic tern combined due to the difficulty of distinguishing between these two species) were recorded in April, May and September on NV East (Annex 1 Table 18.1a) and April, May, July and August on NV West (Annex 1 Table 38.1a). The estimated NV East and NV West mean peak wind farm populations were 122 (May) and 88 (August) respectively. Figure 13.9.9 provides locations for all tern species recorded.

5.2.18 Kittiwake

69. Kittiwakes were recorded in all months on both NV East (Annex 1 Table 19.1a) and NV West (Table 39.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 841 (January) and 189 (November), respectively. Figure 13.9.10 provides locations for all kittiwakes recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

5.2.19 Black-headed gull

70. Black-headed gulls were recorded in low numbers in January, March, May, July, October and November on NV East (Annex 1 Table 20.1a) and January, February, March, April, July and October on NV West (Annex 1 Table 40.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 15 (July) and 15 (October), respectively. Figure 13.9.11 provides locations for all black-headed gulls recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

5.2.20 Little gull

71. Little gulls were recorded in January, February, May, August, September, October and November on NV East (Annex 1 Table 21.1a) and September and November on NV West (Annex 1 Table 41.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 62 (August) and 18 (November), respectively. Figure 13.9.11 provides locations for all little gulls recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

5.2.21 Common gull

72. Common gulls were recorded in January, February, March, August, October, November and December on NV East (Annex 1 Table 22.1a) and February, March, April, July, August, September, October, November and December on NV West (Annex 1 Table 42.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 15 (January) and 50 (November), respectively. Figure 13.9.11 provides locations for all common gulls recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

5.2.22 Lesser black-backed gull

73. Lesser black-backed gulls were recorded in all months except June on NV East (Annex 1 Table 23.1a) and all months except December on NV West (Table 43.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 98 (November) and 109 (September), respectively. Figure 13.9.12 provides locations for all lesser black-backed gulls recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

5.2.23 Herring gull

74. Herring gulls were recorded on NV East in all months except June (Annex 1 Table 24.1a) and in all months on NV West (Annex 1 Table 44.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 202 (January) and 65 (August), respectively. Figure 13.9.13 provides locations for all herring gulls recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

5.2.24 Great black-backed gull

75. Great black-backed gulls were recorded in all months except June on both NV East (Annex 1 Table 25.1a) NV West (Annex 1 Table 45.1a). The estimated NV East and NV West mean peak wind farm populations, including unidentified birds, were 437 (January) and 192 (November), respectively. Figure 13.9.14 provides locations for all great black-backed gulls recorded and Figure 13.9.15 provides locations for all unidentified gulls recorded.

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Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 1

Monthly seabird density and abundance

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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1 INTRODUCTION

1. This appendix provides tables of seabird density and abundance in each calendar month for each species recorded on NV East and NV West.

2. The first set of tables (1.1 to 25.3) provide density and abundance estimates for species recorded on the NV East site and 4km buffer. These have been derived using the 32 surveyed months for the former East Anglia FOUR site (24 months: March 2012 – February 2014) and the NV East site (8 months: September 2015 – April 2016).

3. The second set of tables (26.1 to 45.3) provide density and abundance estimates for species recorded on the NV West site, derived from 24 months of survey (September 2015 – August 2017).

4. For each species at each site the tables follow a sequence of #.1 all bird recorded, #.2 birds recorded in flight, #.3 birds recorded on the sea surface. For each table number there is a matched pair (a and b) providing abundance and density respectively.

5. A key to the table numbering is provided in Table A1.

6. Monthly densities and abundances are summarised as the median, mean and 95% confidence range, derived from 1,000 nonparametric bootstrap samples. The median and confidence intervals were calculated by pooling all the bootstrap samples for each month. Thus, for NV West these have been calculated from 2,000 samples in each month, while for NV East these have been calculated from 2,000 samples in May to August and 3,000 samples for all other months. The mean was calculated as the average of the individual monthly median values (i.e. across two or three estimates, dependent on the site and month data availability). The median is considered to be the more robust metric for assessment than the mean, as this is much less affected by the skewed nature of the observations.

7. For species groups which include unidentified individuals (e.g. large gulls, auks, etc.) these have been added to the contributory species (e.g. large gulls comprise herring gull, lesser black-backed gull and great black-backed gull) on the basis of the proportions of positively identified individuals in the same survey. For example, if a survey included individuals categorised as large gulls, and 35 positively identified herring gulls, 10 positively identified lesser black-backed gulls and 5 positively identified great black-backed gulls, then 70%, 20% and 10% of the large gulls would be assigned to each species respectively.

8. For guillemot and razorbill adjustment was made to account for availability bias, with birds recorded on the sea multiplied by a species-specific correction factor to account for individuals expected to be underwater when the image was taken. The values used were those advised by JNCC[1]; 1.316 and 1.204 for guillemot and razorbill respectively, to account for estimates that 24% and 17% of these species are underwater at any given time.

[1] Allen, S. (2013). JNCC expert statement on ornithological issues for written representations in respect of East Anglia One offshore windfarm. 30 July 2013.

Table A1. Key to species density and abundance tables. Each table is provided as 'a' and 'b' for abundance and density respectively.

Species	**NV East**			**NV west**		
	All birds	**In Flight**	**On Sea**	**All birds**	**In Flight**	**On Sea**
Common scoter	N/A			26.1	26.2	26.3
Red-breasted merganser	1.1	1.2	1.3	N/A		
Red-throated diver	2.1	2.2	2.3	27.1	27.2	27.3
Black-throated diver	3.1	3.2	3.3	N/A		
Great northern diver	4.1	4.2	4.3	N/A		
Fulmar	5.1	5.2	5.3	28.1	28.2	28.3
Gannet	6.1	6.2	6.3	29.1	29.2	29.3
Cormorant	7.1	7.2	7.3	30.1	30.2	30.3
Pomarine skua	8.1	8.2	8.3	31.1	31.2	31.3
Arctic skua	9.1	9.2	9.3	32.1	32.2	32.3
Great skua	10.1	10.2	10.3	33.1	33.2	33.3
Puffin	11.1	11.2	11.3	34.1	34.2	34.3
Razorbill	12.1	12.2	12.3	35.1	35.2	35.3
Little auk	13.1	13.2	13.3	N/A		
Guillemot	14.1	14.2	14.3	36.1	36.2	36.3
Little tern	15.1	15.2	15.3	N/A		
Black tern	16.1	16.2	16.3	N/A		
Sandwich tern	17.1	17.2	17.3	37.1	37.2	37.3
Commic tern	18.1	18.2	18.3	38.1	38.2	38.3
Kittiwake	19.1	19.2	19.3	39.1	39.2	39.3
Black-headed gull	20.1	20.2	20.3	40.1	40.2	40.3
Little gull	21.1	21.2	21.3	41.1	41.2	41.3
Common gull	22.1	22.2	22.3	42.1	42.2	42.3
Lesser black-backed gull	23.1	23.2	23.3	43.1	43.2	43.3
Herring gull	24.1	24.2	24.3	44.1	44.2	44.3
Great black-backed gull	25.1	25.2	25.3	45.1	45.2	45.3

Table 1.1a. Norfolk Vanguard East. Red-breasted Merganser design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	6.28	0-21.21
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 1.1b. Norfolk Vanguard East. Red-breasted Merganser design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.01	0-0.03
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 1.2a. Norfolk Vanguard East. Red-breasted Merganser design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	6.28	0-20.95
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 1.2b. Norfolk Vanguard East. Red-breasted Merganser design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.01	0-0.03
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 1.3a. Norfolk Vanguard East. Red-breasted Merganser design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 1.3b. Norfolk Vanguard East. Red-breasted Merganser design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 2.1a. Norfolk Vanguard East. Red-throated Diver design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	11.55	17.83	0-71.39	11.6	18.0	0-73.71	11.5	18.85	0-75.07
Feb	0.00	2.97	0-34.32	0.0	4.5	0-23.01	0.0	6.28	0-23.43
Mar	9.25	77.26	0-290.61	38.3	90.0	0-302.83	64.9	119.40	0-376.94
Apr	9.73	17.83	0-73.88	10.3	27.0	0-101.83	21.2	43.99	0-146.44
May	0.00	29.71	0-115.43	0.0	27.0	0-114.54	0.0	37.71	0-134.24
Jun	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Sep	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Oct	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Nov	17.36	26.74	0-100.73	35.1	45.0	0-111.46	44.2	50.27	0-112.71
Dec	0.00	2.97	0-30.75	10.6	13.5	0-52.83	22.9	25.14	0-83.44

Table 2.1b. Norfolk Vanguard East. Red-throated Diver design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.04	0.06	0-0.24	0.03	0.04	0-0.16	0.02	0.03	0-0.12
Feb	0.00	0.01	0-0.12	0.00	0.01	0-0.05	0.00	0.01	0-0.04
Mar	0.03	0.26	0-0.98	0.09	0.20	0-0.67	0.10	0.19	0-0.6
Apr	0.03	0.06	0-0.25	0.02	0.06	0-0.23	0.03	0.07	0-0.23
May	0.00	0.10	0-0.39	0.00	0.06	0-0.25	0.00	0.06	0-0.21
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.06	0.09	0-0.34	0.08	0.10	0-0.25	0.07	0.08	0-0.18
Dec	0.00	0.01	0-0.1	0.02	0.03	0-0.12	0.04	0.04	0-0.13

Table 2.2a. Norfolk Vanguard East. Red-throated Diver design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	2.97	0-35.31	0	4.5	0-35.9	0	6.28	0-36.22
Apr	0	0.00	0-0	0	0.0	0-0	0	6.28	0-31.83
May	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	11.89	0-64.1	0	13.5	0-65.02	0	12.57	0-65.75
Dec	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0

Table 2.2b. Norfolk Vanguard East. Red-throated Diver design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.01	0-0.12	0	0.01	0-0.08	0	0.01	0-0.06
Apr	0	0.00	0-0	0	0.00	0-0	0	0.01	0-0.05
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.04	0-0.22	0	0.03	0-0.14	0	0.02	0-0.1
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 2.3a. Norfolk Vanguard East. Red-throated Diver design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	11.55	17.83	0-71.39	11.6	18.0	0-73.71	11.5	18.85	0-75.07
Feb	0.00	2.97	0-23.17	0.0	4.5	0-23.01	0.0	6.28	0-34.71
Mar	9.25	71.31	0-281.57	38.3	90.0	0-296.08	64.9	119.40	0-359.5
Apr	9.73	17.83	0-69.67	10.3	27.0	0-105.84	10.6	37.71	0-148.26
May	0.00	29.71	0-115.43	0.0	27.0	0-114.54	0.0	37.71	0-133.77
Jun	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Sep	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Oct	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Nov	9.16	14.86	0-54.95	27.9	31.5	0-74.31	34.1	37.71	0-79.57
Dec	0.00	2.97	0-30.75	10.6	13.5	0-63.4	23.8	25.14	0-83.44

Table 2.3b. Norfolk Vanguard East. Red-throated Diver design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.04	0.06	0-0.24	0.03	0.04	0-0.16	0.02	0.03	0-0.12
Feb	0.00	0.01	0-0.08	0.00	0.01	0-0.05	0.00	0.01	0-0.06
Mar	0.03	0.24	0-0.95	0.09	0.20	0-0.66	0.10	0.19	0-0.57
Apr	0.03	0.06	0-0.23	0.02	0.06	0-0.24	0.02	0.06	0-0.24
May	0.00	0.10	0-0.39	0.00	0.06	0-0.25	0.00	0.06	0-0.21
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.03	0.05	0-0.18	0.06	0.07	0-0.17	0.05	0.06	0-0.13
Dec	0.00	0.01	0-0.1	0.02	0.03	0-0.14	0.04	0.04	0-0.13

Table 3.1a. Norfolk Vanguard East. Black-throated Diver design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Feb	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Mar	0	17.8	0-95.87	0	22.5	0-101.25	0	25.1	0-119.25
Apr	0	11.9	0-56.4	0	18.0	0-78.02	0	18.9	0-79.09
May	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Jun	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Jul	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Aug	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Sep	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Oct	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Nov	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0
Dec	0	0.0	0-0	0	0.0	0-0	0	0.0	0-0

Table 3.1b. Norfolk Vanguard East. Black-throated Diver design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.06	0-0.32	0	0.05	0-0.22	0	0.04	0-0.19
Apr	0	0.04	0-0.19	0	0.04	0-0.17	0	0.03	0-0.13
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 3.2a. Norfolk Vanguard East. Black-throated Diver design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 3.2b. Norfolk Vanguard East. Black-throated Diver design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 3.3a. Norfolk Vanguard East. Black-throated Diver design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Feb	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Mar	0	17.8	0-94.12	0	18	0-99.66	0	25.1	0-116.44
Apr	0	11.9	0-58.6	0	18	0-80.39	0	18.9	0-79.99
May	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Jun	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Jul	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Aug	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Sep	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Oct	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Nov	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Dec	0	0.0	0-0	0	0	0-0	0	0.0	0-0

Table 3.3b. Norfolk Vanguard East. Black-throated Diver design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.06	0-0.32	0	0.04	0-0.22	0	0.04	0-0.19
Apr	0	0.04	0-0.2	0	0.04	0-0.18	0	0.03	0-0.13
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 4.1a. Norfolk Vanguard East. Great Northern Diver design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	41.60	0-182.54	0	63.0	0-249.95	13	100.55	0-372.22
Apr	0	2.97	0-27.12	0	4.5	0-31.5	0	6.28	0-32.23
May	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Dec	0	2.97	0-30.75	0	4.5	0-31.7	0	6.28	0-34.29

Table 4.1b. Norfolk Vanguard East. Great Northern Diver design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0.14	0-0.61	0	0.14	0-0.56	0.02	0.16	0-0.59
Apr	0	0.01	0-0.09	0	0.01	0-0.07	0.00	0.01	0-0.05
May	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Dec	0	0.01	0-0.1	0	0.01	0-0.07	0.00	0.01	0-0.05

Table 4.2a. Norfolk Vanguard East. Great Northern Diver design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 4.2b. Norfolk Vanguard East. Great Northern Diver design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 4.3a. Norfolk Vanguard East. Great Northern Diver design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	41.60	0-179.28	0	63.0	0-249.95	13	100.55	0-369.25
Apr	0	2.97	0-27.12	0	4.5	0-32.56	0	6.28	0-33.28
May	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Dec	0	2.97	0-30.75	0	4.5	0-21.4	0	6.28	0-34.29

Table 4.3b. Norfolk Vanguard East. Great Northern Diver design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0.14	0-0.6	0	0.14	0-0.56	0.02	0.16	0-0.59
Apr	0	0.01	0-0.09	0	0.01	0-0.07	0.00	0.01	0-0.05
May	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Dec	0	0.01	0-0.1	0	0.01	0-0.05	0.00	0.01	0-0.05

Table 5.1a. Norfolk Vanguard East. Fulmar design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	28.1	71.3	0-234.58	27.7	81.0	0-273.78	46.1	107	0-321.71
Feb	34.3	35.7	0-83.88	102.0	99.0	0-241.58	150.4	132	0-266.12
Mar	46.2	53.5	0-142.53	59.8	94.5	11.97-268.33	75.1	119	18.79-311.35
Apr	17.4	127.8	0-442.86	10.3	157.6	0-545.31	31.8	352	0-1131.21
May	292.7	291.2	57.72-554.12	553.0	549.3	152.72-981.33	649.2	672	191.09-1206.83
Jun	38.8	130.7	0-372.19	83.5	180.1	0-485.71	172.8	264	0-669.7
Jul	42.0	71.3	0-195.84	78.0	153.1	0-403.3	84.9	151	0-401.25
Aug	184.2	213.9	27.04-452.36	247.5	288.1	53.4-575.77	402.4	415	116.81-773.86
Sep	445.4	362.5	49.22-644.84	635.5	513.2	66.18-915.58	863.3	698	124.49-1210.85
Oct	113.9	124.8	27.31-264.26	128.6	180.1	39.57-407.34	136.2	220	62.86-519.1
Nov	82.4	83.2	0-193.69	139.3	121.6	8.77-260.08	216.0	195	8.84-461.02
Dec	46.8	89.1	9.11-266.53	193.1	180.1	11.84-369.84	251.5	233	35.76-468.63

Table 5.1b. Norfolk Vanguard East. Fulmar design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.09	0.24	0-0.79	0.06	0.18	0-0.61	0.07	0.17	0-0.51
Feb	0.12	0.12	0-0.28	0.23	0.22	0-0.54	0.24	0.21	0-0.42
Mar	0.16	0.18	0-0.48	0.13	0.21	0.03-0.6	0.12	0.19	0.03-0.5
Apr	0.06	0.43	0-1.49	0.02	0.35	0-1.21	0.05	0.56	0-1.8
May	0.99	0.98	0.19-1.86	1.23	1.22	0.34-2.18	1.03	1.07	0.3-1.92
Jun	0.13	0.44	0-1.25	0.19	0.40	0-1.08	0.27	0.42	0-1.07
Jul	0.14	0.24	0-0.66	0.17	0.34	0-0.9	0.14	0.24	0-0.64
Aug	0.62	0.72	0.09-1.52	0.55	0.64	0.12-1.28	0.64	0.66	0.19-1.23
Sep	1.50	1.22	0.17-2.17	1.41	1.14	0.15-2.03	1.37	1.11	0.2-1.93
Oct	0.38	0.42	0.09-0.89	0.29	0.40	0.09-0.9	0.22	0.35	0.1-0.83
Nov	0.28	0.28	0-0.65	0.31	0.27	0.02-0.58	0.34	0.31	0.01-0.73
Dec	0.16	0.30	0.03-0.9	0.43	0.40	0.03-0.82	0.40	0.37	0.06-0.75

Table 5.2a. Norfolk Vanguard East. Fulmar design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	23.10	38.63	0-122.39	23.09	45.0	0-157.95	28.3	50.27	0-171.58
Feb	11.44	20.80	0-74.56	37.09	36.0	0-103.53	57.9	56.56	0-159.68
Mar	23.54	29.71	0-103.66	35.90	54.0	0-178.88	36.2	56.56	0-207.57
Apr	9.73	26.74	0-110.72	10.27	31.5	0-129.4	21.2	62.84	0-207.39
May	84.11	104.00	0-257.27	176.01	189.1	19.09-390.43	235.3	251.37	19.11-533.02
Jun	0.00	47.54	0-155.08	7.59	67.5	0-212.5	44.6	94.27	0-267.88
Jul	0.00	5.94	0-29.14	0.00	9.0	0-36.59	0.0	6.28	0-29.54
Aug	67.60	71.31	13.52-160.21	69.49	76.5	0-168.76	90.8	100.55	12.98-206.36
Sep	31.08	44.57	0-128.94	47.07	63.0	0-183.12	62.9	94.27	8.3-246.65
Oct	9.11	14.86	0-54.67	14.32	18.0	0-64.8	14.3	31.42	0-113.26
Nov	48.42	47.54	0-119.05	52.64	58.5	8.77-133.53	103.3	100.55	8.84-256.12
Dec	36.45	47.54	0-133.27	91.97	85.5	0-221.9	100.9	113.12	0-285.75

Table 5.2b. Norfolk Vanguard East. Fulmar design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.08	0.13	0-0.41	0.05	0.10	0-0.35	0.05	0.08	0-0.27
Feb	0.04	0.07	0-0.25	0.08	0.08	0-0.23	0.09	0.09	0-0.25
Mar	0.08	0.10	0-0.35	0.08	0.12	0-0.4	0.06	0.09	0-0.33
Apr	0.03	0.09	0-0.37	0.02	0.07	0-0.29	0.03	0.10	0-0.33
May	0.28	0.35	0-0.87	0.39	0.42	0.04-0.87	0.37	0.40	0.03-0.85
Jun	0.00	0.16	0-0.52	0.02	0.15	0-0.47	0.07	0.15	0-0.43
Jul	0.00	0.02	0-0.1	0.00	0.02	0-0.08	0.00	0.01	0-0.05
Aug	0.23	0.24	0.05-0.54	0.15	0.17	0-0.37	0.14	0.16	0.02-0.33
Sep	0.10	0.15	0-0.43	0.10	0.14	0-0.41	0.10	0.15	0.01-0.39
Oct	0.03	0.05	0-0.18	0.03	0.04	0-0.14	0.02	0.05	0-0.18
Nov	0.16	0.16	0-0.4	0.12	0.13	0.02-0.3	0.16	0.16	0.01-0.41
Dec	0.12	0.16	0-0.45	0.20	0.19	0-0.49	0.16	0.18	0-0.45

Table 5.3a. Norfolk Vanguard East. Fulmar design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	11.55	35.7	0-132.59	11.55	36.0	0-137.16	23.0	50.3	0-182.3
Feb	10.19	14.9	0-68.64	55.64	58.5	0-172.55	75.1	75.4	0-173.56
Mar	18.50	23.8	0-77.75	37.28	40.5	0-102.22	51.9	56.6	0-142.7
Apr	8.69	101.0	0-359.83	8.74	126.1	0-452.88	17.6	289.1	0-970.95
May	192.39	187.2	38.48-346.32	360.40	360.2	95.45-660.73	421.4	421.1	133.77-744.21
Jun	15.51	86.2	0-263.63	37.95	112.5	0-333.93	52.1	169.7	0-461.35
Jul	6.99	62.4	0-195.84	55.63	144.1	0-403.3	55.3	144.5	0-401.25
Aug	115.34	139.7	0-339.27	176.11	211.6	26.7-456.64	310.5	320.5	77.87-609.02
Sep	375.10	320.9	32.82-613.76	572.74	450.2	49.63-801.13	777.9	609.6	91.29-1020.25
Oct	99.70	112.9	27.31-227.81	114.58	162.1	39.57-370.31	128.7	188.5	62.86-434.15
Nov	32.28	32.7	0-112.99	66.76	63.0	0-166.91	103.3	94.3	0-256.12
Dec	23.39	41.6	0-153.77	94.76	90.0	11.84-190.2	125.7	119.4	23.84-228.6

Table 5.3b. Norfolk Vanguard East. Fulmar design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.04	0.12	0-0.45	0.03	0.08	0-0.3	0.04	0.08	0-0.29
Feb	0.03	0.05	0-0.23	0.12	0.13	0-0.38	0.12	0.12	0-0.28
Mar	0.06	0.08	0-0.26	0.08	0.09	0-0.23	0.08	0.09	0-0.23
Apr	0.03	0.34	0-1.21	0.02	0.28	0-1.01	0.03	0.46	0-1.55
May	0.65	0.63	0.13-1.17	0.80	0.80	0.21-1.47	0.67	0.67	0.21-1.18
Jun	0.05	0.29	0-0.89	0.08	0.25	0-0.74	0.08	0.27	0-0.73
Jul	0.02	0.21	0-0.66	0.12	0.32	0-0.9	0.09	0.23	0-0.64
Aug	0.39	0.47	0-1.14	0.39	0.47	0.06-1.01	0.49	0.51	0.12-0.97
Sep	1.26	1.08	0.11-2.07	1.27	1.00	0.11-1.78	1.24	0.97	0.15-1.62
Oct	0.34	0.38	0.09-0.77	0.25	0.36	0.09-0.82	0.20	0.30	0.1-0.69
Nov	0.11	0.11	0-0.38	0.15	0.14	0-0.37	0.16	0.15	0-0.41
Dec	0.08	0.14	0-0.52	0.21	0.20	0.03-0.42	0.20	0.19	0.04-0.36

Table 6.1a. Norfolk Vanguard East. Gannet design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	10.20	20.80	0-71.39	27.7	31.5	0-84.24	37.7	44.0	0-117.96
Feb	11.44	17.83	0-57.2	34.5	36.0	0-92.73	90.1	100.5	23.14-225.42
Mar	12.96	98.06	0-342.23	12.8	162.1	0-568.49	13.0	364.5	0-1230.44
Apr	9.73	41.60	0-156.85	71.9	81.0	0-221.82	329.9	257.7	0-519.92
May	4.95	44.57	0-138.53	10.0	54.0	0-170.19	60.3	75.4	0-191.08
Jun	53.50	71.31	0-201.6	73.8	85.5	0-212.5	89.3	100.5	10.47-253
Jul	0.00	2.97	0-21.85	0.0	22.5	0-73.18	29.5	31.4	0-88.61
Aug	75.39	77.26	27.04-141.36	148.9	162.1	26.7-327.59	207.7	226.2	64.89-433.36
Sep	139.47	124.80	23.31-238.12	182.0	175.6	47.07-331.9	240.7	232.5	70.72-414.83
Oct	54.63	202.05	9.1-619.64	71.6	297.1	21.48-888.75	115.2	370.8	35.75-1066.51
Nov	807.20	1135.06	613.56-2130.61	1374.7	1629.8	815.92-2854.19	1662.5	2067.6	1140.47-3568.62
Dec	455.62	341.71	0-637.87	556.7	418.7	0-772.54	687.9	515.3	11.43-908.02

Table 6.1b. Norfolk Vanguard East. Gannet design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.03	0.07	0-0.24	0.06	0.07	0-0.19	0.06	0.07	0-0.19
Feb	0.04	0.06	0-0.19	0.08	0.08	0-0.21	0.14	0.16	0.04-0.36
Mar	0.04	0.33	0-1.15	0.03	0.36	0-1.26	0.02	0.58	0-1.96
Apr	0.03	0.14	0-0.53	0.16	0.18	0-0.49	0.53	0.41	0-0.83
May	0.02	0.15	0-0.47	0.02	0.12	0-0.38	0.10	0.12	0-0.3
Jun	0.18	0.24	0-0.68	0.16	0.19	0-0.47	0.14	0.16	0.02-0.4
Jul	0.00	0.01	0-0.07	0.00	0.05	0-0.16	0.05	0.05	0-0.14
Aug	0.25	0.26	0.09-0.48	0.33	0.36	0.06-0.73	0.33	0.36	0.1-0.69
Sep	0.47	0.42	0.08-0.8	0.40	0.39	0.1-0.74	0.38	0.37	0.11-0.66
Oct	0.18	0.68	0.03-2.09	0.16	0.66	0.05-1.97	0.18	0.59	0.06-1.7
Nov	2.72	3.82	2.06-7.17	3.05	3.62	1.81-6.34	2.65	3.29	1.81-5.68
Dec	1.53	1.15	0-2.15	1.24	0.93	0-1.72	1.09	0.82	0.02-1.44

Table 6.2a. Norfolk Vanguard East. Gannet design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	8.91	0-40.8	10.53	18.0	0-64.7	21.4	25.1	0-75.41
Feb	9.32	14.86	0-55.92	18.55	22.5	0-80.6	47.0	50.3	0-120.17
Mar	0.00	5.94	0-27.98	9.32	13.5	0-55.92	13.0	18.9	0-65.75
Apr	9.23	8.91	0-36.91	20.54	27.0	0-92.43	84.8	69.1	0-169.77
May	0.00	14.86	0-59.37	0.00	18.0	0-80.09	30.2	37.7	0-90.51
Jun	53.50	71.31	0-201.6	52.69	72.0	0-197.32	59.5	88.0	0-238.12
Jul	0.00	2.97	0-21.85	0.00	9.0	0-36.59	13.8	12.6	0-41.51
Aug	40.56	41.60	0-94.24	93.44	108.0	0-248.18	154.8	157.1	25.96-309.8
Sep	82.04	68.34	0-164.11	82.72	81.0	7.85-171.67	123.3	113.1	23.57-224.07
Oct	36.42	47.54	7.12-136.69	50.13	72.0	9.89-185.16	83.8	106.8	28.6-245.39
Nov	347.18	635.87	201.47-1501.11	421.12	832.9	269.37-1986.25	557.0	1043.2	356.92-2390.89
Dec	339.22	261.48	0-502.98	426.42	324.1	0-607	512.5	383.3	11.43-703.32

Table 6.2b. Norfolk Vanguard East. Gannet design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.14	0.02	0.04	0-0.14	0.03	0.04	0-0.12
Feb	0.03	0.05	0-0.19	0.04	0.05	0-0.18	0.07	0.08	0-0.19
Mar	0.00	0.02	0-0.09	0.02	0.03	0-0.12	0.02	0.03	0-0.1
Apr	0.03	0.03	0-0.12	0.05	0.06	0-0.21	0.14	0.11	0-0.27
May	0.00	0.05	0-0.2	0.00	0.04	0-0.18	0.05	0.06	0-0.14
Jun	0.18	0.24	0-0.68	0.12	0.16	0-0.44	0.09	0.14	0-0.38
Jul	0.00	0.01	0-0.07	0.00	0.02	0-0.08	0.02	0.02	0-0.07
Aug	0.14	0.14	0-0.32	0.21	0.24	0-0.55	0.25	0.25	0.04-0.49
Sep	0.28	0.23	0-0.55	0.18	0.18	0.02-0.38	0.20	0.18	0.04-0.36
Oct	0.12	0.16	0.02-0.46	0.11	0.16	0.02-0.41	0.13	0.17	0.05-0.39
Nov	1.17	2.14	0.68-5.05	0.94	1.85	0.6-4.41	0.89	1.66	0.57-3.8
Dec	1.14	0.88	0-1.69	0.95	0.72	0-1.35	0.82	0.61	0.02-1.12

Table 6.3a. Norfolk Vanguard East. Gannet design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	8.91	0-61.19	0.00	13.5	0-73.71	0.0	18.9	0-85.79
Feb	0.0	2.97	0-27.96	9.27	9.0	0-46.01	46.3	50.3	0-140.89
Mar	0.0	89.14	0-332.98	0.00	148.6	0-540.53	0.0	351.9	0-1202.27
Apr	0.0	29.71	0-138.39	51.35	54.0	0-157.12	235.7	182.2	0-392.6
May	0.0	29.71	0-108.84	5.01	36.0	0-110.12	0.0	37.7	0-130.74
Jun	0.0	0.00	0-0	10.54	13.5	0-45.54	14.9	18.9	0-52.34
Jul	0.0	0.00	0-0	0.00	13.5	0-58.55	0.0	18.9	0-66.46
Aug	28.3	35.66	0-81.12	53.40	54.0	0-119.12	61.9	62.8	12.98-144.45
Sep	57.4	56.46	15.54-114.85	90.99	94.5	23.54-194.56	102.2	119.4	39.29-246.65
Oct	18.2	154.51	0-528.52	29.68	225.1	0-749.88	31.4	263.9	0-858.87
Nov	484.2	499.19	338.83-726.34	817.87	796.9	438.67-1151.79	1089.5	1024.3	618.86-1408.9
Dec	93.6	83.20	0-182.25	110.36	94.5	0-211.53	154.9	125.7	0-274.15

Table 6.3b. Norfolk Vanguard East. Gannet design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.21	0.00	0.03	0-0.16	0.00	0.03	0-0.14
Feb	0.00	0.01	0-0.09	0.02	0.02	0-0.1	0.07	0.08	0-0.22
Mar	0.00	0.30	0-1.12	0.00	0.33	0-1.2	0.00	0.56	0-1.91
Apr	0.00	0.10	0-0.47	0.11	0.12	0-0.35	0.38	0.29	0-0.62
May	0.00	0.10	0-0.37	0.01	0.08	0-0.24	0.00	0.06	0-0.21
Jun	0.00	0.00	0-0	0.02	0.03	0-0.1	0.02	0.03	0-0.08
Jul	0.00	0.00	0-0	0.00	0.03	0-0.13	0.00	0.03	0-0.11
Aug	0.10	0.12	0-0.27	0.12	0.12	0-0.26	0.10	0.10	0.02-0.23
Sep	0.19	0.19	0.05-0.39	0.20	0.21	0.05-0.43	0.16	0.19	0.06-0.39
Oct	0.06	0.52	0-1.78	0.07	0.50	0-1.67	0.05	0.42	0-1.37
Nov	1.63	1.68	1.14-2.44	1.82	1.77	0.97-2.56	1.73	1.63	0.98-2.24
Dec	0.31	0.28	0-0.61	0.25	0.21	0-0.47	0.25	0.20	0-0.44

Table 7.1a. Norfolk Vanguard East. Cormorant design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Apr	8.69	11.89	0-58.36	8.74	13.5	0-61.62	8.8	12.57	0-53.32
May	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Nov	0.00	2.97	0-27.47	0.00	4.5	0-37.15	0.0	6.28	0-37.57
Dec	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0

Table 7.1b. Norfolk Vanguard East. Cormorant design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.03	0.04	0-0.2	0.02	0.03	0-0.14	0.01	0.02	0-0.08
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.01	0-0.09	0.00	0.01	0-0.08	0.00	0.01	0-0.06
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 7.2a. Norfolk Vanguard East. Cormorant design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Feb	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Mar	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Apr	8.69	11.9	0-48.88	8.74	13.5	0-61.62	8.8	12.6	0-63.66
May	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Jun	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Jul	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Aug	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Sep	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Oct	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Nov	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0
Dec	0.00	0.0	0-0	0.00	0.0	0-0	0.0	0.0	0-0

Table 7.2b. Norfolk Vanguard East. Cormorant design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.03	0.04	0-0.16	0.02	0.03	0-0.14	0.01	0.02	0-0.1
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 7.3a. Norfolk Vanguard East. Cormorant design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	2.97	0-18.32	0	4.5	0-37.15	0	6.28	0-37.57
Dec	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0

Table 7.3b. Norfolk Vanguard East. Cormorant design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.01	0-0.06	0	0.01	0-0.08	0	0.01	0-0.06
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 8.1a. Norfolk Vanguard East. Pomarine Skua design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 8.1b. Norfolk Vanguard East. Pomarine Skua design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 8.2a. Norfolk Vanguard East. Pomarine Skua design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 8.2b. Norfolk Vanguard East. Pomarine Skua design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 8.3a. Norfolk Vanguard East. Pomarine Skua design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 8.3b. Norfolk Vanguard East. Pomarine Skua design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 9.1a. Norfolk Vanguard East. Arctic Skua design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
May	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.0	6.28	0-41.51
Aug	0.00	5.94	0-28.27	0.00	4.5	0-29.78	0.0	6.28	0-30.95
Sep	7.77	14.86	0-70.33	8.27	18.0	0-68.67	15.7	18.85	0-67.27
Oct	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0

Table 9.1b. Norfolk Vanguard East. Arctic Skua design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.07
Aug	0.00	0.02	0-0.1	0.00	0.01	0-0.07	0.00	0.01	0-0.05
Sep	0.03	0.05	0-0.24	0.02	0.04	0-0.15	0.03	0.03	0-0.11
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 9.2a. Norfolk Vanguard East. Arctic Skua design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Feb	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Mar	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Apr	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
May	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jun	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0	0.00	0-0	0.00	0.0	0-0	0.0	6.28	0-41.51
Aug	0	5.94	0-28.27	0.00	4.5	0-29.78	0.0	6.28	0-30.95
Sep	0	11.89	0-70.33	8.27	13.5	0-68.67	11.2	18.85	0-67.27
Oct	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Nov	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Dec	0	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0

Table 9.2b. Norfolk Vanguard East. Arctic Skua design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.07
Aug	0	0.02	0-0.1	0.00	0.01	0-0.07	0.00	0.01	0-0.05
Sep	0	0.04	0-0.24	0.02	0.03	0-0.15	0.02	0.03	0-0.11
Oct	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 9.3a. Norfolk Vanguard East. Arctic Skua design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Sep	0	2.97	0-15.73	0	4.5	0-23.54	0	0	0-23.57
Oct	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.0	0-0	0	0	0-0

Table 9.3b. Norfolk Vanguard East. Arctic Skua design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Sep	0	0.01	0-0.05	0	0.01	0-0.05	0	0	0-0.04
Oct	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0	0-0

Table 10.1a. Norfolk Vanguard East. Great Skua design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Mar	0.00	2.97	0-18.5	0.00	4.5	0-18.64	0.00	0.00	0-28.18
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Sep	7.77	14.86	0-57.43	15.69	18.0	0-74.45	15.72	18.85	0-82.99
Oct	0.00	5.94	0-27.31	7.16	9.0	0-35.81	7.15	6.28	0-31.43
Nov	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-18.79
Dec	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0

Table 10.1b. Norfolk Vanguard East. Great Skua design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.01	0-0.06	0.00	0.01	0-0.04	0.00	0.00	0-0.04
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.03	0.05	0-0.19	0.03	0.04	0-0.17	0.03	0.03	0-0.13
Oct	0.00	0.02	0-0.09	0.02	0.02	0-0.08	0.01	0.01	0-0.05
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0.03
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 10.2a. Norfolk Vanguard East. Great Skua design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Mar	0.00	2.97	0-27.75	0.0	4.5	0-27.96	0.0	0.00	0-28.18
Apr	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
May	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Sep	7.77	14.86	0-57.43	15.7	18.0	0-66.38	15.7	18.85	0-82.99
Oct	0.00	5.94	0-27.31	0.0	9.0	0-35.81	0.0	6.28	0-31.43
Nov	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-28.18
Dec	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0

Table 10.2b. Norfolk Vanguard East. Great Skua design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.01	0-0.09	0.00	0.01	0-0.06	0.00	0.00	0-0.04
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.03	0.05	0-0.19	0.03	0.04	0-0.15	0.03	0.03	0-0.13
Oct	0.00	0.02	0-0.09	0.00	0.02	0-0.08	0.00	0.01	0-0.05
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0.04
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 10.3a. Norfolk Vanguard East. Great Skua design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 10.3b. Norfolk Vanguard East. Great Skua design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 11.1a. Norfolk Vanguard East. Puffin design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	8.91	0-61.19	0.00	9.0	0-63.18	11.52	25.1	0-107.24
Feb	0.00	0.00	0-0	0.00	4.5	0-34.51	10.01	12.6	0-50.07
Mar	0.00	8.91	0-51.83	11.97	18.0	0-76.66	24.15	31.4	0-103.78
Apr	0.00	5.94	0-29.18	8.74	13.5	0-52.45	31.83	31.4	0-84.89
May	19.24	23.77	0-96.19	40.04	67.5	0-190.9	60.34	106.8	0-286.64
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.0	0-0
Jul	0.00	14.86	0-56.3	0.00	27.0	0-111.26	0.00	37.7	0-124.53
Aug	0.00	20.80	0-81.12	29.78	49.5	0-146.84	41.27	62.8	0-181.7
Sep	7.77	20.80	0-93.78	7.85	31.5	0-125.89	7.86	31.4	0-134.54
Oct	0.00	5.94	0-36.42	0.00	13.5	0-69.25	7.15	25.1	0-94.28
Nov	17.36	86.17	0-338.96	17.55	112.5	0-417.28	17.68	138.3	0-512.24
Dec	20.50	38.63	0-140.37	31.70	40.5	0-142.14	59.60	56.6	0-155.08

Table 11.1b. Norfolk Vanguard East. Puffin design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.21	0.00	0.02	0-0.14	0.02	0.04	0-0.17
Feb	0.00	0.00	0-0	0.00	0.01	0-0.08	0.02	0.02	0-0.08
Mar	0.00	0.03	0-0.17	0.03	0.04	0-0.17	0.04	0.05	0-0.17
Apr	0.00	0.02	0-0.1	0.02	0.03	0-0.12	0.05	0.05	0-0.14
May	0.06	0.08	0-0.32	0.09	0.15	0-0.42	0.10	0.17	0-0.46
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.05	0-0.19	0.00	0.06	0-0.25	0.00	0.06	0-0.2
Aug	0.00	0.07	0-0.27	0.07	0.11	0-0.33	0.07	0.10	0-0.29
Sep	0.03	0.07	0-0.32	0.02	0.07	0-0.28	0.01	0.05	0-0.21
Oct	0.00	0.02	0-0.12	0.00	0.03	0-0.15	0.01	0.04	0-0.15
Nov	0.06	0.29	0-1.14	0.04	0.25	0-0.93	0.03	0.22	0-0.82
Dec	0.07	0.13	0-0.47	0.07	0.09	0-0.32	0.09	0.09	0-0.25

Table 11.2a. Norfolk Vanguard East. Puffin design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.0	0-0	0	6.28	0-34.56
Feb	0	0	0-0	0	0.0	0-0	0	6.28	0-40.06
Mar	0	0	0-0	0	0.0	0-0	0	6.28	0-36.22
Apr	0	0	0-0	0	0.0	0-0	0	0.00	0-0
May	0	0	0-0	0	4.5	0-30.03	0	6.28	0-30.17
Jun	0	0	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.0	0-0	0	0.00	0-0

Table 11.2b. Norfolk Vanguard East. Puffin design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.01	0-0.05
Feb	0	0	0-0	0	0.00	0-0	0	0.01	0-0.06
Mar	0	0	0-0	0	0.00	0-0	0	0.01	0-0.06
Apr	0	0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0	0-0	0	0.01	0-0.07	0	0.01	0-0.05
Jun	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.00	0-0

Table 11.3a. Norfolk Vanguard East. Puffin design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	8.91	0-51	0.00	9.0	0-63.18	0.00	18.85	0-107.24
Feb	0.00	0.00	0-0	0.00	4.5	0-34.51	0.00	6.28	0-46.28
Mar	0.00	8.91	0-51.83	11.97	18.0	0-76.66	12.07	25.14	0-116.76
Apr	0.00	5.94	0-29.18	8.74	13.5	0-52.45	26.40	31.42	0-84.89
May	19.24	23.77	0-96.19	38.18	63.0	0-190.9	45.26	100.55	0-286.64
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	14.86	0-55.95	0.00	27.0	0-111.26	0.00	37.71	0-124.53
Aug	0.00	20.80	0-81.12	34.74	49.5	0-160.19	38.94	62.84	0-181.7
Sep	7.77	20.80	0-93.78	7.85	31.5	0-125.89	7.86	31.42	0-134.54
Oct	0.00	5.94	0-36.42	0.00	13.5	0-69.25	7.15	25.14	0-94.28
Nov	17.36	86.17	0-338.96	17.55	112.5	0-433.97	17.68	138.26	0-512.24
Dec	20.50	38.63	0-140.37	31.70	40.5	0-142.14	57.15	56.56	0-166.87

Table 11.3b. Norfolk Vanguard East. Puffin design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.17	0.00	0.02	0-0.14	0.00	0.03	0-0.17
Feb	0.00	0.00	0-0	0.00	0.01	0-0.08	0.00	0.01	0-0.07
Mar	0.00	0.03	0-0.17	0.03	0.04	0-0.17	0.02	0.04	0-0.19
Apr	0.00	0.02	0-0.1	0.02	0.03	0-0.12	0.04	0.05	0-0.14
May	0.06	0.08	0-0.32	0.08	0.14	0-0.42	0.07	0.16	0-0.46
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.05	0-0.19	0.00	0.06	0-0.25	0.00	0.06	0-0.2
Aug	0.00	0.07	0-0.27	0.08	0.11	0-0.36	0.06	0.10	0-0.29
Sep	0.03	0.07	0-0.32	0.02	0.07	0-0.28	0.01	0.05	0-0.21
Oct	0.00	0.02	0-0.12	0.00	0.03	0-0.15	0.01	0.04	0-0.15
Nov	0.06	0.29	0-1.14	0.04	0.25	0-0.96	0.03	0.22	0-0.82
Dec	0.07	0.13	0-0.47	0.07	0.09	0-0.32	0.09	0.09	0-0.27

Table 12.1a. Norfolk Vanguard East. Razorbill design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	125.2	433.8	45.14-1265.67	223	589.8	100.22-1585.87	235.9	666.1	113.58-1795.9
Feb	592.7	484.3	134.74-797.1	762	693.3	212.28-1164.36	920.1	1043.2	373.44-1969.98
Mar	479.2	525.9	300.89-879.53	634	751.9	416.98-1302.45	931.0	1099.8	690.31-1811.86
Apr	366.3	320.9	66.7-554.7	526	477.2	155.9-791.91	701.4	678.7	295.3-1099.42
May	355.9	457.6	147.57-903.99	502	598.8	199.45-1150.02	569.4	766.7	247.24-1473.5
Jun	0.0	26.7	0-112.11	0	63.0	0-219.45	37.8	69.1	0-215.16
Jul	0.0	17.8	0-67.41	0	49.5	0-167.55	30.0	56.6	0-166.7
Aug	149.0	240.7	11.35-587.58	190	274.6	11.96-665.85	329.4	458.8	24.86-1032.05
Sep	365.1	320.9	79.07-564.91	520	490.7	229.23-785.96	672.2	634.7	289.97-972.57
Oct	65.9	163.4	0-515.54	156	279.1	25.89-739	227.4	446.2	51.69-1186.43
Nov	110.3	160.4	33.1-427.83	291	279.1	73.99-542.97	350.8	395.9	106.52-843.45
Dec	185.3	222.8	32.94-521.45	611	490.7	66.48-884.8	812.5	741.5	66.3-1493.52

Table 12.1b. Norfolk Vanguard East. Razorbill design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.42	1.46	0.15-4.26	0.49	1.31	0.22-3.52	0.38	1.06	0.18-2.86
Feb	1.99	1.63	0.45-2.68	1.69	1.54	0.47-2.59	1.46	1.66	0.59-3.13
Mar	1.61	1.77	1.01-2.96	1.41	1.67	0.93-2.89	1.48	1.75	1.1-2.88
Apr	1.23	1.08	0.22-1.87	1.17	1.06	0.35-1.76	1.12	1.08	0.47-1.75
May	1.20	1.54	0.5-3.04	1.11	1.33	0.44-2.55	0.91	1.22	0.39-2.34
Jun	0.00	0.09	0-0.38	0.00	0.14	0-0.49	0.06	0.11	0-0.34
Jul	0.00	0.06	0-0.23	0.00	0.11	0-0.37	0.05	0.09	0-0.27
Aug	0.50	0.81	0.04-1.98	0.42	0.61	0.03-1.48	0.52	0.73	0.04-1.64
Sep	1.23	1.08	0.27-1.9	1.15	1.09	0.51-1.75	1.07	1.01	0.46-1.55
Oct	0.22	0.55	0-1.74	0.35	0.62	0.06-1.64	0.36	0.71	0.08-1.89
Nov	0.37	0.54	0.11-1.44	0.65	0.62	0.16-1.21	0.56	0.63	0.17-1.34
Dec	0.62	0.75	0.11-1.75	1.36	1.09	0.15-1.97	1.29	1.18	0.11-2.38

Table 12.2a. Norfolk Vanguard East. Razorbill design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	9.37	14.86	0-46.83	9.24	13.5	0-55.46	9.43	12.57	0-47.13
Feb	34.32	56.46	0-183.5	34.51	72.0	0-254.57	46.28	138.26	0-450.62
Mar	0.00	2.97	0-38.87	0.00	13.5	0-76.66	28.18	31.42	0-77.84
Apr	0.00	8.91	0-58.36	0.00	9.0	0-61.62	8.80	18.85	0-95.5
May	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Oct	0.00	2.97	0-18.22	0.00	4.5	0-27.77	0.00	6.28	0-28.31
Nov	0.00	2.97	0-27.47	0.00	4.5	0-27.87	0.00	6.28	0-37.57
Dec	0.00	5.94	0-36.45	9.20	13.5	0-55.18	11.92	18.85	0-55.03

Table 12.2b. Norfolk Vanguard East. Razorbill design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.03	0.05	0-0.16	0.02	0.03	0-0.12	0.02	0.02	0-0.08
Feb	0.12	0.19	0-0.62	0.08	0.16	0-0.57	0.07	0.22	0-0.72
Mar	0.00	0.01	0-0.13	0.00	0.03	0-0.17	0.04	0.05	0-0.12
Apr	0.00	0.03	0-0.2	0.00	0.02	0-0.14	0.01	0.03	0-0.15
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.01	0-0.06	0.00	0.01	0-0.06	0.00	0.01	0-0.05
Nov	0.00	0.01	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.06
Dec	0.00	0.02	0-0.12	0.02	0.03	0-0.12	0.02	0.03	0-0.09

Table 12.3a. Norfolk Vanguard East. Razorbill design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	97.4	419.0	27.83-1265.67	195	571.8	83.47-1585.87	208.2	653.6	97.15-1808.82
Feb	506.2	430.9	134.46-689.17	735	621.3	212.28-931.28	864.3	905.0	373.44-1497.58
Mar	479.2	523.0	311.67-853.59	640	742.9	424.77-1260.74	894.0	1062.0	654.64-1750.56
Apr	355.9	306.1	66.7-523.31	516	463.7	167.03-754.79	689.1	659.9	295.3-1048.28
May	361.9	457.6	151.5-903.99	487	598.8	194.03-1173.02	628.8	766.7	254.21-1473.5
Jun	0.0	26.7	0-112.11	0	63.0	0-201.16	50.4	69.1	0-215.16
Jul	0.0	17.8	0-84.27	0	49.5	0-184.31	33.3	56.6	0-166.7
Aug	153.0	240.7	11.35-594.94	150	279.1	11.96-674.41	309.9	458.8	24.86-1047.68
Sep	365.1	320.9	79.07-564.91	520	490.7	219.26-794.17	675.4	634.7	299.96-972.57
Oct	54.9	160.4	0-515.54	145	274.6	25.89-739	216.1	439.9	51.69-1186.43
Nov	104.6	157.5	22.07-427.83	282	270.1	73.99-563.08	328.2	389.6	106.52-843.97
Dec	185.3	216.9	21.96-521.45	599	477.2	33.24-870.53	812.5	722.7	33.15-1464.8

Table 12.3b. Norfolk Vanguard East. Razorbill design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.33	1.41	0.09-4.26	0.43	1.27	0.19-3.52	0.33	1.04	0.15-2.88
Feb	1.70	1.45	0.45-2.32	1.63	1.38	0.47-2.07	1.38	1.44	0.59-2.38
Mar	1.61	1.76	1.05-2.87	1.42	1.65	0.94-2.8	1.42	1.69	1.04-2.79
Apr	1.20	1.03	0.22-1.76	1.15	1.03	0.37-1.68	1.10	1.05	0.47-1.67
May	1.22	1.54	0.51-3.04	1.08	1.33	0.43-2.61	1.00	1.22	0.4-2.34
Jun	0.00	0.09	0-0.38	0.00	0.14	0-0.45	0.08	0.11	0-0.34
Jul	0.00	0.06	0-0.28	0.00	0.11	0-0.41	0.05	0.09	0-0.27
Aug	0.51	0.81	0.04-2	0.33	0.62	0.03-1.5	0.49	0.73	0.04-1.67
Sep	1.23	1.08	0.27-1.9	1.15	1.09	0.49-1.76	1.07	1.01	0.48-1.55
Oct	0.18	0.54	0-1.74	0.32	0.61	0.06-1.64	0.34	0.70	0.08-1.89
Nov	0.35	0.53	0.07-1.44	0.63	0.60	0.16-1.25	0.52	0.62	0.17-1.34
Dec	0.62	0.73	0.07-1.75	1.33	1.06	0.07-1.93	1.29	1.15	0.05-2.33

Table 13.1a. Norfolk Vanguard East. Little Auk design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	2.97	0-30.6	0	4.5	0-31.59	0	6.28	0-42.89
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	47.54	0-225.97	0	72.0	0-300.44	0	75.41	0-307.35
Dec	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0

Table 13.1b. Norfolk Vanguard East. Little Auk design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.01	0-0.1	0	0.01	0-0.07	0	0.01	0-0.07
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.16	0-0.76	0	0.16	0-0.67	0	0.12	0-0.49
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 13.2a. Norfolk Vanguard East. Little Auk design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Feb	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Mar	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Apr	0	0.0	0-0	0	0	0-0	0	0.0	0-0
May	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Jun	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Jul	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Aug	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Sep	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Oct	0	0.0	0-0	0	0	0-0	0	0.0	0-0
Nov	0	14.9	0-96.85	0	18	0-100.15	0	18.9	0-102.45
Dec	0	0.0	0-0	0	0	0-0	0	0.0	0-0

Table 13.2b. Norfolk Vanguard East. Little Auk design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.05	0-0.33	0	0.04	0-0.22	0	0.03	0-0.16
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 13.3a. Norfolk Vanguard East. Little Auk design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	2.97	0-20.65	0	4.5	0-31.59	0	6.28	0-42.89
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Nov	0	32.69	0-161.41	0	54.0	0-250.37	0	56.56	0-256.12
Dec	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0

Table 13.3b. Norfolk Vanguard East. Little Auk design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.01	0-0.07	0	0.01	0-0.07	0	0.01	0-0.07
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.11	0-0.54	0	0.12	0-0.56	0	0.09	0-0.41
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 14.1a. Norfolk Vanguard East. Guillemot design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	714.8	1298.5	182.36-3167.09	1374.2	2161	227.89-5126.53	1587.7	2922.2	333.47-7139.76
Feb	1280.0	1289.6	782.75-1937.48	1992.5	2197	1377.4-3440.84	2427.7	2915.9	1811.71-4807.89
Mar	1551.2	1649.1	154.86-3371.17	2853.1	2931	543.82-5628.52	3938.5	4078.5	770.56-7798.41
Apr	883.1	823.1	285.75-1371.81	1605.3	1391	523.64-2162.12	2406.3	2186.9	782.09-3560.16
May	359.5	475.4	145.73-961.94	555.7	662	270.9-1205.7	787.2	923.8	365.05-1684.65
Jun	28.2	47.5	0-142.84	41.6	54	0-159.77	78.3	81.7	19.58-176.24
Jul	27.6	127.8	0-368.12	91.5	185	0-494.06	151.7	251.4	0-637.19
Aug	212.0	279.3	37.2-631.16	296.2	378	52.25-827.93	485.2	578.2	149.34-1135.6
Sep	776.9	787.4	539.82-1068.67	1145.9	1180	798.12-1610.91	1695.6	1646.5	1106.4-2140.18
Oct	419.3	861.7	159.29-2134.22	637.8	1337	226.15-3301.15	1006.2	1866.5	357.49-4408.91
Nov	700.9	766.6	114.21-1578.79	878.5	1076	138.53-2346.59	1303.1	1426.5	162.86-2990.83
Dec	849.8	793.4	407.66-1146.52	1334.8	1180	568.76-1696.25	1835.0	1627.6	856.85-2258.42

Table 14.1b. Norfolk Vanguard East. Guillemot design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	2.41	4.37	0.61-10.66	3.05	4.80	0.51-11.39	2.53	4.65	0.53-11.36
Feb	4.31	4.34	2.63-6.52	4.43	4.88	3.06-7.64	3.86	4.64	2.88-7.65
Mar	5.22	5.55	0.52-11.35	6.34	6.51	1.21-12.5	6.27	6.49	1.23-12.41
Apr	2.97	2.77	0.96-4.62	3.57	3.09	1.16-4.8	3.83	3.48	1.24-5.67
May	1.21	1.60	0.49-3.24	1.23	1.47	0.6-2.68	1.25	1.47	0.58-2.68
Jun	0.09	0.16	0-0.48	0.09	0.12	0-0.35	0.12	0.13	0.03-0.28
Jul	0.09	0.43	0-1.24	0.20	0.41	0-1.1	0.24	0.40	0-1.01
Aug	0.71	0.94	0.13-2.12	0.66	0.84	0.12-1.84	0.77	0.92	0.24-1.81
Sep	2.61	2.65	1.82-3.6	2.55	2.62	1.77-3.58	2.70	2.62	1.76-3.41
Oct	1.41	2.90	0.54-7.18	1.42	2.97	0.5-7.33	1.60	2.97	0.57-7.02
Nov	2.36	2.58	0.38-5.31	1.95	2.39	0.31-5.21	2.07	2.27	0.26-4.76

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Dec	2.86	2.67	1.37-3.86	2.96	2.62	1.26-3.77	2.92	2.59	1.36-3.59

Table 14.2a. Norfolk Vanguard East. Guillemot design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	2.97	0-18.73	0.00	4.5	0-27.73	0.00	6.28	0-37.71
Feb	102.96	133.71	37.28-295.64	185.46	207.1	69.02-401.43	231.41	276.51	104.14-540.75
Mar	9.25	23.77	0-94.15	107.70	121.6	0-307.55	108.67	144.54	12.97-356.92
Apr	0.00	8.91	0-38.91	9.24	18.0	0-61.62	9.43	18.85	0-74.27
May	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Oct	7.12	14.86	0-63.79	7.16	13.5	0-64.8	7.15	18.85	0-84.94
Nov	0.00	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-51.22
Dec	10.25	14.86	0-51.26	21.13	22.5	0-71.07	23.84	25.14	0-80.01

Table 14.2b. Norfolk Vanguard East. Guillemot design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.01	0-0.06	0.00	0.01	0-0.06	0.00	0.01	0-0.06
Feb	0.35	0.45	0.13-0.99	0.41	0.46	0.15-0.89	0.37	0.44	0.17-0.86
Mar	0.03	0.08	0-0.32	0.24	0.27	0-0.68	0.17	0.23	0.02-0.57
Apr	0.00	0.03	0-0.13	0.02	0.04	0-0.14	0.02	0.03	0-0.12
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.02	0.05	0-0.21	0.02	0.03	0-0.14	0.01	0.03	0-0.14
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.08
Dec	0.03	0.05	0-0.17	0.05	0.05	0-0.16	0.04	0.04	0-0.13

Table 14.3a. Norfolk Vanguard East. Guillemot design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	702.5	1295.5	182.36-3167.09	1362.1	2152	243.09-5084.97	1575.3	2915.9	333.47-7139.76
Feb	1003.5	1158.8	662.33-1827.42	1597.9	1981	1226.04-3196.81	1933.5	2639.4	1598.57-4486.56
Mar	1545.7	1622.4	108.4-3359	2819.5	2800	417.86-5321.96	3874.8	3927.7	627.58-7427.65
Apr	857.5	811.2	285.75-1347.53	1593.1	1373	523.5-2094.9	2393.9	2161.8	765.22-3504.32
May	365.6	475.4	145.71-936.62	554.9	662	268.15-1205.7	717.8	923.8	376.38-1684.65
Jun	40.8	47.5	0-163.24	41.6	54	0-159.77	78.3	81.7	19.58-176.24
Jul	36.8	127.8	0-386.53	82.3	185	0-512.36	142.6	251.4	0-637.65
Aug	208.6	279.3	37.2-630.89	267.4	383	65.31-826.73	505.0	571.9	149.34-1127.29
Sep	776.9	787.4	552.02-1068.67	1144.5	1175	825.55-1600.02	1692.6	1646.5	1091.65-2130.09
Oct	419.3	843.9	149.92-2074.27	637.8	1319	226.15-3252.42	1006.2	1847.6	348.08-4346.51
Nov	700.9	763.6	114.21-1578.49	878.5	1076	138.53-2346.59	1280.6	1426.5	174.49-2978.47
Dec	822.8	772.6	419.65-1108.16	1293.0	1157	580.86-1636.58	1789.7	1602.5	856.85-2210.79

Table 14.3b. Norfolk Vanguard East. Guillemot design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	2.36	4.36	0.61-10.66	3.03	4.78	0.54-11.29	2.51	4.64	0.53-11.36
Feb	3.38	3.90	2.23-6.15	3.55	4.40	2.72-7.1	3.08	4.20	2.54-7.14
Mar	5.20	5.46	0.36-11.3	6.26	6.22	0.93-11.82	6.17	6.25	1-11.82
Apr	2.89	2.73	0.96-4.54	3.54	3.05	1.16-4.65	3.81	3.44	1.22-5.58
May	1.23	1.60	0.49-3.15	1.23	1.47	0.6-2.68	1.14	1.47	0.6-2.68
Jun	0.14	0.16	0-0.55	0.09	0.12	0-0.35	0.12	0.13	0.03-0.28
Jul	0.12	0.43	0-1.3	0.18	0.41	0-1.14	0.23	0.40	0-1.01
Aug	0.70	0.94	0.13-2.12	0.59	0.85	0.15-1.84	0.80	0.91	0.24-1.79
Sep	2.61	2.65	1.86-3.6	2.54	2.61	1.83-3.55	2.69	2.62	1.74-3.39
Oct	1.41	2.84	0.5-6.98	1.42	2.93	0.5-7.22	1.60	2.94	0.55-6.92

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Nov	2.36	2.57	0.38-5.31	1.95	2.39	0.31-5.21	2.04	2.27	0.28-4.74
Dec	2.77	2.60	1.41-3.73	2.87	2.57	1.29-3.64	2.85	2.55	1.36-3.52

Table 15.1a. Norfolk Vanguard East. Little Tern design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 15.1b. Norfolk Vanguard East. Little Tern design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 15.2a. Norfolk Vanguard East. Little Tern design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 15.2b. Norfolk Vanguard East. Little Tern design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 15.3a. Norfolk Vanguard East. Little Tern design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 15.3b. Norfolk Vanguard East. Little Tern design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 16.1a. Norfolk Vanguard East. Black Tern design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Sep	0	2.97	0-23.31	0	4.5	0-23.54	0	0	0-23.57
Oct	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.0	0-0	0	0	0-0

Table 16.1b. Norfolk Vanguard East. Black Tern design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Sep	0	0.01	0-0.08	0	0.01	0-0.05	0	0	0-0.04
Oct	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0	0-0

Table 16.2a. Norfolk Vanguard East. Black Tern design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Sep	0	2.97	0-15.54	0	4.5	0-15.69	0	0	0-15.72
Oct	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.0	0-0	0	0	0-0

Table 16.2b. Norfolk Vanguard East. Black Tern design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Sep	0	0.01	0-0.05	0	0.01	0-0.03	0	0	0-0.03
Oct	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0	0-0

Table 16.3a. Norfolk Vanguard East. Black Tern design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 16.3b. Norfolk Vanguard East. Black Tern design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 17.1a. Norfolk Vanguard East. Sandwich Tern design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Sep	0	2.97	0-23.31	0	4.5	0-15.69	0	0	0-15.72
Oct	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.0	0-0	0	0	0-0

Table 17.1b. Norfolk Vanguard East. Sandwich Tern design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Sep	0	0.01	0-0.08	0	0.01	0-0.03	0	0	0-0.03
Oct	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0	0-0

Table 17.2a. Norfolk Vanguard East. Sandwich Tern design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.0	0-0	0	0	0-0
May	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Sep	0	2.97	0-23.31	0	4.5	0-23.54	0	0	0-15.72
Oct	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.0	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.0	0-0	0	0	0-0

Table 17.2b. Norfolk Vanguard East. Sandwich Tern design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Sep	0	0.01	0-0.08	0	0.01	0-0.05	0	0	0-0.03
Oct	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0	0-0

Table 17.3a. Norfolk Vanguard East. Sandwich Tern design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 17.3b. Norfolk Vanguard East. Sandwich Tern design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 18.1a. Norfolk Vanguard East. Commic Tern design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Mar	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Apr	0.00	0.00	0-0	0.0	4.5	0-30.81	0.0	6.28	0-42.44
May	115.43	121.83	39.58-250.1	190.9	189.1	76.36-300.33	229.3	226.24	90.16-372.11
Jun	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.0	0-0	0.0	12.57	0-64.89
Sep	7.77	8.91	0-35.17	15.7	18.0	0-68.67	22.4	25.14	0-89.69
Oct	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Nov	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0

Table 18.1b. Norfolk Vanguard East. Commic Tern design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.01	0-0.07	0.00	0.01	0-0.07
May	0.39	0.41	0.13-0.84	0.42	0.42	0.17-0.67	0.36	0.36	0.14-0.59
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.1
Sep	0.03	0.03	0-0.12	0.03	0.04	0-0.15	0.04	0.04	0-0.14
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 18.2a. Norfolk Vanguard East. Commic Tern design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Mar	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Apr	0.00	0.00	0-0	0.0	4.5	0-30.81	0.0	6.28	0-42.44
May	115.43	121.83	39.58-231.35	150.2	157.6	60.07-267.26	191.1	188.53	76.44-305.75
Jun	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.0	0-0	0.0	12.57	0-64.89
Sep	7.77	8.91	0-38.85	15.7	18.0	0-68.67	22.4	25.14	0-89.69
Oct	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Nov	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0

Table 18.2b. Norfolk Vanguard East. Commic Tern design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.01	0-0.07	0.00	0.01	0-0.07
May	0.39	0.41	0.13-0.78	0.33	0.35	0.13-0.59	0.30	0.30	0.12-0.49
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.1
Sep	0.03	0.03	0-0.13	0.03	0.04	0-0.15	0.04	0.04	0-0.14
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 18.3a. Norfolk Vanguard East. Commic Tern design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Feb	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Mar	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Apr	0	0	0-0	0	0	0-0	0.00	0.0	0-0
May	0	0	0-0	0	36	0-120.13	5.03	37.7	0-120.68
Jun	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Jul	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Aug	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Sep	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Oct	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Nov	0	0	0-0	0	0	0-0	0.00	0.0	0-0
Dec	0	0	0-0	0	0	0-0	0.00	0.0	0-0

Table 18.3b. Norfolk Vanguard East. Commic Tern design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Feb	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Apr	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
May	0	0	0-0	0	0.08	0-0.27	0.01	0.06	0-0.19
Jun	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0.00	0.00	0-0

Table 19.1a. Norfolk Vanguard East. Kittiwake design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	922.7	840.9	168.6-1524.5	1150.2	999.5	323.26-1616.52	1492.0	1206.6	367.64-1813.68
Feb	525.5	421.9	68.64-708.28	819.3	630.3	69.02-1053.03	1268.0	1018.1	104.14-1819.61
Mar	129.6	612.1	0-1840.64	204.4	855.4	24.01-2497.64	259.5	1168.9	50.59-3342.94
Apr	52.1	252.6	0-802.69	96.2	310.6	0-924.48	193.6	421.1	74.27-1065.22
May	127.4	154.5	38.33-346.3	227.9	288.1	68.22-610.89	326.6	395.9	129.55-764.38
Jun	21.4	26.7	0-64.2	30.4	31.5	0-91.07	44.6	50.3	10.47-119.06
Jul	87.3	107.0	29.11-223.82	105.2	126.1	36.8-264.23	193.7	238.8	80.71-484.27
Aug	0.0	32.7	0-121.68	39.7	45.0	0-120.14	90.8	94.3	20.64-207.66
Sep	46.6	47.5	8.2-117.22	54.9	54.0	8.27-117.69	74.7	81.7	16.6-179.39
Oct	27.3	95.1	0-328.05	39.6	144.1	0-453.63	83.8	201.1	7.15-585.16
Nov	403.5	371.4	26.04-750.93	600.9	589.8	35.09-1226.33	956.2	892.4	35.36-1812.79
Dec	218.7	371.4	123.01-842.2	348.7	517.7	200.77-1089.74	480.1	691.3	330.19-1370.73

Table 19.1b. Norfolk Vanguard East. Kittiwake design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	3.11	2.83	0.57-5.13	2.55	2.22	0.72-3.59	2.37	1.92	0.59-2.89
Feb	1.77	1.42	0.23-2.38	1.82	1.40	0.15-2.34	2.02	1.62	0.17-2.9
Mar	0.44	2.06	0-6.19	0.45	1.90	0.05-5.55	0.41	1.86	0.08-5.32
Apr	0.18	0.85	0-2.7	0.21	0.69	0-2.05	0.31	0.67	0.12-1.7
May	0.43	0.52	0.13-1.17	0.51	0.64	0.15-1.36	0.52	0.63	0.21-1.22
Jun	0.07	0.09	0-0.22	0.07	0.07	0-0.2	0.07	0.08	0.02-0.19
Jul	0.29	0.36	0.1-0.75	0.23	0.28	0.08-0.59	0.31	0.38	0.13-0.77
Aug	0.00	0.11	0-0.41	0.09	0.10	0-0.27	0.14	0.15	0.03-0.33
Sep	0.16	0.16	0.03-0.39	0.12	0.12	0.02-0.26	0.12	0.13	0.03-0.29
Oct	0.09	0.32	0-1.1	0.09	0.32	0-1.01	0.13	0.32	0.01-0.93
Nov	1.36	1.25	0.09-2.53	1.33	1.31	0.08-2.72	1.52	1.42	0.06-2.88
Dec	0.74	1.25	0.41-2.83	0.77	1.15	0.45-2.42	0.76	1.10	0.53-2.18

Table 19.2a. Norfolk Vanguard East. Kittiwake design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	203.98	540.79	101.99-1432.11	294.84	621.3	168.48-1512.61	386.1	697.6	245.09-1578.21
Feb	223.67	240.68	57.2-489.33	278.20	342.2	69.02-744.12	479.0	590.7	92.56-1311.82
Mar	90.70	273.37	0-841.7	140.55	382.7	0-1109.03	155.7	571.9	24.15-1671.04
Apr	26.06	133.71	0-442.86	69.93	175.6	0-526.82	127.3	232.5	53.05-584.46
May	69.26	109.94	9.89-288.58	110.12	148.6	20.02-362.71	172.0	213.7	50.28-458.63
Jun	15.51	20.80	0-77.54	15.18	22.5	0-60.71	29.8	31.4	0-89.29
Jul	7.28	11.89	0-41.97	13.91	18.0	0-69.53	36.9	62.8	0-179.87
Aug	0.00	5.94	0-40.56	0.00	4.5	0-40.05	10.3	12.6	0-41.27
Sep	0.00	8.91	0-32.82	7.85	9.0	0-39.23	8.3	12.6	0-47.15
Oct	9.10	23.77	0-100.24	9.89	45.0	0-175.9	20.9	62.8	0-226.52
Nov	338.96	279.31	0-576.93	484.04	391.7	0-789.53	751.3	553.0	8.84-1007.58
Dec	145.80	205.02	41-479.59	229.92	306.1	84.53-651.47	339.4	414.8	171.45-786.68

Table 19.2b. Norfolk Vanguard East. Kittiwake design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.69	1.82	0.34-4.82	0.65	1.38	0.37-3.36	0.61	1.11	0.39-2.51
Feb	0.75	0.81	0.19-1.65	0.62	0.76	0.15-1.65	0.76	0.94	0.15-2.09
Mar	0.31	0.92	0-2.83	0.31	0.85	0-2.46	0.25	0.91	0.04-2.66
Apr	0.09	0.45	0-1.49	0.16	0.39	0-1.17	0.20	0.37	0.08-0.93
May	0.23	0.37	0.03-0.97	0.24	0.33	0.04-0.81	0.27	0.34	0.08-0.73
Jun	0.05	0.07	0-0.26	0.03	0.05	0-0.13	0.05	0.05	0-0.14
Jul	0.02	0.04	0-0.14	0.03	0.04	0-0.15	0.06	0.10	0-0.29
Aug	0.00	0.02	0-0.14	0.00	0.01	0-0.09	0.02	0.02	0-0.07
Sep	0.00	0.03	0-0.11	0.02	0.02	0-0.09	0.01	0.02	0-0.08
Oct	0.03	0.08	0-0.34	0.02	0.10	0-0.39	0.03	0.10	0-0.36
Nov	1.14	0.94	0-1.94	1.08	0.87	0-1.75	1.20	0.88	0.01-1.6
Dec	0.49	0.69	0.14-1.61	0.51	0.68	0.19-1.45	0.54	0.66	0.27-1.25

Table 19.3a. Norfolk Vanguard East. Kittiwake design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	92.4	300.11	18.73-891.86	138.6	378.2	55.46-1046.26	172.8	509.0	80.64-1379.65
Feb	149.1	178.28	0-456.89	269.9	288.1	0-686.22	478.0	427.3	0-901.7
Mar	38.9	338.74	0-1091.43	63.9	472.7	8-1463.17	103.8	590.7	19.26-1784.61
Apr	26.1	115.88	0-396.73	26.2	135.1	0-462.13	88.0	182.2	0-537.32
May	38.5	44.57	0-96.51	114.5	139.6	29.11-324.53	152.9	182.2	49.1-382.67
Jun	0.0	5.94	0-32.1	10.5	13.5	0-45.54	14.9	18.9	0-52.34
Jul	75.2	95.08	26.67-209.83	90.7	108.0	31.89-236.42	152.2	176.0	69.91-359.74
Aug	0.0	26.74	0-108.16	29.8	36.0	0-106.79	77.9	81.7	20.64-181.7
Sep	35.2	38.63	0-105.79	45.8	45.0	0-114.45	55.0	69.1	8.3-179.39
Oct	18.2	71.31	0-255.15	29.7	99.0	0-324.02	62.9	138.3	7.15-405.84
Nov	64.6	83.20	16.14-192.31	133.5	189.1	17.55-473.95	187.8	326.8	17.68-864.13
Dec	102.5	166.40	27.34-432.8	137.4	211.6	55.18-497.49	182.9	276.5	64.2-655.57

Table 19.3b. Norfolk Vanguard East. Kittiwake design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.31	1.01	0.06-3	0.31	0.84	0.12-2.32	0.27	0.81	0.13-2.2
Feb	0.50	0.60	0-1.54	0.60	0.64	0-1.52	0.76	0.68	0-1.43
Mar	0.13	1.14	0-3.67	0.14	1.05	0.02-3.25	0.17	0.94	0.03-2.84
Apr	0.09	0.39	0-1.34	0.06	0.30	0-1.03	0.14	0.29	0-0.86
May	0.13	0.15	0-0.32	0.25	0.31	0.06-0.72	0.24	0.29	0.08-0.61
Jun	0.00	0.02	0-0.11	0.02	0.03	0-0.1	0.02	0.03	0-0.08
Jul	0.25	0.32	0.09-0.71	0.20	0.24	0.07-0.53	0.24	0.28	0.11-0.57
Aug	0.00	0.09	0-0.36	0.07	0.08	0-0.24	0.12	0.13	0.03-0.29
Sep	0.12	0.13	0-0.36	0.10	0.10	0-0.25	0.09	0.11	0.01-0.29
Oct	0.06	0.24	0-0.86	0.07	0.22	0-0.72	0.10	0.22	0.01-0.65
Nov	0.22	0.28	0.05-0.65	0.30	0.42	0.04-1.05	0.30	0.52	0.03-1.38
Dec	0.34	0.56	0.09-1.46	0.31	0.47	0.12-1.11	0.29	0.44	0.1-1.04

Table 20.1a. Norfolk Vanguard East. Black-headed Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	1.61	11.89	0-46.2	11.02	13.5	0-46.19	1.11	12.57	0-46.08
Feb	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Mar	3.06	8.91	0-41.91	11.89	13.5	0-51.12	17.13	18.85	0-48.46
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
May	0.00	5.94	0-29.68	0.00	4.5	0-31.89	0.00	6.28	0-31.95
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	1.22	14.86	0-51.04	3.61	18.0	0-55.72	22.70	50.27	0-137.35
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Oct	0.00	5.94	0-36.45	0.00	4.5	0-37.03	0.00	12.57	0-56.63
Nov	0.00	5.94	0-32.28	0.00	4.5	0-50.07	0.00	6.28	0-51.22
Dec	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0

Table 20.1b. Norfolk Vanguard East. Black-headed Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.01	0.04	0-0.16	0.02	0.03	0-0.1	0.00	0.02	0-0.07
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.01	0.03	0-0.14	0.03	0.03	0-0.11	0.03	0.03	0-0.08
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.02	0-0.1	0.00	0.01	0-0.07	0.00	0.01	0-0.05
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.05	0-0.17	0.01	0.04	0-0.12	0.04	0.08	0-0.22
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.02	0-0.12	0.00	0.01	0-0.08	0.00	0.02	0-0.09
Nov	0.00	0.02	0-0.11	0.00	0.01	0-0.11	0.00	0.01	0-0.08
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 20.2a. Norfolk Vanguard East. Black-headed Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	8.91	0-46.2	0	9.0	0-46.19	0	6.28	0-46.08
Feb	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Mar	0	8.91	0-38.87	0	9.0	0-38.33	13	12.57	0-47.02
Apr	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
May	0	5.94	0-29.68	0	4.5	0-30.03	0	6.28	0-30.17
Jun	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Jul	0	5.94	0-29.14	0	9.0	0-36.59	0	18.85	0-66.46
Aug	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0
Oct	0	2.97	0-27.34	0	4.5	0-27.77	0	6.28	0-37.75
Nov	0	5.94	0-48.42	0	4.5	0-50.07	0	6.28	0-51.22
Dec	0	0.00	0-0	0	0.0	0-0	0	0.00	0-0

Table 20.2b. Norfolk Vanguard East. Black-headed Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.03	0-0.16	0	0.02	0-0.1	0.00	0.01	0-0.07
Feb	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0.03	0-0.13	0	0.02	0-0.09	0.02	0.02	0-0.07
Apr	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
May	0	0.02	0-0.1	0	0.01	0-0.07	0.00	0.01	0-0.05
Jun	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0.02	0-0.1	0	0.02	0-0.08	0.00	0.03	0-0.11
Aug	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Oct	0	0.01	0-0.09	0	0.01	0-0.06	0.00	0.01	0-0.06
Nov	0	0.02	0-0.16	0	0.01	0-0.11	0.00	0.01	0-0.08
Dec	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0

Table 20.3a. Norfolk Vanguard East. Black-headed Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	2.97	0-21.83	0.0	4.5	0-32.38	0.0	6.28	0-32.84
Feb	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Mar	0	2.97	0-18.37	0.0	4.5	0-27.75	0.0	6.28	0-19.57
Apr	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
May	0	0.00	0-3.66	0.0	0.0	0-3.73	0.0	0.00	0-4.75
Jun	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0	5.94	0-24.37	1.2	9.0	0-31.26	10.2	31.42	0-88.48
Aug	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Sep	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Oct	0	2.97	0-27.34	0.0	4.5	0-18.52	0.0	6.28	0-28.31
Nov	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Dec	0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0

Table 20.3b. Norfolk Vanguard East. Black-headed Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.01	0-0.07	0	0.01	0-0.07	0.00	0.01	0-0.05
Feb	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0.01	0-0.06	0	0.01	0-0.06	0.00	0.01	0-0.03
Apr	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
May	0	0.00	0-0.01	0	0.00	0-0.01	0.00	0.00	0-0.01
Jun	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0.02	0-0.08	0	0.02	0-0.07	0.02	0.05	0-0.14
Aug	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Oct	0	0.01	0-0.09	0	0.01	0-0.04	0.00	0.01	0-0.05
Nov	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0

Table 21.1a. Norfolk Vanguard East. Little Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.0	0-0	0.0	18.85	0-91.56
Feb	3.85	8.91	0-34.43	3.79	9.0	0-34.51	11.6	12.57	0-48.8
Mar	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
May	0.00	56.46	0-211.63	0.00	58.5	0-190.9	0.0	56.56	0-191.09
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Aug	14.14	62.40	0-179.06	14.89	63.0	0-188.61	15.5	69.13	0-196.04
Sep	0.00	2.97	0-23.31	0.00	4.5	0-23.54	0.0	6.28	0-31.43
Oct	0.00	0.00	0-0	0.00	4.5	0-21.48	0.0	6.28	0-28.31
Nov	0.00	14.86	0-96.85	0.00	27.0	0-133.53	0.0	31.42	0-136.6
Dec	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0

Table 21.1b. Norfolk Vanguard East. Little Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.03	0-0.15
Feb	0.01	0.03	0-0.12	0.01	0.02	0-0.08	0.02	0.02	0-0.08
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.19	0-0.71	0.00	0.13	0-0.42	0.00	0.09	0-0.3
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.05	0.21	0-0.6	0.03	0.14	0-0.42	0.02	0.11	0-0.31
Sep	0.00	0.01	0-0.08	0.00	0.01	0-0.05	0.00	0.01	0-0.05
Oct	0.00	0.00	0-0	0.00	0.01	0-0.05	0.00	0.01	0-0.05
Nov	0.00	0.05	0-0.33	0.00	0.06	0-0.3	0.00	0.05	0-0.22
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 21.2a. Norfolk Vanguard East. Little Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	0.00	0-0	0.0	0.0	0-0	0.0	6.28	0-42.89
Feb	0.0	2.97	0-20.39	0.0	4.5	0-29.37	0.0	6.28	0-40.06
Mar	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Apr	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
May	0.0	56.46	0-192.39	0.0	58.5	0-190.9	0.0	56.56	0-191.09
Jun	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Aug	18.9	62.40	0-179.06	19.9	63.0	0-188.61	15.5	69.13	0-196.04
Sep	0.0	2.97	0-23.31	0.0	4.5	0-23.54	0.0	6.28	0-31.43
Oct	0.0	0.00	0-0	0.0	4.5	0-21.48	0.0	6.28	0-28.31
Nov	0.0	14.86	0-96.85	0.0	27.0	0-133.53	0.0	31.42	0-136.6
Dec	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0

Table 21.2b. Norfolk Vanguard East. Little Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.07
Feb	0.00	0.01	0-0.07	0.00	0.01	0-0.07	0.00	0.01	0-0.06
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.19	0-0.65	0.00	0.13	0-0.42	0.00	0.09	0-0.3
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.06	0.21	0-0.6	0.04	0.14	0-0.42	0.02	0.11	0-0.31
Sep	0.00	0.01	0-0.08	0.00	0.01	0-0.05	0.00	0.01	0-0.05
Oct	0.00	0.00	0-0	0.00	0.01	0-0.05	0.00	0.01	0-0.05
Nov	0.00	0.05	0-0.33	0.00	0.06	0-0.3	0.00	0.05	0-0.22
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 21.3a. Norfolk Vanguard East. Little Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.0	0-0	0.00	12.57	0-67.58
Feb	2.82	5.94	0-34.32	3.34	4.5	0-34.51	6.89	6.28	0-23.14
Mar	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0

Table 21.3b. Norfolk Vanguard East. Little Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.11
Feb	0.01	0.02	0-0.12	0.01	0.01	0-0.08	0.01	0.01	0-0.04
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 22.1a. Norfolk Vanguard East. Common Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	9.37	14.86	0-63.31	9.24	27.0	0-104.02	9.43	25.14	0-103.72
Feb	0.00	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-34.02
Mar	0.00	8.91	0-55.5	0.00	9.0	0-55.92	0.00	18.85	0-85.35
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-30.95
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Oct	0.00	11.89	0-63.79	7.16	13.5	0-64.8	7.15	18.85	0-84.94
Nov	0.00	5.94	0-27.47	0.00	4.5	0-27.87	8.84	6.28	0-35.36
Dec	0.00	2.97	0-27.34	0.00	4.5	0-31.7	9.17	12.57	0-45.72

Table 22.1b. Norfolk Vanguard East. Common Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.03	0.05	0-0.21	0.02	0.06	0-0.23	0.02	0.04	0-0.17
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
Mar	0.00	0.03	0-0.19	0.00	0.02	0-0.12	0.00	0.03	0-0.14
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.04	0-0.21	0.02	0.03	0-0.14	0.01	0.03	0-0.14
Nov	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.01	0.01	0-0.06
Dec	0.00	0.01	0-0.09	0.00	0.01	0-0.07	0.01	0.02	0-0.07

Table 22.2a. Norfolk Vanguard East. Common Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	9.37	11.89	0-61.19	9.24	22.5	0-105.3	9.43	25.14	0-107.24
Feb	0.00	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-20.03
Mar	0.00	8.91	0-55.5	0.00	9.0	0-55.92	0.00	12.57	0-66.07
Apr	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-30.95
Sep	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Oct	0.00	11.89	0-63.79	7.16	13.5	0-64.8	7.15	18.85	0-94.38
Nov	0.00	5.94	0-27.47	0.00	4.5	0-27.87	0.00	6.28	0-35.42
Dec	0.00	2.97	0-27.34	0.00	4.5	0-31.7	0.00	12.57	0-45.72

Table 22.2b. Norfolk Vanguard East. Common Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.03	0.04	0-0.21	0.02	0.05	0-0.23	0.02	0.04	0-0.17
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.03
Mar	0.00	0.03	0-0.19	0.00	0.02	0-0.12	0.00	0.02	0-0.11
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.04	0-0.21	0.02	0.03	0-0.14	0.01	0.03	0-0.15
Nov	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.06
Dec	0.00	0.01	0-0.09	0.00	0.01	0-0.07	0.00	0.02	0-0.07

Table 22.3a. Norfolk Vanguard East. Common Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-4.24	0	0	0-8.67	0	0.00	0-7.2
Feb	0	0	0-0	0	0	0-0	0	0.00	0-5.34
Mar	0	0	0-0	0	0	0-0	0	6.28	0-37.57
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 22.3b. Norfolk Vanguard East. Common Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0.01	0	0	0-0.02	0	0.00	0-0.01
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0.01
Mar	0	0	0-0	0	0	0-0	0	0.01	0-0.06
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 23.1a. Norfolk Vanguard East. Lesser Black-backed Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	18.73	65.37	0-242.53	21.06	72.0	0-254.03	21.4	75.41	0-264.96
Feb	4.66	8.91	0-37.28	0.00	9.0	0-46.01	28.2	75.41	0-229.28
Mar	0.00	11.89	0-47.08	11.97	13.5	0-50.32	35.2	37.71	0-84.52
Apr	9.73	11.89	0-36.91	9.24	13.5	0-34.97	17.6	18.85	0-52.8
May	0.00	5.94	0-29.68	0.00	4.5	0-30.03	0.0	6.28	0-30.17
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0.00	11.89	0-43.7	6.89	31.5	0-106.37	69.2	69.13	13.49-147.62
Aug	40.56	53.48	0-141.36	60.07	112.5	0-287.88	119.0	157.11	0-381.77
Sep	32.82	32.69	0-85.46	39.23	40.5	0-94.34	47.1	56.56	0-137.74
Oct	0.00	5.94	0-42.73	7.16	9.0	0-42.97	14.3	18.85	0-56.63
Nov	78.12	98.06	0-283.89	87.73	130.6	16.69-343.68	97.2	138.26	17.07-338.37
Dec	10.25	14.86	0-51.26	11.84	18.0	0-63.4	23.8	31.42	0-91.44

Table 23.1b. Norfolk Vanguard East. Lesser Black-backed Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.06	0.22	0-0.82	0.05	0.16	0-0.56	0.03	0.12	0-0.42
Feb	0.02	0.03	0-0.13	0.00	0.02	0-0.1	0.04	0.12	0-0.36
Mar	0.00	0.04	0-0.16	0.03	0.03	0-0.11	0.06	0.06	0-0.13
Apr	0.03	0.04	0-0.12	0.02	0.03	0-0.08	0.03	0.03	0-0.08
May	0.00	0.02	0-0.1	0.00	0.01	0-0.07	0.00	0.01	0-0.05
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.04	0-0.15	0.02	0.07	0-0.24	0.11	0.11	0.02-0.23
Aug	0.14	0.18	0-0.48	0.13	0.25	0-0.64	0.19	0.25	0-0.61
Sep	0.11	0.11	0-0.29	0.09	0.09	0-0.21	0.08	0.09	0-0.22
Oct	0.00	0.02	0-0.14	0.02	0.02	0-0.1	0.02	0.03	0-0.09
Nov	0.26	0.33	0-0.96	0.19	0.29	0.04-0.76	0.15	0.22	0.03-0.54
Dec	0.03	0.05	0-0.17	0.03	0.04	0-0.14	0.04	0.05	0-0.15

Table 23.2a. Norfolk Vanguard East. Lesser Black-backed Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	10.2	20.80	0-80.84	21.06	27.0	0-80.83	21.45	31.42	0-92.16
Feb	0.0	5.94	0-37.28	0.00	4.5	0-37.09	10.01	18.85	0-60.08
Mar	0.0	2.97	0-35.31	0.00	9.0	0-35.9	9.39	12.57	0-48.3
Apr	0.0	5.94	0-29.18	0.00	4.5	0-30.81	0.00	12.57	0-37.71
May	0.0	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jun	0.0	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.0	5.94	0-36.42	3.66	27.0	0-80.5	36.92	43.99	0-110.76
Aug	37.7	44.57	0-122.51	66.75	81.0	0-218.39	80.21	119.40	0-299.22
Sep	0.0	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-33.2
Oct	0.0	2.97	0-21.36	0.00	4.5	0-27.77	7.15	6.28	0-37.75
Nov	0.0	8.91	0-36.63	8.77	13.5	0-55.73	17.07	18.85	0-56.36
Dec	0.0	8.91	0-46.79	0.00	9.0	0-47.38	11.92	18.85	0-57.15

Table 23.2b. Norfolk Vanguard East. Lesser Black-backed Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.03	0.07	0-0.27	0.05	0.06	0-0.18	0.03	0.05	0-0.15
Feb	0.00	0.02	0-0.13	0.00	0.01	0-0.08	0.02	0.03	0-0.1
Mar	0.00	0.01	0-0.12	0.00	0.02	0-0.08	0.01	0.02	0-0.08
Apr	0.00	0.02	0-0.1	0.00	0.01	0-0.07	0.00	0.02	0-0.06
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.02	0-0.12	0.01	0.06	0-0.18	0.06	0.07	0-0.18
Aug	0.13	0.15	0-0.41	0.15	0.18	0-0.49	0.13	0.19	0-0.48
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
Oct	0.00	0.01	0-0.07	0.00	0.01	0-0.06	0.01	0.01	0-0.06
Nov	0.00	0.03	0-0.12	0.02	0.03	0-0.12	0.03	0.03	0-0.09
Dec	0.00	0.03	0-0.16	0.00	0.02	0-0.11	0.02	0.03	0-0.09

Table 23.3a. Norfolk Vanguard East. Lesser Black-backed Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	41.60	0-184.79	0.00	45.0	0-196.29	0.00	43.99	0-195.84
Feb	0.0	2.97	0-22.88	0.00	4.5	0-23.01	18.79	56.56	0-191.15
Mar	0.0	5.94	0-35.31	3.72	9.0	0-35.9	24.15	25.14	0-64.86
Apr	0.0	5.94	0-34.75	0.00	4.5	0-34.97	0.00	6.28	0-52.8
May	0.0	5.94	0-29.68	0.00	4.5	0-30.03	0.00	6.28	0-30.17
Jun	0.0	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.0	2.97	0-21.85	0.00	9.0	0-28.42	27.67	25.14	0-69.18
Aug	0.0	8.91	0-47.12	0.00	31.5	0-99.27	5.16	37.71	0-113.5
Sep	32.8	32.69	0-85.46	39.23	40.5	0-94.66	47.15	50.27	0-129.57
Oct	0.0	5.94	0-28.48	0.00	4.5	0-28.65	7.15	6.28	0-28.6
Nov	69.4	89.14	0-256.41	78.96	121.6	16.69-306.52	79.57	119.40	17.07-310.19
Dec	0.0	5.94	0-41	0.00	9.0	0-63.4	0.00	12.57	0-68.58

Table 23.3b. Norfolk Vanguard East. Lesser Black-backed Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.14	0-0.62	0.00	0.10	0-0.44	0.00	0.07	0-0.31
Feb	0.00	0.01	0-0.08	0.00	0.01	0-0.05	0.03	0.09	0-0.3
Mar	0.00	0.02	0-0.12	0.01	0.02	0-0.08	0.04	0.04	0-0.1
Apr	0.00	0.02	0-0.12	0.00	0.01	0-0.08	0.00	0.01	0-0.08
May	0.00	0.02	0-0.1	0.00	0.01	0-0.07	0.00	0.01	0-0.05
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.01	0-0.07	0.00	0.02	0-0.06	0.04	0.04	0-0.11
Aug	0.00	0.03	0-0.16	0.00	0.07	0-0.22	0.01	0.06	0-0.18
Sep	0.11	0.11	0-0.29	0.09	0.09	0-0.21	0.08	0.08	0-0.21
Oct	0.00	0.02	0-0.1	0.00	0.01	0-0.06	0.01	0.01	0-0.05
Nov	0.23	0.30	0-0.86	0.18	0.27	0.04-0.68	0.13	0.19	0.03-0.49
Dec	0.00	0.02	0-0.14	0.00	0.02	0-0.14	0.00	0.02	0-0.11

Table 24.1a. Norfolk Vanguard East. Herring Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	122.39	202.05	0-589.01	231.66	238.6	0-600.42	257.37	257.66	0-610.55
Feb	0.00	2.97	0-34.32	0.00	9.0	0-46.01	0.00	12.57	0-69.42
Mar	0.00	20.80	0-94.15	9.32	27.0	0-119.67	10.58	37.71	0-144.9
Apr	9.23	14.86	0-52.12	18.49	22.5	0-78.67	28.28	31.42	0-84.84
May	0.00	5.94	0-29.68	0.00	13.5	0-60.07	0.00	18.85	0-70.4
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	2.97	0-21.85	0.00	4.5	0-22.81	0.00	12.57	0-48.52
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	6.28	0-30.95
Sep	0.00	14.86	0-77.69	19.01	22.5	0-70.61	15.81	31.42	0-117.86
Oct	0.00	8.91	0-36.45	0.00	9.0	0-37.03	7.15	12.57	0-56.63
Nov	16.14	29.71	0-109.89	33.38	45.0	0-139.33	51.22	81.70	0-225.42
Dec	82.01	101.03	0-304.13	84.53	103.5	0-307.97	166.87	138.26	0-309.91

Table 24.1b. Norfolk Vanguard East. Herring Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.41	0.68	0-1.98	0.51	0.53	0-1.33	0.41	0.41	0-0.97
Feb	0.00	0.01	0-0.12	0.00	0.02	0-0.1	0.00	0.02	0-0.11
Mar	0.00	0.07	0-0.32	0.02	0.06	0-0.27	0.02	0.06	0-0.23
Apr	0.03	0.05	0-0.18	0.04	0.05	0-0.17	0.05	0.05	0-0.14
May	0.00	0.02	0-0.1	0.00	0.03	0-0.13	0.00	0.03	0-0.11
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.01	0-0.07	0.00	0.01	0-0.05	0.00	0.02	0-0.08
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
Sep	0.00	0.05	0-0.26	0.04	0.05	0-0.16	0.03	0.05	0-0.19
Oct	0.00	0.03	0-0.12	0.00	0.02	0-0.08	0.01	0.02	0-0.09
Nov	0.05	0.10	0-0.37	0.07	0.10	0-0.31	0.08	0.13	0-0.36
Dec	0.28	0.34	0-1.02	0.19	0.23	0-0.68	0.27	0.22	0-0.49

Table 24.2a. Norfolk Vanguard East. Herring Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	30.6	151.54	0-531.27	52.6	162.1	0-531.14	53.6	169.68	0-552.95
Feb	0.0	0.00	0-0	0.0	0.0	0-0	0.0	6.28	0-34.71
Mar	0.0	2.97	0-35.31	0.0	9.0	0-35.9	0.0	6.28	0-36.22
Apr	0.0	5.94	0-27.68	0.0	4.5	0-27.73	0.0	6.28	0-28.28
May	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jun	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Jul	0.0	0.00	0-0	0.0	0.0	0-0	0.0	6.28	0-22.15
Aug	0.0	0.00	0-0	0.0	0.0	0-0	0.0	6.28	0-30.95
Sep	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Oct	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.00	0-0
Nov	0.0	11.89	0-64.1	0.0	13.5	0-74.31	17.1	31.42	0-122.11
Dec	0.0	8.91	0-61.51	0.0	9.0	0-63.4	0.0	31.42	0-137.16

Table 24.2b. Norfolk Vanguard East. Herring Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.1	0.51	0-1.79	0.12	0.36	0-1.18	0.09	0.27	0-0.88
Feb	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.06
Mar	0.0	0.01	0-0.12	0.00	0.02	0-0.08	0.00	0.01	0-0.06
Apr	0.0	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.05
May	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
Aug	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
Sep	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.0	0.04	0-0.22	0.00	0.03	0-0.17	0.03	0.05	0-0.19
Dec	0.0	0.03	0-0.21	0.00	0.02	0-0.14	0.00	0.05	0-0.22

Table 24.3a. Norfolk Vanguard East. Herring Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	51.00	50.51	0-138.7	57.73	81.0	0-242.19	57.60	87.98	0-268.09
Feb	0.00	2.97	0-34.32	0.00	9.0	0-46.01	0.00	6.28	0-46.28
Mar	0.00	14.86	0-82.38	1.88	22.5	0-95.73	1.19	31.42	0-132.82
Apr	8.69	8.91	0-34.75	17.48	18.0	0-61.19	26.40	25.14	0-70.4
May	0.00	5.94	0-29.68	0.00	13.5	0-60.07	0.00	18.85	0-80.46
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Jul	0.00	2.97	0-21.85	0.00	4.5	0-22.81	0.00	6.28	0-38.33
Aug	0.00	0.00	0-0	0.00	0.0	0-0	0.00	0.00	0-0
Sep	0.00	14.86	0-77.69	19.01	22.5	0-70.61	15.81	31.42	0-110.01
Oct	0.00	8.91	0-36.45	0.00	9.0	0-37.03	7.15	12.57	0-56.63
Nov	16.14	17.83	0-64.1	27.87	31.5	0-83.46	35.36	50.27	0-122.11
Dec	51.26	92.11	0-292.43	52.83	94.5	0-307.97	91.44	106.83	0-297.99

Table 24.3b. Norfolk Vanguard East. Herring Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.17	0.17	0-0.47	0.13	0.18	0-0.54	0.09	0.14	0-0.43
Feb	0.00	0.01	0-0.12	0.00	0.02	0-0.1	0.00	0.01	0-0.07
Mar	0.00	0.05	0-0.28	0.00	0.05	0-0.21	0.00	0.05	0-0.21
Apr	0.03	0.03	0-0.12	0.04	0.04	0-0.14	0.04	0.04	0-0.11
May	0.00	0.02	0-0.1	0.00	0.03	0-0.13	0.00	0.03	0-0.13
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.01	0-0.07	0.00	0.01	0-0.05	0.00	0.01	0-0.06
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.05	0-0.26	0.04	0.05	0-0.16	0.03	0.05	0-0.18
Oct	0.00	0.03	0-0.12	0.00	0.02	0-0.08	0.01	0.02	0-0.09
Nov	0.05	0.06	0-0.22	0.06	0.07	0-0.19	0.06	0.08	0-0.19
Dec	0.17	0.31	0-0.98	0.12	0.21	0-0.68	0.15	0.17	0-0.47

Table 25.1a. Norfolk Vanguard East. Great Black-backed Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	193.78	436.79	18.73-1224.22	410.68	544.8	27.73-1316.31	589.8	603.30	37.71-1313.26
Feb	0.00	8.91	0-37.28	37.09	90.0	0-299.09	121.0	138.26	28.18-312.41
Mar	0.00	5.94	0-37	12.78	13.5	0-47.87	24.1	25.14	0-75.14
Apr	0.00	8.91	0-38.91	8.74	9.0	0-41.08	8.8	18.85	0-85.15
May	9.89	14.86	0-57.72	10.01	13.5	0-57.27	10.1	12.57	0-57.33
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.0	6.28	0-23.06
Aug	9.42	50.51	0-160.21	44.67	112.5	0-297.81	51.6	125.69	0-340.5
Sep	23.44	26.74	0-85.46	39.23	40.5	0-103	55.0	56.56	13.1-125.72
Oct	9.11	17.83	0-63.79	14.32	18.0	0-64.8	14.3	18.85	0-75.51
Nov	78.12	169.37	16.14-476.2	300.44	337.7	26.32-780.24	478.1	471.33	70.73-929.88
Dec	304.13	243.65	9.11-471.56	343.50	288.1	27.59-570.61	429.1	358.21	27.52-708.66

Table 25.1b. Norfolk Vanguard East. Great Black-backed Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.65	1.47	0.06-4.12	0.91	1.21	0.06-2.92	0.94	0.96	0.06-2.09
Feb	0.00	0.03	0-0.13	0.08	0.20	0-0.66	0.19	0.22	0.04-0.5
Mar	0.00	0.02	0-0.12	0.03	0.03	0-0.11	0.04	0.04	0-0.12
Apr	0.00	0.03	0-0.13	0.02	0.02	0-0.09	0.01	0.03	0-0.14
May	0.03	0.05	0-0.19	0.02	0.03	0-0.13	0.02	0.02	0-0.09
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
Aug	0.03	0.17	0-0.54	0.10	0.25	0-0.66	0.08	0.20	0-0.54
Sep	0.08	0.09	0-0.29	0.09	0.09	0-0.23	0.09	0.09	0.02-0.2
Oct	0.03	0.06	0-0.21	0.03	0.04	0-0.14	0.02	0.03	0-0.12
Nov	0.26	0.57	0.05-1.6	0.67	0.75	0.06-1.73	0.76	0.75	0.11-1.48
Dec	1.02	0.82	0.03-1.59	0.76	0.64	0.06-1.27	0.68	0.57	0.04-1.13

Table 25.2a. Norfolk Vanguard East. Great Black-backed Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	46.83	311.99	9.37-1004.79	73.7	342.2	18.49-1073.83	118.0	364.5	18.85-1071.34
Feb	0.00	5.94	0-37.28	0.0	13.5	0-64.91	18.8	25.1	0-75.14
Mar	0.00	2.97	0-27.75	0.0	4.5	0-18.64	0.0	0.0	0-28.18
Apr	0.00	5.94	0-38.91	0.0	9.0	0-41.08	0.0	18.9	0-95.5
May	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Jun	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Jul	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Aug	4.71	47.54	0-150.79	44.7	94.5	0-277.96	46.4	106.8	0-299.22
Sep	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Oct	0.00	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Nov	0.00	26.74	0-128.21	50.1	49.5	0-148.62	68.3	75.4	0-197.25
Dec	36.45	44.57	0-116.97	71.1	72.0	9.2-148.09	107.3	106.8	9.17-217.17

Table 25.2b. Norfolk Vanguard East. Great Black-backed Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.16	1.05	0.03-3.38	0.16	0.76	0.04-2.39	0.19	0.58	0.03-1.7
Feb	0.00	0.02	0-0.13	0.00	0.03	0-0.14	0.03	0.04	0-0.12
Mar	0.00	0.01	0-0.09	0.00	0.01	0-0.04	0.00	0.00	0-0.04
Apr	0.00	0.02	0-0.13	0.00	0.02	0-0.09	0.00	0.03	0-0.15
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.02	0.16	0-0.51	0.10	0.21	0-0.62	0.07	0.17	0-0.48
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.09	0-0.43	0.11	0.11	0-0.33	0.11	0.12	0-0.31
Dec	0.12	0.15	0-0.39	0.16	0.16	0.02-0.33	0.17	0.17	0.01-0.35

Table 25.3a. Norfolk Vanguard East. Great Black-backed Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	150.14	127.77	0-285.57	219.39	198.1	0-452.8	230.4	238.80	0-579.08
Feb	0.00	2.97	0-34.32	0.00	76.5	0-299.09	101.0	113.12	0-312.41
Mar	0.00	2.97	0-38.87	11.97	13.5	0-38.33	23.5	25.14	0-64.86
Apr	0.00	2.97	0-17.37	0.00	4.5	0-26.22	0.0	0.00	0-26.4
May	9.89	14.86	0-57.72	10.01	13.5	0-57.27	10.1	12.57	0-57.33
Jun	0.00	0.00	0-0	0.00	0.0	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.0	0-0	0.0	6.28	0-23.06
Aug	0.00	5.94	0-28.27	0.00	13.5	0-59.56	0.0	12.57	0-61.91
Sep	23.44	26.74	0-85.46	39.23	40.5	0-109.84	56.1	56.56	13.1-125.72
Oct	14.24	17.83	0-63.79	9.26	18.0	0-64.8	14.3	18.85	0-75.74
Nov	78.12	139.65	16.14-375.46	250.37	288.1	26.32-659.49	426.9	402.20	61.89-770.2
Dec	235.78	202.05	0-430.55	248.74	216.1	0-486.07	298.0	251.37	0-548.64

Table 25.3b. Norfolk Vanguard East. Great Black-backed Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.51	0.43	0-0.96	0.49	0.44	0-1.01	0.37	0.38	0-0.92
Feb	0.00	0.01	0-0.12	0.00	0.17	0-0.66	0.16	0.18	0-0.5
Mar	0.00	0.01	0-0.13	0.03	0.03	0-0.09	0.04	0.04	0-0.1
Apr	0.00	0.01	0-0.06	0.00	0.01	0-0.06	0.00	0.00	0-0.04
May	0.03	0.05	0-0.19	0.02	0.03	0-0.13	0.02	0.02	0-0.09
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
Aug	0.00	0.02	0-0.1	0.00	0.03	0-0.13	0.00	0.02	0-0.1
Sep	0.08	0.09	0-0.29	0.09	0.09	0-0.24	0.09	0.09	0.02-0.2
Oct	0.05	0.06	0-0.21	0.02	0.04	0-0.14	0.02	0.03	0-0.12
Nov	0.26	0.47	0.05-1.26	0.56	0.64	0.06-1.46	0.68	0.64	0.1-1.23
Dec	0.79	0.68	0-1.45	0.55	0.48	0-1.08	0.47	0.40	0-0.87

Table 26.1a. Norfolk Vanguard West. Common Scoter design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	6.35	0-46.94
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 26.1b. Norfolk Vanguard West. Common Scoter design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.01	0-0.07
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 26.2a. Norfolk Vanguard West. Common Scoter design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 26.2b. Norfolk Vanguard West. Common Scoter design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 26.3a. Norfolk Vanguard West. Common Scoter design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	6.35	0-37.55
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 26.3b. Norfolk Vanguard West. Common Scoter design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.01	0-0.06
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 27.1a. Norfolk Vanguard West. Red-throated Diver design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	127.6	141.57	36.54-281.78	208.7	235.2	65.04-462.82	278.6	355.6	75.67-707.49
Feb	72.7	82.58	9.11-181.79	92.7	113.1	18.54-240.66	131.4	152.4	18.78-338.78
Mar	109.6	109.12	45.68-183.62	120.5	126.7	55.45-203.98	197.9	196.8	113.06-292.08
Apr	56.4	58.99	9.39-127.57	93.8	104.0	28.14-194.06	162.5	184.1	28.68-396.67
May	0.0	5.90	0-27.47	0.0	13.6	0-55.63	0.0	12.7	0-56.53
Jun	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Jul	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Aug	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Sep	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Oct	0.0	0.00	0-0	0.0	0.0	0-0	0.0	0.0	0-0
Nov	0.0	2.95	0-24.04	0.0	18.1	0-65.75	0.0	25.4	0-83.5
Dec	18.3	17.70	0-54.95	18.5	22.6	0-55.27	27.5	25.4	0-65.58

Table 27.1b. Norfolk Vanguard West. Red-throated Diver design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.43	0.48	0.12-0.96	0.46	0.52	0.14-1.02	0.44	0.56	0.12-1.11
Feb	0.25	0.28	0.03-0.62	0.20	0.25	0.04-0.53	0.21	0.24	0.03-0.53
Mar	0.37	0.37	0.15-0.62	0.27	0.28	0.12-0.45	0.31	0.31	0.18-0.46
Apr	0.19	0.20	0.03-0.43	0.21	0.23	0.06-0.43	0.26	0.29	0.05-0.62
May	0.00	0.02	0-0.09	0.00	0.03	0-0.12	0.00	0.02	0-0.09
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.01	0-0.08	0.00	0.04	0-0.15	0.00	0.04	0-0.13
Dec	0.06	0.06	0-0.19	0.04	0.05	0-0.12	0.04	0.04	0-0.1

Table 27.2a. Norfolk Vanguard West. Red-throated Diver design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	18.3	23.6	0-54.54	18.6	22.62	0-55.54	18.9	25.40	0-56.6
Feb	0.0	5.9	0-27.34	0.0	4.52	0-27.81	0.0	6.35	0-28.16
Mar	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Apr	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
May	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jun	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Aug	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Sep	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Oct	0.0	0.0	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Nov	0.0	0.0	0-0	0.0	9.05	0-41.09	0.0	19.05	0-58.45
Dec	0.0	5.9	0-27.47	0.0	4.52	0-27.63	0.0	6.35	0-27.51

Table 27.2b. Norfolk Vanguard West. Red-throated Diver design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.06	0.08	0-0.18	0.04	0.05	0-0.12	0.03	0.04	0-0.09
Feb	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.02	0-0.09	0.00	0.03	0-0.09
Dec	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04

Table 27.3a. Norfolk Vanguard West. Red-throated Diver design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	109.08	117.97	18.27-254.51	190.1	212.62	46.45-416.54	273.9	330.17	66.21-650.89
Feb	63.79	76.68	8.88-181.79	92.6	108.57	9.27-249.92	126.9	152.39	18.78-338.78
Mar	109.62	109.12	45.68-183.62	120.5	126.66	55.45-213.25	197.9	196.83	113.33-283.33
Apr	56.36	58.99	9.39-127.57	93.8	104.05	28.14-194.06	147.3	184.13	28.68-387.22
May	0.00	5.90	0-27.47	0.0	13.57	0-55.63	0.0	12.70	0-56.53
Jun	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Sep	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Oct	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Nov	0.00	2.95	0-24.04	0.0	9.05	0-32.87	0.0	6.35	0-41.75
Dec	9.16	14.75	0-45.79	18.4	18.09	0-46.17	18.7	25.40	0-56.21

Table 27.3b. Norfolk Vanguard West. Red-throated Diver design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.37	0.40	0.06-0.86	0.42	0.47	0.1-0.92	0.43	0.52	0.1-1.03
Feb	0.22	0.26	0.03-0.62	0.20	0.24	0.02-0.55	0.20	0.24	0.03-0.53
Mar	0.37	0.37	0.15-0.62	0.27	0.28	0.12-0.47	0.31	0.31	0.18-0.45
Apr	0.19	0.20	0.03-0.43	0.21	0.23	0.06-0.43	0.23	0.29	0.05-0.61
May	0.00	0.02	0-0.09	0.00	0.03	0-0.12	0.00	0.02	0-0.09
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.01	0-0.08	0.00	0.02	0-0.07	0.00	0.01	0-0.07
Dec	0.03	0.05	0-0.16	0.04	0.04	0-0.1	0.03	0.04	0-0.09

Table 28.1a. Norfolk Vanguard West. Fulmar design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	45.45	67.8	0-191.84	97.4	140.2	0-353.05	179.6	234.9	18.87-539.14
Feb	18.18	17.7	0-54.54	27.8	31.7	0-83.31	37.5	44.5	0-122.34
Mar	36.54	50.1	0-137.71	55.5	67.9	0-167.12	66.0	88.9	0-217.46
Apr	18.22	17.7	0-54.67	27.7	27.1	0-64.69	28.7	31.8	0-85
May	36.36	35.4	0-81.81	55.6	58.8	18.54-111.26	85.1	88.9	37.69-160.75
Jun	45.90	50.1	9.18-100.99	65.1	67.9	18.61-129.59	103.3	101.6	37.32-187.77
Jul	27.41	29.5	0-82.22	43.5	67.9	0-175.58	69.1	114.3	7.67-284.01
Aug	60.76	126.8	0-319.73	136.0	194.5	7.86-454.31	239.2	298.4	15.74-680
Sep	78.80	79.6	36.54-137.03	141.5	153.8	55.03-277.69	201.1	228.6	70.75-423.99
Oct	467.15	589.9	9.18-1318.73	518.1	628.8	9.24-1388.11	545.4	717.5	18.93-1574.86
Nov	48.07	53.1	8.01-118.46	102.2	104.0	46.45-172.59	141.9	146.0	75.15-244.9
Dec	9.16	14.8	0-45.73	18.5	22.6	0-55.27	46.8	57.1	0-155.89

Table 28.1b. Norfolk Vanguard West. Fulmar design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.15	0.23	0-0.65	0.22	0.31	0-0.78	0.28	0.37	0.03-0.85
Feb	0.06	0.06	0-0.18	0.06	0.07	0-0.18	0.06	0.07	0-0.19
Mar	0.12	0.17	0-0.47	0.12	0.15	0-0.37	0.10	0.14	0-0.34
Apr	0.06	0.06	0-0.19	0.06	0.06	0-0.14	0.05	0.05	0-0.13
May	0.12	0.12	0-0.28	0.12	0.13	0.04-0.25	0.13	0.14	0.06-0.25
Jun	0.16	0.17	0.03-0.34	0.14	0.15	0.04-0.29	0.16	0.16	0.06-0.3
Jul	0.09	0.10	0-0.28	0.10	0.15	0-0.39	0.11	0.18	0.01-0.45
Aug	0.21	0.43	0-1.08	0.30	0.43	0.02-1	0.38	0.47	0.02-1.07
Sep	0.27	0.27	0.12-0.46	0.31	0.34	0.12-0.61	0.32	0.36	0.11-0.67
Oct	1.58	2.00	0.03-4.47	1.15	1.39	0.02-3.07	0.86	1.13	0.03-2.48
Nov	0.16	0.18	0.03-0.4	0.23	0.23	0.1-0.38	0.22	0.23	0.12-0.39
Dec	0.03	0.05	0-0.16	0.04	0.05	0-0.12	0.07	0.09	0-0.25

Table 28.2a. Norfolk Vanguard West. Fulmar design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	18.27	23.59	0-73.08	37.03	36.19	0-92.91	56.8	63.5	9.46-122.96
Feb	18.18	17.70	0-54.54	18.51	18.09	0-55.54	18.8	19.1	0-56.46
Mar	9.18	14.75	0-45.68	18.48	18.09	0-55.63	18.9	25.4	0-75.56
Apr	9.39	14.75	0-45.56	18.48	18.09	0-46.9	18.9	19.1	0-47.79
May	9.09	8.85	0-27.47	18.54	18.09	0-55.63	37.7	38.1	9.42-75.65
Jun	0.00	14.75	0-55.08	18.61	22.62	0-65.14	37.8	44.5	9.39-85.03
Jul	0.00	17.70	0-73.08	4.62	31.67	0-101.65	37.9	63.5	0-170.41
Aug	13.70	41.29	0-137.03	39.31	54.28	0-148.35	75.6	95.2	7.87-236.11
Sep	7.88	8.85	0-27.41	23.59	27.14	0-55.54	37.7	38.1	7.86-78.61
Oct	45.79	106.18	0-283.89	73.99	117.62	0-296.08	118.5	158.7	0-398.46
Nov	16.02	17.70	0-48.07	37.16	54.28	0-147.93	75.3	76.2	18.84-150.3
Dec	0.00	5.90	0-27.47	0.00	4.52	0-27.63	0.0	19.1	0-64.42

Table 28.2b. Norfolk Vanguard West. Fulmar design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.06	0.08	0-0.25	0.08	0.08	0-0.21	0.09	0.10	0.01-0.19
Feb	0.06	0.06	0-0.18	0.04	0.04	0-0.12	0.03	0.03	0-0.09
Mar	0.03	0.05	0-0.15	0.04	0.04	0-0.12	0.03	0.04	0-0.12
Apr	0.03	0.05	0-0.15	0.04	0.04	0-0.1	0.03	0.03	0-0.08
May	0.03	0.03	0-0.09	0.04	0.04	0-0.12	0.06	0.06	0.01-0.12
Jun	0.00	0.05	0-0.19	0.04	0.05	0-0.14	0.06	0.07	0.01-0.13
Jul	0.00	0.06	0-0.25	0.01	0.07	0-0.22	0.06	0.10	0-0.27
Aug	0.05	0.14	0-0.46	0.09	0.12	0-0.33	0.12	0.15	0.01-0.37
Sep	0.03	0.03	0-0.09	0.05	0.06	0-0.12	0.06	0.06	0.01-0.12
Oct	0.16	0.36	0-0.96	0.16	0.26	0-0.65	0.19	0.25	0-0.63
Nov	0.05	0.06	0-0.16	0.08	0.12	0-0.33	0.12	0.12	0.03-0.24
Dec	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.03	0-0.1

Table 28.3a. Norfolk Vanguard West. Fulmar design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	4.57	44.24	0-146.16	37.16	104.05	0-278.72	80.4	177.8	0-444.56
Feb	0.00	0.00	0-0	9.27	13.57	0-46.28	18.8	25.4	0-84.7
Mar	4.59	35.39	0-119.35	36.96	49.76	0-139.07	42.4	63.5	0-179.45
Apr	0.00	5.90	0-27.34	0.00	9.05	0-46.21	0.0	12.7	0-56.67
May	27.27	26.54	0-63.63	37.09	40.71	9.27-83.44	47.3	50.8	9.42-113.47
Jun	27.54	35.39	0-91.81	37.22	45.24	0-120.33	56.3	63.5	9.45-140.82
Jul	9.14	11.80	0-35.63	27.72	36.19	0-92.41	38.4	57.1	0-151.47
Aug	39.30	85.53	0-228.38	83.85	140.24	0-361.59	121.2	203.2	0-481.67
Sep	70.92	70.78	27.41-118.76	117.93	126.66	39.31-249.92	162.6	190.5	39.31-386.3
Oct	398.49	486.64	9.18-1098.94	416.31	515.70	0-1165.82	441.1	552.4	0-1242.81
Nov	24.04	35.39	0-109.35	37.16	49.76	0-130.07	56.5	69.8	8.35-169.54
Dec	0.00	8.85	0-45.73	18.42	18.09	0-46.17	36.7	44.5	0-110.04

Table 28.3b. Norfolk Vanguard West. Fulmar design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.02	0.15	0-0.5	0.08	0.23	0-0.62	0.13	0.28	0-0.7
Feb	0.00	0.00	0-0	0.02	0.03	0-0.1	0.03	0.04	0-0.13
Mar	0.02	0.12	0-0.4	0.08	0.11	0-0.31	0.07	0.10	0-0.28
Apr	0.00	0.02	0-0.09	0.00	0.02	0-0.1	0.00	0.02	0-0.09
May	0.09	0.09	0-0.22	0.08	0.09	0.02-0.18	0.07	0.08	0.01-0.18
Jun	0.09	0.12	0-0.31	0.08	0.10	0-0.27	0.09	0.10	0.01-0.22
Jul	0.03	0.04	0-0.12	0.06	0.08	0-0.2	0.06	0.09	0-0.24
Aug	0.13	0.29	0-0.77	0.19	0.31	0-0.8	0.19	0.32	0-0.76
Sep	0.24	0.24	0.09-0.4	0.26	0.28	0.09-0.55	0.26	0.30	0.06-0.61
Oct	1.35	1.65	0.03-3.73	0.92	1.14	0-2.58	0.69	0.87	0-1.96
Nov	0.08	0.12	0-0.37	0.08	0.11	0-0.29	0.09	0.11	0.01-0.27
Dec	0.00	0.03	0-0.16	0.04	0.04	0-0.1	0.06	0.07	0-0.17

Table 29.1a. Norfolk Vanguard West. Gannet design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	14.75	0-54.81	0.00	18.09	0-65.04	0.00	19.05	0-75.67
Feb	9.09	8.85	0-36.36	9.26	9.05	0-27.81	9.41	12.70	0-47.05
Mar	0.00	14.75	0-55.08	0.00	13.57	0-55.63	0.00	12.70	0-56.67
Apr	0.00	0.00	0-0	0.00	4.52	0-28.14	18.89	19.05	0-56.67
May	0.00	5.90	0-27.47	0.00	9.05	0-37.09	18.91	25.40	0-65.95
Jun	27.54	35.39	0-110.17	55.54	58.81	9.3-139.08	75.11	82.54	18.89-168.99
Jul	35.63	44.24	0-118.76	44.87	58.81	7.26-147.86	47.34	63.49	0-160.94
Aug	39.30	53.09	0-146.16	55.03	95.00	0-241.06	94.44	120.64	15.74-255
Sep	18.27	20.65	0-54.81	31.45	36.19	7.86-74.05	55.03	57.14	18.84-102.2
Oct	165.17	256.59	0-596.75	272.68	357.37	9.25-794.74	331.47	419.06	9.49-937.25
Nov	519.40	530.88	336.5-765.43	821.85	823.32	665.7-1012.69	1026.68	1028.60	838.22-1233.9
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-36.68

Table 29.1b. Norfolk Vanguard West. Gannet design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.05	0-0.19	0.00	0.04	0-0.14	0.00	0.03	0-0.12
Feb	0.03	0.03	0-0.12	0.02	0.02	0-0.06	0.01	0.02	0-0.07
Mar	0.00	0.05	0-0.19	0.00	0.03	0-0.12	0.00	0.02	0-0.09
Apr	0.00	0.00	0-0	0.00	0.01	0-0.06	0.03	0.03	0-0.09
May	0.00	0.02	0-0.09	0.00	0.02	0-0.08	0.03	0.04	0-0.1
Jun	0.09	0.12	0-0.37	0.12	0.13	0.02-0.31	0.12	0.13	0.03-0.27
Jul	0.12	0.15	0-0.4	0.10	0.13	0.02-0.33	0.07	0.10	0-0.25
Aug	0.13	0.18	0-0.5	0.12	0.21	0-0.53	0.15	0.19	0.02-0.4
Sep	0.06	0.07	0-0.19	0.07	0.08	0.02-0.16	0.09	0.09	0.03-0.16
Oct	0.56	0.87	0-2.02	0.60	0.79	0.02-1.76	0.52	0.66	0.01-1.48
Nov	1.76	1.80	1.14-2.6	1.82	1.82	1.47-2.24	1.62	1.62	1.32-1.94
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.06

Table 29.2a. Norfolk Vanguard West. Gannet design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	5.90	0-27.41	0.00	9.05	0-37.16	0.00	6.35	0-37.83
Feb	9.09	8.85	0-27.34	9.26	9.05	0-27.81	9.41	12.70	0-47.05
Mar	0.00	14.75	0-55.08	0.00	13.57	0-55.63	0.00	12.70	0-56.67
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-28.33
May	0.00	5.90	0-27.47	0.00	9.05	0-37.32	18.91	25.40	0-65.95
Jun	9.18	8.85	0-27.54	18.61	22.62	0-55.84	37.55	38.10	0-85.03
Jul	18.27	26.54	0-82.22	27.72	36.19	0-101.65	30.69	38.10	0-113.61
Aug	23.58	35.39	0-109.62	37.09	54.28	0-148.35	62.94	69.84	7.87-160.56
Sep	15.76	17.70	0-54.81	18.51	22.62	0-55.54	37.69	38.10	7.86-75.38
Oct	82.54	115.02	0-284.61	124.83	149.28	9.25-341.92	146.88	177.78	9.49-416.56
Nov	191.36	191.71	109.35-280.42	325.18	325.71	185.82-493.32	452.12	457.16	301.41-626.27
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-27.51

Table 29.2b. Norfolk Vanguard West. Gannet design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.02	0-0.09	0.00	0.02	0-0.08	0.00	0.01	0-0.06
Feb	0.03	0.03	0-0.09	0.02	0.02	0-0.06	0.01	0.02	0-0.07
Mar	0.00	0.05	0-0.19	0.00	0.03	0-0.12	0.00	0.02	0-0.09
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
May	0.00	0.02	0-0.09	0.00	0.02	0-0.08	0.03	0.04	0-0.1
Jun	0.03	0.03	0-0.09	0.04	0.05	0-0.12	0.06	0.06	0-0.13
Jul	0.06	0.09	0-0.28	0.06	0.08	0-0.22	0.05	0.06	0-0.18
Aug	0.08	0.12	0-0.37	0.08	0.12	0-0.33	0.10	0.11	0.01-0.25
Sep	0.05	0.06	0-0.19	0.04	0.05	0-0.12	0.06	0.06	0.01-0.12
Oct	0.28	0.39	0-0.96	0.28	0.33	0.02-0.76	0.23	0.28	0.01-0.66
Nov	0.65	0.65	0.37-0.95	0.72	0.72	0.41-1.09	0.71	0.72	0.47-0.99
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04

Table 29.3a. Norfolk Vanguard West. Gannet design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	8.85	0-36.54	0.00	9.05	0-46.45	0.00	6.35	0-37.83
Feb	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.0	0.00	0-0	0.00	4.52	0-28.14	9.56	12.70	0-47.22
May	0.0	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.0	26.54	0-91.81	4.63	36.19	0-120.33	4.69	44.45	0-131.44
Jul	14.2	17.70	0-54.81	18.48	22.62	0-73.93	15.35	25.40	0-75.74
Aug	15.7	17.70	0-54.81	27.81	40.71	0-120.53	31.47	44.45	0-132.22
Sep	0.0	2.95	0-23.64	9.26	13.57	0-39.31	15.72	19.05	0-47.17
Oct	68.9	141.57	0-367.23	110.89	208.09	0-517.5	137.27	241.28	0-586.96
Nov	320.5	339.17	152.23-583.19	484.89	493.09	312.3-724.68	565.15	571.45	383.9-800.86
Dec	0.0	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-27.51

Table 29.3b. Norfolk Vanguard West. Gannet design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.12	0.00	0.02	0-0.1	0.00	0.01	0-0.06
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.01	0-0.06	0.02	0.02	0-0.07
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.09	0-0.31	0.01	0.08	0-0.27	0.01	0.07	0-0.21
Jul	0.05	0.06	0-0.19	0.04	0.05	0-0.16	0.02	0.04	0-0.12
Aug	0.05	0.06	0-0.19	0.06	0.09	0-0.27	0.05	0.07	0-0.21
Sep	0.00	0.01	0-0.08	0.02	0.03	0-0.09	0.02	0.03	0-0.07
Oct	0.23	0.48	0-1.25	0.25	0.46	0-1.14	0.22	0.38	0-0.92
Nov	1.09	1.15	0.52-1.98	1.07	1.09	0.69-1.6	0.89	0.90	0.6-1.26
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04

Table 30.1a. Norfolk Vanguard West. Cormorant design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	8.85	0-36.63	0	9.05	0-46.05	0	6.35	0-36.68

Table 30.1b. Norfolk Vanguard West. Cormorant design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.03	0-0.12	0	0.02	0-0.1	0	0.01	0-0.06

Table 30.2a. Norfolk Vanguard West. Cormorant design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	5.9	0-27.47	0	4.52	0-27.63	0	6.35	0-27.51

Table 30.2b. Norfolk Vanguard West. Cormorant design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04

Table 30.3a. Norfolk Vanguard West. Cormorant design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	5.9	0-27.47	0	4.52	0-27.63	0	6.35	0-27.51

Table 30.3b. Norfolk Vanguard West. Cormorant design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04

Table 31.1a. Norfolk Vanguard West. Pomarine Skua design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	5.9	0-27.47	0	4.52	0-27.76	0	6.35	0-28.46
Nov	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0

Table 31.1b. Norfolk Vanguard West. Pomarine Skua design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 31.2a. Norfolk Vanguard West. Pomarine Skua design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	5.9	0-27.47	0	4.52	0-27.76	0	6.35	0-28.46
Nov	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0

Table 31.2b. Norfolk Vanguard West. Pomarine Skua design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 31.3a. Norfolk Vanguard West. Pomarine Skua design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 31.3b. Norfolk Vanguard West. Pomarine Skua design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 32.1a. Norfolk Vanguard West. Arctic Skua design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	6.35	0-23.58
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 32.1b. Norfolk Vanguard West. Arctic Skua design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.01	0-0.04
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 32.2a. Norfolk Vanguard West. Arctic Skua design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	6.35	0-23.58
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 32.2b. Norfolk Vanguard West. Arctic Skua design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.01	0-0.04
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 32.3a. Norfolk Vanguard West. Arctic Skua design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 32.3b. Norfolk Vanguard West. Arctic Skua design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 33.1a. Norfolk Vanguard West. Great Skua design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.0	4.52	0-27.81	0.0	6.35	0-28.16
Mar	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Apr	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
May	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Sep	7.88	8.85	0-27.41	15.7	18.09	0-47.17	15.7	19.05	0-47.17
Oct	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Nov	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0

Table 33.1b. Norfolk Vanguard West. Great Skua design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.03	0.03	0-0.09	0.03	0.04	0-0.1	0.02	0.03	0-0.07
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 33.2a. Norfolk Vanguard West. Great Skua design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Feb	0.00	0.00	0-0	0.0	4.52	0-27.81	0.0	6.35	0-28.16
Mar	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Apr	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
May	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Aug	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Sep	7.88	8.85	0-27.41	15.7	18.09	0-47.17	15.7	19.05	0-47.17
Oct	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Nov	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0

Table 33.2b. Norfolk Vanguard West. Great Skua design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.03	0.03	0-0.09	0.03	0.04	0-0.1	0.02	0.03	0-0.07
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 33.3a. Norfolk Vanguard West. Great Skua design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 33.3b. Norfolk Vanguard West. Great Skua design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 34.1a. Norfolk Vanguard West. Puffin design-based abundance estimates of birds in flight and on sea.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	6.35	0-28.4
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 34.1b. Norfolk Vanguard West. Puffin design-based density estimates of birds in flight and on sea.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.01	0-0.04
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 34.2a. Norfolk Vanguard West. Puffin design-based abundance estimates of birds in flight.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 34.2b. Norfolk Vanguard West. Puffin design-based density estimates of birds in flight.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0	0-0
Feb	0	0	0-0	0	0	0-0	0	0	0-0
Mar	0	0	0-0	0	0	0-0	0	0	0-0
Apr	0	0	0-0	0	0	0-0	0	0	0-0
May	0	0	0-0	0	0	0-0	0	0	0-0
Jun	0	0	0-0	0	0	0-0	0	0	0-0
Jul	0	0	0-0	0	0	0-0	0	0	0-0
Aug	0	0	0-0	0	0	0-0	0	0	0-0
Sep	0	0	0-0	0	0	0-0	0	0	0-0
Oct	0	0	0-0	0	0	0-0	0	0	0-0
Nov	0	0	0-0	0	0	0-0	0	0	0-0
Dec	0	0	0-0	0	0	0-0	0	0	0-0

Table 34.3a. Norfolk Vanguard West. Puffin design-based abundance estimates of birds on the sea surface.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	6.35	0-28.4
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 34.3b. Norfolk Vanguard West. Puffin design-based density estimates of birds on the sea surface.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0	0-0	0	0.00	0-0
May	0	0	0-0	0	0	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0	0-0	0	0.00	0-0
Jul	0	0	0-0	0	0	0-0	0	0.01	0-0.04
Aug	0	0	0-0	0	0	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0	0-0	0	0.00	0-0

Table 35.1a. Norfolk Vanguard West. Razorbill design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	110.1	115.0	43.81-198.11	167.9	171.9	89.22-268.65	330.5	336.5	227.31-455.84
Feb	32.9	44.2	0-120.77	44.6	76.9	0-212.24	90.5	114.3	0-282.78
Mar	22.0	20.6	0-66.37	44.5	45.2	0-100.54	56.9	63.5	11.38-124.87
Apr	66.9	94.4	0-248.96	157.3	203.6	11.13-463.35	269.1	323.8	56.89-656.46
May	10.9	11.8	0-33.1	22.3	27.1	0-78.19	22.8	25.4	0-90.81
Jun	22.1	23.6	0-66.37	33.6	40.7	11.15-89.7	34.1	38.1	0-90.49
Jul	146.0	153.4	77.28-242.41	259.2	280.5	96.17-523.29	382.1	406.4	147.92-730
Aug	37.9	64.9	0-187.1	85.2	108.6	9.47-268.09	85.3	107.9	0-273.09
Sep	198.7	238.9	44.02-484.18	344.7	375.5	88.94-729.34	459.1	495.2	113.23-947.15
Oct	33.2	56.0	0-154.86	44.5	54.3	0-155.87	57.1	82.5	0-228.12
Nov	311.6	312.6	98.81-542.64	365.9	348.3	179.1-495.21	459.1	495.2	320.81-760.34
Dec	22.0	82.6	0-231.42	155.7	244.3	0-611.86	253.1	342.9	0-824

Table 35.1b. Norfolk Vanguard West. Razorbill design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.37	0.39	0.15-0.67	0.37	0.38	0.2-0.59	0.52	0.53	0.36-0.72
Feb	0.11	0.15	0-0.41	0.10	0.17	0-0.47	0.14	0.18	0-0.45
Mar	0.07	0.07	0-0.23	0.10	0.10	0-0.22	0.09	0.10	0.02-0.2
Apr	0.23	0.32	0-0.84	0.35	0.45	0.02-1.02	0.42	0.51	0.09-1.03
May	0.04	0.04	0-0.11	0.05	0.06	0-0.17	0.04	0.04	0-0.14
Jun	0.08	0.08	0-0.23	0.07	0.09	0.02-0.2	0.05	0.06	0-0.14
Jul	0.49	0.52	0.26-0.82	0.57	0.62	0.21-1.16	0.60	0.64	0.23-1.15
Aug	0.13	0.22	0-0.63	0.19	0.24	0.02-0.59	0.13	0.17	0-0.43
Sep	0.67	0.81	0.15-1.64	0.76	0.83	0.2-1.61	0.72	0.78	0.18-1.49
Oct	0.11	0.19	0-0.53	0.10	0.12	0-0.34	0.09	0.13	0-0.36
Nov	1.06	1.06	0.34-1.84	0.81	0.77	0.4-1.09	0.72	0.78	0.51-1.2
Dec	0.07	0.28	0-0.78	0.34	0.54	0-1.35	0.40	0.54	0-1.3

Table 35.2a. Norfolk Vanguard West. Razorbill design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	6.35	0-28.38
Feb	0	5.90	0-27.34	0	4.52	0-27.81	0	6.35	0-28.16
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	2.95	0-23.64	0	4.52	0-23.59	0	6.35	0-23.58
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	2.95	0-9.95	0	4.52	0-12.41	0	6.35	0-10.59
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 35.2b. Norfolk Vanguard West. Razorbill design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0	0.01	0-0.04
Feb	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.01	0-0.08	0	0.01	0-0.05	0	0.01	0-0.04
Oct	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0.01	0-0.03	0	0.01	0-0.03	0	0.01	0-0.02
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 35.3a. Norfolk Vanguard West. Razorbill design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	110.1	115.0	43.81-198.11	167.9	171.9	89.22-268.65	329.6	330.2	216.52-465.98
Feb	32.9	38.3	0-109.79	44.7	72.4	0-201.07	79.2	107.9	0-271.47
Mar	22.0	20.6	0-66.37	44.5	45.2	11.13-100.54	56.9	63.5	22.42-124.87
Apr	72.4	94.4	0-237.65	151.7	203.6	11.13-463.35	280.6	323.8	56.89-656.46
May	10.9	11.8	0-33.1	22.3	27.1	0-78.19	22.8	25.4	0-90.81
Jun	22.1	23.6	0-66.37	33.6	40.7	0-89.22	34.1	38.1	0-91.06
Jul	146.0	153.4	77.28-253.14	256.1	280.5	96.17-512.16	367.4	406.4	147.92-730
Aug	44.0	64.9	0-176.1	78.2	108.6	9.47-268.09	82.5	107.9	9.48-273.09
Sep	218.5	233.0	44.02-474.69	344.7	370.9	89.22-710.4	468.6	495.2	113.52-956.62
Oct	33.2	56.0	0-154.86	33.4	54.3	0-155.87	45.7	82.5	0-239.53
Nov	319.2	312.6	98.81-536.3	358.2	343.8	179.1-487.8	449.8	488.9	303.76-748.99
Dec	22.0	82.6	0-231.42	150.1	244.3	0-589.61	213.6	336.5	0-812.71

Table 35.3b. Norfolk Vanguard West. Razorbill design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.37	0.39	0.15-0.67	0.37	0.38	0.2-0.59	0.52	0.52	0.34-0.73
Feb	0.11	0.13	0-0.37	0.10	0.16	0-0.44	0.12	0.17	0-0.43
Mar	0.07	0.07	0-0.23	0.10	0.10	0.02-0.22	0.09	0.10	0.04-0.2
Apr	0.25	0.32	0-0.81	0.34	0.45	0.02-1.02	0.44	0.51	0.09-1.03
May	0.04	0.04	0-0.11	0.05	0.06	0-0.17	0.04	0.04	0-0.14
Jun	0.08	0.08	0-0.23	0.07	0.09	0-0.2	0.05	0.06	0-0.14
Jul	0.49	0.52	0.26-0.86	0.57	0.62	0.21-1.13	0.58	0.64	0.23-1.15
Aug	0.15	0.22	0-0.6	0.17	0.24	0.02-0.59	0.13	0.17	0.01-0.43
Sep	0.74	0.79	0.15-1.61	0.76	0.82	0.2-1.57	0.74	0.78	0.18-1.51
Oct	0.11	0.19	0-0.53	0.07	0.12	0-0.34	0.07	0.13	0-0.38
Nov	1.08	1.06	0.34-1.82	0.79	0.76	0.4-1.08	0.71	0.77	0.48-1.18
Dec	0.07	0.28	0-0.78	0.33	0.54	0-1.3	0.34	0.53	0-1.28

Table 36.1a. Norfolk Vanguard West. Guillemot design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	1592.0	1698.8	204.34-3336.87	2114	2289	354.52-4360.22	2850	2997	622.28-5535.79
Feb	143.9	141.6	71.76-251.16	207	199	121.79-304.99	310	305	198.12-444.71
Mar	120.2	118.0	48.32-193.28	146	149	73.19-255.35	224	229	124.27-335.53
Apr	225.7	271.3	35.97-580.86	392	480	72.96-987.36	569	692	211.26-1270.34
May	83.7	82.6	24.1-156.65	122	122	48.8-207.39	162	165	74.65-261.28
Jun	108.7	138.6	12.08-326.16	226	280	48.98-584.61	402	489	74.58-1012.94
Jul	602.5	651.8	234.43-1141.88	1267	1389	439.23-2492.97	2327	2406	797.61-4197.94
Aug	196.5	209.4	82.74-372.61	362	371	186.2-597.78	559	565	362.32-820.18
Sep	968.9	979.2	600.99-1378.97	1544	1543	1071.79-2037.84	2298	2318	1500.07-3165.24
Oct	549.4	631.2	24.1-1365.04	778	882	109.27-1811.74	1072	1162	174.76-2329.42
Nov	1394.3	1574.9	612.9-2673.74	2371	2579	1219.84-4083.05	3555	3733	1929.81-5676.56
Dec	824.7	934.9	204.85-1829.29	1299	1407	290.87-2709.31	1747	1924	494.69-3550.26

Table 36.1b. Norfolk Vanguard West. Guillemot design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	5.40	5.76	0.69-11.31	4.67	5.06	0.78-9.64	4.49	4.72	0.98-8.72
Feb	0.49	0.48	0.24-0.85	0.46	0.44	0.27-0.67	0.49	0.48	0.31-0.7
Mar	0.41	0.40	0.16-0.66	0.32	0.33	0.16-0.56	0.35	0.36	0.2-0.53
Apr	0.77	0.92	0.12-1.97	0.87	1.06	0.16-2.18	0.90	1.09	0.33-2
May	0.28	0.28	0.08-0.53	0.27	0.27	0.11-0.46	0.25	0.26	0.12-0.41
Jun	0.37	0.47	0.04-1.11	0.50	0.62	0.11-1.29	0.63	0.77	0.12-1.6
Jul	2.04	2.21	0.79-3.87	2.80	3.07	0.97-5.51	3.67	3.79	1.26-6.61
Aug	0.67	0.71	0.28-1.26	0.80	0.82	0.41-1.32	0.88	0.89	0.57-1.29
Sep	3.29	3.32	2.04-4.68	3.41	3.41	2.37-4.5	3.62	3.65	2.36-4.99
Oct	1.86	2.14	0.08-4.63	1.72	1.95	0.24-4	1.69	1.83	0.28-3.67
Nov	4.73	5.34	2.08-9.07	5.24	5.70	2.7-9.03	5.60	5.88	3.04-8.94

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Dec	2.80	3.17	0.69-6.2	2.87	3.11	0.64-5.99	2.75	3.03	0.78-5.59

Table 36.2a. Norfolk Vanguard West. Guillemot design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	5.90	0-27.27	0.00	4.52	0-27.77	0.00	6.35	0-28.3
Feb	0.00	23.59	0-81.81	0.00	22.62	0-83.31	0.00	25.40	0-84.7
Mar	0.00	5.90	0-27.54	0.00	4.52	0-27.81	0.00	6.35	0-28.33
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	5.90	0-27.41	0.00	4.52	0-27.72	0.00	6.35	0-38.11
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	12.70	0-47.17
Oct	9.18	14.75	0-45.9	9.25	13.57	0-46.21	9.49	12.70	0-37.95
Nov	0.00	2.95	0-14.08	0.00	9.05	0-36.9	0.00	19.05	0-70.27
Dec	0.00	26.54	0-91.58	0.00	27.14	0-92.11	4.58	31.75	0-100.87

Table 36.2b. Norfolk Vanguard West. Guillemot design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Feb	0.00	0.08	0-0.28	0.00	0.05	0-0.18	0.00	0.04	0-0.13
Mar	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.06
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.07
Oct	0.03	0.05	0-0.16	0.02	0.03	0-0.1	0.01	0.02	0-0.06
Nov	0.00	0.01	0-0.05	0.00	0.02	0-0.08	0.00	0.03	0-0.11
Dec	0.00	0.09	0-0.31	0.00	0.06	0-0.2	0.01	0.05	0-0.16

Table 36.3a. Norfolk Vanguard West. Guillemot design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	1556.0	1698.8	204.04-3325.21	2054	2280	354.52-4360.22	2863	2991	634.72-5523.38
Feb	119.6	120.9	47.84-203.83	171	176	85.26-292.79	284	286	160.97-432.35
Mar	108.7	115.0	48.31-193.28	146	145	61-255.35	223	222	124.27-334.73
Apr	201.0	271.3	35.97-581.17	374	480	72.96-999.71	607	692	198.83-1282.91
May	83.7	82.6	24.1-155.48	122	122	48.8-207.39	162	165	74.64-273.72
Jun	120.8	138.6	12.08-326.16	232	280	36.73-584.61	409	483	74.58-988.24
Jul	611.1	645.9	234.43-1141.88	1251	1384	438.99-2456.19	2143	2400	797.61-4173.02
Aug	196.5	209.4	82.74-372.61	354	371	186.2-597.78	559	565	362.32-807.75
Sep	973.6	979.2	600.99-1368.6	1531	1538	1059.61-2037.84	2277	2305	1500.07-3134.2
Oct	495.1	616.4	24.1-1329.1	730	864	97.4-1787.43	1034	1149	162.28-2292.05
Nov	1462.9	1572.0	600.51-2709.71	2441	2569	1211.68-4119.73	3535	3708	1896.32-5713.43
Dec	842.7	908.4	132.55-1817.25	1257	1380	230.27-2697.16	1728	1886	410.23-3550.26

Table 36.3b. Norfolk Vanguard West. Guillemot design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	5.28	5.76	0.69-11.27	4.54	5.04	0.78-9.64	4.51	4.71	1-8.7
Feb	0.41	0.41	0.16-0.69	0.38	0.39	0.19-0.65	0.45	0.45	0.25-0.68
Mar	0.37	0.39	0.16-0.66	0.32	0.32	0.13-0.56	0.35	0.35	0.2-0.53
Apr	0.68	0.92	0.12-1.97	0.83	1.06	0.16-2.21	0.96	1.09	0.31-2.02
May	0.28	0.28	0.08-0.53	0.27	0.27	0.11-0.46	0.25	0.26	0.12-0.43
Jun	0.41	0.47	0.04-1.11	0.51	0.62	0.08-1.29	0.64	0.76	0.12-1.56
Jul	2.07	2.19	0.79-3.87	2.77	3.06	0.97-5.43	3.38	3.78	1.26-6.57
Aug	0.67	0.71	0.28-1.26	0.78	0.82	0.41-1.32	0.88	0.89	0.57-1.27
Sep	3.30	3.32	2.04-4.64	3.38	3.40	2.34-4.5	3.59	3.63	2.36-4.94
Oct	1.68	2.09	0.08-4.51	1.61	1.91	0.22-3.95	1.63	1.81	0.26-3.61
Nov	4.96	5.33	2.04-9.19	5.40	5.68	2.68-9.11	5.57	5.84	2.99-9

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Dec	2.86	3.08	0.45-6.16	2.78	3.05	0.51-5.96	2.72	2.97	0.65-5.59

Table 37.1a. Norfolk Vanguard West. Sandwich Tern design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Feb	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Mar	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Apr	0	0	0-0	0	9.05	0-37.52	0	12.7	0-47.79
May	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Jun	0	0	0-0	0	13.57	0-55.84	0	12.7	0-56.68
Jul	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.0	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.0	0-0

Table 37.1b. Norfolk Vanguard West. Sandwich Tern design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0.02	0-0.08	0	0.02	0-0.08
May	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0.03	0-0.12	0	0.02	0-0.09
Jul	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.00	0-0

Table 37.2a. Norfolk Vanguard West. Sandwich Tern design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0	0-0	0	9.05	0-46.9	0	12.70	0-47.79
May	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0	0-0	0	9.05	0-37.22	0	6.35	0-47.24
Jul	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.00	0-0

Table 37.2b. Norfolk Vanguard West. Sandwich Tern design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0.02	0-0.1	0	0.02	0-0.08
May	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0.02	0-0.08	0	0.01	0-0.07
Jul	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.00	0-0

Table 37.3a. Norfolk Vanguard West. Sandwich Tern design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0	0-0	0	4.52	0-27.92	0	6.35	0-28.34
Jul	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.00	0-0

Table 37.3b. Norfolk Vanguard West. Sandwich Tern design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Feb	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0	0-0	0	0.00	0-0	0	0.00	0-0
May	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0	0-0	0	0.01	0-0.06	0	0.01	0-0.04
Jul	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Nov	0	0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0	0-0	0	0.00	0-0	0	0.00	0-0

Table 38.1a. Norfolk Vanguard West. Commic Tern design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Feb	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Mar	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Apr	23.5	64.9	0-187.85	28.1	85.95	0-234.5	105	203.2	0-506.62
May	0.0	17.7	0-63.63	0.0	22.62	0-83.44	0	25.4	0-94.56
Jun	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Jul	0.0	0.0	0-0	0.0	4.52	0-27.72	0	25.4	0-85.2
Aug	78.6	88.5	15.72-182.7	111.3	117.62	47.17-204.21	189	184.1	103.89-283.23
Sep	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Oct	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Nov	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Dec	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0

Table 38.1b. Norfolk Vanguard West. Commic Tern design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.08	0.22	0-0.64	0.06	0.19	0-0.52	0.17	0.32	0-0.8
May	0.00	0.06	0-0.22	0.00	0.05	0-0.18	0.00	0.04	0-0.15
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.04	0-0.13
Aug	0.27	0.30	0.05-0.62	0.25	0.26	0.1-0.45	0.30	0.29	0.16-0.45
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 38.2a. Norfolk Vanguard West. Commic Tern design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Feb	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Mar	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Apr	14.1	64.9	0-187.85	28.1	85.95	0-234.5	100	203.2	0-506.62
May	0.0	17.7	0-63.63	0.0	22.62	0-83.44	0	25.4	0-94.56
Jun	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Jul	0.0	0.0	0-0	0.0	4.52	0-27.72	0	25.4	0-85.2
Aug	55.0	56.0	15.72-118.76	86.5	90.47	39.31-148.35	102	101.6	47.21-170
Sep	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Oct	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Nov	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0
Dec	0.0	0.0	0-0	0.0	0.00	0-0	0	0.0	0-0

Table 38.2b. Norfolk Vanguard West. Commic Tern design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.05	0.22	0-0.64	0.06	0.19	0-0.52	0.16	0.32	0-0.8
May	0.00	0.06	0-0.22	0.00	0.05	0-0.18	0.00	0.04	0-0.15
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.04	0-0.13
Aug	0.19	0.19	0.05-0.4	0.19	0.20	0.09-0.33	0.16	0.16	0.07-0.27
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 38.3a. Norfolk Vanguard West. Commic Tern design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Feb	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Mar	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Apr	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
May	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Jun	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Jul	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Aug	0	26.5	0-91.35	0	27.1	0-92.72	78.7	82.5	18.89-165.22
Sep	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Oct	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Nov	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0
Dec	0	0.0	0-0	0	0.0	0-0	0.0	0.0	0-0

Table 38.3b. Norfolk Vanguard West. Commic Tern design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Feb	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
May	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Aug	0	0.09	0-0.31	0	0.06	0-0.2	0.12	0.13	0.03-0.26
Sep	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Nov	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0.00	0.00	0-0

Table 39.1a. Norfolk Vanguard West. Kittiwake design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	54.5	56.0	18.18-100.49	92.9	99.5	46.28-157.94	151.3	158.7	85.13-245.26
Feb	18.2	23.6	0-54.67	74.2	76.9	27.81-138.85	94.1	101.6	37.64-159.6
Mar	196.8	247.7	36.72-520.7	259.2	294.0	74.17-562.6	337.5	349.2	141.67-599.55
Apr	47.0	50.1	9.39-103.93	75.0	76.9	29.04-140.7	142.9	139.7	76.47-219.86
May	45.8	50.1	9.09-109.89	64.9	67.9	18.54-129.8	75.4	76.2	28.27-132.38
Jun	137.7	141.6	73.45-238.7	204.7	208.1	120.33-307.1	347.4	349.2	244.09-462.92
Jul	42.8	56.0	0-155.3	69.6	122.1	0-295.72	141.6	196.8	7.67-463.89
Aug	70.7	70.8	27.41-125.76	120.5	122.1	62.89-194.7	165.2	165.1	94.44-243.89
Sep	47.3	53.1	6.15-133.96	179.0	208.1	68.3-388.49	242.3	273.0	85.32-508.75
Oct	128.5	138.6	36.72-274.74	148.0	158.3	64.69-277.58	180.2	184.1	86.11-303.59
Nov	182.2	188.8	63.79-336.5	318.2	325.7	167.23-499.81	730.6	774.6	454.6-1139.71
Dec	27.4	26.5	0-73.17	55.4	58.8	18.42-119.74	119.2	127.0	28.11-256.99

Table 39.1b. Norfolk Vanguard West. Kittiwake design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.18	0.19	0.06-0.34	0.21	0.22	0.1-0.35	0.24	0.25	0.13-0.39
Feb	0.06	0.08	0-0.19	0.16	0.17	0.06-0.31	0.15	0.16	0.06-0.25
Mar	0.67	0.84	0.12-1.77	0.57	0.65	0.16-1.24	0.53	0.55	0.22-0.94
Apr	0.16	0.17	0.03-0.35	0.17	0.17	0.06-0.31	0.23	0.22	0.12-0.35
May	0.16	0.17	0.03-0.37	0.14	0.15	0.04-0.29	0.12	0.12	0.04-0.21
Jun	0.47	0.48	0.25-0.81	0.45	0.46	0.27-0.68	0.55	0.55	0.38-0.73
Jul	0.14	0.19	0-0.53	0.15	0.27	0-0.65	0.22	0.31	0.01-0.73
Aug	0.24	0.24	0.09-0.43	0.27	0.27	0.14-0.43	0.26	0.26	0.15-0.38
Sep	0.16	0.18	0.02-0.45	0.40	0.46	0.15-0.86	0.38	0.43	0.13-0.8
Oct	0.44	0.47	0.12-0.93	0.33	0.35	0.14-0.61	0.28	0.29	0.14-0.48
Nov	0.62	0.64	0.22-1.14	0.70	0.72	0.37-1.1	1.15	1.22	0.72-1.79
Dec	0.09	0.09	0-0.25	0.12	0.13	0.04-0.26	0.19	0.20	0.04-0.4

Table 39.2a. Norfolk Vanguard West. Kittiwake design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	27.4	32.4	0-72.72	55.7	58.8	18.58-111.08	103.77	107.9	37.83-207.53
Feb	18.2	23.6	0-54.67	46.4	49.8	9.27-92.72	56.46	63.5	18.78-112.93
Mar	45.9	56.0	9.18-127.89	74.2	76.9	27.72-138.62	94.44	101.6	37.78-179.02
Apr	0.0	17.7	0-75.14	0.0	31.7	0-112.56	4.78	38.1	0-124.27
May	18.3	23.6	0-54.95	37.1	40.7	9.27-83.44	37.82	44.5	9.42-85.1
Jun	73.5	82.6	18.36-174.44	111.1	117.6	27.77-223.35	188.95	196.8	84.49-321.21
Jul	0.0	32.4	0-109.62	36.3	63.3	0-175.58	66.52	114.3	0-303.19
Aug	27.4	29.5	0-63.95	47.2	49.8	9.27-102.2	75.56	76.2	28.33-133.75
Sep	0.0	20.6	0-70.92	95.8	117.6	15.72-249.92	107.56	127.0	23.58-273.24
Oct	27.5	35.4	0-91.81	37.0	45.2	0-120.13	37.95	50.8	0-132.54
Nov	106.8	123.9	18.22-264.39	160.8	190.0	37.16-391.44	339.09	342.9	178.73-531.63
Dec	0.0	5.9	0-27.47	27.6	31.7	0-92.11	55.02	57.1	9.13-146.72

Table 39.2b. Norfolk Vanguard West. Kittiwake design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.09	0.11	0-0.25	0.12	0.13	0.04-0.25	0.16	0.17	0.06-0.33
Feb	0.06	0.08	0-0.19	0.10	0.11	0.02-0.2	0.09	0.10	0.03-0.18
Mar	0.16	0.19	0.03-0.43	0.16	0.17	0.06-0.31	0.15	0.16	0.06-0.28
Apr	0.00	0.06	0-0.25	0.00	0.07	0-0.25	0.01	0.06	0-0.2
May	0.06	0.08	0-0.19	0.08	0.09	0.02-0.18	0.06	0.07	0.01-0.13
Jun	0.25	0.28	0.06-0.59	0.25	0.26	0.06-0.49	0.30	0.31	0.13-0.51
Jul	0.00	0.11	0-0.37	0.08	0.14	0-0.39	0.10	0.18	0-0.48
Aug	0.09	0.10	0-0.22	0.10	0.11	0.02-0.23	0.12	0.12	0.04-0.21
Sep	0.00	0.07	0-0.24	0.21	0.26	0.03-0.55	0.17	0.20	0.04-0.43
Oct	0.09	0.12	0-0.31	0.08	0.10	0-0.27	0.06	0.08	0-0.21
Nov	0.36	0.42	0.06-0.9	0.36	0.42	0.08-0.87	0.53	0.54	0.28-0.84
Dec	0.00	0.02	0-0.09	0.06	0.07	0-0.2	0.09	0.09	0.01-0.23

Table 39.3a. Norfolk Vanguard West. Kittiwake design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	18.3	23.6	0-54.81	37.0	36.2	0-83.62	47.2	44.5	0-104.05
Feb	0.0	0.0	0-0	27.8	27.1	0-55.86	37.5	38.1	0-84.49
Mar	137.3	191.7	18.36-429.35	161.4	217.1	27.81-452.99	225.1	247.6	66.11-478.44
Apr	3.1	29.5	0-100.64	38.3	45.2	0-114.84	95.6	101.6	28.68-201.45
May	18.3	26.5	0-82.42	18.5	27.1	0-83.44	28.4	31.8	0-84.8
Jun	55.1	59.0	18.36-119.35	83.8	95.0	27.92-175.87	141.7	152.4	56.68-272.26
Jul	21.4	26.5	0-73.08	37.0	58.8	0-157.1	56.8	76.2	7.67-189.34
Aug	39.3	41.3	9.14-86.46	70.8	72.4	23.59-148.35	86.5	88.9	39.34-151.11
Sep	33.5	35.4	0-77.52	91.2	95.0	30.23-175.87	131.0	146.0	45.17-281.73
Oct	64.3	100.3	0-247.26	92.5	113.1	9.24-250.05	113.5	133.3	24.8-284.61
Nov	63.8	64.9	24.04-118.46	123.3	131.2	57.53-232.27	352.9	431.8	75.15-866.79
Dec	18.3	23.6	0-73.17	27.6	27.1	0-73.87	64.2	69.8	9.37-155.89

Table 39.3b. Norfolk Vanguard West. Kittiwake design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.06	0.08	0-0.19	0.08	0.08	0-0.18	0.07	0.07	0-0.16
Feb	0.00	0.00	0-0	0.06	0.06	0-0.12	0.06	0.06	0-0.13
Mar	0.47	0.65	0.06-1.46	0.36	0.48	0.06-1	0.35	0.39	0.1-0.75
Apr	0.01	0.10	0-0.34	0.08	0.10	0-0.25	0.15	0.16	0.05-0.32
May	0.06	0.09	0-0.28	0.04	0.06	0-0.18	0.04	0.05	0-0.13
Jun	0.19	0.20	0.06-0.4	0.19	0.21	0.06-0.39	0.22	0.24	0.09-0.43
Jul	0.07	0.09	0-0.25	0.08	0.13	0-0.35	0.09	0.12	0.01-0.3
Aug	0.13	0.14	0.03-0.29	0.16	0.16	0.05-0.33	0.14	0.14	0.06-0.24
Sep	0.11	0.12	0-0.26	0.20	0.21	0.07-0.39	0.21	0.23	0.07-0.44
Oct	0.22	0.34	0-0.84	0.20	0.25	0.02-0.55	0.18	0.21	0.04-0.45
Nov	0.22	0.22	0.08-0.4	0.27	0.29	0.13-0.51	0.56	0.68	0.12-1.37
Dec	0.06	0.08	0-0.25	0.06	0.06	0-0.16	0.10	0.11	0.01-0.25

Table 40.1a. Norfolk Vanguard West. Black-headed Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	5.90	0-27.41	0.0	4.52	0-27.87	0.0	6.35	0-37.83
Feb	0.00	14.75	0-54.67	23.2	67.86	0-203.98	18.8	69.84	0-206.54
Mar	0.00	5.90	0-27.41	0.0	4.52	0-28.09	19.0	25.40	0-66.11
Apr	0.00	14.75	0-57.19	0.0	13.57	0-55.45	1.9	19.05	0-68.09
May	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.00	2.95	0-21.38	0.0	4.52	0-21.77	0.0	6.35	0-23.02
Aug	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Sep	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Oct	9.18	14.75	0-45.9	18.5	18.09	0-55.45	28.5	44.45	0-119.89
Nov	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0

Table 40.1b. Norfolk Vanguard West. Black-headed Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.06
Feb	0.00	0.05	0-0.19	0.05	0.15	0-0.45	0.03	0.11	0-0.33
Mar	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.03	0.04	0-0.1
Apr	0.00	0.05	0-0.19	0.00	0.03	0-0.12	0.00	0.03	0-0.11
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.01	0-0.07	0.00	0.01	0-0.05	0.00	0.01	0-0.04
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.03	0.05	0-0.16	0.04	0.04	0-0.12	0.04	0.07	0-0.19
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 40.2a. Norfolk Vanguard West. Black-headed Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Feb	0.00	14.75	0-54.67	18.5	67.86	0-194.7	18.8	69.84	0-206.54
Mar	0.00	5.90	0-27.41	0.0	4.52	0-27.72	18.9	25.40	0-66.11
Apr	0.00	8.85	0-36.45	0.0	9.05	0-46.21	0.0	12.70	0-56.67
May	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jun	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.00	2.95	0-21.38	0.0	4.52	0-21.77	0.0	6.35	0-23.02
Aug	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Sep	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Oct	9.18	14.75	0-36.72	18.5	18.09	0-55.45	28.4	38.10	0-113.61
Nov	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Dec	0.00	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0

Table 40.2b. Norfolk Vanguard West. Black-headed Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.05	0-0.19	0.04	0.15	0-0.43	0.03	0.11	0-0.33
Mar	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.03	0.04	0-0.1
Apr	0.00	0.03	0-0.12	0.00	0.02	0-0.1	0.00	0.02	0-0.09
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.01	0-0.07	0.00	0.01	0-0.05	0.00	0.01	0-0.04
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.03	0.05	0-0.12	0.04	0.04	0-0.12	0.04	0.06	0-0.18
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 40.3a. Norfolk Vanguard West. Black-headed Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	5.9	0-27.41	0	4.52	0-27.87	0	6.35	0-47.29
Feb	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.0	0-0	0	0.00	0-0.92	0	0.00	0-0.73
Apr	0	5.9	0-23.25	0	4.52	0-18.49	0	6.35	0-17.13
May	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.0	0-0	0	0.00	0-0	0	6.35	0-18.9
Nov	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.0	0-0	0	0.00	0-0	0	0.00	0-0

Table 40.3b. Norfolk Vanguard West. Black-headed Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.07
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.02	0-0.08	0	0.01	0-0.04	0	0.01	0-0.03
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Sep	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Oct	0	0.00	0-0	0	0.00	0-0	0	0.01	0-0.03
Nov	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Dec	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0

Table 41.1a. Norfolk Vanguard West. Little Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Sep	8.51	8.85	0-33.22	9.53	9.05	0-28.32	9.86	12.7	0.23-29.44
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Nov	16.02	17.70	0-45.56	27.87	31.67	1.37-74.33	35.24	38.1	9.26-75.35
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0

Table 41.1b. Norfolk Vanguard West. Little Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.03	0.03	0-0.11	0.02	0.02	0-0.06	0.02	0.02	0-0.05
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.05	0.06	0-0.15	0.06	0.07	0-0.16	0.06	0.06	0.01-0.12
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 41.2a. Norfolk Vanguard West. Little Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	7.88	8.85	0-27.41	8.45	9.05	0-27.77	8.86	6.35	0-28.27
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	16.02	17.70	0-45.56	27.87	31.67	1.37-74.33	34.78	38.10	9.27-75.35
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 41.2b. Norfolk Vanguard West. Little Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Sep	0.03	0.03	0-0.09	0.02	0.02	0-0.06	0.01	0.01	0-0.04
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.05	0.06	0-0.15	0.06	0.07	0-0.16	0.05	0.06	0.01-0.12
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 41.3a. Norfolk Vanguard West. Little Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Feb	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Mar	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Apr	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
May	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Jun	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Jul	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Aug	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Sep	0.63	2.95	0-8.97	0.59	0	0-3.53	0.93	0	0-3
Oct	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Nov	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0
Dec	0.00	0.00	0-0	0.00	0	0-0	0.00	0	0-0

Table 41.3b. Norfolk Vanguard West. Little Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0	0-0	0	0	0-0
Feb	0	0.00	0-0	0	0	0-0	0	0	0-0
Mar	0	0.00	0-0	0	0	0-0	0	0	0-0
Apr	0	0.00	0-0	0	0	0-0	0	0	0-0
May	0	0.00	0-0	0	0	0-0	0	0	0-0
Jun	0	0.00	0-0	0	0	0-0	0	0	0-0
Jul	0	0.00	0-0	0	0	0-0	0	0	0-0
Aug	0	0.00	0-0	0	0	0-0	0	0	0-0
Sep	0	0.01	0-0.03	0	0	0-0.01	0	0	0-0
Oct	0	0.00	0-0	0	0	0-0	0	0	0-0
Nov	0	0.00	0-0	0	0	0-0	0	0	0-0
Dec	0	0.00	0-0	0	0	0-0	0	0	0-0

Table 42.1a. Norfolk Vanguard West. Common Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	9.05	0-37.16	0.00	12.70	0-56.75
Feb	0.00	8.85	0-45.56	0.00	9.05	0-46.36	0.00	19.05	0-75.11
Mar	0.00	8.85	0-45.9	18.54	18.09	0-46.95	19.87	25.40	0-57.55
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.31	6.35	0-31.42
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-23.02
Aug	0.00	20.65	0-70.74	0.00	22.62	0-78.62	0.00	38.10	0-110.15
Sep	0.00	2.95	0-24.28	0.00	4.52	0-26.08	0.00	6.35	0-25.58
Oct	9.18	14.75	0-45.79	9.25	13.57	0-46.26	11.29	12.70	0-47.44
Nov	40.06	50.14	0-127.57	41.40	49.76	0.62-130.07	75.35	95.24	9.29-216.64
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-28.11

Table 42.1b. Norfolk Vanguard West. Common Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.02	0-0.08	0.00	0.02	0-0.09
Feb	0.00	0.03	0-0.15	0.00	0.02	0-0.1	0.00	0.03	0-0.12
Mar	0.00	0.03	0-0.16	0.04	0.04	0-0.1	0.03	0.04	0-0.09
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.05
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
Aug	0.00	0.07	0-0.24	0.00	0.05	0-0.17	0.00	0.06	0-0.17
Sep	0.00	0.01	0-0.08	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Oct	0.03	0.05	0-0.16	0.02	0.03	0-0.1	0.02	0.02	0-0.07
Nov	0.14	0.17	0-0.43	0.09	0.11	0-0.29	0.12	0.15	0.01-0.34
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04

Table 42.2a. Norfolk Vanguard West. Common Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	4.52	0-27.87	0.00	6.35	0-37.83
Feb	0.00	8.85	0-45.56	0.00	9.05	0-37.09	0.00	19.05	0-75.11
Mar	0.00	8.85	0-45.9	18.48	18.09	0-46.36	18.89	25.40	0-56.53
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-28.33
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-23.02
Aug	0.00	0.00	0-0	0.00	4.52	0-23.59	0.00	12.70	0-47.21
Sep	0.00	2.95	0-23.64	0.00	4.52	0-24.21	0.00	6.35	0-24.08
Oct	9.16	8.85	0-27.54	9.24	9.05	0-27.76	9.47	6.35	0-28.46
Nov	36.45	44.24	0-118.46	37.16	45.24	0.62-120.78	75.35	88.89	9.76-207.22
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 42.2b. Norfolk Vanguard West. Common Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.01	0-0.06
Feb	0.00	0.03	0-0.15	0.00	0.02	0-0.08	0.00	0.03	0-0.12
Mar	0.00	0.03	0-0.16	0.04	0.04	0-0.1	0.03	0.04	0-0.09
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
Aug	0.00	0.00	0-0	0.00	0.01	0-0.05	0.00	0.02	0-0.07
Sep	0.00	0.01	0-0.08	0.00	0.01	0-0.05	0.00	0.01	0-0.04
Oct	0.03	0.03	0-0.09	0.02	0.02	0-0.06	0.01	0.01	0-0.04
Nov	0.12	0.15	0-0.4	0.08	0.10	0-0.27	0.12	0.14	0.02-0.33
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 42.3a. Norfolk Vanguard West. Common Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.0	0-0	0	4.52	0-27.87	0.00	6.35	0-28.38
Feb	0	0.0	0-0	0	0.00	0-0	0.00	0.00	0-0
Mar	0	0.0	0-0	0	0.00	0-1.86	0.00	0.00	0-2.05
Apr	0	0.0	0-0	0	0.00	0-0	0.00	0.00	0-5.56
May	0	0.0	0-0	0	0.00	0-0	0.00	0.00	0-0
Jun	0	0.0	0-0	0	0.00	0-0	0.00	0.00	0-0
Jul	0	0.0	0-0	0	0.00	0-0	0.00	0.00	0-0
Aug	0	20.6	0-70.74	0	18.09	0-70.76	0.00	25.40	0-78.68
Sep	0	0.0	0-1.92	0	0.00	0-3.74	0.00	0.00	0-2.99
Oct	0	5.9	0-27.47	0	4.52	0-27.76	1.37	6.35	0-28.46
Nov	0	5.9	0-27.34	0	4.52	0-27.87	0.00	6.35	0-28.26
Dec	0	0.0	0-0	0	0.00	0-0	0.00	6.35	0-28.11

Table 42.3b. Norfolk Vanguard West. Common Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0	0.00	0-0	0	0.01	0-0.06	0	0.01	0-0.04
Feb	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Mar	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Apr	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0.01
May	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jun	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Jul	0	0.00	0-0	0	0.00	0-0	0	0.00	0-0
Aug	0	0.07	0-0.24	0	0.04	0-0.16	0	0.04	0-0.12
Sep	0	0.00	0-0.01	0	0.00	0-0.01	0	0.00	0-0
Oct	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04
Nov	0	0.02	0-0.09	0	0.01	0-0.06	0	0.01	0-0.04
Dec	0	0.00	0-0	0	0.00	0-0	0	0.01	0-0.04

Table 43.1a. Norfolk Vanguard West. Lesser Black-backed Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	8.85	0-45.68	0.0	9.05	0-46.45	0.00	19.05	0-66.21
Feb	0.0	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Mar	0.0	23.59	0-82.63	27.7	31.67	0-92.95	37.69	50.80	0-141.67
Apr	0.0	5.90	0-32.08	0.0	9.05	0-41.62	0.00	6.35	0-34.67
May	0.0	23.59	0-82.42	18.5	27.14	0-83.44	28.37	38.10	0-94.22
Jun	55.1	64.89	0-156.07	83.3	85.95	18.61-184.49	149.92	184.13	28.34-393.72
Jul	64.1	73.73	9.14-163.91	331.2	366.42	36.96-754.71	340.00	406.36	42.05-859.4
Aug	62.9	64.89	10.93-141.48	101.3	99.52	32.13-188.68	488.20	558.75	118.01-1088.29
Sep	94.4	109.12	15.76-244.41	372.1	411.66	47.17-860.99	506.22	590.49	65.89-1211.07
Oct	36.7	41.29	0-100.72	46.2	49.76	9.24-101.94	47.44	50.80	9.47-114.57
Nov	0.0	20.65	0-72.11	0.0	22.62	0-82.19	4.18	25.40	0-83.5
Dec	0.0	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0

Table 43.1b. Norfolk Vanguard West. Lesser Black-backed Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.15	0.00	0.02	0-0.1	0.00	0.03	0-0.1
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.08	0-0.28	0.06	0.07	0-0.21	0.06	0.08	0-0.22
Apr	0.00	0.02	0-0.11	0.00	0.02	0-0.09	0.00	0.01	0-0.05
May	0.00	0.08	0-0.28	0.04	0.06	0-0.18	0.04	0.06	0-0.15
Jun	0.19	0.22	0-0.53	0.18	0.19	0.04-0.41	0.24	0.29	0.04-0.62
Jul	0.22	0.25	0.03-0.56	0.73	0.81	0.08-1.67	0.54	0.64	0.07-1.35
Aug	0.21	0.22	0.04-0.48	0.22	0.22	0.07-0.42	0.77	0.88	0.19-1.71
Sep	0.32	0.37	0.05-0.83	0.82	0.91	0.1-1.9	0.80	0.93	0.1-1.91
Oct	0.12	0.14	0-0.34	0.10	0.11	0.02-0.23	0.07	0.08	0.01-0.18
Nov	0.00	0.07	0-0.24	0.00	0.05	0-0.18	0.01	0.04	0-0.13
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 43.2a. Norfolk Vanguard West. Lesser Black-backed Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.0	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.0	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Mar	0.00	5.9	0-27.54	0.0	4.52	0-27.81	0.00	12.70	0-56.67
Apr	0.00	5.9	0-27.34	0.0	4.52	0-27.72	0.00	6.35	0-28.33
May	0.00	0.0	0-0	0.0	4.52	0-27.81	9.46	12.70	0-47.11
Jun	27.54	32.4	0-82.63	46.5	49.76	9.31-111.08	103.27	114.29	18.89-234.71
Jul	32.07	41.3	0-106.9	81.5	99.52	9.24-232.22	88.64	120.64	0-283.91
Aug	54.81	61.9	9.14-133.62	74.2	81.43	9.27-180.82	226.67	234.93	110.15-396.67
Sep	3.94	29.5	0-100.78	124.3	158.33	0-374.74	132.68	203.18	7.86-479.03
Oct	27.47	32.4	0-91.58	27.8	36.19	0-92.53	37.87	44.45	0-113.85
Nov	0.00	0.0	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.0	0-0	0.0	0.00	0-0	0.00	0.00	0-0

Table 43.2b. Norfolk Vanguard West. Lesser Black-backed Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.02	0-0.09
Apr	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04
May	0.00	0.00	0-0	0.00	0.01	0-0.06	0.01	0.02	0-0.07
Jun	0.09	0.11	0-0.28	0.10	0.11	0.02-0.25	0.16	0.18	0.03-0.37
Jul	0.11	0.14	0-0.36	0.18	0.22	0.02-0.51	0.14	0.19	0-0.45
Aug	0.19	0.21	0.03-0.45	0.16	0.18	0.02-0.4	0.36	0.37	0.17-0.62
Sep	0.01	0.10	0-0.34	0.27	0.35	0-0.83	0.21	0.32	0.01-0.75
Oct	0.09	0.11	0-0.31	0.06	0.08	0-0.2	0.06	0.07	0-0.18
Nov	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 43.3a. Norfolk Vanguard West. Lesser Black-backed Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	8.85	0-45.68	0.00	9.05	0-46.45	0.00	19.1	0-66.21
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0
Mar	0.00	17.70	0-64.27	18.54	27.14	0-83.44	28.27	38.1	0-113.33
Apr	0.00	2.95	0-13.86	0.00	4.52	0-23.27	0.00	0.0	0-12.66
May	0.00	23.59	0-82.42	0.00	22.62	0-83.44	0.00	25.4	0-84.8
Jun	18.36	32.44	0-91.81	27.77	36.19	0-101.17	47.24	69.8	0-187.47
Jul	28.51	32.44	0-78.39	229.07	262.38	22.87-566.03	230.72	285.7	23.15-613.86
Aug	0.00	5.90	0-30.99	15.72	18.09	0-66.44	191.48	311.1	0-751.91
Sep	73.08	79.63	15.76-169.78	229.44	253.33	31.45-532.43	351.94	387.3	47.17-808.63
Oct	9.14	11.80	0-45.9	9.24	13.57	0-36.96	9.47	12.7	0-37.87
Nov	0.00	20.65	0-72.11	0.00	22.62	0-82.19	0.00	25.4	0-83.5
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.0	0-0

Table 43.3b. Norfolk Vanguard West. Lesser Black-backed Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.03	0-0.15	0.00	0.02	0-0.1	0.00	0.03	0-0.1
Feb	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Mar	0.00	0.06	0-0.22	0.04	0.06	0-0.18	0.04	0.06	0-0.18
Apr	0.00	0.01	0-0.05	0.00	0.01	0-0.05	0.00	0.00	0-0.02
May	0.00	0.08	0-0.28	0.00	0.05	0-0.18	0.00	0.04	0-0.13
Jun	0.06	0.11	0-0.31	0.06	0.08	0-0.22	0.07	0.11	0-0.3
Jul	0.10	0.11	0-0.27	0.51	0.58	0.05-1.25	0.36	0.45	0.04-0.97
Aug	0.00	0.02	0-0.11	0.03	0.04	0-0.15	0.30	0.49	0-1.18
Sep	0.25	0.27	0.05-0.58	0.51	0.56	0.07-1.18	0.55	0.61	0.07-1.27
Oct	0.03	0.04	0-0.16	0.02	0.03	0-0.08	0.01	0.02	0-0.06
Nov	0.00	0.07	0-0.24	0.00	0.05	0-0.18	0.00	0.04	0-0.13
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0

Table 44.1a. Norfolk Vanguard West. Herring Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	5.90	0-27.41	0.00	9.05	0-46.45	0.00	25.4	0-85.13
Feb	18.2	23.59	0-72.9	27.81	40.71	0-111.26	37.55	50.8	0-140.82
Mar	0.0	0.00	0-0	0.00	0.00	0-0	9.44	12.7	0-47.22
Apr	0.0	5.90	0-31.83	0.00	9.05	0-41.42	0.00	12.7	0-59.78
May	0.0	14.75	0-54.95	0.00	18.09	0-74.17	0.00	19.1	0-66.19
Jun	0.0	0.00	0-0	0.00	4.52	0-28.42	9.68	12.7	0-47.24
Jul	0.0	14.75	0-61.49	42.39	45.24	7.26-91.3	46.04	50.8	12.63-104.16
Aug	18.3	64.89	0-185.44	66.87	104.05	0-275.08	95.76	158.7	0-405.36
Sep	0.0	2.95	0-23.64	15.72	18.09	0.28-47.95	19.13	19.1	0.31-56.7
Oct	0.0	17.70	0-70.32	0.00	18.09	0-73.87	0.00	19.1	0-75.9
Nov	32.0	38.34	0-88.13	41.09	45.24	0-115.06	66.80	69.8	18.84-131.87
Dec	0.0	5.90	0-27.44	9.21	9.05	0-27.7	9.37	12.7	0-45.85

Table 44.1b. Norfolk Vanguard West. Herring Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.02	0-0.09	0.00	0.02	0-0.1	0.00	0.04	0-0.13
Feb	0.06	0.08	0-0.25	0.06	0.09	0-0.25	0.06	0.08	0-0.22
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.01	0.02	0-0.07
Apr	0.00	0.02	0-0.11	0.00	0.02	0-0.09	0.00	0.02	0-0.09
May	0.00	0.05	0-0.19	0.00	0.04	0-0.16	0.00	0.03	0-0.1
Jun	0.00	0.00	0-0	0.00	0.01	0-0.06	0.02	0.02	0-0.07
Jul	0.00	0.05	0-0.21	0.09	0.10	0.02-0.2	0.07	0.08	0.02-0.16
Aug	0.06	0.22	0-0.63	0.15	0.23	0-0.61	0.15	0.25	0-0.64
Sep	0.00	0.01	0-0.08	0.03	0.04	0-0.11	0.03	0.03	0-0.09
Oct	0.00	0.06	0-0.24	0.00	0.04	0-0.16	0.00	0.03	0-0.12
Nov	0.11	0.13	0-0.3	0.09	0.10	0-0.25	0.11	0.11	0.03-0.21
Dec	0.00	0.02	0-0.09	0.02	0.02	0-0.06	0.01	0.02	0-0.07

Table 44.2a. Norfolk Vanguard West. Herring Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.0	0.00	0-0	0.00	6.35	0-28.38
Feb	0.00	5.90	0-27.27	0.0	4.52	0-27.77	0.00	6.35	0-28.23
Mar	0.00	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.0	4.52	0-27.77	0.00	6.35	0-28.16
Jul	0.00	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.0	4.52	0-23.59	9.44	12.70	0-37.78
Sep	0.00	0.00	0-0	0.0	0.00	0-0.33	0.00	0.00	0-0.36
Oct	0.00	0.00	0-0	0.0	0.00	0-0	0.00	0.00	0-0
Nov	8.01	8.85	0-27.34	16.4	18.09	0-49.31	18.84	19.05	0-56.51
Dec	0.00	0.00	0-0	0.0	4.52	0-27.63	0.00	6.35	0-45.85

Table 44.2b. Norfolk Vanguard West. Herring Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.04
Feb	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jun	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Jul	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Aug	0.00	0.00	0-0	0.00	0.01	0-0.05	0.01	0.02	0-0.06
Sep	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Oct	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Nov	0.03	0.03	0-0.09	0.04	0.04	0-0.11	0.03	0.03	0-0.09
Dec	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.01	0-0.07

Table 44.3a. Norfolk Vanguard West. Herring Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.0	5.90	0-27.41	0.0	9.05	0-37.16	0.00	19.05	0-75.67
Feb	0.0	17.70	0-63.79	0.0	36.19	0-120.53	4.69	44.45	0-140.82
Mar	0.0	0.00	0-0	0.0	0.00	0-0	9.44	12.70	0-47.22
Apr	0.0	5.90	0-31.83	0.0	9.05	0-41.42	0.00	12.70	0-59.78
May	0.0	14.75	0-54.95	0.0	18.09	0-65.13	0.00	19.05	0-75.38
Jun	0.0	0.00	0-0	0.0	0.00	0-1.95	0.58	12.70	0-47.24
Jul	0.0	14.75	0-58.15	42.4	40.71	11.95-87.08	47.36	50.80	7.67-107.3
Aug	18.3	64.89	0-191.38	44.8	99.52	0-275.08	97.99	152.39	0-385.02
Sep	0.0	2.95	0-23.64	15.7	18.09	0.17-47.95	19.11	19.05	0.18-56.7
Oct	0.0	20.65	0-70.24	0.0	18.09	0-67.8	0.00	19.05	0-75.9
Nov	21.1	29.49	0-80.12	24.7	27.14	0-82.19	47.10	50.80	9.42-94.19
Dec	0.0	5.90	0-27.44	0.0	4.52	0-27.7	0.00	6.35	0-28.11

Table 44.3b. Norfolk Vanguard West. Herring Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.00	0.02	0-0.09	0.00	0.02	0-0.08	0.00	0.03	0-0.12
Feb	0.00	0.06	0-0.22	0.00	0.08	0-0.27	0.01	0.07	0-0.22
Mar	0.00	0.00	0-0	0.00	0.00	0-0	0.01	0.02	0-0.07
Apr	0.00	0.02	0-0.11	0.00	0.02	0-0.09	0.00	0.02	0-0.09
May	0.00	0.05	0-0.19	0.00	0.04	0-0.14	0.00	0.03	0-0.12
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.07
Jul	0.00	0.05	0-0.2	0.09	0.09	0.03-0.19	0.07	0.08	0.01-0.17
Aug	0.06	0.22	0-0.65	0.10	0.22	0-0.61	0.15	0.24	0-0.61
Sep	0.00	0.01	0-0.08	0.03	0.04	0-0.11	0.03	0.03	0-0.09
Oct	0.00	0.07	0-0.24	0.00	0.04	0-0.15	0.00	0.03	0-0.12
Nov	0.07	0.10	0-0.27	0.05	0.06	0-0.18	0.07	0.08	0.01-0.15
Dec	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04

Table 45.1a. Norfolk Vanguard West. Great Black-backed Gull design-based abundance estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	45.7	58.99	0-155.3	64.8	108.57	0-269.43	89.8	139.69	0-340.51
Feb	81.8	94.38	9.09-218.7	125.1	153.81	9.26-352.32	150.4	171.43	18.82-394.31
Mar	18.4	26.54	0-82.63	27.7	31.67	0-101.99	37.8	57.14	0-160.56
Apr	0.0	0.00	0-0	0.0	0.00	0-0	0.0	12.70	0-38.24
May	0.0	5.90	0-27.47	0.0	9.05	0-37.09	0.0	6.35	0-47.11
Jun	0.0	0.00	0-0	0.0	0.00	0-0	0.0	0.00	0-0
Jul	0.0	8.85	0-45.68	0.0	18.09	0-73.24	0.0	19.05	0-72.54
Aug	0.0	14.75	0-59.02	0.0	13.57	0-58.36	260.1	393.66	0-919.07
Sep	39.4	44.24	8.84-102.44	462.6	511.18	87.26-1022.01	501.5	577.80	98.36-1155.06
Oct	18.4	17.70	0-47.31	18.5	18.09	0-47.77	18.9	19.05	0-47.44
Nov	182.2	191.71	80.12-328.04	213.7	226.19	90.4-408.79	263.7	285.72	100.2-518.05
Dec	0.0	0.00	0-0	36.9	63.33	0-175.01	100.9	114.29	9.37-275.1

Table 45.1b. Norfolk Vanguard West. Great Black-backed Gull design-based density estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.15	0.20	0-0.53	0.14	0.24	0-0.6	0.14	0.22	0-0.54
Feb	0.28	0.32	0.03-0.74	0.28	0.34	0.02-0.78	0.24	0.27	0.03-0.62
Mar	0.06	0.09	0-0.28	0.06	0.07	0-0.23	0.06	0.09	0-0.25
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.06
May	0.00	0.02	0-0.09	0.00	0.02	0-0.08	0.00	0.01	0-0.07
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.03	0-0.15	0.00	0.04	0-0.16	0.00	0.03	0-0.11
Aug	0.00	0.05	0-0.2	0.00	0.03	0-0.13	0.41	0.62	0-1.45
Sep	0.13	0.15	0.03-0.35	1.02	1.13	0.19-2.26	0.79	0.91	0.15-1.82
Oct	0.06	0.06	0-0.16	0.04	0.04	0-0.11	0.03	0.03	0-0.07
Nov	0.62	0.65	0.27-1.11	0.47	0.50	0.2-0.9	0.42	0.45	0.16-0.82
Dec	0.00	0.00	0-0	0.08	0.14	0-0.39	0.16	0.18	0.01-0.43

Table 45.2a. Norfolk Vanguard West. Great Black-backed Gull design-based abundance estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	9.14	14.75	0-45.45	37.03	40.71	0-102.2	37.73	44.45	0-113.5
Feb	27.34	32.44	0-72.9	37.03	36.19	9.26-83.44	37.55	38.10	9.39-84.49
Mar	0.00	5.90	0-27.41	9.24	9.05	0-27.81	9.42	6.35	0-28.33
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	12.70	0-47.79
May	0.00	5.90	0-27.47	0.00	4.52	0-27.81	0.00	6.35	0-28.27
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	8.85	0-36.54	0.00	18.09	0-64.69	0.00	19.05	0-66.27
Aug	0.00	14.75	0-54.81	0.00	13.57	0-55.63	28.33	82.54	0-226.67
Sep	39.40	41.29	2.53-94.56	304.34	348.33	47.17-727.33	330.30	400.01	55.03-829.66
Oct	0.00	8.85	0-36.63	0.00	9.05	0-46.26	0.00	6.35	0-47.44
Nov	16.02	23.59	0-64.01	27.87	40.71	0-120.78	56.51	63.49	8.35-150.94
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	6.35	0-46.84

Table 45.2b. Norfolk Vanguard West. Great Black-backed Gull design-based density estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.03	0.05	0-0.15	0.08	0.09	0-0.23	0.06	0.07	0-0.18
Feb	0.09	0.11	0-0.25	0.08	0.08	0.02-0.18	0.06	0.06	0.01-0.13
Mar	0.00	0.02	0-0.09	0.02	0.02	0-0.06	0.01	0.01	0-0.04
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.02	0-0.08
May	0.00	0.02	0-0.09	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.03	0-0.12	0.00	0.04	0-0.14	0.00	0.03	0-0.1
Aug	0.00	0.05	0-0.19	0.00	0.03	0-0.12	0.04	0.13	0-0.36
Sep	0.13	0.14	0.01-0.32	0.67	0.77	0.1-1.61	0.52	0.63	0.09-1.31
Oct	0.00	0.03	0-0.12	0.00	0.02	0-0.1	0.00	0.01	0-0.07
Nov	0.05	0.08	0-0.22	0.06	0.09	0-0.27	0.09	0.10	0.01-0.24
Dec	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.01	0-0.07

Table 45.3a. Norfolk Vanguard West. Great Black-backed Gull design-based abundance estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Abundance								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	4.57	44.24	0-146.16	23.23	63.33	0-185.82	37.83	95.24	0-264.84
Feb	45.45	64.89	0-173.13	69.51	117.62	0-296.69	89.29	133.34	0-337.98
Mar	0.00	23.59	0-82.63	0.00	22.62	0-83.44	4.72	44.45	0-151.11
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	4.52	0-27.81	0.00	6.35	0-28.27
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-6.93	0.00	0.00	0-10.69	0.00	0.00	0-8.37
Aug	0.00	0.00	0-7.02	0.00	0.00	0-5.47	194.35	311.12	0-741.1
Sep	0.00	2.95	0-10.1	136.86	162.85	20.05-337.28	158.20	184.13	27.61-369.19
Oct	3.04	8.85	0-36.95	3.02	9.05	0-46.21	2.87	12.70	0-37.87
Nov	160.24	168.11	80.12-282.48	176.52	185.47	82.19-334.47	200.40	215.88	83.5-395.6
Dec	0.00	0.00	0-0	36.93	63.33	0-175.01	60.10	107.94	0-275.1

Table 45.3b. Norfolk Vanguard West. Great Black-backed Gull design-based density estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Month	Density								
	Wind farm			Wind farm & 2km buffer			Wind farm & 4km buffer		
	Median	Mean	Confidence interval	Median	Mean	Confidence interval	Median	Mean	Confidence interval
Jan	0.02	0.15	0-0.5	0.05	0.14	0-0.41	0.06	0.15	0-0.42
Feb	0.15	0.22	0-0.59	0.15	0.26	0-0.66	0.14	0.21	0-0.53
Mar	0.00	0.08	0-0.28	0.00	0.05	0-0.18	0.01	0.07	0-0.24
Apr	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
May	0.00	0.00	0-0	0.00	0.01	0-0.06	0.00	0.01	0-0.04
Jun	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00	0-0
Jul	0.00	0.00	0-0.02	0.00	0.00	0-0.02	0.00	0.00	0-0.01
Aug	0.00	0.00	0-0.02	0.00	0.00	0-0.01	0.31	0.49	0-1.17
Sep	0.00	0.01	0-0.03	0.30	0.36	0.04-0.75	0.25	0.29	0.04-0.58
Oct	0.01	0.03	0-0.13	0.01	0.02	0-0.1	0.00	0.02	0-0.06
Nov	0.54	0.57	0.27-0.96	0.39	0.41	0.18-0.74	0.32	0.34	0.13-0.62
Dec	0.00	0.00	0-0	0.08	0.14	0-0.39	0.09	0.17	0-0.43

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Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Ornithology Technical Appendix

Annex 2

Survey seabird density and abundance

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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4	Internal Approval		
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1 INTRODUCTION

1. This appendix provides tables of seabird density and abundance for each species recorded on NV East and NV West in each survey.

2. The first set of tables (1.1 to 25.6) provide density and abundance estimates for species recorded on the NV East site, NV East and 2km buffer and NV East and 4km buffer in each of the 32 surveyed months for the former East Anglia FOUR site (24 months: March 2012 – February 2014) and the NV East site (8 months: September 2015 – April 2016).

3. The second set of tables (26.1 to 45.6) provide density and abundance estimates for species recorded on the NV West site, NV West and 2km buffer and NV West and 4km buffer in each of the 24 months of survey (September 2015 – August 2017).

4. A key to the table numbering is provided in Table A2. Tables are presented for all birds (on the sea and in flight) and in flight and on the sea separately. Tables are presented with and without the inclusion of birds not identified to species level (e.g. large gulls, etc) and for guillemot and razorbill, with and without adjustment for availability bias to account for the estimated proportion of individuals underwater when images were captured. Methods for assigning unidentified records and adjustment for availability bias are provided in Technical Appendix 13.1.

5. Monthly densities and abundances are summarised as the median and 95% confidence range, derived from 1,000 nonparametric bootstrap samples.

Table A2. Key to species density and abundance tables.

Species	Site	All birds				In Flight		On Sea			
		Positive ID only	Plus availability bias	Plus unidentified	Plus availability bias and unidentified	Positive ID only	Plus unidentified	Positive ID only	Plus availability bias	Plus unidentified	Plus availability bias and unidentified
Red-breasted merganser	NV East	1.1		1.2				1.3			
Red-throated diver		2.1		2.2		2.3	2.4	2.5		2.6	
Black-throated diver		3.1		3.2		2.3	2.4	2.5		3.6	
Great northern diver		4.1		4.2		2.3	2.4	2.5		4.6	
Fulmar		5.1		5.2		2.3	2.4	2.5		5.6	
Gannet		6.1				6.2		6.3			
Cormorant		7.1				7.2		7.3			
Pomarine skua		8.1				8.2		8.3			
Arctic skua		9.1				9.2		9.3			
Great skua		10.1				10.2		10.3			
Puffin		11.1				11.2		11.3			
Razorbill		12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	12.10
Little auk		13.1				13.2		13.3			
Guillemot		14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	14.10
Little Tern		15.1				15.2		15.3			
Black tern		16.1				16.2		16.3			
Sandwich tern		17.1				17.2		17.3			
Commic tern		18.1				18.2		18.3			
Kittiwake		19.1		19.2		19.3	19.4	19.5		19.6	
Black-headed gull		20.1		20.2		20.3	20.4	20.5		20.6	
Little gull		21.1		21.2		21.3	21.4	21.5		21.6	
Common gull		22.1		22.2		22.3	22.4	22.5		22.6	
Lesser black-backed gull		23.1		23.2		23.3	23.4	23.5		23.6	
Herring gull		24.1		24.2		24.3	24.4	24.5		24.6	
Great black-backed gull		25.1		25.2		25.3	25.4	25.5		25.6	
Common scoter	NV West	26.1									
Red-throated diver		27.1									

Species	Site	All birds				In Flight		On Sea			
		Positive ID only	Plus availability bias	Plus unidentified	Plus availability bias and unidentified	Positive ID only	Plus unidentified	Positive ID only	Plus availability bias	Plus unidentified	Plus availability bias and unidentified
Fulmar		28.1									
Gannet		29.1									
Cormorant		30.1									
Pomarine skua		31.1									
Arctic skua		32.1									
Great skua		33.1									
Puffin		34.1									
Razorbill		35.1									
Guillemot		36.1									
Sandwich tern		37.1		37.2		37.3	37.4	37.5		37.6	
Commic tern		38.1		38.2		38.3	38.4	38.5		38.6	
Kittiwake		39.1		39.2		39.3	39.4	39.5		39.6	
Black-headed gull		40.1		40.2		40.3	40.4	40.5		40.6	
Little gull		41.1		41.2		41.3	41.4	41.5		41.6	
Common gull		42.1		42.2		42.3	42.4	42.5		42.6	
Lesser black-backed gull		43.1		43.2		43.3	43.4	43.5		43.6	
Herring gull		44.1		44.2		44.3	44.4	44.5		44.6	
Great black-backed gull		45.1		45.2		45.3	45.4	46.5		45.6	

Table 1.1. Norfolk Vanguard East. Red-breasted Merganser design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2012	0	0-0	0	0-0	10.5	0-31.69	0	0-0	0	0-0	0.02	0-0.05
Nov-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2014	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Table 1.2. Norfolk Vanguard East. Red-breasted Merganser design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2012	0	0-0	0	0-0	10.5	0-31.43	0	0-0	0	0-0	0.02	0-0.05
Nov-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2014	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Table 1.3. Norfolk Vanguard East. Red-breasted Merganser design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 2.1. Norfolk Vanguard East. Red-throated Diver design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	176.54	94.15-270.69	179.50	95.73-275.23	229.42	132.82-338.09	0.59	0.32-0.91	0.40	0.21-0.61	0.37	0.21-0.54
Apr-2012	34.75	8.69-78.18	34.97	8.74-69.93	52.80	17.6-96.8	0.12	0.03-0.26	0.08	0.02-0.16	0.08	0.03-0.15
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	33.38	0-83.46	34.15	0-85.37	0.00	0-0	0.07	0-0.19	0.05	0-0.14
Dec-2012	10.25	0-30.75	31.70	0-73.97	34.29	0-80.01	0.03	0-0.1	0.07	0-0.16	0.05	0-0.13
Jan-2013	40.80	10.2-91.79	42.12	10.53-84.24	42.89	10.72-85.79	0.14	0.03-0.31	0.09	0.02-0.19	0.07	0.02-0.14
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	38.33	0-76.98	64.86	12.97-129.73	0.00	0-0	0.09	0-0.17	0.10	0.02-0.21
Apr-2013	9.73	0-29.18	10.27	0-30.81	21.22	0-53.05	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
May-2013	57.72	0-134.67	57.27	0-133.63	76.44	19.11-152.88	0.19	0-0.45	0.13	0-0.3	0.12	0.03-0.24
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	17.36	0-43.4	26.32	0-61.41	35.36	8.84-70.73	0.06	0-0.15	0.06	0-0.14	0.06	0.01-0.11
Dec-2013	0.00	0-0	11.84	0-35.53	47.68	11.92-95.36	0.00	0-0	0.03	0-0.08	0.08	0.02-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	11.55	0-34.65	11.55	0-34.64	11.52	0-34.56	0.04	0-0.12	0.03	0-0.08	0.02	0-0.05
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	64.10	18.32-119.05	74.31	27.87-130.04	75.14	28.18-131.5	0.22	0.06-0.4	0.17	0.06-0.29	0.12	0.04-0.21
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 2.2. Norfolk Vanguard East. Red-throated Diver design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	220.00	131.28-314.17	225.82	142.05-326.77	292.41	190.42-411.81	0.74	0.44-1.06	0.50	0.32-0.73	0.47	0.3-0.66
Apr-2012	43.52	13.07-82.85	71.12	35.11-115.06	105.92	58.28-160.55	0.15	0.04-0.28	0.16	0.08-0.26	0.17	0.09-0.26
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	33.38	0-83.46	34.15	0-85.37	0.00	0-0	0.07	0-0.19	0.05	0-0.14
Dec-2012	10.25	0-30.75	31.70	0-73.97	34.29	0-80.01	0.03	0-0.1	0.07	0-0.16	0.05	0-0.13
Jan-2013	40.80	10.2-91.79	42.12	10.53-84.24	42.89	10.72-85.79	0.14	0.03-0.31	0.09	0.02-0.19	0.07	0.02-0.14
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	38.33	0-76.98	64.86	12.97-129.73	0.00	0-0	0.09	0-0.17	0.10	0.02-0.21
Apr-2013	9.73	0-29.18	10.27	0-30.81	21.22	0-53.05	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
May-2013	57.72	0-134.67	57.27	0-133.63	76.44	19.11-152.88	0.19	0-0.45	0.13	0-0.3	0.12	0.03-0.24
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	17.36	0-43.4	26.32	0-61.41	35.36	8.84-70.73	0.06	0-0.15	0.06	0-0.14	0.06	0.01-0.11

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	11.84	0-35.53	47.68	11.92-95.36	0.00	0-0	0.03	0-0.08	0.08	0.02-0.15
Jan-2014	11.55	0-34.65	11.55	0-34.64	11.52	0-34.56	0.04	0-0.12	0.03	0-0.08	0.02	0-0.05
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	64.10	18.32-119.05	74.31	27.87-130.04	75.14	28.18-131.5	0.22	0.06-0.4	0.17	0.06-0.29	0.12	0.04-0.21
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 2.3. Norfolk Vanguard East. Red-throated Diver design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.8	0-35.31	12.0	0-35.9	12.1	0-48.3	0.04	0-0.12	0.03	0-0.08	0.02	0-0.08
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	10.6	0-31.83	0.00	0-0	0.00	0-0	0.02	0-0.05
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	36.6	9.16-82.42	37.1	9.29-74.31	37.6	9.39-75.14	0.12	0.03-0.28	0.08	0.02-0.17	0.06	0.01-0.12
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 2.4. Norfolk Vanguard East. Red-throated Diver design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.8	0-35.31	12.0	0-35.9	12.1	0-48.3	0.04	0-0.12	0.03	0-0.08	0.02	0-0.08
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	10.6	0-31.83	0.00	0-0	0.00	0-0	0.02	0-0.05
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	36.6	9.16-82.42	37.1	9.29-74.31	37.6	9.39-75.14	0.12	0.03-0.28	0.08	0.02-0.17	0.06	0.01-0.12
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 2.5. Norfolk Vanguard East. Red-throated Diver design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	164.77	82.38-258.92	167.53	95.73-263.27	217.34	120.75-313.94	0.55	0.28-0.87	0.37	0.21-0.58	0.35	0.19-0.5
Apr-2012	34.75	8.69-69.49	34.97	8.74-69.93	52.80	17.6-96.8	0.12	0.03-0.23	0.08	0.02-0.16	0.08	0.03-0.15
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	33.38	0-83.46	34.15	0-85.37	0.00	0-0	0.07	0-0.19	0.05	0-0.14
Dec-2012	10.25	0-30.75	31.70	0-73.97	34.29	0-80.01	0.03	0-0.1	0.07	0-0.16	0.05	0-0.13
Jan-2013	40.80	10.2-91.79	42.12	10.53-84.24	42.89	10.72-85.79	0.14	0.03-0.31	0.09	0.02-0.19	0.07	0.02-0.14
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	38.33	0-76.98	64.86	12.97-129.73	0.00	0-0	0.09	0-0.17	0.10	0.02-0.21
Apr-2013	9.73	0-29.18	10.27	0-41.08	10.61	0-31.83	0.03	0-0.1	0.02	0-0.09	0.02	0-0.05
May-2013	57.72	0-134.67	57.27	0-133.63	76.44	19.11-152.88	0.19	0-0.45	0.13	0-0.3	0.12	0.03-0.24
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	17.36	0-43.4	26.32	0-61.41	35.36	8.84-70.73	0.06	0-0.15	0.06	0-0.14	0.06	0.01-0.11
Dec-2013	0.00	0-0	11.84	0-35.53	47.68	11.92-95.36	0.00	0-0	0.03	0-0.08	0.08	0.02-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	11.55	0-34.65	11.55	0-34.64	11.52	0-34.56	0.04	0-0.12	0.03	0-0.08	0.02	0-0.05
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	27.47	0-64.1	37.15	9.29-74.31	37.57	9.39-75.14	0.09	0-0.22	0.08	0.02-0.17	0.06	0.01-0.12
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 2.6. Norfolk Vanguard East. Red-throated Diver design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	209.14	121.3-312.35	219.07	135.81-313.77	281.69	181.08-390.43	0.70	0.41-1.05	0.49	0.3-0.7	0.45	0.29-0.62
Apr-2012	43.52	13.07-82.85	70.88	31.42-119.08	105.92	56.45-165.86	0.15	0.04-0.28	0.16	0.07-0.26	0.17	0.09-0.26
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	33.38	0-83.46	34.15	0-85.37	0.00	0-0	0.07	0-0.19	0.05	0-0.14
Dec-2012	10.25	0-30.75	31.70	0-73.97	34.29	0-80.01	0.03	0-0.1	0.07	0-0.16	0.05	0-0.13
Jan-2013	40.80	10.2-91.79	42.12	10.53-84.24	42.89	10.72-85.79	0.14	0.03-0.31	0.09	0.02-0.19	0.07	0.02-0.14
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	38.33	0-76.98	64.86	12.97-129.73	0.00	0-0	0.09	0-0.17	0.10	0.02-0.21
Apr-2013	9.73	0-29.18	10.27	0-41.08	10.61	0-31.83	0.03	0-0.1	0.02	0-0.09	0.02	0-0.05
May-2013	57.72	0-134.67	57.27	0-133.63	76.44	19.11-152.88	0.19	0-0.45	0.13	0-0.3	0.12	0.03-0.24
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	17.36	0-43.4	26.32	0-61.41	35.36	8.84-70.73	0.06	0-0.15	0.06	0-0.14	0.06	0.01-0.11

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	11.84	0-35.53	47.68	11.92-95.36	0.00	0-0	0.03	0-0.08	0.08	0.02-0.15
Jan-2014	11.55	0-34.65	11.55	0-34.64	11.52	0-34.56	0.04	0-0.12	0.03	0-0.08	0.02	0-0.05
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	27.47	0-64.1	37.15	9.29-74.31	37.57	9.39-75.14	0.09	0-0.22	0.08	0.02-0.17	0.06	0.01-0.12
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 3.1. Norfolk Vanguard East. Black-throated Diver design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	47.1	0-94.45	47.9	11.97-96.03	60.4	12.07-120.75	0.16	0-0.32	0.11	0.03-0.21	0.10	0.02-0.19
Apr-2012	26.1	0-60.81	26.2	0-61.19	26.4	0-61.6	0.09	0-0.2	0.06	0-0.14	0.04	0-0.1
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 3.2. Norfolk Vanguard East. Black-throated Diver design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	57.1	16.8-112.63	62.2	21.5-117.25	76.0	31.21-136.32	0.19	0.06-0.38	0.14	0.05-0.26	0.12	0.05-0.22
Apr-2012	32.5	3.24-67.32	50.3	20.64-86.76	51.8	23.6-92.21	0.11	0.01-0.23	0.11	0.05-0.19	0.08	0.04-0.15
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 3.3. Norfolk Vanguard East. Black-throated Diver design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 3.4. Norfolk Vanguard East. Black-throated Diver design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 3.5. Norfolk Vanguard East. Black-throated Diver design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	47.1	11.77-94.15	47.9	11.97-95.73	60.4	12.07-120.75	0.16	0.04-0.32	0.11	0.03-0.21	0.10	0.02-0.19
Apr-2012	26.1	0-60.81	26.2	0-61.19	26.4	0-61.6	0.09	0-0.2	0.06	0-0.14	0.04	0-0.1
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 3.6. Norfolk Vanguard East. Black-throated Diver design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	55.5	18.47-110.91	60.6	23.09-111.67	75.2	30.48-134.91	0.19	0.06-0.37	0.13	0.05-0.25	0.12	0.05-0.21
Apr-2012	32.5	6.48-67.29	50.3	21.53-90.8	50.0	24.56-90.5	0.11	0.02-0.23	0.11	0.05-0.2	0.08	0.04-0.14
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 4.1. Norfolk Vanguard East. Great Northern Diver design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	105.92	47.08-176.54	143.60	71.8-227.37	229.4	132.82-338.09	0.36	0.16-0.59	0.32	0.16-0.51	0.37	0.21-0.54
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.8	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	10.25	0-30.75	10.57	0-31.7	11.4	0-45.72	0.03	0-0.1	0.02	0-0.07	0.02	0-0.07
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	13.0	0-38.92	0.00	0-0	0.00	0-0	0.02	0-0.06
Apr-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 4.2. Norfolk Vanguard East. Great Northern Diver design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	128.95	65.85-206.08	185.5	109.01-276.59	287.7	191.08-404.11	0.43	0.22-0.69	0.41	0.24-0.61	0.46	0.3-0.64
Apr-2012	9.75	0-30.29	16.1	4.22-36.79	16.5	4.3-37.58	0.03	0-0.1	0.04	0.01-0.08	0.03	0.01-0.06
May-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	10.25	0-30.75	10.6	0-31.7	11.4	0-45.72	0.03	0-0.1	0.02	0-0.07	0.02	0-0.07
Jan-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.0	0-0	13.0	0-38.92	0.00	0-0	0.00	0-0	0.02	0-0.06
Apr-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 4.3. Norfolk Vanguard East. Great Northern Diver design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 4.4. Norfolk Vanguard East. Great Northern Diver design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 4.5. Norfolk Vanguard East. Great Northern Diver design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	105.92	47.08-176.54	143.60	71.8-227.37	229.4	120.75-338.09	0.36	0.16-0.59	0.32	0.16-0.51	0.37	0.19-0.54
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.8	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	10.25	0-30.75	10.57	0-31.7	11.4	0-45.72	0.03	0-0.1	0.02	0-0.07	0.02	0-0.07
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	13.0	0-38.92	0.00	0-0	0.00	0-0	0.02	0-0.06
Apr-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 4.6. Norfolk Vanguard East. Great Northern Diver design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	127.94	66.34-206.58	183.5	107.02-273.93	293.8	181.97-403.16	0.43	0.22-0.7	0.41	0.24-0.61	0.47	0.29-0.64
Apr-2012	9.75	0-29.24	16.1	4.22-37.84	15.7	4.3-39.32	0.03	0-0.1	0.04	0.01-0.08	0.02	0.01-0.06
May-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	10.25	0-30.75	10.6	0-31.7	11.4	0-45.72	0.03	0-0.1	0.02	0-0.07	0.02	0-0.07
Jan-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.0	0-0	13.0	0-38.92	0.00	0-0	0.00	0-0	0.02	0-0.06
Apr-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 5.1. Norfolk Vanguard East. Fulmar design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	23.54	0-58.85	47.87	11.97-107.7	60.4	12.07-120.75	0.08	0-0.2	0.11	0.03-0.24	0.10	0.02-0.19
Apr-2012	8.69	0-26.06	8.74	0-26.22	17.6	0-44	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
May-2012	445.27	326.53-583.8	830.92	670.74-1021.13	1035.9	834.73-1226.95	1.50	1.1-1.96	1.85	1.49-2.27	1.65	1.33-1.95
Jun-2012	263.63	154.69-403.21	364.29	227.68-516.07	520.9	357.17-699.46	0.89	0.52-1.36	0.81	0.51-1.15	0.83	0.57-1.11
Jul-2012	14.57	0-36.42	14.64	0-36.59	14.8	0-36.92	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Aug-2012	67.60	13.52-122.02	106.79	40.05-186.89	194.7	103.83-298.51	0.23	0.05-0.41	0.24	0.09-0.42	0.31	0.17-0.48
Sep-2012	457.15	316.49-598.11	789.69	618.02-984.25	1053.9	852.08-1278.12	1.54	1.07-2.01	1.75	1.37-2.19	1.68	1.36-2.03
Oct-2012	63.73	18.21-109.25	79.14	29.68-138.5	115.2	52.38-188.57	0.21	0.06-0.37	0.18	0.07-0.31	0.18	0.08-0.3
Nov-2012	129.13	48.42-225.97	166.91	83.04-283.75	341.5	204.9-495.17	0.43	0.16-0.76	0.37	0.18-0.63	0.54	0.33-0.79
Dec-2012	194.77	123.01-287.03	285.30	179.64-401.54	365.8	251.46-502.92	0.66	0.41-0.97	0.63	0.4-0.89	0.58	0.4-0.8
Jan-2013	173.38	101.99-254.98	200.07	115.83-305.38	246.7	150.13-353.88	0.58	0.34-0.86	0.44	0.26-0.68	0.39	0.24-0.56
Feb-2013	45.76	11.44-91.52	172.55	92.03-264.58	173.6	92.56-266.12	0.15	0.04-0.31	0.38	0.2-0.59	0.28	0.15-0.42
Mar-2013	90.70	25.92-168.45	191.66	102.22-293.88	233.5	129.73-337.62	0.31	0.09-0.57	0.43	0.23-0.65	0.37	0.21-0.54
Apr-2013	9.73	0-29.18	10.27	0-30.81	31.8	0-74.27	0.03	0-0.1	0.02	0-0.07	0.05	0-0.12
May-2013	134.67	38.48-250.1	267.26	133.63-400.9	305.8	171.99-458.63	0.45	0.13-0.84	0.59	0.3-0.89	0.49	0.27-0.73
Jun-2013	0.00	0-0	0.00	0-0	10.5	0-31.4	0.00	0-0	0.00	0-0	0.02	0-0.05
Jul-2013	125.90	41.97-209.83	292.05	180.79-431.11	290.6	179.87-428.92	0.42	0.14-0.71	0.65	0.4-0.96	0.46	0.29-0.68
Aug-2013	358.12	254.45-471.21	466.57	347.45-595.62	639.7	484.95-794.49	1.21	0.86-1.59	1.04	0.77-1.32	1.02	0.77-1.26
Sep-2013	551.61	427.3-675.92	643.35	517.82-776.73	872.2	722.9-1029.35	1.86	1.44-2.27	1.43	1.15-1.73	1.39	1.15-1.64
Oct-2013	113.94	64.09-170.91	121.75	64.45-186.2	121.5	64.35-185.89	0.38	0.22-0.58	0.27	0.14-0.41	0.19	0.1-0.3
Nov-2013	17.36	0-43.4	26.32	0-61.41	26.5	0-61.89	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Dec-2013	35.09	0-81.88	47.38	11.84-94.76	71.5	23.84-131.11	0.12	0-0.28	0.11	0.03-0.21	0.11	0.04-0.21

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	23.10	0-57.75	23.09	0-57.73	46.1	0-92.16	0.08	0-0.19	0.05	0-0.13	0.07	0-0.15
Feb-2014	10.19	0-40.78	9.79	0-29.37	20.0	0-50.07	0.03	0-0.14	0.02	0-0.07	0.03	0-0.08
Sep-2015	82.04	32.82-131.47	107.54	57.91-165.44	174.3	99.59-248.97	0.28	0.11-0.44	0.24	0.13-0.37	0.28	0.16-0.4
Oct-2015	200.47	118.46-291.6	333.28	231.45-435.35	424.7	320.66-547.41	0.67	0.4-0.98	0.74	0.51-0.97	0.68	0.51-0.87
Nov-2015	100.73	45.79-164.84	176.48	102.17-260.08	225.4	140.89-319.35	0.34	0.15-0.55	0.39	0.23-0.58	0.36	0.22-0.51
Dec-2015	36.45	9.11-72.9	202.33	128.76-285.1	256.8	165.1-348.53	0.12	0.03-0.25	0.45	0.29-0.63	0.41	0.26-0.55
Jan-2016	18.73	0-46.83	18.49	0-46.21	18.9	0-47.13	0.06	0-0.16	0.04	0-0.1	0.03	0-0.08
Feb-2016	46.60	9.32-93.2	111.28	55.64-185.46	197.2	122.11-281.78	0.16	0.03-0.31	0.25	0.12-0.41	0.31	0.19-0.45
Mar-2016	46.25	9.25-92.49	46.60	9.32-93.2	56.4	18.79-103.32	0.16	0.03-0.31	0.10	0.02-0.21	0.09	0.03-0.16
Apr-2016	369.05	267.56-479.77	452.88	341.97-573.27	999.2	829.55-1169.15	1.24	0.9-1.61	1.01	0.76-1.27	1.59	1.32-1.86

Table 5.2. Norfolk Vanguard East. Fulmar design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	23.54	0-58.85	35.9	0-83.77	36.2	0-84.52	0.08	0-0.2	0.08	0-0.19	0.06	0-0.13
Apr-2012	0.00	0-0	0.0	0-0	8.8	0-26.4	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2012	188.00	98.95-277.06	300.3	200.22-410.7	422.4	301.71-553.13	0.63	0.33-0.93	0.67	0.44-0.91	0.67	0.48-0.88
Jun-2012	93.05	31.02-170.59	136.6	45.54-227.68	178.6	89.29-282.76	0.31	0.1-0.57	0.30	0.1-0.51	0.28	0.14-0.45
Jul-2012	14.57	0-36.42	14.6	0-36.59	14.8	0-36.92	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Aug-2012	40.56	0-94.64	40.0	0-93.44	51.9	12.98-103.83	0.14	0-0.32	0.09	0-0.21	0.08	0.02-0.17
Sep-2012	82.05	23.44-152.38	125.9	57.22-206.01	179.4	100.9-269.08	0.28	0.08-0.51	0.28	0.13-0.46	0.29	0.16-0.43
Oct-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	64.56	16.14-129.13	66.8	16.69-133.53	170.8	85.37-290.27	0.22	0.05-0.43	0.15	0.04-0.3	0.27	0.14-0.46
Dec-2012	92.26	30.75-153.77	158.5	84.53-243.04	217.2	136.87-320.04	0.31	0.1-0.52	0.35	0.19-0.54	0.35	0.22-0.51
Jan-2013	81.59	30.6-132.59	105.3	42.12-168.48	118.0	53.62-193.03	0.27	0.1-0.45	0.23	0.09-0.37	0.19	0.09-0.31
Feb-2013	11.44	0-34.32	57.5	11.5-115.04	57.9	11.57-115.71	0.04	0-0.12	0.13	0.03-0.26	0.09	0.02-0.18
Mar-2013	64.79	12.96-129.58	127.8	63.89-204.44	142.7	64.86-233.51	0.22	0.04-0.44	0.28	0.14-0.45	0.23	0.1-0.37
Apr-2013	9.73	0-29.18	10.3	0-30.81	21.2	0-53.05	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
May-2013	19.24	0-57.72	76.4	19.09-152.72	76.4	19.11-152.88	0.06	0-0.19	0.17	0.04-0.34	0.12	0.03-0.24
Jun-2013	0.00	0-0	0.0	0-0	10.5	0-31.4	0.00	0-0	0.00	0-0	0.02	0-0.05
Jul-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	103.67	47.12-169.64	109.2	49.64-178.69	144.4	72.23-216.94	0.35	0.16-0.57	0.24	0.11-0.4	0.23	0.11-0.35
Sep-2013	31.08	7.77-69.92	47.1	15.69-86.3	62.9	23.57-110.01	0.10	0.03-0.24	0.10	0.03-0.19	0.10	0.04-0.18
Oct-2013	14.24	0-35.61	14.3	0-35.81	14.3	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	17.36	0-43.4	26.3	0-61.41	26.5	0-61.89	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Dec-2013	11.70	0-35.09	11.8	0-35.53	11.9	0-35.76	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	11.55	0-46.2	11.6	0-34.64	23.0	0-57.6	0.04	0-0.16	0.03	0-0.08	0.04	0-0.09
Feb-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	16.41	0-41.02	16.5	0-41.36	33.2	8.3-66.6	0.06	0-0.14	0.04	0-0.09	0.05	0.01-0.11
Oct-2015	27.34	0-63.79	37.0	9.26-74.06	75.5	28.31-132.13	0.09	0-0.21	0.08	0.02-0.16	0.12	0.05-0.21
Nov-2015	64.10	27.24-119.05	83.6	37.15-139.33	112.7	56.36-178.46	0.22	0.09-0.4	0.19	0.08-0.31	0.18	0.09-0.28
Dec-2015	36.45	9.11-72.9	92.0	36.79-156.35	100.9	45.86-165.1	0.12	0.03-0.25	0.20	0.08-0.35	0.16	0.07-0.26
Jan-2016	18.73	0-46.83	18.5	0-46.21	18.9	0-47.13	0.06	0-0.16	0.04	0-0.1	0.03	0-0.08
Feb-2016	46.60	9.32-84.11	55.6	18.55-111.28	112.7	56.36-178.46	0.16	0.03-0.28	0.12	0.04-0.25	0.18	0.09-0.28
Mar-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	73.81	27.68-129.17	83.2	36.97-138.64	150.8	84.84-226.24	0.25	0.09-0.43	0.18	0.08-0.31	0.24	0.14-0.36

Table 5.3. Norfolk Vanguard East. Fulmar design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-47.87	24.1	0-60.37	0.00	0-0	0.03	0-0.11	0.04	0-0.1
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.8	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	257.27	168.21-366.11	530.58	400.44-680.75	613.5	462.62-764.33	0.87	0.57-1.23	1.18	0.89-1.51	0.98	0.74-1.22
Jun-2012	170.59	77.54-279.14	227.68	121.43-364.29	342.3	208.35-476.23	0.57	0.26-0.94	0.51	0.27-0.81	0.54	0.33-0.76
Jul-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	27.04	0-67.6	66.75	13.35-133.49	142.8	64.89-233.62	0.09	0-0.23	0.15	0.03-0.3	0.23	0.1-0.37
Sep-2012	375.10	257.88-504.04	663.79	515.01-846.91	874.5	695.12-1054.17	1.26	0.87-1.7	1.47	1.14-1.88	1.39	1.11-1.68
Oct-2012	63.73	18.21-109.48	79.14	29.68-138.5	115.2	52.38-188.57	0.21	0.06-0.37	0.18	0.07-0.31	0.18	0.08-0.3
Nov-2012	64.56	16.14-129.13	100.15	33.38-183.6	170.8	85.37-290.27	0.22	0.05-0.43	0.22	0.07-0.41	0.27	0.14-0.46
Dec-2012	102.51	41-174.27	126.80	63.4-200.77	148.6	68.58-228.6	0.34	0.14-0.59	0.28	0.14-0.45	0.24	0.11-0.36
Jan-2013	91.79	40.8-152.99	94.77	42.12-157.95	128.7	64.34-203.75	0.31	0.14-0.51	0.21	0.09-0.35	0.20	0.1-0.32
Feb-2013	34.32	0-80.08	115.04	57.52-195.56	115.7	57.85-196.7	0.12	0-0.27	0.26	0.13-0.43	0.18	0.09-0.31
Mar-2013	25.92	0-64.79	63.89	12.78-127.77	90.8	25.95-155.68	0.09	0-0.22	0.14	0.03-0.28	0.14	0.04-0.25
Apr-2013	0.00	0-0	0.00	0-0	10.6	0-31.83	0.00	0-0	0.00	0-0	0.02	0-0.05
May-2013	115.43	38.48-211.63	190.90	76.36-305.44	229.3	114.66-363.08	0.39	0.13-0.71	0.42	0.17-0.68	0.36	0.18-0.58
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	125.90	41.97-209.83	292.05	180.79-431.11	290.6	166.03-428.92	0.42	0.14-0.71	0.65	0.4-0.96	0.46	0.26-0.68
Aug-2013	254.45	160.21-348.93	357.37	258.1-476.5	495.3	361.13-650.04	0.86	0.54-1.17	0.79	0.57-1.06	0.79	0.57-1.03
Sep-2013	520.53	396.23-644.84	596.28	470.74-729.65	809.3	660.04-974.35	1.75	1.33-2.17	1.32	1.05-1.62	1.29	1.05-1.55
Oct-2013	99.70	49.85-156.66	107.42	57.29-164.72	107.2	57.2-164.45	0.34	0.17-0.53	0.24	0.13-0.37	0.17	0.09-0.26
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	23.39	0-58.49	35.53	0-82.91	59.6	11.92-119.19	0.08	0-0.2	0.08	0-0.18	0.09	0.02-0.19

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	11.55	0-34.65	11.55	0-34.64	23.0	0-57.6	0.04	0-0.12	0.03	0-0.08	0.04	0-0.09
Feb-2014	10.19	0-30.58	9.79	0-29.37	20.0	0-50.07	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
Sep-2015	65.63	24.61-114.85	90.99	41.36-148.9	141.1	74.69-215.77	0.22	0.08-0.39	0.20	0.09-0.33	0.22	0.12-0.34
Oct-2015	173.14	100.24-255.15	296.25	203.44-398.09	349.2	245.39-462.47	0.58	0.34-0.86	0.66	0.45-0.88	0.56	0.39-0.74
Nov-2015	36.63	9.16-73.26	92.89	37.15-157.91	112.7	56.36-178.46	0.12	0.03-0.25	0.21	0.08-0.35	0.18	0.09-0.28
Dec-2015	0.00	0-0	110.36	54.95-183.94	155.9	82.55-238.47	0.00	0-0	0.25	0.12-0.41	0.25	0.13-0.38
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	55.64	18.55-102.01	84.5	37.57-150.28	0.00	0-0	0.12	0.04-0.23	0.13	0.06-0.24
Mar-2016	46.25	9.25-92.49	46.60	9.32-93.2	56.4	18.79-103.32	0.16	0.03-0.31	0.10	0.02-0.21	0.09	0.03-0.16
Apr-2016	295.24	202.75-387.5	369.70	268.03-480.61	848.4	688.15-1008.9	0.99	0.68-1.3	0.82	0.6-1.07	1.35	1.1-1.61

Table 6.1. Norfolk Vanguard East. Gannet design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	89.05	39.58-148.42	110.1	50.06-190.21	130.7	60.34-201.14	0.30	0.13-0.5	0.24	0.11-0.42	0.21	0.1-0.32
Jun-2012	124.06	46.52-217.11	136.6	60.71-242.86	163.7	89.29-267.88	0.42	0.16-0.73	0.30	0.13-0.54	0.26	0.14-0.43
Jul-2012	7.28	0-21.85	43.9	14.64-80.5	51.7	14.77-95.99	0.02	0-0.07	0.10	0.03-0.18	0.08	0.02-0.15
Aug-2012	67.60	13.52-135.2	80.1	26.7-146.84	116.8	51.91-194.68	0.23	0.05-0.46	0.18	0.06-0.33	0.19	0.08-0.31
Sep-2012	164.11	82.05-257.88	251.8	148.78-354.79	325.1	213.02-437.25	0.55	0.28-0.87	0.56	0.33-0.79	0.52	0.34-0.7
Oct-2012	45.52	9.1-91.04	69.2	19.79-118.72	115.2	52.38-188.57	0.15	0.03-0.31	0.15	0.04-0.26	0.18	0.08-0.3
Nov-2012	1888.49	1581.81-2211.31	2570.4	2186.55-2971.03	3244.2	2782.76-3705.22	6.36	5.32-7.44	5.71	4.86-6.6	5.16	4.43-5.9
Dec-2012	20.50	0-51.26	21.1	0-52.83	45.7	11.43-102.87	0.07	0-0.17	0.05	0-0.12	0.07	0.02-0.16
Jan-2013	40.80	10.2-81.59	52.6	10.53-105.3	75.1	21.45-139.41	0.14	0.03-0.27	0.12	0.02-0.23	0.12	0.03-0.22
Feb-2013	22.88	0-57.2	46.0	11.5-92.03	57.9	11.57-115.71	0.08	0-0.19	0.10	0.03-0.2	0.09	0.02-0.18
Mar-2013	12.96	0-38.87	12.8	0-38.33	13.0	0-38.92	0.04	0-0.13	0.03	0-0.09	0.02	0-0.06
Apr-2013	9.73	0-29.18	71.9	20.54-133.51	424.4	297.1-551.76	0.03	0-0.1	0.16	0.05-0.3	0.68	0.47-0.88
May-2013	0.00	0-0	0.0	0-0	19.1	0-57.33	0.00	0-0	0.00	0-0	0.03	0-0.09
Jun-2013	21.40	0-53.5	31.6	0-73.76	41.9	10.47-94.2	0.07	0-0.18	0.07	0-0.16	0.07	0.02-0.15
Jul-2013	0.00	0-0	0.0	0-0	13.8	0-41.85	0.00	0-0	0.00	0-0	0.02	0-0.07
Aug-2013	84.82	37.46-150.79	248.2	148.91-337.77	330.2	227-464.31	0.29	0.13-0.51	0.55	0.33-0.75	0.53	0.36-0.74
Sep-2013	46.61	15.54-85.46	78.5	31.38-133.38	117.9	62.86-180.73	0.16	0.05-0.29	0.17	0.07-0.3	0.19	0.1-0.29
Oct-2013	35.61	7.12-71.21	50.1	21.48-85.94	64.3	28.6-107.25	0.12	0.02-0.24	0.11	0.05-0.19	0.10	0.05-0.17
Nov-2013	781.16	624.93-928.72	938.8	772.05-1114.21	1290.8	1087.42-1494.1	2.63	2.1-3.13	2.09	1.71-2.47	2.05	1.73-2.38

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	467.89	339.22-608.26	580.4	426.42-734.39	715.2	548.29-905.88	1.57	1.14-2.05	1.29	0.95-1.63	1.14	0.87-1.44
Jan-2014	0.00	0-0	0.0	0-0	11.5	0-34.56	0.00	0-0	0.00	0-0	0.02	0-0.05
Feb-2014	0.00	0-0	0.0	0-0	80.1	30.04-140.19	0.00	0-0	0.00	0-0	0.13	0.05-0.22
Sep-2015	164.08	98.45-229.91	190.3	115.81-264.71	249.0	165.98-332.17	0.55	0.33-0.77	0.42	0.26-0.59	0.40	0.26-0.53
Oct-2015	528.52	409.83-656.09	768.4	601.76-935.04	934.4	764.49-1113.7	1.78	1.38-2.21	1.71	1.34-2.08	1.49	1.22-1.77
Nov-2015	732.61	576.93-879.13	1374.7	1179.65-1579.06	1671.9	1465.26-1887.93	2.47	1.94-2.96	3.05	2.62-3.51	2.66	2.33-3
Dec-2015	537.63	410.06-665.43	653.0	524.23-800.13	779.6	623.69-935.54	1.81	1.38-2.24	1.45	1.16-1.78	1.24	0.99-1.49
Jan-2016	18.73	0-46.83	37.0	9.24-73.94	47.1	9.43-94.27	0.06	0-0.16	0.08	0.02-0.16	0.08	0.02-0.15
Feb-2016	27.96	0-65.24	55.6	18.55-102.01	169.1	93.93-253.6	0.09	0-0.22	0.12	0.04-0.23	0.27	0.15-0.4
Mar-2016	277.48	184.99-369.98	475.3	344.82-596.45	1089.5	920.48-1286.8	0.93	0.62-1.25	1.06	0.77-1.32	1.73	1.46-2.05
Apr-2016	110.72	55.36-175.3	166.4	92.43-240.31	339.4	235.67-443.06	0.37	0.19-0.59	0.37	0.21-0.53	0.54	0.38-0.71

Table 6.2. Norfolk Vanguard East. Gannet design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	29.68	0-69.26	40.0	10.01-80.09	50.3	10.06-100.57	0.10	0-0.23	0.09	0.02-0.18	0.08	0.02-0.16
Jun-2012	124.06	46.52-217.11	121.4	45.54-212.5	148.8	74.41-238.49	0.42	0.16-0.73	0.27	0.1-0.47	0.24	0.12-0.38
Jul-2012	7.28	0-21.85	14.6	0-36.59	14.8	0-36.92	0.02	0-0.07	0.03	0-0.08	0.02	0-0.06
Aug-2012	27.04	0-67.6	40.0	0-93.44	77.9	25.96-155.74	0.09	0-0.23	0.09	0-0.21	0.12	0.04-0.25
Sep-2012	105.50	46.89-187.55	114.5	45.78-194.56	145.8	67.27-235.44	0.36	0.16-0.63	0.25	0.1-0.43	0.23	0.11-0.37
Oct-2012	27.31	0-63.73	39.6	9.89-79.14	83.8	31.43-146.66	0.09	0-0.21	0.09	0.02-0.18	0.13	0.05-0.23
Nov-2012	1291.28	1048.76-1565.67	1735.9	1452.13-2053.43	2134.3	1775.77-2527.06	4.35	3.53-5.27	3.86	3.23-4.56	3.40	2.83-4.02
Dec-2012	10.25	0-30.75	10.6	0-31.7	34.3	0-80.01	0.03	0-0.1	0.02	0-0.07	0.05	0-0.13
Jan-2013	10.20	0-30.6	10.5	0-31.59	21.4	0-53.62	0.03	0-0.1	0.02	0-0.07	0.03	0-0.09
Feb-2013	22.88	0-57.2	23.0	0-57.52	23.1	0-57.85	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Mar-2013	12.96	0-38.87	12.8	0-38.33	13.0	0-51.89	0.04	0-0.13	0.03	0-0.09	0.02	0-0.08
Apr-2013	9.73	0-29.18	20.5	0-51.35	116.7	53.05-190.99	0.03	0-0.1	0.05	0-0.11	0.19	0.08-0.3
May-2013	0.00	0-0	0.0	0-0	19.1	0-57.33	0.00	0-0	0.00	0-0	0.03	0-0.09
Jun-2013	21.40	0-53.5	21.1	0-52.69	20.9	0-52.34	0.07	0-0.18	0.05	0-0.12	0.03	0-0.08
Jul-2013	0.00	0-0	0.0	0-0	13.8	0-55.34	0.00	0-0	0.00	0-0	0.02	0-0.09
Aug-2013	56.55	9.42-103.67	178.7	99.27-258.1	237.3	154.51-330.18	0.19	0.03-0.35	0.40	0.22-0.57	0.38	0.25-0.53
Sep-2013	0.00	0-0	23.5	0-54.92	47.1	15.72-94.29	0.00	0-0	0.05	0-0.12	0.08	0.03-0.15
Oct-2013	28.48	7.12-56.97	43.0	14.32-78.78	57.2	21.45-100.1	0.10	0.02-0.19	0.10	0.03-0.17	0.09	0.03-0.16
Nov-2013	338.50	243.03-442.88	403.6	289.52-526.4	557.0	424.36-689.58	1.14	0.82-1.49	0.90	0.64-1.17	0.89	0.68-1.1

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	350.92	233.95-479.59	450.1	319.81-592.25	536.4	393.34-703.25	1.18	0.79-1.61	1.00	0.71-1.32	0.85	0.63-1.12
Jan-2014	0.00	0-0	0.0	0-0	11.5	0-34.56	0.00	0-0	0.00	0-0	0.02	0-0.05
Feb-2014	0.00	0-0	0.0	0-0	50.1	10.01-100.14	0.00	0-0	0.00	0-0	0.08	0.02-0.16
Sep-2015	98.45	49.22-155.87	99.3	41.36-157.17	149.4	91.29-224.07	0.33	0.17-0.52	0.22	0.09-0.35	0.24	0.15-0.36
Oct-2015	91.12	36.45-154.91	129.6	64.8-203.67	188.8	113.26-273.71	0.31	0.12-0.52	0.29	0.14-0.45	0.30	0.18-0.44
Nov-2015	274.73	183.15-366.3	353.0	250.79-464.43	441.5	319.35-563.56	0.92	0.62-1.23	0.78	0.56-1.03	0.70	0.51-0.9
Dec-2015	419.17	309.82-528.52	505.8	377.07-634.59	587.0	449.43-724.58	1.41	1.04-1.78	1.12	0.84-1.41	0.93	0.72-1.15
Jan-2016	18.73	0-46.83	37.0	9.24-73.94	47.1	9.43-94.27	0.06	0-0.16	0.08	0.02-0.16	0.08	0.02-0.15
Feb-2016	18.64	0-46.6	46.4	9.27-92.73	75.1	28.18-131.5	0.06	0-0.16	0.10	0.02-0.21	0.12	0.04-0.21
Mar-2016	9.25	0-27.75	28.0	0-65.24	37.6	9.39-84.53	0.03	0-0.09	0.06	0-0.14	0.06	0.01-0.13
Apr-2016	18.45	0-46.13	55.5	18.49-101.67	94.3	47.13-160.25	0.06	0-0.16	0.12	0.04-0.23	0.15	0.08-0.26

Table 6.3. Norfolk Vanguard East. Gannet design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	59.37	19.79-108.84	70.08	20.02-130.14	80.46	30.17-140.8	0.20	0.07-0.37	0.16	0.04-0.29	0.13	0.05-0.22
Jun-2012	0.00	0-0	15.18	0-45.54	14.88	0-44.65	0.00	0-0	0.03	0-0.1	0.02	0-0.07
Jul-2012	0.00	0-0	29.27	7.32-58.55	36.92	7.38-73.84	0.00	0-0	0.07	0.02-0.13	0.06	0.01-0.12
Aug-2012	40.56	0-94.64	40.05	0-93.44	38.94	0-90.85	0.14	0-0.32	0.09	0-0.21	0.06	0-0.14
Sep-2012	58.61	11.72-117.22	137.34	68.67-217.45	179.39	100.9-269.08	0.20	0.04-0.39	0.31	0.15-0.48	0.29	0.16-0.43
Oct-2012	18.21	0-45.52	29.68	0-69.25	31.43	0-62.86	0.06	0-0.15	0.07	0-0.15	0.05	0-0.1
Nov-2012	597.22	403.52-775.17	834.56	617.57-1068.24	1109.86	853.74-1400.13	2.01	1.36-2.61	1.85	1.37-2.37	1.77	1.36-2.23
Dec-2012	10.25	0-30.75	10.57	0-31.7	11.43	0-34.29	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jan-2013	30.60	0-71.39	42.12	10.53-94.77	53.62	10.72-107.24	0.10	0-0.24	0.09	0.02-0.21	0.09	0.02-0.17
Feb-2013	0.00	0-0	23.01	0-57.52	34.71	0-80.99	0.00	0-0	0.05	0-0.13	0.06	0-0.13
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	51.35	10.27-102.7	307.71	212.21-413.82	0.00	0-0	0.11	0.02-0.23	0.49	0.34-0.66
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	10.54	0-31.61	20.93	0-52.34	0.00	0-0	0.02	0-0.07	0.03	0-0.08
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	28.27	0-65.97	69.49	19.85-129.05	92.86	41.27-154.77	0.10	0-0.22	0.15	0.04-0.29	0.15	0.07-0.25
Sep-2013	46.61	15.54-85.46	54.92	15.69-101.99	70.72	31.43-117.86	0.16	0.05-0.29	0.12	0.03-0.23	0.11	0.05-0.19
Oct-2013	7.12	0-28.48	7.16	0-21.48	7.15	0-21.45	0.02	0-0.1	0.02	0-0.05	0.01	0-0.03
Nov-2013	442.66	321.14-564.17	535.17	403.57-666.77	733.79	583.49-892.92	1.49	1.08-1.9	1.19	0.9-1.48	1.17	0.93-1.42
Dec-2013	116.97	46.79-198.85	130.29	59.22-213.21	178.79	95.36-286.07	0.39	0.16-0.67	0.29	0.13-0.47	0.28	0.15-0.46

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	30.04	0-70.1	0.00	0-0	0.00	0-0	0.05	0-0.11
Sep-2015	65.63	24.61-114.85	90.99	41.36-148.9	99.59	49.79-157.68	0.22	0.08-0.39	0.20	0.09-0.33	0.16	0.08-0.25
Oct-2015	437.40	318.93-555.86	638.79	499.92-786.92	745.61	604.04-915.5	1.47	1.07-1.87	1.42	1.11-1.75	1.19	0.96-1.46
Nov-2015	457.88	347.99-586.09	1021.75	854.32-1207.52	1230.44	1032.96-1437.08	1.54	1.17-1.97	2.27	1.9-2.68	1.96	1.64-2.29
Dec-2015	118.46	54.67-182.25	147.15	82.77-220.73	192.61	119.24-275.16	0.40	0.18-0.61	0.33	0.18-0.49	0.31	0.19-0.44
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.32	0-27.96	9.27	0-27.82	93.93	46.96-159.68	0.03	0-0.09	0.02	0-0.06	0.15	0.07-0.25
Mar-2016	268.23	184.99-369.98	447.34	335.5-568.49	1051.98	873.52-1249.23	0.90	0.62-1.25	0.99	0.75-1.26	1.67	1.39-1.99
Apr-2016	92.26	46.13-156.85	110.91	55.46-184.85	245.09	160.25-329.94	0.31	0.16-0.53	0.25	0.12-0.41	0.39	0.26-0.53

Table 7.1. Norfolk Vanguard East. Cormorant design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.8	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	29.18	0-68.09	30.81	0-71.89	31.8	0-74.27	0.10	0-0.23	0.07	0-0.16	0.05	0-0.12
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	9.16	0-27.47	18.58	0-46.44	18.8	0-46.96	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 7.2. Norfolk Vanguard East. Cormorant design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	8.69	0-26.06	8.74	0-34.97	8.8	0-26.4	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	29.18	0-58.36	30.81	0-71.89	31.8	0-74.27	0.10	0-0.2	0.07	0-0.16	0.05	0-0.12
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 7.3. Norfolk Vanguard East. Cormorant design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	9.16	0-27.47	18.6	0-46.44	18.8	0-46.96	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07
Dec-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 8.1. Norfolk Vanguard East. Pomarine Skua design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 8.2. Norfolk Vanguard East. Pomarine Skua design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 8.3. Norfolk Vanguard East. Pomarine Skua design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 9.1. Norfolk Vanguard East. Arctic Skua design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	35.17	0-82.05	34.33	0-80.11	33.63	0-78.48	0.12	0-0.28	0.08	0-0.18	0.05	0-0.12
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	13.84	0-41.51	0.00	0-0	0.00	0-0	0.02	0-0.07
Aug-2013	9.42	0-28.27	9.93	0-29.78	10.32	0-30.95	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	8.27	0-24.82	16.60	0-41.5	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 9.2. Norfolk Vanguard East. Arctic Skua design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	35.17	0-82.05	34.33	0-80.11	33.6	0-78.48	0.12	0-0.28	0.08	0-0.18	0.05	0-0.12
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	13.8	0-41.51	0.00	0-0	0.00	0-0	0.02	0-0.07
Aug-2013	9.42	0-28.27	9.93	0-29.78	10.3	0-30.95	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	8.27	0-24.82	16.6	0-41.5	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 9.3. Norfolk Vanguard East. Arctic Skua design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 10.1. Norfolk Vanguard East. Great Skua design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	9.10	0-27.31	9.89	0-39.57	10.48	0-31.43	0.03	0-0.09	0.02	0-0.09	0.02	0-0.05
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	15.69	0-39.42	15.72	0-39.29	0.03	0-0.08	0.03	0-0.09	0.03	0-0.06
Oct-2013	7.12	0-21.36	14.32	0-35.81	14.30	0-35.75	0.02	0-0.07	0.03	0-0.08	0.02	0-0.06
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	32.82	8.2-65.63	41.36	8.27-82.72	49.79	16.6-91.29	0.11	0.03-0.22	0.09	0.02-0.18	0.08	0.03-0.15
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	9.39	0-28.18	0.00	0-0	0.00	0-0	0.01	0-0.04
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 10.2. Norfolk Vanguard East. Great Skua design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	9.10	0-27.31	9.89	0-29.68	10.48	0-31.43	0.03	0-0.09	0.02	0-0.07	0.02	0-0.05
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	15.69	0-39.23	15.72	0-39.29	0.03	0-0.08	0.03	0-0.09	0.03	0-0.06
Oct-2013	7.12	0-21.36	14.32	0-35.81	14.30	0-35.75	0.02	0-0.07	0.03	0-0.08	0.02	0-0.06
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	32.82	8.2-65.63	41.36	8.27-82.72	49.79	16.6-91.29	0.11	0.03-0.22	0.09	0.02-0.18	0.08	0.03-0.15
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	9.39	0-28.18	0.00	0-0	0.00	0-0	0.01	0-0.04
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 10.3. Norfolk Vanguard East. Great Skua design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 11.1. Norfolk Vanguard East. Puffin design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-35.9	24.15	0-60.37	0.00	0-0	0.03	0-0.08	0.04	0-0.1
Apr-2012	8.69	0-26.06	26.22	0-61.19	44.00	8.8-88	0.03	0-0.09	0.06	0-0.14	0.07	0.01-0.14
May-2012	9.89	0-29.68	20.02	0-50.06	20.11	0-50.28	0.03	0-0.1	0.04	0-0.11	0.03	0-0.08
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	40.56	0-94.64	93.44	26.7-160.52	116.81	51.91-194.68	0.14	0-0.32	0.21	0.06-0.36	0.19	0.08-0.31
Sep-2012	58.61	11.72-117.22	80.11	22.89-137.34	89.69	33.63-156.96	0.20	0.04-0.39	0.18	0.05-0.31	0.14	0.05-0.25
Oct-2012	18.21	0-45.52	39.57	9.89-79.14	62.86	20.95-115.24	0.06	0-0.15	0.09	0.02-0.18	0.10	0.03-0.18
Nov-2012	242.11	129.13-371.24	317.13	183.6-467.35	392.72	239.05-563.47	0.81	0.43-1.25	0.70	0.41-1.04	0.62	0.38-0.9
Dec-2012	20.50	0-51.26	31.70	0-73.97	68.58	22.86-125.73	0.07	0-0.17	0.07	0-0.16	0.11	0.04-0.2
Jan-2013	30.60	0-71.39	31.59	0-73.71	64.34	21.45-117.96	0.10	0-0.24	0.07	0-0.16	0.10	0.03-0.19
Feb-2013	0.00	0-0	11.50	0-34.51	23.14	0-57.85	0.00	0-0	0.03	0-0.08	0.04	0-0.09
Mar-2013	25.92	0-64.79	38.33	0-89.44	64.86	12.97-129.73	0.09	0-0.22	0.09	0-0.2	0.10	0.02-0.21
Apr-2013	9.73	0-29.18	10.27	0-30.81	42.44	10.61-84.89	0.03	0-0.1	0.02	0-0.07	0.07	0.02-0.14
May-2013	38.48	0-96.19	114.54	19.09-209.99	191.09	76.44-324.86	0.13	0-0.32	0.25	0.04-0.47	0.30	0.12-0.52
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	27.98	0-69.94	55.63	0-111.26	69.18	13.84-138.36	0.09	0-0.24	0.12	0-0.25	0.11	0.02-0.22
Aug-2013	0.00	0-0	9.93	0-29.78	10.32	0-30.95	0.00	0-0	0.02	0-0.07	0.02	0-0.05
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.77	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	7.15	0-21.45	0.00	0-0	0.00	0-0	0.01	0-0.03
Nov-2013	17.36	0-43.4	17.55	0-43.87	17.68	0-44.2	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Dec-2013	93.58	35.09-163.76	94.76	35.53-165.83	107.27	47.38-178.79	0.31	0.12-0.55	0.21	0.08-0.37	0.17	0.08-0.28

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	11.52	0-34.56	0.00	0-0	0.00	0-0	0.02	0-0.05
Feb-2014	0.00	0-0	0.00	0-0	20.03	0-50.07	0.00	0-0	0.00	0-0	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 11.2. Norfolk Vanguard East. Puffin design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	12.1	0-36.22	0	0-0	0.00	0-0	0.02	0-0.06
Apr-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2012	0	0-0	10	0-30.03	10.1	0-40.23	0	0-0	0.02	0-0.07	0.02	0-0.06
Jun-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	11.5	0-34.56	0	0-0	0.00	0-0	0.02	0-0.05
Feb-2014	0	0-0	0	0-0	20.0	0-50.07	0	0-0	0.00	0-0	0.03	0-0.08
Sep-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 11.3. Norfolk Vanguard East. Puffin design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-35.9	12.07	0-36.22	0.00	0-0	0.03	0-0.08	0.02	0-0.06
Apr-2012	8.69	0-26.06	26.22	0-61.19	44.00	8.8-79.2	0.03	0-0.09	0.06	0-0.14	0.07	0.01-0.13
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	40.56	0-94.64	93.44	26.7-173.54	116.81	51.59-207.66	0.14	0-0.32	0.21	0.06-0.39	0.19	0.08-0.33
Sep-2012	58.61	11.72-117.22	80.11	22.89-137.34	89.69	33.63-156.96	0.20	0.04-0.39	0.18	0.05-0.31	0.14	0.05-0.25
Oct-2012	18.21	0-45.52	39.57	9.65-79.14	62.86	20.95-115.24	0.06	0-0.15	0.09	0.02-0.18	0.10	0.03-0.18
Nov-2012	242.11	129.13-371.24	317.13	183.6-467.35	392.72	256.12-563.47	0.81	0.43-1.25	0.70	0.41-1.04	0.62	0.41-0.9
Dec-2012	20.50	0-51.26	31.70	0-73.97	68.58	22.86-125.73	0.07	0-0.17	0.07	0-0.16	0.11	0.04-0.2
Jan-2013	30.60	0-61.45	31.59	0-73.71	64.34	21.45-118.23	0.10	0-0.21	0.07	0-0.16	0.10	0.03-0.19
Feb-2013	0.00	0-0	11.50	0-34.51	23.14	0-57.85	0.00	0-0	0.03	0-0.08	0.04	0-0.09
Mar-2013	25.92	0-64.79	38.33	0-89.44	64.86	12.97-129.73	0.09	0-0.22	0.09	0-0.2	0.10	0.02-0.21
Apr-2013	9.73	0-29.18	10.27	0-30.81	42.44	10.61-84.89	0.03	0-0.1	0.02	0-0.07	0.07	0.02-0.14
May-2013	38.48	0-96.19	114.54	38.18-209.99	191.09	76.44-305.75	0.13	0-0.32	0.25	0.08-0.47	0.30	0.12-0.49
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	27.98	0-69.94	55.63	13.91-111.26	69.18	13.84-138.36	0.09	0-0.24	0.12	0.03-0.25	0.11	0.02-0.22
Aug-2013	0.00	0-0	9.93	0-39.71	10.32	0-30.95	0.00	0-0	0.02	0-0.09	0.02	0-0.05
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	7.15	0-21.45	0.00	0-0	0.00	0-0	0.01	0-0.03
Nov-2013	17.36	0-43.4	17.55	0-43.87	17.68	0-44.2	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Dec-2013	93.58	35.09-163.76	94.76	35.53-165.83	107.27	47.38-190.71	0.31	0.12-0.55	0.21	0.08-0.37	0.17	0.08-0.3

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 12.1. Norfolk Vanguard East. Razorbill design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	341.30	235.38-470.76	442.8	298.87-574.7	688.25	531.28-881.44	1.15	0.79-1.58	0.98	0.66-1.28	1.10	0.85-1.4
Apr-2012	321.41	225.86-425.66	437.1	314.69-568.19	580.79	448.79-712.79	1.08	0.76-1.43	0.97	0.7-1.26	0.92	0.71-1.13
May-2012	89.05	39.58-148.42	130.1	60.07-200.22	160.91	90.51-241.37	0.30	0.13-0.5	0.29	0.13-0.44	0.26	0.14-0.38
Jun-2012	46.52	0-93.05	106.2	30.36-197.32	104.18	29.76-178.59	0.16	0-0.31	0.24	0.07-0.44	0.17	0.05-0.28
Jul-2012	0.00	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	351.53	229.85-500.26	413.8	280.33-560.67	687.87	531.8-869.57	1.18	0.77-1.68	0.92	0.62-1.25	1.09	0.85-1.38
Sep-2012	375.10	257.88-504.04	537.9	389.12-686.68	683.91	526.94-852.08	1.26	0.87-1.7	1.19	0.86-1.53	1.09	0.84-1.36
Oct-2012	345.96	236.71-464.32	514.4	385.83-652.94	848.55	670.46-1037.12	1.16	0.8-1.56	1.14	0.86-1.45	1.35	1.07-1.65
Nov-2012	258.26	145.27-403.52	350.5	216.99-500.74	563.47	358.57-751.29	0.87	0.49-1.36	0.78	0.48-1.11	0.90	0.57-1.2
Dec-2012	153.77	82.01-235.78	528.3	380.4-665.71	685.80	537.21-857.24	0.52	0.28-0.79	1.17	0.84-1.48	1.09	0.85-1.36
Jan-2013	917.92	754.73-1101.5	1158.3	957.98-1379.45	1329.74	1115-1554.94	3.09	2.54-3.71	2.57	2.13-3.06	2.12	1.77-2.47
Feb-2013	503.37	365.8-652.09	644.2	482.86-816.75	763.66	590.1-948.79	1.69	1.23-2.19	1.43	1.07-1.81	1.22	0.94-1.51
Mar-2013	596.05	427.6-777.45	920.0	728.32-1137.19	1310.27	1076.75-1543.78	2.01	1.44-2.62	2.04	1.62-2.53	2.08	1.71-2.46
Apr-2013	369.62	252.9-496.06	554.6	421.07-698.62	795.80	626.03-965.57	1.24	0.85-1.67	1.23	0.94-1.55	1.27	1-1.54
May-2013	577.16	384.77-788.79	763.6	553.62-1011.78	993.69	745.27-1261.22	1.94	1.29-2.65	1.70	1.23-2.25	1.58	1.19-2.01
Jun-2013	0.00	0-0	0.0	0-0	10.47	0-31.66	0.00	0-0	0.00	0-0	0.02	0-0.05
Jul-2013	27.98	0-69.94	83.4	27.81-166.88	83.02	27.67-152.54	0.09	0-0.24	0.19	0.06-0.37	0.13	0.04-0.24
Aug-2013	28.27	0-56.55	29.8	9.68-69.49	51.59	10.32-103.18	0.10	0-0.19	0.07	0.02-0.15	0.08	0.02-0.16
Sep-2013	318.53	225.31-419.53	439.4	321.68-557.05	573.61	447.89-699.53	1.07	0.76-1.41	0.98	0.71-1.24	0.91	0.71-1.11
Oct-2013	7.12	0-21.36	50.1	14.32-85.94	71.50	28.6-114.4	0.02	0-0.07	0.11	0.03-0.19	0.11	0.05-0.18
Nov-2013	86.80	34.72-138.87	96.5	43.87-157.92	132.61	70.73-203.34	0.29	0.12-0.47	0.21	0.1-0.35	0.21	0.11-0.32

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	339.22	222.25-467.89	604.1	450.11-769.92	1072.75	870.12-1299.22	1.14	0.75-1.57	1.34	1-1.71	1.71	1.38-2.07
Jan-2014	92.39	34.65-161.69	173.2	92.37-277.12	172.80	92.16-264.96	0.31	0.12-0.54	0.38	0.21-0.62	0.27	0.15-0.42
Feb-2014	132.53	71.11-203.89	186.0	107.7-274.15	360.50	250.35-480.67	0.45	0.24-0.69	0.41	0.24-0.61	0.57	0.4-0.76
Sep-2015	106.65	57.43-172.28	248.2	157.17-339.16	315.36	224.07-423.25	0.36	0.19-0.58	0.55	0.35-0.75	0.50	0.36-0.67
Oct-2015	54.67	18.22-100.24	129.6	64.8-194.41	188.76	113.26-273.71	0.18	0.06-0.34	0.29	0.14-0.43	0.30	0.18-0.44
Nov-2015	54.95	18.32-100.73	250.8	166.96-352.97	291.17	187.85-385.34	0.18	0.06-0.34	0.56	0.37-0.78	0.46	0.3-0.61
Dec-2015	63.79	18.22-109.35	92.0	36.79-156.35	91.72	36.69-146.75	0.21	0.06-0.37	0.20	0.08-0.35	0.15	0.06-0.23
Jan-2016	74.93	28.1-131.14	138.6	73.94-203.34	160.25	94.03-235.67	0.25	0.09-0.44	0.31	0.16-0.45	0.26	0.15-0.38
Feb-2016	158.43	92.96-232.99	241.1	157.64-333.83	394.49	281.78-516.83	0.53	0.31-0.78	0.54	0.35-0.74	0.63	0.45-0.82
Mar-2016	369.98	258.98-471.72	503.3	372.78-624.41	732.63	582.35-892.31	1.25	0.87-1.59	1.12	0.83-1.39	1.17	0.93-1.42
Apr-2016	101.49	46.13-166.07	194.1	119.92-286.52	320.51	216.81-424.2	0.34	0.16-0.56	0.43	0.27-0.64	0.51	0.35-0.68

Table 12.2. Norfolk Vanguard East. Razorbill design based estimates of birds in flight and on sea and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	411.21	283.59-569.59	533.5	362.59-694.8	824.3	632.68-1054.56	1.38	0.95-1.92	1.18	0.81-1.54	1.31	1.01-1.68
Apr-2012	387.25	272.07-512.84	526.6	380.93-682.77	697.9	537.11-857.02	1.30	0.92-1.73	1.17	0.85-1.52	1.11	0.85-1.36
May-2012	107.29	47.69-180.85	156.8	72.37-241.23	193.9	109-290.8	0.36	0.16-0.61	0.35	0.16-0.54	0.31	0.17-0.46
Jun-2012	56.05	0-112.11	128.0	36.57-234.63	125.5	35.86-218.21	0.19	0-0.38	0.28	0.08-0.52	0.20	0.06-0.35
Jul-2012	0.00	0-0	0.0	0-0	8.9	0-26.69	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	423.53	276.93-600.02	498.6	337.68-678.23	828.8	635.4-1047.74	1.43	0.93-2.02	1.11	0.75-1.51	1.32	1.01-1.67
Sep-2012	451.93	310.7-607.28	648.1	468.82-829.67	824.0	634.87-1026.6	1.52	1.05-2.04	1.44	1.04-1.84	1.31	1.01-1.63
Oct-2012	416.82	287.01-557.55	619.8	462.83-790.73	1022.4	807.79-1251.74	1.40	0.97-1.88	1.38	1.03-1.76	1.63	1.29-1.99
Nov-2012	311.15	175.02-482.87	422.3	261.43-603.3	678.9	439.01-908.66	1.05	0.59-1.63	0.94	0.58-1.34	1.08	0.7-1.45
Dec-2012	185.26	98.81-284.07	636.5	458.32-806.39	823.9	640.21-1028.14	0.62	0.33-0.96	1.41	1.02-1.79	1.31	1.02-1.64
Jan-2013	1105.93	909.32-1327.11	1395.6	1152.09-1659.83	1602.1	1339.04-1875.68	3.72	3.06-4.47	3.10	2.56-3.69	2.55	2.13-2.98
Feb-2013	599.44	436.1-778.62	769.1	577.11-976.97	910.6	701.49-1136.01	2.02	1.47-2.62	1.71	1.28-2.17	1.45	1.12-1.81
Mar-2013	715.48	515.18-934.04	1100.6	869.64-1364.88	1570.7	1286.6-1854.66	2.41	1.73-3.14	2.44	1.93-3.03	2.50	2.05-2.95
Apr-2013	439.34	302.7-589.75	661.9	501.01-833.3	947.9	743.39-1152.47	1.48	1.02-1.98	1.47	1.11-1.85	1.51	1.18-1.83
May-2013	695.38	463.58-950.35	920.0	663.1-1219.02	1197.2	894-1523.46	2.34	1.56-3.2	2.04	1.47-2.71	1.91	1.42-2.42
Jun-2013	0.00	0-0	0.0	0-0	12.6	0-40.24	0.00	0-0	0.00	0-0	0.02	0-0.06
Jul-2013	33.71	0-84.27	100.5	33.51-198.22	100.0	33.34-183.72	0.11	0-0.28	0.22	0.07-0.44	0.16	0.05-0.29
Aug-2013	34.06	0-70.06	35.9	9.68-81.74	62.2	12.43-124.31	0.11	0-0.24	0.08	0.02-0.18	0.10	0.02-0.2
Sep-2013	383.78	271.45-505.46	529.4	389.17-669.53	691.1	539.62-844.37	1.29	0.91-1.7	1.18	0.86-1.49	1.10	0.86-1.34
Oct-2013	8.58	0-25.74	60.4	17.26-103.54	86.1	34.46-139.29	0.03	0-0.09	0.13	0.04-0.23	0.14	0.05-0.22
Nov-2013	104.57	43.56-167.32	116.3	52.85-190.26	159.8	85.21-244.99	0.35	0.15-0.56	0.26	0.12-0.42	0.25	0.14-0.39

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	408.70	267.77-566.12	725.4	539.81-925.19	1290.0	1048.34-1560.44	1.38	0.9-1.91	1.61	1.2-2.06	2.05	1.67-2.48
Jan-2014	106.59	39.38-187.71	203.9	106.56-326.78	203.5	108.67-312.2	0.36	0.13-0.63	0.45	0.24-0.73	0.32	0.17-0.5
Feb-2014	132.53	71.11-203.89	186.0	107.7-274.15	360.5	250.35-480.67	0.45	0.24-0.69	0.41	0.24-0.61	0.57	0.4-0.76
Sep-2015	128.50	67.51-205.89	299.0	191.06-408.63	380.0	269.97-508.24	0.43	0.23-0.69	0.66	0.42-0.91	0.60	0.43-0.81
Oct-2015	64.01	20.09-118.9	154.3	78.08-232.34	225.5	134.52-327.83	0.22	0.07-0.4	0.34	0.17-0.52	0.36	0.21-0.52
Nov-2015	64.32	22.02-117.66	300.3	197.4-423.41	347.0	224.41-462.29	0.22	0.07-0.4	0.67	0.44-0.94	0.55	0.36-0.74
Dec-2015	73.12	20.09-128.01	105.2	40.56-178.95	104.9	40.44-171.17	0.25	0.07-0.43	0.23	0.09-0.4	0.17	0.06-0.27
Jan-2016	86.45	31.94-152.24	163.2	87.19-241.2	189.2	109.48-280.08	0.29	0.11-0.51	0.36	0.19-0.54	0.30	0.17-0.45
Feb-2016	190.88	112-282.62	290.5	189.89-406.01	475.3	339.5-622.64	0.64	0.38-0.95	0.65	0.42-0.9	0.76	0.54-0.99
Mar-2016	445.76	313.92-572.13	606.3	452.95-756.17	875.0	695.8-1067.42	1.50	1.06-1.93	1.35	1.01-1.68	1.39	1.11-1.7
Apr-2016	122.28	55.58-201.98	233.8	144.53-343.31	386.2	263.15-513.02	0.41	0.19-0.68	0.52	0.32-0.76	0.61	0.42-0.82

Table 12.3. Norfolk Vanguard East. Razorbill design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	341.30	235.38-470.76	448.3	304.69-591.98	700.32	543.35-899.54	1.15	0.79-1.58	1.00	0.68-1.31	1.11	0.86-1.43
Apr-2012	321.41	225.86-425.66	441.2	314.69-568.19	584.79	456.7-716.79	1.08	0.76-1.43	0.98	0.7-1.26	0.93	0.73-1.14
May-2012	182.78	111.64-257.23	229.1	151.45-310.64	277.09	195.2-380.52	0.62	0.38-0.87	0.51	0.34-0.69	0.44	0.31-0.61
Jun-2012	46.52	0-93.05	106.2	30.36-197.32	104.18	29.76-178.59	0.16	0-0.31	0.24	0.07-0.44	0.17	0.05-0.28
Jul-2012	0.00	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	371.91	250.23-527.7	425.4	292.78-580.32	707.35	544.94-895.7	1.25	0.84-1.78	0.94	0.65-1.29	1.13	0.87-1.43
Sep-2012	375.10	257.88-504.04	537.9	389.12-686.68	683.91	526.94-852.08	1.26	0.87-1.7	1.19	0.86-1.53	1.09	0.84-1.36
Oct-2012	345.96	236.71-464.32	514.4	385.83-652.94	848.55	670.46-1037.12	1.16	0.8-1.56	1.14	0.86-1.45	1.35	1.07-1.65
Nov-2012	258.26	145.27-403.52	350.5	216.99-500.74	563.47	358.57-751.29	0.87	0.49-1.36	0.78	0.48-1.11	0.90	0.57-1.2
Dec-2012	153.77	82.01-235.78	528.3	380.4-665.71	685.80	537.21-857.24	0.52	0.28-0.79	1.17	0.84-1.48	1.09	0.85-1.36
Jan-2013	917.92	754.73-1101.5	1158.3	957.98-1379.45	1329.74	1115-1554.94	3.09	2.54-3.71	2.57	2.13-3.06	2.12	1.77-2.47
Feb-2013	503.37	365.8-652.09	644.2	482.86-816.75	763.66	590.1-948.79	1.69	1.23-2.19	1.43	1.07-1.81	1.22	0.94-1.51
Mar-2013	600.43	427.6-777.75	923.8	732.13-1137.19	1322.20	1080.73-1559.69	2.02	1.44-2.62	2.05	1.63-2.53	2.10	1.72-2.48
Apr-2013	379.34	252.9-496.06	554.6	421.07-698.62	795.80	626.03-965.57	1.28	0.85-1.67	1.23	0.94-1.55	1.27	1-1.54
May-2013	577.16	384.77-788.79	763.6	553.62-1011.78	993.69	745.27-1261.22	1.94	1.29-2.65	1.70	1.23-2.25	1.58	1.19-2.01
Jun-2013	0.00	0-0	0.0	0-0	10.47	0-31.66	0.00	0-0	0.00	0-0	0.02	0-0.05
Jul-2013	27.98	0-69.94	83.4	27.81-166.88	83.02	27.67-152.54	0.09	0-0.24	0.19	0.06-0.37	0.13	0.04-0.24
Aug-2013	28.27	0-56.55	29.8	9.68-69.49	51.59	10.32-103.18	0.10	0-0.19	0.07	0.02-0.15	0.08	0.02-0.16
Sep-2013	318.53	225.31-419.53	439.4	321.68-557.05	573.61	447.89-699.53	1.07	0.76-1.41	0.98	0.71-1.24	0.91	0.71-1.11
Oct-2013	7.12	0-21.36	50.1	14.32-85.94	71.50	28.6-114.4	0.02	0-0.07	0.11	0.03-0.19	0.11	0.05-0.18

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Nov-2013	86.80	34.72-138.87	96.5	43.87-157.92	132.61	70.73-203.34	0.29	0.12-0.47	0.21	0.1-0.35	0.21	0.11-0.32
Dec-2013	339.22	222.25-467.89	604.1	450.11-769.92	1072.75	870.12-1299.22	1.14	0.75-1.57	1.34	1-1.71	1.71	1.38-2.07
Jan-2014	92.39	34.65-161.69	173.2	92.37-277.12	172.80	92.16-264.96	0.31	0.12-0.54	0.38	0.21-0.62	0.27	0.15-0.42
Feb-2014	574.23	475.22-679.06	877.8	746.64-1003.98	1507.88	1332.27-1688.61	1.93	1.6-2.29	1.95	1.66-2.23	2.40	2.12-2.69
Sep-2015	106.65	57.43-172.28	248.2	157.17-339.16	315.36	224.07-423.25	0.36	0.19-0.58	0.55	0.35-0.75	0.50	0.36-0.67
Oct-2015	54.67	18.22-100.24	129.6	64.8-194.41	188.76	113.26-273.71	0.18	0.06-0.34	0.29	0.14-0.43	0.30	0.18-0.44
Nov-2015	54.95	18.32-100.73	250.8	166.96-352.97	291.17	187.85-385.34	0.18	0.06-0.34	0.56	0.37-0.78	0.46	0.3-0.61
Dec-2015	63.79	18.22-109.35	92.0	36.79-156.35	91.72	36.69-146.75	0.21	0.06-0.37	0.20	0.08-0.35	0.15	0.06-0.23
Jan-2016	74.93	28.1-131.14	138.6	73.94-203.34	160.25	94.03-235.67	0.25	0.09-0.44	0.31	0.16-0.45	0.26	0.15-0.38
Feb-2016	158.43	92.96-232.99	241.1	157.64-333.83	394.49	281.78-516.83	0.53	0.31-0.78	0.54	0.35-0.74	0.63	0.45-0.82
Mar-2016	369.98	258.98-471.72	503.3	372.78-624.41	732.63	582.35-892.31	1.25	0.87-1.59	1.12	0.83-1.39	1.17	0.93-1.42
Apr-2016	101.49	46.13-166.07	194.1	119.92-286.52	320.51	216.81-424.2	0.34	0.16-0.56	0.43	0.27-0.64	0.51	0.35-0.68

Table 12.4. Norfolk Vanguard East. Razorbill design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	411.21	283.59-569.59	541.2	370.65-714.16	838.8	648.45-1076.4	1.38	0.95-1.92	1.20	0.82-1.59	1.33	1.03-1.71
Apr-2012	387.25	272.07-512.84	531.5	381.78-683.62	702.6	546.81-863.44	1.30	0.92-1.73	1.18	0.85-1.52	1.12	0.87-1.37
May-2012	220.13	134.51-312.13	275.8	182.39-373.76	334.6	235.77-458.15	0.74	0.45-1.05	0.61	0.41-0.83	0.53	0.38-0.73
Jun-2012	56.05	0-112.11	128.0	36.57-234.63	125.5	35.86-218.21	0.19	0-0.38	0.28	0.08-0.52	0.20	0.06-0.35
Jul-2012	0.00	0-0	0.0	0-0	8.9	0-26.69	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	448.13	300.16-634.42	513.8	352.35-700.26	852.2	649.94-1079.16	1.51	1.01-2.14	1.14	0.78-1.56	1.36	1.03-1.72
Sep-2012	451.93	310.7-607.28	648.1	468.82-829.67	824.0	634.87-1026.6	1.52	1.05-2.04	1.44	1.04-1.84	1.31	1.01-1.63
Oct-2012	416.82	287.01-557.55	619.8	462.83-790.73	1022.4	807.79-1251.74	1.40	0.97-1.88	1.38	1.03-1.76	1.63	1.29-1.99
Nov-2012	311.15	175.02-482.87	418.9	261.43-603.3	678.9	439.01-908.66	1.05	0.59-1.63	0.93	0.58-1.34	1.08	0.7-1.45
Dec-2012	185.26	98.81-284.07	636.5	458.32-806.39	823.9	640.21-1028.14	0.62	0.33-0.96	1.41	1.02-1.79	1.31	1.02-1.64
Jan-2013	1105.93	909.32-1327.11	1395.6	1152.09-1659.83	1602.1	1339.04-1875.68	3.72	3.06-4.47	3.10	2.56-3.69	2.55	2.13-2.98
Feb-2013	599.44	436.1-778.62	771.4	577.11-976.97	910.6	701.49-1136.01	2.02	1.47-2.62	1.71	1.28-2.17	1.45	1.12-1.81
Mar-2013	720.76	516.06-936.13	1105.8	874.23-1364.88	1582.6	1291.45-1872.22	2.43	1.74-3.15	2.46	1.94-3.03	2.52	2.06-2.98
Apr-2013	449.07	302.7-589.75	661.9	501.01-833.3	950.1	743.39-1152.47	1.51	1.02-1.98	1.47	1.11-1.85	1.51	1.18-1.83
May-2013	695.38	463.58-950.35	920.0	663.1-1219.02	1197.2	894-1523.46	2.34	1.56-3.2	2.04	1.47-2.71	1.91	1.42-2.42
Jun-2013	0.00	0-0	0.0	0-0	12.6	0-40.24	0.00	0-0	0.00	0-0	0.02	0-0.06
Jul-2013	33.71	0-84.27	100.5	33.51-198.22	100.0	33.34-183.72	0.11	0-0.28	0.22	0.07-0.44	0.16	0.05-0.29
Aug-2013	34.06	0-70.06	35.9	9.68-81.74	62.2	12.43-124.31	0.11	0-0.24	0.08	0.02-0.18	0.10	0.02-0.2
Sep-2013	383.78	271.45-505.46	529.4	389.17-669.53	691.1	539.62-844.37	1.29	0.91-1.7	1.18	0.86-1.49	1.10	0.86-1.34

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Oct-2013	8.58	0-25.74	60.4	17.26-103.54	86.1	34.46-139.29	0.03	0-0.09	0.13	0.04-0.23	0.14	0.05-0.22
Nov-2013	104.57	43.56-167.32	116.3	52.85-190.26	159.8	85.21-244.99	0.35	0.15-0.56	0.26	0.12-0.42	0.25	0.14-0.39
Dec-2013	408.70	267.77-566.12	725.4	539.81-925.19	1290.0	1048.34-1560.44	1.38	0.9-1.91	1.61	1.2-2.06	2.05	1.67-2.48
Jan-2014	106.59	39.38-187.71	203.9	106.56-326.78	203.5	108.67-312.2	0.36	0.13-0.63	0.45	0.24-0.73	0.32	0.17-0.5
Feb-2014	665.72	551.95-786.05	1018.4	869.61-1164.51	1742.2	1540.74-1950.6	2.24	1.86-2.65	2.26	1.93-2.59	2.77	2.45-3.1
Sep-2015	128.50	67.51-205.89	299.0	191.06-408.63	380.0	269.97-508.24	0.43	0.23-0.69	0.66	0.42-0.91	0.60	0.43-0.81
Oct-2015	64.01	20.09-118.9	154.3	78.08-232.34	225.5	134.52-327.83	0.22	0.07-0.4	0.34	0.17-0.52	0.36	0.21-0.52
Nov-2015	64.32	22.02-117.66	300.3	197.4-423.41	347.0	224.41-462.29	0.22	0.07-0.4	0.67	0.44-0.94	0.55	0.36-0.74
Dec-2015	73.12	20.09-128.01	105.2	40.56-178.95	104.9	40.44-171.17	0.25	0.07-0.43	0.23	0.09-0.4	0.17	0.06-0.27
Jan-2016	86.45	31.94-152.24	163.2	87.19-241.2	189.2	109.48-280.08	0.29	0.11-0.51	0.36	0.19-0.54	0.30	0.17-0.45
Feb-2016	190.88	112-282.62	290.5	189.89-406.01	475.3	339.5-622.64	0.64	0.38-0.95	0.65	0.42-0.9	0.76	0.54-0.99
Mar-2016	445.76	313.92-572.13	606.3	452.95-756.17	875.0	695.8-1067.42	1.50	1.06-1.93	1.35	1.01-1.68	1.39	1.11-1.7
Apr-2016	122.28	55.58-201.98	233.8	144.53-343.31	386.2	263.15-513.02	0.41	0.19-0.68	0.52	0.32-0.76	0.61	0.42-0.82

Table 12.5. Norfolk Vanguard East. Razorbill design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	24.15	0-60.37	0.00	0-0	0.00	0-0	0.04	0-0.1
Apr-2012	0.00	0-0	0.00	0-0	8.80	0-26.4	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	11.43	0-45.72	0.00	0-0	0.00	0-0	0.02	0-0.07
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	34.32	0-80.08	34.51	0-80.53	46.28	11.57-92.56	0.12	0-0.27	0.08	0-0.18	0.07	0.02-0.15
Mar-2013	12.96	0-38.87	38.33	0-89.44	38.92	0-90.81	0.04	0-0.13	0.09	0-0.2	0.06	0-0.14
Apr-2013	29.18	0-68.09	30.81	0-71.89	53.05	10.61-106.11	0.10	0-0.23	0.07	0-0.16	0.08	0.02-0.17
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	11.84	0-35.53	11.92	0-35.76	0.00	0-0	0.03	0-0.08	0.02	0-0.06

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	23.10	0-57.75	23.09	0-57.73	23.04	0-57.6	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Feb-2014	132.53	71.36-214.08	186.03	107.7-274.15	360.50	260.36-470.65	0.45	0.24-0.72	0.41	0.24-0.61	0.57	0.41-0.75
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	9.11	0-27.34	9.26	0-27.77	9.44	0-28.31	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Nov-2015	9.16	0-36.63	9.29	0-27.87	18.79	0-46.96	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Dec-2015	18.22	0-45.56	27.59	0-64.38	27.52	0-64.2	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Jan-2016	18.73	0-46.83	18.49	0-46.21	18.85	0-47.13	0.06	0-0.16	0.04	0-0.1	0.03	0-0.08
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	37.57	9.39-75.14	0.00	0-0	0.00	0-0	0.06	0.01-0.12
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 12.6. Norfolk Vanguard East. Razorbill design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	24.15	0-60.37	0.00	0-0	0.00	0-0	0.04	0-0.1
Apr-2012	0.00	0-0	0.00	0-0	8.80	0-26.4	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	11.43	0-45.72	0.00	0-0	0.00	0-0	0.02	0-0.07
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	34.32	0-80.08	34.51	0-80.53	46.28	11.57-92.56	0.12	0-0.27	0.08	0-0.18	0.07	0.02-0.15
Mar-2013	12.96	0-38.87	38.33	0-89.44	38.92	0-90.81	0.04	0-0.13	0.09	0-0.2	0.06	0-0.14
Apr-2013	29.18	0-68.09	30.81	0-71.89	53.05	10.61-106.11	0.10	0-0.23	0.07	0-0.16	0.08	0.02-0.17
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	11.84	0-35.53	11.92	0-35.76	0.00	0-0	0.03	0-0.08	0.02	0-0.06

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	23.10	0-57.75	23.09	0-57.73	23.04	0-57.6	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Feb-2014	132.53	71.36-214.08	186.03	107.7-274.15	360.50	260.36-470.65	0.45	0.24-0.72	0.41	0.24-0.61	0.57	0.41-0.75
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	9.11	0-27.34	9.26	0-27.77	9.44	0-28.31	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Nov-2015	9.16	0-36.63	9.29	0-27.87	18.79	0-46.96	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Dec-2015	18.22	0-45.56	27.59	0-64.38	27.52	0-64.2	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Jan-2016	18.73	0-46.83	18.49	0-46.21	18.85	0-47.13	0.06	0-0.16	0.04	0-0.1	0.03	0-0.08
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	37.57	9.39-75.14	0.00	0-0	0.00	0-0	0.06	0.01-0.12
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 12.7. Norfolk Vanguard East. Razorbill design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	341.30	235.38-482.53	442.8	311.13-586.36	664.10	495.06-845.22	1.15	0.79-1.62	0.98	0.69-1.3	1.06	0.79-1.34
Apr-2012	321.41	225.64-425.66	437.1	323.43-559.45	571.99	431.19-704.21	1.08	0.76-1.43	0.97	0.72-1.24	0.91	0.69-1.12
May-2012	89.05	39.58-158.32	130.1	60.07-200.22	160.91	90.26-241.37	0.30	0.13-0.53	0.29	0.13-0.44	0.26	0.14-0.38
Jun-2012	46.52	0-93.05	106.2	30.36-182.14	104.18	29.76-193.47	0.16	0-0.31	0.24	0.07-0.4	0.17	0.05-0.31
Jul-2012	0.00	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	351.53	229.85-487.08	413.8	280-574.01	687.87	505.84-869.89	1.18	0.77-1.64	0.92	0.62-1.27	1.09	0.8-1.38
Sep-2012	375.10	257.88-504.04	537.9	389.12-698.13	683.91	526.94-852.08	1.26	0.87-1.7	1.19	0.86-1.55	1.09	0.84-1.36
Oct-2012	345.96	245.59-455.21	514.4	375.94-672.73	848.55	670.46-1047.86	1.16	0.83-1.53	1.14	0.84-1.49	1.35	1.07-1.67
Nov-2012	258.26	145.27-387.38	350.5	216.99-500.74	563.47	392.72-768.36	0.87	0.49-1.3	0.78	0.48-1.11	0.90	0.62-1.22
Dec-2012	153.77	82.01-235.78	528.3	380.4-686.84	674.37	502.92-834.38	0.52	0.28-0.79	1.17	0.84-1.53	1.07	0.8-1.33
Jan-2013	917.92	754.73-1101.5	1158.3	947.72-1368.92	1329.74	1093.82-1565.94	3.09	2.54-3.71	2.57	2.11-3.04	2.12	1.74-2.49
Feb-2013	469.05	343.21-617.77	609.7	460.14-782.24	717.38	543.82-914.08	1.58	1.16-2.08	1.35	1.02-1.74	1.14	0.87-1.45
Mar-2013	583.09	427.6-764.5	881.6	689.98-1111.64	1271.35	1024.54-1517.83	1.96	1.44-2.57	1.96	1.53-2.47	2.02	1.63-2.42
Apr-2013	340.44	243.17-457.4	523.8	390.26-657.54	742.75	572.98-912.52	1.15	0.82-1.54	1.16	0.87-1.46	1.18	0.91-1.45
May-2013	577.16	384.77-788.79	763.6	534.53-1011.78	993.69	726.16-1280.33	1.94	1.29-2.65	1.70	1.19-2.25	1.58	1.16-2.04
Jun-2013	0.00	0-0	0.0	0-0	10.47	0-41.87	0.00	0-0	0.00	0-0	0.02	0-0.07
Jul-2013	27.98	0-69.94	83.4	27.81-152.98	83.02	27.67-152.2	0.09	0-0.24	0.19	0.06-0.34	0.13	0.04-0.24
Aug-2013	28.27	0-65.97	29.8	0-59.81	51.59	10.32-103.18	0.10	0-0.22	0.07	0-0.13	0.08	0.02-0.16
Sep-2013	318.53	225.31-419.53	439.4	329.52-549.2	573.61	447.89-707.19	1.07	0.76-1.41	0.98	0.73-1.22	0.91	0.71-1.13
Oct-2013	7.12	0-21.36	50.1	14.32-85.94	71.50	28.6-121.55	0.02	0-0.07	0.11	0.03-0.19	0.11	0.05-0.19

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Nov-2013	86.80	43.18-138.87	96.5	43.87-157.92	132.61	70.73-203.34	0.29	0.15-0.47	0.21	0.1-0.35	0.21	0.11-0.32
Dec-2013	339.22	222.25-479.59	592.2	437.97-758.08	1060.83	870.12-1275.38	1.14	0.75-1.61	1.32	0.97-1.68	1.69	1.38-2.03
Jan-2014	69.30	23.1-127.04	150.1	69.28-242.48	149.76	80.64-230.68	0.23	0.08-0.43	0.33	0.15-0.54	0.24	0.13-0.37
Feb-2014	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	106.65	49.22-164.08	248.2	165.44-339.16	315.36	224.07-414.95	0.36	0.17-0.55	0.55	0.37-0.75	0.50	0.36-0.66
Oct-2015	45.56	9.11-91.12	120.3	64.8-185.16	179.32	103.82-264.27	0.15	0.03-0.31	0.27	0.14-0.41	0.29	0.17-0.42
Nov-2015	45.79	18.09-82.65	241.5	148.62-343.91	272.39	178.46-375.71	0.15	0.06-0.28	0.54	0.33-0.76	0.43	0.28-0.6
Dec-2015	45.56	9.11-91.12	64.4	18.39-110.36	64.20	18.34-119.24	0.15	0.03-0.31	0.14	0.04-0.25	0.10	0.03-0.19
Jan-2016	56.20	18.73-103.03	120.2	64.7-184.85	141.40	75.41-216.81	0.19	0.06-0.35	0.27	0.14-0.41	0.23	0.12-0.35
Feb-2016	158.43	92.96-242.31	241.1	157.41-352.38	394.49	281.78-516.6	0.53	0.31-0.82	0.54	0.35-0.78	0.63	0.45-0.82
Mar-2016	369.98	268.23-490.22	503.3	391.42-643.28	695.06	553.93-854.97	1.25	0.9-1.65	1.12	0.87-1.43	1.11	0.88-1.36
Apr-2016	101.49	46.13-175.3	194.1	120.15-277.28	320.51	226.24-433.63	0.34	0.16-0.59	0.43	0.27-0.62	0.51	0.36-0.69

Table 12.8. Norfolk Vanguard East. Razorbill design based estimates of birds on the sea surface and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	411.21	283.59-581.36	533.5	374.86-706.46	800.1	596.46-1018.34	1.38	0.95-1.96	1.18	0.83-1.57	1.27	0.95-1.62
Apr-2012	387.25	271.86-512.84	526.6	389.67-674.03	689.1	519.51-848.44	1.30	0.91-1.73	1.17	0.87-1.5	1.10	0.83-1.35
May-2012	107.29	47.69-190.75	156.8	72.37-241.23	193.9	108.75-290.8	0.36	0.16-0.64	0.35	0.16-0.54	0.31	0.17-0.46
Jun-2012	56.05	0-112.11	128.0	36.57-219.45	125.5	35.86-233.1	0.19	0-0.38	0.28	0.08-0.49	0.20	0.06-0.37
Jul-2012	0.00	0-0	0.0	0-0	8.9	0-26.69	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	423.53	276.93-586.84	498.6	337.35-691.58	828.8	609.45-1048.06	1.43	0.93-1.97	1.11	0.75-1.54	1.32	0.97-1.67
Sep-2012	451.93	310.7-607.28	648.1	468.82-841.12	824.0	634.87-1026.6	1.52	1.05-2.04	1.44	1.04-1.87	1.31	1.01-1.63
Oct-2012	416.82	295.89-548.45	619.8	452.94-810.52	1022.4	807.79-1262.48	1.40	1-1.85	1.38	1.01-1.8	1.63	1.29-2.01
Nov-2012	311.15	175.02-466.73	422.3	261.43-603.3	678.9	473.16-925.74	1.05	0.59-1.57	0.94	0.58-1.34	1.08	0.75-1.47
Dec-2012	185.26	98.81-284.07	636.5	458.32-827.52	812.5	605.92-1005.28	0.62	0.33-0.96	1.41	1.02-1.84	1.29	0.96-1.6
Jan-2013	1105.93	909.32-1327.11	1395.6	1141.83-1649.3	1602.1	1317.86-1886.67	3.72	3.06-4.47	3.10	2.54-3.66	2.55	2.1-3
Feb-2013	565.12	413.5-744.3	734.6	554.39-942.46	864.3	655.2-1101.3	1.90	1.39-2.5	1.63	1.23-2.09	1.38	1.04-1.75
Mar-2013	702.52	515.18-921.08	1062.2	831.31-1339.33	1531.7	1234.38-1828.71	2.36	1.73-3.1	2.36	1.85-2.97	2.44	1.96-2.91
Apr-2013	410.16	292.97-551.08	631.0	470.2-792.22	894.9	690.33-1099.42	1.38	0.99-1.85	1.40	1.04-1.76	1.42	1.1-1.75
May-2013	695.38	463.58-950.35	920.0	644.01-1219.02	1197.2	874.89-1542.57	2.34	1.56-3.2	2.04	1.43-2.71	1.91	1.39-2.45
Jun-2013	0.00	0-0	0.0	0-0	12.6	0-50.44	0.00	0-0	0.00	0-0	0.02	0-0.08
Jul-2013	33.71	0-84.27	100.5	33.51-184.31	100.0	33.34-183.37	0.11	0-0.28	0.22	0.07-0.41	0.16	0.05-0.29
Aug-2013	34.06	0-79.48	35.9	0-72.06	62.2	12.43-124.31	0.11	0-0.27	0.08	0-0.16	0.10	0.02-0.2
Sep-2013	383.78	271.45-505.46	529.4	397.01-661.69	691.1	539.62-852.03	1.29	0.91-1.7	1.18	0.88-1.47	1.10	0.86-1.36
Oct-2013	8.58	0-25.74	60.4	17.26-103.54	86.1	34.46-146.44	0.03	0-0.09	0.13	0.04-0.23	0.14	0.05-0.23

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Nov-2013	104.57	52.03-167.32	116.3	52.85-190.26	159.8	85.21-244.99	0.35	0.18-0.56	0.26	0.12-0.42	0.25	0.14-0.39
Dec-2013	408.70	267.77-577.82	713.5	527.67-913.35	1278.1	1048.34-1536.6	1.38	0.9-1.94	1.58	1.17-2.03	2.03	1.67-2.45
Jan-2014	83.49	27.83-153.06	180.8	83.47-292.14	180.4	97.15-277.93	0.28	0.09-0.52	0.40	0.19-0.65	0.29	0.15-0.44
Feb-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	128.50	59.31-197.68	299.0	199.33-408.63	380.0	269.97-499.94	0.43	0.2-0.67	0.66	0.44-0.91	0.60	0.43-0.8
Oct-2015	54.89	10.98-109.79	145.0	78.08-223.08	216.1	125.08-318.39	0.18	0.04-0.37	0.32	0.17-0.5	0.34	0.2-0.51
Nov-2015	55.17	21.79-99.58	291.0	179.06-414.35	328.2	215.01-452.66	0.19	0.07-0.34	0.65	0.4-0.92	0.52	0.34-0.72
Dec-2015	54.89	10.98-109.79	77.6	22.16-132.97	77.3	22.1-143.66	0.18	0.04-0.37	0.17	0.05-0.3	0.12	0.04-0.23
Jan-2016	67.71	22.57-124.14	144.8	77.95-222.71	170.4	90.86-261.22	0.23	0.08-0.42	0.32	0.17-0.49	0.27	0.14-0.42
Feb-2016	190.88	112-291.94	290.5	189.65-424.56	475.3	339.5-622.41	0.64	0.38-0.98	0.65	0.42-0.94	0.76	0.54-0.99
Mar-2016	445.76	323.17-590.63	606.3	471.59-775.04	837.4	667.39-1030.08	1.50	1.09-1.99	1.35	1.05-1.72	1.33	1.06-1.64
Apr-2016	122.28	55.58-211.2	233.8	144.76-334.07	386.2	272.58-522.45	0.41	0.19-0.71	0.52	0.32-0.74	0.61	0.43-0.83

Table 12.9. Norfolk Vanguard East. Razorbill design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	341.30	235.38-482.53	453.8	322.05-596.5	676.17	513.17-863.48	1.15	0.79-1.62	1.01	0.72-1.32	1.08	0.82-1.37
Apr-2012	321.41	225.64-425.66	440.7	327.57-563.58	575.20	439.99-715.99	1.08	0.76-1.43	0.98	0.73-1.25	0.92	0.7-1.14
May-2012	182.32	111.65-268.06	228.1	151.03-308.17	280.67	198.05-379.02	0.61	0.38-0.9	0.51	0.34-0.68	0.45	0.32-0.6
Jun-2012	46.52	0-93.05	106.2	30.36-182.14	104.18	29.76-193.47	0.16	0-0.31	0.24	0.07-0.4	0.17	0.05-0.31
Jul-2012	0.00	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	372.12	243.77-521.04	431.6	290.85-585.55	707.34	512.67-895.7	1.25	0.82-1.75	0.96	0.65-1.3	1.13	0.82-1.43
Sep-2012	375.10	257.88-504.04	537.9	389.12-698.13	683.91	526.94-852.08	1.26	0.87-1.7	1.19	0.86-1.55	1.09	0.84-1.36
Oct-2012	345.96	245.59-455.21	514.4	375.94-672.73	848.55	670.46-1047.86	1.16	0.83-1.53	1.14	0.84-1.49	1.35	1.07-1.67
Nov-2012	258.26	145.27-387.38	333.8	216.99-500.74	563.47	392.72-768.36	0.87	0.49-1.3	0.74	0.48-1.11	0.90	0.62-1.22
Dec-2012	153.77	82.01-235.78	528.3	380.4-686.84	674.37	502.92-834.38	0.52	0.28-0.79	1.17	0.84-1.53	1.07	0.8-1.33
Jan-2013	917.92	754.73-1101.5	1158.3	947.72-1368.92	1329.74	1093.82-1565.94	3.09	2.54-3.71	2.57	2.11-3.04	2.12	1.74-2.49
Feb-2013	469.05	343.21-617.77	621.2	460.14-782.24	717.38	543.82-914.08	1.58	1.16-2.08	1.38	1.02-1.74	1.14	0.87-1.45
Mar-2013	587.47	431.87-773.27	888.6	693.8-1111.64	1271.35	1028.81-1525.89	1.98	1.45-2.6	1.97	1.54-2.47	2.02	1.64-2.43
Apr-2013	340.44	243.17-457.4	523.8	390.26-657.54	753.36	572.98-912.52	1.15	0.82-1.54	1.16	0.87-1.46	1.20	0.91-1.45
May-2013	577.16	384.77-788.79	763.6	534.53-1011.78	993.69	726.16-1280.33	1.94	1.29-2.65	1.70	1.19-2.25	1.58	1.16-2.04
Jun-2013	0.00	0-0	0.0	0-0	10.47	0-41.87	0.00	0-0	0.00	0-0	0.02	0-0.07
Jul-2013	27.98	0-69.94	83.4	27.81-152.98	83.02	27.67-152.2	0.09	0-0.24	0.19	0.06-0.34	0.13	0.04-0.24
Aug-2013	28.27	0-65.97	29.8	0-59.81	51.59	10.32-103.18	0.10	0-0.22	0.07	0-0.13	0.08	0.02-0.16
Sep-2013	318.53	225.31-419.53	439.4	329.52-549.2	573.61	447.89-707.19	1.07	0.76-1.41	0.98	0.73-1.22	0.91	0.71-1.13
Oct-2013	7.12	0-21.36	50.1	14.32-85.94	71.50	28.6-121.55	0.02	0-0.07	0.11	0.03-0.19	0.11	0.05-0.19

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Nov-2013	86.80	43.18-138.87	96.5	43.87-157.92	132.61	70.73-203.34	0.29	0.15-0.47	0.21	0.1-0.35	0.21	0.11-0.32
Dec-2013	339.22	222.25-479.59	592.2	437.97-758.08	1060.83	870.12-1275.38	1.14	0.75-1.61	1.32	0.97-1.68	1.69	1.38-2.03
Jan-2014	69.30	23.1-127.04	150.1	69.28-242.48	149.76	80.64-230.68	0.23	0.08-0.43	0.33	0.15-0.54	0.24	0.13-0.37
Feb-2014	446.65	374.64-522.36	686.7	600.4-783.75	1143.91	1017.81-1279.13	1.50	1.26-1.76	1.53	1.33-1.74	1.82	1.62-2.04
Sep-2015	106.65	49.22-164.08	248.2	165.44-339.16	315.36	224.07-414.95	0.36	0.17-0.55	0.55	0.37-0.75	0.50	0.36-0.66
Oct-2015	45.56	9.11-91.12	120.3	64.8-185.16	179.32	103.82-264.27	0.15	0.03-0.31	0.27	0.14-0.41	0.29	0.17-0.42
Nov-2015	45.79	18.09-82.65	241.5	148.62-343.91	272.39	178.46-375.71	0.15	0.06-0.28	0.54	0.33-0.76	0.43	0.28-0.6
Dec-2015	45.56	9.11-91.12	64.4	18.39-110.36	64.20	18.34-119.24	0.15	0.03-0.31	0.14	0.04-0.25	0.10	0.03-0.19
Jan-2016	56.20	18.73-103.03	120.2	64.7-184.85	141.40	75.41-216.81	0.19	0.06-0.35	0.27	0.14-0.41	0.23	0.12-0.35
Feb-2016	158.43	92.96-242.31	241.1	157.41-352.38	394.49	281.78-516.6	0.53	0.31-0.82	0.54	0.35-0.78	0.63	0.45-0.82
Mar-2016	369.98	268.23-490.22	503.3	391.42-643.28	695.06	553.93-854.97	1.25	0.9-1.65	1.12	0.87-1.43	1.11	0.88-1.36
Apr-2016	101.49	46.13-175.3	194.1	120.15-277.28	320.51	226.24-433.63	0.34	0.16-0.59	0.43	0.27-0.62	0.51	0.36-0.69

Table 12.10. Norfolk Vanguard East. Razorbill design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	411.21	283.59-581.36	546.8	388.01-718.68	814.7	618.27-1040.34	1.38	0.95-1.96	1.21	0.86-1.6	1.30	0.98-1.66
Apr-2012	387.25	271.86-512.84	531.0	394.66-679.02	693.0	530.11-862.64	1.30	0.91-1.73	1.18	0.88-1.51	1.10	0.84-1.37
May-2012	219.66	134.52-322.96	274.8	181.96-371.29	338.2	238.62-456.65	0.74	0.45-1.09	0.61	0.4-0.82	0.54	0.38-0.73
Jun-2012	56.05	0-112.11	128.0	36.57-219.45	125.5	35.86-233.1	0.19	0-0.38	0.28	0.08-0.49	0.20	0.06-0.37
Jul-2012	0.00	0-0	0.0	0-0	8.9	0-26.69	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	448.33	293.7-627.76	520.0	350.43-705.48	852.2	617.67-1079.16	1.51	0.99-2.11	1.15	0.78-1.57	1.36	0.98-1.72
Sep-2012	451.93	310.7-607.28	648.1	468.82-841.12	824.0	634.87-1026.6	1.52	1.05-2.04	1.44	1.04-1.87	1.31	1.01-1.63
Oct-2012	416.82	295.89-548.45	619.8	452.94-810.52	1022.4	807.79-1262.48	1.40	1-1.85	1.38	1.01-1.8	1.63	1.29-2.01
Nov-2012	311.15	175.02-466.73	402.2	261.43-603.3	678.9	473.16-925.74	1.05	0.59-1.57	0.89	0.58-1.34	1.08	0.75-1.47
Dec-2012	185.26	98.81-284.07	636.5	458.32-827.52	812.5	605.92-1005.28	0.62	0.33-0.96	1.41	1.02-1.84	1.29	0.96-1.6
Jan-2013	1105.93	909.32-1327.11	1395.6	1141.83-1649.3	1602.1	1317.86-1886.67	3.72	3.06-4.47	3.10	2.54-3.66	2.55	2.1-3
Feb-2013	565.12	413.5-744.3	748.4	554.39-942.46	864.3	655.2-1101.3	1.90	1.39-2.5	1.66	1.23-2.09	1.38	1.04-1.75
Mar-2013	707.80	520.33-931.65	1070.6	835.9-1339.33	1531.7	1239.53-1838.42	2.38	1.75-3.14	2.38	1.86-2.97	2.44	1.97-2.93
Apr-2013	410.16	292.97-551.08	631.0	470.2-792.22	907.7	690.33-1099.42	1.38	0.99-1.85	1.40	1.04-1.76	1.44	1.1-1.75
May-2013	695.38	463.58-950.35	920.0	644.01-1219.02	1197.2	874.89-1542.57	2.34	1.56-3.2	2.04	1.43-2.71	1.91	1.39-2.45
Jun-2013	0.00	0-0	0.0	0-0	12.6	0-50.44	0.00	0-0	0.00	0-0	0.02	0-0.08
Jul-2013	33.71	0-84.27	100.5	33.51-184.31	100.0	33.34-183.37	0.11	0-0.28	0.22	0.07-0.41	0.16	0.05-0.29
Aug-2013	34.06	0-79.48	35.9	0-72.06	62.2	12.43-124.31	0.11	0-0.27	0.08	0-0.16	0.10	0.02-0.2
Sep-2013	383.78	271.45-505.46	529.4	397.01-661.69	691.1	539.62-852.03	1.29	0.91-1.7	1.18	0.88-1.47	1.10	0.86-1.36

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Oct-2013	8.58	0-25.74	60.4	17.26-103.54	86.1	34.46-146.44	0.03	0-0.09	0.13	0.04-0.23	0.14	0.05-0.23
Nov-2013	104.57	52.03-167.32	116.3	52.85-190.26	159.8	85.21-244.99	0.35	0.18-0.56	0.26	0.12-0.42	0.25	0.14-0.39
Dec-2013	408.70	267.77-577.82	713.5	527.67-913.35	1278.1	1048.34-1536.6	1.38	0.9-1.94	1.58	1.17-2.03	2.03	1.67-2.45
Jan-2014	83.49	27.83-153.06	180.8	83.47-292.14	180.4	97.15-277.93	0.28	0.09-0.52	0.40	0.19-0.65	0.29	0.15-0.44
Feb-2014	538.14	451.37-629.35	827.3	723.37-944.28	1378.2	1226.28-1541.13	1.81	1.52-2.12	1.84	1.61-2.1	2.19	1.95-2.45
Sep-2015	128.50	59.31-197.68	299.0	199.33-408.63	380.0	269.97-499.94	0.43	0.2-0.67	0.66	0.44-0.91	0.60	0.43-0.8
Oct-2015	54.89	10.98-109.79	145.0	78.08-223.08	216.1	125.08-318.39	0.18	0.04-0.37	0.32	0.17-0.5	0.34	0.2-0.51
Nov-2015	55.17	21.79-99.58	291.0	179.06-414.35	328.2	215.01-452.66	0.19	0.07-0.34	0.65	0.4-0.92	0.52	0.34-0.72
Dec-2015	54.89	10.98-109.79	77.6	22.16-132.97	77.3	22.1-143.66	0.18	0.04-0.37	0.17	0.05-0.3	0.12	0.04-0.23
Jan-2016	67.71	22.57-124.14	144.8	77.95-222.71	170.4	90.86-261.22	0.23	0.08-0.42	0.32	0.17-0.49	0.27	0.14-0.42
Feb-2016	190.88	112-291.94	290.5	189.65-424.56	475.3	339.5-622.41	0.64	0.38-0.98	0.65	0.42-0.94	0.76	0.54-0.99
Mar-2016	445.76	323.17-590.63	606.3	471.59-775.04	837.4	667.39-1030.08	1.50	1.09-1.99	1.35	1.05-1.72	1.33	1.06-1.64
Apr-2016	122.28	55.58-211.2	233.8	144.76-334.07	386.2	272.58-522.45	0.41	0.19-0.71	0.52	0.32-0.74	0.61	0.43-0.83

Table 13.1. Norfolk Vanguard East. Little Auk design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	145.3	64.56-242.11	217.0	100.15-333.82	222.0	102.45-341.92	0.49	0.22-0.81	0.48	0.22-0.74	0.35	0.16-0.54
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	10.2	0-30.6	10.5	0-31.59	21.4	0-53.62	0.03	0-0.1	0.02	0-0.07	0.03	0-0.09
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 13.2. Norfolk Vanguard East. Little Auk design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	48.4	0-112.99	50.1	0-116.84	51.2	0-119.52	0.16	0-0.38	0.11	0-0.26	0.08	0-0.19
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 13.3. Norfolk Vanguard East. Little Auk design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	96.8	32.28-177.95	166.9	66.76-283.75	170.8	68.3-290.27	0.33	0.11-0.6	0.37	0.15-0.63	0.27	0.11-0.46
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	10.2	0-30.6	10.5	0-31.85	21.4	0-53.62	0.03	0-0.1	0.02	0-0.07	0.03	0-0.09
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 14.1. Norfolk Vanguard East. Guillemot design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	188.3	94.15-282.46	514.6	370.97-682.1	688.25	519.21-869.37	0.63	0.32-0.95	1.14	0.82-1.52	1.10	0.83-1.38
Apr-2012	286.7	199.8-382.22	489.5	366.92-620.64	695.19	545.59-844.78	0.96	0.67-1.29	1.09	0.81-1.38	1.11	0.87-1.34
May-2012	79.2	29.68-138.53	160.2	90.1-240.26	211.20	120.68-311.76	0.27	0.1-0.47	0.36	0.2-0.53	0.34	0.19-0.5
Jun-2012	62.0	15.51-124.06	60.7	15.18-121.81	74.41	14.88-148.82	0.21	0.05-0.42	0.13	0.03-0.27	0.12	0.02-0.24
Jul-2012	0.0	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	338.0	216.33-473.56	467.2	320.38-627.41	687.87	519.14-869.57	1.14	0.73-1.59	1.04	0.71-1.39	1.09	0.83-1.38
Sep-2012	527.5	375.1-679.87	743.9	572.24-927.02	986.62	784.81-1199.64	1.78	1.26-2.29	1.65	1.27-2.06	1.57	1.25-1.91
Oct-2012	318.6	218.5-419.02	484.8	355.9-623.27	764.75	596.87-943.1	1.07	0.74-1.41	1.08	0.79-1.38	1.22	0.95-1.5
Nov-2012	532.6	371.24-694.47	667.6	450.66-884.63	990.34	751.29-1263.53	1.79	1.25-2.34	1.48	1-1.96	1.58	1.2-2.01
Dec-2012	727.8	563.82-902.11	1077.8	887.61-1299.72	1485.89	1234.15-1725.92	2.45	1.9-3.04	2.39	1.97-2.89	2.36	1.96-2.75
Jan-2013	2213.2	1957.97-2468.18	3622.4	3295.68-3980.41	5115.23	4654.11-5544.45	7.45	6.59-8.31	8.05	7.32-8.84	8.14	7.41-8.82
Feb-2013	720.7	549.13-903.78	1207.9	989.31-1438.24	1562.03	1295.91-1805.01	2.43	1.85-3.04	2.68	2.2-3.19	2.49	2.06-2.87
Mar-2013	1166.2	958.86-1399.74	2159.4	1878.29-2466.05	2970.80	2594.59-3347.02	3.92	3.23-4.71	4.80	4.17-5.48	4.73	4.13-5.33
Apr-2013	671.1	515.52-826.77	1458.3	1232.41-1735.65	2472.29	2196.41-2769.39	2.26	1.73-2.78	3.24	2.74-3.86	3.93	3.5-4.41
May-2013	557.9	365.54-769.55	725.4	515.44-954.51	1031.91	763.9-1318.55	1.88	1.23-2.59	1.61	1.14-2.12	1.64	1.22-2.1
Jun-2013	10.7	0-32.1	21.1	0-52.69	52.34	10.47-104.67	0.04	0-0.11	0.05	0-0.12	0.08	0.02-0.17
Jul-2013	195.8	97.92-293.76	278.1	166.88-389.39	373.58	249.05-511.94	0.66	0.33-0.99	0.62	0.37-0.86	0.59	0.4-0.81

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Aug-2013	66.0	18.85-113.09	89.3	39.71-148.91	175.41	92.86-257.95	0.22	0.06-0.38	0.20	0.09-0.33	0.28	0.15-0.41
Sep-2013	567.1	450.61-699.22	855.2	706.12-1004.25	1469.38	1265.08-1673.68	1.91	1.52-2.35	1.90	1.57-2.23	2.34	2.01-2.66
Oct-2013	170.9	106.82-242.12	229.2	157.55-307.95	343.19	250.24-443.29	0.58	0.36-0.81	0.51	0.35-0.68	0.55	0.4-0.71
Nov-2013	138.9	69.44-208.31	157.9	87.73-228.33	185.66	114.93-265.45	0.47	0.23-0.7	0.35	0.19-0.51	0.30	0.18-0.42
Dec-2013	690.1	526.38-854.19	1089.7	888.37-1314.79	1489.93	1215.78-1740.53	2.32	1.77-2.87	2.42	1.97-2.92	2.37	1.93-2.77
Jan-2014	207.9	115.49-300.57	254.0	150.11-369.49	334.07	218.88-460.79	0.70	0.39-1.01	0.56	0.33-0.82	0.53	0.35-0.73
Feb-2014	224.3	132.53-326.22	323.1	215.4-440.59	440.61	320.19-581.06	0.75	0.45-1.1	0.72	0.48-0.98	0.70	0.51-0.92
Sep-2015	705.5	574.27-853.21	1083.7	926.49-1274.13	1302.95	1112.07-1518.72	2.37	1.93-2.87	2.41	2.06-2.83	2.07	1.77-2.42
Oct-2015	1485.3	1293.96-1676.68	2342.2	2119.81-2555.39	3152.33	2897.27-3444.92	5.00	4.35-5.64	5.20	4.71-5.68	5.02	4.61-5.48
Nov-2015	1080.6	906.38-1254.59	1625.5	1421.15-1857.72	2085.18	1859.75-2329.39	3.64	3.05-4.22	3.61	3.16-4.13	3.32	2.96-3.71
Dec-2015	400.9	291.37-510.52	533.4	395.47-662.18	761.27	614.52-926.37	1.35	0.98-1.72	1.18	0.88-1.47	1.21	0.98-1.47
Jan-2016	543.3	421.51-665.04	1044.4	877.81-1220.01	1216.05	1027.51-1404.58	1.83	1.42-2.24	2.32	1.95-2.71	1.94	1.64-2.24
Feb-2016	1342.0	1174.26-1519.31	2448.1	2234.84-2661.41	3437.73	3137.16-3738.29	4.52	3.95-5.11	5.44	4.96-5.91	5.47	4.99-5.95
Mar-2016	2414.1	2201.36-2636.09	4082.0	3802.38-4343.15	5691.97	5363.23-5992.78	8.12	7.41-8.87	9.07	8.45-9.65	9.06	8.53-9.54
Apr-2016	922.6	775.01-1088.93	1229.3	1053.65-1414.11	1828.79	1621.16-2064.45	3.11	2.61-3.66	2.73	2.34-3.14	2.91	2.58-3.29

Table 14.2. Norfolk Vanguard East. Guillemot design based estimates of birds in flight and on sea and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	229.2	112.74-349.35	643.0	457.88-859.71	871.28	656.48-1105.78	0.77	0.38-1.18	1.43	1.02-1.91	1.39	1.04-1.76
Apr-2012	377.2	262.89-508.41	641.3	480.1-811.1	911.94	715.1-1108.85	1.27	0.88-1.71	1.42	1.07-1.8	1.45	1.14-1.76
May-2012	104.2	39.06-185.4	210.8	115.39-316.14	277.89	161.97-407.04	0.35	0.13-0.62	0.47	0.26-0.7	0.44	0.26-0.65
Jun-2012	81.6	20.41-163.24	79.9	19.97-160.15	97.91	19.58-195.82	0.27	0.07-0.55	0.18	0.04-0.36	0.16	0.03-0.31
Jul-2012	0.0	0-0	0.0	0-0	9.72	0-29.15	0.00	0-0	0.00	0-0	0.02	0-0.05
Aug-2012	444.8	284.64-622.99	614.8	421.55-825.54	905.09	674.89-1144.17	1.50	0.96-2.1	1.37	0.94-1.83	1.44	1.07-1.82
Sep-2012	694.1	497.25-894.56	978.8	756.56-1216.15	1298.18	1029.1-1574.93	2.34	1.67-3.01	2.17	1.68-2.7	2.07	1.64-2.51
Oct-2012	419.3	287.5-554.15	637.8	468.37-816.96	1006.24	785.44-1244.14	1.41	0.97-1.86	1.42	1.04-1.81	1.60	1.25-1.98
Nov-2012	700.9	488.48-928.93	878.5	598.25-1158.72	1297.68	983.15-1657.15	2.36	1.64-3.13	1.95	1.33-2.57	2.06	1.56-2.64
Dec-2012	951.2	735.39-1177.27	1408.2	1157.9-1700.14	1940.68	1613.14-2256.6	3.20	2.47-3.96	3.13	2.57-3.78	3.09	2.57-3.59
Jan-2013	2912.1	2573.14-3250.83	4766.3	4329.86-5234.05	6730.56	6144.14-7298.71	9.80	8.66-10.94	10.59	9.62-11.63	10.71	9.78-11.61
Feb-2013	919.4	697.25-1156.67	1553.0	1269.03-1856	2004.15	1664.86-2323.87	3.09	2.35-3.89	3.45	2.82-4.12	3.19	2.65-3.7
Mar-2013	1534.5	1257.46-1841.66	2833.2	2455.19-3240.87	3896.66	3413.93-4395.78	5.16	4.23-6.2	6.29	5.45-7.2	6.20	5.43-6.99
Apr-2013	876.9	675.24-1081.72	1909.2	1618.35-2257.8	3239.61	2866.56-3630.61	2.95	2.27-3.64	4.24	3.59-5.01	5.16	4.56-5.78
May-2013	734.1	474.89-1006.49	954.5	678.06-1255.94	1357.78	1011.17-1734.94	2.47	1.6-3.39	2.12	1.51-2.79	2.16	1.61-2.76
Jun-2013	14.1	0-45.62	27.7	0-69.32	68.86	13.77-137.72	0.05	0-0.15	0.06	0-0.15	0.11	0.02-0.22
Jul-2013	257.7	128.84-390.94	366.0	219.58-516.75	491.55	327.7-673.6	0.87	0.43-1.32	0.81	0.49-1.15	0.78	0.52-1.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Aug-2013	86.8	24.8-148.8	117.6	52.25-199.06	230.80	125.45-342.67	0.29	0.08-0.5	0.26	0.12-0.44	0.37	0.2-0.55
Sep-2013	746.2	590.45-920.03	1125.2	924.08-1323.87	1933.40	1667.06-2202.21	2.51	1.99-3.1	2.50	2.05-2.94	3.08	2.65-3.5
Oct-2013	222.6	138.3-316.33	299.3	205.05-402.93	449.31	329.27-578.81	0.75	0.47-1.06	0.66	0.46-0.89	0.71	0.52-0.92
Nov-2013	182.7	91.36-274.09	207.8	115.44-303.13	244.29	151.22-351.99	0.61	0.31-0.92	0.46	0.26-0.67	0.39	0.24-0.56
Dec-2013	900.7	685.21-1120.15	1422.6	1153.95-1715.12	1949.14	1595.85-2278.88	3.03	2.31-3.77	3.16	2.56-3.81	3.10	2.54-3.63
Jan-2014	273.5	151.96-399.04	334.2	201.06-482.53	439.57	287.99-606.3	0.92	0.51-1.34	0.74	0.45-1.07	0.70	0.46-0.96
Feb-2014	224.3	132.53-326.22	323.1	215.4-440.59	440.61	320.19-581.06	0.75	0.45-1.1	0.72	0.48-0.98	0.70	0.51-0.92
Sep-2015	928.3	750.44-1120.05	1425.9	1208.55-1671.2	1714.40	1455.39-1993.08	3.12	2.53-3.77	3.17	2.68-3.71	2.73	2.32-3.17
Oct-2015	1942.9	1691.07-2191.77	3070.2	2771.69-3353.59	4132.91	3788.43-4512	6.54	5.69-7.38	6.82	6.16-7.45	6.58	6.03-7.18
Nov-2015	1421.8	1192.67-1647.89	2138.8	1872.87-2441.43	2743.66	2444.08-3062.02	4.79	4.01-5.55	4.75	4.16-5.42	4.37	3.89-4.87
Dec-2015	527.6	383.45-674.55	701.9	526.16-871.29	1001.67	805.68-1216.01	1.78	1.29-2.27	1.56	1.17-1.94	1.59	1.28-1.93
Jan-2016	711.9	548.7-878.02	1371.3	1155.09-1605.28	1594.11	1345.96-1845.16	2.40	1.85-2.95	3.05	2.57-3.57	2.54	2.14-2.94
Feb-2016	1739.3	1512.7-1975.48	3162.7	2879.08-3446.21	4452.14	4065.48-4838.72	5.85	5.09-6.65	7.02	6.39-7.65	7.08	6.47-7.7
Mar-2016	3173.5	2893.61-3462.69	5294.5	4932.42-5641.09	7400.46	6967.9-7802.11	10.68	9.74-11.65	11.76	10.96-12.53	11.78	11.09-12.42
Apr-2016	1211.1	1013.92-1426.98	1614.5	1386.31-1854.83	2403.32	2124.25-2710.43	4.08	3.41-4.8	3.59	3.08-4.12	3.82	3.38-4.31

Table 14.3. Norfolk Vanguard East. Guillemot design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	188.3	94.15-282.46	526.5	383.85-689.57	706.37	537.02-887.49	0.63	0.32-0.95	1.17	0.85-1.53	1.12	0.85-1.41
Apr-2012	286.7	199.8-382.22	490.0	367.59-625.34	695.19	550.39-849.58	0.96	0.67-1.29	1.09	0.82-1.39	1.11	0.88-1.35
May-2012	164.5	101.78-236.11	280.8	192.83-379.12	372.25	263.04-488.69	0.55	0.34-0.79	0.62	0.43-0.84	0.59	0.42-0.78
Jun-2012	62.0	15.51-124.06	60.7	15.18-121.81	74.41	14.88-148.82	0.21	0.05-0.42	0.13	0.03-0.27	0.12	0.02-0.24
Jul-2012	0.0	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	358.0	229.45-493.56	488.6	334.61-655.97	707.33	532.12-889.19	1.20	0.77-1.66	1.09	0.74-1.46	1.13	0.85-1.41
Sep-2012	527.5	375.1-679.87	743.9	572.24-927.02	986.62	784.81-1199.64	1.78	1.26-2.29	1.65	1.27-2.06	1.57	1.25-1.91
Oct-2012	318.6	218.5-419.02	484.8	355.9-623.27	764.75	596.87-943.1	1.07	0.74-1.41	1.08	0.79-1.38	1.22	0.95-1.5
Nov-2012	532.6	371.24-694.47	667.6	450.66-884.63	990.34	751.29-1263.53	1.79	1.25-2.34	1.48	1-1.96	1.58	1.2-2.01
Dec-2012	727.8	563.82-902.11	1088.4	887.61-1299.72	1485.89	1234.15-1725.92	2.45	1.9-3.04	2.42	1.97-2.89	2.36	1.96-2.75
Jan-2013	2213.2	1957.97-2468.18	3632.9	3295.68-3980.41	5115.23	4654.11-5544.45	7.45	6.59-8.31	8.07	7.32-8.84	8.14	7.41-8.82
Feb-2013	720.7	549.13-903.78	1207.9	989.31-1438.24	1562.03	1295.91-1805.01	2.43	1.85-3.04	2.68	2.2-3.19	2.49	2.06-2.87
Mar-2013	1178.9	971.82-1412.37	2168.4	1890.97-2475.02	2993.29	2616.13-3352.36	3.97	3.27-4.75	4.82	4.2-5.5	4.76	4.16-5.33
Apr-2013	671.1	515.52-826.77	1458.3	1232.41-1735.65	2472.29	2196.41-2769.39	2.26	1.73-2.78	3.24	2.74-3.86	3.93	3.5-4.41
May-2013	557.9	365.54-769.55	725.4	515.44-954.51	1031.91	763.9-1318.55	1.88	1.23-2.59	1.61	1.14-2.12	1.64	1.22-2.1
Jun-2013	10.7	0-32.1	21.1	0-52.69	52.34	10.47-104.67	0.04	0-0.11	0.05	0-0.12	0.08	0.02-0.17

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2013	195.8	97.92-293.76	278.1	166.88-389.39	373.58	249.05-511.94	0.66	0.33-0.99	0.62	0.37-0.86	0.59	0.4-0.81
Aug-2013	66.0	18.85-113.09	89.3	39.71-148.91	175.41	92.86-257.95	0.22	0.06-0.38	0.20	0.09-0.33	0.28	0.15-0.41
Sep-2013	567.1	450.61-699.22	855.2	706.12-1004.25	1469.38	1265.08-1673.68	1.91	1.52-2.35	1.90	1.57-2.23	2.34	2.01-2.66
Oct-2013	170.9	106.82-242.12	229.2	157.55-307.95	343.19	250.24-443.29	0.58	0.36-0.81	0.51	0.35-0.68	0.55	0.4-0.71
Nov-2013	138.9	69.44-208.31	157.9	87.73-228.33	185.66	114.93-265.45	0.47	0.23-0.7	0.35	0.19-0.51	0.30	0.18-0.42
Dec-2013	690.1	526.38-854.19	1089.7	888.37-1314.79	1489.93	1215.78-1740.53	2.32	1.77-2.87	2.42	1.97-2.92	2.37	1.93-2.77
Jan-2014	207.9	115.49-300.57	254.0	150.11-369.49	334.07	218.88-460.79	0.70	0.39-1.01	0.56	0.33-0.82	0.53	0.35-0.73
Feb-2014	971.1	817.68-1136.44	1512.2	1312.78-1703.16	1843.69	1649.43-2053.61	3.27	2.75-3.82	3.36	2.92-3.78	2.93	2.62-3.27
Sep-2015	705.5	574.27-853.21	1091.9	926.49-1274.13	1302.95	1112.07-1518.72	2.37	1.93-2.87	2.43	2.06-2.83	2.07	1.77-2.42
Oct-2015	1485.3	1293.96-1676.68	2342.2	2119.81-2555.39	3157.05	2897.27-3444.92	5.00	4.35-5.64	5.20	4.71-5.68	5.02	4.61-5.48
Nov-2015	1080.6	906.38-1254.59	1625.5	1421.15-1857.72	2085.18	1859.75-2329.39	3.64	3.05-4.22	3.61	3.16-4.13	3.32	2.96-3.71
Dec-2015	400.9	291.37-510.52	533.4	395.47-662.18	761.27	614.52-926.37	1.35	0.98-1.72	1.18	0.88-1.47	1.21	0.98-1.47
Jan-2016	543.3	421.51-665.04	1044.4	877.81-1220.01	1216.05	1027.51-1404.58	1.83	1.42-2.24	2.32	1.95-2.71	1.94	1.64-2.24
Feb-2016	1342.0	1174.26-1519.31	2448.1	2234.84-2661.41	3437.73	3137.16-3738.29	4.52	3.95-5.11	5.44	4.96-5.91	5.47	4.99-5.95
Mar-2016	2414.1	2201.36-2636.09	4082.0	3802.38-4343.15	5701.37	5363.23-5992.78	8.12	7.41-8.87	9.07	8.45-9.65	9.07	8.53-9.54
Apr-2016	922.6	775.01-1088.93	1229.3	1053.65-	1828.79	1621.16-	3.11	2.61-3.66	2.73	2.34-3.14	2.91	2.58-3.29

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
				1414.11		2064.45						

Table 14.4. Norfolk Vanguard East. Guillemot design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	229.2	112.74-349.35	657.0	472.8-871.24	897.02	678.06-1131.52	0.77	0.38-1.18	1.46	1.05-1.94	1.43	1.08-1.8
Apr-2012	377.2	262.89-508.41	643.3	482.22-817.26	912.19	722.65-1116.36	1.27	0.88-1.71	1.43	1.07-1.82	1.45	1.15-1.78
May-2012	216.3	134.8-312.46	368.4	252.3-498.07	488.92	348.37-642.59	0.73	0.45-1.05	0.82	0.56-1.11	0.78	0.55-1.02
Jun-2012	81.6	20.41-163.24	79.9	19.97-160.15	97.91	19.58-195.82	0.27	0.07-0.55	0.18	0.04-0.36	0.16	0.03-0.31
Jul-2012	0.0	0-0	0.0	0-0	9.72	0-29.15	0.00	0-0	0.00	0-0	0.02	0-0.05
Aug-2012	471.1	303.96-651.47	643.2	442.25-863.1	926.60	694.01-1169.99	1.59	1.02-2.19	1.43	0.98-1.92	1.47	1.1-1.86
Sep-2012	694.1	497.25-894.56	978.8	756.56-1216.15	1298.18	1029.1-1574.93	2.34	1.67-3.01	2.17	1.68-2.7	2.07	1.64-2.51
Oct-2012	419.3	287.5-554.15	637.8	468.37-816.96	1006.24	785.44-1244.14	1.41	0.97-1.86	1.42	1.04-1.81	1.60	1.25-1.98
Nov-2012	700.9	488.48-928.93	878.5	598.25-1158.72	1297.68	983.15-1657.15	2.36	1.64-3.13	1.95	1.33-2.57	2.06	1.56-2.64
Dec-2012	948.0	735.39-1177.27	1418.7	1157.9-1700.14	1940.68	1613.14-2256.6	3.19	2.47-3.96	3.15	2.57-3.78	3.09	2.57-3.59
Jan-2013	2912.1	2573.14-3250.83	4776.8	4329.86-5234.05	6730.56	6144.14-7298.71	9.80	8.66-10.94	10.61	9.62-11.63	10.71	9.78-11.61
Feb-2013	919.4	697.25-1156.67	1549.3	1269.03-1856	2004.15	1664.86-2323.87	3.09	2.35-3.89	3.44	2.82-4.12	3.19	2.65-3.7
Mar-2013	1549.9	1270.52-1858.33	2845.0	2471.91-3252.59	3923.25	3442.41-4408.41	5.22	4.28-6.25	6.32	5.49-7.22	6.24	5.48-7.01
Apr-2013	876.9	675.24-1081.72	1909.2	1618.35-2257.8	3236.26	2866.56-3630.61	2.95	2.27-3.64	4.24	3.59-5.01	5.15	4.56-5.78
May-2013	734.1	474.89-1006.49	954.5	678.06-1255.94	1357.78	1011.17-1734.94	2.47	1.6-3.39	2.12	1.51-2.79	2.16	1.61-2.76
Jun-2013	14.1	0-45.62	27.7	0-69.32	68.86	13.77-137.72	0.05	0-0.15	0.06	0-0.15	0.11	0.02-0.22

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2013	257.7	128.84-390.94	366.0	219.58-516.75	491.55	327.7-673.6	0.87	0.43-1.32	0.81	0.49-1.15	0.78	0.52-1.07
Aug-2013	86.8	24.8-148.8	117.6	52.25-199.06	230.80	125.45-342.67	0.29	0.08-0.5	0.26	0.12-0.44	0.37	0.2-0.55
Sep-2013	743.8	590.45-920.03	1125.2	924.08-1323.87	1933.40	1667.06-2202.21	2.50	1.99-3.1	2.50	2.05-2.94	3.08	2.65-3.5
Oct-2013	222.6	138.3-316.33	299.3	205.05-402.93	449.31	329.27-578.81	0.75	0.47-1.06	0.66	0.46-0.89	0.71	0.52-0.92
Nov-2013	182.7	91.36-274.09	207.8	115.44-303.13	244.29	151.22-351.99	0.61	0.31-0.92	0.46	0.26-0.67	0.39	0.24-0.56
Dec-2013	900.7	685.21-1120.15	1422.6	1153.95-1715.12	1949.14	1595.85-2278.88	3.03	2.31-3.77	3.16	2.56-3.81	3.10	2.54-3.63
Jan-2014	273.5	151.96-399.04	334.2	201.06-482.53	439.57	287.99-606.3	0.92	0.51-1.34	0.74	0.45-1.07	0.70	0.46-0.96
Feb-2014	1209.9	1018-1415.74	1885.9	1639.53-2129.7	2285.67	2042.69-2547.84	4.07	3.43-4.76	4.19	3.64-4.73	3.64	3.25-4.05
Sep-2015	928.3	750.44-1120.05	1431.5	1208.55-1671.2	1711.78	1455.39-1993.08	3.12	2.53-3.77	3.18	2.68-3.71	2.72	2.32-3.17
Oct-2015	1940.0	1691.07-2191.77	3070.2	2771.69-3353.59	4137.63	3788.43-4512	6.53	5.69-7.38	6.82	6.16-7.45	6.58	6.03-7.18
Nov-2015	1419.0	1192.67-1647.89	2138.8	1872.87-2441.43	2746.62	2444.08-3062.02	4.78	4.01-5.55	4.75	4.16-5.42	4.37	3.89-4.87
Dec-2015	527.6	383.45-674.55	701.9	526.16-871.29	1001.67	805.68-1216.01	1.78	1.29-2.27	1.56	1.17-1.94	1.59	1.28-1.93
Jan-2016	711.9	548.7-878.02	1371.3	1155.09-1605.28	1594.11	1345.96-1845.16	2.40	1.85-2.95	3.05	2.57-3.57	2.54	2.14-2.94
Feb-2016	1739.3	1512.7-1975.48	3159.7	2879.08-3446.21	4455.10	4065.48-4838.72	5.85	5.09-6.65	7.02	6.39-7.65	7.09	6.47-7.7
Mar-2016	3170.6	2893.61-3462.69	5291.6	4932.42-5641.09	7409.85	6967.9-7802.11	10.67	9.74-11.65	11.75	10.96-12.53	11.79	11.09-12.42
Apr-2016	1211.1	1013.92-	1614.5	1386.31-	2403.32	2124.25-	4.08	3.41-4.8	3.59	3.08-4.12	3.82	3.38-4.31

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
		1426.98		1854.83		2710.43						

Table 14.5. Norfolk Vanguard East. Guillemot design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	58.85	11.77-117.69	107.70	35.9-179.5	108.67	48.3-181.12	0.20	0.04-0.4	0.24	0.08-0.4	0.17	0.08-0.29
Apr-2012	0.00	0-0	8.74	0-26.22	8.80	0-26.4	0.00	0-0	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	17.07	0-51.22	0.00	0-0	0.00	0-0	0.03	0-0.08
Dec-2012	20.50	0-51.26	31.70	0-73.97	45.72	11.43-91.44	0.07	0-0.17	0.07	0-0.16	0.07	0.02-0.15
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	91.52	34.32-160.16	115.04	57.52-195.56	161.99	80.99-254.55	0.31	0.12-0.54	0.26	0.13-0.43	0.26	0.13-0.41
Mar-2013	0.00	0-0	25.55	0-76.66	38.92	0-90.81	0.00	0-0	0.06	0-0.17	0.06	0-0.14
Apr-2013	19.45	0-48.63	30.81	0-71.89	42.44	10.61-84.89	0.07	0-0.16	0.07	0-0.16	0.07	0.02-0.14
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	7.12	0-21.36	7.16	0-21.48	7.15	0-21.45	0.02	0-0.07	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	23.39	0-58.49	35.53	0-82.91	35.76	0-83.44	0.08	0-0.2	0.08	0-0.18	0.06	0-0.13

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	224.28	132.53-316.02	323.10	215.4-440.59	440.61	320.44-580.8	0.75	0.45-1.06	0.72	0.48-0.98	0.70	0.51-0.92
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	47.19	9.44-94.38	0.12	0.03-0.25	0.08	0.02-0.16	0.08	0.02-0.15
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	9.37	0-28.1	9.24	0-27.73	18.85	0-47.13	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08
Feb-2016	83.88	37.28-139.79	185.46	111.28-268.92	225.42	140.89-309.96	0.28	0.13-0.47	0.41	0.25-0.6	0.36	0.22-0.49
Mar-2016	9.25	0-27.75	242.31	149.11-335.5	281.78	187.85-385.1	0.03	0-0.09	0.54	0.33-0.75	0.45	0.3-0.61
Apr-2016	9.23	0-27.68	9.24	0-27.73	9.43	0-28.28	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05

Table 14.6. Norfolk Vanguard East. Guillemot design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	58.85	11.77-117.69	107.70	35.9-179.5	108.67	48.3-181.12	0.20	0.04-0.4	0.24	0.08-0.4	0.17	0.08-0.29
Apr-2012	0.00	0-0	8.74	0-26.22	8.80	0-26.4	0.00	0-0	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	17.07	0-51.22	0.00	0-0	0.00	0-0	0.03	0-0.08
Dec-2012	20.50	0-51.26	31.70	0-73.97	45.72	11.43-91.44	0.07	0-0.17	0.07	0-0.16	0.07	0.02-0.15
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	91.52	34.32-160.16	115.04	57.52-195.56	161.99	80.99-254.55	0.31	0.12-0.54	0.26	0.13-0.43	0.26	0.13-0.41
Mar-2013	0.00	0-0	25.55	0-76.66	38.92	0-90.81	0.00	0-0	0.06	0-0.17	0.06	0-0.14
Apr-2013	19.45	0-48.63	30.81	0-71.89	42.44	10.61-84.89	0.07	0-0.16	0.07	0-0.16	0.07	0.02-0.14
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	7.12	0-21.36	7.16	0-21.48	7.15	0-21.45	0.02	0-0.07	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	23.39	0-58.49	35.53	0-82.91	35.76	0-83.44	0.08	0-0.2	0.08	0-0.18	0.06	0-0.13

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	224.28	132.53-316.02	323.10	215.4-440.59	440.61	320.44-580.8	0.75	0.45-1.06	0.72	0.48-0.98	0.70	0.51-0.92
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	47.19	9.44-94.38	0.12	0.03-0.25	0.08	0.02-0.16	0.08	0.02-0.15
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	9.37	0-28.1	9.24	0-27.73	18.85	0-47.13	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08
Feb-2016	83.88	37.28-139.79	185.46	111.28-268.92	225.42	140.89-309.96	0.28	0.13-0.47	0.41	0.25-0.6	0.36	0.22-0.49
Mar-2016	9.25	0-27.75	237.65	149.11-335.5	281.78	187.85-385.1	0.03	0-0.09	0.53	0.33-0.75	0.45	0.3-0.61
Apr-2016	9.23	0-27.68	9.24	0-27.73	9.43	0-28.28	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05

Table 14.7. Norfolk Vanguard East. Guillemot design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	129.5	58.85-211.84	406.9	275.23-562.43	579.58	434.69-748.62	0.44	0.2-0.71	0.90	0.61-1.25	0.92	0.69-1.19
Apr-2012	286.7	199.8-399.6	480.8	358.4-603.15	686.39	536.79-836.2	0.96	0.67-1.34	1.07	0.8-1.34	1.09	0.85-1.33
May-2012	79.2	29.68-148.42	160.2	80.09-240.26	211.20	130.74-301.71	0.27	0.1-0.5	0.36	0.18-0.53	0.34	0.21-0.48
Jun-2012	62.0	15.51-124.06	60.7	15.18-121.43	74.41	14.88-148.82	0.21	0.05-0.42	0.13	0.03-0.27	0.12	0.02-0.24
Jul-2012	0.0	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	338.0	216.33-473.22	467.2	320.38-627.41	687.87	493.19-869.57	1.14	0.73-1.59	1.04	0.71-1.39	1.09	0.78-1.38
Sep-2012	527.5	386.82-679.87	743.9	583.68-915.58	986.62	773.6-1188.43	1.78	1.3-2.29	1.65	1.3-2.03	1.57	1.23-1.89
Oct-2012	318.6	218.5-427.9	484.8	356.15-613.37	764.75	597.13-953.31	1.07	0.74-1.44	1.08	0.79-1.36	1.22	0.95-1.52
Nov-2012	532.6	371.24-742.48	667.6	467.35-867.94	973.26	734.21-1246.46	1.79	1.25-2.5	1.48	1.04-1.93	1.55	1.17-1.98
Dec-2012	707.3	543.31-871.35	1046.1	855.91-1268.02	1440.17	1200.14-1680.48	2.38	1.83-2.93	2.32	1.9-2.82	2.29	1.91-2.67
Jan-2013	2213.2	1948.03-2478.38	3622.4	3274.88-3969.88	5115.23	4718.45-5555.17	7.45	6.56-8.34	8.05	7.27-8.82	8.14	7.51-8.84
Feb-2013	629.2	469.05-800.82	1092.8	885.78-1322.91	1400.04	1168.34-1643.03	2.12	1.58-2.7	2.43	1.97-2.94	2.23	1.86-2.61
Mar-2013	1166.2	945.58-1399.42	2133.8	1826.86-2453.59	2931.88	2594.59-3321.07	3.92	3.18-4.71	4.74	4.06-5.45	4.67	4.13-5.28
Apr-2013	651.7	505.79-807.32	1427.5	1222.14-1653.48	2429.85	2122.14-2727.21	2.19	1.7-2.72	3.17	2.71-3.67	3.87	3.38-4.34
May-2013	557.9	346.3-750.31	725.4	514.96-954.51	1031.91	783.01-1318.55	1.88	1.17-2.53	1.61	1.14-2.12	1.64	1.25-2.1
Jun-2013	10.7	0-42.8	21.1	0-52.69	52.34	10.47-104.67	0.04	0-0.14	0.05	0-0.12	0.08	0.02-0.17
Jul-2013	195.8	97.92-307.75	278.1	166.88-403.3	373.58	249.05-511.94	0.66	0.33-1.04	0.62	0.37-0.9	0.59	0.4-0.81

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Aug-2013	66.0	18.85-113.09	89.3	39.71-158.83	175.41	103.18-268.27	0.22	0.06-0.38	0.20	0.09-0.35	0.28	0.16-0.43
Sep-2013	567.1	442.84-699.22	855.2	690.23-1012.1	1469.38	1272.94-1673.68	1.91	1.49-2.35	1.90	1.53-2.25	2.34	2.03-2.66
Oct-2013	163.8	99.7-235	222.0	150.39-300.78	336.04	250.24-429.17	0.55	0.34-0.79	0.49	0.33-0.67	0.53	0.4-0.68
Nov-2013	138.9	69.44-208.31	157.9	87.73-236.88	185.66	114.93-274.07	0.47	0.23-0.7	0.35	0.19-0.53	0.30	0.18-0.44
Dec-2013	666.8	502.98-842.2	1054.2	840.99-1267.71	1454.17	1203.56-1704.78	2.24	1.69-2.83	2.34	1.87-2.82	2.31	1.92-2.71
Jan-2014	207.9	115.49-311.83	254.0	161.36-357.94	334.07	218.88-460.79	0.70	0.39-1.05	0.56	0.36-0.8	0.53	0.35-0.73
Feb-2014	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	705.5	557.87-845	1083.7	893.19-1257.38	1302.95	1087.17-1502.12	2.37	1.88-2.84	2.41	1.98-2.79	2.07	1.73-2.39
Oct-2015	1448.9	1257.51-1631.12	2305.2	2064.27-2527.62	3105.14	2822-3379.09	4.88	4.23-5.49	5.12	4.59-5.61	4.94	4.49-5.38
Nov-2015	1080.6	906.6-1245.44	1625.5	1430.44-1848.43	2085.18	1850.36-2320	3.64	3.05-4.19	3.61	3.18-4.11	3.32	2.94-3.69
Dec-2015	400.9	291.6-519.41	533.4	413.86-662.18	761.27	605.35-917.2	1.35	0.98-1.75	1.18	0.92-1.47	1.21	0.96-1.46
Jan-2016	533.9	402.77-674.41	1035.2	878.04-1220.01	1197.19	1008.42-1395.16	1.80	1.36-2.27	2.30	1.95-2.71	1.91	1.6-2.22
Feb-2016	1258.1	1071.74-1444.52	2262.7	2040.1-2485.21	3212.30	2939.68-3484.69	4.23	3.61-4.86	5.03	4.53-5.52	5.11	4.68-5.55
Mar-2016	2404.8	2192.11-2617.59	3839.7	3578.48-4110.16	5410.19	5081.45-5729.55	8.09	7.38-8.81	8.53	7.95-9.13	8.61	8.09-9.12
Apr-2016	913.4	756.56-1070.48	1220.0	1053.42-1395.62	1819.36	1593.12-2045.6	3.07	2.55-3.6	2.71	2.34-3.1	2.90	2.54-3.26

Table 14.8. Norfolk Vanguard East. Guillemot design based estimates of birds on the sea surface and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	170.3	77.43-278.74	535.4	362.15-740.04	762.61	571.95-985.03	0.57	0.26-0.94	1.19	0.8-1.64	1.21	0.91-1.57
Apr-2012	377.2	262.89-525.78	632.6	471.57-793.62	903.14	706.3-1100.27	1.27	0.88-1.77	1.41	1.05-1.76	1.44	1.12-1.75
May-2012	104.2	39.06-195.29	210.8	105.38-316.14	277.89	172.03-396.98	0.35	0.13-0.66	0.47	0.23-0.7	0.44	0.27-0.63
Jun-2012	81.6	20.41-163.24	79.9	19.97-159.77	97.91	19.58-195.82	0.27	0.07-0.55	0.18	0.04-0.35	0.16	0.03-0.31
Jul-2012	0.0	0-0	0.0	0-0	9.72	0-29.15	0.00	0-0	0.00	0-0	0.02	0-0.05
Aug-2012	444.8	284.64-622.65	614.8	421.55-825.54	905.09	648.93-1144.17	1.50	0.96-2.1	1.37	0.94-1.83	1.44	1.03-1.82
Sep-2012	694.1	508.98-894.56	978.8	768-1204.71	1298.18	1017.89-1563.72	2.34	1.71-3.01	2.17	1.71-2.68	2.07	1.62-2.49
Oct-2012	419.3	287.5-563.03	637.8	468.62-807.07	1006.24	785.7-1254.36	1.41	0.97-1.89	1.42	1.04-1.79	1.60	1.25-2
Nov-2012	700.9	488.48-976.95	878.5	614.94-1142.03	1280.61	966.07-1640.07	2.36	1.64-3.29	1.95	1.37-2.54	2.04	1.54-2.61
Dec-2012	930.7	714.89-1146.52	1376.5	1126.2-1668.44	1894.96	1579.13-2211.16	3.13	2.41-3.86	3.06	2.5-3.71	3.02	2.51-3.52
Jan-2013	2912.1	2563.19-3261.03	4766.3	4309.06-5223.52	6730.56	6208.49-7309.43	9.80	8.63-10.97	10.59	9.57-11.6	10.71	9.88-11.63
Feb-2013	827.9	617.17-1053.71	1438.0	1165.49-1740.67	1842.16	1537.29-2161.88	2.79	2.08-3.55	3.19	2.59-3.87	2.93	2.45-3.44
Mar-2013	1534.5	1244.18-1841.34	2807.7	2403.76-3228.41	3857.74	3413.93-4369.83	5.16	4.19-6.2	6.24	5.34-7.17	6.14	5.43-6.95
Apr-2013	857.5	665.51-1062.26	1878.3	1608.08-2175.64	3197.17	2792.28-3588.44	2.89	2.24-3.57	4.17	3.57-4.83	5.09	4.44-5.71
May-2013	734.1	455.65-987.25	954.5	677.58-1255.94	1357.78	1030.28-1734.94	2.47	1.53-3.32	2.12	1.51-2.79	2.16	1.64-2.76

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2013	14.1	0-56.32	27.7	0-69.32	68.86	13.77-137.72	0.05	0-0.19	0.06	0-0.15	0.11	0.02-0.22
Jul-2013	257.7	128.84-404.93	366.0	219.58-530.66	491.55	327.7-673.6	0.87	0.43-1.36	0.81	0.49-1.18	0.78	0.52-1.07
Aug-2013	86.8	24.8-148.8	117.6	52.25-208.99	230.80	135.76-352.99	0.29	0.08-0.5	0.26	0.12-0.46	0.37	0.22-0.56
Sep-2013	746.2	582.69-920.03	1125.2	908.2-1331.71	1933.40	1674.92-2202.21	2.51	1.96-3.1	2.50	2.02-2.96	3.08	2.67-3.5
Oct-2013	215.5	131.18-309.21	292.1	197.88-395.77	442.16	329.27-564.69	0.73	0.44-1.04	0.65	0.44-0.88	0.70	0.52-0.9
Nov-2013	182.7	91.36-274.09	207.8	115.44-311.68	244.29	151.22-360.61	0.61	0.31-0.92	0.46	0.26-0.69	0.39	0.24-0.57
Dec-2013	877.3	661.82-1108.16	1387.1	1106.57-1668.04	1913.38	1583.64-2243.13	2.95	2.23-3.73	3.08	2.46-3.71	3.04	2.52-3.57
Jan-2014	273.5	151.96-410.3	334.2	212.32-470.98	439.57	287.99-606.3	0.92	0.51-1.38	0.74	0.47-1.05	0.70	0.46-0.96
Feb-2014	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	928.3	734.03-1111.85	1425.9	1175.25-1654.45	1714.40	1430.49-1976.48	3.12	2.47-3.74	3.17	2.61-3.67	2.73	2.28-3.15
Oct-2015	1906.4	1654.62-2146.21	3033.2	2716.14-3325.82	4085.72	3713.16-4446.17	6.42	5.57-7.22	6.74	6.03-7.39	6.50	5.91-7.07
Nov-2015	1421.8	1192.9-1638.73	2138.8	1882.16-2432.14	2743.66	2434.69-3052.63	4.79	4.01-5.52	4.75	4.18-5.4	4.37	3.87-4.86
Dec-2015	527.6	383.68-683.43	701.9	544.56-871.29	1001.67	796.51-1206.84	1.78	1.29-2.3	1.56	1.21-1.94	1.59	1.27-1.92
Jan-2016	702.5	529.96-887.38	1362.1	1155.32-1605.28	1575.26	1326.87-1835.73	2.36	1.78-2.99	3.03	2.57-3.57	2.51	2.11-2.92
Feb-2016	1655.4	1410.19-1900.69	2977.2	2684.34-3270.02	4226.71	3868-4585.12	5.57	4.75-6.4	6.61	5.96-7.26	6.73	6.15-7.3
Mar-2016	3164.3	2884.36-3444.2	5052.2	4708.52-5408.1	7118.68	6686.12-7538.88	10.65	9.71-11.59	11.22	10.46-12.01	11.33	10.64-12
Apr-2016	1201.8	995.47-1408.53	1605.3	1386.08-	2393.89	2096.21-	4.04	3.35-4.74	3.57	3.08-4.08	3.81	3.34-4.28

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
				1836.35		2691.58						

Table 14.9. Norfolk Vanguard East. Guillemot design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	129.5	58.85-211.84	413.3	281.67-575.31	603.74	446.61-772.77	0.44	0.2-0.71	0.92	0.63-1.28	0.96	0.71-1.23
Apr-2012	286.7	199.8-399.6	485.4	363-607.76	687.18	545.51-844.8	0.96	0.67-1.34	1.08	0.81-1.35	1.09	0.87-1.34
May-2012	164.0	104.55-241.77	277.7	188.33-376.67	369.45	270.2-487.35	0.55	0.35-0.81	0.62	0.42-0.84	0.59	0.43-0.78
Jun-2012	62.0	15.51-124.06	60.7	15.18-121.43	74.41	14.88-148.82	0.21	0.05-0.42	0.13	0.03-0.27	0.12	0.02-0.24
Jul-2012	0.0	0-0	0.0	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	358.2	235.95-500.06	489.5	340.86-655.92	694.35	512.65-889.19	1.21	0.79-1.68	1.09	0.76-1.46	1.10	0.82-1.41
Sep-2012	527.5	386.82-679.87	743.9	583.68-915.58	986.62	773.6-1188.43	1.78	1.3-2.29	1.65	1.3-2.03	1.57	1.23-1.89
Oct-2012	318.6	218.5-427.9	484.8	356.15-613.37	764.75	597.13-953.31	1.07	0.74-1.44	1.08	0.79-1.36	1.22	0.95-1.52
Nov-2012	532.6	371.24-742.48	667.6	467.35-867.94	973.26	734.21-1246.46	1.79	1.25-2.5	1.48	1.04-1.93	1.55	1.17-1.98
Dec-2012	697.1	543.31-871.35	1046.1	855.91-1268.02	1440.17	1200.14-1680.48	2.35	1.83-2.93	2.32	1.9-2.82	2.29	1.91-2.67
Jan-2013	2213.2	1948.03-2478.38	3622.4	3274.88-3969.88	5115.23	4718.45-5555.17	7.45	6.56-8.34	8.05	7.27-8.82	8.14	7.51-8.84
Feb-2013	629.2	469.05-800.82	1081.3	885.78-1322.91	1400.04	1168.34-1643.03	2.12	1.58-2.7	2.40	1.97-2.94	2.23	1.86-2.61
Mar-2013	1174.8	945.9-1412.18	2142.8	1839.64-2462.33	2944.86	2616.56-3344.15	3.95	3.18-4.75	4.76	4.09-5.47	4.69	4.16-5.32
Apr-2013	651.7	505.79-807.32	1427.5	1222.14-1653.48	2419.24	2122.14-2727.21	2.19	1.7-2.72	3.17	2.71-3.67	3.85	3.38-4.34
May-2013	557.9	346.3-750.31	725.4	514.96-954.51	1031.91	783.01-1318.55	1.88	1.17-2.53	1.61	1.14-2.12	1.64	1.25-2.1
Jun-2013	10.7	0-42.8	21.1	0-52.69	52.34	10.47-104.67	0.04	0-0.14	0.05	0-0.12	0.08	0.02-0.17

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2013	195.8	97.92-307.75	278.1	166.88-403.3	373.58	249.05-511.94	0.66	0.33-1.04	0.62	0.37-0.9	0.59	0.4-0.81
Aug-2013	66.0	18.85-113.09	89.3	39.71-158.83	175.41	103.18-268.27	0.22	0.06-0.38	0.20	0.09-0.35	0.28	0.16-0.43
Sep-2013	559.4	442.84-699.22	855.2	690.23-1012.1	1469.38	1272.94-1673.68	1.88	1.49-2.35	1.90	1.53-2.25	2.34	2.03-2.66
Oct-2013	163.8	99.7-235	222.0	150.39-300.78	336.04	250.24-429.17	0.55	0.34-0.79	0.49	0.33-0.67	0.53	0.4-0.68
Nov-2013	138.9	69.44-208.31	157.9	87.73-236.88	185.66	114.93-274.07	0.47	0.23-0.7	0.35	0.19-0.53	0.30	0.18-0.44
Dec-2013	666.8	502.98-842.2	1054.2	840.99-1267.71	1454.17	1203.56-1704.78	2.24	1.69-2.83	2.34	1.87-2.82	2.31	1.92-2.71
Jan-2014	207.9	115.49-311.83	254.0	161.36-357.94	334.07	218.88-460.79	0.70	0.39-1.05	0.56	0.36-0.8	0.53	0.35-0.73
Feb-2014	756.3	634.34-884.46	1183.4	1034.7-1350.69	1399.61	1245.32-1565.06	2.55	2.13-2.98	2.63	2.3-3	2.23	1.98-2.49
Sep-2015	705.5	557.87-845	1075.4	893.19-1257.38	1294.65	1087.17-1502.12	2.37	1.88-2.84	2.39	1.98-2.79	2.06	1.73-2.39
Oct-2015	1439.8	1257.51-1631.12	2305.2	2064.27-2527.62	3105.14	2822-3379.09	4.85	4.23-5.49	5.12	4.59-5.61	4.94	4.49-5.38
Nov-2015	1071.4	906.6-1245.44	1625.5	1430.44-1848.43	2094.57	1850.36-2320	3.61	3.05-4.19	3.61	3.18-4.11	3.33	2.94-3.69
Dec-2015	400.9	291.6-519.41	533.4	413.86-662.18	761.27	605.35-917.2	1.35	0.98-1.75	1.18	0.92-1.47	1.21	0.96-1.46
Jan-2016	533.9	402.77-674.41	1035.2	878.04-1220.01	1197.19	1008.42-1395.16	1.80	1.36-2.27	2.30	1.95-2.71	1.91	1.6-2.22
Feb-2016	1258.1	1071.74-1444.52	2253.4	2040.1-2485.21	3221.70	2939.68-3484.69	4.23	3.61-4.86	5.01	4.53-5.52	5.13	4.68-5.55
Mar-2016	2395.6	2192.11-2617.59	3830.3	3578.48-4110.16	5410.19	5081.45-5729.55	8.06	7.38-8.81	8.51	7.95-9.13	8.61	8.09-9.12
Apr-2016	913.4	756.56-1070.48	1220.0	1053.42-	1819.36	1593.12-2045.6	3.07	2.55-3.6	2.71	2.34-3.1	2.90	2.54-3.26

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
				1395.62								

Table 14.10. Norfolk Vanguard East. Guillemot design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	170.3	77.43-278.74	543.8	370.62-756.99	794.39	587.64-1016.81	0.57	0.26-0.94	1.21	0.82-1.68	1.26	0.94-1.62
Apr-2012	377.2	262.89-525.78	638.6	477.63-799.68	904.19	717.78-1111.58	1.27	0.88-1.77	1.42	1.06-1.78	1.44	1.14-1.77
May-2012	215.8	137.57-318.12	365.4	247.8-495.61	486.12	355.53-641.26	0.73	0.46-1.07	0.81	0.55-1.1	0.77	0.57-1.02
Jun-2012	81.6	20.41-163.24	79.9	19.97-159.77	97.91	19.58-195.82	0.27	0.07-0.55	0.18	0.04-0.35	0.16	0.03-0.31
Jul-2012	0.0	0-0	0.0	0-0	9.72	0-29.15	0.00	0-0	0.00	0-0	0.02	0-0.05
Aug-2012	471.3	310.46-657.97	644.1	448.5-863.05	913.62	674.54-1169.98	1.59	1.04-2.21	1.43	1-1.92	1.45	1.07-1.86
Sep-2012	694.1	508.98-894.56	978.8	768-1204.71	1298.18	1017.89-1563.72	2.34	1.71-3.01	2.17	1.71-2.68	2.07	1.62-2.49
Oct-2012	419.3	287.5-563.03	637.8	468.62-807.07	1006.24	785.7-1254.36	1.41	0.97-1.89	1.42	1.04-1.79	1.60	1.25-2
Nov-2012	700.9	488.48-976.95	878.5	614.94-1142.03	1280.61	966.07-1640.07	2.36	1.64-3.29	1.95	1.37-2.54	2.04	1.54-2.61
Dec-2012	917.2	714.89-1146.52	1376.5	1126.2-1668.44	1894.96	1579.13-2211.16	3.09	2.41-3.86	3.06	2.5-3.71	3.02	2.51-3.52
Jan-2013	2912.1	2563.19-3261.03	4766.3	4309.06-5223.52	6730.56	6208.49-7309.43	9.80	8.63-10.97	10.59	9.57-11.6	10.71	9.88-11.63
Feb-2013	827.9	617.17-1053.71	1422.8	1165.49-1740.67	1842.16	1537.29-2161.88	2.79	2.08-3.55	3.16	2.59-3.87	2.93	2.45-3.44
Mar-2013	1545.7	1244.61-1858.14	2819.5	2420.57-3239.91	3874.81	3442.84-4400.2	5.20	4.19-6.25	6.26	5.38-7.2	6.17	5.48-7
Apr-2013	857.5	665.51-1062.26	1878.3	1608.08-2175.64	3183.20	2792.28-3588.44	2.89	2.24-3.57	4.17	3.57-4.83	5.07	4.44-5.71
May-2013	734.1	455.65-987.25	954.5	677.58-1255.94	1357.78	1030.28-	2.47	1.53-3.32	2.12	1.51-2.79	2.16	1.64-2.76

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
						1734.94						
Jun-2013	14.1	0-56.32	27.7	0-69.32	68.86	13.77-137.72	0.05	0-0.19	0.06	0-0.15	0.11	0.02-0.22
Jul-2013	257.7	128.84-404.93	366.0	219.58-530.66	491.55	327.7-673.6	0.87	0.43-1.36	0.81	0.49-1.18	0.78	0.52-1.07
Aug-2013	86.8	24.8-148.8	117.6	52.25-208.99	230.80	135.76-352.99	0.29	0.08-0.5	0.26	0.12-0.46	0.37	0.22-0.56
Sep-2013	736.0	582.69-920.03	1125.2	908.2-1331.71	1933.40	1674.92-2202.21	2.48	1.96-3.1	2.50	2.02-2.96	3.08	2.67-3.5
Oct-2013	215.5	131.18-309.21	292.1	197.88-395.77	442.16	329.27-564.69	0.73	0.44-1.04	0.65	0.44-0.88	0.70	0.52-0.9
Nov-2013	182.7	91.36-274.09	207.8	115.44-311.68	244.29	151.22-360.61	0.61	0.31-0.92	0.46	0.26-0.69	0.39	0.24-0.57
Dec-2013	877.3	661.82-1108.16	1387.1	1106.57-1668.04	1913.38	1583.64-2243.13	2.95	2.23-3.73	3.08	2.46-3.71	3.04	2.52-3.57
Jan-2014	273.5	151.96-410.3	334.2	212.32-470.98	439.57	287.99-606.3	0.92	0.51-1.38	0.74	0.47-1.05	0.70	0.46-0.96
Feb-2014	995.1	834.66-1163.76	1557.1	1361.45-1777.22	1841.59	1638.58-2059.29	3.35	2.81-3.92	3.46	3.02-3.95	2.93	2.61-3.28
Sep-2015	928.3	734.03-1111.85	1415.0	1175.25-1654.45	1703.48	1430.49-1976.48	3.12	2.47-3.74	3.14	2.61-3.67	2.71	2.28-3.15
Oct-2015	1894.4	1654.62-2146.21	3033.2	2716.14-3325.82	4085.72	3713.16-4446.17	6.38	5.57-7.22	6.74	6.03-7.39	6.50	5.91-7.07
Nov-2015	1409.8	1192.9-1638.73	2138.8	1882.16-2432.14	2756.02	2434.69-3052.63	4.74	4.01-5.52	4.75	4.18-5.4	4.39	3.87-4.86
Dec-2015	527.6	383.68-683.43	701.9	544.56-871.29	1001.67	796.51-1206.84	1.78	1.29-2.3	1.56	1.21-1.94	1.59	1.27-1.92
Jan-2016	702.5	529.96-887.38	1362.1	1155.32-1605.28	1575.26	1326.87-1835.73	2.36	1.78-2.99	3.03	2.57-3.57	2.51	2.11-2.92
Feb-2016	1655.4	1410.19-1900.69	2965.0	2684.34-3270.02	4239.07	3868-4585.12	5.57	4.75-6.4	6.59	5.96-7.26	6.75	6.15-7.3
Mar-2016	3152.1	2884.36-3444.2	5039.9	4708.52-5408.1	7118.68	6686.12-	10.61	9.71-11.59	11.19	10.46-12.01	11.33	10.64-12

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
						7538.88						
Apr-2016	1201.8	995.47-1408.53	1605.3	1386.08-1836.35	2393.89	2096.21-2691.58	4.04	3.35-4.74	3.57	3.08-4.08	3.81	3.34-4.28

Table 15.1. Norfolk Vanguard East. Little Tern design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 15.2. Norfolk Vanguard East. Little Tern design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 15.3. Norfolk Vanguard East. Little Tern design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 16.1. Norfolk Vanguard East. Black Tern design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 16.2. Norfolk Vanguard East. Black Tern design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 16.3. Norfolk Vanguard East. Black Tern design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 17.1. Norfolk Vanguard East. Sandwich Tern design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 17.2. Norfolk Vanguard East. Sandwich Tern design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	7.77	0-23.31	7.85	0-23.54	7.86	0-23.57	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 17.3. Norfolk Vanguard East. Sandwich Tern design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2012	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2013	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2014	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 18.1. Norfolk Vanguard East. Commic Tern design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	89.0	29.68-148.42	210.2	120.13-300.33	281.6	181.02-382.16	0.30	0.1-0.5	0.47	0.27-0.67	0.45	0.29-0.61
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	26.0	0-64.89	0.00	0-0	0.00	0-0	0.04	0-0.1
Sep-2012	11.7	0-35.17	34.3	0-80.11	56.1	11.21-112.12	0.04	0-0.12	0.08	0-0.18	0.09	0.02-0.18
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	10.3	0-30.81	21.2	0-53.05	0.00	0-0	0.02	0-0.07	0.03	0-0.08
May-2013	153.9	57.72-269.34	171.8	76.36-305.44	172.0	76.44-286.64	0.52	0.19-0.91	0.38	0.17-0.68	0.27	0.12-0.46
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	15.5	0-38.85	23.5	0-54.92	23.6	0-55	0.05	0-0.13	0.05	0-0.12	0.04	0-0.09
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 18.2. Norfolk Vanguard East. Commic Tern design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	89.0	39.58-148.42	140.2	70.08-220.24	211.2	130.74-311.76	0.30	0.13-0.5	0.31	0.16-0.49	0.34	0.21-0.5
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	26.0	0-64.89	0.00	0-0	0.00	0-0	0.04	0-0.1
Sep-2012	11.7	0-46.89	34.3	0-80.11	56.1	11.21-112.12	0.04	0-0.16	0.08	0-0.18	0.09	0.02-0.18
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	10.3	0-30.81	21.2	0-53.05	0.00	0-0	0.02	0-0.07	0.03	0-0.08
May-2013	153.9	57.72-269.34	171.8	57.27-286.35	172.0	76.44-305.75	0.52	0.19-0.91	0.38	0.13-0.64	0.27	0.12-0.49
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	15.5	0-38.85	23.5	0-54.92	23.6	0-55	0.05	0-0.13	0.05	0-0.12	0.04	0-0.09
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 18.3. Norfolk Vanguard East. Commic Tern design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2012	0	0-0	70.1	20.02-130.14	70.4	20.11-130.74	0	0-0	0.16	0.04-0.29	0.11	0.03-0.21
Jun-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2012	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2013	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2014	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 19.1. Norfolk Vanguard East. Kittiwake design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	23.9	0-59.83	48.3	12.07-96.6	0.04	0-0.12	0.05	0-0.13	0.08	0.02-0.15
Apr-2012	52.12	17.37-95.56	96.2	43.71-157.34	193.6	114.4-272.79	0.18	0.06-0.32	0.21	0.1-0.35	0.31	0.18-0.43
May-2012	69.26	29.68-118.74	100.1	49.8-170.19	160.9	90.51-241.37	0.23	0.1-0.4	0.22	0.11-0.38	0.26	0.14-0.38
Jun-2012	31.02	0-77.54	45.5	0-106.25	59.5	14.88-119.06	0.10	0-0.26	0.10	0-0.24	0.09	0.02-0.19
Jul-2012	29.14	7.28-58.27	29.3	7.32-58.55	44.3	14.77-81.23	0.10	0.02-0.2	0.07	0.02-0.13	0.07	0.02-0.13
Aug-2012	67.60	13.52-135.2	66.8	13.35-133.49	129.8	51.91-220.64	0.23	0.05-0.46	0.15	0.03-0.3	0.21	0.08-0.35
Sep-2012	70.33	23.44-128.94	68.7	22.89-125.89	123.3	56.06-201.81	0.24	0.08-0.43	0.15	0.05-0.28	0.20	0.09-0.32
Oct-2012	27.31	0-63.73	39.6	9.65-89.04	83.8	31.43-146.66	0.09	0-0.21	0.09	0.02-0.2	0.13	0.05-0.23
Nov-2012	403.52	242.11-564.93	617.6	433.97-801.18	956.2	700.06-1212.31	1.36	0.81-1.9	1.37	0.96-1.78	1.52	1.11-1.93
Dec-2012	184.52	112.76-266.53	274.7	179.64-380.4	434.3	297.18-571.5	0.62	0.38-0.9	0.61	0.4-0.84	0.69	0.47-0.91
Jan-2013	846.52	683.08-1019.91	1053.0	852.94-1253.35	1479.9	1276.13-1726.79	2.85	2.3-3.43	2.34	1.89-2.78	2.35	2.03-2.75
Feb-2013	114.40	45.76-194.48	126.5	57.52-207.06	162.0	80.99-254.55	0.39	0.15-0.65	0.28	0.13-0.46	0.26	0.13-0.41
Mar-2013	129.58	51.83-220.28	204.4	115-306.98	259.5	155.68-376.22	0.44	0.17-0.74	0.45	0.26-0.68	0.41	0.25-0.6
Apr-2013	9.73	0-29.18	20.5	0-51.35	127.3	63.66-201.6	0.03	0-0.1	0.05	0-0.11	0.20	0.1-0.32
May-2013	230.86	115.43-365.54	458.2	286.35-629.98	592.4	382.19-783.49	0.78	0.39-1.23	1.02	0.64-1.4	0.94	0.61-1.25
Jun-2013	21.40	0-53.5	21.1	0-52.69	41.9	10.47-83.74	0.07	0-0.18	0.05	0-0.12	0.07	0.02-0.13
Jul-2013	153.87	69.94-251.79	180.8	97.35-292.05	359.7	235.22-498.1	0.52	0.24-0.85	0.40	0.22-0.65	0.57	0.37-0.79
Aug-2013	0.00	0-0	19.9	0-49.64	61.9	20.64-113.5	0.00	0-0	0.04	0-0.11	0.10	0.03-0.18
Sep-2013	46.61	15.54-85.46	70.6	31.38-117.69	78.6	31.43-125.72	0.16	0.05-0.29	0.16	0.07-0.26	0.13	0.05-0.2
Oct-2013	7.12	0-21.36	14.3	0-35.81	28.6	7.15-57.2	0.02	0-0.07	0.03	0-0.08	0.05	0.01-0.09
Nov-2013	60.76	17.36-112.83	61.4	26.32-105.28	70.7	26.52-123.77	0.20	0.06-0.38	0.14	0.06-0.23	0.11	0.04-0.2

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	725.23	561.47-888.99	947.6	746.23-1148.96	1191.9	977.39-1442.25	2.44	1.89-2.99	2.10	1.66-2.55	1.90	1.56-2.29
Jan-2014	1362.81	1131.83-1593.8	1443.3	1200.56-1686.09	1555.2	1313.26-1820.13	4.59	3.81-5.36	3.21	2.67-3.75	2.47	2.09-2.9
Feb-2014	397.58	285.44-530.11	636.4	479.76-802.86	1161.6	961.33-1362.14	1.34	0.96-1.78	1.41	1.07-1.78	1.85	1.53-2.17
Sep-2015	24.61	0-57.43	24.8	0-57.91	41.5	8.3-82.99	0.08	0-0.19	0.06	0-0.13	0.07	0.01-0.13
Oct-2015	255.15	164.02-346.5	379.6	268.48-481.64	490.8	368.09-622.92	0.86	0.55-1.17	0.84	0.6-1.07	0.78	0.59-0.99
Nov-2015	650.19	512.83-787.56	1096.0	919.34-1281.83	1653.1	1427.46-1859.75	2.19	1.73-2.65	2.43	2.04-2.85	2.63	2.27-2.96
Dec-2015	200.47	127.57-282.48	331.1	229.92-441.45	440.2	339.13-568.66	0.67	0.43-0.95	0.74	0.51-0.98	0.70	0.54-0.9
Jan-2016	234.17	149.87-327.84	397.4	295.76-517.58	461.9	339.36-593.88	0.79	0.5-1.1	0.88	0.66-1.15	0.74	0.54-0.95
Feb-2016	596.45	456.66-736.24	862.4	695.49-1029.32	1268.0	1070.77-1474.65	2.01	1.54-2.48	1.92	1.54-2.29	2.02	1.7-2.35
Mar-2016	1692.65	1498.41-1886.88	2311.2	2078.26-2544.24	3127.8	2864.77-3418.94	5.70	5.04-6.35	5.13	4.62-5.65	4.98	4.56-5.44
Apr-2016	673.52	544.35-811.91	794.9	637.73-951.98	914.4	754.14-1102.93	2.27	1.83-2.73	1.77	1.42-2.11	1.46	1.2-1.76

Table 19.2. Norfolk Vanguard East. Kittiwake design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	17.41	0-46.61	55.9	16.01-103.89	94.0	38.51-166.44	0.06	0-0.16	0.12	0.04-0.23	0.15	0.06-0.26
Apr-2012	52.12	17.37-95.56	96.2	43.71-157.34	193.6	114.4-272.79	0.18	0.06-0.32	0.21	0.1-0.35	0.31	0.18-0.43
May-2012	76.72	29.68-137.31	117.3	58.21-188.36	198.2	118.9-288.09	0.26	0.1-0.46	0.26	0.13-0.42	0.32	0.19-0.46
Jun-2012	31.02	0-77.54	45.5	0-106.25	59.5	14.88-119.06	0.10	0-0.26	0.10	0-0.24	0.09	0.02-0.19
Jul-2012	58.22	26.67-97.05	68.6	31.89-110.09	118.8	75.05-168.83	0.20	0.09-0.33	0.15	0.07-0.24	0.19	0.12-0.27
Aug-2012	67.60	13.52-135.2	66.8	13.35-133.49	129.8	51.91-220.64	0.23	0.05-0.46	0.15	0.03-0.3	0.21	0.08-0.35
Sep-2012	70.33	23.44-128.94	68.7	22.89-125.89	123.3	56.06-201.81	0.24	0.08-0.43	0.15	0.05-0.28	0.20	0.09-0.32
Oct-2012	27.31	0-63.73	39.6	9.65-89.04	83.8	31.43-146.66	0.09	0-0.21	0.09	0.02-0.2	0.13	0.05-0.23
Nov-2012	403.52	242.11-564.93	617.6	433.97-801.18	956.2	700.06-1212.31	1.36	0.81-1.9	1.37	0.96-1.78	1.52	1.11-1.93
Dec-2012	184.52	112.76-266.53	274.7	179.64-380.4	434.3	297.18-571.5	0.62	0.38-0.9	0.61	0.4-0.84	0.69	0.47-0.91
Jan-2013	922.68	742.62-1113.92	1151.9	950.14-1362.95	1601.6	1386.43-1863.09	3.11	2.5-3.75	2.56	2.11-3.03	2.55	2.21-2.96
Feb-2013	114.40	45.76-194.48	126.5	57.52-207.06	162.0	80.99-254.55	0.39	0.15-0.65	0.28	0.13-0.46	0.26	0.13-0.41
Mar-2013	129.58	51.83-220.28	204.4	115-306.98	259.5	155.68-376.22	0.44	0.17-0.74	0.45	0.26-0.68	0.41	0.25-0.6
Apr-2013	9.73	0-29.18	20.5	0-51.35	127.3	63.66-201.6	0.03	0-0.1	0.05	0-0.11	0.20	0.1-0.32
May-2013	230.86	115.43-365.54	458.2	286.35-629.98	592.4	382.19-783.49	0.78	0.39-1.23	1.02	0.64-1.4	0.94	0.61-1.25
Jun-2013	21.40	0-53.5	21.1	0-52.69	41.9	10.47-83.74	0.07	0-0.18	0.05	0-0.12	0.07	0.02-0.13
Jul-2013	153.87	69.94-251.79	180.8	97.35-292.05	359.7	235.22-498.1	0.52	0.24-0.85	0.40	0.22-0.65	0.57	0.37-0.79
Aug-2013	0.00	0-0	19.9	0-49.64	61.9	20.64-113.5	0.00	0-0	0.04	0-0.11	0.10	0.03-0.18
Sep-2013	46.61	15.54-85.46	70.6	31.38-117.69	78.6	31.43-125.72	0.16	0.05-0.29	0.16	0.07-0.26	0.13	0.05-0.2
Oct-2013	7.12	0-21.36	14.3	0-35.81	28.6	7.15-57.2	0.02	0-0.07	0.03	0-0.08	0.05	0.01-0.09

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Nov-2013	60.76	17.36-112.83	61.4	26.32-105.28	70.7	26.52-123.77	0.20	0.06-0.38	0.14	0.06-0.23	0.11	0.04-0.2
Dec-2013	725.23	561.47-888.99	947.6	746.23-1148.96	1191.9	977.39-1442.25	2.44	1.89-2.99	2.10	1.66-2.55	1.90	1.56-2.29
Jan-2014	1362.81	1131.83-1593.8	1443.3	1200.56-1686.09	1555.2	1313.26-1820.13	4.59	3.81-5.36	3.21	2.67-3.75	2.47	2.09-2.9
Feb-2014	555.82	405.72-707.45	905.9	731.14-1101.63	1629.6	1389.87-1886.89	1.87	1.37-2.38	2.01	1.62-2.45	2.59	2.21-3
Sep-2015	24.61	0-57.43	24.8	0-57.91	41.5	8.3-82.99	0.08	0-0.19	0.06	0-0.13	0.07	0.01-0.13
Oct-2015	255.15	164.02-346.5	379.6	268.48-481.64	490.8	368.09-622.92	0.86	0.55-1.17	0.84	0.6-1.07	0.78	0.59-0.99
Nov-2015	650.19	512.83-787.56	1096.0	919.34-1281.83	1653.1	1427.46-1859.75	2.19	1.73-2.65	2.43	2.04-2.85	2.63	2.27-2.96
Dec-2015	200.47	127.57-282.48	331.1	229.92-441.45	440.2	339.13-568.66	0.67	0.43-0.95	0.74	0.51-0.98	0.70	0.54-0.9
Jan-2016	234.17	149.87-327.84	397.4	295.76-517.58	461.9	339.36-593.88	0.79	0.5-1.1	0.88	0.66-1.15	0.74	0.54-0.95
Feb-2016	596.45	456.66-736.24	862.4	695.49-1029.32	1268.0	1070.77-1474.65	2.01	1.54-2.48	1.92	1.54-2.29	2.02	1.7-2.35
Mar-2016	1692.65	1498.41-1886.88	2311.2	2078.26-2544.24	3154.9	2883.13-3436.66	5.70	5.04-6.35	5.13	4.62-5.65	5.02	4.59-5.47
Apr-2016	691.97	562.8-839.59	813.3	665.46-979.71	933.2	763.57-1121.78	2.33	1.89-2.83	1.81	1.48-2.18	1.49	1.22-1.79

Table 19.3. Norfolk Vanguard East. Kittiwake design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	23.93	0-59.83	48.3	12.07-96.6	0.04	0-0.12	0.05	0-0.13	0.08	0.02-0.15
Apr-2012	26.06	0-60.81	69.93	26.22-122.38	105.6	52.8-167.2	0.09	0-0.2	0.16	0.06-0.27	0.17	0.08-0.27
May-2012	29.68	0-69.26	50.06	10.01-100.11	100.6	40.23-170.97	0.10	0-0.23	0.11	0.02-0.22	0.16	0.06-0.27
Jun-2012	31.02	0-77.54	30.36	0-75.89	44.6	0-104.18	0.10	0-0.26	0.07	0-0.17	0.07	0-0.17
Jul-2012	7.28	0-21.85	7.32	0-21.96	14.8	0-36.92	0.02	0-0.07	0.02	0-0.05	0.02	0-0.06
Aug-2012	13.52	0-40.56	13.35	0-40.05	13.0	0-51.91	0.05	0-0.14	0.03	0-0.09	0.02	0-0.08
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	9.10	0-27.31	9.89	0-29.68	20.9	0-52.64	0.03	0-0.09	0.02	0-0.07	0.03	0-0.08
Nov-2012	338.96	193.69-500.37	484.04	317.13-650.96	768.4	546.39-990.76	1.14	0.65-1.68	1.08	0.7-1.45	1.22	0.87-1.58
Dec-2012	82.01	30.75-143.52	147.94	73.97-232.47	251.5	159.73-354.33	0.28	0.1-0.48	0.33	0.16-0.52	0.40	0.25-0.56
Jan-2013	163.19	91.79-244.78	242.19	147.42-347.5	364.6	246.65-482.84	0.55	0.31-0.82	0.54	0.33-0.77	0.58	0.39-0.77
Feb-2013	102.96	45.47-171.6	115.04	46.01-195.56	150.4	80.99-231.41	0.35	0.15-0.58	0.26	0.1-0.43	0.24	0.13-0.37
Mar-2013	90.70	25.92-168.45	140.55	63.89-229.99	155.7	77.84-233.51	0.31	0.09-0.57	0.31	0.14-0.51	0.25	0.12-0.37
Apr-2013	9.73	0-29.18	20.54	0-51.35	106.1	42.44-180.38	0.03	0-0.1	0.05	0-0.11	0.17	0.07-0.29
May-2013	192.39	76.95-307.82	248.17	114.54-400.9	324.9	191.09-496.85	0.65	0.26-1.04	0.55	0.25-0.89	0.52	0.3-0.79
Jun-2013	10.70	0-32.1	10.54	0-31.88	20.9	0-52.34	0.04	0-0.11	0.02	0-0.07	0.03	0-0.08
Jul-2013	13.99	0-41.97	27.81	0-69.53	110.7	41.51-193.71	0.05	0-0.14	0.06	0-0.15	0.18	0.07-0.31
Aug-2013	0.00	0-0	0.00	0-0	10.3	0-31.21	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	7.77	0-23.31	15.69	0-39.23	23.6	0-55	0.03	0-0.08	0.03	0-0.09	0.04	0-0.09
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	17.36	0-43.4	17.55	0-43.87	26.5	0-61.89	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
Dec-2013	386.01	257.34-526.38	544.87	390.88-687.01	655.6	488.7-822.44	1.30	0.87-1.77	1.21	0.87-1.53	1.04	0.78-1.31

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	1270.42	1062.53-1501.4	1339.41	1119.73-1582.17	1393.9	1163.5-1647.33	4.28	3.58-5.05	2.98	2.49-3.51	2.22	1.85-2.62
Feb-2014	397.58	285.19-530.11	636.41	489.55-783.28	1161.6	951.07-1371.9	1.34	0.96-1.78	1.41	1.09-1.74	1.85	1.51-2.18
Sep-2015	16.41	0-41.02	16.54	0-41.36	16.6	0-41.5	0.06	0-0.14	0.04	0-0.09	0.03	0-0.07
Oct-2015	63.79	27.11-118.46	120.35	55.55-194.41	169.9	94.38-245.39	0.21	0.09-0.4	0.27	0.12-0.43	0.27	0.15-0.39
Nov-2015	485.35	357.15-613.56	678.07	529.45-826.68	873.5	723.24-1042.59	1.63	1.2-2.06	1.51	1.18-1.84	1.39	1.15-1.66
Dec-2015	145.80	82.01-218.7	229.92	146.92-312.7	330.2	220.13-431.08	0.49	0.28-0.74	0.51	0.33-0.69	0.53	0.35-0.69
Jan-2016	187.34	112.4-271.64	277.28	184.85-378.94	329.9	226.24-443.06	0.63	0.38-0.91	0.62	0.41-0.84	0.53	0.36-0.71
Feb-2016	223.67	149.11-307.54	278.20	194.74-371.16	479.0	356.92-610.76	0.75	0.5-1.04	0.62	0.43-0.82	0.76	0.57-0.97
Mar-2016	721.46	582.71-878.7	987.87	820.12-1146.31	1502.8	1296.19-1709.47	2.43	1.96-2.96	2.19	1.82-2.55	2.39	2.06-2.72
Apr-2016	369.05	267.56-479.77	434.40	314.25-563.79	490.2	358.22-622.16	1.24	0.9-1.61	0.96	0.7-1.25	0.78	0.57-0.99

Table 19.4. Norfolk Vanguard East. Kittiwake design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	23.93	0-59.83	48.3	12.07-96.6	0.04	0-0.12	0.05	0-0.13	0.08	0.02-0.15
Apr-2012	26.06	0-60.81	69.93	26.22-122.38	105.6	52.8-167.2	0.09	0-0.2	0.16	0.06-0.27	0.17	0.08-0.27
May-2012	29.68	0-69.26	50.06	10.01-100.11	100.6	40.23-170.97	0.10	0-0.23	0.11	0.02-0.22	0.16	0.06-0.27
Jun-2012	31.02	0-77.54	30.36	0-75.89	44.6	0-104.18	0.10	0-0.26	0.07	0-0.17	0.07	0-0.17
Jul-2012	7.28	0-21.85	7.32	0-21.96	14.8	0-36.92	0.02	0-0.07	0.02	0-0.05	0.02	0-0.06
Aug-2012	13.52	0-40.56	13.35	0-40.05	13.0	0-51.91	0.05	0-0.14	0.03	0-0.09	0.02	0-0.08
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	9.10	0-27.31	9.89	0-29.68	20.9	0-52.64	0.03	0-0.09	0.02	0-0.07	0.03	0-0.08
Nov-2012	338.96	193.69-500.37	484.04	317.13-650.96	768.4	546.39-990.76	1.14	0.65-1.68	1.08	0.7-1.45	1.22	0.87-1.58
Dec-2012	82.01	30.75-143.52	147.94	73.97-232.47	251.5	159.73-354.33	0.28	0.1-0.48	0.33	0.16-0.52	0.40	0.25-0.56
Jan-2013	163.19	91.79-244.78	242.19	147.42-347.5	364.6	246.65-482.84	0.55	0.31-0.82	0.54	0.33-0.77	0.58	0.39-0.77
Feb-2013	102.96	45.47-171.6	115.04	46.01-195.56	150.4	80.99-231.41	0.35	0.15-0.58	0.26	0.1-0.43	0.24	0.13-0.37
Mar-2013	90.70	25.92-168.45	140.55	63.89-229.99	155.7	77.84-233.51	0.31	0.09-0.57	0.31	0.14-0.51	0.25	0.12-0.37
Apr-2013	9.73	0-29.18	20.54	0-51.35	106.1	42.44-180.38	0.03	0-0.1	0.05	0-0.11	0.17	0.07-0.29
May-2013	192.39	76.95-307.82	248.17	114.54-400.9	324.9	191.09-496.85	0.65	0.26-1.04	0.55	0.25-0.89	0.52	0.3-0.79
Jun-2013	10.70	0-32.1	10.54	0-31.88	20.9	0-52.34	0.04	0-0.11	0.02	0-0.07	0.03	0-0.08
Jul-2013	13.99	0-41.97	27.81	0-69.53	110.7	41.51-193.71	0.05	0-0.14	0.06	0-0.15	0.18	0.07-0.31
Aug-2013	0.00	0-0	0.00	0-0	10.3	0-31.21	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	7.77	0-23.31	15.69	0-39.23	23.6	0-55	0.03	0-0.08	0.03	0-0.09	0.04	0-0.09
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	17.36	0-43.4	17.55	0-43.87	26.5	0-61.89	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
Dec-2013	386.01	257.34-526.38	544.87	390.88-687.01	655.6	488.7-822.44	1.30	0.87-1.77	1.21	0.87-1.53	1.04	0.78-1.31

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	1270.42	1062.53-1501.4	1339.41	1119.73-1582.17	1405.4	1163.5-1647.33	4.28	3.58-5.05	2.98	2.49-3.51	2.24	1.85-2.62
Feb-2014	397.58	285.19-530.11	636.41	489.55-783.28	1151.6	951.07-1371.9	1.34	0.96-1.78	1.41	1.09-1.74	1.83	1.51-2.18
Sep-2015	16.41	0-41.02	16.54	0-41.36	16.6	0-41.5	0.06	0-0.14	0.04	0-0.09	0.03	0-0.07
Oct-2015	63.79	27.11-118.46	120.35	55.55-194.41	169.9	94.38-245.39	0.21	0.09-0.4	0.27	0.12-0.43	0.27	0.15-0.39
Nov-2015	485.35	357.15-613.56	678.07	529.45-826.68	873.5	723.24-1042.59	1.63	1.2-2.06	1.51	1.18-1.84	1.39	1.15-1.66
Dec-2015	145.80	82.01-218.7	229.92	146.92-312.7	330.2	220.13-431.08	0.49	0.28-0.74	0.51	0.33-0.69	0.53	0.35-0.69
Jan-2016	187.34	112.4-271.64	277.28	184.85-378.94	329.9	226.24-443.06	0.63	0.38-0.91	0.62	0.41-0.84	0.53	0.36-0.71
Feb-2016	223.67	149.11-307.54	278.20	194.74-371.16	479.0	356.92-610.76	0.75	0.5-1.04	0.62	0.43-0.82	0.76	0.57-0.97
Mar-2016	721.46	582.71-878.7	987.87	820.12-1146.31	1516.2	1305.58-1728.26	2.43	1.96-2.96	2.19	1.82-2.55	2.41	2.08-2.75
Apr-2016	369.05	267.56-479.77	434.40	314.25-563.79	490.2	358.22-622.16	1.24	0.9-1.61	0.96	0.7-1.25	0.78	0.57-0.99

Table 19.5. Norfolk Vanguard East. Kittiwake design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	26.06	0-60.81	26.22	0-61.19	88.0	35.2-140.8	0.09	0-0.2	0.06	0-0.14	0.14	0.06-0.22
May-2012	39.58	0-89.05	50.06	10.01-100.11	60.3	20.11-110.63	0.13	0-0.3	0.11	0.02-0.22	0.10	0.03-0.18
Jun-2012	0.00	0-0	15.18	0-45.54	14.9	0-44.65	0.00	0-0	0.03	0-0.1	0.02	0-0.07
Jul-2012	21.85	0-50.99	21.96	0-51.23	29.5	7.38-59.26	0.07	0-0.17	0.05	0-0.11	0.05	0.01-0.09
Aug-2012	54.08	13.52-121.68	53.40	13.35-106.79	116.8	51.91-194.68	0.18	0.05-0.41	0.12	0.03-0.24	0.19	0.08-0.31
Sep-2012	70.33	23.44-128.94	68.67	22.89-126.18	123.3	56.06-201.81	0.24	0.08-0.43	0.15	0.05-0.28	0.20	0.09-0.32
Oct-2012	18.21	0-45.52	29.68	0-69.25	62.9	20.95-115.24	0.06	0-0.15	0.07	0-0.15	0.10	0.03-0.18
Nov-2012	64.56	16.14-129.13	133.53	50.07-233.68	187.8	85.37-307.35	0.22	0.05-0.43	0.30	0.11-0.52	0.30	0.14-0.49
Dec-2012	102.51	51.26-174.27	126.80	63.4-211.34	182.9	102.87-274.32	0.34	0.17-0.59	0.28	0.14-0.47	0.29	0.16-0.44
Jan-2013	683.34	520.15-846.78	810.82	652.61-1000.37	1115.3	900.79-1308.3	2.30	1.75-2.85	1.80	1.45-2.22	1.77	1.43-2.08
Feb-2013	11.44	0-34.61	11.50	0-34.51	11.6	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	38.87	0-90.7	63.89	12.78-127.77	103.8	38.92-181.62	0.13	0-0.31	0.14	0.03-0.28	0.17	0.06-0.29
Apr-2013	0.00	0-0	0.00	0-0	21.2	0-53.05	0.00	0-0	0.00	0-0	0.03	0-0.08
May-2013	38.48	0-96.19	209.99	95.45-343.62	267.5	133.77-420.41	0.13	0-0.32	0.47	0.21-0.76	0.43	0.21-0.67
Jun-2013	10.70	0-32.1	10.54	0-31.61	20.9	0-52.34	0.04	0-0.11	0.02	0-0.07	0.03	0-0.08
Jul-2013	139.89	55.95-223.82	152.98	69.53-250.32	249.1	152.2-373.58	0.47	0.19-0.75	0.34	0.15-0.56	0.40	0.24-0.59
Aug-2013	0.00	0-0	19.85	0-49.64	51.6	10.32-93.12	0.00	0-0	0.04	0-0.11	0.08	0.02-0.15
Sep-2013	38.85	7.77-77.69	54.92	23.54-101.99	55.0	15.72-94.29	0.13	0.03-0.26	0.12	0.05-0.23	0.09	0.03-0.15
Oct-2013	7.12	0-21.36	14.32	0-35.81	28.6	7.15-57.2	0.02	0-0.07	0.03	0-0.08	0.05	0.01-0.09
Nov-2013	43.40	8.68-86.8	43.87	8.77-78.96	44.2	8.84-88.41	0.15	0.03-0.29	0.10	0.02-0.18	0.07	0.01-0.14
Dec-2013	339.22	210.55-456.19	402.73	284.28-544.87	536.4	393.34-691.33	1.14	0.71-1.54	0.89	0.63-1.21	0.85	0.63-1.1

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	92.39	34.65-161.69	103.92	46.19-173.2	161.3	91.87-253.44	0.31	0.12-0.54	0.23	0.1-0.38	0.26	0.15-0.4
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	8.20	0-24.61	8.27	0-24.82	24.9	0-58.09	0.03	0-0.08	0.02	0-0.06	0.04	0-0.09
Oct-2015	191.36	118.46-273.37	259.22	166.64-351.8	320.9	226.52-424.72	0.64	0.4-0.92	0.58	0.37-0.78	0.51	0.36-0.68
Nov-2015	137.36	73.26-210.63	390.12	287.95-510.87	751.4	610.53-911.09	0.46	0.25-0.71	0.87	0.64-1.13	1.20	0.97-1.45
Dec-2015	54.67	18.22-100.24	101.17	45.98-165.54	110.1	55.03-183.44	0.18	0.06-0.34	0.22	0.1-0.37	0.18	0.09-0.29
Jan-2016	46.83	9.37-93.67	120.15	64.7-184.85	132.0	65.99-197.96	0.16	0.03-0.32	0.27	0.14-0.41	0.21	0.11-0.32
Feb-2016	372.78	260.95-484.85	584.21	454.39-723.31	789.0	638.7-939.27	1.25	0.88-1.63	1.30	1.01-1.61	1.26	1.02-1.49
Mar-2016	971.19	813.95-1137.91	1323.38	1136.99-1509.77	1624.9	1427.69-1840.97	3.27	2.74-3.83	2.94	2.53-3.35	2.59	2.27-2.93
Apr-2016	304.47	202.98-405.96	360.46	258.79-471.6	424.2	320.51-546.75	1.02	0.68-1.37	0.80	0.57-1.05	0.68	0.51-0.87

Table 19.6. Norfolk Vanguard East. Kittiwake design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	5.65	0-16.94	32.01	8-64.22	48.1	9.63-96.28	0.02	0-0.06	0.07	0.02-0.14	0.08	0.02-0.15
Apr-2012	26.06	0-60.81	26.22	0-61.19	88.0	35.2-140.8	0.09	0-0.2	0.06	0-0.14	0.14	0.06-0.22
May-2012	48.26	9.89-97.73	68.22	20.02-118.28	97.6	40.23-157.36	0.16	0.03-0.33	0.15	0.04-0.26	0.16	0.06-0.25
Jun-2012	0.00	0-0	15.18	0-45.54	14.9	0-44.65	0.00	0-0	0.03	0-0.1	0.02	0-0.07
Jul-2012	50.93	21.83-84.92	61.16	26.97-102.88	104.0	62.54-154.62	0.17	0.07-0.29	0.14	0.06-0.23	0.17	0.1-0.25
Aug-2012	54.08	13.52-121.68	53.40	13.35-106.79	116.8	51.91-194.68	0.18	0.05-0.41	0.12	0.03-0.24	0.19	0.08-0.31
Sep-2012	70.33	23.44-128.94	68.67	22.89-126.18	123.3	56.06-201.81	0.24	0.08-0.43	0.15	0.05-0.28	0.20	0.09-0.32
Oct-2012	18.21	0-45.52	29.68	0-69.25	62.9	20.95-115.24	0.06	0-0.15	0.07	0-0.15	0.10	0.03-0.18
Nov-2012	64.56	16.14-129.13	133.53	50.07-233.68	187.8	85.37-307.35	0.22	0.05-0.43	0.30	0.11-0.52	0.30	0.14-0.49
Dec-2012	102.51	51.26-174.27	126.80	63.4-211.34	182.9	102.87-274.32	0.34	0.17-0.59	0.28	0.14-0.47	0.29	0.16-0.44
Jan-2013	761.15	597.76-942.38	912.07	741.56-1102.45	1227.7	1020.91-1437.5	2.56	2.01-3.17	2.03	1.65-2.45	1.95	1.62-2.29
Feb-2013	11.44	0-34.61	11.50	0-34.51	11.6	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	38.87	0-90.7	63.89	12.78-127.77	103.8	38.92-181.62	0.13	0-0.31	0.14	0.03-0.28	0.17	0.06-0.29
Apr-2013	0.00	0-0	0.00	0-0	21.2	0-53.05	0.00	0-0	0.00	0-0	0.03	0-0.08
May-2013	38.48	0-96.19	209.99	95.45-343.62	267.5	133.77-420.41	0.13	0-0.32	0.47	0.21-0.76	0.43	0.21-0.67
Jun-2013	10.70	0-32.1	10.54	0-31.61	20.9	0-52.34	0.04	0-0.11	0.02	0-0.07	0.03	0-0.08
Jul-2013	139.89	55.95-223.82	152.98	69.53-250.32	249.1	152.2-373.58	0.47	0.19-0.75	0.34	0.15-0.56	0.40	0.24-0.59
Aug-2013	0.00	0-0	19.85	0-49.64	51.6	10.32-93.12	0.00	0-0	0.04	0-0.11	0.08	0.02-0.15
Sep-2013	38.85	7.77-77.69	54.92	23.54-101.99	55.0	15.72-94.29	0.13	0.03-0.26	0.12	0.05-0.23	0.09	0.03-0.15
Oct-2013	7.12	0-21.36	14.32	0-35.81	28.6	7.15-57.2	0.02	0-0.07	0.03	0-0.08	0.05	0.01-0.09
Nov-2013	43.40	8.68-86.8	43.87	8.77-78.96	44.2	8.84-88.41	0.15	0.03-0.29	0.10	0.02-0.18	0.07	0.01-0.14

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	339.22	210.55-456.19	402.73	284.28-544.87	536.4	393.34-691.33	1.14	0.71-1.54	0.89	0.63-1.21	0.85	0.63-1.1
Jan-2014	92.39	34.65-161.69	103.92	46.19-173.2	161.3	91.87-253.44	0.31	0.12-0.54	0.23	0.1-0.38	0.26	0.15-0.4
Feb-2014	149.07	89.44-228.82	269.90	173.51-375.94	478.0	351.19-624.33	0.50	0.3-0.77	0.60	0.39-0.84	0.76	0.56-0.99
Sep-2015	8.20	0-24.61	8.27	0-24.82	24.9	0-58.09	0.03	0-0.08	0.02	0-0.06	0.04	0-0.09
Oct-2015	191.36	118.46-273.37	259.22	166.64-351.8	320.9	226.52-424.72	0.64	0.4-0.92	0.58	0.37-0.78	0.51	0.36-0.68
Nov-2015	137.36	73.26-210.63	390.12	287.95-510.87	751.4	610.53-911.09	0.46	0.25-0.71	0.87	0.64-1.13	1.20	0.97-1.45
Dec-2015	54.67	18.22-100.24	101.17	45.98-165.54	110.1	55.03-183.44	0.18	0.06-0.34	0.22	0.1-0.37	0.18	0.09-0.29
Jan-2016	46.83	9.37-93.67	120.15	64.7-184.85	132.0	65.99-197.96	0.16	0.03-0.32	0.27	0.14-0.41	0.21	0.11-0.32
Feb-2016	372.78	260.95-484.85	584.21	454.39-723.31	793.7	638.7-939.27	1.25	0.88-1.63	1.30	1.01-1.61	1.26	1.02-1.49
Mar-2016	971.19	813.95-1137.91	1323.38	1136.99-1509.77	1624.9	1427.69-1840.97	3.27	2.74-3.83	2.94	2.53-3.35	2.59	2.27-2.93
Apr-2016	322.92	221.43-424.41	378.94	277.28-499.1	443.1	339.13-565.6	1.09	0.75-1.43	0.84	0.62-1.11	0.71	0.54-0.9

Table 20.1. Norfolk Vanguard East. Black-headed Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	12.0	0-35.9	12.1	0-36.53	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Apr-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	9.89	0-29.68	10.0	0-30.03	10.1	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	14.57	0-36.42	14.6	0-36.59	36.9	7.38-73.84	0.05	0-0.12	0.03	0-0.08	0.06	0.01-0.12
Aug-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	16.7	0-66.76	17.1	0-51.22	0.05	0-0.16	0.04	0-0.15	0.03	0-0.08
Dec-2012	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	10.20	0-30.6	10.5	0-31.59	10.7	0-32.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Feb-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	12.96	0-38.87	12.8	0-38.33	13.0	0-38.92	0.04	0-0.13	0.03	0-0.09	0.02	0-0.06
Apr-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	23.10	0-57.75	23.1	0-57.73	23.0	0-57.6	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Feb-2014	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	18.22	0-45.56	18.5	0-46.29	28.3	0-66.07	0.06	0-0.15	0.04	0-0.1	0.05	0-0.11
Nov-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.0	0-0	18.8	0-46.96	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 20.2. Norfolk Vanguard East. Black-headed Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	17.9	0-48.03	23.9	3.96-63.58	21.9	4.89-55.8	0.06	0-0.16	0.05	0.01-0.14	0.03	0.01-0.09
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	11.1	0-32.12	10.9	0-32.84	11.8	0.59-33.73	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	29.2	9.75-55.94	33.8	14.43-60.54	101.6	62.41-148.7	0.10	0.03-0.19	0.08	0.03-0.13	0.16	0.1-0.24
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.1	0-48.42	16.7	0-66.76	17.1	0-51.22	0.05	0-0.16	0.04	0-0.15	0.03	0-0.08
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	11.0	0.48-31.91	11.4	0.59-32.77	11.4	0.47-33.25	0.04	0-0.11	0.03	0-0.07	0.02	0-0.05
Feb-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	13.0	0-38.87	12.8	0-38.33	13.0	0-38.92	0.04	0-0.13	0.03	0-0.09	0.02	0-0.06
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	23.1	0-57.75	23.1	0-57.73	23.0	0-57.6	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	18.2	0-45.56	18.5	0-46.29	28.3	0-66.07	0.06	0-0.15	0.04	0-0.1	0.05	0-0.11
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	18.8	0.05-47.07	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 20.3. Norfolk Vanguard East. Black-headed Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	11.97	0-35.9	12.1	0-36.22	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Apr-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	9.89	0-29.68	10.01	0-30.03	10.1	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	14.57	0-36.42	14.64	0-36.59	36.9	7.38-66.46	0.05	0-0.12	0.03	0-0.08	0.06	0.01-0.11
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	16.69	0-50.07	17.1	0-51.22	0.05	0-0.16	0.04	0-0.11	0.03	0-0.08
Dec-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	12.96	0-38.87	12.78	0-38.33	13.0	0-38.92	0.04	0-0.13	0.03	0-0.09	0.02	0-0.06
Apr-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	23.10	0-57.75	23.09	0-57.73	23.0	0-57.6	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	9.11	0-27.34	9.26	0-27.77	18.9	0-47.19	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	18.8	0-46.96	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 20.4. Norfolk Vanguard East. Black-headed Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	11.97	0-35.9	12.1	0-36.22	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Apr-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	9.89	0-29.68	10.01	0-30.03	10.1	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	14.57	0-36.42	14.64	0-36.59	36.9	7.38-66.46	0.05	0-0.12	0.03	0-0.08	0.06	0.01-0.11
Aug-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	16.69	0-50.07	17.1	0-51.22	0.05	0-0.16	0.04	0-0.11	0.03	0-0.08
Dec-2012	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	12.96	0-38.87	12.78	0-38.33	13.0	0-38.92	0.04	0-0.13	0.03	0-0.09	0.02	0-0.06
Apr-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	23.10	0-57.75	23.09	0-57.73	23.0	0-57.6	0.08	0-0.19	0.05	0-0.13	0.04	0-0.09
Feb-2014	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	9.11	0-27.34	9.26	0-27.77	18.9	0-47.19	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	18.9	0.05-47.07	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 20.5. Norfolk Vanguard East. Black-headed Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	10.20	0-30.6	10.53	0-42.12	10.72	0-32.17	0.03	0-0.1	0.02	0-0.09	0.02	0-0.05
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	9.11	0-27.34	9.26	0-27.77	9.44	0-28.31	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 20.6. Norfolk Vanguard East. Black-headed Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	6.12	0-18.37	15.86	3.96-31.81	12.23	2.45-24.47	0.02	0-0.06	0.04	0.01-0.07	0.02	0-0.04
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	1.22	0-3.66	1.85	0-4.63	2.38	0.59-4.75	0.00	0-0.01	0.00	0-0.01	0.00	0-0.01
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	14.62	4.87-26.81	19.24	7.21-33.66	64.65	37.43-95.28	0.05	0.02-0.09	0.04	0.02-0.07	0.10	0.06-0.15
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	11.04	0.48-31.67	11.41	0.49-42.61	11.46	0.54-33.38	0.04	0-0.11	0.03	0-0.09	0.02	0-0.05
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	9.11	0-27.34	9.26	0-27.77	9.44	0-28.31	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 21.1. Norfolk Vanguard East. Little Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	48.42	0-112.99	83.46	16.69-166.91	85.37	17.07-153.67	0.16	0-0.38	0.19	0.04-0.37	0.14	0.03-0.24
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	53.62	10.72-107.24	0.00	0-0	0.00	0-0	0.09	0.02-0.17
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	115.43	38.48-230.86	114.54	19.09-209.99	114.66	38.22-210.2	0.39	0.13-0.78	0.25	0.04-0.47	0.18	0.06-0.33
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	122.51	65.97-188.48	129.05	59.56-198.54	134.13	61.91-216.68	0.41	0.22-0.63	0.29	0.13-0.44	0.21	0.1-0.34
Sep-2013	7.77	0-31.08	7.85	0-23.54	15.72	0-39.29	0.03	0-0.1	0.02	0-0.05	0.03	0-0.06
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-28.6	0.00	0-0	0.02	0-0.05	0.01	0-0.05
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	10.19	0-30.58	9.79	0-29.37	20.03	0-50.07	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	9.44	0-28.31	0.00	0-0	0.00	0-0	0.02	0-0.05
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 21.2. Norfolk Vanguard East. Little Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	48.42	0-112.99	83.46	16.69-166.91	85.37	17.07-153.67	0.16	0-0.38	0.19	0.04-0.37	0.14	0.03-0.24
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	57.58	17.56-110.48	0.00	0-0	0.00	0-0	0.09	0.03-0.18
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	115.43	38.48-230.86	114.54	19.09-209.99	114.66	38.22-210.2	0.39	0.13-0.78	0.25	0.04-0.47	0.18	0.06-0.33
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	122.51	65.97-188.48	129.05	59.56-198.54	134.13	61.91-216.68	0.41	0.22-0.63	0.29	0.13-0.44	0.21	0.1-0.34
Sep-2013	7.77	0-31.08	7.85	0-23.54	15.72	0-39.29	0.03	0-0.1	0.02	0-0.05	0.03	0-0.06
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-28.6	0.00	0-0	0.02	0-0.05	0.01	0-0.05
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	14.04	2.82-35.46	13.88	3.03-35.29	27.76	7.57-58.48	0.05	0.01-0.12	0.03	0.01-0.08	0.04	0.01-0.09
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	9.44	0-28.31	0.00	0-0	0.00	0-0	0.02	0-0.05
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 21.3. Norfolk Vanguard East. Little Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	48.42	0-112.99	83.46	16.69-166.91	85.37	17.07-170.75	0.16	0-0.38	0.19	0.04-0.37	0.14	0.03-0.27
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	21.45	0-53.62	0.00	0-0	0.00	0-0	0.03	0-0.09
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	115.43	38.48-211.63	114.54	38.18-229.08	114.66	38.22-210.2	0.39	0.13-0.71	0.25	0.08-0.51	0.18	0.06-0.33
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	122.51	65.97-188.48	129.05	59.56-198.54	134.13	71.97-216.68	0.41	0.22-0.63	0.29	0.13-0.44	0.21	0.11-0.34
Sep-2013	7.77	0-23.5	7.85	0-23.54	15.72	0-47.15	0.03	0-0.08	0.02	0-0.05	0.03	0-0.08
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-21.45	0.00	0-0	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	10.19	0-30.58	9.79	0-29.37	20.03	0-50.07	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	9.44	0-28.31	0.00	0-0	0.00	0-0	0.02	0-0.05
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 21.4. Norfolk Vanguard East. Little Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	48.42	0-112.99	83.46	16.69-166.91	85.37	17.07-170.75	0.16	0-0.38	0.19	0.04-0.37	0.14	0.03-0.27
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	21.45	0-53.62	0.00	0-0	0.00	0-0	0.03	0-0.09
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	115.43	38.48-211.63	114.54	38.18-229.08	114.66	38.22-210.2	0.39	0.13-0.71	0.25	0.08-0.51	0.18	0.06-0.33
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	122.51	65.97-188.48	129.05	59.56-198.54	134.13	71.97-216.68	0.41	0.22-0.63	0.29	0.13-0.44	0.21	0.11-0.34
Sep-2013	7.77	0-23.5	7.85	0-23.54	15.72	0-47.15	0.03	0-0.08	0.02	0-0.05	0.03	0-0.08
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-21.45	0.00	0-0	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	10.19	0-30.58	9.79	0-29.37	20.03	0-50.07	0.03	0-0.1	0.02	0-0.07	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	9.44	0-28.31	0.00	0-0	0.00	0-0	0.02	0-0.05
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 21.5. Norfolk Vanguard East. Little Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.0	0-0	0.0	0-0	32.2	0-75.07	0.00	0-0	0.00	0-0	0.05	0-0.12
Feb-2013	11.4	0-34.32	11.5	0-34.8	11.6	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 21.6. Norfolk Vanguard East. Little Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	0.00	0-0	0.00	0-0	36.13	4.67-79.75	0.00	0-0	0.00	0-0	0.06	0.01-0.13
Feb-2013	11.44	0-34.32	11.50	0-34.8	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	3.85	2.31-5.91	4.25	2.73-5.91	8.24	6.05-10.76	0.01	0.01-0.02	0.01	0.01-0.01	0.01	0.01-0.02
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 22.1. Norfolk Vanguard East. Common Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	10.57	0-31.7	22.86	0-57.15	0.00	0-0	0.02	0-0.07	0.04	0-0.09
Jan-2013	30.60	0-71.39	63.18	21.06-115.83	64.34	21.45-117.96	0.10	0-0.24	0.14	0.05-0.26	0.10	0.03-0.19
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-30.95	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-21.45	0.00	0-0	0.02	0-0.05	0.01	0-0.03
Nov-2013	8.68	0-26.04	8.77	0-26.32	17.68	0-44.2	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	10.01	0-30.04	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	36.45	9.11-82.01	37.03	9.26-74.06	56.63	18.88-103.82	0.12	0.03-0.28	0.08	0.02-0.16	0.09	0.03-0.17
Nov-2015	9.16	0-27.47	9.29	0-27.87	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Dec-2015	9.11	0-36.45	9.20	0-27.59	9.17	0-27.52	0.03	0-0.12	0.02	0-0.06	0.01	0-0.04
Jan-2016	9.37	0-28.1	9.24	0-27.73	9.43	0-28.28	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	27.75	0-64.75	27.96	0-65.24	56.36	18.79-103.32	0.09	0-0.22	0.06	0-0.14	0.09	0.03-0.16
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 22.2. Norfolk Vanguard East. Common Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	10.57	0-31.7	22.86	0-57.15	0.00	0-0	0.02	0-0.07	0.04	0-0.09
Jan-2013	33.07	2.47-73.51	67.23	25.09-121.61	68.58	24.83-122.63	0.11	0.01-0.25	0.15	0.06-0.27	0.11	0.04-0.2
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-30.95	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-21.45	0.00	0-0	0.02	0-0.05	0.01	0-0.03
Nov-2013	8.68	0-26.04	8.77	0-26.32	17.68	0-44.2	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	14.36	3.62-35.29	0.00	0-0	0.00	0-0	0.02	0.01-0.06
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	36.45	9.11-82.01	37.03	9.26-74.06	56.63	18.88-103.82	0.12	0.03-0.28	0.08	0.02-0.16	0.09	0.03-0.17
Nov-2015	9.16	0-27.47	9.29	0-27.87	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Dec-2015	9.11	0-36.45	9.20	0-27.59	9.17	0-27.52	0.03	0-0.12	0.02	0-0.06	0.01	0-0.04
Jan-2016	9.37	0-28.1	9.24	0-27.73	9.43	0-28.28	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	27.75	0-64.75	27.96	0-65.24	56.52	18.79-103.64	0.09	0-0.22	0.06	0-0.14	0.09	0.03-0.16
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 22.3. Norfolk Vanguard East. Common Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	10.57	0-31.7	22.86	0-57.15	0.00	0-0	0.02	0-0.07	0.04	0-0.09
Jan-2013	30.60	0-71.39	63.18	20.8-116.1	64.34	21.45-117.96	0.10	0-0.24	0.14	0.05-0.26	0.10	0.03-0.19
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-30.95	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-21.45	0.00	0-0	0.02	0-0.05	0.01	0-0.03
Nov-2013	8.68	0-26.04	8.77	0-26.32	17.68	0-44.2	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	10.01	0-30.04	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	56.63	18.88-103.82	0.12	0.03-0.25	0.08	0.02-0.16	0.09	0.03-0.17
Nov-2015	9.16	0-27.7	9.29	0-27.87	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Dec-2015	9.11	0-27.34	9.20	0-27.59	9.17	0-27.52	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2016	9.37	0-28.1	9.24	0-27.73	9.43	0-37.71	0.03	0-0.09	0.02	0-0.06	0.02	0-0.06
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	27.75	0-64.75	27.96	0-65.24	37.57	9.39-75.14	0.09	0-0.22	0.06	0-0.14	0.06	0.01-0.12
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 22.4. Norfolk Vanguard East. Common Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	10.57	0-31.7	22.86	0-57.15	0.00	0-0	0.02	0-0.07	0.04	0-0.09
Jan-2013	30.60	0-71.39	63.18	20.8-116.1	64.34	21.45-117.96	0.10	0-0.24	0.14	0.05-0.26	0.10	0.03-0.19
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-30.95	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	7.16	0-21.48	7.15	0-21.45	0.00	0-0	0.02	0-0.05	0.01	0-0.03
Nov-2013	8.68	0-26.04	8.77	0-26.32	17.68	0-44.2	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	10.01	0-30.04	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	56.63	18.88-103.82	0.12	0.03-0.25	0.08	0.02-0.16	0.09	0.03-0.17
Nov-2015	9.16	0-27.7	9.29	0-27.87	9.39	0-28.18	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Dec-2015	9.11	0-27.34	9.20	0-27.59	9.17	0-27.52	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2016	9.37	0-28.1	9.24	0-27.73	9.43	0-37.71	0.03	0-0.09	0.02	0-0.06	0.02	0-0.06
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	27.75	0-64.75	27.96	0-65.24	37.73	9.55-75.63	0.09	0-0.22	0.06	0-0.14	0.06	0.02-0.12
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 22.5. Norfolk Vanguard East. Common Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2012	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2013	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2014	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	18.8	0-46.96	0	0-0	0	0-0	0.03	0-0.07
Apr-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Table 22.6. Norfolk Vanguard East. Common Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2013	2.83	1.06-4.95	5.78	2.31-9.24	5.08	2.54-8.04	0.01	0-0.02	0.01	0.01-0.02	0.01	0-0.01
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2014	0.00	0-0	0.00	0-0	4.44	3.26-5.79	0.00	0-0	0.00	0-0	0.01	0.01-0.01
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	18.79	0-46.96	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 23.1. Norfolk Vanguard East. Lesser Black-backed Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	23.54	0-58.85	23.93	0-59.83	48.30	12.07-96.6	0.08	0-0.2	0.05	0-0.13	0.08	0.02-0.15
Apr-2012	17.37	0-43.43	17.48	0-43.71	26.40	0-61.6	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	21.85	0-43.7	58.55	21.96-102.46	88.61	44.3-140.3	0.07	0-0.15	0.13	0.05-0.23	0.14	0.07-0.22
Aug-2012	13.52	0-40.56	13.35	0-40.05	25.96	0-64.89	0.05	0-0.14	0.03	0-0.09	0.04	0-0.1
Sep-2012	0.00	0-0	11.44	0-34.33	22.42	0-56.06	0.00	0-0	0.03	0-0.08	0.04	0-0.09
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	50.07	0-116.84	68.30	17.07-153.67	0.00	0-0	0.11	0-0.26	0.11	0.03-0.24
Dec-2012	20.50	0-51.26	31.70	0-73.97	57.15	11.43-114.3	0.07	0-0.17	0.07	0-0.16	0.09	0.02-0.18
Jan-2013	10.20	0-30.6	10.53	0-31.59	10.72	0-32.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	25.95	0-64.86	0.00	0-0	0.00	0-0	0.04	0-0.1
Apr-2013	9.73	0-29.18	10.27	0-30.81	10.61	0-31.83	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	41.51	0-96.85	0.00	0-0	0.00	0-0	0.07	0-0.15
Aug-2013	94.24	37.7-150.79	208.47	129.05-297.81	288.91	185.73-402.4	0.32	0.13-0.51	0.46	0.29-0.66	0.46	0.3-0.64
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	47.15	15.72-86.43	0.16	0.05-0.29	0.10	0.03-0.19	0.08	0.03-0.14
Oct-2013	21.36	0-49.85	21.48	0-50.13	21.45	0-50.05	0.07	0-0.17	0.05	0-0.11	0.03	0-0.08
Nov-2013	78.12	34.72-130.19	78.96	35.09-131.6	79.57	35.36-132.61	0.26	0.12-0.44	0.18	0.08-0.29	0.13	0.06-0.21
Dec-2013	23.39	0-58.49	23.69	0-59.22	23.84	0-59.6	0.08	0-0.2	0.05	0-0.13	0.04	0-0.09

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	173.24	92.39-265.63	184.75	103.63-288.67	195.84	115.2-287.99	0.58	0.31-0.89	0.41	0.23-0.64	0.31	0.18-0.46
Feb-2014	0.00	0-0	0.00	0-0	30.04	0-70.1	0.00	0-0	0.00	0-0	0.05	0-0.11
Sep-2015	8.20	0-24.61	24.82	0-57.91	49.79	16.6-91.29	0.03	0-0.08	0.06	0-0.13	0.08	0.03-0.15
Oct-2015	0.00	0-0	9.26	0-27.77	28.31	0-66.07	0.00	0-0	0.02	0-0.06	0.05	0-0.11
Nov-2015	219.78	137.36-302.2	269.37	176.48-371.54	272.39	178.46-366.32	0.74	0.46-1.02	0.60	0.39-0.83	0.43	0.28-0.58
Dec-2015	0.00	0-0	0.00	0-0	9.17	0-27.52	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2016	9.37	0-28.1	18.49	0-46.21	18.85	0-47.13	0.03	0-0.09	0.04	0-0.1	0.03	0-0.08
Feb-2016	18.64	0-46.6	18.55	0-46.37	28.18	0-65.75	0.06	0-0.16	0.04	0-0.1	0.04	0-0.1
Mar-2016	9.25	0-27.75	18.64	0-46.6	28.18	0-65.75	0.03	0-0.09	0.04	0-0.1	0.04	0-0.1
Apr-2016	9.23	0-27.91	9.24	0-27.73	18.85	0-47.13	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08

Table 23.2. Norfolk Vanguard East. Lesser Black-backed Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	23.54	0-58.85	23.93	0-59.83	48.30	12.07-96.6	0.08	0-0.2	0.05	0-0.13	0.08	0.02-0.15
Apr-2012	17.37	0-43.43	17.48	0-43.71	26.40	0-61.6	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	21.85	0-43.7	65.01	28.42-109.78	96.89	49.83-155.11	0.07	0-0.15	0.14	0.06-0.24	0.15	0.08-0.25
Aug-2012	13.52	0-40.56	13.35	0-40.05	25.96	0-64.89	0.05	0-0.14	0.03	0-0.09	0.04	0-0.1
Sep-2012	0.00	0-0	11.44	0-34.33	22.42	0-56.06	0.00	0-0	0.03	0-0.08	0.04	0-0.09
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	50.07	0-116.84	68.30	17.07-153.67	0.00	0-0	0.11	0-0.26	0.11	0.03-0.24
Dec-2012	20.50	0-51.26	31.70	0-73.97	57.15	11.43-114.3	0.07	0-0.17	0.07	0-0.16	0.09	0.02-0.18
Jan-2013	10.20	0-30.6	10.53	0-31.59	10.72	0-32.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-34.71	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	25.95	0-64.86	0.00	0-0	0.00	0-0	0.04	0-0.1
Apr-2013	9.73	0-29.18	10.27	0-30.81	10.61	0-31.83	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	41.51	0-96.85	0.00	0-0	0.00	0-0	0.07	0-0.15
Aug-2013	94.24	37.7-150.79	208.47	129.05-297.81	288.91	185.73-402.4	0.32	0.13-0.51	0.46	0.29-0.66	0.46	0.3-0.64
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	47.15	15.72-86.43	0.16	0.05-0.29	0.10	0.03-0.19	0.08	0.03-0.14
Oct-2013	21.36	0-49.85	21.48	0-50.13	21.45	0-50.05	0.07	0-0.17	0.05	0-0.11	0.03	0-0.08
Nov-2013	78.12	34.72-130.19	78.96	35.09-131.6	79.57	35.36-132.61	0.26	0.12-0.44	0.18	0.08-0.29	0.13	0.06-0.21

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	23.39	0-58.49	23.69	0-59.22	23.84	0-59.6	0.08	0-0.2	0.05	0-0.13	0.04	0-0.09
Jan-2014	173.24	92.39-265.63	184.75	103.63-288.67	195.84	115.2-287.99	0.58	0.31-0.89	0.41	0.23-0.64	0.31	0.18-0.46
Feb-2014	0.00	0-0	0.00	0-0	179.38	111.56-247.2	0.00	0-0	0.00	0-0	0.29	0.18-0.39
Sep-2015	49.22	16.41-90.24	59.74	24.5-104.76	96.38	52.14-154.21	0.17	0.06-0.3	0.13	0.05-0.23	0.15	0.08-0.25
Oct-2015	0.00	0-0	9.26	0-27.77	28.31	0-66.07	0.00	0-0	0.02	0-0.06	0.05	0-0.11
Nov-2015	219.78	137.36-302.2	269.37	176.48-371.54	272.39	178.46-366.32	0.74	0.46-1.02	0.60	0.39-0.83	0.43	0.28-0.58
Dec-2015	0.00	0-0	0.00	0-0	9.17	0-27.52	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2016	9.37	0-28.1	18.49	0-46.21	18.85	0-47.13	0.03	0-0.09	0.04	0-0.1	0.03	0-0.08
Feb-2016	18.64	0-46.6	18.55	0-46.37	28.18	0-65.75	0.06	0-0.16	0.04	0-0.1	0.04	0-0.1
Mar-2016	9.25	0-27.75	22.36	0-50.32	31.68	3.51-69.26	0.03	0-0.09	0.05	0-0.11	0.05	0.01-0.11
Apr-2016	9.23	0-27.91	9.24	0-27.73	18.85	0-47.13	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08

Table 23.3. Norfolk Vanguard East. Lesser Black-backed Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-47.08	11.97	0-47.87	24.15	0-60.37	0.04	0-0.16	0.03	0-0.11	0.04	0-0.1
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	14.57	0-36.42	51.23	14.64-95.14	73.84	29.54-125.53	0.05	0-0.12	0.11	0.03-0.21	0.12	0.05-0.2
Aug-2012	13.52	0-40.56	13.35	0-53.4	25.96	0-64.89	0.05	0-0.14	0.03	0-0.12	0.04	0-0.1
Sep-2012	0.00	0-0	0.00	0-0	11.21	0-33.63	0.00	0-0	0.00	0-0	0.02	0-0.05
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	17.07	0-51.22	0.00	0-0	0.00	0-0	0.03	0-0.08
Dec-2012	0.00	0-0	0.00	0-0	22.86	0-57.15	0.00	0-0	0.00	0-0	0.04	0-0.09
Jan-2013	10.20	0-30.6	10.53	0-31.59	10.72	0-32.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	9.73	0-38.91	10.27	0-30.81	10.61	0-31.83	0.03	0-0.13	0.02	0-0.07	0.02	0-0.05
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	13.84	0-41.51	0.00	0-0	0.00	0-0	0.02	0-0.07
Aug-2013	75.39	28.27-131.94	148.91	79.42-238.25	216.68	123.82-319.86	0.25	0.1-0.44	0.33	0.18-0.53	0.34	0.2-0.51
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	7.12	0-21.36	7.16	0-21.48	7.15	0-21.45	0.02	0-0.07	0.02	0-0.05	0.01	0-0.03
Nov-2013	8.68	0-26.04	8.77	0-26.32	8.84	0-26.52	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Dec-2013	23.39	0-58.49	23.69	0-59.22	23.84	0-59.6	0.08	0-0.2	0.05	0-0.13	0.04	0-0.09

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	46.20	0-92.39	46.19	11.55-92.37	57.60	11.52-115.2	0.16	0-0.31	0.10	0.03-0.21	0.09	0.02-0.18
Feb-2014	0.00	0-0	0.00	0-0	30.04	0-70.1	0.00	0-0	0.00	0-0	0.05	0-0.11
Sep-2015	0.00	0-0	0.00	0-0	8.30	0-24.9	0.00	0-0	0.00	0-0	0.01	0-0.04
Oct-2015	0.00	0-0	9.26	0-27.77	18.88	0-47.19	0.00	0-0	0.02	0-0.06	0.03	0-0.08
Nov-2015	18.32	0-45.79	27.87	0-65.02	28.18	0-65.75	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Dec-2015	0.00	0-0	0.00	0-0	9.17	0-27.52	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2016	9.37	0-28.1	18.49	0-46.21	18.85	0-47.13	0.03	0-0.09	0.04	0-0.1	0.03	0-0.08
Feb-2016	18.64	0-46.6	18.55	0-46.37	18.79	0-46.96	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Mar-2016	0.00	0-0	9.32	0-27.96	9.39	0-28.18	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	9.23	0-27.68	9.24	0-27.73	18.85	0-47.13	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08

Table 23.4. Norfolk Vanguard East. Lesser Black-backed Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-47.08	11.97	0-47.87	24.15	0-60.37	0.04	0-0.16	0.03	0-0.11	0.04	0-0.1
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	14.57	0-36.42	51.23	14.64-95.14	73.84	29.54-125.53	0.05	0-0.12	0.11	0.03-0.21	0.12	0.05-0.2
Aug-2012	13.52	0-40.56	13.35	0-53.4	25.96	0-64.89	0.05	0-0.14	0.03	0-0.12	0.04	0-0.1
Sep-2012	0.00	0-0	0.00	0-0	11.21	0-33.63	0.00	0-0	0.00	0-0	0.02	0-0.05
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	17.07	0-51.22	0.00	0-0	0.00	0-0	0.03	0-0.08
Dec-2012	0.00	0-0	0.00	0-0	22.86	0-57.15	0.00	0-0	0.00	0-0	0.04	0-0.09
Jan-2013	10.20	0-30.6	10.53	0-31.59	10.72	0-32.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	9.73	0-38.91	10.27	0-30.81	10.61	0-31.83	0.03	0-0.13	0.02	0-0.07	0.02	0-0.05
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	13.84	0-41.51	0.00	0-0	0.00	0-0	0.02	0-0.07
Aug-2013	75.39	28.27-131.94	148.91	79.42-238.25	216.68	123.82-319.86	0.25	0.1-0.44	0.33	0.18-0.53	0.34	0.2-0.51
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	7.12	0-21.36	7.16	0-21.48	7.15	0-21.45	0.02	0-0.07	0.02	0-0.05	0.01	0-0.03
Nov-2013	8.68	0-26.04	8.77	0-26.32	8.84	0-26.52	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	23.39	0-58.49	23.69	0-59.22	23.84	0-59.6	0.08	0-0.2	0.05	0-0.13	0.04	0-0.09
Jan-2014	46.20	0-92.39	46.19	11.55-92.37	57.60	11.52-115.2	0.16	0-0.31	0.10	0.03-0.21	0.09	0.02-0.18
Feb-2014	0.00	0-0	0.00	0-0	30.04	0-70.1	0.00	0-0	0.00	0-0	0.05	0-0.11
Sep-2015	0.00	0-0	0.00	0-0	8.30	0-24.9	0.00	0-0	0.00	0-0	0.01	0-0.04
Oct-2015	0.00	0-0	9.26	0-27.77	18.88	0-47.19	0.00	0-0	0.02	0-0.06	0.03	0-0.08
Nov-2015	18.32	0-45.79	27.87	0-65.02	28.18	0-65.75	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Dec-2015	0.00	0-0	0.00	0-0	9.17	0-27.52	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2016	9.37	0-28.1	18.49	0-46.21	18.85	0-47.13	0.03	0-0.09	0.04	0-0.1	0.03	0-0.08
Feb-2016	18.64	0-46.6	18.55	0-46.37	18.79	0-46.96	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Mar-2016	0.00	0-0	9.32	0-27.96	9.39	0-28.18	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	9.23	0-27.68	9.24	0-27.73	18.85	0-47.13	0.03	0-0.09	0.02	0-0.06	0.03	0-0.08

Table 23.5. Norfolk Vanguard East. Lesser Black-backed Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	11.97	0-35.9	24.15	0-60.37	0.04	0-0.12	0.03	0-0.08	0.04	0-0.1
Apr-2012	17.37	0-43.43	17.48	0-43.71	26.40	0-61.6	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-40.23	0.03	0-0.1	0.02	0-0.07	0.02	0-0.06
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	7.28	0-21.85	7.32	0-21.96	14.77	0-36.92	0.02	0-0.07	0.02	0-0.05	0.02	0-0.06
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	11.44	0-34.33	11.21	0-33.63	0.00	0-0	0.03	0-0.08	0.02	0-0.05
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	50.07	0-100.56	51.22	0-119.52	0.00	0-0	0.11	0-0.22	0.08	0-0.19
Dec-2012	20.50	0-51.26	31.70	0-73.97	34.29	0-80.01	0.07	0-0.17	0.07	0-0.16	0.05	0-0.13
Jan-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	11.44	0-34.32	11.50	0-34.51	11.57	0-35	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	25.95	0-64.86	0.00	0-0	0.00	0-0	0.04	0-0.1
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	27.67	0-69.18	0.00	0-0	0.00	0-0	0.04	0-0.11
Aug-2013	18.85	0-47.12	59.56	19.85-109.2	72.23	20.64-134.13	0.06	0-0.16	0.13	0.04-0.24	0.11	0.03-0.21
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	47.15	15.72-86.43	0.16	0.05-0.29	0.10	0.03-0.19	0.08	0.03-0.14
Oct-2013	14.24	0-35.61	14.32	0-35.81	14.30	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	69.44	26.04-121.51	70.19	26.32-122.83	70.73	26.52-123.77	0.23	0.09-0.41	0.16	0.06-0.27	0.11	0.04-0.2
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	127.04	57.75-207.89	138.56	69.28-219.39	138.24	68.83-218.88	0.43	0.19-0.7	0.31	0.15-0.49	0.22	0.11-0.35
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	8.20	0-24.61	24.82	0-57.91	41.50	8.3-83.2	0.03	0-0.08	0.06	0-0.13	0.07	0.01-0.13
Oct-2015	0.00	0-0	0.00	0-0	9.44	0-28.31	0.00	0-0	0.00	0-0	0.02	0-0.05
Nov-2015	201.47	127.98-293.04	241.50	157.91-334.39	244.21	150.28-347.53	0.68	0.43-0.99	0.54	0.35-0.74	0.39	0.24-0.55
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	9.39	0-28.18	0.00	0-0	0.00	0-0	0.01	0-0.04
Mar-2016	9.25	0-27.75	9.32	0-27.96	18.79	0-46.96	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 23.6. Norfolk Vanguard East. Lesser Black-backed Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-35.31	12.0	0-35.9	24.15	0-60.37	0.04	0-0.12	0.03	0-0.08	0.04	0-0.1
Apr-2012	17.37	0-43.43	17.5	0-43.71	26.40	0-61.6	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2012	9.89	0-29.68	10.0	0-30.03	10.06	0-40.23	0.03	0-0.1	0.02	0-0.07	0.02	0-0.06
Jun-2012	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	7.28	0-21.85	13.8	0-34.88	25.81	5.52-53.53	0.02	0-0.07	0.03	0-0.08	0.04	0.01-0.09
Aug-2012	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	11.4	0-34.33	11.21	0-33.63	0.00	0-0	0.03	0-0.08	0.02	0-0.05
Oct-2012	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	50.1	0-100.56	51.22	0-119.52	0.00	0-0	0.11	0-0.22	0.08	0-0.19
Dec-2012	20.50	0-51.26	31.7	0-73.97	34.29	0-80.01	0.07	0-0.17	0.07	0-0.16	0.05	0-0.13
Jan-2013	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2013	11.44	0-34.32	11.5	0-34.51	11.57	0-35	0.04	0-0.12	0.03	0-0.08	0.02	0-0.06
Mar-2013	0.00	0-0	0.0	0-0	25.95	0-64.86	0.00	0-0	0.00	0-0	0.04	0-0.1
Apr-2013	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.0	0-0	27.67	0-69.18	0.00	0-0	0.00	0-0	0.04	0-0.11
Aug-2013	18.85	0-47.12	59.6	19.85-109.2	72.23	20.64-134.13	0.06	0-0.16	0.13	0.04-0.24	0.11	0.03-0.21
Sep-2013	46.61	15.54-85.46	47.1	15.69-86.3	47.15	15.72-86.43	0.16	0.05-0.29	0.10	0.03-0.19	0.08	0.03-0.14
Oct-2013	14.24	0-35.61	14.3	0-35.81	14.30	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	69.44	26.04-121.51	70.2	26.32-122.83	70.73	26.52-123.77	0.23	0.09-0.41	0.16	0.06-0.27	0.11	0.04-0.2

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2014	127.04	57.75-207.89	138.6	69.28-219.39	138.24	68.83-218.88	0.43	0.19-0.7	0.31	0.15-0.49	0.22	0.11-0.35
Feb-2014	0.00	0-0	0.0	0-0	149.34	89.6-209.08	0.00	0-0	0.00	0-0	0.24	0.14-0.33
Sep-2015	49.22	16.41-90.24	61.6	26.65-104.81	90.75	49.66-146.04	0.17	0.06-0.3	0.14	0.06-0.23	0.14	0.08-0.23
Oct-2015	0.00	0-0	0.0	0-0	9.44	0-28.31	0.00	0-0	0.00	0-0	0.02	0-0.05
Nov-2015	201.47	127.98-293.04	241.5	157.91-334.39	244.21	150.28-347.53	0.68	0.43-0.99	0.54	0.35-0.74	0.39	0.24-0.55
Dec-2015	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.0	0-0	9.39	0-28.18	0.00	0-0	0.00	0-0	0.01	0-0.04
Mar-2016	9.25	0-27.75	13.0	0-35.41	21.10	0-53.98	0.03	0-0.09	0.03	0-0.08	0.03	0-0.09
Apr-2016	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 24.1. Norfolk Vanguard East. Herring Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	58.85	11.77-117.69	71.80	23.93-131.63	96.60	36.22-156.97	0.20	0.04-0.4	0.16	0.05-0.29	0.15	0.06-0.25
Apr-2012	26.06	0-60.81	43.71	8.74-87.41	44.00	8.8-79.2	0.09	0-0.2	0.10	0.02-0.19	0.07	0.01-0.13
May-2012	9.89	0-29.68	30.03	0-70.08	40.23	10.06-80.46	0.03	0-0.1	0.07	0-0.16	0.06	0.02-0.13
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	7.28	0-21.85	7.32	0-21.96	22.15	0-51.69	0.02	0-0.07	0.02	0-0.05	0.04	0-0.08
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	33.38	0-83.46	51.22	0-119.52	0.05	0-0.16	0.07	0-0.19	0.08	0-0.19
Dec-2012	82.01	30.75-143.52	84.53	31.7-147.94	182.88	102.87-274.32	0.28	0.1-0.48	0.19	0.07-0.33	0.29	0.16-0.44
Jan-2013	122.39	61.19-193.78	231.66	136.89-326.7	257.37	160.86-364.61	0.41	0.21-0.65	0.51	0.3-0.73	0.41	0.26-0.58
Feb-2013	11.44	0-34.61	23.01	0-57.52	34.71	0-80.99	0.04	0-0.12	0.05	0-0.13	0.06	0-0.13
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-30.95	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	78.58	39.29-133.58	0.16	0.05-0.29	0.10	0.03-0.19	0.13	0.06-0.21
Oct-2013	7.12	0-28.48	7.16	0-21.48	7.15	0-21.45	0.02	0-0.1	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	8.77	0-26.54	26.52	0-61.89	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Dec-2013	222.25	128.67-327.52	225.05	130.29-331.66	226.47	131.11-333.74	0.75	0.43-1.1	0.50	0.29-0.74	0.36	0.21-0.53

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	485.07	346.19-635.21	484.96	346.11-635.06	506.87	357.11-656.63	1.63	1.17-2.14	1.08	0.77-1.41	0.81	0.57-1.04
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	8.27	0-33.09	8.30	0-24.9	0.00	0-0	0.02	0-0.07	0.01	0-0.04
Oct-2015	18.22	0-45.56	18.52	0-46.29	28.31	0-66.07	0.06	0-0.15	0.04	0-0.1	0.05	0-0.11
Nov-2015	73.26	27.47-128.21	92.89	37.15-157.91	169.07	93.93-244.21	0.25	0.09-0.43	0.21	0.08-0.35	0.27	0.15-0.39
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	9.32	0-27.96	9.39	0-28.18	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	18.45	0-46.13	27.73	0-55.46	47.13	9.43-85.08	0.06	0-0.16	0.06	0-0.12	0.08	0.02-0.14

Table 24.2. Norfolk Vanguard East. Herring Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	58.85	11.77-117.69	71.80	23.93-131.63	96.60	36.22-156.97	0.20	0.04-0.4	0.16	0.05-0.29	0.15	0.06-0.25
Apr-2012	26.06	0-60.81	43.71	8.74-87.41	44.00	8.8-79.2	0.09	0-0.2	0.10	0.02-0.19	0.07	0.01-0.13
May-2012	9.89	0-29.68	30.03	0-70.08	40.23	10.06-80.46	0.03	0-0.1	0.07	0-0.16	0.06	0.02-0.13
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	7.28	0-21.85	8.18	0-25.38	23.56	2.78-54.5	0.02	0-0.07	0.02	0-0.06	0.04	0-0.09
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	33.38	0-83.46	51.22	0-119.52	0.05	0-0.16	0.07	0-0.19	0.08	0-0.19
Dec-2012	82.01	30.75-143.52	84.53	31.7-147.94	182.88	102.87-274.32	0.28	0.1-0.48	0.19	0.07-0.33	0.29	0.16-0.44
Jan-2013	122.39	61.19-193.78	231.66	136.89-326.7	257.37	160.86-364.61	0.41	0.21-0.65	0.51	0.3-0.73	0.41	0.26-0.58
Feb-2013	11.44	0-34.61	23.01	0-57.52	34.71	0-80.99	0.04	0-0.12	0.05	0-0.13	0.06	0-0.13
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-30.95	0.00	0-0	0.00	0-0	0.02	0-0.05
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	78.58	39.29-133.58	0.16	0.05-0.29	0.10	0.03-0.19	0.13	0.06-0.21
Oct-2013	7.12	0-28.48	7.16	0-21.48	7.15	0-21.45	0.02	0-0.1	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	8.77	0-26.54	26.52	0-61.89	0.00	0-0	0.02	0-0.06	0.04	0-0.1

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	222.25	128.67-327.52	225.05	130.29-331.66	226.47	131.11-333.74	0.75	0.43-1.1	0.50	0.29-0.74	0.36	0.21-0.53
Jan-2014	485.07	346.19-635.21	484.96	346.11-635.06	506.87	357.11-656.63	1.63	1.17-2.14	1.08	0.77-1.41	0.81	0.57-1.04
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	21.15	6.44-43.83	15.81	4.7-36.17	0.00	0-0	0.05	0.01-0.1	0.03	0.01-0.06
Oct-2015	18.22	0-45.56	18.52	0-46.29	28.31	0-66.07	0.06	0-0.15	0.04	0-0.1	0.05	0-0.11
Nov-2015	73.26	27.47-128.21	92.89	37.15-157.91	169.07	93.93-244.21	0.25	0.09-0.43	0.21	0.08-0.35	0.27	0.15-0.39
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	11.20	0-31.73	10.58	0-30.56	0.00	0-0	0.02	0-0.07	0.02	0-0.05
Apr-2016	18.45	0-46.13	27.73	0-55.46	47.13	9.43-85.08	0.06	0-0.16	0.06	0-0.12	0.08	0.02-0.14

Table 24.3. Norfolk Vanguard East. Herring Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-47.08	11.97	0-35.9	12.07	0-48.3	0.04	0-0.16	0.03	0-0.08	0.02	0-0.08
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.80	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	17.07	0-68.3	0.00	0-0	0.00	0-0	0.03	0-0.11
Dec-2012	30.75	0-71.76	31.70	0-73.97	91.44	34.29-160.02	0.10	0-0.24	0.07	0-0.16	0.15	0.05-0.25
Jan-2013	30.60	0-71.39	52.65	10.53-105.3	53.62	10.72-107.24	0.10	0-0.24	0.12	0.02-0.23	0.09	0.02-0.17
Feb-2013	0.00	0-0	0.00	0-0	11.57	0-34.71	0.00	0-0	0.00	0-0	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-41.27	0.00	0-0	0.00	0-0	0.02	0-0.07
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	427.32	311.83-554.65	427.22	300.21-577.33	449.27	311.03-575.99	1.44	1.05-1.87	0.95	0.67-1.28	0.71	0.49-0.92
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	36.63	9.16-73.26	46.44	9.29-92.89	84.53	37.57-140.89	0.12	0.03-0.25	0.10	0.02-0.21	0.13	0.06-0.22
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	9.32	0-28.19	9.39	0-28.18	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	9.23	0-36.91	9.24	0-27.73	9.43	0-28.28	0.03	0-0.12	0.02	0-0.06	0.02	0-0.05

Table 24.4. Norfolk Vanguard East. Herring Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	11.77	0-47.08	11.97	0-35.9	12.07	0-48.3	0.04	0-0.16	0.03	0-0.08	0.02	0-0.08
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.80	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	0.00	0-0	17.07	0-68.3	0.00	0-0	0.00	0-0	0.03	0-0.11
Dec-2012	30.75	0-71.76	31.70	0-73.97	91.44	34.29-160.02	0.10	0-0.24	0.07	0-0.16	0.15	0.05-0.25
Jan-2013	30.60	0-71.39	52.65	10.53-105.3	53.62	10.72-107.24	0.10	0-0.24	0.12	0.02-0.23	0.09	0.02-0.17
Feb-2013	0.00	0-0	0.00	0-0	11.57	0-34.71	0.00	0-0	0.00	0-0	0.02	0-0.06
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	10.32	0-41.27	0.00	0-0	0.00	0-0	0.02	0-0.07
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	427.32	311.83-554.65	427.22	300.21-577.33	449.27	311.03-575.99	1.44	1.05-1.87	0.95	0.67-1.28	0.71	0.49-0.92
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	36.63	9.16-73.26	46.44	9.29-92.89	84.53	37.57-140.89	0.12	0.03-0.25	0.10	0.02-0.21	0.13	0.06-0.22
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	9.32	0-28.19	9.39	0-28.18	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	9.23	0-36.91	9.24	0-27.73	9.43	0-28.28	0.03	0-0.12	0.02	0-0.06	0.02	0-0.05

Table 24.5. Norfolk Vanguard East. Herring Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	47.08	11.77-94.15	59.83	11.97-119.67	84.52	24.15-144.9	0.16	0.04-0.32	0.13	0.03-0.27	0.13	0.04-0.23
Apr-2012	17.37	0-43.43	34.97	0-69.93	35.20	8.8-70.4	0.06	0-0.15	0.08	0-0.16	0.06	0.01-0.11
May-2012	9.89	0-29.68	30.03	0-70.08	40.23	10.06-90.51	0.03	0-0.1	0.07	0-0.16	0.06	0.02-0.14
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	7.28	0-22.03	7.32	0-21.96	14.77	0-36.92	0.02	0-0.07	0.02	0-0.05	0.02	0-0.06
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	33.38	0-83.46	34.15	0-85.37	0.05	0-0.16	0.07	0-0.19	0.05	0-0.14
Dec-2012	51.26	10.25-102.51	52.83	10.57-105.67	91.44	34.29-160.02	0.17	0.03-0.34	0.12	0.02-0.23	0.15	0.05-0.25
Jan-2013	91.79	40.8-163.19	179.01	105.3-263.25	203.75	117.96-289.81	0.31	0.14-0.55	0.40	0.23-0.58	0.32	0.19-0.46
Feb-2013	11.44	0-34.32	23.01	0-57.52	23.14	0-57.85	0.04	0-0.12	0.05	0-0.13	0.04	0-0.09
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	78.58	39.29-125.72	0.16	0.05-0.29	0.10	0.03-0.19	0.13	0.06-0.2
Oct-2013	7.12	0-21.36	7.16	0-21.48	7.15	0-21.45	0.02	0-0.07	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	8.77	0-26.32	26.52	0-61.89	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Dec-2013	222.25	128.38-327.52	225.05	130.29-331.66	226.47	131.11-334.04	0.75	0.43-1.1	0.50	0.29-0.74	0.36	0.21-0.53

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	57.75	11.55-115.49	57.73	11.55-115.47	57.60	11.52-115.2	0.19	0.04-0.39	0.13	0.03-0.26	0.09	0.02-0.18
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	8.27	0-24.82	8.30	0-24.9	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Oct-2015	18.22	0-45.56	18.52	0-46.29	28.31	0-66.07	0.06	0-0.15	0.04	0-0.1	0.05	0-0.11
Nov-2015	36.63	9.16-73.26	46.44	9.29-83.6	84.53	37.57-140.89	0.12	0.03-0.25	0.10	0.02-0.19	0.13	0.06-0.22
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	9.23	0-27.68	18.49	0-46.21	37.71	9.43-75.65	0.03	0-0.09	0.04	0-0.1	0.06	0.02-0.12

Table 24.6. Norfolk Vanguard East. Herring Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	47.08	11.77-94.15	59.83	11.97-119.67	84.52	24.15-144.9	0.16	0.04-0.32	0.13	0.03-0.27	0.13	0.04-0.23
Apr-2012	17.37	0-43.43	34.97	0-69.93	35.20	8.8-70.4	0.06	0-0.15	0.08	0-0.16	0.06	0.01-0.11
May-2012	9.89	0-29.68	30.03	0-70.08	40.23	10.06-90.51	0.03	0-0.1	0.07	0-0.16	0.06	0.02-0.14
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	7.28	0-22.03	7.32	0-23.67	17.58	1.41-41.14	0.02	0-0.07	0.02	0-0.05	0.03	0-0.07
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	16.14	0-48.42	33.38	0-83.46	34.15	0-85.37	0.05	0-0.16	0.07	0-0.19	0.05	0-0.14
Dec-2012	51.26	10.25-102.51	52.83	10.57-105.67	91.44	34.29-160.02	0.17	0.03-0.34	0.12	0.02-0.23	0.15	0.05-0.25
Jan-2013	91.79	40.8-163.19	179.01	105.3-263.25	203.75	117.96-289.81	0.31	0.14-0.55	0.40	0.23-0.58	0.32	0.19-0.46
Feb-2013	11.44	0-34.32	23.01	0-57.52	23.14	0-57.85	0.04	0-0.12	0.05	0-0.13	0.04	0-0.09
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2013	46.61	15.54-85.46	47.07	15.69-86.3	78.58	39.29-125.72	0.16	0.05-0.29	0.10	0.03-0.19	0.13	0.06-0.2
Oct-2013	7.12	0-21.36	7.16	0-21.48	7.15	0-21.45	0.02	0-0.07	0.02	0-0.05	0.01	0-0.03
Nov-2013	0.00	0-0	8.77	0-26.32	26.52	0-61.89	0.00	0-0	0.02	0-0.06	0.04	0-0.1

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	222.25	128.38-327.52	225.05	130.29-331.66	226.47	131.11-334.04	0.75	0.43-1.1	0.50	0.29-0.74	0.36	0.21-0.53
Jan-2014	57.75	11.55-115.49	57.73	11.55-115.47	57.60	11.52-115.2	0.19	0.04-0.39	0.13	0.03-0.26	0.09	0.02-0.18
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	19.32	6.44-42	15.81	4.7-35.23	0.00	0-0	0.04	0.01-0.09	0.03	0.01-0.06
Oct-2015	18.22	0-45.56	18.52	0-46.29	28.31	0-66.07	0.06	0-0.15	0.04	0-0.1	0.05	0-0.11
Nov-2015	36.63	9.16-73.26	46.44	9.29-83.6	84.53	37.57-140.89	0.12	0.03-0.25	0.10	0.02-0.19	0.13	0.06-0.22
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	1.88	0-7.54	1.19	0-3.57	0.00	0-0	0.00	0-0.02	0.00	0-0.01
Apr-2016	9.23	0-27.68	18.49	0-46.21	37.71	9.43-75.65	0.03	0-0.09	0.04	0-0.1	0.06	0.02-0.12

Table 25.1. Norfolk Vanguard East. Great Black-backed Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-35.9	12.07	0-36.22	0.00	0-0	0.03	0-0.08	0.02	0-0.06
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.80	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	23.44	0-58.61	45.78	11.44-91.56	56.06	11.21-101.18	0.08	0-0.2	0.10	0.03-0.2	0.09	0.02-0.16
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	64.56	0-129.13	300.44	183.6-450.66	495.17	324.42-665.91	0.22	0-0.43	0.67	0.41-1	0.79	0.52-1.06
Dec-2012	379.29	266.53-512.56	464.94	338.14-602.31	594.36	434.34-765.8	1.28	0.9-1.72	1.03	0.75-1.34	0.95	0.69-1.22
Jan-2013	193.78	122.13-275.63	421.21	294.84-558.1	589.81	439.41-750.66	0.65	0.41-0.93	0.94	0.65-1.24	0.94	0.7-1.19
Feb-2013	11.44	0-34.32	230.07	126.54-322.1	231.41	138.56-335.55	0.04	0-0.12	0.51	0.28-0.72	0.37	0.22-0.53
Mar-2013	12.96	0-38.87	12.78	0-38.33	25.95	0-64.86	0.04	0-0.13	0.03	0-0.09	0.04	0-0.1
Apr-2013	19.45	0-48.63	20.54	0-51.35	53.05	10.61-106.11	0.07	0-0.16	0.05	0-0.11	0.08	0.02-0.17
May-2013	19.24	0-57.72	19.09	0-57.27	19.11	0-57.33	0.06	0-0.19	0.04	0-0.13	0.03	0-0.09
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	103.67	47.12-169.64	228.32	148.66-317.67	247.63	154.77-361.13	0.35	0.16-0.57	0.51	0.33-0.71	0.39	0.25-0.57
Sep-2013	54.38	15.54-101	70.61	31.38-117.69	86.43	39.29-141.44	0.18	0.05-0.34	0.16	0.07-0.26	0.14	0.06-0.23
Oct-2013	14.24	0-35.61	14.32	0-35.81	14.30	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	52.08	17.36-104.16	52.64	17.55-96.51	114.93	53.04-185.66	0.18	0.06-0.35	0.12	0.04-0.21	0.18	0.08-0.3
Dec-2013	315.83	198.85-444.5	343.50	225.05-474.09	429.10	297.69-584.05	1.06	0.67-1.5	0.76	0.5-1.05	0.68	0.47-0.93

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	1074.08	866.2-1293.52	1143.11	923.73-1362.5	1151.98	944.33-1382.37	3.61	2.92-4.35	2.54	2.05-3.03	1.83	1.5-2.2
Feb-2014	0.00	0-0	0.00	0-0	20.03	0-50.07	0.00	0-0	0.00	0-0	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	16.60	0-41.5	0.00	0-0	0.00	0-0	0.03	0-0.07
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	47.19	9.44-84.94	0.12	0.03-0.25	0.08	0.02-0.16	0.08	0.02-0.14
Nov-2015	393.78	293.04-503.9	659.49	519.93-817.4	807.77	648.1-967.45	1.33	0.99-1.7	1.46	1.15-1.82	1.29	1.03-1.54
Dec-2015	36.45	9.11-72.9	55.18	18.39-110.36	55.03	18.34-100.89	0.12	0.03-0.25	0.12	0.04-0.25	0.09	0.03-0.16
Jan-2016	46.83	9.37-84.54	64.70	18.49-110.91	65.99	28.04-113.12	0.16	0.03-0.28	0.14	0.04-0.25	0.11	0.04-0.18
Feb-2016	18.64	0-46.6	37.09	9.27-74.19	56.36	18.79-103.32	0.06	0-0.16	0.08	0.02-0.16	0.09	0.03-0.16
Mar-2016	9.25	0-27.75	18.64	0-46.6	37.57	9.39-84.53	0.03	0-0.09	0.04	0-0.1	0.06	0.01-0.13
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 25.2. Norfolk Vanguard East. Great Black-backed Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-35.9	12.07	0-36.22	0.00	0-0	0.03	0-0.08	0.02	0-0.06
Apr-2012	8.69	0-26.06	8.74	0-26.22	8.80	0-26.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	7.84	0-23.98	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	23.44	0-58.61	45.78	11.44-91.56	56.06	11.21-101.18	0.08	0-0.2	0.10	0.03-0.2	0.09	0.02-0.16
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	64.56	0-129.13	300.44	183.6-450.66	495.17	324.42-665.91	0.22	0-0.43	0.67	0.41-1	0.79	0.52-1.06
Dec-2012	379.29	266.53-512.56	464.94	338.14-602.31	594.36	434.34-765.8	1.28	0.9-1.72	1.03	0.75-1.34	0.95	0.69-1.22
Jan-2013	193.78	122.13-275.63	421.21	294.84-558.1	589.81	439.41-750.66	0.65	0.41-0.93	0.94	0.65-1.24	0.94	0.7-1.19
Feb-2013	11.44	0-34.32	230.07	126.54-322.1	231.41	138.56-335.55	0.04	0-0.12	0.51	0.28-0.72	0.37	0.22-0.53
Mar-2013	12.96	0-38.87	12.78	0-38.33	25.95	0-64.86	0.04	0-0.13	0.03	0-0.09	0.04	0-0.1
Apr-2013	19.45	0-48.63	20.54	0-51.35	53.05	10.61-106.11	0.07	0-0.16	0.05	0-0.11	0.08	0.02-0.17
May-2013	19.24	0-57.72	19.09	0-57.27	19.11	0-57.33	0.06	0-0.19	0.04	0-0.13	0.03	0-0.09
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	103.67	47.12-169.64	228.32	148.66-317.67	247.63	154.77-361.13	0.35	0.16-0.57	0.51	0.33-0.71	0.39	0.25-0.57
Sep-2013	54.38	15.54-101	70.61	31.38-117.69	86.43	39.29-141.44	0.18	0.05-0.34	0.16	0.07-0.26	0.14	0.06-0.23
Oct-2013	14.24	0-35.61	14.32	0-35.81	14.30	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	52.08	17.36-104.16	52.64	17.55-96.51	114.93	53.04-185.66	0.18	0.06-0.35	0.12	0.04-0.21	0.18	0.08-0.3

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	315.83	198.85-444.5	343.50	225.05-474.09	429.10	297.69-584.05	1.06	0.67-1.5	0.76	0.5-1.05	0.68	0.47-0.93
Jan-2014	1074.08	866.2-1293.52	1143.11	923.73-1362.5	1151.98	944.33-1382.37	3.61	2.92-4.35	2.54	2.05-3.03	1.83	1.5-2.2
Feb-2014	0.00	0-0	0.00	0-0	121.04	76.77-171.45	0.00	0-0	0.00	0-0	0.19	0.12-0.27
Sep-2015	0.00	0-0	0.00	0-0	32.10	11.23-62.1	0.00	0-0	0.00	0-0	0.05	0.02-0.1
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	47.19	9.44-84.94	0.12	0.03-0.25	0.08	0.02-0.16	0.08	0.02-0.14
Nov-2015	393.78	293.04-503.9	659.49	519.93-817.4	807.77	648.1-967.45	1.33	0.99-1.7	1.46	1.15-1.82	1.29	1.03-1.54
Dec-2015	36.45	9.11-72.9	55.18	18.39-110.36	55.03	18.34-100.89	0.12	0.03-0.25	0.12	0.04-0.25	0.09	0.03-0.16
Jan-2016	46.83	9.37-84.54	64.70	18.49-110.91	65.99	28.04-113.12	0.16	0.03-0.28	0.14	0.04-0.25	0.11	0.04-0.18
Feb-2016	18.64	0-46.6	37.09	9.27-74.19	56.36	18.79-103.32	0.06	0-0.16	0.08	0.02-0.16	0.09	0.03-0.16
Mar-2016	9.25	0-27.75	20.45	0-50.31	42.27	9.39-84.53	0.03	0-0.09	0.05	0-0.11	0.07	0.01-0.13
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 25.3. Norfolk Vanguard East. Great Black-backed Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	50.07	0-116.84	68.30	17.07-136.6	0.00	0-0	0.11	0-0.26	0.11	0.03-0.22
Dec-2012	41.00	10.25-82.01	84.53	31.7-147.94	148.59	68.58-228.88	0.14	0.03-0.28	0.19	0.07-0.33	0.24	0.11-0.36
Jan-2013	30.60	0-71.39	63.18	21.06-115.83	117.96	53.62-193.03	0.10	0-0.24	0.14	0.05-0.26	0.19	0.09-0.31
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	19.45	0-48.63	20.54	0-51.35	53.05	10.61-106.11	0.07	0-0.16	0.05	0-0.11	0.08	0.02-0.17
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	94.24	37.7-160.21	198.54	119.12-287.88	216.68	134.13-319.86	0.32	0.13-0.54	0.44	0.26-0.64	0.34	0.21-0.51
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	8.84	0-26.52	0.00	0-0	0.00	0-0	0.01	0-0.04
Dec-2013	70.18	23.39-128.67	94.76	35.53-165.83	131.11	59.6-214.55	0.24	0.08-0.43	0.21	0.08-0.37	0.21	0.09-0.34

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	866.20	681.12-1062.53	923.73	727.44-1108.76	921.58	725.75-1128.94	2.92	2.29-3.58	2.05	1.62-2.46	1.47	1.15-1.8
Feb-2014	0.00	0-0	0.00	0-0	20.03	0-50.07	0.00	0-0	0.00	0-0	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	82.42	36.63-137.36	102.17	46.44-167.19	140.89	75.14-216.03	0.28	0.12-0.46	0.23	0.1-0.37	0.22	0.12-0.34
Dec-2015	18.22	0-45.56	36.79	9.2-73.58	36.69	0-73.38	0.06	0-0.15	0.08	0.02-0.16	0.06	0-0.12
Jan-2016	37.47	9.37-74.93	46.21	9.24-92.43	47.13	9.43-94.27	0.13	0.03-0.25	0.10	0.02-0.21	0.08	0.02-0.15
Feb-2016	18.64	0-46.6	37.09	9.27-74.19	46.96	9.39-93.93	0.06	0-0.16	0.08	0.02-0.16	0.07	0.01-0.15
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.41	0.03	0-0.09	0.02	0-0.06	0.01	0-0.05
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 25.4. Norfolk Vanguard East. Great Black-backed Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	0.00	0-0	50.07	0-116.84	68.30	17.07-136.6	0.00	0-0	0.11	0-0.26	0.11	0.03-0.22
Dec-2012	41.00	10.25-82.01	84.53	31.7-147.94	148.59	68.58-228.88	0.14	0.03-0.28	0.19	0.07-0.33	0.24	0.11-0.36
Jan-2013	30.60	0-71.39	63.18	21.06-115.83	117.96	53.62-193.03	0.10	0-0.24	0.14	0.05-0.26	0.19	0.09-0.31
Feb-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2013	19.45	0-48.63	20.54	0-51.35	53.05	10.61-106.11	0.07	0-0.16	0.05	0-0.11	0.08	0.02-0.17
May-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	94.24	37.7-160.21	188.61	119.12-287.88	216.68	134.13-319.86	0.32	0.13-0.54	0.42	0.26-0.64	0.34	0.21-0.51
Sep-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2013	0.00	0-0	0.00	0-0	8.84	0-26.52	0.00	0-0	0.00	0-0	0.01	0-0.04

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	70.18	23.39-128.67	94.76	35.53-165.83	131.11	59.6-214.55	0.24	0.08-0.43	0.21	0.08-0.37	0.21	0.09-0.34
Jan-2014	866.20	681.12-1062.53	923.73	727.44-1108.76	921.58	725.75-1128.94	2.92	2.29-3.58	2.05	1.62-2.46	1.47	1.15-1.8
Feb-2014	0.00	0-0	0.00	0-0	20.03	0-50.07	0.00	0-0	0.00	0-0	0.03	0-0.08
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	82.42	36.63-137.36	102.17	46.44-167.19	140.89	75.14-216.03	0.28	0.12-0.46	0.23	0.1-0.37	0.22	0.12-0.34
Dec-2015	18.22	0-45.56	36.79	9.2-73.58	36.69	0-73.38	0.06	0-0.15	0.08	0.02-0.16	0.06	0-0.12
Jan-2016	37.47	9.37-74.93	46.21	9.24-92.43	47.13	9.43-94.27	0.13	0.03-0.25	0.10	0.02-0.21	0.08	0.02-0.15
Feb-2016	18.64	0-46.6	37.09	9.27-74.19	46.96	9.39-93.93	0.06	0-0.16	0.08	0.02-0.16	0.07	0.01-0.15
Mar-2016	9.25	0-27.75	9.32	0-27.96	9.39	0-28.41	0.03	0-0.09	0.02	0-0.06	0.01	0-0.05
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 25.5. Norfolk Vanguard East. Great Black-backed Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-47.87	12.07	0-36.22	0.00	0-0	0.03	0-0.11	0.02	0-0.06
Apr-2012	8.69	0-26.06	8.74	0-34.97	8.80	0-26.4	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	7.38	0-22.15	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	23.44	0-58.61	45.78	11.44-91.56	56.06	11.21-112.12	0.08	0-0.2	0.10	0.03-0.2	0.09	0.02-0.18
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	64.56	16.14-129.13	250.37	133.53-383.9	426.87	273.2-580.54	0.22	0.05-0.43	0.56	0.3-0.85	0.68	0.43-0.92
Dec-2012	338.29	225.53-461.3	380.40	264.17-517.77	445.77	308.61-594.36	1.14	0.76-1.55	0.84	0.59-1.15	0.71	0.49-0.95
Jan-2013	163.19	91.79-244.78	358.03	252.72-484.39	471.84	332.44-611.52	0.55	0.31-0.82	0.80	0.56-1.08	0.75	0.53-0.97
Feb-2013	11.44	0-34.32	230.07	138.04-333.89	231.41	138.85-347.12	0.04	0-0.12	0.51	0.31-0.74	0.37	0.22-0.55
Mar-2013	12.96	0-38.87	12.78	0-38.33	25.95	0-64.86	0.04	0-0.13	0.03	0-0.09	0.04	0-0.1
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	19.24	0-58.2	19.09	0-76.36	19.11	0-57.33	0.06	0-0.2	0.04	0-0.17	0.03	0-0.09
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	9.42	0-28.27	29.78	0-69.49	30.95	0-72.23	0.03	0-0.1	0.07	0-0.15	0.05	0-0.11
Sep-2013	54.38	15.54-101	70.61	31.19-117.69	86.43	39.29-141.44	0.18	0.05-0.34	0.16	0.07-0.26	0.14	0.06-0.23
Oct-2013	14.24	0-35.61	14.32	0-35.81	14.30	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	52.08	17.36-95.48	52.64	17.55-96.51	106.09	53.04-167.98	0.18	0.06-0.32	0.12	0.04-0.21	0.17	0.08-0.27
Dec-2013	245.64	152.06-350.92	248.74	153.69-367.19	297.99	190.71-429.1	0.83	0.51-1.18	0.55	0.34-0.82	0.47	0.3-0.68

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2014	207.89	115.49-311.83	219.39	127.01-323.3	230.40	138.24-334.07	0.70	0.39-1.05	0.49	0.28-0.72	0.37	0.22-0.53
Feb-2014	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2015	0.00	0-0	0.00	0-0	16.60	0-41.5	0.00	0-0	0.00	0-0	0.03	0-0.07
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	47.19	9.44-94.38	0.12	0.03-0.25	0.08	0.02-0.16	0.08	0.02-0.15
Nov-2015	311.36	210.63-402.94	557.32	427.28-696.64	666.88	525.99-817.16	1.05	0.71-1.36	1.24	0.95-1.55	1.06	0.84-1.3
Dec-2015	18.22	0-45.56	18.39	0-45.98	18.34	0-45.86	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Jan-2016	9.37	0-28.1	18.49	0-46.21	18.85	0-47.13	0.03	0-0.09	0.04	0-0.1	0.03	0-0.08
Feb-2016	0.00	0-0	0.00	0-0	9.39	0-28.18	0.00	0-0	0.00	0-0	0.01	0-0.04
Mar-2016	0.00	0-0	9.32	0-27.96	28.18	0-65.75	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 25.6. Norfolk Vanguard East. Great Black-backed Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Mar-2012	0.00	0-0	11.97	0-47.87	12.07	0-36.22	0.00	0-0	0.03	0-0.11	0.02	0-0.06
Apr-2012	8.69	0-26.06	8.74	0-34.97	8.80	0-26.4	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
May-2012	9.89	0-29.68	10.01	0-30.03	10.06	0-30.17	0.03	0-0.1	0.02	0-0.07	0.02	0-0.05
Jun-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2012	0.00	0-0	0.00	0-0	7.84	0-23.98	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2012	23.44	0-58.61	45.78	11.44-91.56	56.06	11.21-112.12	0.08	0-0.2	0.10	0.03-0.2	0.09	0.02-0.18
Oct-2012	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2012	64.56	16.14-129.13	250.37	133.53-383.9	426.87	273.2-580.54	0.22	0.05-0.43	0.56	0.3-0.85	0.68	0.43-0.92
Dec-2012	338.29	225.53-461.3	380.40	264.17-517.77	445.77	308.61-594.36	1.14	0.76-1.55	0.84	0.59-1.15	0.71	0.49-0.95
Jan-2013	163.19	91.79-244.78	358.03	252.72-484.39	471.84	332.44-611.52	0.55	0.31-0.82	0.80	0.56-1.08	0.75	0.53-0.97
Feb-2013	11.44	0-34.32	230.07	138.04-333.89	231.41	138.85-347.12	0.04	0-0.12	0.51	0.31-0.74	0.37	0.22-0.55
Mar-2013	12.96	0-38.87	12.78	0-38.33	25.95	0-64.86	0.04	0-0.13	0.03	0-0.09	0.04	0-0.1
Apr-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2013	19.24	0-58.2	19.09	0-76.36	19.11	0-57.33	0.06	0-0.2	0.04	0-0.17	0.03	0-0.09
Jun-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2013	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2013	9.42	0-28.27	29.78	0-69.49	30.95	0-72.23	0.03	0-0.1	0.07	0-0.15	0.05	0-0.11
Sep-2013	54.38	15.54-101	70.61	31.19-117.69	86.43	39.29-141.44	0.18	0.05-0.34	0.16	0.07-0.26	0.14	0.06-0.23
Oct-2013	14.24	0-35.61	14.32	0-35.81	14.30	0-35.75	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Nov-2013	52.08	17.36-95.48	52.64	17.55-96.51	106.09	53.04-167.98	0.18	0.06-0.32	0.12	0.04-0.21	0.17	0.08-0.27

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2013	245.64	152.06-350.92	248.74	153.69-367.19	297.99	190.71-429.1	0.83	0.51-1.18	0.55	0.34-0.82	0.47	0.3-0.68
Jan-2014	207.89	115.49-311.83	219.39	127.01-323.3	230.40	138.24-334.07	0.70	0.39-1.05	0.49	0.28-0.72	0.37	0.22-0.53
Feb-2014	0.00	0-0	0.00	0-0	101.01	60.6-141.41	0.00	0-0	0.00	0-0	0.16	0.1-0.23
Sep-2015	0.00	0-0	0.00	0-0	31.57	11.23-62.08	0.00	0-0	0.00	0-0	0.05	0.02-0.1
Oct-2015	36.45	9.11-72.9	37.03	9.26-74.06	47.19	9.44-94.38	0.12	0.03-0.25	0.08	0.02-0.16	0.08	0.02-0.15
Nov-2015	302.20	210.63-402.94	557.32	427.28-696.64	676.27	525.99-817.16	1.02	0.71-1.36	1.24	0.95-1.55	1.08	0.84-1.3
Dec-2015	18.22	0-45.56	18.39	0-45.98	18.34	0-45.86	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Jan-2016	9.37	0-28.1	18.49	0-46.21	18.85	0-47.13	0.03	0-0.09	0.04	0-0.1	0.03	0-0.08
Feb-2016	0.00	0-0	0.00	0-0	9.39	0-28.18	0.00	0-0	0.00	0-0	0.01	0-0.04
Mar-2016	0.00	0-0	13.03	0-35.38	32.87	4.7-70.45	0.00	0-0	0.03	0-0.08	0.05	0.01-0.11
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 26.1. Norfolk Vanguard West. Common Scoter design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2017	0	0-0	0	0-0	18.8	0-46.94	0	0-0	0	0-0	0.03	0-0.07
Mar-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Table 26.2. Norfolk Vanguard West. Common Scoter design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 26.3. Norfolk Vanguard West. Common Scoter design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2016	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2017	0	0-0	0	0-0	18.8	0-46.94	0	0-0	0	0-0	0.03	0-0.07
Mar-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
May-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2017	0	0-0	0	0-0	0.0	0-0	0	0-0	0	0-0	0.00	0-0

Table 27.1. Norfolk Vanguard West. Red-throated Diver design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	8.01	0-24.04	32.9	8.22-73.97	50.1	16.7-91.85	0.03	0-0.08	0.07	0.02-0.16	0.08	0.03-0.14
Dec-2015	27.47	0-64.11	27.6	0-64.48	27.5	0-64.19	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Jan-2016	209.06	127.26-290.87	361.0	259.18-481.33	575.4	433.69-726.36	0.71	0.43-0.99	0.80	0.57-1.06	0.91	0.68-1.14
Feb-2016	127.26	63.63-190.88	175.9	101.82-259.18	254.1	159.98-357.61	0.43	0.22-0.65	0.39	0.23-0.57	0.40	0.25-0.56
Mar-2016	128.53	64.27-192.8	148.3	83.44-222.52	207.8	132.22-302.22	0.44	0.22-0.65	0.33	0.18-0.49	0.33	0.21-0.48
Apr-2016	82.01	36.22-136.68	138.6	73.93-212.55	302.2	207.78-425	0.28	0.12-0.46	0.31	0.16-0.47	0.48	0.33-0.67
May-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	9.15	0-27.44	18.5	0-46.17	28.1	0-65.58	0.03	0-0.09	0.04	0-0.1	0.04	0-0.1
Jan-2017	73.08	27.41-127.89	111.5	55.74-176.52	132.4	66.21-198.63	0.25	0.09-0.43	0.25	0.12-0.39	0.21	0.1-0.31
Feb-2017	36.45	9.11-72.9	46.4	9.27-92.72	56.3	18.78-103.27	0.12	0.03-0.25	0.10	0.02-0.2	0.09	0.03-0.16
Mar-2017	91.35	36.54-146.16	101.7	46.21-157.1	188.4	103.64-273.24	0.31	0.12-0.5	0.22	0.1-0.35	0.30	0.16-0.43
Apr-2017	37.57	9.39-75.14	65.7	18.76-121.94	66.9	19.12-114.71	0.13	0.03-0.25	0.15	0.04-0.27	0.11	0.03-0.18
May-2017	9.16	0-27.47	27.8	0-64.9	28.3	0-65.95	0.03	0-0.09	0.06	0-0.14	0.04	0-0.1
Jun-2017	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 27.2. Norfolk Vanguard West. Red-throated Diver design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	16.44	0-41.09	33.40	8.35-66.8	0.00	0-0	0.04	0-0.09	0.05	0.01-0.11
Dec-2015	9.16	0-27.47	9.21	0-27.63	9.17	0-27.51	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2016	27.27	0-63.63	27.77	0-64.79	28.30	0-66.03	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	18.27	0-45.68	18.58	0-46.45	18.92	0-47.29	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Feb-2017	9.11	0-27.34	9.27	0-27.81	9.39	0-28.16	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 27.3. Norfolk Vanguard West. Red-throated Diver design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	8.01	0-24.04	16.4	0-41.09	16.7	0-41.75	0.03	0-0.08	0.04	0-0.09	0.03	0-0.07
Dec-2015	18.32	0-45.79	18.4	0-46.05	18.3	0-45.85	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Jan-2016	181.79	109.08-263.6	333.2	231.18-435.05	547.1	415.06-679.19	0.62	0.37-0.89	0.74	0.51-0.96	0.86	0.65-1.07
Feb-2016	127.26	63.63-199.97	175.9	101.82-259.18	254.1	169.39-357.61	0.43	0.22-0.68	0.39	0.23-0.57	0.40	0.27-0.56
Mar-2016	128.53	64.27-193.03	148.3	83.44-222.52	207.8	122.78-292.78	0.44	0.22-0.65	0.33	0.18-0.49	0.33	0.19-0.46
Apr-2016	82.01	36.45-136.68	138.6	73.93-203.3	302.2	198.1-406.11	0.28	0.12-0.46	0.31	0.16-0.45	0.48	0.31-0.64
May-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	9.15	0-27.44	18.5	0-46.17	28.1	0-65.58	0.03	0-0.09	0.04	0-0.1	0.04	0-0.1
Jan-2017	54.81	18.27-100.49	92.9	46.45-148.65	113.5	56.75-179.71	0.19	0.06-0.34	0.21	0.1-0.33	0.18	0.09-0.28
Feb-2017	27.34	0-63.79	37.1	9.27-74.4	46.9	9.39-93.88	0.09	0-0.22	0.08	0.02-0.16	0.07	0.01-0.15
Mar-2017	91.35	36.54-146.16	101.7	46.21-166.34	188.4	113.06-282.66	0.31	0.12-0.5	0.22	0.1-0.37	0.30	0.18-0.45
Apr-2017	37.57	9.39-75.14	65.7	27.91-121.94	66.9	19.12-114.71	0.13	0.03-0.25	0.15	0.06-0.27	0.11	0.03-0.18
May-2017	9.16	0-27.47	27.8	0-64.9	28.3	0-65.95	0.03	0-0.09	0.06	0-0.14	0.04	0-0.1
Jun-2017	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 28.1. Norfolk Vanguard West. Fulmar design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	78.80	31.52-133.96	102.2	55.03-157.23	117.9	62.89-180.81	0.27	0.11-0.45	0.23	0.12-0.35	0.19	0.1-0.28
Oct-2015	27.54	0-64.27	37.0	9.24-73.93	47.3	9.47-94.67	0.09	0-0.22	0.08	0.02-0.16	0.07	0.01-0.15
Nov-2015	32.05	8.01-64.1	115.1	65.75-180.81	125.2	66.8-192.05	0.11	0.03-0.22	0.25	0.15-0.4	0.20	0.11-0.3
Dec-2015	9.16	0-27.47	27.6	0-64.48	100.9	45.85-165.06	0.03	0-0.09	0.06	0-0.14	0.16	0.07-0.26
Jan-2016	9.09	0-27.27	18.5	0-46.51	47.2	9.43-94.33	0.03	0-0.09	0.04	0-0.1	0.07	0.01-0.15
Feb-2016	27.27	0-63.63	46.3	9.26-92.56	75.3	28.23-131.75	0.09	0-0.22	0.10	0.02-0.2	0.12	0.04-0.21
Mar-2016	91.81	36.72-156.07	120.5	55.63-185.43	160.6	94.21-236.11	0.31	0.12-0.53	0.27	0.12-0.41	0.25	0.15-0.37
Apr-2016	27.34	0-63.79	37.0	9.24-73.93	47.2	9.44-94.44	0.09	0-0.22	0.08	0.02-0.16	0.07	0.01-0.15
May-2016	45.45	9.09-90.9	55.6	18.54-101.99	104.0	47.28-170.2	0.15	0.03-0.31	0.12	0.04-0.23	0.16	0.07-0.27
Jun-2016	55.08	18.36-100.99	83.3	36.79-138.85	131.4	65.72-206.54	0.19	0.06-0.34	0.18	0.08-0.31	0.21	0.1-0.33
Jul-2016	14.25	0-35.63	14.5	0-36.28	23.0	0-53.71	0.05	0-0.12	0.03	0-0.08	0.04	0-0.08
Aug-2016	7.86	0-23.58	23.6	0-55.03	39.3	7.87-78.68	0.03	0-0.08	0.05	0-0.12	0.06	0.01-0.12
Sep-2016	82.22	36.54-137.25	203.6	120.33-296.2	339.2	235.55-442.83	0.28	0.12-0.47	0.45	0.27-0.65	0.53	0.37-0.7
Oct-2016	1153.89	979.89-1364.52	1221.3	1017.78-1424.89	1385.1	1166.67-1612.81	3.91	3.32-4.63	2.70	2.25-3.15	2.18	1.84-2.54
Nov-2016	72.90	27.34-127.57	92.9	37.16-157.94	169.5	103.37-254.32	0.25	0.09-0.43	0.21	0.08-0.35	0.27	0.16-0.4
Dec-2016	18.29	0-45.73	18.5	0-46.17	18.7	0-46.84	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Jan-2017	127.89	63.95-200.97	260.1	167.23-371.63	425.6	293.22-558.06	0.43	0.22-0.68	0.58	0.37-0.82	0.67	0.46-0.88
Feb-2017	9.11	0-27.34	18.5	0-46.36	18.8	0-46.94	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07
Mar-2017	9.14	0-27.41	18.5	0-46.21	18.8	0-47.11	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07
Apr-2017	9.39	0-28.18	18.8	0-46.9	19.1	0-48.03	0.03	0-0.1	0.04	0-0.1	0.03	0-0.08
May-2017	27.47	0-64.11	64.9	18.54-120.53	75.4	28.27-131.91	0.09	0-0.22	0.14	0.04-0.27	0.12	0.04-0.21

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	45.90	9.18-82.63	55.8	18.61-102.37	75.6	28.34-132.26	0.16	0.03-0.28	0.12	0.04-0.23	0.12	0.04-0.21
Jul-2017	45.68	9.14-91.35	120.1	55.45-184.82	208.3	123.07-302.95	0.15	0.03-0.31	0.27	0.12-0.41	0.33	0.19-0.48
Aug-2017	246.65	155.3-338	361.6	259.61-473.08	557.2	434.21-708.34	0.84	0.53-1.15	0.80	0.57-1.05	0.88	0.68-1.12

Table 28.2. Norfolk Vanguard West. Fulmar design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0-55.03	39.31	7.86-78.61	0.03	0-0.08	0.05	0-0.12	0.06	0.01-0.12
Oct-2015	0.00	0-0	9.24	0-27.72	18.93	0-47.34	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Nov-2015	24.04	0-48.27	98.62	49.31-156.36	100.20	50.1-158.65	0.08	0-0.16	0.22	0.11-0.35	0.16	0.08-0.25
Dec-2015	9.16	0-27.47	9.21	0-27.63	36.68	9.17-73.36	0.03	0-0.09	0.02	0-0.06	0.06	0.01-0.12
Jan-2016	9.09	0-27.27	18.51	0-55.54	47.17	9.43-94.33	0.03	0-0.09	0.04	0-0.12	0.07	0.01-0.15
Feb-2016	27.27	0-63.63	27.77	0-64.79	28.23	0-65.87	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Mar-2016	18.36	0-45.9	27.81	0-64.9	37.78	9.44-85	0.06	0-0.16	0.06	0-0.14	0.06	0.01-0.13
Apr-2016	18.22	0-45.56	18.48	0-55.45	18.89	0-47.22	0.06	0-0.15	0.04	0-0.12	0.03	0-0.07
May-2016	9.09	0-27.27	9.27	0-27.81	37.82	9.46-75.65	0.03	0-0.09	0.02	0-0.06	0.06	0.01-0.12
Jun-2016	0.00	0-0	9.26	0-27.77	37.55	9.39-84.49	0.00	0-0	0.02	0-0.06	0.06	0.01-0.13
Jul-2016	0.00	0-0	0.00	0-0	7.67	0-23.02	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2016	0.00	0-0	15.72	0-39.31	23.60	0-55.07	0.00	0-0	0.03	0-0.09	0.04	0-0.09
Sep-2016	9.14	0-27.41	27.77	0-64.79	37.69	9.42-75.38	0.03	0-0.09	0.06	0-0.14	0.06	0.01-0.12
Oct-2016	210.63	128.21-302.21	222.06	147.81-305.56	303.59	199.23-417.43	0.71	0.43-1.02	0.49	0.33-0.68	0.48	0.31-0.66
Nov-2016	9.11	0-27.34	9.29	0-27.87	56.51	18.84-103.61	0.03	0-0.09	0.02	0-0.06	0.09	0.03-0.16
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	36.54	9.14-82.22	55.74	18.58-102.2	75.67	28.38-132.42	0.12	0.03-0.28	0.12	0.04-0.23	0.12	0.04-0.21
Feb-2017	9.11	0-27.34	9.27	0-27.81	9.39	0-28.16	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2017	9.14	0-27.41	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	9.39	0-28.18	18.76	0-46.9	19.12	0-47.79	0.03	0-0.1	0.04	0-0.1	0.03	0-0.08
May-2017	9.16	0-27.47	27.81	0-64.9	37.69	9.42-75.38	0.03	0-0.09	0.06	0-0.14	0.06	0.01-0.12
Jun-2017	27.54	0-64.27	37.22	9.31-74.45	47.24	9.45-94.47	0.09	0-0.22	0.08	0.02-0.16	0.07	0.01-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	36.54	9.14-73.31	64.69	18.48-110.89	113.61	56.8-179.88	0.12	0.03-0.25	0.14	0.04-0.25	0.18	0.09-0.28
Aug-2017	82.22	36.54-137.03	92.72	37.09-157.62	170.00	94.44-255	0.28	0.12-0.46	0.20	0.08-0.35	0.27	0.15-0.4

Table 28.3. Norfolk Vanguard West. Fulmar design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	70.92	31.52-118.2	78.62	31.45-133.65	78.61	31.45-133.64	0.24	0.11-0.4	0.17	0.07-0.3	0.12	0.05-0.21
Oct-2015	27.54	0-64.27	27.72	0-64.69	28.40	0-66.27	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Nov-2015	8.01	0-24.04	16.44	0-41.09	25.05	0-58.45	0.03	0-0.08	0.04	0-0.09	0.04	0-0.09
Dec-2015	0.00	0-0	18.42	0-46.05	64.19	18.34-110.04	0.00	0-0	0.04	0-0.1	0.10	0.03-0.17
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	18.51	0-46.28	47.05	9.41-94.11	0.00	0-0	0.04	0-0.1	0.07	0.01-0.15
Mar-2016	73.45	27.54-128.53	92.72	37.09-148.35	122.78	66.11-188.89	0.25	0.09-0.44	0.20	0.08-0.33	0.19	0.1-0.3
Apr-2016	9.11	0-27.34	18.48	0-46.21	28.33	0-66.11	0.03	0-0.09	0.04	0-0.1	0.04	0-0.1
May-2016	36.36	9.09-72.72	46.36	9.27-83.68	66.19	28.13-122.93	0.12	0.03-0.25	0.10	0.02-0.18	0.10	0.04-0.19
Jun-2016	55.08	18.36-100.99	74.05	27.77-129.59	93.88	37.55-150.21	0.19	0.06-0.34	0.16	0.06-0.29	0.15	0.06-0.24
Jul-2016	14.25	0-35.63	14.51	0-36.28	15.35	0-38.37	0.05	0-0.12	0.03	0-0.08	0.02	0-0.06
Aug-2016	7.86	0-23.58	7.86	0-23.59	15.74	0-39.34	0.03	0-0.08	0.02	0-0.05	0.02	0-0.06
Sep-2016	73.08	27.41-118.76	175.87	101.82-259.18	301.50	207.05-405.14	0.25	0.09-0.4	0.39	0.23-0.57	0.47	0.33-0.64
Oct-2016	943.26	787.58-1117.26	999.27	813.99-1193.58	1081.53	901.04-1271.51	3.20	2.67-3.79	2.21	1.8-2.64	1.70	1.42-2
Nov-2016	63.79	18.22-118.46	83.62	37.16-139.36	113.03	56.51-178.96	0.22	0.06-0.4	0.18	0.08-0.31	0.18	0.09-0.28
Dec-2016	18.29	0-45.73	18.47	0-46.17	18.74	0-46.84	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Jan-2017	91.35	36.54-155.3	204.40	120.78-288.01	349.97	245.69-463.47	0.31	0.12-0.53	0.45	0.27-0.64	0.55	0.39-0.73
Feb-2017	0.00	0-0	9.27	0-27.81	9.39	0-28.16	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	9.24	0-27.72	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	18.32	0-45.79	37.09	9.27-74.17	37.69	9.42-75.38	0.06	0-0.16	0.08	0.02-0.16	0.06	0.01-0.12
Jun-2017	18.36	0-45.9	18.61	0-46.53	28.34	0-66.13	0.06	0-0.16	0.04	0-0.1	0.04	0-0.1

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	9.14	0-27.41	55.45	18.48-101.65	94.67	37.87-160.94	0.03	0-0.09	0.12	0.04-0.22	0.15	0.06-0.25
Aug-2017	164.43	100.26-237.74	268.88	176.16-380.14	387.22	283.1-510	0.56	0.34-0.81	0.59	0.39-0.84	0.61	0.45-0.8

Table 29.1. Norfolk Vanguard West. Gannet design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	15.76	0-39.4	31.45	7.86-62.89	62.89	23.58-110.26	0.05	0-0.13	0.07	0.02-0.14	0.10	0.04-0.17
Oct-2015	495.76	367.23-624.3	674.60	526.74-822.46	804.71	634.3-965.65	1.68	1.25-2.12	1.49	1.16-1.82	1.27	1-1.52
Nov-2015	424.63	312.47-536.8	788.98	649.06-945.13	993.67	826.67-1177.38	1.44	1.06-1.82	1.74	1.43-2.09	1.56	1.3-1.85
Dec-2015	0.00	0-0	0.00	0-0	18.34	0-45.85	0.00	0-0	0.00	0-0	0.03	0-0.07
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-36.36	9.26	0-27.77	18.82	0-47.05	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Mar-2016	27.54	0-64.27	27.81	0-64.9	28.33	0-66.11	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Apr-2016	0.00	0-0	0.00	0-0	28.33	0-66.11	0.00	0-0	0.00	0-0	0.04	0-0.1
May-2016	0.00	0-0	0.00	0-0	9.46	0-28.37	0.00	0-0	0.00	0-0	0.01	0-0.04
Jun-2016	64.27	18.36-119.35	92.56	37.03-157.36	112.66	56.33-187.77	0.22	0.06-0.4	0.20	0.08-0.35	0.18	0.09-0.3
Jul-2016	14.25	0-35.63	21.77	0-50.8	23.02	0-53.71	0.05	0-0.12	0.05	0-0.11	0.04	0-0.08
Aug-2016	15.72	0-39.3	15.72	0-39.31	47.21	15.74-86.54	0.05	0-0.13	0.03	0-0.09	0.07	0.02-0.14
Sep-2016	27.41	0-63.95	37.03	9.26-74.05	47.11	9.42-84.8	0.09	0-0.22	0.08	0.02-0.16	0.07	0.01-0.13
Oct-2016	18.32	0-45.79	37.01	9.25-74.02	37.95	9.49-85.38	0.06	0-0.16	0.08	0.02-0.16	0.06	0.01-0.13
Nov-2016	637.86	492.06-792.77	854.75	687.52-1031.28	1064.36	875.98-1252.98	2.16	1.67-2.69	1.89	1.52-2.28	1.68	1.38-1.97
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	27.41	0-63.95	37.16	9.29-74.33	37.83	9.46-75.67	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12
Feb-2017	9.11	0-27.34	9.27	0-27.81	9.39	0-28.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	9.38	0-28.14	9.56	0-28.68	0.00	0-0	0.02	0-0.06	0.02	0-0.05
May-2017	9.16	0-36.63	18.54	0-46.36	37.69	9.42-75.38	0.03	0-0.12	0.04	0-0.1	0.06	0.01-0.12
Jun-2017	9.18	0-27.54	27.92	0-65.14	47.24	9.45-94.47	0.03	0-0.09	0.06	0-0.14	0.07	0.01-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	73.08	27.41-127.89	92.41	36.96-157.1	104.14	47.34-170.41	0.25	0.09-0.43	0.20	0.08-0.35	0.16	0.07-0.27
Aug-2017	91.35	36.54-146.39	176.16	92.72-259.61	188.89	113.1-264.45	0.31	0.12-0.5	0.39	0.2-0.57	0.30	0.18-0.42

Table 29.2. Norfolk Vanguard West. Gannet design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	15.72	0-39.31	39.31	7.86-70.75	0.03	0-0.08	0.03	0-0.09	0.06	0.01-0.11
Oct-2015	211.16	137.71-293.79	258.75	175.58-360.4	321.88	217.74-426.02	0.72	0.47-1	0.57	0.39-0.8	0.51	0.34-0.67
Nov-2015	208.31	136.2-288.43	394.49	287.44-517.77	517.71	392.46-642.97	0.71	0.46-0.98	0.87	0.64-1.14	0.82	0.62-1.01
Dec-2015	0.00	0-0	0.00	0-0	9.17	0-27.51	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.5	9.26	0-27.77	18.82	0-47.05	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Mar-2016	27.54	0-64.27	27.81	0-64.9	28.33	0-66.11	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Apr-2016	0.00	0-0	0.00	0-0	9.44	0-28.33	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2016	0.00	0-0	0.00	0-0	9.46	0-28.37	0.00	0-0	0.00	0-0	0.01	0-0.04
Jun-2016	9.18	0-27.54	18.51	0-46.28	28.16	0-65.72	0.03	0-0.09	0.04	0-0.1	0.04	0-0.1
Jul-2016	7.13	0-28.51	14.51	0-36.28	15.35	0-38.37	0.02	0-0.1	0.03	0-0.08	0.02	0-0.06
Aug-2016	7.86	0-23.58	7.86	0-23.59	39.34	7.87-78.68	0.03	0-0.08	0.02	0-0.05	0.06	0.01-0.12
Sep-2016	27.41	0-63.95	27.77	0-64.79	37.69	9.42-75.38	0.09	0-0.22	0.06	0-0.14	0.06	0.01-0.12
Oct-2016	18.32	0-45.79	37.01	9.02-74.25	37.95	9.49-75.9	0.06	0-0.16	0.08	0.02-0.16	0.06	0.01-0.12
Nov-2016	173.13	100.24-255.14	260.14	167-362.57	395.60	282.57-518.29	0.59	0.34-0.87	0.58	0.37-0.8	0.62	0.45-0.82
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	9.14	0-27.41	18.58	0-46.45	18.92	0-47.29	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07
Feb-2017	9.11	0-27.34	9.27	0-27.81	9.39	0-28.16	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	9.16	0-27.47	18.54	0-46.36	37.69	9.42-75.38	0.03	0-0.09	0.04	0-0.1	0.06	0.01-0.12
Jun-2017	9.18	0-27.54	27.92	0-65.14	47.24	9.45-94.47	0.03	0-0.09	0.06	0-0.14	0.07	0.01-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	45.68	9.14-91.35	55.45	18.48-101.65	66.27	18.93-123.07	0.15	0.03-0.31	0.12	0.04-0.22	0.10	0.03-0.19
Aug-2017	63.95	18.27-109.85	101.99	46.36-157.62	103.89	47.22-170	0.22	0.06-0.37	0.23	0.1-0.35	0.16	0.07-0.27

Table 29.3. Norfolk Vanguard West. Gannet design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	15.72	0-39.31	23.58	0-55.03	0.03	0-0.08	0.03	0-0.09	0.04	0-0.09
Oct-2015	284.61	183.62-385.59	415.85	295.72-535.98	482.83	359.52-606.13	0.96	0.62-1.31	0.92	0.65-1.18	0.76	0.57-0.95
Nov-2015	216.32	144.21-304.45	394.49	295.66-509.55	475.96	367.2-609.56	0.73	0.49-1.03	0.87	0.65-1.13	0.75	0.58-0.96
Dec-2015	0.00	0-0	0.00	0-0	9.17	0-27.51	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	55.08	18.36-100.99	74.05	27.77-129.59	84.49	37.55-140.82	0.19	0.06-0.34	0.16	0.06-0.29	0.13	0.06-0.22
Jul-2016	7.13	0-21.38	7.26	0-21.77	7.67	0-23.02	0.02	0-0.07	0.02	0-0.05	0.01	0-0.04
Aug-2016	7.86	0-23.58	7.86	0-31.45	7.87	0-23.6	0.03	0-0.08	0.02	0-0.07	0.01	0-0.04
Sep-2016	0.00	0-0	9.26	0-27.77	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	464.73	346.27-601.41	594.61	464.54-743.26	668.76	518.05-838.3	1.58	1.17-2.04	1.31	1.03-1.64	1.05	0.82-1.32
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	18.27	0-45.68	18.58	0-46.45	18.92	0-47.29	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	9.38	0-28.14	9.56	0-28.68	0.00	0-0	0.02	0-0.06	0.02	0-0.05
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	27.41	0-63.95	36.96	9.24-73.93	37.87	9.47-85.2	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.13
Aug-2017	27.41	0-63.95	74.17	27.81-129.8	85.00	37.78-141.67	0.09	0-0.22	0.16	0.06-0.29	0.13	0.06-0.22

Table 30.1. Norfolk Vanguard West. Cormorant design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	18.3	0-45.79	18.4	0-46.05	18.3	0-45.85	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 30.2. Norfolk Vanguard West. Cormorant design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	9.16	0-27.47	9.21	0-27.63	9.17	0-27.51	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 30.3. Norfolk Vanguard West. Cormorant design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	9.16	0-27.47	9.21	0-27.63	9.17	0-27.51	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 31.1. Norfolk Vanguard West. Pomarine Skua design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 31.2. Norfolk Vanguard West. Pomarine Skua design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 31.3. Norfolk Vanguard West. Pomarine Skua design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 32.1. Norfolk Vanguard West. Arctic Skua design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	7.86	0-23.58	0	0-0	0	0-0	0.01	0-0.04
Oct-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Table 32.2. Norfolk Vanguard West. Arctic Skua design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	7.86	0-23.58	0	0-0	0	0-0	0.01	0-0.04
Oct-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Table 32.3. Norfolk Vanguard West. Arctic Skua design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 33.1. Norfolk Vanguard West. Great Skua design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0-55.03	23.58	0-55.03	0.03	0-0.08	0.05	0-0.12	0.04	0-0.09
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	9.14	0-27.41	9.26	0-27.77	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	9.27	0-27.81	9.39	0-28.16	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 33.2. Norfolk Vanguard West. Great Skua design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0-55.03	23.58	0-55.03	0.03	0-0.08	0.05	0-0.12	0.04	0-0.09
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	9.14	0-36.54	9.26	0-27.77	9.42	0-28.27	0.03	0-0.12	0.02	0-0.06	0.01	0-0.04
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	9.27	0-27.81	9.39	0-28.16	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 33.3. Norfolk Vanguard West. Great Skua design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 34.1. Norfolk Vanguard West. Puffin design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	9.47	0-28.4	0	0-0	0	0-0	0.01	0-0.04
Aug-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Table 34.2. Norfolk Vanguard West. Puffin design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 34.3. Norfolk Vanguard West. Puffin design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2015	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jul-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Aug-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Sep-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Oct-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Nov-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Dec-2016	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jan-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Feb-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Mar-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Apr-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
May-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0
Jun-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	9.47	0-37.87	0	0-0	0	0-0	0.01	0-0.06
Aug-2017	0	0-0	0	0-0	0.00	0-0	0	0-0	0	0-0	0.00	0-0

Table 35.1. Norfolk Vanguard West. Razorbill design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	323.07	228.52-417.63	503.15	385.23-636.8	676.08	550.3-817.58	1.10	0.77-1.42	1.11	0.85-1.41	1.06	0.87-1.29
Oct-2015	82.63	27.54-137.94	83.17	36.96-138.62	132.54	75.74-208.28	0.28	0.09-0.47	0.18	0.08-0.31	0.21	0.12-0.33
Nov-2015	56.08	16.02-104.16	73.97	32.87-123.28	75.15	33.4-133.6	0.19	0.05-0.35	0.16	0.07-0.27	0.12	0.05-0.21
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	81.81	36.36-136.35	129.59	64.79-203.64	283.00	188.66-386.76	0.28	0.12-0.46	0.29	0.14-0.45	0.45	0.3-0.61
Feb-2016	9.09	0-27.27	9.26	0-27.77	18.82	0-47.05	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Mar-2016	27.54	0-64.27	46.36	9.27-92.72	47.22	9.44-94.44	0.09	0-0.22	0.10	0.02-0.2	0.07	0.01-0.15
Apr-2016	18.22	0-45.56	36.96	9.24-73.93	94.44	37.78-160.56	0.06	0-0.15	0.08	0.02-0.16	0.15	0.06-0.25
May-2016	9.09	0-27.27	9.27	0-27.81	9.46	0-28.37	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jun-2016	9.18	0-27.54	27.77	0-64.79	28.16	0-65.72	0.03	0-0.09	0.06	0-0.14	0.04	0-0.1
Jul-2016	106.90	57.01-171.04	130.62	72.57-195.93	184.16	115.1-253.22	0.36	0.19-0.58	0.29	0.16-0.43	0.29	0.18-0.4
Aug-2016	7.86	0-23.78	23.59	0-55.03	23.60	0-55.07	0.03	0-0.08	0.05	0-0.12	0.04	0-0.09
Sep-2016	73.08	27.41-118.76	120.33	64.79-185.13	150.75	84.56-235.55	0.25	0.09-0.4	0.27	0.14-0.41	0.24	0.13-0.37
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	136.68	72.9-209.58	222.98	139.13-315.89	508.63	386.18-659.34	0.46	0.25-0.71	0.49	0.31-0.7	0.80	0.61-1.04
Dec-2016	137.20	73.17-210.37	397.04	286.24-535.54	552.76	430.96-693.52	0.47	0.25-0.71	0.88	0.63-1.18	0.87	0.68-1.09
Jan-2017	109.62	54.81-173.57	157.94	83.62-232.27	274.30	179.71-368.89	0.37	0.19-0.59	0.35	0.18-0.51	0.43	0.28-0.58
Feb-2017	63.79	18.22-109.35	120.53	55.63-185.43	168.99	103.27-253.48	0.22	0.06-0.37	0.27	0.12-0.41	0.27	0.16-0.4
Mar-2017	9.14	0-27.41	27.72	0-64.69	56.53	18.84-103.64	0.03	0-0.09	0.06	0-0.14	0.09	0.03-0.16
Apr-2017	140.89	75.14-216.27	300.16	206.36-403.34	439.71	315.45-563.98	0.48	0.25-0.73	0.66	0.46-0.89	0.69	0.5-0.89
May-2017	9.16	0-27.47	37.09	9.27-74.17	37.69	9.42-84.8	0.03	0-0.09	0.08	0.02-0.16	0.06	0.01-0.13
Jun-2017	27.54	0-64.27	37.22	9.31-74.45	37.79	9.45-75.58	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	146.16	82.22-219.24	332.68	231.03-443.8	492.29	369.22-625.07	0.50	0.28-0.74	0.74	0.51-0.98	0.78	0.58-0.98
Aug-2017	100.49	45.68-164.43	157.62	92.72-231.79	160.56	94.44-236.11	0.34	0.15-0.56	0.35	0.2-0.51	0.25	0.15-0.37

Table 35.2. Norfolk Vanguard West. Razorbill design based estimates of birds in flight and on sea and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	387.63	275.32-501.56	604.6	462.52-762.4	812.9	661.4-985.04	1.31	0.93-1.7	1.34	1.02-1.69	1.28	1.04-1.55
Oct-2015	99.55	35.06-166.15	100.2	44.49-167.01	159.7	89.31-250.94	0.34	0.12-0.56	0.22	0.1-0.37	0.25	0.14-0.4
Nov-2015	67.57	20.95-125.49	89.1	37.92-148.53	90.5	40.24-159.26	0.23	0.07-0.43	0.20	0.08-0.33	0.14	0.06-0.25
Dec-2015	0.00	0-0	11.1	0-33.29	22.1	0-55.24	0.00	0-0	0.02	0-0.07	0.03	0-0.09
Jan-2016	98.56	43.81-164.32	156.1	78.07-245.35	341.0	227.31-467.91	0.33	0.15-0.56	0.35	0.17-0.54	0.54	0.36-0.74
Feb-2016	10.95	0-34.72	11.2	0-33.46	22.7	0-56.69	0.04	0-0.12	0.02	0-0.07	0.04	0-0.09
Mar-2016	33.18	0-77.43	55.9	11.17-111.71	56.9	11.38-111.9	0.11	0-0.26	0.12	0.02-0.25	0.09	0.02-0.18
Apr-2016	21.96	0-54.89	44.5	11.13-89.07	113.8	45.52-193.44	0.07	0-0.19	0.10	0.02-0.2	0.18	0.07-0.3
May-2016	10.95	0-32.85	11.2	0-33.51	11.4	0-34.18	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Jun-2016	11.06	0-33.18	33.5	0-78.07	33.9	0-79.18	0.04	0-0.11	0.07	0-0.17	0.05	0-0.12
Jul-2016	128.80	68.69-204.61	157.4	87.43-236.07	221.9	138.67-308.22	0.44	0.23-0.69	0.35	0.19-0.52	0.35	0.22-0.49
Aug-2016	9.47	0-30.22	28.4	0-66.3	28.4	0-66.35	0.03	0-0.1	0.06	0-0.15	0.04	0-0.1
Sep-2016	88.05	33.02-144.95	145.0	78.07-224.94	181.6	101.93-281.86	0.30	0.11-0.49	0.32	0.17-0.5	0.29	0.16-0.44
Oct-2016	11.03	0-33.1	11.2	0-33.44	11.4	0-34.29	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Nov-2016	164.68	87.83-252.51	268.6	167.67-380.59	612.8	465.28-792.45	0.56	0.3-0.86	0.59	0.37-0.84	0.97	0.73-1.25
Dec-2016	165.30	88.16-251.58	478.4	344.87-639.56	666.0	515.39-835.52	0.56	0.3-0.85	1.06	0.76-1.41	1.05	0.81-1.32
Jan-2017	132.07	66.04-209.11	190.3	102.6-279.84	328.6	216.52-446.38	0.45	0.22-0.71	0.42	0.23-0.62	0.52	0.34-0.7
Feb-2017	74.98	21.96-129.88	143.3	67.02-223.41	201.7	122.5-303.48	0.25	0.07-0.44	0.32	0.15-0.49	0.32	0.19-0.48
Mar-2017	11.01	0-33.02	33.4	0-77.94	68.1	22.7-124.87	0.04	0-0.11	0.07	0-0.17	0.11	0.04-0.2
Apr-2017	169.75	90.53-258.59	361.6	248.63-485.95	529.8	382.01-677.53	0.58	0.31-0.88	0.80	0.55-1.07	0.83	0.6-1.07
May-2017	11.03	0-33.1	44.7	11.17-89.36	45.4	11.35-100.24	0.04	0-0.11	0.10	0.02-0.2	0.07	0.02-0.16
Jun-2017	33.18	0-77.43	44.9	11.21-89.7	45.5	11.38-92.99	0.11	0-0.26	0.10	0.02-0.2	0.07	0.02-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	176.10	99.05-266.02	400.8	280.24-536.55	593.1	442.9-753.05	0.60	0.34-0.9	0.89	0.62-1.19	0.93	0.7-1.19
Aug-2017	121.07	55.03-196.28	189.9	111.71-279.27	193.4	111.85-286.41	0.41	0.19-0.67	0.42	0.25-0.62	0.30	0.18-0.45

Table 35.3. Norfolk Vanguard West. Razorbill design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	323.07	228.52-417.63	503.15	385.23-636.8	676.08	550.3-817.58	1.10	0.77-1.42	1.11	0.85-1.41	1.06	0.87-1.29
Oct-2015	82.63	27.54-137.94	83.17	36.96-138.62	132.54	75.74-208.28	0.28	0.09-0.47	0.18	0.08-0.31	0.21	0.12-0.33
Nov-2015	384.88	317.97-464.26	355.37	293.45-421.2	309.40	257.51-376.15	1.30	1.08-1.57	0.79	0.65-0.93	0.49	0.41-0.59
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	81.81	36.36-136.35	129.59	64.79-203.64	283.00	188.66-386.76	0.28	0.12-0.46	0.29	0.14-0.45	0.45	0.3-0.61
Feb-2016	9.09	0-27.27	9.26	0-27.77	18.82	0-47.05	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Mar-2016	27.54	0-64.27	46.36	9.27-92.72	47.22	9.44-94.44	0.09	0-0.22	0.10	0.02-0.2	0.07	0.01-0.15
Apr-2016	18.22	0-45.56	36.96	9.24-73.93	94.44	37.78-160.56	0.06	0-0.15	0.08	0.02-0.16	0.15	0.06-0.25
May-2016	9.09	0-27.27	9.27	0-27.81	9.46	0-28.37	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jun-2016	9.18	0-27.54	27.77	0-64.79	28.16	0-65.72	0.03	0-0.09	0.06	0-0.14	0.04	0-0.1
Jul-2016	106.90	57.01-171.04	130.62	72.57-195.93	184.16	115.1-253.22	0.36	0.19-0.58	0.29	0.16-0.43	0.29	0.18-0.4
Aug-2016	7.86	0-23.78	23.59	0-55.03	23.60	0-55.07	0.03	0-0.08	0.05	0-0.12	0.04	0-0.09
Sep-2016	73.08	27.41-118.76	120.33	64.79-185.13	150.75	84.56-235.55	0.25	0.09-0.4	0.27	0.14-0.41	0.24	0.13-0.37
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	136.68	72.9-209.58	222.98	139.13-315.89	508.63	386.18-659.34	0.46	0.25-0.71	0.49	0.31-0.7	0.80	0.61-1.04
Dec-2016	137.20	73.17-210.37	397.04	286.24-535.54	552.76	430.96-693.52	0.47	0.25-0.71	0.88	0.63-1.18	0.87	0.68-1.09
Jan-2017	109.62	54.81-173.57	157.94	83.62-232.27	274.30	179.71-368.89	0.37	0.19-0.59	0.35	0.18-0.51	0.43	0.28-0.58
Feb-2017	63.79	18.22-109.35	120.53	55.63-185.43	168.99	103.27-253.48	0.22	0.06-0.37	0.27	0.12-0.41	0.27	0.16-0.4
Mar-2017	9.14	0-27.41	27.72	0-64.69	56.53	18.84-103.64	0.03	0-0.09	0.06	0-0.14	0.09	0.03-0.16
Apr-2017	140.89	75.14-216.27	300.16	206.36-403.34	439.71	315.45-563.98	0.48	0.25-0.73	0.66	0.46-0.89	0.69	0.5-0.89
May-2017	9.16	0-27.47	37.09	9.27-74.17	37.69	9.42-84.8	0.03	0-0.09	0.08	0.02-0.16	0.06	0.01-0.13

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	27.54	0-64.27	37.22	9.31-74.45	37.79	9.45-75.58	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12
Jul-2017	146.16	82.22-219.24	332.68	231.03-443.8	492.29	369.22-625.07	0.50	0.28-0.74	0.74	0.51-0.98	0.78	0.58-0.98
Aug-2017	100.49	45.68-164.43	157.62	92.72-231.79	160.56	94.44-236.11	0.34	0.15-0.56	0.35	0.2-0.51	0.25	0.15-0.37

Table 35.4. Norfolk Vanguard West. Razorbill design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	387.63	275.32-501.56	604.6	462.52-762.4	812.9	661.4-985.04	1.31	0.93-1.7	1.34	1.02-1.69	1.28	1.04-1.55
Oct-2015	99.55	35.06-166.15	100.2	44.49-167.01	159.7	89.31-250.94	0.34	0.12-0.56	0.22	0.1-0.37	0.25	0.14-0.4
Nov-2015	463.31	381.78-557.64	426.5	351.85-507.04	371.9	308.34-451.13	1.57	1.29-1.89	0.94	0.78-1.12	0.59	0.49-0.71
Dec-2015	0.00	0-0	11.1	0-33.29	22.1	0-55.24	0.00	0-0	0.02	0-0.07	0.03	0-0.09
Jan-2016	98.56	43.81-164.32	156.1	78.07-245.35	341.0	227.31-467.91	0.33	0.15-0.56	0.35	0.17-0.54	0.54	0.36-0.74
Feb-2016	10.95	0-34.72	11.2	0-33.46	22.7	0-56.69	0.04	0-0.12	0.02	0-0.07	0.04	0-0.09
Mar-2016	33.18	0-77.43	55.9	11.17-111.71	56.9	11.38-111.9	0.11	0-0.26	0.12	0.02-0.25	0.09	0.02-0.18
Apr-2016	21.96	0-54.89	44.5	11.13-89.07	113.8	45.52-193.44	0.07	0-0.19	0.10	0.02-0.2	0.18	0.07-0.3
May-2016	10.95	0-32.85	11.2	0-33.51	11.4	0-34.18	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Jun-2016	11.06	0-33.18	33.5	0-78.07	33.9	0-79.18	0.04	0-0.11	0.07	0-0.17	0.05	0-0.12
Jul-2016	128.80	68.69-204.61	157.4	87.43-236.07	221.9	138.67-308.22	0.44	0.23-0.69	0.35	0.19-0.52	0.35	0.22-0.49
Aug-2016	9.47	0-30.22	28.4	0-66.3	28.4	0-66.35	0.03	0-0.1	0.06	0-0.15	0.04	0-0.1
Sep-2016	88.05	33.02-144.95	145.0	78.07-224.94	181.6	101.93-281.86	0.30	0.11-0.49	0.32	0.17-0.5	0.29	0.16-0.44
Oct-2016	11.03	0-33.1	11.2	0-33.44	11.4	0-34.29	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Nov-2016	164.68	87.83-252.51	268.6	167.67-380.59	612.8	465.28-792.45	0.56	0.3-0.86	0.59	0.37-0.84	0.97	0.73-1.25
Dec-2016	165.30	88.16-251.58	478.4	344.87-639.56	664.0	515.39-835.52	0.56	0.3-0.85	1.06	0.76-1.41	1.05	0.81-1.32
Jan-2017	132.07	66.04-209.11	190.3	102.6-279.84	328.6	216.52-446.38	0.45	0.22-0.71	0.42	0.23-0.62	0.52	0.34-0.7
Feb-2017	74.98	21.96-129.88	143.3	67.02-223.41	201.7	122.5-303.48	0.25	0.07-0.44	0.32	0.15-0.49	0.32	0.19-0.48
Mar-2017	11.01	0-33.02	33.4	0-77.94	68.1	22.7-124.87	0.04	0-0.11	0.07	0-0.17	0.11	0.04-0.2
Apr-2017	169.75	90.53-258.59	361.6	248.63-485.95	529.8	382.01-677.53	0.58	0.31-0.88	0.80	0.55-1.07	0.83	0.6-1.07
May-2017	11.03	0-33.1	44.7	11.17-89.36	45.4	11.35-100.24	0.04	0-0.11	0.10	0.02-0.2	0.07	0.02-0.16

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	33.18	0-77.43	44.9	11.21-89.7	45.5	11.38-92.99	0.11	0-0.26	0.10	0.02-0.2	0.07	0.02-0.15
Jul-2017	176.10	99.05-266.02	400.8	280.24-536.55	593.1	442.9-753.05	0.60	0.34-0.9	0.89	0.62-1.19	0.93	0.7-1.19
Aug-2017	121.07	55.03-196.28	189.9	111.71-279.27	193.4	111.85-286.41	0.41	0.19-0.67	0.42	0.25-0.62	0.30	0.18-0.45

Table 35.5. Norfolk Vanguard West. Razorbill design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-23.59	7.86	0-23.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	9.46	0-28.38	0.00	0-0	0.00	0-0	0.01	0-0.04
Feb-2017	9.11	0-27.34	9.27	0-27.81	9.39	0-28.16	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 35.6. Norfolk Vanguard West. Razorbill design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-23.59	7.86	0-23.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	3.32	0-9.95	6.21	0-14.48	6.62	1.32-11.91	0.01	0-0.03	0.01	0-0.03	0.01	0-0.02
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	9.46	0-28.38	0.00	0-0	0.00	0-0	0.01	0-0.04
Feb-2017	9.11	0-27.34	9.27	0-27.81	9.39	0-28.16	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 35.7. Norfolk Vanguard West. Razorbill design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	315.19	228.52-409.75	495.29	377.36-613.22	668.22	542.43-817.58	1.07	0.77-1.39	1.09	0.83-1.36	1.05	0.85-1.29
Oct-2015	82.63	36.72-137.71	83.17	36.73-138.62	132.54	66.27-208.28	0.28	0.12-0.47	0.18	0.08-0.31	0.21	0.1-0.33
Nov-2015	56.08	24.04-104.16	73.97	24.66-123.28	75.15	33.4-125.25	0.19	0.08-0.35	0.16	0.05-0.27	0.12	0.05-0.2
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	81.81	36.36-136.57	129.59	64.79-203.64	283.00	188.66-396.19	0.28	0.12-0.46	0.29	0.14-0.45	0.45	0.3-0.62
Feb-2016	9.09	0-36.36	9.26	0-27.77	18.82	0-47.05	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Mar-2016	27.54	0-64.27	46.36	9.27-92.72	47.22	9.44-85.24	0.09	0-0.22	0.10	0.02-0.2	0.07	0.01-0.13
Apr-2016	18.22	0-45.56	36.96	9.24-73.93	94.44	37.78-160.56	0.06	0-0.15	0.08	0.02-0.16	0.15	0.06-0.25
May-2016	9.09	0-27.27	9.27	0-27.81	9.46	0-28.37	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jun-2016	9.18	0-27.54	27.77	0-64.79	28.16	0-65.72	0.03	0-0.09	0.06	0-0.14	0.04	0-0.1
Jul-2016	106.90	57.01-163.91	130.62	72.57-195.93	184.16	115.1-268.56	0.36	0.19-0.56	0.29	0.16-0.43	0.29	0.18-0.42
Aug-2016	7.86	0-31.44	23.59	0-55.03	23.60	0-55.07	0.03	0-0.11	0.05	0-0.12	0.04	0-0.09
Sep-2016	73.08	27.41-127.89	120.33	64.79-194.38	150.75	84.8-226.13	0.25	0.09-0.43	0.27	0.14-0.43	0.24	0.13-0.36
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	136.68	72.9-209.58	222.98	139.36-315.89	508.63	386.18-649.92	0.46	0.25-0.71	0.49	0.31-0.7	0.80	0.61-1.02
Dec-2016	137.20	73.17-201.22	397.04	286.24-507.84	552.76	412.22-693.29	0.47	0.25-0.68	0.88	0.63-1.12	0.87	0.65-1.09
Jan-2017	109.62	54.81-173.57	157.94	92.68-232.27	264.84	179.71-378.35	0.37	0.19-0.59	0.35	0.2-0.51	0.42	0.28-0.6
Feb-2017	54.67	18.22-100.24	111.26	55.63-185.43	159.60	93.88-244.09	0.19	0.06-0.34	0.25	0.12-0.41	0.25	0.15-0.38
Mar-2017	9.14	0-27.41	27.72	0-64.69	56.53	18.84-103.64	0.03	0-0.09	0.06	0-0.14	0.09	0.03-0.16
Apr-2017	140.89	75.14-206.64	300.16	206.36-403.34	439.71	325-554.42	0.48	0.25-0.7	0.66	0.46-0.89	0.69	0.51-0.87
May-2017	9.16	0-27.47	37.09	9.27-74.17	37.69	9.42-75.38	0.03	0-0.09	0.08	0.02-0.16	0.06	0.01-0.12
Jun-2017	27.54	0-64.27	37.22	9.31-74.45	37.79	9.45-85.03	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.13

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	146.16	82.22-228.38	332.68	240.27-452.81	492.29	359.75-624.83	0.50	0.28-0.77	0.74	0.53-1	0.78	0.57-0.98
Aug-2017	100.49	45.68-155.52	157.62	92.72-231.79	160.56	85-245.56	0.34	0.15-0.53	0.35	0.2-0.51	0.25	0.13-0.39

Table 35.8. Norfolk Vanguard West. Razorbill design based estimates of birds on the sea surface and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	379.75	275.32-493.68	596.7	454.65-738.81	805.1	653.54-985.04	1.29	0.93-1.67	1.32	1.01-1.63	1.27	1.03-1.55
Oct-2015	99.55	44.24-165.92	100.2	44.26-167.01	159.7	79.84-250.94	0.34	0.15-0.56	0.22	0.1-0.37	0.25	0.13-0.4
Nov-2015	67.57	28.96-125.49	89.1	29.71-148.53	90.5	40.24-150.91	0.23	0.1-0.43	0.20	0.07-0.33	0.14	0.06-0.24
Dec-2015	0.00	0-0	11.1	0-33.29	22.1	0-55.24	0.00	0-0	0.02	0-0.07	0.03	0-0.09
Jan-2016	98.56	43.81-164.55	156.1	78.07-245.35	341.0	227.31-477.34	0.33	0.15-0.56	0.35	0.17-0.54	0.54	0.36-0.75
Feb-2016	10.95	0-43.81	11.2	0-33.46	22.7	0-56.69	0.04	0-0.15	0.02	0-0.07	0.04	0-0.09
Mar-2016	33.18	0-77.43	55.9	11.17-111.71	56.9	11.38-102.69	0.11	0-0.26	0.12	0.02-0.25	0.09	0.02-0.16
Apr-2016	21.96	0-54.89	44.5	11.13-89.07	113.8	45.52-193.44	0.07	0-0.19	0.10	0.02-0.2	0.18	0.07-0.3
May-2016	10.95	0-32.85	11.2	0-33.51	11.4	0-34.18	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Jun-2016	11.06	0-33.18	33.5	0-78.07	33.9	0-79.18	0.04	0-0.11	0.07	0-0.17	0.05	0-0.12
Jul-2016	128.80	68.69-197.49	157.4	87.43-236.07	221.9	138.67-323.57	0.44	0.23-0.67	0.35	0.19-0.52	0.35	0.22-0.51
Aug-2016	9.47	0-37.88	28.4	0-66.3	28.4	0-66.35	0.03	0-0.13	0.06	0-0.15	0.04	0-0.1
Sep-2016	88.05	33.02-154.08	145.0	78.07-234.2	181.6	102.17-272.44	0.30	0.11-0.52	0.32	0.17-0.52	0.29	0.16-0.43
Oct-2016	11.03	0-33.1	11.2	0-33.44	11.4	0-34.29	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Nov-2016	164.68	87.83-252.51	268.6	167.91-380.59	612.8	465.28-783.03	0.56	0.3-0.86	0.59	0.37-0.84	0.97	0.73-1.23
Dec-2016	165.30	88.16-242.44	478.4	344.87-611.86	666.0	496.66-835.29	0.56	0.3-0.82	1.06	0.76-1.35	1.05	0.78-1.32
Jan-2017	132.07	66.04-209.11	190.3	111.66-279.84	319.1	216.52-455.84	0.45	0.22-0.71	0.42	0.25-0.62	0.50	0.34-0.72
Feb-2017	65.87	21.96-120.77	134.1	67.02-223.41	192.3	113.11-294.09	0.22	0.07-0.41	0.30	0.15-0.49	0.30	0.18-0.46
Mar-2017	11.01	0-33.02	33.4	0-77.94	68.1	22.7-124.87	0.04	0-0.11	0.07	0-0.17	0.11	0.04-0.2
Apr-2017	169.75	90.53-248.96	361.6	248.63-485.95	529.8	391.57-667.98	0.58	0.31-0.84	0.80	0.55-1.07	0.83	0.62-1.05
May-2017	11.03	0-33.1	44.7	11.17-89.36	45.4	11.35-90.81	0.04	0-0.11	0.10	0.02-0.2	0.07	0.02-0.14
Jun-2017	33.18	0-77.43	44.9	11.21-89.7	45.5	11.38-102.44	0.11	0-0.26	0.10	0.02-0.2	0.07	0.02-0.16

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	176.10	99.05-275.15	400.8	289.48-545.56	593.1	433.44-752.81	0.60	0.34-0.93	0.89	0.64-1.21	0.93	0.68-1.19
Aug-2017	121.07	55.03-187.38	189.9	111.71-279.27	193.4	102.41-295.85	0.41	0.19-0.64	0.42	0.25-0.62	0.30	0.16-0.47

Table 35.9. Norfolk Vanguard West. Razorbill design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	315.19	228.52-409.75	495.29	377.36-613.22	668.22	542.43-817.58	1.07	0.77-1.39	1.09	0.83-1.36	1.05	0.85-1.29
Oct-2015	82.63	36.72-137.71	83.17	36.73-138.62	132.54	66.27-208.28	0.28	0.12-0.47	0.18	0.08-0.31	0.21	0.1-0.33
Nov-2015	382.93	311.52-455.91	347.18	285.13-419.08	305.43	248.16-366.07	1.30	1.06-1.55	0.77	0.63-0.93	0.48	0.39-0.58
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	81.81	36.36-136.57	129.59	64.79-203.64	283.00	188.66-396.19	0.28	0.12-0.46	0.29	0.14-0.45	0.45	0.3-0.62
Feb-2016	9.09	0-36.36	9.26	0-27.77	18.82	0-47.05	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Mar-2016	27.54	0-64.27	46.36	9.27-92.72	47.22	9.44-85.24	0.09	0-0.22	0.10	0.02-0.2	0.07	0.01-0.13
Apr-2016	18.22	0-45.56	36.96	9.24-73.93	94.44	37.78-160.56	0.06	0-0.15	0.08	0.02-0.16	0.15	0.06-0.25
May-2016	9.09	0-27.27	9.27	0-27.81	9.46	0-28.37	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jun-2016	9.18	0-27.54	27.77	0-64.79	28.16	0-65.72	0.03	0-0.09	0.06	0-0.14	0.04	0-0.1
Jul-2016	106.90	57.01-163.91	130.62	72.57-195.93	184.16	115.1-268.56	0.36	0.19-0.56	0.29	0.16-0.43	0.29	0.18-0.42
Aug-2016	7.86	0-31.44	23.59	0-55.03	23.60	0-55.07	0.03	0-0.11	0.05	0-0.12	0.04	0-0.09
Sep-2016	73.08	27.41-127.89	120.33	64.79-194.38	150.75	84.8-226.13	0.25	0.09-0.43	0.27	0.14-0.43	0.24	0.13-0.36
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	136.68	72.9-209.58	222.98	139.36-315.89	508.63	386.18-649.92	0.46	0.25-0.71	0.49	0.31-0.7	0.80	0.61-1.02
Dec-2016	137.20	73.17-201.22	397.04	286.24-507.84	543.39	412.22-693.29	0.47	0.25-0.68	0.88	0.63-1.12	0.86	0.65-1.09
Jan-2017	109.62	54.81-173.57	157.94	92.68-232.27	264.84	179.71-378.35	0.37	0.19-0.59	0.35	0.2-0.51	0.42	0.28-0.6
Feb-2017	54.67	18.22-100.24	111.26	55.63-185.43	159.60	93.88-244.09	0.19	0.06-0.34	0.25	0.12-0.41	0.25	0.15-0.38
Mar-2017	9.14	0-27.41	27.72	0-64.69	56.53	18.84-103.64	0.03	0-0.09	0.06	0-0.14	0.09	0.03-0.16
Apr-2017	140.89	75.14-206.64	300.16	206.36-403.34	439.71	325-554.42	0.48	0.25-0.7	0.66	0.46-0.89	0.69	0.51-0.87
May-2017	9.16	0-27.47	37.09	9.27-74.17	37.69	9.42-75.38	0.03	0-0.09	0.08	0.02-0.16	0.06	0.01-0.12

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	27.54	0-64.27	37.22	9.31-74.45	37.79	9.45-85.03	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.13
Jul-2017	146.16	82.22-228.38	332.68	240.27-452.81	492.29	359.75-624.83	0.50	0.28-0.77	0.74	0.53-1	0.78	0.57-0.98
Aug-2017	100.49	45.68-155.52	157.62	92.72-231.79	160.56	85-245.56	0.34	0.15-0.53	0.35	0.2-0.51	0.25	0.13-0.39

Table 35.10. Norfolk Vanguard West. Razorbill design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	379.75	275.32-493.68	596.7	454.65-738.81	805.1	653.54-985.04	1.29	0.93-1.67	1.32	1.01-1.63	1.27	1.03-1.55
Oct-2015	99.55	44.24-165.92	100.2	44.26-167.01	159.7	79.84-250.94	0.34	0.15-0.56	0.22	0.1-0.37	0.25	0.13-0.4
Nov-2015	461.37	375.33-549.29	418.3	343.53-504.92	368.0	298.99-441.05	1.56	1.27-1.86	0.92	0.76-1.12	0.58	0.47-0.69
Dec-2015	0.00	0-0	11.1	0-33.29	22.1	0-55.24	0.00	0-0	0.02	0-0.07	0.03	0-0.09
Jan-2016	98.56	43.81-164.55	156.1	78.07-245.35	341.0	227.31-477.34	0.33	0.15-0.56	0.35	0.17-0.54	0.54	0.36-0.75
Feb-2016	10.95	0-43.81	11.2	0-33.46	22.7	0-56.69	0.04	0-0.15	0.02	0-0.07	0.04	0-0.09
Mar-2016	33.18	0-77.43	55.9	11.17-111.71	56.9	11.38-102.69	0.11	0-0.26	0.12	0.02-0.25	0.09	0.02-0.16
Apr-2016	21.96	0-54.89	44.5	11.13-89.07	113.8	45.52-193.44	0.07	0-0.19	0.10	0.02-0.2	0.18	0.07-0.3
May-2016	10.95	0-32.85	11.2	0-33.51	11.4	0-34.18	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Jun-2016	11.06	0-33.18	33.5	0-78.07	33.9	0-79.18	0.04	0-0.11	0.07	0-0.17	0.05	0-0.12
Jul-2016	128.80	68.69-197.49	157.4	87.43-236.07	221.9	138.67-323.57	0.44	0.23-0.67	0.35	0.19-0.52	0.35	0.22-0.51
Aug-2016	9.47	0-37.88	28.4	0-66.3	28.4	0-66.35	0.03	0-0.13	0.06	0-0.15	0.04	0-0.1
Sep-2016	88.05	33.02-154.08	145.0	78.07-234.2	181.6	102.17-272.44	0.30	0.11-0.52	0.32	0.17-0.52	0.29	0.16-0.43
Oct-2016	11.03	0-33.1	11.2	0-33.44	11.4	0-34.29	0.04	0-0.11	0.02	0-0.07	0.02	0-0.05
Nov-2016	164.68	87.83-252.51	268.6	167.91-380.59	612.8	465.28-783.03	0.56	0.3-0.86	0.59	0.37-0.84	0.97	0.73-1.23
Dec-2016	165.30	88.16-242.44	478.4	344.87-611.86	654.7	496.66-835.29	0.56	0.3-0.82	1.06	0.76-1.35	1.03	0.78-1.32
Jan-2017	132.07	66.04-209.11	190.3	111.66-279.84	319.1	216.52-455.84	0.45	0.22-0.71	0.42	0.25-0.62	0.50	0.34-0.72
Feb-2017	65.87	21.96-120.77	134.1	67.02-223.41	192.3	113.11-294.09	0.22	0.07-0.41	0.30	0.15-0.49	0.30	0.18-0.46
Mar-2017	11.01	0-33.02	33.4	0-77.94	68.1	22.7-124.87	0.04	0-0.11	0.07	0-0.17	0.11	0.04-0.2
Apr-2017	169.75	90.53-248.96	361.6	248.63-485.95	529.8	391.57-667.98	0.58	0.31-0.84	0.80	0.55-1.07	0.83	0.62-1.05
May-2017	11.03	0-33.1	44.7	11.17-89.36	45.4	11.35-90.81	0.04	0-0.11	0.10	0.02-0.2	0.07	0.02-0.14

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	33.18	0-77.43	44.9	11.21-89.7	45.5	11.38-102.44	0.11	0-0.26	0.10	0.02-0.2	0.07	0.02-0.16
Jul-2017	176.10	99.05-275.15	400.8	289.48-545.56	593.1	433.44-752.81	0.60	0.34-0.93	0.89	0.64-1.21	0.93	0.68-1.19
Aug-2017	121.07	55.03-187.38	189.9	111.71-279.27	193.4	102.41-295.85	0.41	0.19-0.64	0.42	0.25-0.62	0.30	0.16-0.47

Table 36.1. Norfolk Vanguard West. Guillemot design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	914.1	764.34-1079.54	1383.7	1187.12-1572.35	2209	1965.34-2437.22	3.10	2.59-3.66	3.06	2.62-3.48	3.48	3.1-3.84
Oct-2015	908.9	752.83-1064.97	1219.8	1035-1413.89	1572	1372.74-1798.76	3.08	2.55-3.61	2.70	2.29-3.13	2.48	2.16-2.83
Nov-2015	80.1	32.05-136.2	221.9	139.72-312.3	392	292.26-517.71	0.27	0.11-0.46	0.49	0.31-0.69	0.62	0.46-0.82
Dec-2015	219.8	137.37-311.37	304.0	211.85-405.28	477	357.63-605.22	0.75	0.47-1.06	0.67	0.47-0.9	0.75	0.56-0.95
Jan-2016	2363.3	2163.12-2572.38	3110.1	2850.95-3369.31	3962	3650.64-4273.23	8.01	7.33-8.72	6.88	6.3-7.45	6.24	5.75-6.73
Feb-2016	127.3	63.63-199.97	157.4	92.56-231.41	235	141.16-329.37	0.43	0.22-0.68	0.35	0.2-0.51	0.37	0.22-0.52
Mar-2016	91.8	45.9-147.12	102.0	46.36-166.89	179	103.89-255	0.31	0.16-0.5	0.23	0.1-0.37	0.28	0.16-0.4
Apr-2016	63.8	18.22-118.46	101.7	46.21-166.34	227	151.11-330.56	0.22	0.06-0.4	0.22	0.1-0.37	0.36	0.24-0.52
May-2016	72.7	27.27-136.35	102.0	46.36-166.89	142	75.65-208.03	0.25	0.09-0.46	0.23	0.1-0.37	0.22	0.12-0.33
Jun-2016	174.4	100.99-257.06	351.7	231.41-462.82	638	488.19-798	0.59	0.34-0.87	0.78	0.51-1.02	1.01	0.77-1.26
Jul-2016	242.3	170.86-320.7	420.9	319.3-529.75	729	583.16-874.75	0.82	0.58-1.09	0.93	0.71-1.17	1.15	0.92-1.38
Aug-2016	110.0	55.02-165.06	212.3	133.65-298.75	362	259.63-472.05	0.37	0.19-0.56	0.47	0.3-0.66	0.57	0.41-0.74
Sep-2016	575.5	438.48-712.53	962.7	786.79-1147.79	1319	1102.36-1545.19	1.95	1.49-2.42	2.13	1.74-2.54	2.08	1.74-2.43
Oct-2016	55.0	18.32-100.74	129.5	64.77-203.56	199	123.33-303.59	0.19	0.06-0.34	0.29	0.14-0.45	0.31	0.19-0.48
Nov-2016	1849.8	1612.88-2068.49	2852.3	2582.84-3149.81	4031	3673.21-4370.7	6.27	5.47-7.01	6.31	5.71-6.96	6.35	5.79-6.88
Dec-2016	1216.5	1015.02-1417.92	1846.7	1606.63-2096.01	2455	2182.92-2736.14	4.12	3.44-4.81	4.08	3.55-4.63	3.87	3.44-4.31

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2017	219.2	137.03-310.59	362.3	260.14-474.06	596	454.01-747.47	0.74	0.46-1.05	0.80	0.58-1.05	0.94	0.72-1.18
Feb-2017	100.2	45.56-164.02	157.6	92.72-241.06	244	159.6-347.37	0.34	0.15-0.56	0.35	0.2-0.53	0.38	0.25-0.55
Mar-2017	91.3	36.54-146.16	129.4	64.69-194.06	170	94.22-244.97	0.31	0.12-0.5	0.29	0.14-0.43	0.27	0.15-0.39
Apr-2017	347.5	244.21-469.63	628.5	496.9-778.54	822	659.57-984.81	1.18	0.83-1.59	1.39	1.1-1.72	1.29	1.04-1.55
May-2017	55.0	18.32-100.74	83.4	37.09-139.07	113	56.53-179.02	0.19	0.06-0.34	0.18	0.08-0.31	0.18	0.09-0.28
Jun-2017	36.7	9.18-73.45	74.5	27.92-130.29	104	47.24-170.05	0.12	0.03-0.25	0.16	0.06-0.29	0.16	0.07-0.27
Jul-2017	749.1	593.78-895.23	1691.1	1469.34-1940.63	2925	2622.4-3247.47	2.54	2.01-3.04	3.74	3.25-4.29	4.61	4.13-5.11
Aug-2017	210.1	127.89-292.32	352.3	250.33-472.85	501	368.33-632.78	0.71	0.43-0.99	0.78	0.55-1.05	0.79	0.58-1

Table 36.2. Norfolk Vanguard West. Guillemot design based estimates of birds in flight and on sea and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	1202.7	1005.72-1417.96	1821	1562-2073.84	2899	2578.53-3204.32	4.08	3.41-4.81	4.02	3.45-4.58	4.57	4.06-5.05
Oct-2015	1190.1	984.76-1395.48	1599	1353.09-1851.63	2062	1797.27-2363.8	4.04	3.34-4.73	3.54	2.99-4.09	3.25	2.83-3.72
Nov-2015	105.4	44.7-179.28	292	183.84-410.93	514	381.91-670.65	0.36	0.15-0.61	0.65	0.41-0.91	0.81	0.6-1.06
Dec-2015	271.8	166.29-389.45	382	261.3-512.97	607	453.19-776.07	0.92	0.56-1.32	0.85	0.58-1.13	0.96	0.71-1.22
Jan-2016	3106.8	2843.41-3384.71	4089	3754.18-4424.53	5210	4806.46-5610.83	10.53	9.64-11.48	9.04	8.3-9.78	8.21	7.57-8.84
Feb-2016	153.1	75.11-243.03	192	110.1-287.02	295	176.82-415.56	0.52	0.25-0.82	0.43	0.24-0.63	0.46	0.28-0.65
Mar-2016	117.9	54.6-190.61	131	58.07-213.74	233	136.7-332.55	0.40	0.19-0.65	0.29	0.13-0.47	0.37	0.22-0.52
Apr-2016	83.9	23.98-152.99	134	60.8-218.87	298	195.85-434.94	0.28	0.08-0.52	0.30	0.13-0.48	0.47	0.31-0.69
May-2016	95.7	35.88-176.53	134	61-219.59	187	99.53-276.71	0.32	0.12-0.6	0.30	0.13-0.49	0.29	0.16-0.44
Jun-2016	229.5	132.88-338.24	463	310.26-606.05	837	642.36-1044.15	0.78	0.45-1.15	1.02	0.69-1.34	1.32	1.01-1.64
Jul-2016	318.8	222.63-424.23	554	420.13-697.09	959	769.74-1150.98	1.08	0.75-1.44	1.22	0.93-1.54	1.51	1.21-1.81
Aug-2016	144.8	72.39-219.66	279	175.86-390.67	476	344.1-621.12	0.49	0.25-0.74	0.62	0.39-0.86	0.75	0.54-0.98
Sep-2016	757.2	576.95-940.43	1267	1029.4-1507.39	1736	1453.45-2036.13	2.57	1.96-3.19	2.80	2.28-3.33	2.73	2.29-3.21
Oct-2016	69.4	21.21-126.76	168	82.3-261.99	259	159.28-390.47	0.24	0.07-0.43	0.37	0.18-0.58	0.41	0.25-0.61
Nov-2016	2433.9	2125.08-2733.21	3753	3392.53-4150.35	5304	4833.25-5759.77	8.25	7.21-9.27	8.30	7.5-9.17	8.35	7.61-9.07
Dec-2016	1600.6	1338.52-1862.73	2430	2113.99-2766.65	3230	2872.19-3603.07	5.43	4.54-6.32	5.37	4.67-6.12	5.09	4.52-5.67

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2017	288.5	180.3-408.67	477	342.29-623.77	784	600.3-980.45	0.98	0.61-1.39	1.05	0.76-1.38	1.23	0.95-1.54
Feb-2017	131.9	59.95-215.82	207	121.99-314.26	321	210-454.1	0.45	0.2-0.73	0.46	0.27-0.69	0.51	0.33-0.72
Mar-2017	120.2	50.96-195.2	170	88.03-258.26	223	123.97-325.3	0.41	0.17-0.66	0.38	0.19-0.57	0.35	0.2-0.51
Apr-2017	457.3	321.33-614.97	827	647.97-1021.43	1082	867.85-1301.77	1.55	1.09-2.09	1.83	1.43-2.26	1.70	1.37-2.05
May-2017	72.3	24.1-132.55	110	48.8-182.99	149	71.41-235.55	0.25	0.08-0.45	0.24	0.11-0.4	0.23	0.11-0.37
Jun-2017	48.3	12.08-96.64	98	36.73-171.43	137	62.15-223.75	0.16	0.04-0.33	0.22	0.08-0.38	0.22	0.1-0.35
Jul-2017	982.7	778.4-1177.94	2222	1933.34-2544.71	3843	3444.48-4264.02	3.33	2.64-3.99	4.91	4.27-5.63	6.05	5.42-6.72
Aug-2017	276.4	168.28-390.4	464	326.46-622.17	659	490.62-835.59	0.94	0.57-1.32	1.02	0.72-1.38	1.04	0.77-1.32

Table 36.3. Norfolk Vanguard West. Guillemot design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	914.1	764.34-1079.54	1383.7	1187.12-1572.35	2209	1965.34-2437.22	3.10	2.59-3.66	3.06	2.62-3.48	3.48	3.1-3.84
Oct-2015	908.9	752.83-1064.97	1219.8	1035-1413.89	1572	1372.74-1798.76	3.08	2.55-3.61	2.70	2.29-3.13	2.48	2.16-2.83
Nov-2015	544.9	449.75-645.88	1058.4	902.32-1222.45	1652	1445.19-1893.2	1.85	1.52-2.19	2.34	1.99-2.7	2.60	2.28-2.98
Dec-2015	219.8	137.37-311.37	304.0	211.85-405.28	477	357.63-605.22	0.75	0.47-1.06	0.67	0.47-0.9	0.75	0.56-0.95
Jan-2016	2363.3	2163.12-2572.38	3119.4	2850.95-3369.31	3962	3650.64-4273.23	8.01	7.33-8.72	6.90	6.3-7.45	6.24	5.75-6.73
Feb-2016	127.3	63.63-199.97	157.4	92.56-231.41	235	141.16-329.37	0.43	0.22-0.68	0.35	0.2-0.51	0.37	0.22-0.52
Mar-2016	91.8	45.9-147.12	102.0	46.36-166.89	179	103.89-255	0.31	0.16-0.5	0.23	0.1-0.37	0.28	0.16-0.4
Apr-2016	63.8	18.22-118.46	101.7	46.21-166.34	227	151.11-330.56	0.22	0.06-0.4	0.22	0.1-0.37	0.36	0.24-0.52
May-2016	72.7	27.27-136.35	102.0	46.36-166.89	142	75.65-208.03	0.25	0.09-0.46	0.23	0.1-0.37	0.22	0.12-0.33
Jun-2016	174.4	100.99-257.06	351.7	231.41-462.82	638	488.19-798	0.59	0.34-0.87	0.78	0.51-1.02	1.01	0.77-1.26
Jul-2016	242.3	170.86-320.7	420.9	319.3-529.75	729	583.16-874.75	0.82	0.58-1.09	0.93	0.71-1.17	1.15	0.92-1.38
Aug-2016	110.0	55.02-165.06	212.3	133.65-298.75	362	259.63-472.05	0.37	0.19-0.56	0.47	0.3-0.66	0.57	0.41-0.74
Sep-2016	575.5	438.48-712.53	962.7	786.79-1147.79	1319	1102.36-1545.19	1.95	1.49-2.42	2.13	1.74-2.54	2.08	1.74-2.43
Oct-2016	55.0	18.32-100.74	129.5	64.77-203.56	199	123.33-303.59	0.19	0.06-0.34	0.29	0.14-0.45	0.31	0.19-0.48
Nov-2016	1849.8	1612.88-2068.49	2861.6	2582.84-3149.81	4031	3673.21-4370.7	6.27	5.47-7.01	6.33	5.71-6.96	6.35	5.79-6.88
Dec-2016	1216.5	1015.02-	1846.7	1606.63-	2464	2182.92-	4.12	3.44-4.81	4.08	3.55-4.63	3.88	3.44-4.31

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
		1417.92		2096.01		2736.14						
Jan-2017	219.2	137.03-310.59	362.3	260.14-474.06	596	454.01-747.47	0.74	0.46-1.05	0.80	0.58-1.05	0.94	0.72-1.18
Feb-2017	100.2	45.56-164.02	157.6	92.72-241.06	244	159.6-347.37	0.34	0.15-0.56	0.35	0.2-0.53	0.38	0.25-0.55
Mar-2017	91.3	36.54-146.16	129.4	64.69-194.06	170	94.22-244.97	0.31	0.12-0.5	0.29	0.14-0.43	0.27	0.15-0.39
Apr-2017	347.5	244.21-469.63	628.5	496.9-778.54	822	659.57-984.81	1.18	0.83-1.59	1.39	1.1-1.72	1.29	1.04-1.55
May-2017	55.0	18.32-100.74	83.4	37.09-139.07	113	56.53-179.02	0.19	0.06-0.34	0.18	0.08-0.31	0.18	0.09-0.28
Jun-2017	36.7	9.18-73.45	74.5	27.92-130.29	104	47.24-170.05	0.12	0.03-0.25	0.16	0.06-0.29	0.16	0.07-0.27
Jul-2017	749.1	593.78-895.23	1691.1	1469.34-1940.63	2935	2622.4-3247.47	2.54	2.01-3.04	3.74	3.25-4.29	4.62	4.13-5.11
Aug-2017	210.1	127.89-292.32	352.3	250.33-472.85	501	368.33-632.78	0.71	0.43-0.99	0.78	0.55-1.05	0.79	0.58-1

Table 36.4. Norfolk Vanguard West. Guillemot design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	1202.7	1005.72-1417.96	1818	1562-2073.84	2899	2578.53-3204.32	4.08	3.41-4.81	4.02	3.45-4.58	4.57	4.06-5.05
Oct-2015	1190.1	984.76-1395.48	1596	1353.09-1851.63	2062	1797.27-2363.8	4.04	3.34-4.73	3.53	2.99-4.09	3.25	2.83-3.72
Nov-2015	715.8	588.92-849.67	1388	1184.74-1600.06	2160	1891.55-2466.23	2.43	2-2.88	3.07	2.62-3.54	3.40	2.98-3.88
Dec-2015	271.8	166.29-389.45	382	261.3-512.97	607	453.19-776.07	0.92	0.56-1.32	0.85	0.58-1.13	0.96	0.71-1.22
Jan-2016	3109.6	2843.41-3384.71	4099	3754.18-4424.53	5210	4806.46-5610.83	10.54	9.64-11.48	9.06	8.3-9.78	8.21	7.57-8.84
Feb-2016	153.1	75.11-243.03	192	110.1-287.02	295	176.82-415.56	0.52	0.25-0.82	0.43	0.24-0.63	0.46	0.28-0.65
Mar-2016	117.9	54.6-190.61	131	58.07-213.74	233	136.7-332.55	0.40	0.19-0.65	0.29	0.13-0.47	0.37	0.22-0.52
Apr-2016	83.9	23.98-152.99	134	60.8-218.87	298	195.85-434.94	0.28	0.08-0.52	0.30	0.13-0.48	0.47	0.31-0.69
May-2016	95.7	35.88-176.53	134	61-219.59	187	99.53-276.71	0.32	0.12-0.6	0.30	0.13-0.49	0.29	0.16-0.44
Jun-2016	229.5	132.88-338.24	463	310.26-606.05	837	642.36-1044.15	0.78	0.45-1.15	1.02	0.69-1.34	1.32	1.01-1.64
Jul-2016	318.8	222.63-424.23	552	420.13-697.09	959	769.74-1150.98	1.08	0.75-1.44	1.22	0.93-1.54	1.51	1.21-1.81
Aug-2016	144.8	72.39-219.66	279	175.86-390.67	476	344.1-621.12	0.49	0.25-0.74	0.62	0.39-0.86	0.75	0.54-0.98
Sep-2016	757.2	576.95-940.43	1267	1029.4-1507.39	1736	1453.45-2036.13	2.57	1.96-3.19	2.80	2.28-3.33	2.73	2.29-3.21
Oct-2016	69.4	21.21-126.76	168	82.3-261.99	259	159.28-390.47	0.24	0.07-0.43	0.37	0.18-0.58	0.41	0.25-0.61
Nov-2016	2433.9	2125.08-2733.21	3765	3392.53-4150.35	5304	4833.25-5759.77	8.25	7.21-9.27	8.32	7.5-9.17	8.35	7.61-9.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2016	1600.6	1338.52-1862.73	2430	2113.99-2766.65	3239	2872.19-3603.07	5.43	4.54-6.32	5.37	4.67-6.12	5.10	4.52-5.67
Jan-2017	288.5	180.3-408.67	477	342.29-623.77	784	600.3-980.45	0.98	0.61-1.39	1.05	0.76-1.38	1.23	0.95-1.54
Feb-2017	131.9	59.95-215.82	207	121.99-314.26	321	210-454.1	0.45	0.2-0.73	0.46	0.27-0.69	0.51	0.33-0.72
Mar-2017	120.2	50.96-195.2	170	88.03-258.26	223	123.97-325.3	0.41	0.17-0.66	0.38	0.19-0.57	0.35	0.2-0.51
Apr-2017	457.3	321.33-614.97	827	647.97-1021.43	1082	867.85-1301.77	1.55	1.09-2.09	1.83	1.43-2.26	1.70	1.37-2.05
May-2017	72.3	24.1-132.55	110	48.8-182.99	149	71.41-235.55	0.25	0.08-0.45	0.24	0.11-0.4	0.23	0.11-0.37
Jun-2017	48.3	12.08-96.64	98	36.73-171.43	137	62.15-223.75	0.16	0.04-0.33	0.22	0.08-0.38	0.22	0.1-0.35
Jul-2017	982.7	778.4-1177.94	2225	1933.34-2544.71	3856	3444.48-4264.02	3.33	2.64-3.99	4.92	4.27-5.63	6.07	5.42-6.72
Aug-2017	276.4	168.28-390.4	464	326.46-622.17	659	490.62-835.59	0.94	0.57-1.32	1.02	0.72-1.38	1.04	0.77-1.32

Table 36.5. Norfolk Vanguard West. Guillemot design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	23.58	0-55.03	0.00	0-0	0.00	0-0	0.04	0-0.09
Oct-2015	18.36	0-55.08	18.48	0-46.21	18.93	0-47.34	0.06	0-0.19	0.04	0-0.1	0.03	0-0.07
Nov-2015	0.00	0-0	0.00	0-0	8.35	0-25.05	0.00	0-0	0.00	0-0	0.01	0-0.04
Dec-2015	54.95	18.32-100.74	55.26	18.42-101.32	64.19	18.34-110.27	0.19	0.06-0.34	0.12	0.04-0.22	0.10	0.03-0.17
Jan-2016	9.09	0-27.27	9.26	0-37.03	9.43	0-28.3	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
Feb-2016	45.45	9.09-90.9	46.28	9.26-92.56	47.05	9.41-94.11	0.15	0.03-0.31	0.10	0.02-0.2	0.07	0.01-0.15
Mar-2016	9.18	0-27.54	9.27	0-37.09	9.44	0-28.33	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	9.14	0-27.41	9.24	0-27.72	18.93	0-47.34	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 36.6. Norfolk Vanguard West. Guillemot design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	23.58	0-55.03	0.00	0-0	0.00	0-0	0.04	0-0.09
Oct-2015	18.36	0-55.08	18.48	0-46.21	18.93	0-47.34	0.06	0-0.19	0.04	0-0.1	0.03	0-0.07
Nov-2015	4.69	0-14.08	18.45	0-43.05	42.82	13.91-76.9	0.02	0-0.05	0.04	0-0.1	0.07	0.02-0.12
Dec-2015	54.95	18.32-100.74	55.26	18.42-101.32	64.19	18.34-110.27	0.19	0.06-0.34	0.12	0.04-0.22	0.10	0.03-0.17
Jan-2016	9.09	0-27.27	9.26	0-37.03	9.43	0-28.3	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
Feb-2016	45.45	9.09-90.9	46.28	9.26-92.56	47.05	9.41-94.11	0.15	0.03-0.31	0.10	0.02-0.2	0.07	0.01-0.15
Mar-2016	9.18	0-27.54	9.27	0-37.09	9.44	0-28.33	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	9.14	0-27.41	9.24	0-27.72	18.93	0-47.34	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 36.7. Norfolk Vanguard West. Guillemot design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	914.1	764.34-1071.66	1383.7	1187.12-1588.07	2185	1941.76-2429.16	3.10	2.59-3.63	3.06	2.62-3.51	3.44	3.06-3.83
Oct-2015	890.5	734.46-1046.61	1201.3	1007.28-1386.17	1553	1344.34-1789.29	3.02	2.49-3.55	2.66	2.23-3.06	2.45	2.12-2.82
Nov-2015	80.1	40.06-136.4	221.9	139.72-312.3	384	283.91-484.31	0.27	0.14-0.46	0.49	0.31-0.69	0.60	0.45-0.76
Dec-2015	164.8	91.58-247.26	248.7	156.58-341.03	413	302.61-541.03	0.56	0.31-0.84	0.55	0.35-0.75	0.65	0.48-0.85
Jan-2016	2354.2	2154.26-2572.38	3100.9	2860.21-3341.54	3953	3660.08-4235.74	7.98	7.3-8.72	6.85	6.32-7.39	6.23	5.76-6.67
Feb-2016	81.8	36.36-136.35	111.1	55.54-176.1	188	112.93-272.91	0.28	0.12-0.46	0.25	0.12-0.39	0.30	0.18-0.43
Mar-2016	82.6	27.54-137.71	92.7	37.09-148.35	170	103.89-245.56	0.28	0.09-0.47	0.20	0.08-0.33	0.27	0.16-0.39
Apr-2016	63.8	18.22-109.35	101.7	46.21-166.34	227	141.67-330.56	0.22	0.06-0.37	0.22	0.1-0.37	0.36	0.22-0.52
May-2016	72.7	27.27-127.26	102.0	46.36-166.89	142	75.65-217.48	0.25	0.09-0.43	0.23	0.1-0.37	0.22	0.12-0.34
Jun-2016	174.4	100.99-257.06	351.7	249.69-453.56	629	488.19-779.46	0.59	0.34-0.87	0.78	0.55-1	0.99	0.77-1.23
Jul-2016	242.3	163.91-327.83	420.9	319.3-529.93	729	590.84-874.75	0.82	0.56-1.11	0.93	0.71-1.17	1.15	0.93-1.38
Aug-2016	110.0	55.02-172.92	212.3	133.65-291.08	362	267.5-472.05	0.37	0.19-0.59	0.47	0.3-0.64	0.57	0.42-0.74
Sep-2016	575.5	438.48-721.67	962.7	768.28-1138.76	1319	1111.79-1554.62	1.95	1.49-2.45	2.13	1.7-2.52	2.08	1.75-2.45
Oct-2016	45.8	9.16-82.42	120.3	55.52-185.05	190	113.85-275.13	0.16	0.03-0.28	0.27	0.12-0.41	0.30	0.18-0.43
Nov-2016	1849.8	1621.99-2104.94	2852.3	2564.02-3168.39	4031	3673.45-4398.72	6.27	5.5-7.14	6.31	5.67-7	6.35	5.79-6.93
Dec-2016	1216.5	1024.4-1408.55	1846.7	1606.63-2123.71	2455	2182.68-2745.28	4.12	3.47-4.78	4.08	3.55-4.69	3.87	3.44-4.32

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2017	219.2	137.03-310.59	362.3	260.14-474.06	596	463.24-737.77	0.74	0.46-1.05	0.80	0.58-1.05	0.94	0.73-1.16
Feb-2017	100.2	45.56-164.02	157.6	92.72-231.79	244	159.6-337.98	0.34	0.15-0.56	0.35	0.2-0.51	0.38	0.25-0.53
Mar-2017	91.3	45.68-155.3	129.4	73.93-203.3	170	94.22-254.39	0.31	0.15-0.53	0.29	0.16-0.45	0.27	0.15-0.4
Apr-2017	347.5	244.21-460.24	628.5	478.38-769.16	822	659.57-1003.69	1.18	0.83-1.56	1.39	1.06-1.7	1.29	1.04-1.58
May-2017	55.0	18.32-100.74	83.4	37.09-139.07	113	47.11-179.02	0.19	0.06-0.34	0.18	0.08-0.31	0.18	0.07-0.28
Jun-2017	36.7	9.18-73.45	74.5	27.92-130.29	104	47.24-170.05	0.12	0.03-0.25	0.16	0.06-0.29	0.16	0.07-0.27
Jul-2017	739.9	584.64-895.23	1681.9	1469.34-1912.91	2906	2603.23-3219.07	2.51	1.98-3.04	3.72	3.25-4.23	4.58	4.1-5.07
Aug-2017	210.1	127.89-310.59	352.3	241.06-472.85	501	387.22-642.22	0.71	0.43-1.05	0.78	0.53-1.05	0.79	0.61-1.01

Table 36.8. Norfolk Vanguard West. Guillemot design based estimates of birds on the sea surface and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	1202.7	1005.72-1410.08	1821	1562-2089.57	2876	2554.94-3196.27	4.08	3.41-4.78	4.02	3.45-4.62	4.53	4.02-5.03
Oct-2015	1171.8	966.4-1377.12	1581	1325.37-1823.9	2043	1768.86-2354.33	3.97	3.28-4.67	3.49	2.93-4.03	3.22	2.79-3.71
Nov-2015	105.4	52.71-179.48	292	183.84-410.93	505	373.56-637.25	0.36	0.18-0.61	0.65	0.41-0.91	0.80	0.59-1
Dec-2015	216.9	120.5-325.34	327	206.03-448.72	543	398.17-711.88	0.74	0.41-1.1	0.72	0.46-0.99	0.86	0.63-1.12
Jan-2016	3097.7	2834.55-3384.71	4080	3763.43-4396.76	5201	4815.89-5573.34	10.50	9.61-11.48	9.02	8.32-9.72	8.19	7.58-8.78
Feb-2016	107.6	47.84-179.4	146	73.08-231.71	248	148.59-359.09	0.36	0.16-0.61	0.32	0.16-0.51	0.39	0.23-0.57
Mar-2016	108.7	36.24-181.2	122	48.8-195.19	224	136.7-323.1	0.37	0.12-0.61	0.27	0.11-0.43	0.35	0.22-0.51
Apr-2016	83.9	23.98-143.88	134	60.8-218.87	298	186.4-434.94	0.28	0.08-0.49	0.30	0.13-0.48	0.47	0.29-0.69
May-2016	95.7	35.88-167.44	134	61-219.59	187	99.53-286.16	0.32	0.12-0.57	0.30	0.13-0.49	0.29	0.16-0.45
Jun-2016	229.5	132.88-338.24	463	328.54-596.79	828	642.36-1025.61	0.78	0.45-1.15	1.02	0.73-1.32	1.30	1.01-1.62
Jul-2016	318.8	215.68-431.36	554	420.13-697.28	959	777.42-1150.98	1.08	0.73-1.46	1.22	0.93-1.54	1.51	1.22-1.81
Aug-2016	144.8	72.39-227.52	279	175.86-383	476	351.97-621.12	0.49	0.25-0.77	0.62	0.39-0.85	0.75	0.55-0.98
Sep-2016	757.2	576.95-949.56	1267	1010.89-1498.37	1736	1462.88-2045.55	2.57	1.96-3.22	2.80	2.23-3.31	2.73	2.3-3.22
Oct-2016	60.2	12.05-108.45	158	73.05-243.49	250	149.8-362.01	0.20	0.04-0.37	0.35	0.16-0.54	0.39	0.24-0.57
Nov-2016	2433.9	2134.2-2769.66	3753	3373.71-4168.93	5304	4833.49-5787.79	8.25	7.24-9.39	8.30	7.46-9.22	8.35	7.61-9.12
Dec-2016	1600.6	1347.89-1853.35	2430	2113.99-2794.35	3230	2871.95-3612.21	5.43	4.57-6.28	5.37	4.67-6.18	5.09	4.52-5.69

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jan-2017	288.5	180.3-408.67	477	342.29-623.77	784	609.52-970.76	0.98	0.61-1.39	1.05	0.76-1.38	1.23	0.96-1.53
Feb-2017	131.9	59.95-215.82	207	121.99-304.99	321	210-444.71	0.45	0.2-0.73	0.46	0.27-0.67	0.51	0.33-0.7
Mar-2017	120.2	60.1-204.34	170	97.27-267.51	223	123.97-334.73	0.41	0.2-0.69	0.38	0.22-0.59	0.35	0.2-0.53
Apr-2017	457.3	321.33-605.58	827	629.44-1012.05	1082	867.85-1320.65	1.55	1.09-2.05	1.83	1.39-2.24	1.70	1.37-2.08
May-2017	72.3	24.1-132.55	110	48.8-182.99	149	61.99-235.55	0.25	0.08-0.45	0.24	0.11-0.4	0.23	0.1-0.37
Jun-2017	48.3	12.08-96.64	98	36.73-171.43	137	62.15-223.75	0.16	0.04-0.33	0.22	0.08-0.38	0.22	0.1-0.35
Jul-2017	973.6	769.26-1177.94	2213	1933.34-2516.99	3824	3425.31-4235.62	3.30	2.61-3.99	4.89	4.27-5.56	6.02	5.39-6.67
Aug-2017	276.4	168.28-408.67	464	317.19-622.17	659	509.51-845.03	0.94	0.57-1.39	1.02	0.7-1.38	1.04	0.8-1.33

Table 36.9. Norfolk Vanguard West. Guillemot design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	914.1	764.34-1071.66	1375.8	1187.12-1588.07	2185	1941.76-2429.16	3.10	2.59-3.63	3.04	2.62-3.51	3.44	3.06-3.83
Oct-2015	890.5	734.46-1046.61	1192.1	1007.28-1386.17	1553	1344.34-1789.29	3.02	2.49-3.55	2.64	2.23-3.06	2.45	2.12-2.82
Nov-2015	541.2	440.71-645.32	1044.9	894.32-1195.78	1607	1413.48-1814.6	1.83	1.49-2.19	2.31	1.98-2.64	2.53	2.23-2.86
Dec-2015	164.8	91.58-247.26	248.7	156.58-341.03	413	302.61-541.03	0.56	0.31-0.84	0.55	0.35-0.75	0.65	0.48-0.85
Jan-2016	2363.3	2154.26-2572.38	3100.9	2860.21-3341.54	3953	3660.08-4235.74	8.01	7.3-8.72	6.85	6.32-7.39	6.23	5.76-6.67
Feb-2016	81.8	36.36-136.35	111.1	55.54-176.1	188	112.93-272.91	0.28	0.12-0.46	0.25	0.12-0.39	0.30	0.18-0.43
Mar-2016	82.6	27.54-137.71	92.7	37.09-148.35	170	103.89-245.56	0.28	0.09-0.47	0.20	0.08-0.33	0.27	0.16-0.39
Apr-2016	63.8	18.22-109.35	101.7	46.21-166.34	227	141.67-330.56	0.22	0.06-0.37	0.22	0.1-0.37	0.36	0.22-0.52
May-2016	72.7	27.27-127.26	102.0	46.36-166.89	142	75.65-217.48	0.25	0.09-0.43	0.23	0.1-0.37	0.22	0.12-0.34
Jun-2016	174.4	100.99-257.06	351.7	249.69-453.56	629	488.19-779.46	0.59	0.34-0.87	0.78	0.55-1	0.99	0.77-1.23
Jul-2016	242.3	163.91-327.83	413.6	319.3-529.93	729	590.84-874.75	0.82	0.56-1.11	0.91	0.71-1.17	1.15	0.93-1.38
Aug-2016	110.0	55.02-172.92	212.3	133.65-291.08	362	267.5-472.05	0.37	0.19-0.59	0.47	0.3-0.64	0.57	0.42-0.74
Sep-2016	575.5	438.48-721.67	962.7	768.28-1138.76	1319	1111.79-1554.62	1.95	1.49-2.45	2.13	1.7-2.52	2.08	1.75-2.45
Oct-2016	45.8	9.16-82.42	120.3	55.52-185.05	190	113.85-275.13	0.16	0.03-0.28	0.27	0.12-0.41	0.30	0.18-0.43
Nov-2016	1849.8	1621.99-2104.94	2861.6	2564.02-3168.39	4031	3673.45-4398.72	6.27	5.5-7.14	6.33	5.67-7	6.35	5.79-6.93
Dec-2016	1216.5	1024.4-1408.55	1846.7	1606.63-	2455	2182.68-	4.12	3.47-4.78	4.08	3.55-4.69	3.87	3.44-4.32

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
				2123.71		2745.28						
Jan-2017	219.2	137.03-310.59	362.3	260.14-474.06	596	463.24-737.77	0.74	0.46-1.05	0.80	0.58-1.05	0.94	0.73-1.16
Feb-2017	100.2	45.56-164.02	157.6	92.72-231.79	244	159.6-337.98	0.34	0.15-0.56	0.35	0.2-0.51	0.38	0.25-0.53
Mar-2017	91.3	45.68-155.3	129.4	73.93-203.3	170	94.22-254.39	0.31	0.15-0.53	0.29	0.16-0.45	0.27	0.15-0.4
Apr-2017	347.5	244.21-460.24	628.5	478.38-769.16	822	659.57-1003.69	1.18	0.83-1.56	1.39	1.06-1.7	1.29	1.04-1.58
May-2017	55.0	18.32-100.74	83.4	37.09-139.07	113	47.11-179.02	0.19	0.06-0.34	0.18	0.08-0.31	0.18	0.07-0.28
Jun-2017	36.7	9.18-73.45	74.5	27.92-130.29	104	47.24-170.05	0.12	0.03-0.25	0.16	0.06-0.29	0.16	0.07-0.27
Jul-2017	739.9	584.64-895.23	1691.1	1469.34-1912.91	2916	2603.23-3219.07	2.51	1.98-3.04	3.74	3.25-4.23	4.59	4.1-5.07
Aug-2017	210.1	127.89-310.59	352.3	241.06-472.85	501	387.22-642.22	0.71	0.43-1.05	0.78	0.53-1.05	0.79	0.61-1.01

Table 36.10. Norfolk Vanguard West. Guillemot design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions and accounting for availability bias.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	1202.7	1005.72-1410.08	1810	1562-2089.57	2876	2554.94-3196.27	4.08	3.41-4.78	4.00	3.45-4.62	4.53	4.02-5.03
Oct-2015	1171.8	966.4-1377.12	1569	1325.37-1823.9	2043	1768.86-2354.33	3.97	3.28-4.67	3.47	2.93-4.03	3.22	2.79-3.71
Nov-2015	712.1	579.88-849.1	1375	1176.73-1573.4	2115	1859.85-2387.63	2.41	1.97-2.88	3.04	2.6-3.48	3.33	2.93-3.76
Dec-2015	216.9	120.5-325.34	327	206.03-448.72	543	398.17-711.88	0.74	0.41-1.1	0.72	0.46-0.99	0.86	0.63-1.12
Jan-2016	3109.6	2834.55-3384.71	4080	3763.43-4396.76	5201	4815.89-5573.34	10.54	9.61-11.48	9.02	8.32-9.72	8.19	7.58-8.78
Feb-2016	107.6	47.84-179.4	146	73.08-231.71	248	148.59-359.09	0.36	0.16-0.61	0.32	0.16-0.51	0.39	0.23-0.57
Mar-2016	108.7	36.24-181.2	122	48.8-195.19	224	136.7-323.1	0.37	0.12-0.61	0.27	0.11-0.43	0.35	0.22-0.51
Apr-2016	83.9	23.98-143.88	134	60.8-218.87	298	186.4-434.94	0.28	0.08-0.49	0.30	0.13-0.48	0.47	0.29-0.69
May-2016	95.7	35.88-167.44	134	61-219.59	187	99.53-286.16	0.32	0.12-0.57	0.30	0.13-0.49	0.29	0.16-0.45
Jun-2016	229.5	132.88-338.24	463	328.54-596.79	828	642.36-1025.61	0.78	0.45-1.15	1.02	0.73-1.32	1.30	1.01-1.62
Jul-2016	318.8	215.68-431.36	544	420.13-697.28	959	777.42-1150.98	1.08	0.73-1.46	1.20	0.93-1.54	1.51	1.22-1.81
Aug-2016	144.8	72.39-227.52	279	175.86-383	476	351.97-621.12	0.49	0.25-0.77	0.62	0.39-0.85	0.75	0.55-0.98
Sep-2016	757.2	576.95-949.56	1267	1010.89-1498.37	1736	1462.88-2045.55	2.57	1.96-3.22	2.80	2.23-3.31	2.73	2.3-3.22
Oct-2016	60.2	12.05-108.45	158	73.05-243.49	250	149.8-362.01	0.20	0.04-0.37	0.35	0.16-0.54	0.39	0.24-0.57
Nov-2016	2433.9	2134.2-2769.66	3765	3373.71-4168.93	5304	4833.49-5787.79	8.25	7.24-9.39	8.32	7.46-9.22	8.35	7.61-9.12

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Dec-2016	1600.6	1347.89-1853.35	2430	2113.99-2794.35	3230	2871.95-3612.21	5.43	4.57-6.28	5.37	4.67-6.18	5.09	4.52-5.69
Jan-2017	288.5	180.3-408.67	477	342.29-623.77	784	609.52-970.76	0.98	0.61-1.39	1.05	0.76-1.38	1.23	0.96-1.53
Feb-2017	131.9	59.95-215.82	207	121.99-304.99	321	210-444.71	0.45	0.2-0.73	0.46	0.27-0.67	0.51	0.33-0.7
Mar-2017	120.2	60.1-204.34	170	97.27-267.51	223	123.97-334.73	0.41	0.2-0.69	0.38	0.22-0.59	0.35	0.2-0.53
Apr-2017	457.3	321.33-605.58	827	629.44-1012.05	1082	867.85-1320.65	1.55	1.09-2.05	1.83	1.39-2.24	1.70	1.37-2.08
May-2017	72.3	24.1-132.55	110	48.8-182.99	149	61.99-235.55	0.25	0.08-0.45	0.24	0.11-0.4	0.23	0.1-0.37
Jun-2017	48.3	12.08-96.64	98	36.73-171.43	137	62.15-223.75	0.16	0.04-0.33	0.22	0.08-0.38	0.22	0.1-0.35
Jul-2017	973.6	769.26-1177.94	2225	1933.34-2516.99	3837	3425.31-4235.62	3.30	2.61-3.99	4.92	4.27-5.56	6.04	5.39-6.67
Aug-2017	276.4	168.28-408.67	464	317.19-622.17	659	509.51-845.03	0.94	0.57-1.39	1.02	0.7-1.38	1.04	0.8-1.33

Table 37.1. Norfolk Vanguard West. Sandwich Tern design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2017	0	0-0	18.8	0-46.9	19.1	0-47.79	0	0-0	0.04	0-0.1	0.03	0-0.08
May-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2017	0	0-0	18.6	0-46.53	18.9	0-47.24	0	0-0	0.04	0-0.1	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 37.2. Norfolk Vanguard West. Sandwich Tern design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2017	0	0-0	18.8	0-46.9	19.1	0-47.79	0	0-0	0.04	0-0.1	0.03	0-0.08
May-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0	0-0	27.9	0-65.14	28.3	0-66.13	0	0-0	0.06	0-0.14	0.04	0-0.1
Jul-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 37.3. Norfolk Vanguard West. Sandwich Tern design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2017	0	0-0	18.8	0-46.9	19.1	0-47.79	0	0-0	0.04	0-0.1	0.03	0-0.08
May-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2017	0	0-0	18.6	0-46.53	18.9	0-47.24	0	0-0	0.04	0-0.1	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 37.4. Norfolk Vanguard West. Sandwich Tern design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2016	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2017	0	0-0	18.8	0-46.9	19.1	0-47.79	0	0-0	0.04	0-0.1	0.03	0-0.08
May-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2017	0	0-0	18.6	0-46.53	18.9	0-47.24	0	0-0	0.04	0-0.1	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2017	0	0-0	0.0	0-0	0.0	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 37.5. Norfolk Vanguard West. Sandwich Tern design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 37.6. Norfolk Vanguard West. Sandwich Tern design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2015	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2015	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2015	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Jun-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Jul-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Sep-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Oct-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Nov-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Dec-2016	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Jan-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Feb-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Mar-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Apr-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
May-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0	0-0	9.31	0-27.92	9.45	0-28.34	0	0-0	0.02	0-0.06	0.01	0-0.04
Jul-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0
Aug-2017	0	0-0	0.00	0-0	0.00	0-0	0	0-0	0.00	0-0	0.00	0-0

Table 38.1. Norfolk Vanguard West. Commic Tern design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	36.4	0-72.72	46.36	9.27-92.72	56.7	18.91-104.01	0.12	0-0.25	0.10	0.02-0.2	0.09	0.03-0.16
Jun-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	47.2	15.72-86.46	86.48	39.31-141.51	204.6	133.75-298.97	0.16	0.05-0.29	0.19	0.09-0.31	0.32	0.21-0.47
Sep-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	131.5	65.75-206.64	168.84	93.8-243.88	401.5	286.77-535.3	0.45	0.22-0.7	0.37	0.21-0.54	0.63	0.45-0.84
May-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.0	0-0	9.24	0-27.72	47.3	9.47-94.67	0.00	0-0	0.02	0-0.06	0.07	0.01-0.15
Aug-2017	127.9	63.95-200.97	148.35	83.44-222.52	170.0	94.44-255	0.43	0.22-0.68	0.33	0.18-0.49	0.27	0.15-0.4

Table 38.2. Norfolk Vanguard West. Commic Tern design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	36.4	0-72.72	46.36	9.27-92.72	56.7	18.91-104.01	0.12	0-0.25	0.10	0.02-0.2	0.09	0.03-0.16
Jun-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	47.2	15.72-86.46	86.48	39.31-141.51	204.6	133.75-298.97	0.16	0.05-0.29	0.19	0.09-0.31	0.32	0.21-0.47
Sep-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	131.5	65.75-206.64	168.84	93.8-243.88	401.5	286.77-535.3	0.45	0.22-0.7	0.37	0.21-0.54	0.63	0.45-0.84
May-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.0	0-0	9.24	0-27.72	47.3	9.47-94.67	0.00	0-0	0.02	0-0.06	0.07	0.01-0.15
Aug-2017	127.9	63.95-200.97	148.35	83.44-222.52	170.0	94.44-255	0.43	0.22-0.68	0.33	0.18-0.49	0.27	0.15-0.4

Table 38.3. Norfolk Vanguard West. Commic Tern design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	36.4	9.09-72.72	46.36	9.27-92.72	56.7	18.91-104.01	0.12	0.03-0.25	0.10	0.02-0.2	0.09	0.03-0.16
Jun-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	47.2	15.72-86.46	86.48	39.31-133.65	94.4	47.21-149.48	0.16	0.05-0.29	0.19	0.09-0.3	0.15	0.07-0.24
Sep-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	131.5	65.75-197.25	168.84	93.8-243.88	401.5	286.77-525.74	0.45	0.22-0.67	0.37	0.21-0.54	0.63	0.45-0.83
May-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.0	0-0	9.24	0-27.72	47.3	9.47-94.67	0.00	0-0	0.02	0-0.06	0.07	0.01-0.15
Aug-2017	73.1	27.41-127.89	92.72	37.09-157.62	113.3	56.67-179.45	0.25	0.09-0.43	0.20	0.08-0.35	0.18	0.09-0.28

Table 38.4. Norfolk Vanguard West. Commic Tern design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	36.4	9.09-72.72	46.36	9.27-92.72	56.7	18.91-104.01	0.12	0.03-0.25	0.10	0.02-0.2	0.09	0.03-0.16
Jun-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	47.2	15.72-86.46	86.48	39.31-133.65	94.4	47.21-149.48	0.16	0.05-0.29	0.19	0.09-0.3	0.15	0.07-0.24
Sep-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	131.5	65.75-197.25	168.84	93.8-243.88	401.5	286.77-525.74	0.45	0.22-0.67	0.37	0.21-0.54	0.63	0.45-0.83
May-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.0	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.0	0-0	9.24	0-27.72	47.3	9.47-94.67	0.00	0-0	0.02	0-0.06	0.07	0.01-0.15
Aug-2017	64.0	27.41-127.89	92.72	37.09-157.62	113.3	56.67-179.45	0.22	0.09-0.43	0.20	0.08-0.35	0.18	0.09-0.28

Table 38.5. Norfolk Vanguard West. Commic Tern design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.0	0-0	0.0	0-0	110.2	55.07-173.09	0.00	0-0	0.00	0-0	0.17	0.09-0.27
Sep-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	54.8	18.27-100.49	55.6	18.54-101.99	56.7	18.89-103.89	0.19	0.06-0.34	0.12	0.04-0.23	0.09	0.03-0.16

Table 38.6. Norfolk Vanguard West. Commic Tern design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.0	0-0	0.0	0-0	110.2	55.07-173.09	0.00	0-0	0.00	0-0	0.17	0.09-0.27
Sep-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.0	0-0	0.0	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	54.8	18.27-100.49	55.6	18.54-101.99	56.7	18.89-103.89	0.19	0.06-0.34	0.12	0.04-0.23	0.09	0.03-0.16

Table 39.1. Norfolk Vanguard West. Kittiwake design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	78.8	31.52-133.96	86.5	39.31-133.85	110.1	55.03-172.95	0.27	0.11-0.45	0.19	0.09-0.3	0.17	0.09-0.27
Oct-2015	73.5	27.54-128.53	110.9	55.45-175.58	123.1	56.8-189.58	0.25	0.09-0.44	0.25	0.12-0.39	0.19	0.09-0.3
Nov-2015	256.4	176.26-352.53	386.3	279.43-501.33	534.4	409.16-659.67	0.87	0.6-1.2	0.85	0.62-1.11	0.84	0.64-1.04
Dec-2015	18.3	0-45.79	73.7	27.63-128.95	192.6	119.21-275.1	0.06	0-0.16	0.16	0.06-0.29	0.30	0.19-0.43
Jan-2016	54.5	18.18-109.08	92.6	37.03-157.36	169.8	94.33-254.7	0.18	0.06-0.37	0.20	0.08-0.35	0.27	0.15-0.4
Feb-2016	18.2	0-45.45	83.3	37.03-138.85	94.1	37.64-150.57	0.06	0-0.15	0.18	0.08-0.31	0.15	0.06-0.24
Mar-2016	73.5	27.54-128.53	129.8	74.17-194.7	207.8	122.78-292.78	0.25	0.09-0.44	0.29	0.16-0.43	0.33	0.19-0.46
Apr-2016	36.5	9.11-82.01	46.2	9.24-92.41	103.9	47.22-170	0.12	0.03-0.28	0.10	0.02-0.2	0.16	0.07-0.27
May-2016	36.4	9.09-81.81	55.6	18.54-101.99	66.2	18.91-113.47	0.12	0.03-0.28	0.12	0.04-0.23	0.10	0.03-0.18
Jun-2016	119.3	64.27-183.62	194.4	111.08-277.69	347.4	234.71-450.87	0.40	0.22-0.62	0.43	0.25-0.61	0.55	0.37-0.71
Jul-2016	14.2	0-35.63	21.8	0-50.8	30.7	7.67-61.39	0.05	0-0.12	0.05	0-0.11	0.05	0.01-0.1
Aug-2016	78.6	31.44-133.62	117.9	55.03-180.82	173.1	102.28-251.76	0.27	0.11-0.45	0.26	0.12-0.4	0.27	0.16-0.4
Sep-2016	18.3	0-45.68	296.2	194.38-407.28	376.9	263.81-499.36	0.06	0-0.15	0.65	0.43-0.9	0.59	0.42-0.79
Oct-2016	201.5	128.21-283.89	203.6	120.28-286.83	227.7	142.31-322.56	0.68	0.43-0.96	0.45	0.27-0.63	0.36	0.22-0.51
Nov-2016	118.5	54.67-191.36	241.6	157.71-334.47	989.0	810.04-1177.39	0.40	0.19-0.65	0.53	0.35-0.74	1.56	1.28-1.85
Dec-2016	36.6	9.15-73.17	46.2	9.23-92.34	65.6	18.74-112.42	0.12	0.03-0.25	0.10	0.02-0.2	0.10	0.03-0.18
Jan-2017	54.8	18.27-100.49	102.2	46.45-167.23	141.9	75.67-217.55	0.19	0.06-0.34	0.23	0.1-0.37	0.22	0.12-0.34
Feb-2017	27.3	0-54.67	74.2	27.81-129.8	103.3	46.94-168.99	0.09	0-0.19	0.16	0.06-0.29	0.16	0.07-0.27
Mar-2017	420.2	292.32-538.97	443.6	323.44-572.95	471.1	358.03-593.82	1.42	0.99-1.83	0.98	0.71-1.27	0.74	0.56-0.94
Apr-2017	37.6	9.39-75.14	75.0	28.14-131.32	124.3	66.91-200.74	0.13	0.03-0.25	0.17	0.06-0.29	0.20	0.11-0.32
May-2017	64.1	18.32-119.05	83.4	27.81-139.07	84.8	37.69-141.33	0.22	0.06-0.4	0.18	0.06-0.31	0.13	0.06-0.22
Jun-2017	156.1	91.81-238.7	214.0	130.29-307.1	340.1	236.18-462.92	0.53	0.31-0.81	0.47	0.29-0.68	0.54	0.37-0.73

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	91.3	45.68-155.3	212.6	129.38-295.72	350.3	246.15-464.13	0.31	0.15-0.53	0.47	0.29-0.65	0.55	0.39-0.73
Aug-2017	54.8	18.27-100.49	111.3	55.63-185.43	141.7	75.56-217.22	0.19	0.06-0.34	0.25	0.12-0.41	0.22	0.12-0.34

Table 39.2. Norfolk Vanguard West. Kittiwake design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	84.1	39.37-140.59	113.1	60.47-170.55	136.5	76.62-205.29	0.29	0.13-0.48	0.25	0.13-0.38	0.21	0.12-0.32
Oct-2015	73.5	27.54-128.53	110.9	55.45-175.58	140.7	74.39-214.14	0.25	0.09-0.44	0.25	0.12-0.39	0.22	0.12-0.34
Nov-2015	256.4	176.26-352.53	408.6	295.1-520.69	556.7	431.43-687.52	0.87	0.6-1.2	0.90	0.65-1.15	0.88	0.68-1.08
Dec-2015	18.3	0-45.79	73.7	27.63-128.95	192.6	119.21-275.1	0.06	0-0.16	0.16	0.06-0.29	0.30	0.19-0.43
Jan-2016	54.5	18.18-109.08	92.6	37.03-157.36	169.8	94.33-254.7	0.18	0.06-0.37	0.20	0.08-0.35	0.27	0.15-0.4
Feb-2016	18.2	0-45.45	83.3	37.03-138.85	94.1	37.64-150.57	0.06	0-0.15	0.18	0.08-0.31	0.15	0.06-0.24
Mar-2016	73.5	27.54-128.53	129.8	74.17-194.7	207.8	122.78-292.78	0.25	0.09-0.44	0.29	0.16-0.43	0.33	0.19-0.46
Apr-2016	61.3	24.43-110.14	71.3	29.04-122.83	137.9	74.87-207.14	0.21	0.08-0.37	0.16	0.06-0.27	0.22	0.12-0.33
May-2016	36.4	9.09-81.81	55.6	18.54-101.99	66.2	18.91-113.47	0.12	0.03-0.28	0.12	0.04-0.23	0.10	0.03-0.18
Jun-2016	119.3	64.27-183.62	194.4	111.08-277.69	347.4	234.71-450.87	0.40	0.22-0.62	0.43	0.25-0.61	0.55	0.37-0.71
Jul-2016	14.2	0-35.63	21.8	0-50.8	30.7	7.67-61.39	0.05	0-0.12	0.05	0-0.11	0.05	0.01-0.1
Aug-2016	78.6	31.44-133.62	117.9	55.03-180.82	173.1	102.28-251.76	0.27	0.11-0.45	0.26	0.12-0.4	0.27	0.16-0.4
Sep-2016	24.4	0-54.98	305.2	194.38-407.28	404.4	291.15-526.93	0.08	0-0.19	0.67	0.43-0.9	0.64	0.46-0.83
Oct-2016	201.5	128.21-283.89	203.6	120.28-286.83	227.7	142.31-322.56	0.68	0.43-0.96	0.45	0.27-0.63	0.36	0.22-0.51
Nov-2016	118.5	54.67-191.36	241.6	157.71-334.47	989.0	810.04-1177.39	0.40	0.19-0.65	0.53	0.35-0.74	1.56	1.28-1.85
Dec-2016	36.6	9.15-73.17	46.2	9.23-92.34	65.6	18.74-112.42	0.12	0.03-0.25	0.10	0.02-0.2	0.10	0.03-0.18
Jan-2017	54.8	18.27-100.49	102.2	46.45-167.23	141.9	75.67-217.55	0.19	0.06-0.34	0.23	0.1-0.37	0.22	0.12-0.34
Feb-2017	27.3	0-54.67	74.2	27.81-129.8	103.3	46.94-168.99	0.09	0-0.19	0.16	0.06-0.29	0.16	0.07-0.27
Mar-2017	420.2	292.32-538.97	460.9	332.68-589.76	487.9	366.76-619.78	1.42	0.99-1.83	1.02	0.74-1.3	0.77	0.58-0.98
Apr-2017	37.6	9.39-75.14	84.4	37.52-150.08	143.4	76.47-229.42	0.13	0.03-0.25	0.19	0.08-0.33	0.23	0.12-0.36
May-2017	64.1	18.32-119.05	83.4	27.81-139.07	84.8	37.69-141.33	0.22	0.06-0.4	0.18	0.06-0.31	0.13	0.06-0.22

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	165.2	100.76-247.88	223.3	139.59-316.41	349.6	245.63-463.15	0.56	0.34-0.84	0.49	0.31-0.7	0.55	0.39-0.73
Jul-2017	100.5	54.58-164.66	221.8	138.62-305.19	359.8	255.61-482.83	0.34	0.19-0.56	0.49	0.31-0.67	0.57	0.4-0.76
Aug-2017	64.0	18.27-118.76	129.8	64.9-203.98	160.6	85-236.11	0.22	0.06-0.4	0.29	0.14-0.45	0.25	0.13-0.37

Table 39.3. Norfolk Vanguard West. Kittiwake design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	39.40	7.88-78.8	39.31	7.86-78.62	47.17	15.72-86.48	0.13	0.03-0.27	0.09	0.02-0.17	0.07	0.02-0.14
Oct-2015	55.08	18.36-100.99	73.93	27.72-129.38	85.20	37.87-142.01	0.19	0.06-0.34	0.16	0.06-0.29	0.13	0.06-0.22
Nov-2015	200.30	128.19-280.42	287.65	205.26-386.27	409.16	300.61-526.06	0.68	0.43-0.95	0.64	0.45-0.85	0.64	0.47-0.83
Dec-2015	9.16	0-27.47	55.26	18.42-101.32	91.70	36.68-155.89	0.03	0-0.09	0.12	0.04-0.22	0.14	0.06-0.25
Jan-2016	36.36	9.09-72.72	64.79	18.51-111.08	141.50	75.47-216.96	0.12	0.03-0.25	0.14	0.04-0.25	0.22	0.12-0.34
Feb-2016	18.18	0-45.45	55.54	18.51-101.82	65.87	28.23-122.34	0.06	0-0.15	0.12	0.04-0.23	0.10	0.04-0.19
Mar-2016	27.54	0-64.27	64.90	18.54-120.53	85.00	37.78-141.67	0.09	0-0.22	0.14	0.04-0.27	0.13	0.06-0.22
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	27.27	0-63.63	46.36	9.27-92.72	47.28	9.46-94.56	0.09	0-0.22	0.10	0.02-0.2	0.07	0.01-0.15
Jun-2016	45.90	9.18-91.81	74.05	27.77-129.59	150.21	75.11-225.32	0.16	0.03-0.31	0.16	0.06-0.29	0.24	0.12-0.35
Jul-2016	0.00	0-0	7.26	0-29.03	7.67	0-23.02	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Aug-2016	31.44	7.86-62.88	62.89	23.59-110.06	86.54	39.34-141.62	0.11	0.03-0.21	0.14	0.05-0.24	0.14	0.06-0.22
Sep-2016	0.00	0-0	185.13	111.08-268.43	197.86	122.48-292.08	0.00	0-0	0.41	0.25-0.59	0.31	0.19-0.46
Oct-2016	18.32	0-45.79	18.51	0-55.52	18.97	0-47.44	0.06	0-0.16	0.04	0-0.12	0.03	0-0.07
Nov-2016	45.56	9.11-91.12	74.33	27.87-130.07	254.32	160.12-357.93	0.15	0.03-0.31	0.16	0.06-0.29	0.40	0.25-0.56
Dec-2016	0.00	0-0	9.23	0-27.7	28.11	0-65.58	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Jan-2017	27.41	0-63.95	55.74	18.58-102.2	75.67	28.38-141.88	0.09	0-0.22	0.12	0.04-0.23	0.12	0.04-0.22
Feb-2017	27.34	0-63.79	46.36	9.27-92.72	56.33	18.78-103.27	0.09	0-0.22	0.10	0.02-0.2	0.09	0.03-0.16
Mar-2017	82.22	27.41-137.03	92.41	45.97-147.86	113.06	56.53-188.44	0.28	0.09-0.46	0.20	0.1-0.33	0.18	0.09-0.3
Apr-2017	37.57	9.39-84.53	65.66	18.76-121.94	76.47	28.68-124.51	0.13	0.03-0.29	0.15	0.04-0.27	0.12	0.05-0.2
May-2017	18.32	0-54.95	37.09	9.27-74.17	37.69	9.42-75.38	0.06	0-0.19	0.08	0.02-0.16	0.06	0.01-0.12
Jun-2017	119.35	55.08-183.62	158.20	93.06-241.96	245.63	160.6-330.89	0.40	0.19-0.62	0.35	0.21-0.53	0.39	0.25-0.52

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	63.95	18.27-118.76	120.13	55.45-194.06	227.21	142.01-321.88	0.22	0.06-0.4	0.27	0.12-0.43	0.36	0.22-0.51
Aug-2017	27.41	0-63.95	37.09	9.27-74.17	66.11	18.89-113.33	0.09	0-0.22	0.08	0.02-0.16	0.10	0.03-0.18

Table 39.4. Norfolk Vanguard West. Kittiwake design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	39.40	7.88-78.8	45.96	14.51-85.27	54.03	22.58-98.23	0.13	0.03-0.27	0.10	0.03-0.19	0.09	0.04-0.15
Oct-2015	55.08	18.36-100.99	73.93	27.72-129.38	85.20	37.87-142.01	0.19	0.06-0.34	0.16	0.06-0.29	0.13	0.06-0.22
Nov-2015	200.30	128.19-280.42	310.00	220.35-402.05	430.96	322.87-553.92	0.68	0.43-0.95	0.69	0.49-0.89	0.68	0.51-0.87
Dec-2015	9.16	0-27.47	55.26	18.42-101.32	91.70	36.68-155.89	0.03	0-0.09	0.12	0.04-0.22	0.14	0.06-0.25
Jan-2016	36.36	9.09-72.72	64.79	18.51-111.08	141.50	75.47-216.96	0.12	0.03-0.25	0.14	0.04-0.25	0.22	0.12-0.34
Feb-2016	18.18	0-45.45	55.54	18.51-101.82	65.87	28.23-122.34	0.06	0-0.15	0.12	0.04-0.23	0.10	0.04-0.19
Mar-2016	27.54	0-64.27	64.90	18.54-120.53	85.00	37.78-141.67	0.09	0-0.22	0.14	0.04-0.27	0.13	0.06-0.22
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	27.27	0-63.63	46.36	9.27-92.72	47.28	9.46-94.56	0.09	0-0.22	0.10	0.02-0.2	0.07	0.01-0.15
Jun-2016	45.90	9.18-91.81	74.05	27.77-129.59	150.21	75.11-225.32	0.16	0.03-0.31	0.16	0.06-0.29	0.24	0.12-0.35
Jul-2016	0.00	0-0	7.26	0-29.03	7.67	0-23.02	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Aug-2016	31.44	7.86-62.88	62.89	23.59-110.06	86.54	39.34-141.62	0.11	0.03-0.21	0.14	0.05-0.24	0.14	0.06-0.22
Sep-2016	0.00	0-0	185.13	111.08-268.43	197.86	122.48-292.08	0.00	0-0	0.41	0.25-0.59	0.31	0.19-0.46
Oct-2016	18.32	0-45.79	18.51	0-55.52	18.97	0-47.44	0.06	0-0.16	0.04	0-0.12	0.03	0-0.07
Nov-2016	45.56	9.11-91.12	74.33	27.87-130.07	254.32	160.12-357.93	0.15	0.03-0.31	0.16	0.06-0.29	0.40	0.25-0.56
Dec-2016	0.00	0-0	9.23	0-27.7	28.11	0-65.58	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Jan-2017	27.41	0-63.95	55.74	18.58-102.2	75.67	28.38-141.88	0.09	0-0.22	0.12	0.04-0.23	0.12	0.04-0.22
Feb-2017	27.34	0-63.79	46.36	9.27-92.72	56.33	18.78-103.27	0.09	0-0.22	0.10	0.02-0.2	0.09	0.03-0.16
Mar-2017	82.22	27.41-137.03	92.41	45.97-147.86	113.06	56.53-188.44	0.28	0.09-0.46	0.20	0.1-0.33	0.18	0.09-0.3
Apr-2017	37.57	9.39-84.53	65.66	18.76-121.94	76.47	28.68-124.51	0.13	0.03-0.29	0.15	0.04-0.27	0.12	0.05-0.2
May-2017	18.32	0-54.95	37.09	9.27-74.17	37.69	9.42-75.38	0.06	0-0.19	0.08	0.02-0.16	0.06	0.01-0.12
Jun-2017	119.35	55.08-183.62	158.20	93.06-241.96	245.63	160.6-330.89	0.40	0.19-0.62	0.35	0.21-0.53	0.39	0.25-0.52

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	63.95	18.27-118.76	120.13	55.45-194.06	227.21	142.01-321.88	0.22	0.06-0.4	0.27	0.12-0.43	0.36	0.22-0.51
Aug-2017	27.41	0-63.95	37.09	9.27-74.17	66.11	18.89-113.33	0.09	0-0.22	0.08	0.02-0.16	0.10	0.03-0.18

Table 39.5. Norfolk Vanguard West. Kittiwake design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	39.40	7.88-70.92	47.17	15.72-94.34	62.9	23.58-110.06	0.13	0.03-0.24	0.10	0.03-0.21	0.10	0.04-0.17
Oct-2015	18.36	0-45.9	36.96	9.24-73.93	37.9	9.47-75.74	0.06	0-0.16	0.08	0.02-0.16	0.06	0.01-0.12
Nov-2015	56.08	23.84-96.14	98.62	49.31-148.14	125.2	66.8-192.05	0.19	0.08-0.33	0.22	0.11-0.33	0.20	0.11-0.3
Dec-2015	9.16	0-27.47	18.42	0-46.05	100.9	45.85-165.06	0.03	0-0.09	0.04	0-0.1	0.16	0.07-0.26
Jan-2016	18.18	0-45.45	27.77	0-64.79	28.3	0-66.03	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Feb-2016	0.00	0-0	27.77	0-55.54	28.2	0-65.87	0.00	0-0	0.06	0-0.12	0.04	0-0.1
Mar-2016	45.90	9.18-91.81	64.90	27.58-111.49	122.8	65.88-198.33	0.16	0.03-0.31	0.14	0.06-0.25	0.19	0.1-0.31
Apr-2016	36.45	0-82.01	46.21	9.24-92.41	103.9	47.22-170	0.12	0-0.28	0.10	0.02-0.2	0.16	0.07-0.27
May-2016	9.09	0-27.27	9.27	0-27.81	18.9	0-47.28	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Jun-2016	73.45	27.54-128.53	120.33	55.54-185.13	197.2	112.66-291.04	0.25	0.09-0.44	0.27	0.12-0.41	0.31	0.18-0.46
Jul-2016	14.25	0-35.63	14.51	0-36.28	23.0	0-53.71	0.05	0-0.12	0.03	0-0.08	0.04	0-0.08
Aug-2016	47.16	15.72-86.46	55.03	15.72-102.2	86.5	39.34-141.62	0.16	0.05-0.29	0.12	0.03-0.23	0.14	0.06-0.22
Sep-2016	18.27	0-45.68	111.08	55.54-175.87	179.0	103.64-263.81	0.06	0-0.15	0.25	0.12-0.39	0.28	0.16-0.42
Oct-2016	183.16	100.74-265.58	185.05	111.03-268.32	208.7	132.82-303.59	0.62	0.34-0.9	0.41	0.25-0.59	0.33	0.21-0.48
Nov-2016	72.90	27.34-127.57	167.23	92.91-250.85	734.7	574.57-895.05	0.25	0.09-0.43	0.37	0.21-0.55	1.16	0.9-1.41
Dec-2016	36.59	9.15-73.17	36.93	9.23-73.87	37.5	9.37-74.95	0.12	0.03-0.25	0.08	0.02-0.16	0.06	0.01-0.12
Jan-2017	27.41	0-63.95	46.45	9.29-92.91	66.2	18.92-122.96	0.09	0-0.22	0.10	0.02-0.21	0.10	0.03-0.19
Feb-2017	0.00	0-0	27.81	0-64.9	46.9	9.39-93.88	0.00	0-0	0.06	0-0.14	0.07	0.01-0.15
Mar-2017	338.00	228.38-438.48	351.16	249.51-462.06	358.0	244.97-471.1	1.15	0.77-1.49	0.78	0.55-1.02	0.56	0.39-0.74
Apr-2017	0.00	0-0	9.38	0-28.14	47.8	9.56-95.59	0.00	0-0	0.02	0-0.06	0.08	0.02-0.15
May-2017	45.79	9.16-91.58	46.36	9.27-92.72	47.1	9.42-94.22	0.16	0.03-0.31	0.10	0.02-0.2	0.07	0.01-0.15
Jun-2017	36.72	9.18-82.63	55.84	18.61-102.37	94.5	47.24-160.6	0.12	0.03-0.28	0.12	0.04-0.23	0.15	0.07-0.25

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	27.41	0-63.95	92.41	36.96-147.86	123.1	56.8-189.34	0.09	0-0.22	0.20	0.08-0.33	0.19	0.09-0.3
Aug-2017	27.41	0-63.95	74.17	27.81-129.8	75.6	28.33-132.22	0.09	0-0.22	0.16	0.06-0.29	0.12	0.04-0.21

Table 39.6. Norfolk Vanguard West. Kittiwake design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	44.73	14.48-82.88	67.12	27.81-115.5	83.5	39.31-134.54	0.15	0.05-0.28	0.15	0.06-0.26	0.13	0.06-0.21
Oct-2015	18.36	0-45.9	36.96	9.24-73.93	53.2	18.93-101.44	0.06	0-0.16	0.08	0.02-0.16	0.08	0.03-0.16
Nov-2015	56.08	23.84-96.14	98.62	49.31-148.14	125.2	66.8-192.05	0.19	0.08-0.33	0.22	0.11-0.33	0.20	0.11-0.3
Dec-2015	9.16	0-27.47	18.42	0-46.05	100.9	45.85-165.06	0.03	0-0.09	0.04	0-0.1	0.16	0.07-0.26
Jan-2016	18.18	0-45.45	27.77	0-64.79	28.3	0-66.03	0.06	0-0.15	0.06	0-0.14	0.04	0-0.1
Feb-2016	0.00	0-0	27.77	0-55.54	28.2	0-65.87	0.00	0-0	0.06	0-0.12	0.04	0-0.1
Mar-2016	45.90	9.18-91.81	64.90	27.58-111.49	122.8	65.88-198.33	0.16	0.03-0.31	0.14	0.06-0.25	0.19	0.1-0.31
Apr-2016	58.37	21.52-107.23	69.96	31.68-122.8	136.6	77.44-213.44	0.20	0.07-0.36	0.15	0.07-0.27	0.22	0.12-0.34
May-2016	9.09	0-27.27	9.27	0-27.81	18.9	0-47.28	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Jun-2016	73.45	27.54-128.53	120.33	55.54-185.13	197.2	112.66-291.04	0.25	0.09-0.44	0.27	0.12-0.41	0.31	0.18-0.46
Jul-2016	14.25	0-35.63	14.51	0-36.28	23.0	0-53.71	0.05	0-0.12	0.03	0-0.08	0.04	0-0.08
Aug-2016	47.16	15.72-86.46	55.03	15.72-102.2	86.5	39.34-141.62	0.16	0.05-0.29	0.12	0.03-0.23	0.14	0.06-0.22
Sep-2016	24.42	0-55.05	120.06	64.03-184.85	206.3	122.25-291.62	0.08	0-0.19	0.27	0.14-0.41	0.32	0.19-0.46
Oct-2016	183.16	100.74-265.58	185.05	111.03-268.32	208.7	132.82-303.59	0.62	0.34-0.9	0.41	0.25-0.59	0.33	0.21-0.48
Nov-2016	72.90	27.34-127.57	167.23	92.91-250.85	734.7	574.57-895.05	0.25	0.09-0.43	0.37	0.21-0.55	1.16	0.9-1.41
Dec-2016	36.59	9.15-73.17	36.93	9.23-73.87	37.5	9.37-74.95	0.12	0.03-0.25	0.08	0.02-0.16	0.06	0.01-0.12
Jan-2017	27.41	0-63.95	46.45	9.29-92.91	66.2	18.92-122.96	0.09	0-0.22	0.10	0.02-0.21	0.10	0.03-0.19
Feb-2017	0.00	0-0	27.81	0-64.9	46.9	9.39-93.88	0.00	0-0	0.06	0-0.14	0.07	0.01-0.15
Mar-2017	338.00	228.38-438.48	368.26	258.74-479.44	375.5	263.8-490.09	1.15	0.77-1.49	0.81	0.57-1.06	0.59	0.42-0.77
Apr-2017	0.00	0-0	18.76	0-46.9	66.9	19.12-114.71	0.00	0-0	0.04	0-0.1	0.11	0.03-0.18
May-2017	45.79	9.16-91.58	46.36	9.27-92.72	47.1	9.42-94.22	0.16	0.03-0.31	0.10	0.02-0.2	0.07	0.01-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	45.90	9.18-91.81	65.14	18.61-111.67	103.9	56.68-170.05	0.16	0.03-0.31	0.14	0.04-0.25	0.16	0.09-0.27
Jul-2017	36.54	9.14-73.08	101.65	46.21-166.34	132.5	66.27-208.28	0.12	0.03-0.25	0.22	0.1-0.37	0.21	0.1-0.33
Aug-2017	36.54	9.14-73.08	92.72	46.36-157.62	94.4	37.78-160.56	0.12	0.03-0.25	0.20	0.1-0.35	0.15	0.06-0.25

Table 40.1. Norfolk Vanguard West. Black-headed Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	18.36	0-45.9	27.72	0-55.45	66.27	28.16-123.07	0.06	0-0.16	0.06	0-0.12	0.10	0.04-0.19
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	37.78	9.44-75.56	0.00	0-0	0.00	0-0	0.06	0.01-0.12
Apr-2016	18.22	0-45.56	18.48	0-46.21	28.33	0-66.11	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	7.13	0-21.38	7.26	0-21.77	7.67	0-23.02	0.02	0-0.07	0.02	0-0.05	0.01	0-0.04
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-37.01	9.49	0-28.46	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	9.14	0-27.41	9.29	0-27.87	18.92	0-47.29	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Feb-2017	27.34	0-63.79	139.07	74.17-213.25	140.82	75.11-206.54	0.09	0-0.22	0.31	0.16-0.47	0.22	0.12-0.33
Mar-2017	9.14	0-27.41	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 40.2. Norfolk Vanguard West. Black-headed Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	18.36	0-45.9	27.72	0-55.45	75.70	31.55-132.48	0.06	0-0.16	0.06	0-0.12	0.12	0.05-0.21
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	37.78	9.44-75.56	0.00	0-0	0.00	0-0	0.06	0.01-0.12
Apr-2016	26.94	5.81-63	29.05	5.28-60.73	35.95	11.35-73.79	0.09	0.02-0.21	0.06	0.01-0.13	0.06	0.02-0.12
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	7.13	0-21.38	7.26	0-21.77	7.67	0-23.02	0.02	0-0.07	0.02	0-0.05	0.01	0-0.04
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-37.01	9.49	0-28.46	0.03	0-0.09	0.02	0-0.08	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	9.14	0-27.41	9.29	0-27.87	18.92	0-47.29	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Feb-2017	27.34	0-63.79	139.07	74.17-213.25	140.82	75.11-206.54	0.09	0-0.22	0.31	0.16-0.47	0.22	0.12-0.33
Mar-2017	9.14	0-27.41	9.42	0-28.27	9.60	0-28.81	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 40.3. Norfolk Vanguard West. Black-headed Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	18.36	0-45.9	27.72	0-64.69	66.27	18.93-123.07	0.06	0-0.16	0.06	0-0.14	0.10	0.03-0.19
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	37.78	9.44-75.56	0.00	0-0	0.00	0-0	0.06	0.01-0.12
Apr-2016	18.22	0-45.56	18.48	0-46.21	28.33	0-66.11	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	7.13	0-21.38	7.26	0-29.03	7.67	0-23.02	0.02	0-0.07	0.02	0-0.06	0.01	0-0.04
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	27.34	0-63.79	139.07	74.17-213.25	140.82	75.11-215.93	0.09	0-0.22	0.31	0.16-0.47	0.22	0.12-0.34
Mar-2017	9.14	0-27.41	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 40.4. Norfolk Vanguard West. Black-headed Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	18.36	0-45.9	27.72	0-64.69	66.27	18.93-123.07	0.06	0-0.16	0.06	0-0.14	0.10	0.03-0.19
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	37.78	9.44-75.56	0.00	0-0	0.00	0-0	0.06	0.01-0.12
Apr-2016	18.22	0-45.56	18.48	0-46.21	28.33	0-66.11	0.06	0-0.15	0.04	0-0.1	0.04	0-0.1
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	7.13	0-21.38	7.26	0-29.03	7.67	0-23.02	0.02	0-0.07	0.02	0-0.06	0.01	0-0.04
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	27.34	0-63.79	139.07	74.17-213.25	140.82	75.11-215.93	0.09	0-0.22	0.31	0.16-0.47	0.22	0.12-0.34
Mar-2017	9.14	0-27.41	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 40.5. Norfolk Vanguard West. Black-headed Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	9.14	0-36.54	9.29	0-27.87	18.9	0-47.29	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Feb-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 40.6. Norfolk Vanguard West. Black-headed Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	9.45	0-22.05	0.00	0-0	0.00	0-0	0.01	0-0.03
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	11.63	2.91-26.16	10.57	2.64-21.13	9.52	1.9-19.03	0.04	0.01-0.09	0.02	0.01-0.05	0.01	0-0.03
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	9.14	0-36.54	9.29	0-27.87	18.92	0-47.29	0.03	0-0.12	0.02	0-0.06	0.03	0-0.07
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.37	0-0.92	0.36	0-0.91	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 41.1. Norfolk Vanguard West. Little Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-23.59	7.86	0-23.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	16.02	0-40.06	24.66	0-57.53	33.40	8.35-66.8	0.05	0-0.14	0.05	0-0.13	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	9.14	0-36.54	9.26	0-27.77	9.42	0-28.27	0.03	0-0.12	0.02	0-0.06	0.01	0-0.04
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	18.22	0-45.56	37.16	9.29-74.33	37.68	9.42-75.35	0.06	0-0.15	0.08	0.02-0.16	0.06	0.01-0.12
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 41.2. Norfolk Vanguard West. Little Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-24.91	9.63	0.59-27.12	9.36	0.5-27.1	0.03	0-0.08	0.02	0-0.06	0.01	0-0.04
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	16.02	0-40.06	25.57	1.37-57.99	34.32	8.81-68.18	0.05	0-0.14	0.06	0-0.13	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	9.14	0-36.54	9.26	0-28.32	9.89	0.23-29.66	0.03	0-0.12	0.02	0-0.06	0.02	0-0.05
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	18.22	0-45.56	37.16	9.29-74.33	37.68	9.42-75.35	0.06	0-0.15	0.08	0.02-0.16	0.06	0.01-0.12
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 41.3. Norfolk Vanguard West. Little Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-23.59	7.86	0-23.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	16.02	0-40.06	24.66	0-57.53	33.40	8.35-66.8	0.05	0-0.14	0.05	0-0.13	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	9.14	0-27.41	9.26	0-27.77	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	18.22	0-45.56	37.16	0-83.62	37.68	9.42-84.77	0.06	0-0.15	0.08	0-0.18	0.06	0.01-0.13
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 41.4. Norfolk Vanguard West. Little Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-25.35	8.36	0-24.59	0.03	0-0.08	0.02	0-0.06	0.01	0-0.04
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	16.02	0-40.06	26.03	1.37-60.28	34.32	8.81-70.02	0.05	0-0.14	0.06	0-0.13	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	9.14	0-27.41	9.26	0-27.77	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	18.22	0-45.56	37.16	0-83.62	37.68	9.42-84.77	0.06	0-0.15	0.08	0-0.18	0.06	0.01-0.13
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 41.5. Norfolk Vanguard West. Little Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2015	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jul-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Sep-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Oct-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Nov-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Dec-2016	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jan-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Feb-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Mar-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Apr-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
May-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Jun-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0
Aug-2017	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0	0	0-0

Table 41.6. Norfolk Vanguard West. Little Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.63	0-1.9	1.76	0-3.54	1.5	0-3.51	0.00	0-0.01	0	0-0.01	0	0-0.01
Oct-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
May-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Sep-2016	2.99	0-11.95	0.27	0-0.82	0.7	0-1.63	0.01	0-0.04	0	0-0	0	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
May-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Jul-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.0	0-0	0.00	0-0	0	0-0	0	0-0

Table 42.1. Norfolk Vanguard West. Common Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-23.59	7.86	0-23.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	9.18	0-27.54	9.24	0-27.72	9.47	0-28.4	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2015	16.02	0-40.06	16.44	0-41.09	33.40	8.35-66.8	0.05	0-0.14	0.04	0-0.09	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	18.36	0-45.9	18.54	0-46.36	18.89	0-47.22	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	9.44	0-28.33	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	7.67	0-23.02	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2016	39.30	7.86-78.6	47.17	15.72-86.48	70.81	31.47-118.01	0.13	0.03-0.27	0.10	0.03-0.19	0.11	0.05-0.19
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	18.32	0-45.79	18.51	0-46.26	18.97	0-47.44	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2016	82.01	36.45-136.68	83.62	37.16-148.65	150.71	75.35-235.48	0.28	0.12-0.46	0.18	0.08-0.33	0.24	0.12-0.37
Dec-2016	0.00	0-0	0.00	0-0	9.37	0-28.11	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2017	0.00	0-0	18.58	0-46.45	28.38	0-66.21	0.00	0-0	0.04	0-0.1	0.04	0-0.1
Feb-2017	18.22	0-45.56	18.54	0-46.36	37.55	9.39-84.49	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.13
Mar-2017	0.00	0-0	18.48	0-46.21	28.27	0-56.53	0.00	0-0	0.04	0-0.1	0.04	0-0.09
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 42.2. Norfolk Vanguard West. Common Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-24.92	9.73	0.62-27.33	9.36	0.5-28.08	0.03	0-0.08	0.02	0-0.06	0.01	0-0.04
Oct-2015	9.18	0-27.54	9.24	0-27.72	10.38	0.46-30.68	0.03	0-0.09	0.02	0-0.06	0.02	0-0.05
Nov-2015	16.02	0-40.06	17.06	0.31-42.64	34.81	8.35-69.14	0.05	0-0.14	0.04	0-0.09	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	18.36	0-45.9	18.54	0-46.36	18.89	0-47.22	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	11.92	1.24-33.28	0.00	0-0	0.00	0-0	0.02	0-0.05
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	7.67	0-23.02	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2016	39.30	7.86-78.6	47.17	15.72-86.48	70.81	31.47-118.01	0.13	0.03-0.27	0.10	0.03-0.19	0.11	0.05-0.19
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	18.32	0-45.79	18.51	0-46.26	18.97	0-47.44	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2016	82.01	36.45-136.68	83.62	37.16-148.65	150.71	75.35-235.48	0.28	0.12-0.46	0.18	0.08-0.33	0.24	0.12-0.37
Dec-2016	0.00	0-0	0.00	0-0	9.37	0-28.11	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2017	0.00	0-0	18.58	0-46.45	28.38	0-66.21	0.00	0-0	0.04	0-0.1	0.04	0-0.1
Feb-2017	18.22	0-45.56	18.54	0-46.36	37.55	9.39-84.49	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.13
Mar-2017	0.00	0-0	18.85	0.37-47.32	28.78	1.02-58.59	0.00	0-0	0.04	0-0.1	0.05	0-0.09
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 42.3. Norfolk Vanguard West. Common Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-23.59	7.86	0-23.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	9.18	0-36.72	9.24	0-27.72	9.47	0-28.4	0.03	0-0.12	0.02	0-0.06	0.01	0-0.04
Nov-2015	16.02	0-40.06	16.44	0-41.09	33.40	8.35-66.8	0.05	0-0.14	0.04	0-0.09	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	18.36	0-45.9	18.54	0-55.63	18.89	0-47.22	0.06	0-0.16	0.04	0-0.12	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	9.44	0-28.33	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	7.67	0-23.02	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2016	0.00	0-0	7.86	0-23.78	23.60	0-55.07	0.00	0-0	0.02	0-0.05	0.04	0-0.09
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	72.90	27.34-127.57	74.33	27.87-130.07	141.29	75.35-216.64	0.25	0.09-0.43	0.16	0.06-0.29	0.22	0.12-0.34
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	9.29	0-27.87	18.92	0-47.29	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Feb-2017	18.22	0-45.56	18.54	0-46.36	37.55	9.39-84.49	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.13
Mar-2017	0.00	0-0	18.48	0-46.21	28.27	0-65.95	0.00	0-0	0.04	0-0.1	0.04	0-0.1
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 42.4. Norfolk Vanguard West. Common Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	7.86	0-24.83	7.86	0-24.58	0.03	0-0.08	0.02	0-0.05	0.01	0-0.04
Oct-2015	9.18	0-36.72	9.24	0-27.72	9.47	0-28.4	0.03	0-0.12	0.02	0-0.06	0.01	0-0.04
Nov-2015	16.02	0-40.06	17.37	0.62-42.65	34.34	8.82-69.14	0.05	0-0.14	0.04	0-0.09	0.05	0.01-0.11
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	18.36	0-45.9	18.54	0-55.63	18.89	0-47.22	0.06	0-0.16	0.04	0-0.12	0.03	0-0.07
Apr-2016	0.00	0-0	0.00	0-0	9.44	0-28.33	0.00	0-0	0.00	0-0	0.01	0-0.04
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	7.67	0-23.02	0.00	0-0	0.00	0-0	0.01	0-0.04
Aug-2016	0.00	0-0	7.86	0-23.78	23.60	0-55.07	0.00	0-0	0.02	0-0.05	0.04	0-0.09
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	72.90	27.34-127.57	74.33	27.87-130.07	141.29	75.35-216.64	0.25	0.09-0.43	0.16	0.06-0.29	0.22	0.12-0.34
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	9.29	0-27.87	18.92	0-47.29	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Feb-2017	18.22	0-45.56	18.54	0-46.36	37.55	9.39-84.49	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.13
Mar-2017	0.00	0-0	18.48	0-46.21	28.27	0-65.95	0.00	0-0	0.04	0-0.1	0.04	0-0.1
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 42.5. Norfolk Vanguard West. Common Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	39.30	7.86-70.94	39.31	7.86-78.62	47.21	15.74-86.54	0.13	0.03-0.24	0.09	0.02-0.17	0.07	0.02-0.14
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	9.11	0-27.34	9.29	0-27.87	9.42	0-37.68	0.03	0-0.09	0.02	0-0.06	0.01	0-0.06
Dec-2016	0.00	0-0	0.00	0-0	9.37	0-28.11	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2017	0.00	0-0	9.29	0-27.87	9.46	0-28.38	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 42.6. Norfolk Vanguard West. Common Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.64	0-1.92	1.87	0-3.76	1.50	0-3.49	0.00	0-0.01	0.00	0-0.01	0.00	0-0.01
Oct-2015	0.00	0-0	0.00	0-0	1.37	0-3.2	0.00	0-0	0.00	0-0	0.00	0-0.01
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	3.09	0.62-6.18	0.00	0-0	0.00	0-0	0.00	0-0.01
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	39.30	7.86-70.94	39.31	7.86-78.62	47.21	15.74-86.54	0.13	0.03-0.24	0.09	0.02-0.17	0.07	0.02-0.14
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	9.16	0-27.47	9.25	0-27.76	9.49	0-28.46	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Nov-2016	9.11	0-27.34	9.29	0-27.87	9.42	0-37.68	0.03	0-0.09	0.02	0-0.06	0.01	0-0.06
Dec-2016	0.00	0-0	0.00	0-0	9.37	0-28.11	0.00	0-0	0.00	0-0	0.01	0-0.04
Jan-2017	0.00	0-0	9.29	0-27.87	9.46	0-28.38	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.74	0-1.86	1.02	0-2.56	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Table 43.1. Norfolk Vanguard West. Lesser Black-backed Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	47.28	15.76-86.68	86.48	39.31-141.51	110.06	55.03-172.95	0.16	0.05-0.29	0.19	0.09-0.31	0.17	0.09-0.27
Oct-2015	27.54	0-64.27	36.96	9.24-73.93	37.87	9.47-75.74	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12
Nov-2015	40.06	8.01-80.12	49.31	16.44-90.4	50.10	16.7-91.85	0.14	0.03-0.27	0.11	0.04-0.2	0.08	0.03-0.14
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	45.90	9.18-91.81	55.63	18.54-101.99	94.44	37.78-151.11	0.16	0.03-0.31	0.12	0.04-0.23	0.15	0.06-0.24
Apr-2016	9.11	0-27.34	9.24	0-27.72	9.44	0-28.33	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2016	0.00	0-0	9.27	0-27.81	18.91	0-47.28	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jun-2016	100.99	45.9-156.07	120.33	64.56-194.38	291.04	187.77-403.7	0.34	0.16-0.53	0.27	0.14-0.43	0.46	0.3-0.64
Jul-2016	114.03	57.01-171.22	645.86	515.23-769.4	728.96	590.84-882.42	0.39	0.19-0.58	1.43	1.14-1.7	1.15	0.93-1.39
Aug-2016	94.32	46.96-157.2	133.65	78.62-196.54	180.95	110.15-251.76	0.32	0.16-0.53	0.30	0.17-0.43	0.28	0.17-0.4
Sep-2016	118.76	54.81-191.84	472.07	360.77-592.41	697.22	546.47-848.21	0.40	0.19-0.65	1.04	0.8-1.31	1.10	0.86-1.34
Oct-2016	54.95	18.32-100.74	55.52	18.51-102.01	66.41	18.97-123.33	0.19	0.06-0.34	0.12	0.04-0.23	0.10	0.03-0.19
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	18.27	0-45.68	18.58	0-46.45	37.83	9.46-75.67	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.12
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	9.24	0-27.72	9.42	0-37.69	0.00	0-0	0.02	0-0.06	0.01	0-0.06
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	45.79	9.16-91.58	46.36	9.27-92.72	56.53	18.84-103.64	0.16	0.03-0.31	0.10	0.02-0.2	0.09	0.03-0.16
Jun-2017	27.54	0-64.27	46.53	9.31-93.06	66.13	28.34-113.6	0.09	0-0.22	0.10	0.02-0.21	0.10	0.04-0.18

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	27.41	0-63.95	73.93	27.72-138.62	75.74	28.4-132.54	0.09	0-0.22	0.16	0.06-0.31	0.12	0.04-0.21
Aug-2017	36.54	9.14-73.08	64.90	18.54-120.53	897.23	717.78-1086.12	0.12	0.03-0.25	0.14	0.04-0.27	1.41	1.13-1.71

Table 43.2. Norfolk Vanguard West. Lesser Black-backed Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	47.3	15.76-86.68	86.48	42.07-144.27	113.06	58.03-175.95	0.16	0.05-0.29	0.19	0.09-0.32	0.18	0.09-0.28
Oct-2015	27.5	0-64.27	36.96	9.24-73.93	37.87	9.47-75.74	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12
Nov-2015	40.1	8.01-80.12	49.31	16.44-90.4	50.10	16.7-91.85	0.14	0.03-0.27	0.11	0.04-0.2	0.08	0.03-0.14
Dec-2015	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	45.9	9.18-91.81	55.63	18.54-101.99	94.44	37.78-151.11	0.16	0.03-0.31	0.12	0.04-0.23	0.15	0.06-0.24
Apr-2016	13.7	0-36.58	18.55	0-46.34	15.78	0-40.94	0.05	0-0.12	0.04	0-0.1	0.02	0-0.06
May-2016	0.0	0-0	9.27	0-27.81	18.91	0-47.28	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jun-2016	101.0	45.9-156.07	128.94	64.79-202.34	300.13	196.86-412.5	0.34	0.16-0.53	0.29	0.14-0.45	0.47	0.31-0.65
Jul-2016	114.0	57.01-171.22	645.86	515.23-769.4	728.96	590.84-882.42	0.39	0.19-0.58	1.43	1.14-1.7	1.15	0.93-1.39
Aug-2016	94.3	46.96-157.2	133.65	78.62-196.54	180.95	110.15-251.76	0.32	0.16-0.53	0.30	0.17-0.43	0.28	0.17-0.4
Sep-2016	172.6	103.27-254.81	741.35	613.26-880.52	1070.11	904.43-1245.54	0.59	0.35-0.86	1.64	1.36-1.95	1.69	1.42-1.96
Oct-2016	55.0	18.32-109.89	60.22	18.67-111.03	67.13	28.46-124.17	0.19	0.06-0.37	0.13	0.04-0.25	0.11	0.04-0.2
Nov-2016	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	18.3	0-45.68	18.58	0-46.45	37.83	9.46-75.67	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.12
Feb-2017	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.0	0-0	9.24	0-27.72	9.42	0-37.69	0.00	0-0	0.02	0-0.06	0.01	0-0.06
Apr-2017	0.0	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	45.8	9.16-91.58	46.36	9.27-92.72	56.53	18.84-103.64	0.16	0.03-0.31	0.10	0.02-0.2	0.09	0.03-0.16

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	27.5	0-64.27	46.53	9.31-93.06	66.13	28.34-113.6	0.09	0-0.22	0.10	0.02-0.21	0.10	0.04-0.18
Jul-2017	30.9	3.49-70.92	82.71	32.12-146.95	83.11	32.59-143.11	0.10	0.01-0.24	0.18	0.07-0.32	0.13	0.05-0.23
Aug-2017	38.3	9.14-76.71	69.22	27.13-124.9	936.43	761.25-1120.96	0.13	0.03-0.26	0.15	0.06-0.28	1.47	1.2-1.77

Table 43.3. Norfolk Vanguard West. Lesser Black-backed Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	23.59	0-55.03	23.58	0-55.03	0.00	0-0	0.05	0-0.12	0.04	0-0.09
Oct-2015	9.18	0-36.72	18.48	0-46.21	18.93	0-47.34	0.03	0-0.12	0.04	0-0.1	0.03	0-0.07
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.18	0-36.72	9.27	0-27.81	28.33	0-66.11	0.03	0-0.12	0.02	0-0.06	0.04	0-0.1
Apr-2016	9.11	0-27.34	9.24	0-27.72	9.44	0-28.33	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2016	0.00	0-0	9.27	0-27.81	18.91	0-47.28	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jun-2016	45.90	9.18-91.81	64.79	18.51-120.33	168.99	103.27-253.48	0.16	0.03-0.31	0.14	0.04-0.27	0.27	0.16-0.4
Jul-2016	71.27	35.63-121.15	174.16	108.85-239.66	214.85	145.79-291.58	0.24	0.12-0.41	0.39	0.24-0.53	0.34	0.23-0.46
Aug-2016	94.32	47.16-149.34	125.79	70.76-188.68	173.09	102.28-251.76	0.32	0.16-0.51	0.28	0.16-0.42	0.27	0.16-0.4
Sep-2016	36.54	9.14-73.31	203.64	120.33-286.95	263.81	178.78-367.45	0.12	0.03-0.25	0.45	0.27-0.63	0.42	0.28-0.58
Oct-2016	54.95	18.32-100.74	55.52	18.51-101.78	66.41	18.97-123.33	0.19	0.06-0.34	0.12	0.04-0.22	0.10	0.03-0.19
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	9.42	0-28.27	0.00	0-0	0.00	0-0	0.01	0-0.04
Jun-2017	18.36	0-45.9	37.22	9.31-74.45	56.68	18.89-103.92	0.06	0-0.16	0.08	0.02-0.16	0.09	0.03-0.16

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	9.14	0-27.41	27.72	0-55.45	28.40	0-66.27	0.03	0-0.09	0.06	0-0.12	0.04	0-0.1
Aug-2017	27.41	0-63.95	37.09	9.27-83.44	302.22	198.33-415.56	0.09	0-0.22	0.08	0.02-0.18	0.48	0.31-0.65

Table 43.4. Norfolk Vanguard West. Lesser Black-backed Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	23.59	0-55.03	23.58	0-55.03	0.00	0-0	0.05	0-0.12	0.04	0-0.09
Oct-2015	9.18	0-36.72	18.48	0-46.21	18.93	0-47.34	0.03	0-0.12	0.04	0-0.1	0.03	0-0.07
Nov-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	9.18	0-36.72	9.27	0-27.81	28.33	0-66.11	0.03	0-0.12	0.02	0-0.06	0.04	0-0.1
Apr-2016	9.11	0-27.34	9.24	0-27.72	9.44	0-28.33	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
May-2016	0.00	0-0	9.27	0-27.81	18.91	0-47.28	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jun-2016	45.90	9.18-91.81	64.79	18.51-120.33	168.99	103.27-253.48	0.16	0.03-0.31	0.14	0.04-0.27	0.27	0.16-0.4
Jul-2016	71.27	35.63-121.15	174.16	108.85-239.66	214.85	145.79-291.58	0.24	0.12-0.41	0.39	0.24-0.53	0.34	0.23-0.46
Aug-2016	94.32	47.16-149.34	125.79	70.76-188.68	173.09	102.28-251.76	0.32	0.16-0.51	0.28	0.16-0.42	0.27	0.16-0.4
Sep-2016	58.89	18.27-109.91	297.45	211.4-390.12	380.74	280.95-498.66	0.20	0.06-0.37	0.66	0.47-0.86	0.60	0.44-0.79
Oct-2016	54.95	18.32-100.74	55.52	18.51-101.78	66.41	18.97-123.33	0.19	0.06-0.34	0.12	0.04-0.22	0.10	0.03-0.19
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	9.42	0-28.27	0.00	0-0	0.00	0-0	0.01	0-0.04

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	18.36	0-45.9	37.22	9.31-74.45	56.68	18.89-103.92	0.06	0-0.16	0.08	0.02-0.16	0.09	0.03-0.16
Jul-2017	9.14	0-27.41	27.72	0-55.45	28.40	0-66.27	0.03	0-0.09	0.06	0-0.12	0.04	0-0.1
Aug-2017	27.41	0-63.95	37.09	9.27-83.44	302.22	198.33-415.56	0.09	0-0.22	0.08	0.02-0.18	0.48	0.31-0.65

Table 43.5. Norfolk Vanguard West. Lesser Black-backed Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	47.28	15.76-86.68	62.89	23.59-110.06	86.48	39.31-141.5	0.16	0.05-0.29	0.14	0.05-0.24	0.14	0.06-0.22
Oct-2015	18.36	0-45.9	18.48	0-46.21	18.93	0-47.34	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2015	40.06	8.01-80.12	49.31	16.44-90.4	50.10	16.7-91.85	0.14	0.03-0.27	0.11	0.04-0.2	0.08	0.03-0.14
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	36.72	9.18-73.45	46.36	9.27-92.72	66.11	28.1-122.78	0.12	0.03-0.25	0.10	0.02-0.2	0.10	0.04-0.19
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	55.08	18.36-92.04	55.54	18.51-101.82	122.05	65.48-187.77	0.19	0.06-0.31	0.12	0.04-0.23	0.19	0.1-0.3
Jul-2016	42.76	7.13-85.52	471.69	362.66-587.8	514.11	391.33-636.88	0.14	0.02-0.29	1.04	0.8-1.3	0.81	0.62-1
Aug-2016	0.00	0-0	7.86	0-23.59	7.87	0-23.6	0.00	0-0	0.02	0-0.05	0.01	0-0.04
Sep-2016	82.22	36.54-137.03	268.43	175.87-361.23	433.41	310.92-565.31	0.28	0.12-0.46	0.59	0.39-0.8	0.68	0.49-0.89
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	18.27	0-45.68	18.58	0-46.45	37.83	9.46-75.67	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.12
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	9.24	0-27.72	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	45.79	9.16-91.58	46.36	9.27-92.72	47.11	9.42-94.22	0.16	0.03-0.31	0.10	0.02-0.2	0.07	0.01-0.15
Jun-2017	9.18	0-27.54	9.31	0-27.92	9.45	0-37.79	0.03	0-0.09	0.02	0-0.06	0.01	0-0.06

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	18.27	0-45.68	46.21	9.24-92.41	47.34	9.47-94.67	0.06	0-0.15	0.10	0.02-0.2	0.07	0.01-0.15
Aug-2017	9.14	0-27.41	27.81	0-64.9	595.00	453.34-746.11	0.03	0-0.09	0.06	0-0.14	0.94	0.71-1.18

Table 43.6. Norfolk Vanguard West. Lesser Black-backed Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	47.28	15.76-86.68	62.89	26.28-112.83	89.48	39.31-141.53	0.16	0.05-0.29	0.14	0.06-0.25	0.14	0.06-0.22
Oct-2015	18.36	0-45.9	18.48	0-46.21	18.93	0-47.34	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2015	40.06	8.01-80.12	49.31	16.44-90.4	50.10	16.7-91.85	0.14	0.03-0.27	0.11	0.04-0.2	0.08	0.03-0.14
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	36.72	9.18-73.45	46.36	9.27-92.72	66.11	28.1-122.78	0.12	0.03-0.25	0.10	0.02-0.2	0.10	0.04-0.19
Apr-2016	4.62	0-13.86	9.31	0-23.27	6.33	0-15.83	0.02	0-0.05	0.02	0-0.05	0.01	0-0.02
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	55.08	18.36-92.04	64.14	18.51-110.43	131.14	65.72-197.15	0.19	0.06-0.31	0.14	0.04-0.24	0.21	0.1-0.31
Jul-2016	42.76	7.13-85.52	471.69	362.66-587.8	514.11	391.33-636.88	0.14	0.02-0.29	1.04	0.8-1.3	0.81	0.62-1
Aug-2016	0.00	0-0	7.86	0-23.59	7.87	0-23.6	0.00	0-0	0.02	0-0.05	0.01	0-0.04
Sep-2016	112.44	53.55-183.03	439.84	335.21-546.88	680.94	542.78-827.82	0.38	0.18-0.62	0.97	0.74-1.21	1.07	0.85-1.3
Oct-2016	4.57	0-13.71	4.71	0-14.12	5.11	0-15.32	0.02	0-0.05	0.01	0-0.03	0.01	0-0.02
Nov-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	18.27	0-45.68	18.58	0-46.45	37.83	9.46-75.67	0.06	0-0.15	0.04	0-0.1	0.06	0.01-0.12
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	9.24	0-27.72	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	45.79	9.16-91.58	46.36	9.27-92.72	47.11	9.42-94.22	0.16	0.03-0.31	0.10	0.02-0.2	0.07	0.01-0.15

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	9.18	0-27.54	9.31	0-27.92	9.45	0-37.79	0.03	0-0.09	0.02	0-0.06	0.01	0-0.06
Jul-2017	21.76	0-52.65	50.60	18.47-101.21	55.76	17.89-104.14	0.07	0-0.18	0.11	0.04-0.22	0.09	0.03-0.16
Aug-2017	10.93	0-36.38	32.13	4.32-71.38	620.41	487.45-776.61	0.04	0-0.12	0.07	0.01-0.16	0.98	0.77-1.22

Table 44.1. Norfolk Vanguard West. Herring Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0-55.03	31.45	7.86-62.89	0.03	0-0.08	0.05	0-0.12	0.05	0.01-0.1
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	56.08	16.02-96.34	73.97	32.87-123.28	83.50	33.4-141.95	0.19	0.05-0.33	0.16	0.07-0.27	0.13	0.05-0.22
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.27	9.26	0-27.77	9.41	0-37.64	0.03	0-0.09	0.02	0-0.06	0.01	0-0.06
Mar-2016	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	9.11	0-27.56	9.24	0-27.72	18.89	0-47.22	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	9.26	0-27.77	9.39	0-28.16	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Jul-2016	0.00	0-0	36.28	7.26-72.57	38.37	7.67-76.73	0.00	0-0	0.08	0.02-0.16	0.06	0.01-0.12
Aug-2016	0.00	0-0	7.86	0-23.59	15.74	0-39.34	0.00	0-0	0.02	0-0.05	0.02	0-0.06
Sep-2016	0.00	0-0	9.26	0-27.77	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Oct-2016	36.63	9.16-73.26	37.01	9.25-74.02	37.95	9.49-75.9	0.12	0.03-0.25	0.08	0.02-0.16	0.06	0.01-0.12
Nov-2016	18.22	0-45.56	18.58	0-46.45	56.51	18.84-103.61	0.06	0-0.15	0.04	0-0.1	0.09	0.03-0.16
Dec-2016	9.15	0-27.44	9.23	0-27.7	9.37	0-28.11	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2017	9.14	0-27.41	18.58	0-46.45	47.29	9.46-94.59	0.03	0-0.09	0.04	0-0.1	0.07	0.01-0.15
Feb-2017	36.45	9.11-72.9	74.17	27.81-129.8	93.88	37.55-150.21	0.12	0.03-0.25	0.16	0.06-0.29	0.15	0.06-0.24
Mar-2017	0.00	0-0	0.00	0-0	9.42	0-28.27	0.00	0-0	0.00	0-0	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	27.47	0-64.11	37.09	9.27-74.4	37.69	9.42-75.38	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12
Jun-2017	0.00	0-0	0.00	0-0	18.89	0-47.24	0.00	0-0	0.00	0-0	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	27.41	0-63.95	46.21	9.24-92.41	56.80	18.93-113.61	0.09	0-0.22	0.10	0.02-0.2	0.09	0.03-0.18
Aug-2017	118.76	54.81-182.93	185.43	111.26-268.88	302.22	207.78-415.56	0.40	0.19-0.62	0.41	0.25-0.59	0.48	0.33-0.65

Table 44.2. Norfolk Vanguard West. Herring Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0.78-55.81	31.45	7.86-64.56	0.03	0-0.08	0.05	0-0.12	0.05	0.01-0.1
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	56.08	16.02-96.34	73.97	32.87-123.28	83.50	33.4-141.95	0.19	0.05-0.33	0.16	0.07-0.27	0.13	0.05-0.22
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.27	9.26	0-27.77	9.41	0-37.64	0.03	0-0.09	0.02	0-0.06	0.01	0-0.06
Mar-2016	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	13.48	0-40.81	18.42	0-46.01	31.45	6.28-66.06	0.05	0-0.14	0.04	0-0.1	0.05	0.01-0.1
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	9.26	0-29.07	9.68	0-28.75	0.00	0-0	0.02	0-0.06	0.02	0-0.05
Jul-2016	0.00	0-0	36.28	7.26-72.57	38.37	7.67-76.73	0.00	0-0	0.08	0.02-0.16	0.06	0.01-0.12
Aug-2016	0.00	0-0	7.86	0-23.59	15.74	0-39.34	0.00	0-0	0.02	0-0.05	0.02	0-0.06
Sep-2016	0.00	0-0	9.70	0.28-28.54	9.87	0.27-28.94	0.00	0-0	0.02	0-0.06	0.02	0-0.05
Oct-2016	36.68	9.16-76.33	37.01	9.25-77.13	40.89	9.49-84.73	0.12	0.03-0.26	0.08	0.02-0.17	0.06	0.01-0.13
Nov-2016	18.22	0-45.56	18.58	0-46.45	56.51	18.84-103.61	0.06	0-0.15	0.04	0-0.1	0.09	0.03-0.16
Dec-2016	9.15	0-27.44	9.23	0-27.7	9.37	0-28.11	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2017	9.14	0-27.41	18.58	0-46.45	47.29	9.46-94.59	0.03	0-0.09	0.04	0-0.1	0.07	0.01-0.15
Feb-2017	36.45	9.11-72.9	74.17	27.81-129.8	93.88	37.55-150.21	0.12	0.03-0.25	0.16	0.06-0.29	0.15	0.06-0.24
Mar-2017	0.00	0-0	0.00	0-0	9.42	0-28.27	0.00	0-0	0.00	0-0	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	27.47	0-64.11	37.09	9.27-74.4	37.69	9.42-75.38	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.12

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	18.89	0-47.24	0.00	0-0	0.00	0-0	0.03	0-0.07
Jul-2017	27.41	3.34-67.37	50.52	14.66-97.83	63.13	18.93-116.77	0.09	0.01-0.23	0.11	0.03-0.22	0.10	0.03-0.18
Aug-2017	130.17	66.69-197.33	203.98	120.59-290.55	308.02	222.22-422.8	0.44	0.23-0.67	0.45	0.27-0.64	0.49	0.35-0.67

Table 44.3. Norfolk Vanguard West. Herring Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	8.01	0-24.04	24.66	0-57.53	25.05	0-58.45	0.03	0-0.08	0.05	0-0.13	0.04	0-0.09
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.27	9.26	0-27.77	9.41	0-28.23	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	9.26	0-27.77	9.39	0-28.16	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	7.86	0-23.59	7.87	0-23.6	0.00	0-0	0.02	0-0.05	0.01	0-0.04
Sep-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	9.11	0-27.34	9.29	0-27.87	18.84	0-47.1	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	9.46	0-28.38	0.00	0-0	0.00	0-0	0.01	0-0.04
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07

Table 44.4. Norfolk Vanguard West. Herring Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	8.01	0-24.04	24.66	0-57.53	25.05	0-58.45	0.03	0-0.08	0.05	0-0.13	0.04	0-0.09
Dec-2015	0.00	0-0	9.21	0-27.63	18.34	0-45.85	0.00	0-0	0.02	0-0.06	0.03	0-0.07
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.27	9.26	0-27.77	9.41	0-28.23	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Mar-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	9.26	0-27.77	9.39	0-28.16	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	7.86	0-23.59	7.87	0-23.6	0.00	0-0	0.02	0-0.05	0.01	0-0.04
Sep-2016	0.00	0-0	0.17	0-0.39	0.18	0.04-0.36	0.00	0-0	0.00	0-0	0.00	0-0
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	9.11	0-27.34	9.29	0-27.87	18.84	0-47.1	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Dec-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2017	0.00	0-0	0.00	0-0	9.46	0-28.38	0.00	0-0	0.00	0-0	0.01	0-0.04
Feb-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07

Table 44.5. Norfolk Vanguard West. Herring Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0-55.03	31.45	7.86-62.89	0.03	0-0.08	0.05	0-0.12	0.05	0.01-0.1
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	48.07	16.02-96.14	49.31	16.44-90.4	58.45	16.7-108.55	0.16	0.05-0.33	0.11	0.04-0.2	0.09	0.03-0.17
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	9.11	0-27.34	9.24	0-36.96	18.89	0-47.22	0.03	0-0.09	0.02	0-0.08	0.03	0-0.07
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	36.28	7.26-65.31	38.37	7.67-76.73	0.00	0-0	0.08	0.02-0.14	0.06	0.01-0.12
Aug-2016	0.00	0-0	0.00	0-0	7.87	0-23.6	0.00	0-0	0.00	0-0	0.01	0-0.04
Sep-2016	0.00	0-0	9.26	0-27.77	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Oct-2016	36.63	9.16-73.26	37.01	9.25-74.02	37.95	9.49-75.9	0.12	0.03-0.25	0.08	0.02-0.16	0.06	0.01-0.12
Nov-2016	9.11	0-27.34	9.29	0-27.87	37.68	9.42-75.35	0.03	0-0.09	0.02	0-0.06	0.06	0.01-0.12
Dec-2016	9.15	0-27.44	9.23	0-27.7	9.37	0-28.11	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2017	9.14	0-27.41	18.58	0-46.45	37.83	9.46-85.13	0.03	0-0.09	0.04	0-0.1	0.06	0.01-0.13
Feb-2017	36.45	9.11-72.9	74.17	27.81-129.8	93.88	37.55-159.6	0.12	0.03-0.25	0.16	0.06-0.29	0.15	0.06-0.25
Mar-2017	0.00	0-0	0.00	0-0	9.42	0-28.27	0.00	0-0	0.00	0-0	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	27.47	0-64.11	37.09	9.27-74.4	37.69	9.42-84.8	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.13
Jun-2017	0.00	0-0	0.00	0-0	18.89	0-47.24	0.00	0-0	0.00	0-0	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	27.41	0-63.95	46.21	9.24-83.4	56.80	18.93-113.61	0.09	0-0.22	0.10	0.02-0.18	0.09	0.03-0.18
Aug-2017	118.76	63.95-191.84	185.43	111.26-268.88	283.33	188.89-387.22	0.40	0.22-0.65	0.41	0.25-0.59	0.45	0.3-0.61

Table 44.6. Norfolk Vanguard West. Herring Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	7.88	0-23.64	23.59	0.76-55.03	32.28	7.86-63.73	0.03	0-0.08	0.05	0-0.12	0.05	0.01-0.1
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	48.07	16.02-96.14	49.31	16.44-90.4	58.45	16.7-108.55	0.16	0.05-0.33	0.11	0.04-0.2	0.09	0.03-0.17
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Mar-2016	0.00	0-0	0.00	0-0	18.89	0-47.22	0.00	0-0	0.00	0-0	0.03	0-0.07
Apr-2016	13.60	0-36.32	18.42	0-46.08	31.45	6.28-66	0.05	0-0.12	0.04	0-0.1	0.05	0.01-0.1
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.65	0-1.95	0.29	0-0.87	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	36.28	7.26-65.31	38.37	7.67-76.73	0.00	0-0	0.08	0.02-0.14	0.06	0.01-0.12
Aug-2016	0.00	0-0	0.00	0-0	7.87	0-23.6	0.00	0-0	0.00	0-0	0.01	0-0.04
Sep-2016	0.00	0-0	9.53	0.17-28.32	9.69	0.13-28.67	0.00	0-0	0.02	0-0.06	0.02	0-0.05
Oct-2016	39.70	9.16-79.4	37.01	9.25-77.05	40.24	9.49-81.86	0.13	0.03-0.27	0.08	0.02-0.17	0.06	0.01-0.13
Nov-2016	9.11	0-27.34	9.29	0-27.87	37.68	9.42-75.35	0.03	0-0.09	0.02	0-0.06	0.06	0.01-0.12
Dec-2016	9.15	0-27.44	9.23	0-27.7	9.37	0-28.11	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jan-2017	9.14	0-27.41	18.58	0-46.45	37.83	9.46-85.13	0.03	0-0.09	0.04	0-0.1	0.06	0.01-0.13
Feb-2017	36.45	9.11-72.9	74.17	27.81-129.8	93.88	37.55-159.6	0.12	0.03-0.25	0.16	0.06-0.29	0.15	0.06-0.25
Mar-2017	0.00	0-0	0.00	0-0	9.42	0-28.27	0.00	0-0	0.00	0-0	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	27.47	0-64.11	37.09	9.27-74.4	37.69	9.42-84.8	0.09	0-0.22	0.08	0.02-0.16	0.06	0.01-0.13

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	18.89	0-47.24	0.00	0-0	0.00	0-0	0.03	0-0.07
Jul-2017	28.29	3.34-64.83	48.92	14.59-95.12	63.13	22.1-116.77	0.10	0.01-0.22	0.11	0.03-0.21	0.10	0.03-0.18
Aug-2017	127.43	69.88-203.71	200.96	126.65-290.55	293.47	197.58-400.28	0.43	0.24-0.69	0.44	0.28-0.64	0.46	0.31-0.63

Table 45.1. Norfolk Vanguard West. Great Black-backed Gull design based estimates of birds in flight and on sea.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	63.04	23.64-110.32	133.65	78.62-196.54	149.37	86.48-220.12	0.21	0.08-0.37	0.30	0.17-0.43	0.24	0.14-0.35
Oct-2015	18.36	0-46.13	18.48	0-46.21	18.93	0-47.34	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2015	136.20	80.12-200.3	139.72	82.19-213.68	158.65	91.85-233.81	0.46	0.27-0.68	0.31	0.18-0.47	0.25	0.14-0.37
Dec-2015	0.00	0-0	119.74	64.48-184.22	201.74	119.21-293.44	0.00	0-0	0.26	0.14-0.41	0.32	0.19-0.46
Jan-2016	18.18	0-45.45	18.51	0-46.28	18.87	0-47.17	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Feb-2016	36.36	9.09-72.72	37.03	9.26-74.28	47.05	9.41-94.11	0.12	0.03-0.25	0.08	0.02-0.16	0.07	0.01-0.15
Mar-2016	45.90	9.18-91.81	55.63	18.54-111.26	103.89	47.22-170	0.16	0.03-0.31	0.12	0.04-0.25	0.16	0.07-0.27
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	18.27	0-45.68	564.64	425.79-703.48	659.53	518.21-810.28	0.06	0-0.15	1.25	0.94-1.56	1.04	0.82-1.28
Oct-2016	18.32	0-45.79	18.51	0-46.26	18.97	0-47.44	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2016	246.03	154.91-337.15	315.89	213.69-427.38	414.44	301.41-537.12	0.83	0.53-1.14	0.70	0.47-0.94	0.65	0.47-0.85
Dec-2016	0.00	0-0	9.23	0-27.7	28.11	0-65.58	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Jan-2017	100.49	45.68-155.3	195.11	120.78-278.96	255.38	160.56-359.43	0.34	0.15-0.53	0.43	0.27-0.62	0.40	0.25-0.57
Feb-2017	154.91	90.9-236.92	268.88	176.16-370.86	300.42	206.54-413.08	0.53	0.31-0.8	0.59	0.39-0.82	0.47	0.33-0.65
Mar-2017	9.14	0-27.63	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	19.12	0-47.79	0.00	0-0	0.00	0-0	0.03	0-0.08
May-2017	9.16	0-27.47	18.54	0-46.36	18.84	0-47.11	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	18.27	0-45.68	36.96	9.24-73.93	37.87	9.47-75.74	0.06	0-0.15	0.08	0.02-0.16	0.06	0.01-0.12
Aug-2017	27.41	0-63.95	27.81	0-64.9	755.56	594.77-925.56	0.09	0-0.22	0.06	0-0.14	1.19	0.94-1.46

Table 45.2. Norfolk Vanguard West. Great Black-backed Gull design based estimates of birds in flight and on sea including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	63.04	23.64-110.32	133.65	78.62-205.19	149.55	90.5-220.3	0.21	0.08-0.37	0.30	0.17-0.45	0.24	0.14-0.35
Oct-2015	18.36	0-46.13	18.48	0-46.21	18.93	0-47.34	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2015	136.20	80.12-200.3	139.72	82.19-213.68	158.65	91.85-233.81	0.46	0.27-0.68	0.31	0.18-0.47	0.25	0.14-0.37
Dec-2015	0.00	0-0	119.74	64.48-184.22	201.74	119.21-293.44	0.00	0-0	0.26	0.14-0.41	0.32	0.19-0.46
Jan-2016	18.18	0-45.45	18.51	0-46.28	18.87	0-47.17	0.06	0-0.15	0.04	0-0.1	0.03	0-0.07
Feb-2016	36.36	9.09-72.72	37.03	9.26-74.28	47.05	9.41-94.11	0.12	0.03-0.25	0.08	0.02-0.16	0.07	0.01-0.15
Mar-2016	45.90	9.18-91.81	55.63	18.54-111.26	103.89	47.22-170	0.16	0.03-0.31	0.12	0.04-0.25	0.16	0.07-0.27
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	27.11	6.32-59.58	887.35	737.47-1044.38	1007.57	849.02-1180.97	0.09	0.02-0.2	1.96	1.63-2.31	1.59	1.34-1.86
Oct-2016	18.32	0-47.31	18.51	0-49.28	18.97	0-50.31	0.06	0-0.16	0.04	0-0.11	0.03	0-0.08
Nov-2016	246.03	154.91-337.15	315.89	213.69-427.38	414.44	301.41-537.12	0.83	0.53-1.14	0.70	0.47-0.94	0.65	0.47-0.85
Dec-2016	0.00	0-0	9.23	0-27.7	28.11	0-65.58	0.00	0-0	0.02	0-0.06	0.04	0-0.1
Jan-2017	100.49	45.68-155.3	195.11	120.78-278.96	255.38	160.56-359.43	0.34	0.15-0.53	0.43	0.27-0.62	0.40	0.25-0.57
Feb-2017	154.91	90.9-236.92	268.88	176.16-370.86	300.42	206.54-413.08	0.53	0.31-0.8	0.59	0.39-0.82	0.47	0.33-0.65
Mar-2017	9.14	0-27.63	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	19.12	0-47.79	0.00	0-0	0.00	0-0	0.03	0-0.08
May-2017	9.16	0-27.47	18.54	0-46.36	18.84	0-47.11	0.03	0-0.09	0.04	0-0.1	0.03	0-0.07

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	20.58	0-47.99	39.10	9.24-80.34	39.96	9.47-82.01	0.07	0-0.16	0.09	0.02-0.18	0.06	0.01-0.13
Aug-2017	28.81	2.81-65.35	29.64	1.82-67.64	783.55	627.64-946.05	0.10	0.01-0.22	0.07	0-0.15	1.23	0.99-1.49

Table 45.3. Norfolk Vanguard West. Great Black-backed Gull design based estimates of birds in flight.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	63.04	23.64-102.63	86.48	39.31-141.51	94.34	47.17-149.37	0.21	0.08-0.35	0.19	0.09-0.31	0.15	0.07-0.24
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	8.01	0-24.04	8.22	0-24.66	25.05	0-58.45	0.03	0-0.08	0.02	0-0.05	0.04	0-0.09
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	18.18	0-45.45	18.51	0-46.28	18.87	0-56.6	0.06	0-0.15	0.04	0-0.1	0.03	0-0.09
Feb-2016	27.27	0-63.63	27.77	0-64.79	28.23	0-65.87	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Mar-2016	0.00	0-0	9.27	0-27.81	9.44	0-28.33	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	18.27	0-45.68	499.84	370.25-629.43	593.58	461.44-725.49	0.06	0-0.15	1.10	0.82-1.39	0.93	0.73-1.14
Oct-2016	18.32	0-45.79	18.51	0-46.26	18.97	0-47.44	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2016	36.45	9.11-72.9	74.33	27.87-120.78	103.61	47.1-169.54	0.12	0.03-0.25	0.16	0.06-0.27	0.16	0.07-0.27
Dec-2016	0.00	0-0	0.00	0-0	18.74	0-46.84	0.00	0-0	0.00	0-0	0.03	0-0.07
Jan-2017	9.14	0-27.41	65.04	18.58-111.49	66.21	18.92-113.5	0.03	0-0.09	0.14	0.04-0.25	0.10	0.03-0.18
Feb-2017	36.45	9.11-72.9	46.36	9.27-83.44	46.94	9.39-93.88	0.12	0.03-0.25	0.10	0.02-0.18	0.07	0.01-0.15
Mar-2017	9.14	0-27.41	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	19.12	0-47.79	0.00	0-0	0.00	0-0	0.03	0-0.08
May-2017	9.16	0-27.47	9.27	0-27.81	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	18.27	0-45.68	36.96	9.24-73.93	37.87	9.47-75.74	0.06	0-0.15	0.08	0.02-0.16	0.06	0.01-0.12
Aug-2017	27.41	0-55.04	27.81	0-64.9	160.56	94.44-236.11	0.09	0-0.19	0.06	0-0.14	0.25	0.15-0.37

Table 45.4. Norfolk Vanguard West. Great Black-backed Gull design based estimates of birds in flight including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	63.04	23.64-102.63	86.48	39.31-141.51	94.34	47.17-149.37	0.21	0.08-0.35	0.19	0.09-0.31	0.15	0.07-0.24
Oct-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2015	8.01	0-24.04	8.22	0-24.66	25.05	0-58.45	0.03	0-0.08	0.02	0-0.05	0.04	0-0.09
Dec-2015	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jan-2016	18.18	0-45.45	18.51	0-46.28	18.87	0-56.6	0.06	0-0.15	0.04	0-0.1	0.03	0-0.09
Feb-2016	27.27	0-63.63	27.77	0-64.79	28.23	0-65.87	0.09	0-0.22	0.06	0-0.14	0.04	0-0.1
Mar-2016	0.00	0-0	9.27	0-27.81	9.44	0-28.33	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	22.06	1.26-53.25	612.20	484.11-751.71	700.81	553.42-849.01	0.07	0-0.18	1.35	1.07-1.66	1.10	0.87-1.34
Oct-2016	18.32	0-45.79	18.51	0-46.26	18.97	0-47.44	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2016	36.45	9.11-72.9	74.33	27.87-120.78	103.61	47.1-169.54	0.12	0.03-0.25	0.16	0.06-0.27	0.16	0.07-0.27
Dec-2016	0.00	0-0	0.00	0-0	18.74	0-46.84	0.00	0-0	0.00	0-0	0.03	0-0.07
Jan-2017	9.14	0-27.41	65.04	18.58-111.49	66.21	18.92-113.5	0.03	0-0.09	0.14	0.04-0.25	0.10	0.03-0.18
Feb-2017	36.45	9.11-72.9	46.36	9.27-83.44	46.94	9.39-93.88	0.12	0.03-0.25	0.10	0.02-0.18	0.07	0.01-0.15
Mar-2017	9.14	0-27.41	9.24	0-27.72	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04
Apr-2017	0.00	0-0	0.00	0-0	19.12	0-47.79	0.00	0-0	0.00	0-0	0.03	0-0.08
May-2017	9.16	0-27.47	9.27	0-27.81	9.42	0-28.27	0.03	0-0.09	0.02	0-0.06	0.01	0-0.04

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	18.27	0-45.68	36.96	9.24-73.93	37.87	9.47-75.74	0.06	0-0.15	0.08	0.02-0.16	0.06	0.01-0.12
Aug-2017	27.41	0-55.04	27.81	0-64.9	160.56	94.44-236.11	0.09	0-0.19	0.06	0-0.14	0.25	0.15-0.37

Table 45.5. Norfolk Vanguard West. Great Black-backed Gull design based estimates of birds on the sea surface.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	47.17	15.72-86.48	55.03	23.58-94.53	0.00	0-0	0.10	0.03-0.19	0.09	0.04-0.15
Oct-2015	18.36	0-45.9	18.48	0-46.21	18.93	0-47.34	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2015	128.19	72.11-192.29	131.50	73.97-197.24	133.60	75.15-192.05	0.43	0.24-0.65	0.29	0.16-0.44	0.21	0.12-0.3
Dec-2015	0.00	0-0	119.74	55.26-193.43	201.74	119.21-284.27	0.00	0-0	0.26	0.12-0.43	0.32	0.19-0.45
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.27	9.26	0-27.77	18.82	0-47.05	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Mar-2016	45.90	9.18-91.81	46.36	9.27-92.72	94.44	37.78-160.56	0.16	0.03-0.31	0.10	0.02-0.2	0.15	0.06-0.25
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	0.00	0-0	64.79	18.51-120.33	65.95	18.84-122.48	0.00	0-0	0.14	0.04-0.27	0.10	0.03-0.19
Oct-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Nov-2016	209.58	127.57-300.71	241.56	157.94-343.76	310.83	207.22-414.44	0.71	0.43-1.02	0.53	0.35-0.76	0.49	0.33-0.65
Dec-2016	0.00	0-0	9.23	0-27.7	9.37	0-28.11	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Jan-2017	91.35	36.54-155.3	130.07	65.04-195.11	189.17	113.5-284	0.31	0.12-0.53	0.29	0.14-0.43	0.30	0.18-0.45
Feb-2017	118.46	63.79-191.36	222.52	139.07-315.23	253.48	159.6-347.37	0.40	0.22-0.65	0.49	0.31-0.7	0.40	0.25-0.55
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	9.27	0-27.81	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jul-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2017	0.00	0-0	0.00	0-0	595.00	462.78-746.11	0.00	0-0	0.00	0-0	0.94	0.73-1.18

Table 45.6. Norfolk Vanguard West. Great Black-backed Gull design based estimates of birds on the sea surface including unidentified birds assigned using positively identified proportions.

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Sep-2015	0.00	0-0	51.49	15.72-95.13	59.05	23.58-102.39	0.00	0-0	0.11	0.03-0.21	0.09	0.04-0.16
Oct-2015	18.36	0-45.9	18.48	0-46.21	18.93	0-47.34	0.06	0-0.16	0.04	0-0.1	0.03	0-0.07
Nov-2015	128.19	72.11-192.29	131.50	73.97-197.24	133.60	75.15-192.05	0.43	0.24-0.65	0.29	0.16-0.44	0.21	0.12-0.3
Dec-2015	0.00	0-0	119.74	55.26-193.43	201.74	119.21-284.27	0.00	0-0	0.26	0.12-0.43	0.32	0.19-0.45
Jan-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Feb-2016	9.09	0-27.27	9.26	0-27.77	18.82	0-47.05	0.03	0-0.09	0.02	0-0.06	0.03	0-0.07
Mar-2016	45.90	9.18-91.81	46.36	9.27-92.72	94.44	37.78-160.56	0.16	0.03-0.31	0.10	0.02-0.2	0.15	0.06-0.25
Apr-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jun-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Aug-2016	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Sep-2016	5.05	1.26-11.37	270.06	197.02-352.5	303.92	228.93-381.9	0.02	0-0.04	0.60	0.44-0.78	0.48	0.36-0.6
Oct-2016	1.52	0-4.56	1.51	0-4.53	1.44	0-4.31	0.01	0-0.02	0.00	0-0.01	0.00	0-0.01
Nov-2016	209.58	127.57-300.71	241.56	157.94-343.76	301.41	207.22-414.44	0.71	0.43-1.02	0.53	0.35-0.76	0.47	0.33-0.65
Dec-2016	0.00	0-0	9.23	0-27.7	9.37	0-28.11	0.00	0-0	0.02	0-0.06	0.01	0-0.04
Jan-2017	91.35	36.54-155.3	130.07	65.04-195.11	189.17	113.5-284	0.31	0.12-0.53	0.29	0.14-0.43	0.30	0.18-0.45
Feb-2017	118.46	63.79-191.36	222.52	139.07-315.23	253.48	159.6-347.37	0.40	0.22-0.65	0.49	0.31-0.7	0.40	0.25-0.55
Mar-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Apr-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
May-2017	0.00	0-0	9.27	0-27.81	9.42	0-28.27	0.00	0-0	0.02	0-0.06	0.01	0-0.04

Date	Abundance						Density					
	Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer		Wind farm		Wind farm & 2km buffer		Wind farm & 4km buffer	
	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval	Median	Confidence interval
Jun-2017	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0	0.00	0-0
Jul-2017	2.31	0-9.24	4.28	0-10.69	4.18	0-10.46	0.01	0-0.03	0.01	0-0.02	0.01	0-0.02
Aug-2017	2.81	0-7.02	2.74	0-6.38	616.84	482.46-769.45	0.01	0-0.02	0.01	0-0.01	0.97	0.76-1.21

Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 3

Collision risk model input parameters

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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1 INTRODUCTION

1. This appendix provides tables of the input parameters for NV East and NV West used in the collision risk modelling, comprising the following tables.

    - Tables 1 and 2: density of birds in flight in NV East and NV West in each month, presented as the median and upper and lower 95% confidence range derived from 1,000 nonparametric bootstrap simulations (note that stochastic CRM simulations used the individual bootstrap data, not the summary values presented in these tables);
    - Tables 3 and 4: the proportion of each species estimated to be at rotor height (>= 22m) from the survey data and the sample sizes available (for use in Band Option 1 modelling);
    - Table 5: the proportion of each species estimated to be at rotor height (>= 22m) derived from Johnston et al. (2014; for Band Option 2 modelling);
    - Table 6: biometrics of each species modelled (e.g. wingspan, body length, etc.), and;
    - Table 7: the wind farm and turbine data.

2. In addition to the tabulated parameters, histograms of the bootstrapped densities of seabirds in flight for NV East are provided in Figures 1 to 12 and for NV West in Figures 13 to 23. These present the bootstrapped data for each calendar month, with distributions derived from data collected in different years indicated with shading.

3. For the avoidance of doubt, the avoidance rates used were those advised by Natural England, as follows:

    - Gannet 98.9% (SD = 0.2%)
    - Kittiwake 98.9% (SD = 0.2%)
    - Herring gull, lesser black-backed gull, great black-backed gull 99.5% (SD = 0.1%)
    - Little gull, common gull, black-headed gull 99.2% (SD = 0.2%)
    - All other species 98% (SD = 0.2%)

Table 1. Norfolk Vanguard East monthly median densities (and 95% confidence intervals) of birds in flight used in the collision risk modelling.

Species	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0.119)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.216)	0 (0-0)
Fulmar	0.078 (0-0.412)	0.039 (0-0.251)	0.079 (0-0.349)	0.033 (0-0.373)	0.283 (0-0.866)	0 (0-0.522)	0 (0-0.098)	0.228 (0.046-0.539)	0.105 (0-0.434)	0.031 (0-0.184)	0.163 (0-0.401)	0.123 (0-0.448)
Gannet	0 (0-0.137)	0.031 (0-0.188)	0 (0-0.094)	0.031 (0-0.124)	0 (0-0.2)	0.18 (0-0.678)	0 (0-0.074)	0.137 (0-0.317)	0.276 (0-0.552)	0.123 (0.024-0.46)	1.168 (0.678-5.052)	1.142 (0-1.693)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.095)	0 (0-0.237)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0.093)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.026 (0-0.193)	0 (0-0.092)	0 (0-0)	0 (0-0)
Kittiwake	0.686 (0.343-4.82)	0.753 (0.193-1.647)	0.305 (0-2.833)	0.088 (0-1.49)	0.233 (0.033-0.971)	0.052 (0-0.261)	0.025 (0-0.141)	0 (0-0.137)	0 (0-0.11)	0.031 (0-0.337)	1.141 (0-1.942)	0.491 (0.138-1.614)
Black-headed Gull	0 (0-0.155)	0 (0-0)	0 (0-0.131)	0 (0-0)	0 (0-0.1)	0 (0-0)	0 (0-0.098)	0 (0-0)	0 (0-0)	0 (0-0.092)	0 (0-0.163)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0.069)	0 (0-0)	0 (0-0)	0 (0-0.647)	0 (0-0)	0 (0-0)	0.063 (0-0.603)	0 (0-0.078)	0 (0-0)	0 (0-0.326)	0 (0-0)
Common Gull	0.032 (0-0.206)	0 (0-0)	0 (0-0.187)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.215)	0 (0-0.092)	0 (0-0.092)
Lesser Black-backed Gull	0.034 (0-0.272)	0 (0-0.125)	0 (0-0.119)	0 (0-0.098)	0 (0-0)	0 (0-0)	0 (0-0.123)	0.127 (0-0.412)	0 (0-0)	0 (0-0.072)	0 (0-0.123)	0 (0-0.157)
Herring Gull	0.103 (0-1.788)	0 (0-0)	0 (0-0.119)	0 (0-0.093)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.216)	0 (0-0.207)
Great Black-backed Gull	0.158 (0.032-3.382)	0 (0-0.125)	0 (0-0.093)	0 (0-0.131)	0 (0-0)	0 (0-0)	0 (0-0)	0.016 (0-0.507)	0 (0-0)	0 (0-0)	0 (0-0.431)	0.123 (0-0.394)

Table 2. Norfolk Vanguard West monthly median densities (and 95% confidence intervals) of birds in flight used in the collision risk modelling.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Red-throated Diver	0.062 (0-0.185)	0 (0-0.093)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.093)
Fulmar	0.062 (0-0.248)	0.062 (0-0.185)	0.031 (0-0.155)	0.032 (0-0.154)	0.031 (0-0.093)	0 (0-0.187)	0 (0-0.248)	0.046 (0-0.465)	0.027 (0-0.093)	0.155 (0-0.963)	0.054 (0-0.163)	0 (0-0.093)
Gannet	0 (0-0.093)	0.031 (0-0.093)	0 (0-0.187)	0 (0-0)	0 (0-0.093)	0.031 (0-0.093)	0.062 (0-0.279)	0.08 (0-0.372)	0.053 (0-0.186)	0.28 (0-0.965)	0.649 (0.371-0.951)	0 (0-0)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.027 (0-0.093)	0 (0-0)	0 (0-0)	0 (0-0)
Kittiwake	0.093 (0-0.247)	0.062 (0-0.185)	0.156 (0.031-0.434)	0 (0-0.255)	0.062 (0-0.186)	0.249 (0.062-0.591)	0 (0-0.372)	0.093 (0-0.217)	0 (0-0.24)	0.093 (0-0.311)	0.362 (0.062-0.896)	0 (0-0.093)
Black-headed Gull	0 (0-0)	0 (0-0.185)	0 (0-0.093)	0 (0-0.124)	0 (0-0)	0 (0-0)	0 (0-0.072)	0 (0-0)	0 (0-0)	0.031 (0-0.125)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.027 (0-0.093)	0 (0-0)	0.054 (0-0.154)	0 (0-0)
Common Gull	0 (0-0)	0 (0-0.154)	0 (0-0.156)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.08)	0.031 (0-0.093)	0.124 (0-0.402)	0 (0-0)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0.093)	0 (0-0.093)	0 (0-0)	0.093 (0-0.28)	0.109 (0-0.362)	0.186 (0.031-0.453)	0.013 (0-0.342)	0.093 (0-0.311)	0 (0-0)	0 (0-0)
Herring Gull	0 (0-0)	0 (0-0.092)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.027 (0-0.093)	0 (0-0)
Great Black-backed Gull	0.031 (0-0.154)	0.093 (0-0.247)	0 (0-0.093)	0 (0-0)	0 (0-0.093)	0 (0-0)	0 (0-0.124)	0 (0-0.186)	0.134 (0.009-0.321)	0 (0-0.124)	0.054 (0-0.217)	0 (0-0)

Table 3. Norfolk Vanguard East. Total number of birds with an estimated flight height, number at collision height (>=22m) and proportion at collision height. Figures provided for all birds within the 4km buffer and just those within the wind farm boundary.

	Within 4km buffer			**Within wind farm**		
Species	**No. height estimates**	**No. >=22m**	**Proportion >=22m**	**No. height estimates**	**No. >=22m**	**Proportion >=22m**
Red-throated Diver	6	3	0.500	5	3	0.600
Fulmar	274	4	0.015	113	1	0.009
Gannet	538	77	0.143	263	45	0.171
Arctic Skua	6	2	0.333	4	1	0.250
Great Skua	14	5	0.357	7	4	0.571
Kittiwake	942	219	0.232	437	102	0.233
Black-headed Gull	13	3	0.231	8	2	0.250
Little Gull	33	2	0.061	24	1	0.042
Common Gull	25	7	0.280	11	4	0.364
Lesser Black-backed Gull	90	26	0.289	26	5	0.192
Herring Gull	93	17	0.183	50	12	0.240
Great Black-backed Gull	204	39	0.191	112	9	0.080

Table 4. Norfolk Vanguard West. Total number of birds with an estimated flight height, number at collision height (>=22m) and proportion at collision height. Figures provided for all birds within the 4km buffer and just those within the wind farm boundary.

	Within 4km buffer			**Within wind farm**		
Species	**No. height estimates**	**No. >=22m**	**Proportion >=22m**	**No. height estimates**	**No. >=22m**	**Proportion >=22m**
Red-throated Diver	8	3	0.375	4	0	0.000
Fulmar	88	13	0.148	37	4	0.108
Gannet	116	17	0.147	51	6	0.118
Arctic Skua	1	0	0.000	0	0	0.000
Great Skua	4	2	0.500	1	0	0.000
Kittiwake	206	74	0.359	75	27	0.360
Black-headed Gull	21	17	0.810	3	2	0.667
Little Gull	7	1	0.143	5	1	0.200
Common Gull	32	11	0.344	15	4	0.267
Lesser Black-backed Gull	44	16	0.364	11	5	0.455
Herring Gull	10	4	0.400	3	2	0.667
Great Black-backed Gull	57	17	0.298	25	8	0.320

Table 5. Proportions at collision height (>=22m) from Johnston et al. (2014).

	Proportion at collision height (>=22m)			
Species	**Maximum likelihood**	**Median**	**Lower confidence interval**	**Upper confidence interval**
Red-throated Diver	0.047	0.046	0.010	0.320
Fulmar	0.006	0.005	0.000	0.073
Gannet	0.102	0.104	0.047	0.173
Arctic Skua	0.018	0.019	0.010	0.086
Great Skua	0.044	0.047	0.025	0.151
Kittiwake	0.124	0.124	0.093	0.147
Black-headed Gull	0.114	0.108	0.042	0.232
Little Gull	0.125	0.114	0.041	0.245
Common Gull	0.188	0.202	0.159	0.276
Lesser Black-backed Gull	0.249	0.249	0.171	0.408
Herring Gull	0.285	0.287	0.216	0.400
Great Black-backed Gull	0.291	0.310	0.247	0.420

Table 6. Species biometrics used in the collision risk modelling. Note that nocturnal activity factors are the generic ones derived from Garthe and Huppop (2004). In collision modelling simulations which included uncertainty in nocturnal activity the values used for gannet, kittiwake, lesser black-backed gull, herring gull and great black-backed gull were as detailed in Technical Appendix 13.1.

Species	**Body length (m)**	**Wingspan (m)**	**Flight speed (m/s)**	**Nocturnal activity factor**	**Flight type (flapping=0, gliding=1)**	**Avoidance rate (%)**
Red-throated Diver	0.73	1.30	17.0	0.50	0	98
Fulmar	0.48	1.07	13.0	0.75	0	98
Gannet	0.94	1.72	14.9	0.25	0	98.9
Arctic Skua	0.44	1.18	13.3	0.00	0	98
Great Skua	0.56	1.36	14.9	0.00	0	98
Kittiwake	0.39	1.08	13.1	0.50	0	98.9
Black-headed Gull	0.37	1.10	11.9	0.50	0	99.2
Little Gull	0.26	0.78	12.2	0.25	0	99.2
Common Gull	0.42	1.30	13.4	0.50	0	99.2
Lesser Black-backed Gull	0.58	1.42	13.1	0.50	0	99.5
Herring Gull	0.60	1.44	12.8	0.50	0	99.5
Great Black-backed Gull	0.71	1.58	13.7	0.50	0	99.5

Table 7. Wind farm and turbine specifications used in the collision risk modelling.

Turbine output (MW)	**No. of rotor blades**	**RPM**	**Rotor radius (m)**	**Hub height above HAT (m)**	**Predicted operation time (%)**	**Max. blade width (m)**	**Mean blade pitch (deg.)**	**No. of turbines**
9	3	11.26	85.0	107.0	90	7.0	15	200
20	3	5.05	151.5	173.5	90	10.0	15	90

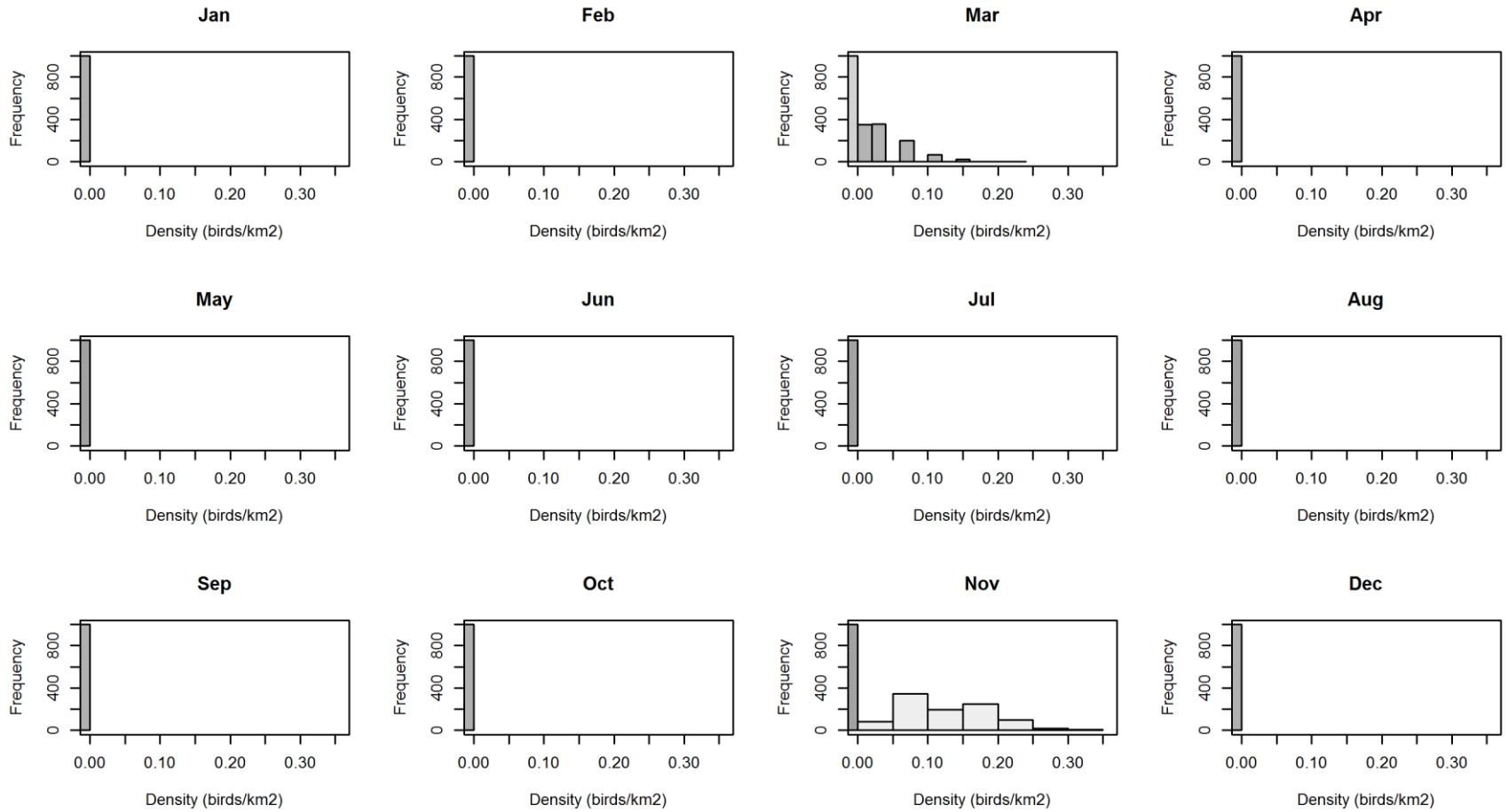


Figure 1. Norfolk Vanguard East, Red-throated diver bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

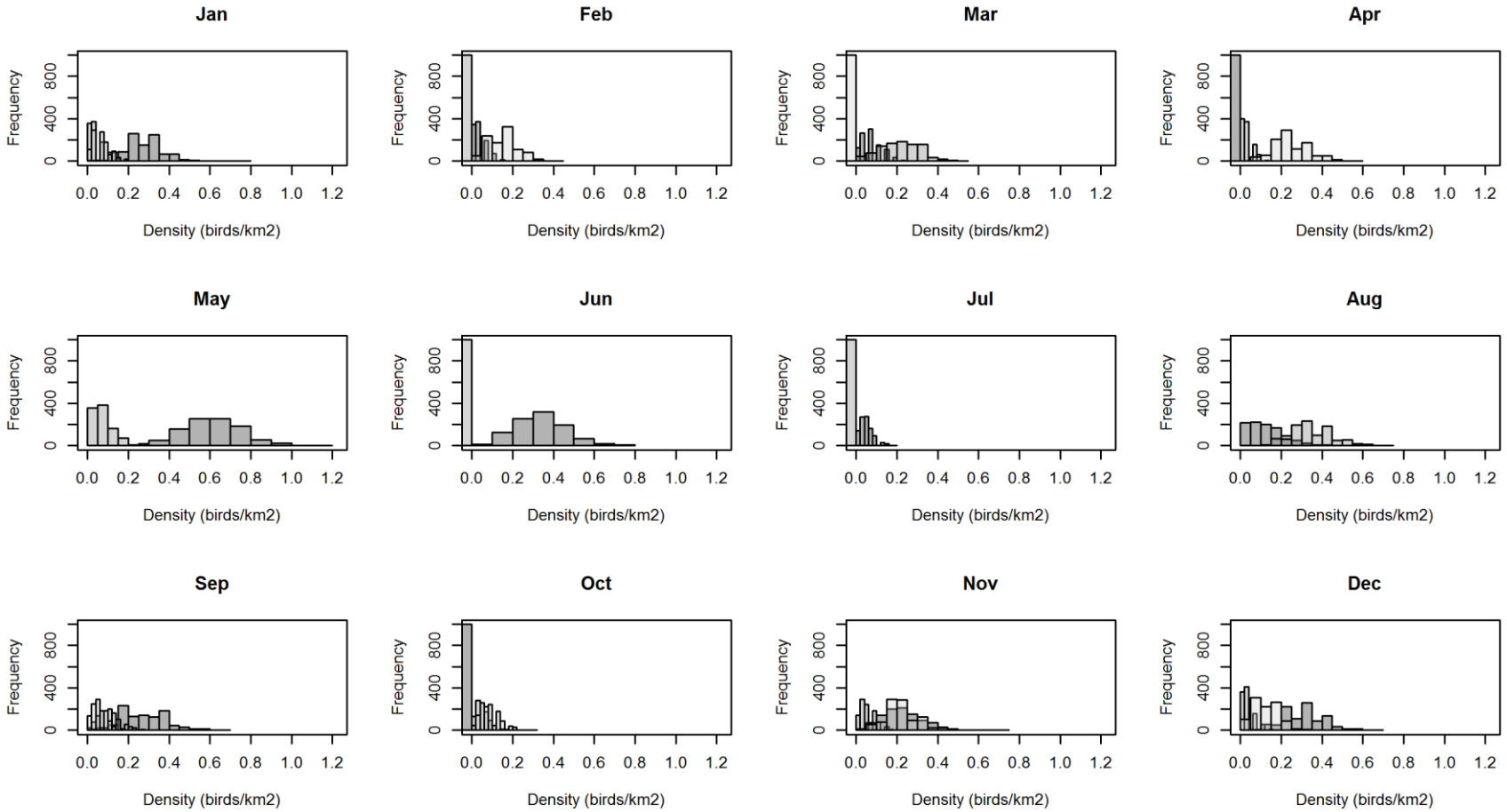


Figure 2. Norfolk Vanguard East, Fulmar bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

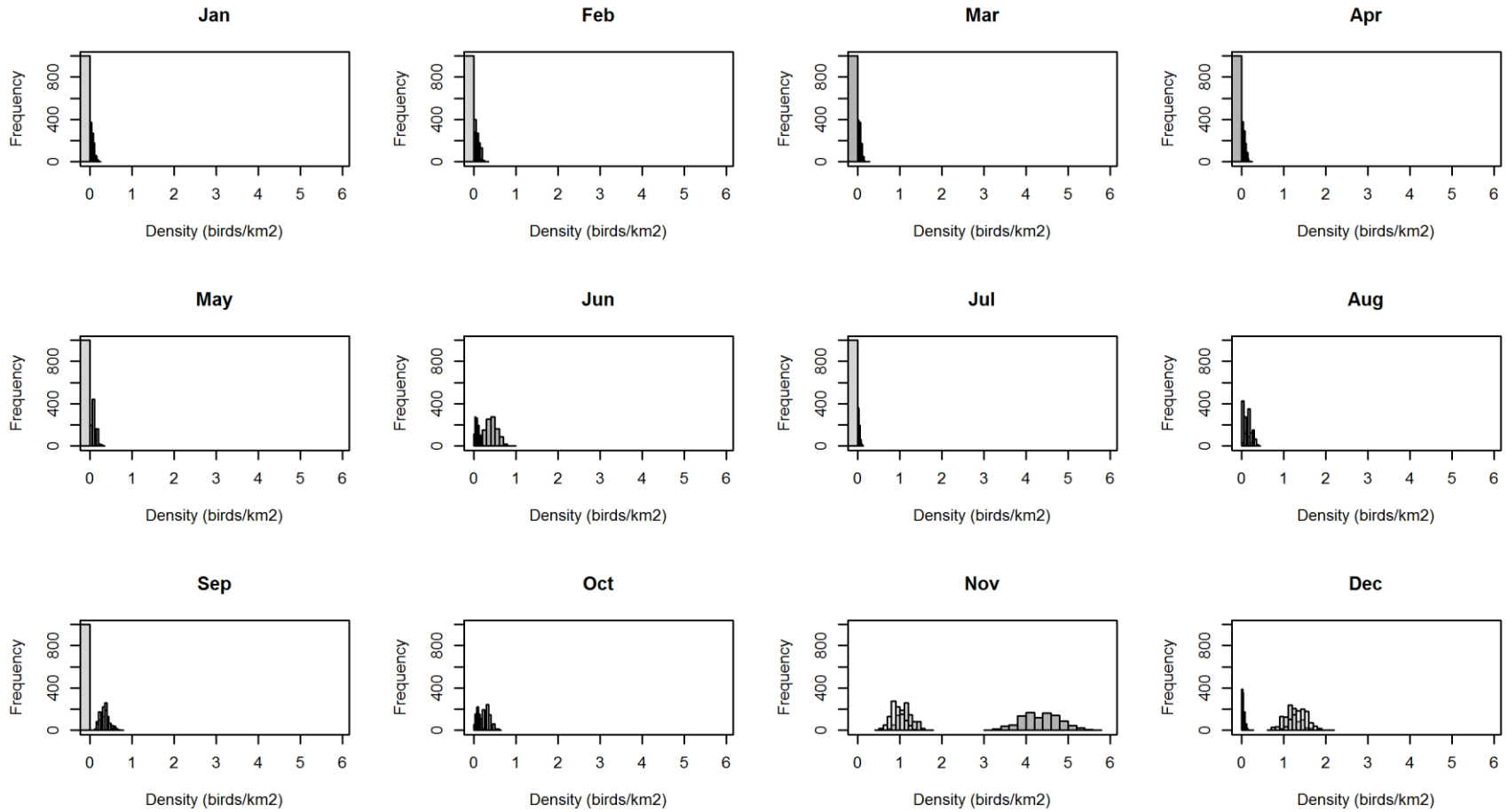


Figure 3. Norfolk Vanguard East, Gannet bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

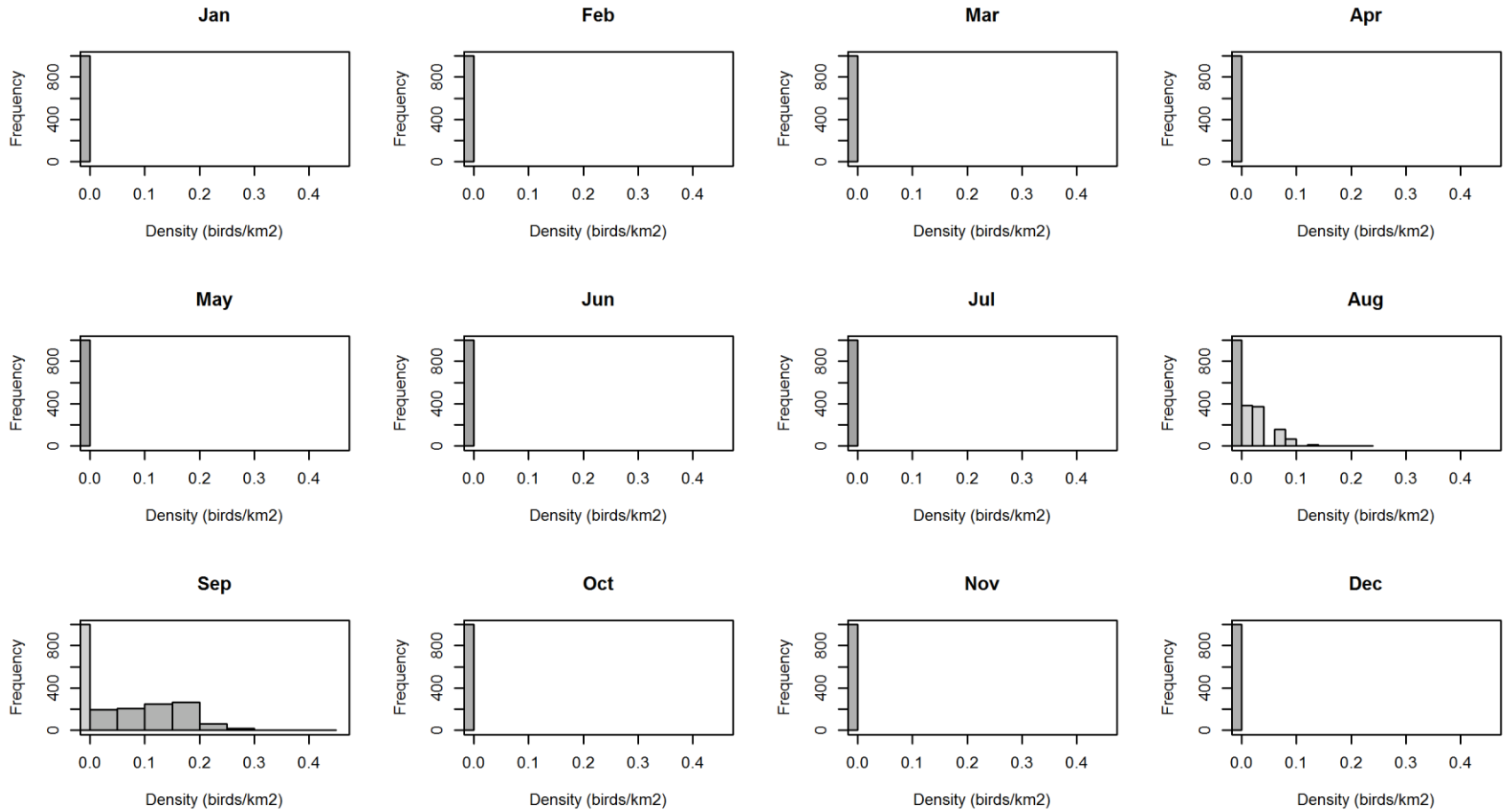


Figure 4. Norfolk Vanguard East, Arctic Skua bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

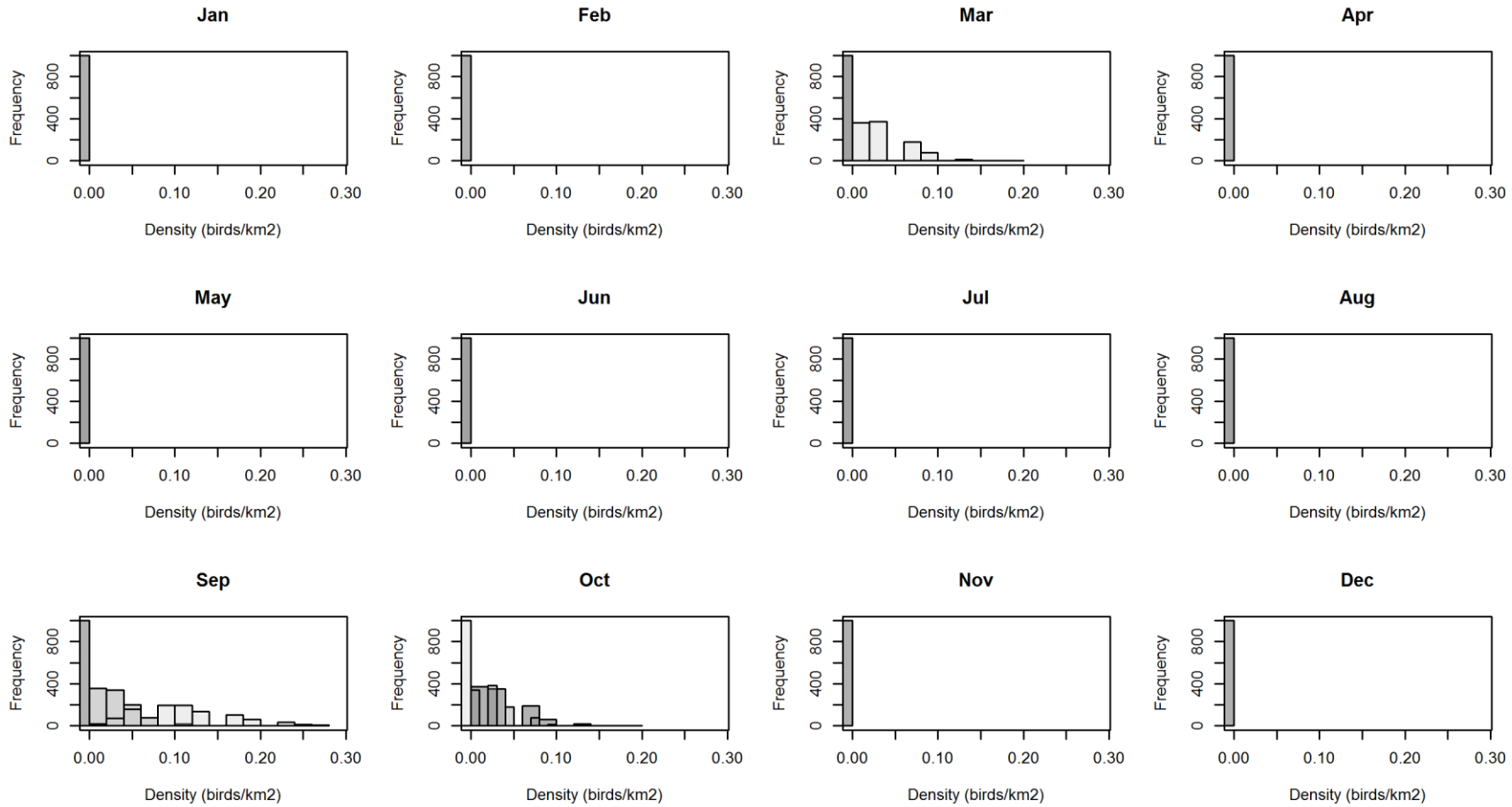


Figure 5. Norfolk Vanguard East, Great Skua bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

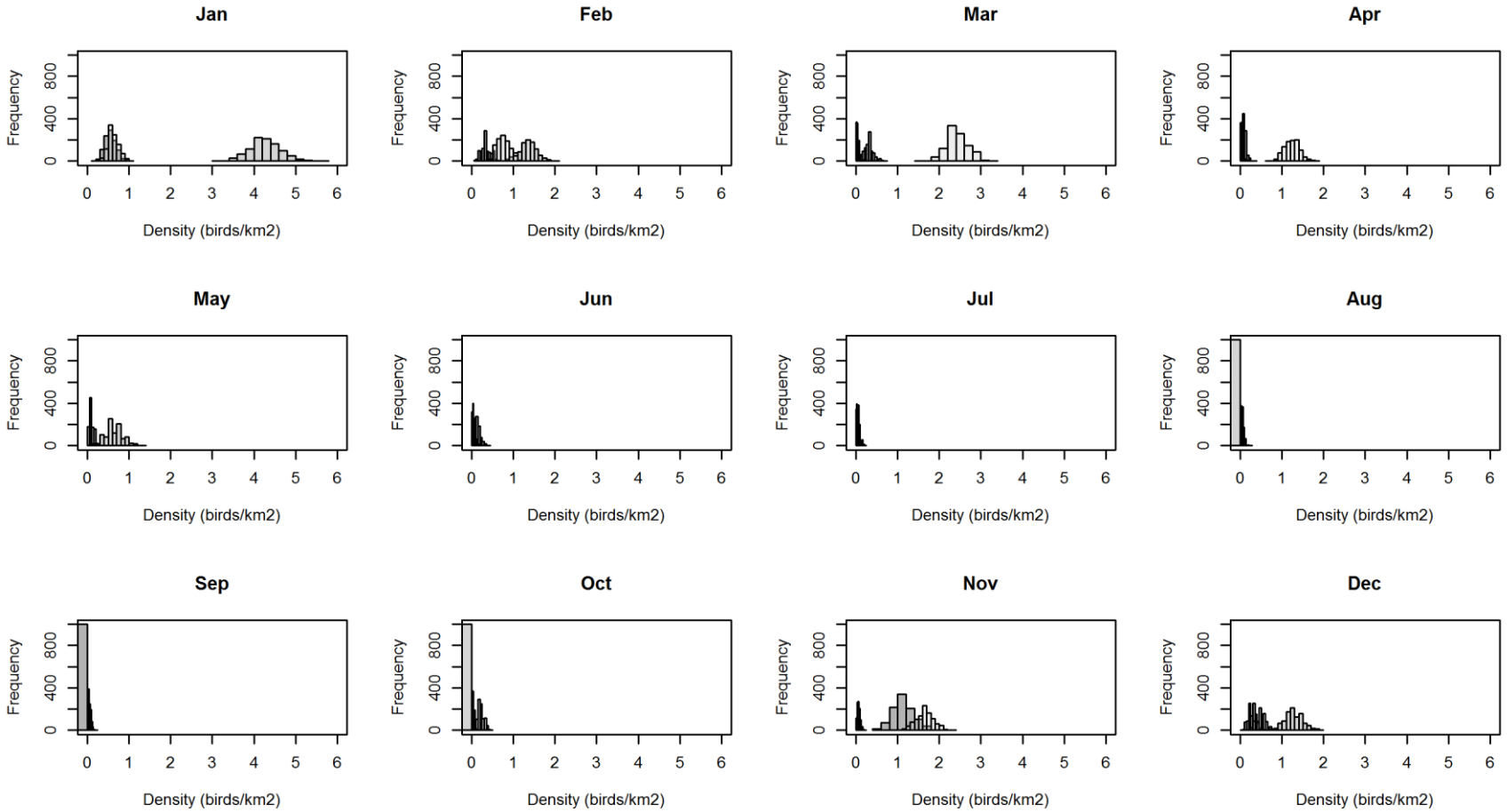


Figure 6. Norfolk Vanguard East, Kittiwake bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

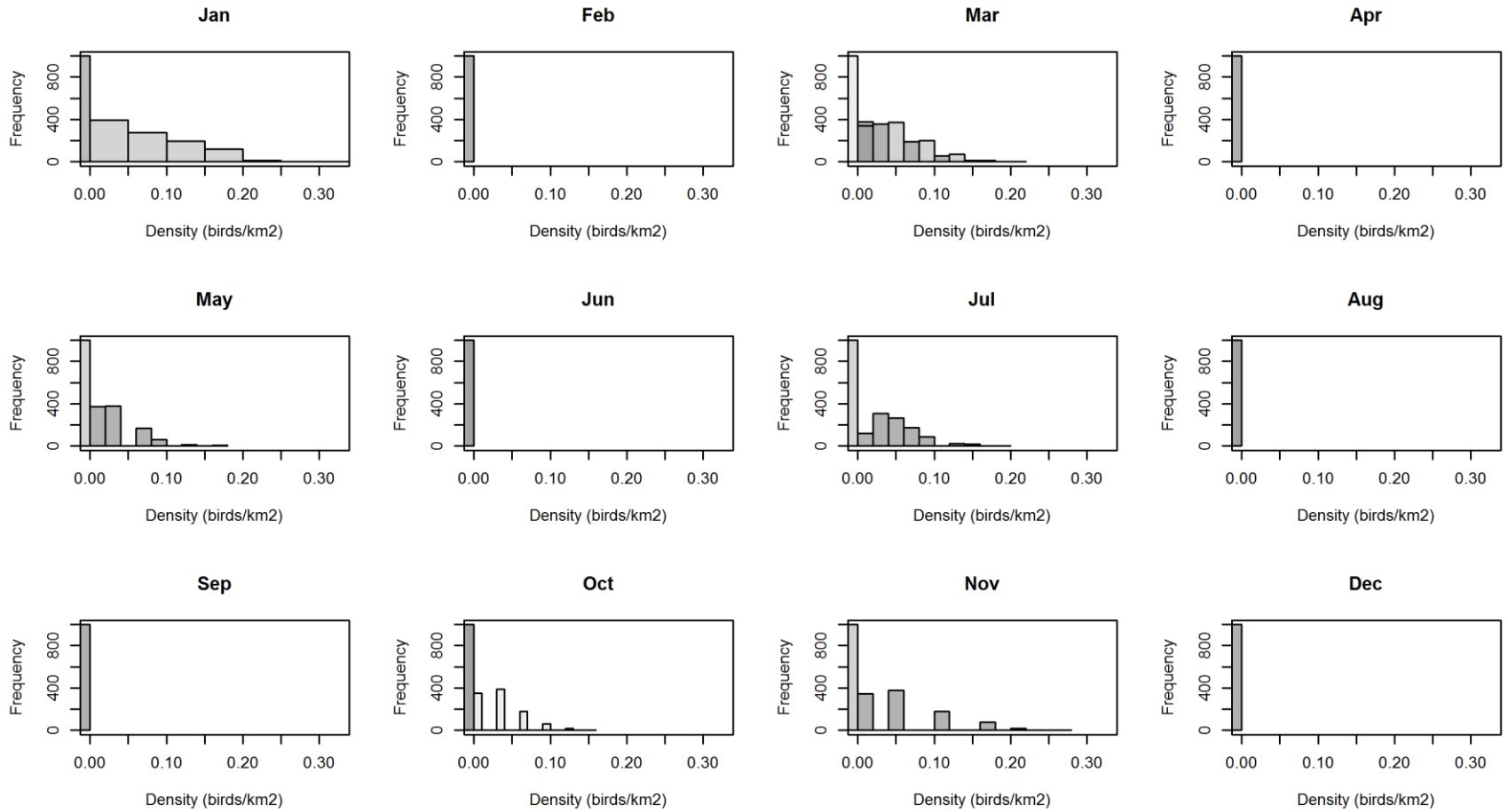


Figure 7. Norfolk Vanguard East, Black-headed Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

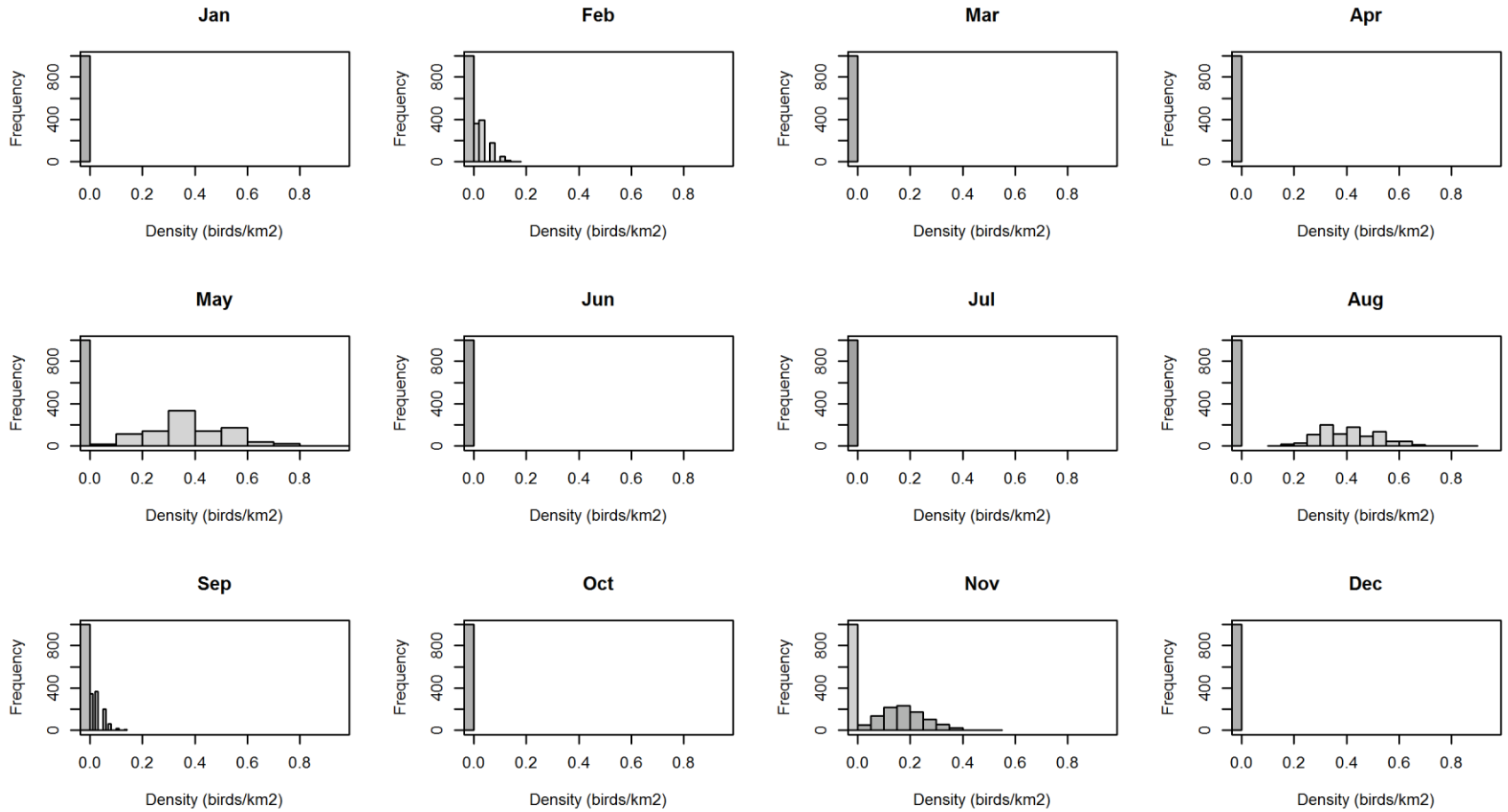


Figure 8. Norfolk Vanguard East, Little Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

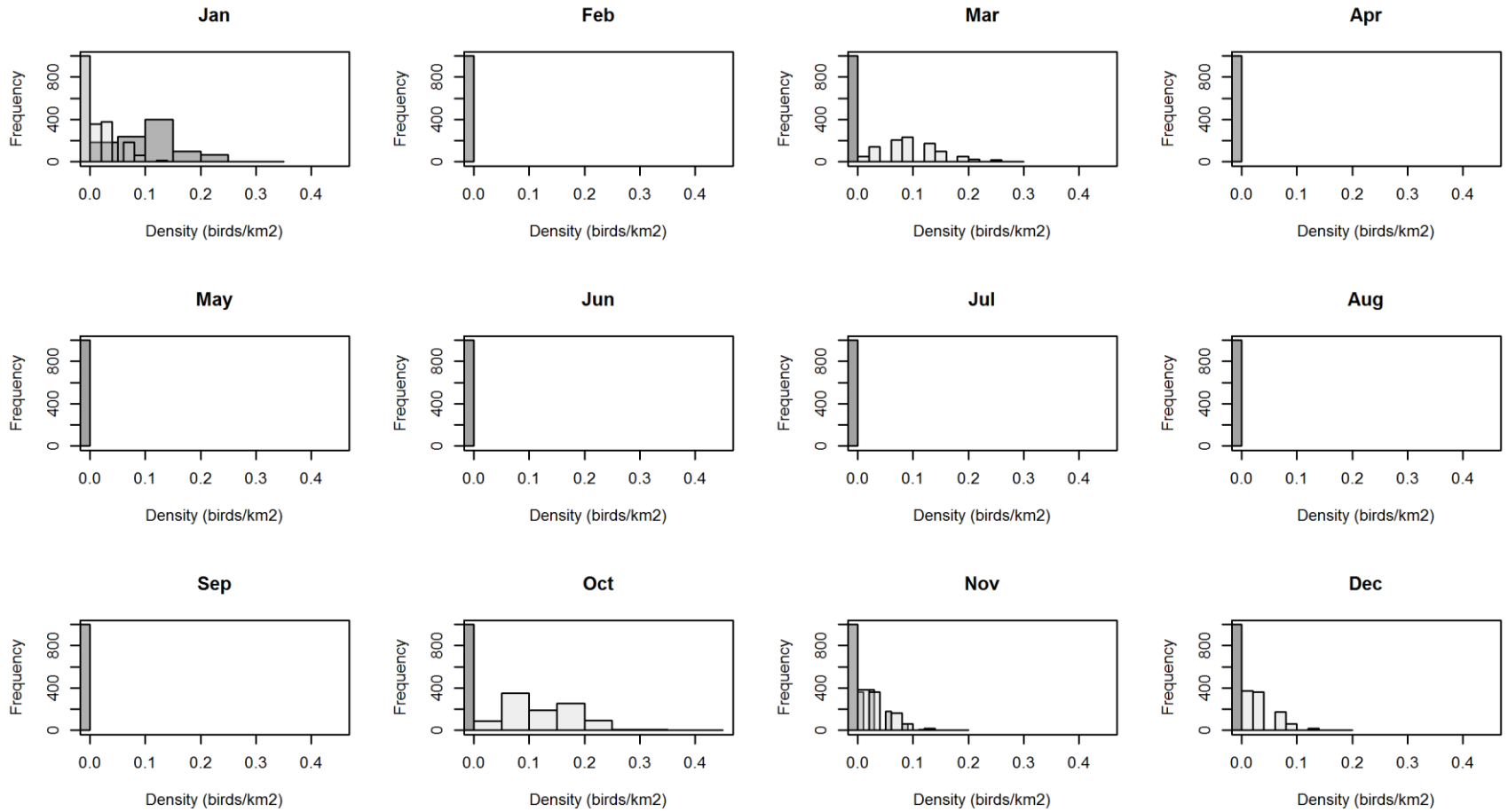


Figure 9. Norfolk Vanguard East, Common Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

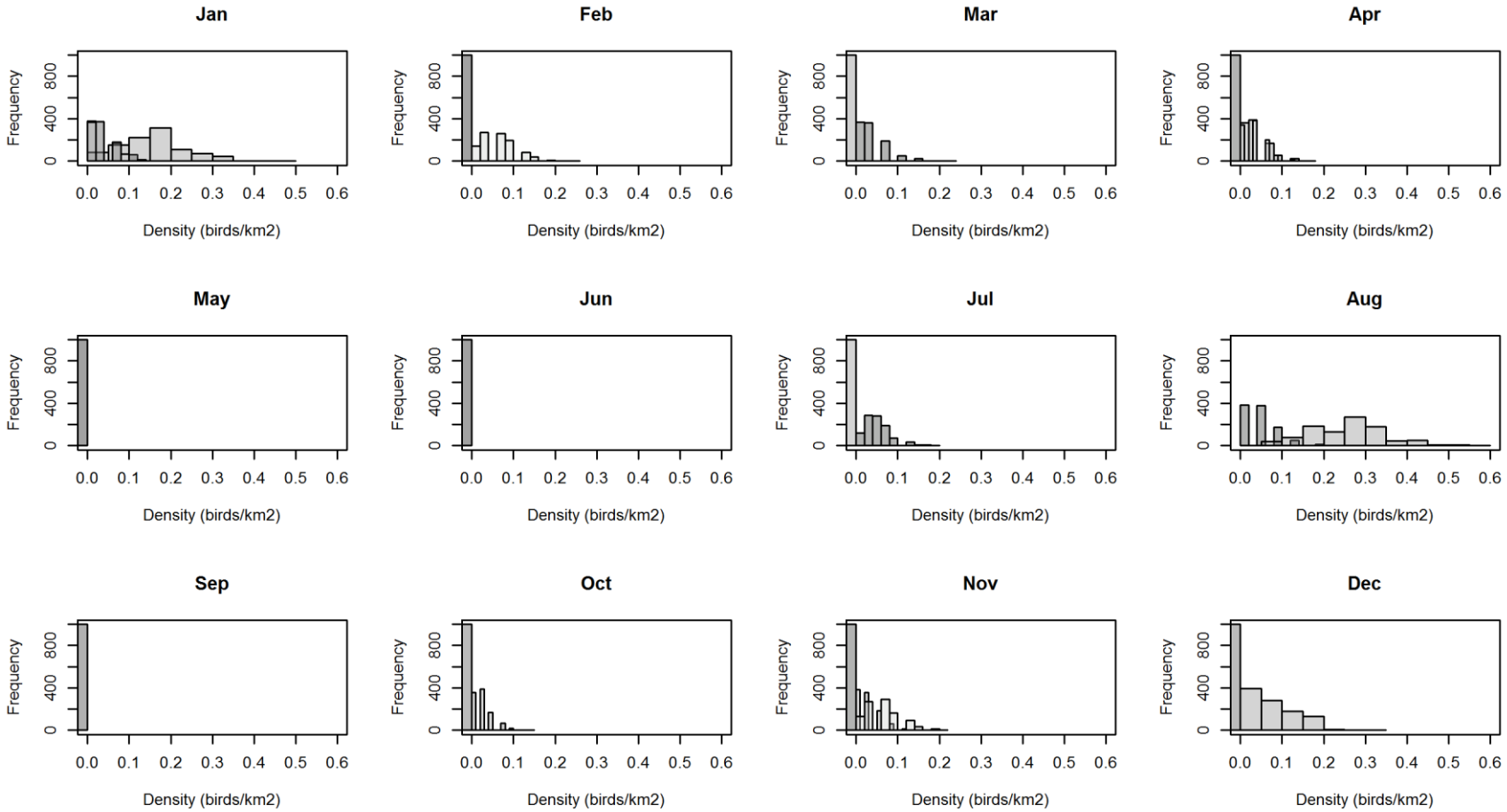


Figure 10. Norfolk Vanguard East, Lesser Black-backed Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

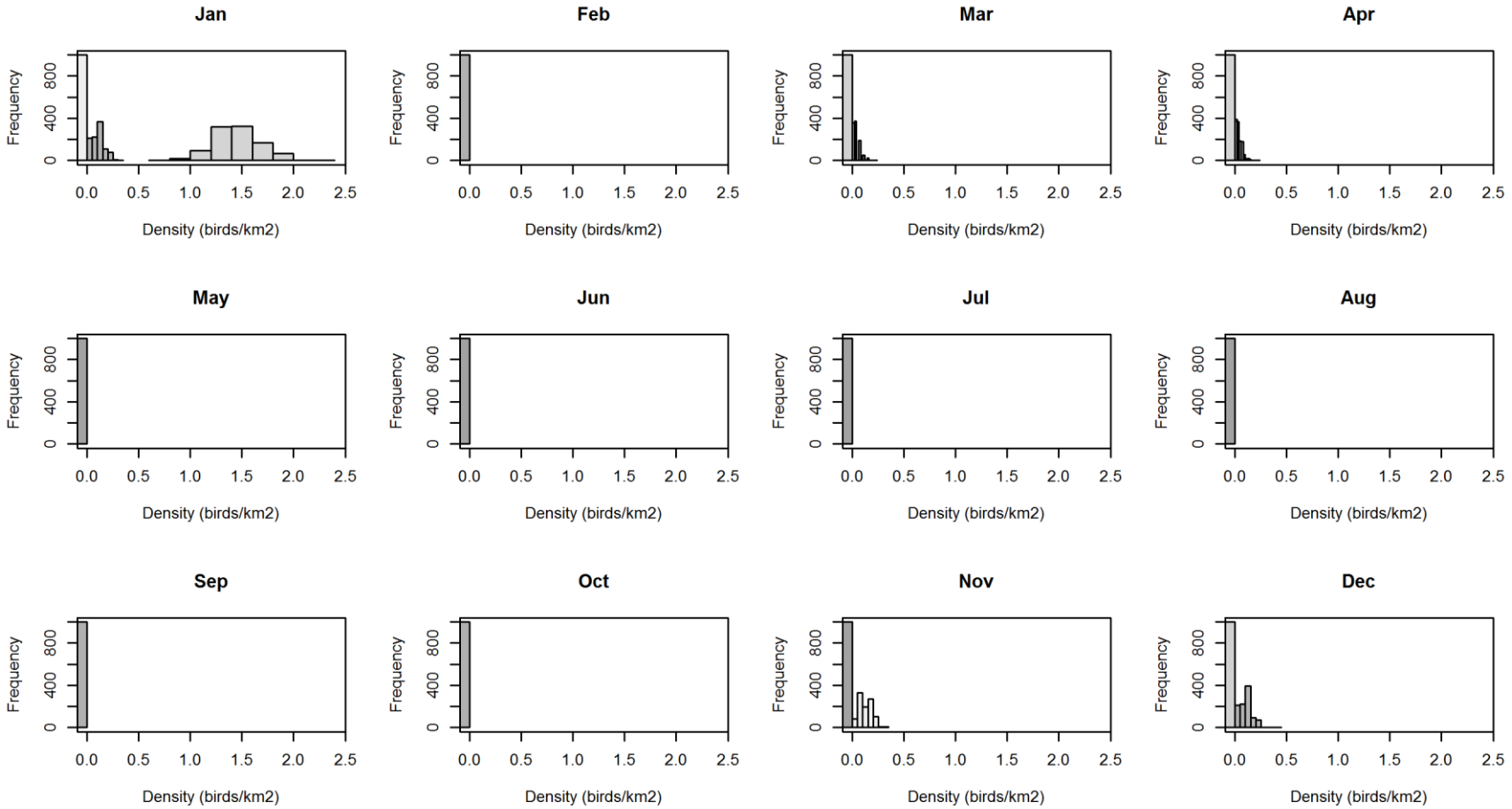


Figure 11. Norfolk Vanguard East, Herring Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

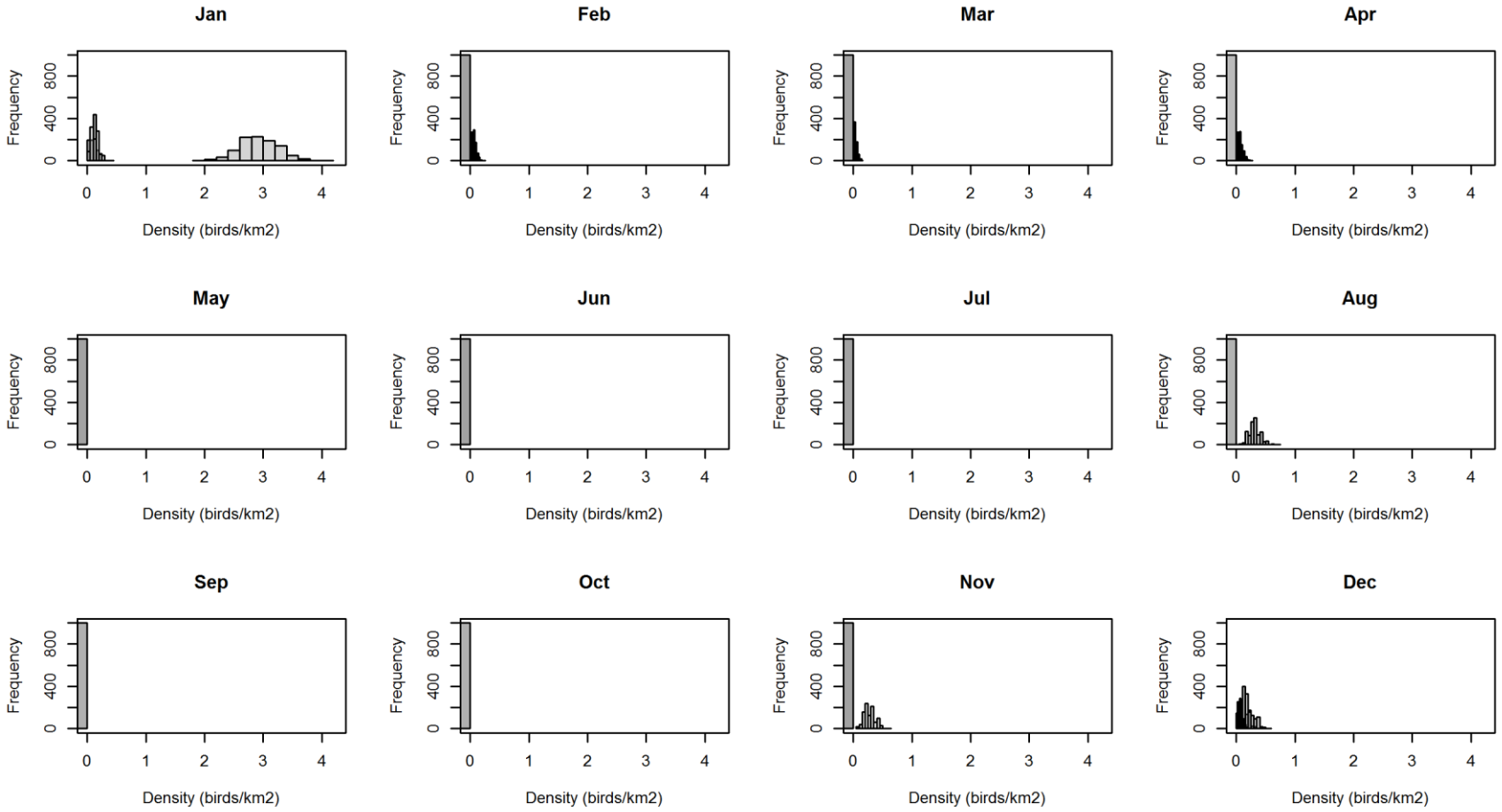


Figure 12. Norfolk Vanguard East, Great Black-backed Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

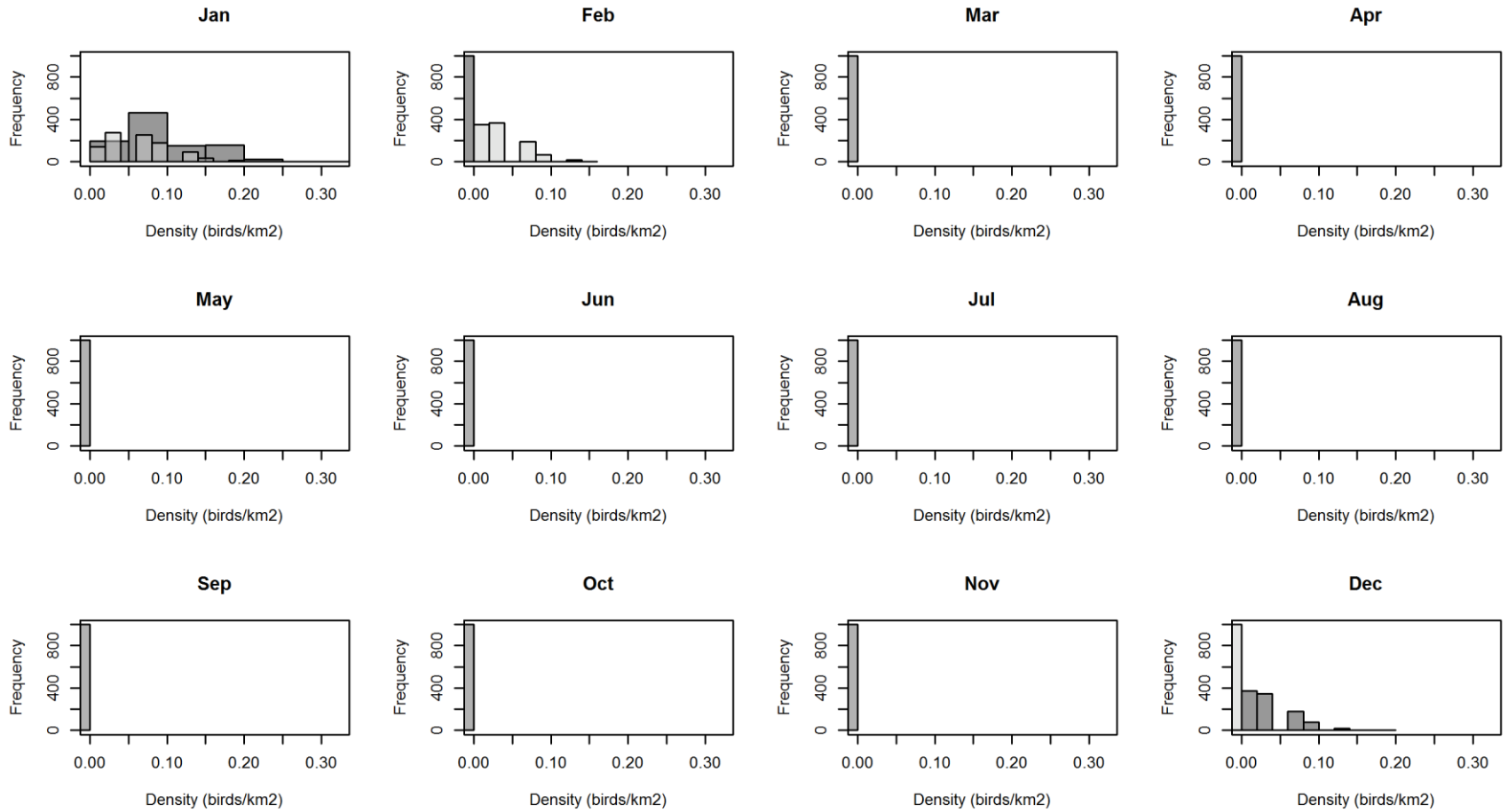


Figure 13. Norfolk Vanguard West, Red-throated diver bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

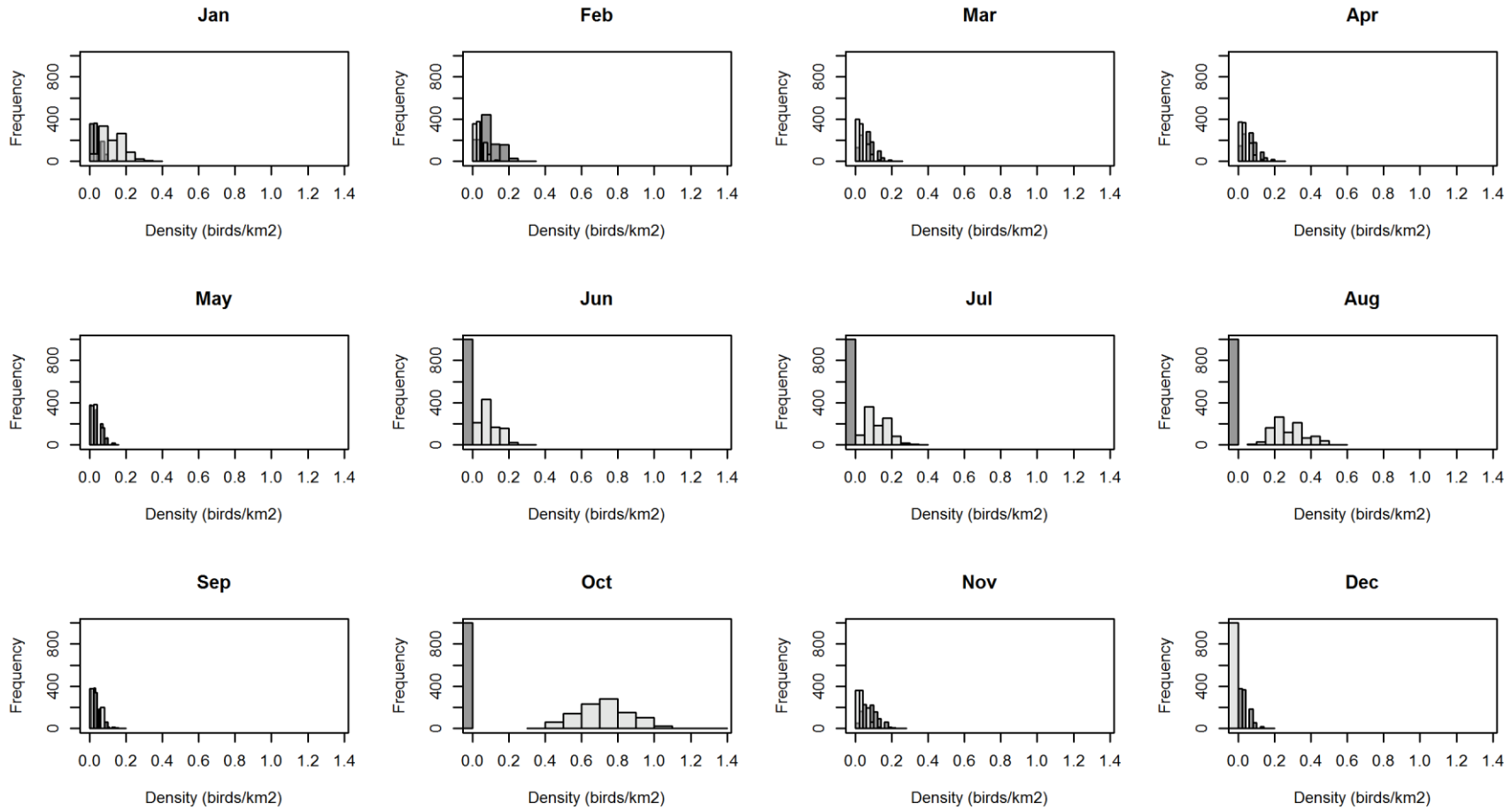


Figure 14. Norfolk Vanguard West, Fulmar bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

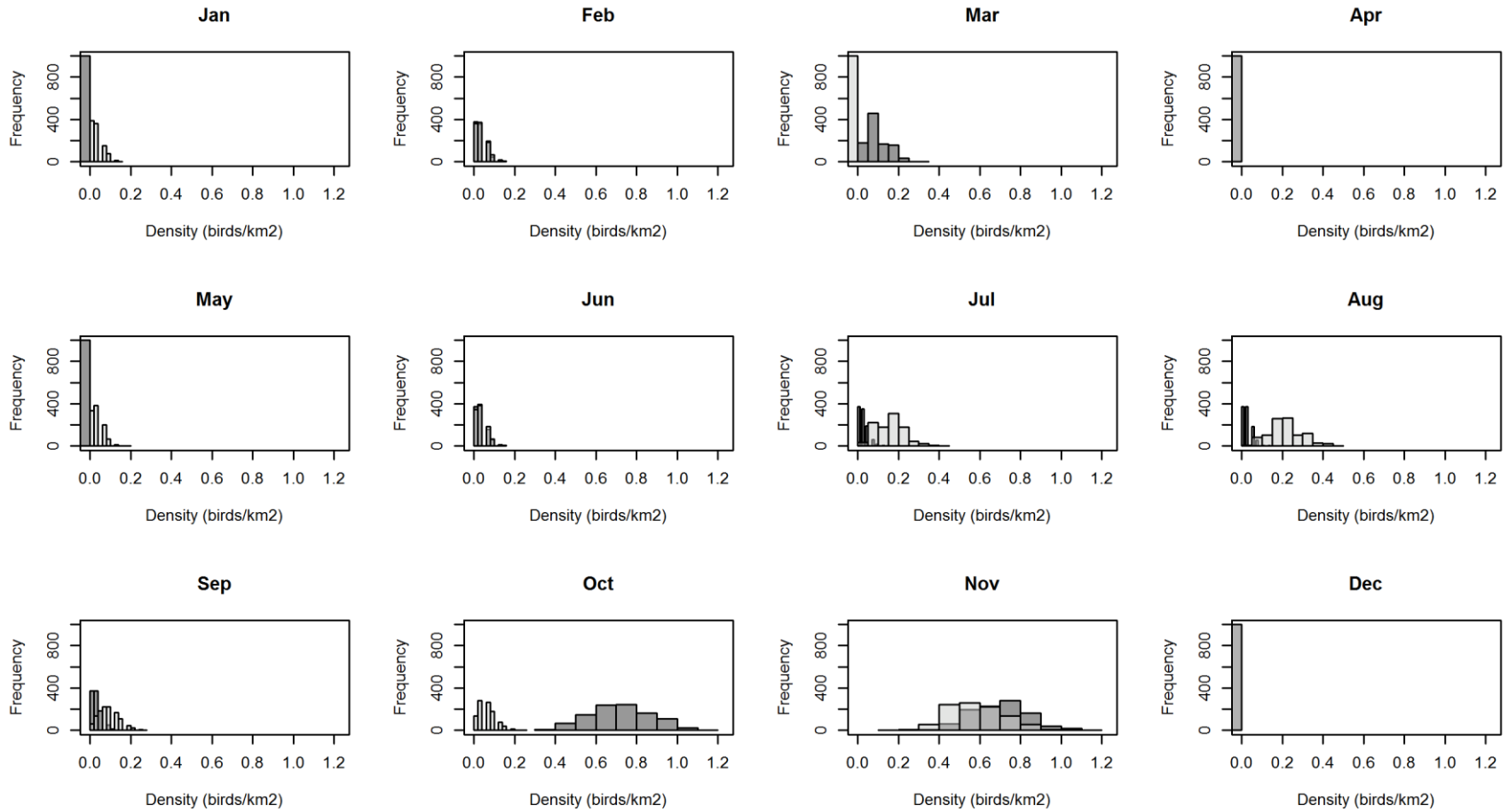


Figure 15. Norfolk Vanguard West, Gannet bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

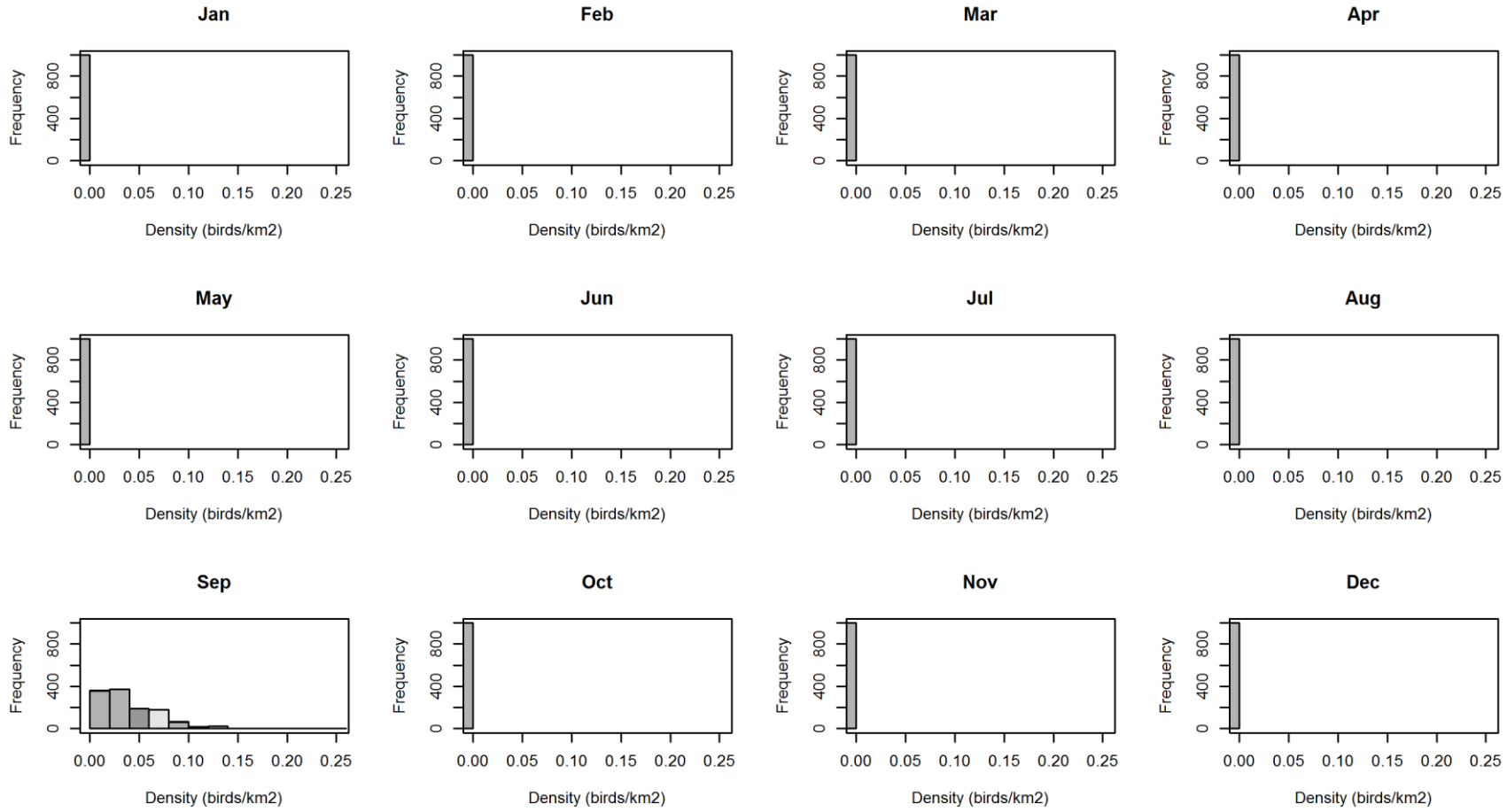


Figure 16. Norfolk Vanguard West, Great Skua bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

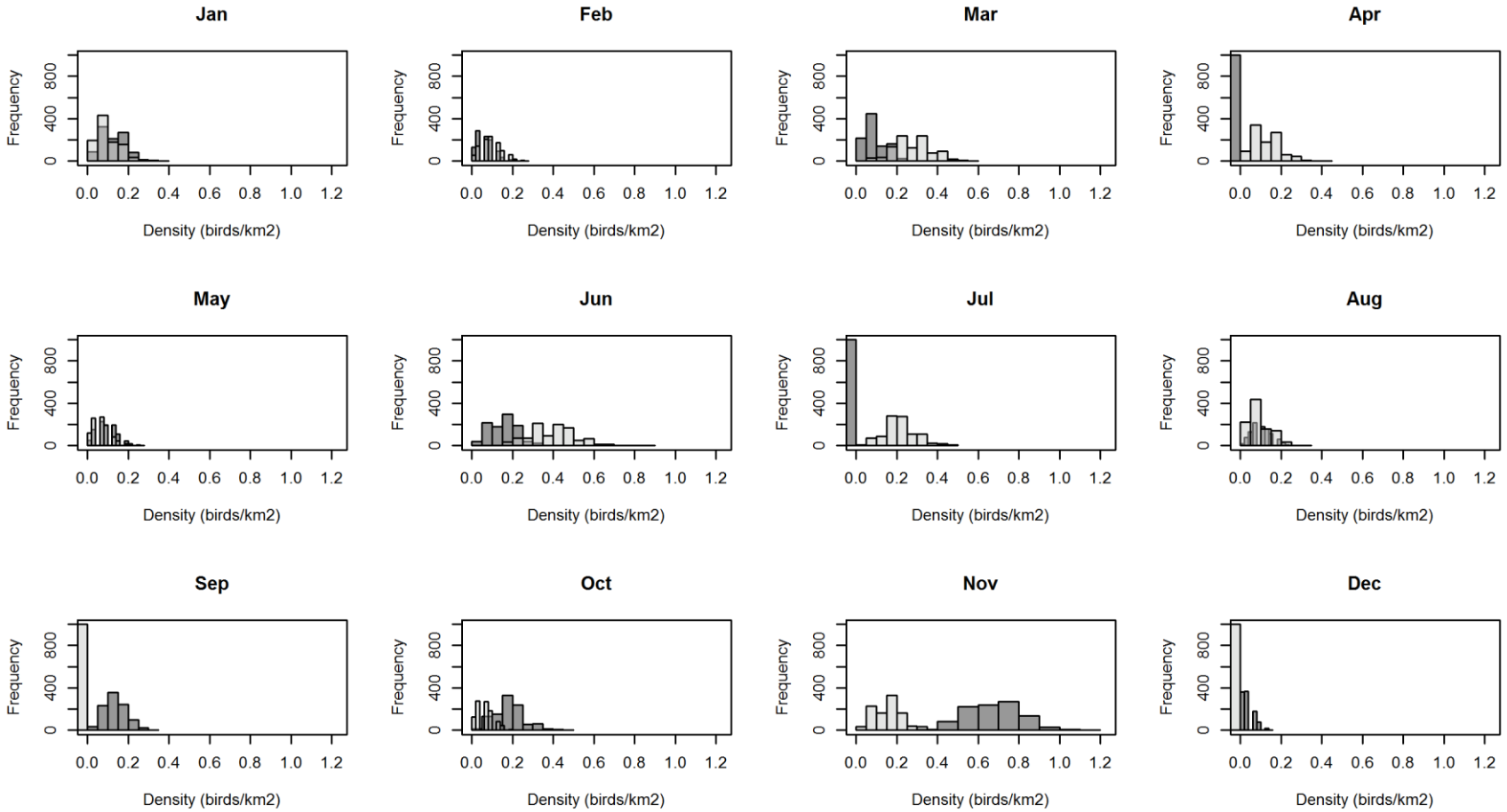


Figure 17. Norfolk Vanguard West, Kittiwake bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

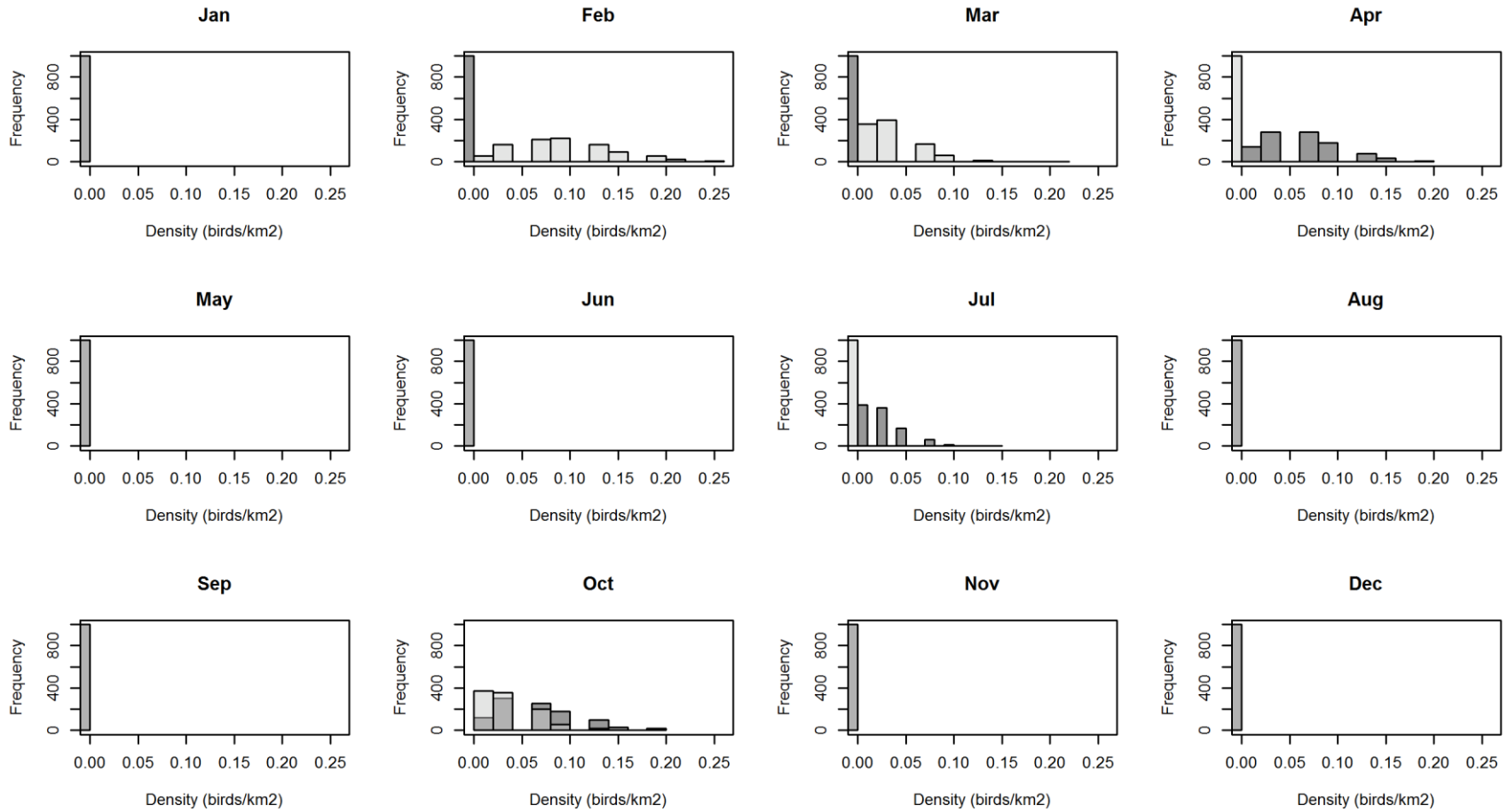


Figure 18. Norfolk Vanguard West, Black-headed Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

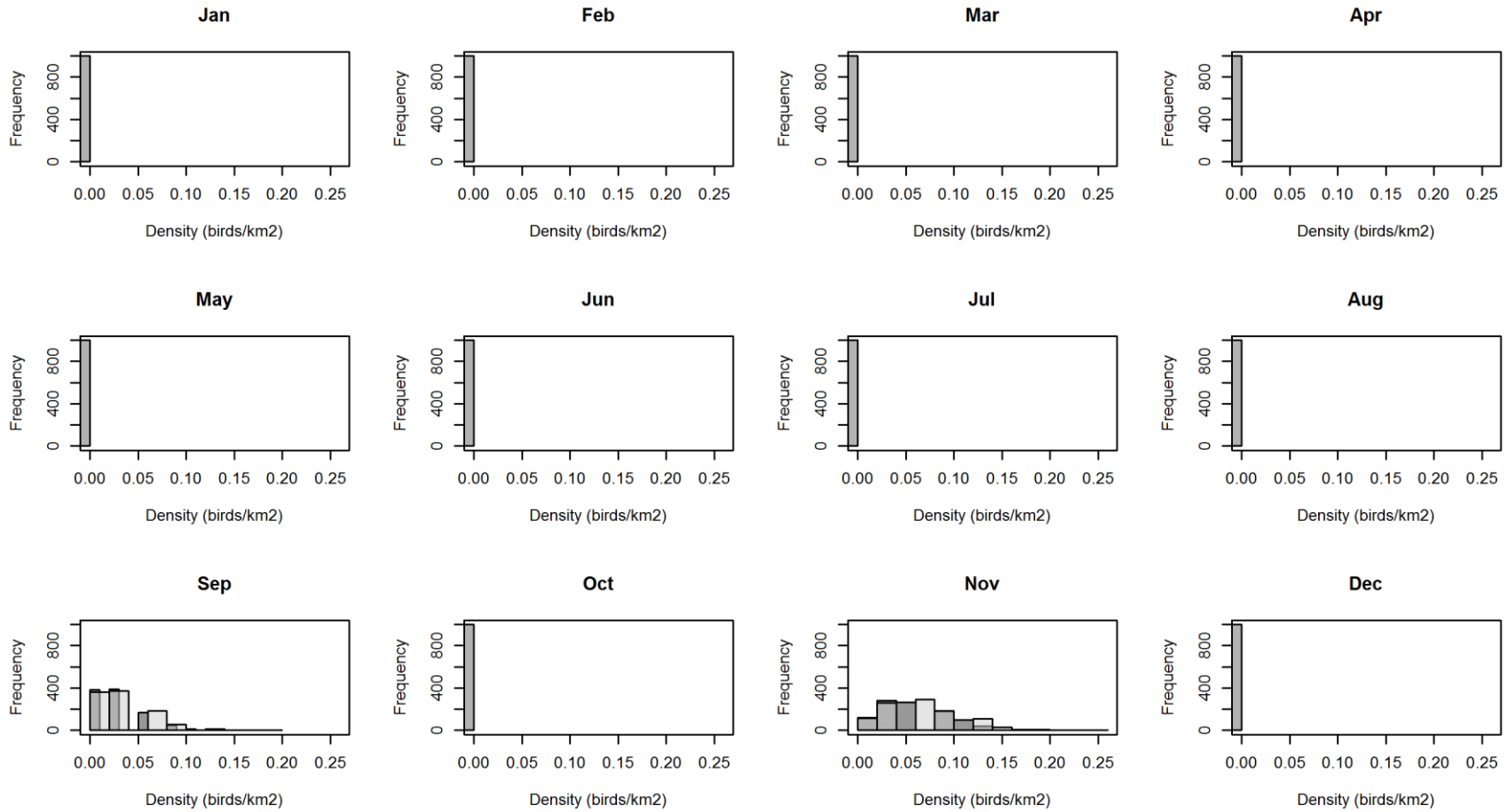


Figure 19. Norfolk Vanguard West, Little Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

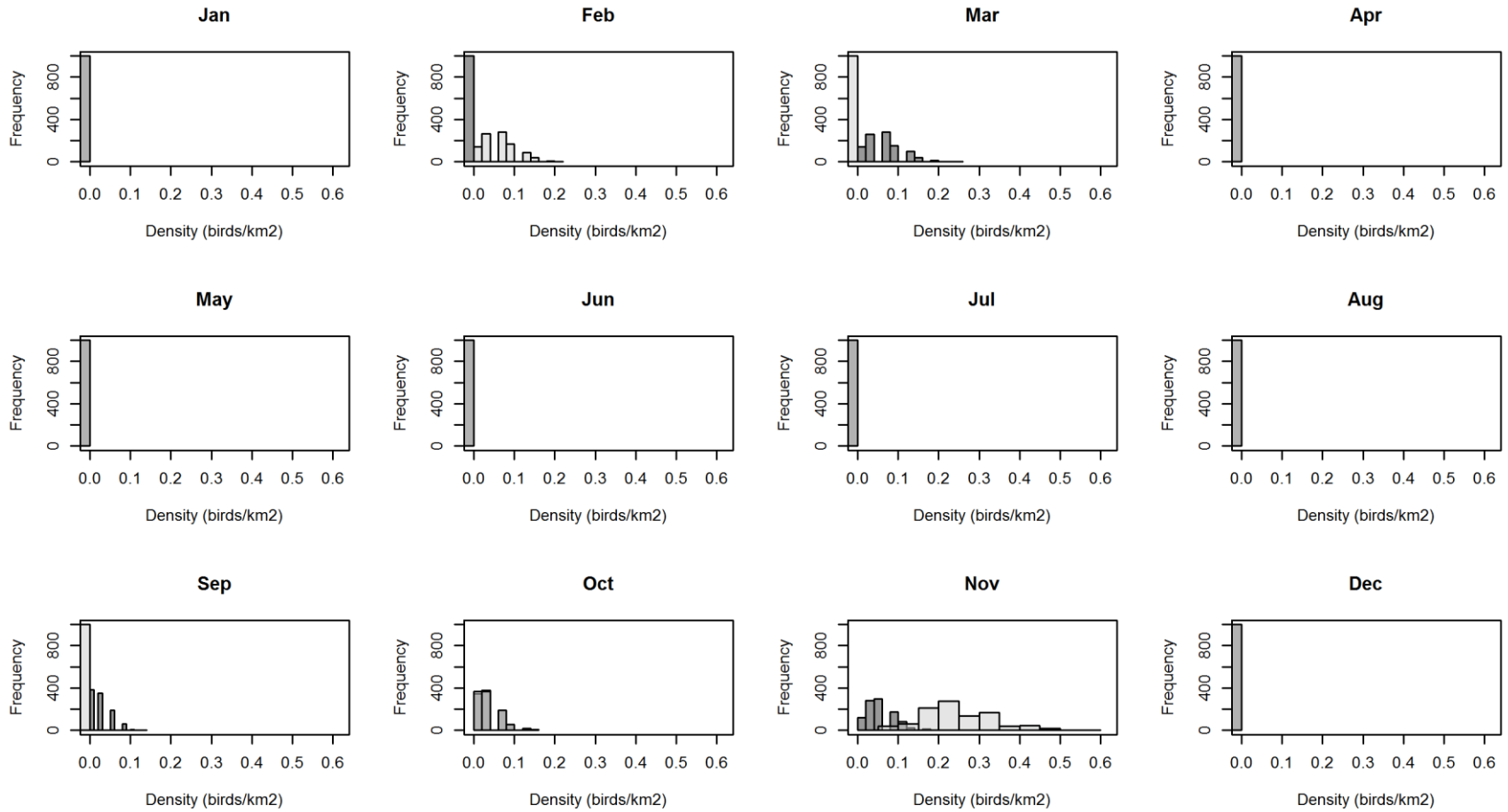


Figure 20. Norfolk Vanguard West, Common Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

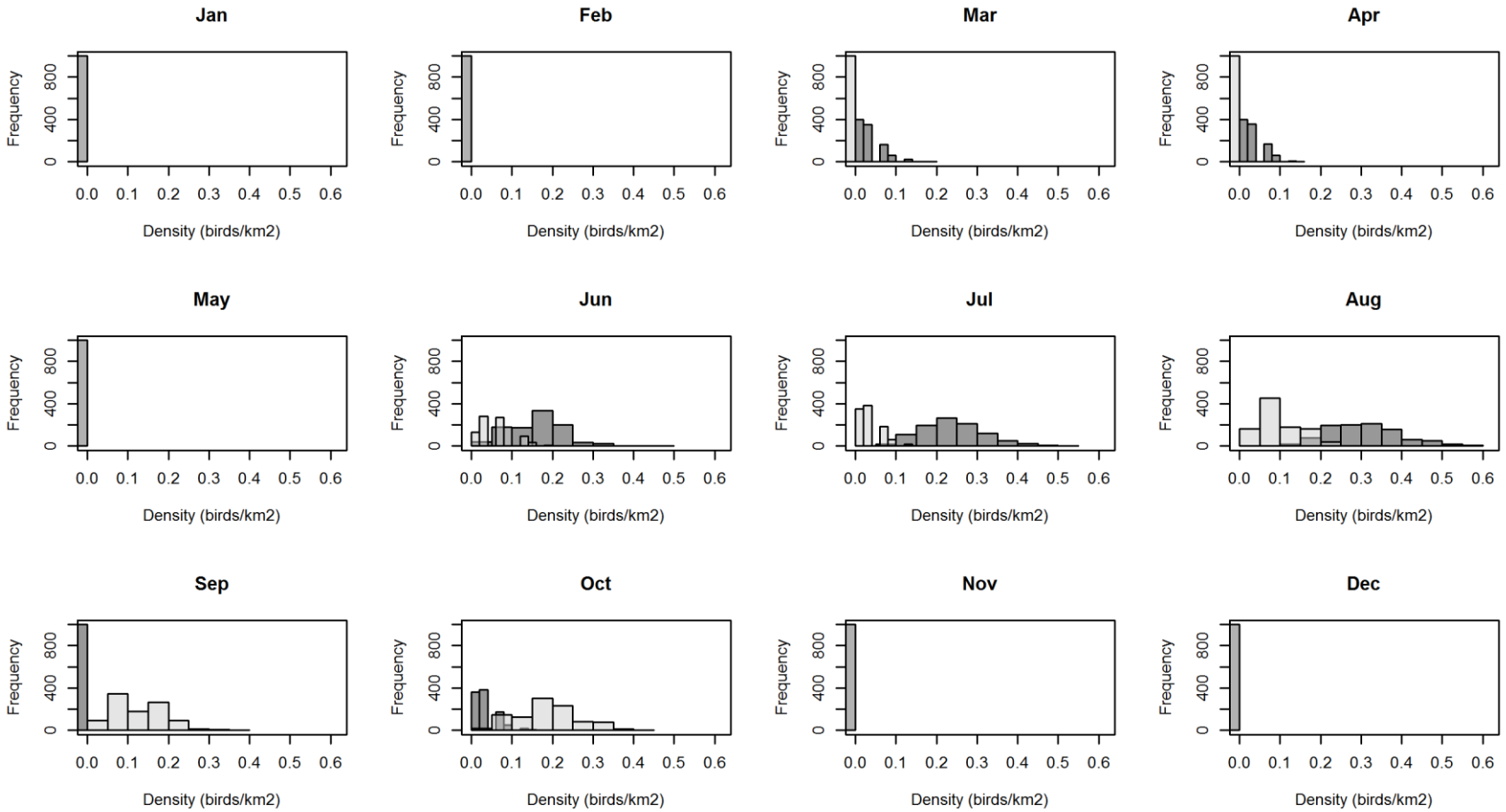


Figure 21. Norfolk Vanguard West, Lesser Black-backed Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

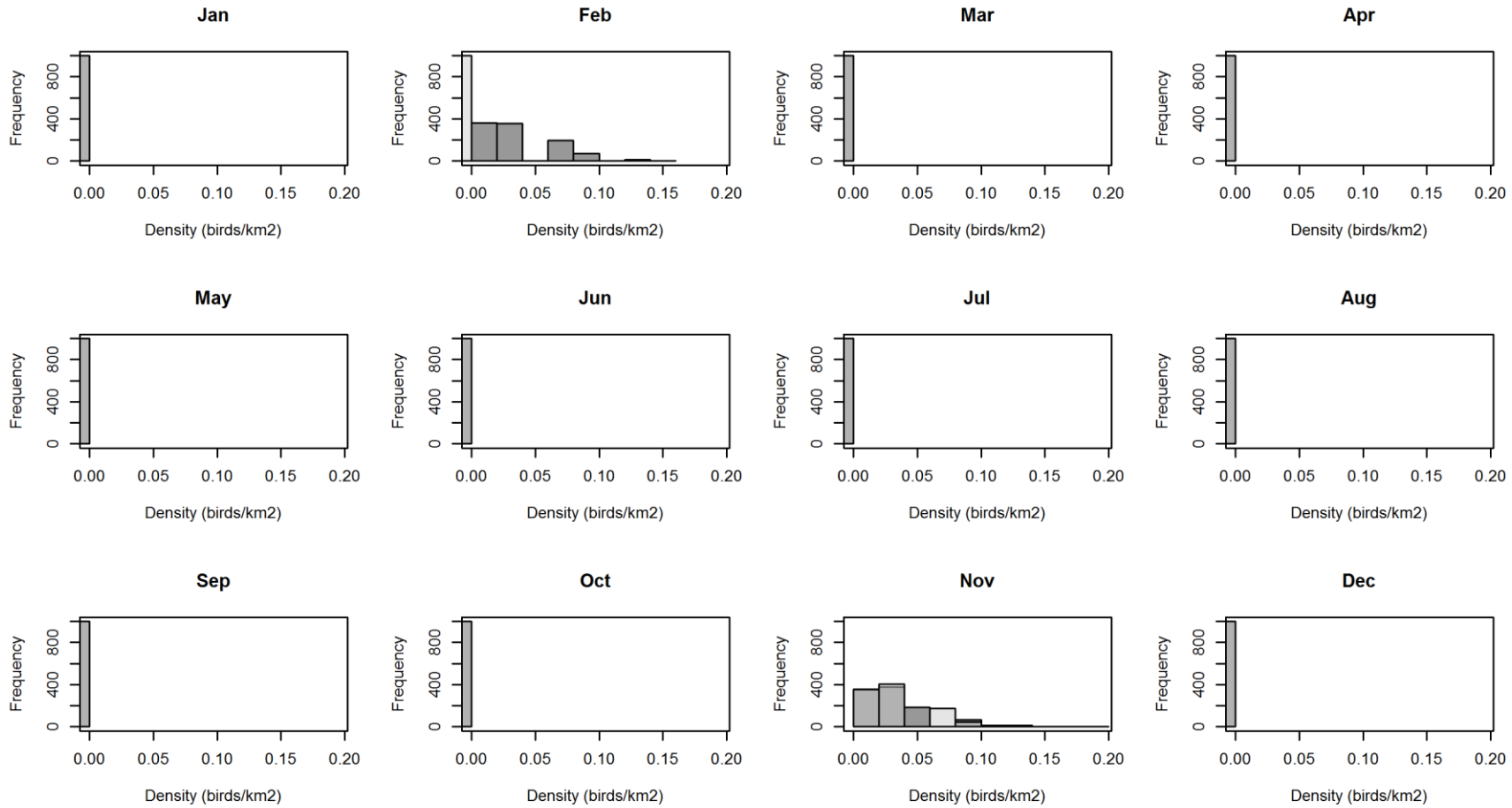


Figure 22. Norfolk Vanguard West, Herring Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

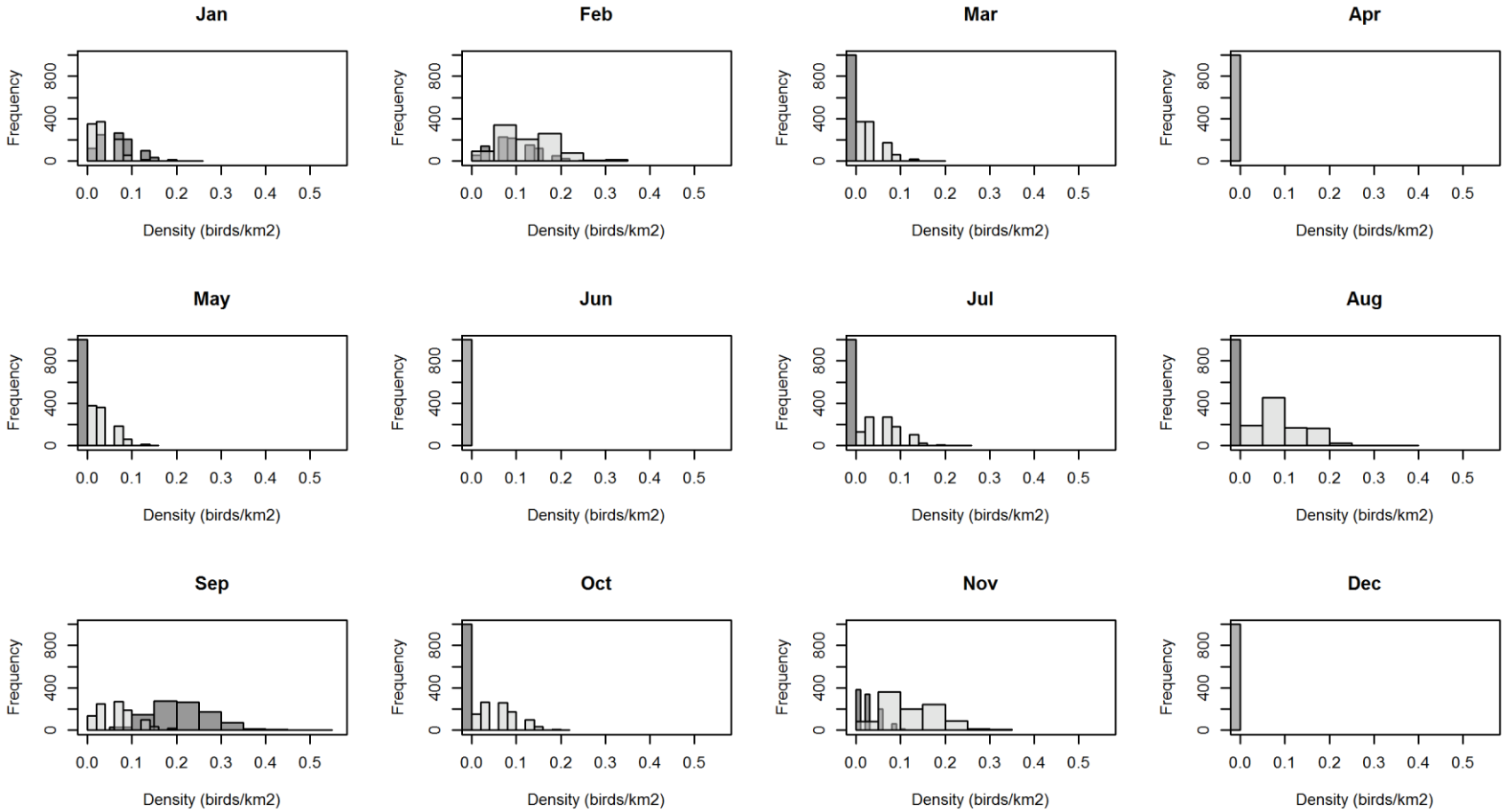


Figure 23. Norfolk Vanguard West, Great Black-backed Gull bootstrapped design based densities of birds in flight in each year and month of surveys (shading indicates data from different years).

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Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 4

NV East seabird collision modelling results

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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1	Draft	Mark Trinder	29/03/2018
2	Reviewed	Bob Furness	12/04/2018
3	Updated		
3.1	Revisions		
4	Internal Approval		
5	Final Client Approval		

1 INTRODUCTION

1. This appendix provides results of collision risk modelling (CRM) for the NV East wind farm.

2. Collision mortality estimates are presented for each month and summed across the year, produced using the Band CRM (2012) options 1 (site-based flight heights) and 2 (generic flight heights).

3. Modelling is presented for the 9MW and 20MW turbine options under consideration.

4. Uncertainty in model parameters has been incorporated using stochastic collision models with the following parameters generated as random values:

    - Seabird density (using the bootstrapped samples – see Appendix 13.1 Methods for details);
    - Proportions at collision height (option 2 only) using data from Johnston et al. (2014);
    - Avoidance rate (using the mean and variance advised in JNCC et al. 2014); and
    - Nocturnal activity, using:
        i. Gannet - species and season specific values (Furness et al. subm.);
        ii. Kittiwake – species and season specific values (Furness et al. in prep);
        iii. Large gulls – randomly selected as either 25% or 50% in each simulation.
        iv. All other species – fixed value (see Annex 3 for values).

5. The parameters listed in point 4 were simulated in combination and also individually (i.e. with the other three set to fixed values) to illustrate the relative contributions of each to the overall uncertainty in the collision results.

6. As a final run, all parameters were set to fixed values (i.e. median for density and flight height, mean for avoidance rate) to generate deterministic collision estimates.

7. The input parameter values are provided in Annex 3.

8. Table A4 provides a key to table contents.

Table A4. Key to collision mortality output table numbers, for all combinations of turbine model and input parameters.

Band option	Turbine (MW)	Uncertain parameters					
		Seabird density Flight height Avoidance rate Nocturnal activity	**Seabird density**	**Avoidance rate**	**Flight height**	**Nocturnal activity**	**N/A - deterministic**
2	**9**	1	2	3	4	5	6
	20	7	8	9	10	11	12
1	**9**	13	14	15	16	17	18
	20	19	20	21	22	23	24

Table 1. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-12.11)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-22.74)	0 (0-0)	0 (0-34.85)
Fulmar	0 (0-5.12)	0 (0-1.96)	0 (0-4.34)	0 (0-1.93)	0 (0-14.54)	0 (0-5.38)	0 (0-0.38)	0 (0-12)	0 (0-7.18)	0 (0-1.67)	0 (0-8.4)	0 (0-6.67)	0 (0-69.57)
Gannet	0 (0-5.07)	1.13 (0-7.53)	0 (0-6.18)	0.15 (0-8.45)	0 (0-15.67)	11.07 (0-56.97)	0 (0-5.42)	7.14 (0-25.08)	11.35 (0-35.81)	5.28 (0.62-24.32)	45.69 (14.17-252.69)	28.83 (0-80.84)	110.64 (14.79-524.03)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-2.51)	0 (0-5.59)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-8.1)
Great Skua	0 (0-0)	0 (0-0)	0 (0-4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.06 (0-11.41)	0 (0-4.66)	0 (0-0)	0 (0-0)	0.06 (0-20.07)
Kittiwake	27.54 (11.4-228.5)	28.84 (6.21-75.76)	14.7 (0-172.03)	5.18 (0-97.24)	15.64 (0-69.81)	3.35 (0-16.68)	1.86 (0-8.77)	0 (0-8.34)	0 (0-6.3)	1.28 (0-16.69)	41.65 (0-90.67)	18.39 (4.82-68.86)	158.43 (22.43-859.65)
Black-headed Gull	0 (0-7.68)	0 (0-0)	0 (0-6.46)	0 (0-0)	0 (0-5.29)	0 (0-0)	0 (0-6.12)	0 (0-0)	0 (0-0)	0 (0-3.55)	0 (0-6.33)	0 (0-0)	0 (0-35.43)
Little Gull	0 (0-0)	0 (0-2.6)	0 (0-0)	0 (0-0)	0 (0-37.25)	0 (0-0)	0 (0-0)	0.13 (0-37.4)	0 (0-2.69)	0 (0-0)	0 (0-10.11)	0 (0-0)	0.13 (0-90.05)
Common Gull	1.65 (0-13.75)	0 (0-0)	0 (0-15.24)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-18.9)	0 (0-7.22)	0 (0-5.68)	1.65 (0-60.79)
Lesser Black-backed Gull	2.29 (0-16.19)	0 (0-7.29)	0 (0-6.63)	0 (0-6.93)	0 (0-0)	0 (0-0)	0 (0-8.91)	6.81 (0-33.69)	0 (0-0)	0 (0-3.73)	0 (0-7.27)	0 (0-8.86)	9.1 (0-99.5)
Herring Gull	5.17 (0-131.35)	0 (0-0)	0 (0-7.21)	0 (0-7.46)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-13.93)	0 (0-12.12)	5.17 (0-172.07)
Great Black-backed Gull	10.9 (1.43-307.69)	0 (0-8.93)	0 (0-7.06)	0 (0-12.8)	0 (0-0)	0 (0-0)	0 (0-0)	1.13 (0-51.5)	0 (0-0)	0 (0-0)	0 (0-33.73)	7.93 (0-30.02)	19.96 (1.43-451.73)

Table 2. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-6.9)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-11.09)	0 (0-0)	0 (0-17.99)
Fulmar	0.47 (0-2.48)	0.21 (0-1.39)	0.5 (0-2.2)	0.2 (0-2.33)	1.71 (0-5.71)	0 (0-3.71)	0 (0-0.65)	1.48 (0.3-3.52)	0.64 (0-2.68)	0.19 (0-1.14)	0.96 (0-2.36)	0.74 (0-2.69)	7.1 (0.3-30.86)
Gannet	0 (0-6.82)	1.55 (0-7.74)	0 (0-5.67)	0 (0-8.07)	0 (0-14.55)	11.51 (0-49.9)	0 (0-5.49)	8.84 (0-22.11)	16.98 (0-33.97)	7.01 (1.37-26.32)	58.14 (33.74-251.37)	54.96 (0-81.49)	158.99 (35.11-513.5)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-1.44)	0 (0-2.99)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-4.43)
Great Skua	0 (0-0)	0 (0-0)	0 (0-3.13)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0-6.76)	0 (0-2.78)	0 (0-0)	0 (0-0)	0.92 (0-12.67)
Kittiwake	39.78 (19.89-279.25)	41.37 (10.58-90.51)	19.67 (0-184.57)	5.79 (0-98.38)	16.68 (2.38-69.48)	3.71 (0-18.53)	1.78 (0-10.25)	0 (0-9.52)	0 (0-7.06)	1.91 (0-21.04)	65.1 (0-110.8)	27.99 (7.87-92.07)	223.78 (40.72-991.46)
Black-headed Gull	0 (0-5.43)	0 (0-0)	0 (0-5.08)	0 (0-0)	0 (0-4.31)	0 (0-0)	0 (0-4.29)	0 (0-0)	0 (0-0)	0 (0-2.3)	0 (0-5.6)	0 (0-0)	0 (0-27.01)
Little Gull	0 (0-0)	0 (0-1.77)	0 (0-0)	0 (0-0)	0 (0-24.34)	0 (0-0)	0 (0-0)	2.28 (0-22.82)	0 (0-1.66)	0 (0-0)	0 (0-8.37)	0 (0-0)	2.28 (0-58.96)
Common Gull	2.22 (0-14.52)	0 (0-0)	0 (0-14.65)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-16.29)	0 (0-6.42)	0 (0-6.39)	2.22 (0-58.27)
Lesser Black-backed Gull	2 (0-15.87)	0 (0-6.94)	0 (0-7.71)	0 (0-6.53)	0 (0-0)	0 (0-0)	0 (0-8.96)	8.9 (0-28.94)	0 (0-0)	0 (0-4.51)	0 (0-7.08)	0 (0-9.04)	10.9 (0-95.58)
Herring Gull	6.92 (0-120.09)	0 (0-0)	0 (0-8.88)	0 (0-7.13)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-14.27)	0 (0-13.69)	6.92 (0-164.06)
Great Black-backed Gull	12.4 (2.48-269.07)	0 (0-9.36)	0 (0-8.17)	0 (0-11.73)	0 (0-0)	0 (0-0)	0 (0-0)	1.5 (0-48.03)	0 (0-0)	0 (0-0)	0 (0-33.43)	10.69 (0-30.49)	24.59 (2.48-410.28)

Table 3. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.47 (0.38-0.56)	0.21 (0.17-0.26)	0.5 (0.41-0.6)	0.2 (0.17-0.25)	1.86 (1.51-2.23)	0 (0-0)	0 (0-0)	1.48 (1.21-1.8)	0.64 (0.52-0.78)	0.19 (0.15-0.23)	0.95 (0.78-1.15)	0.73 (0.6-0.89)	7.23 (5.9-8.75)
Gannet	0 (0-0)	1.53 (1.04-2.15)	0 (0-0)	1.99 (1.35-2.81)	0 (0-0)	13.1 (8.86-18.33)	0 (0-0)	9.33 (6.38-13.25)	16.77 (11.5-23.45)	6.97 (4.7-9.78)	57.78 (39.69-80.6)	54.25 (37.29-75.84)	161.72 (110.81-226.21)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.91 (0.75-1.11)	0 (0-0)	0 (0-0)	0 (0-0)	0.91 (0.75-1.11)
Kittiwake	39.32 (26.66-55.31)	40.82 (28.01-57.14)	19.47 (13.19-27.47)	5.76 (3.92-8.08)	16.52 (11.25-23.19)	3.67 (2.54-5.13)	1.75 (1.21-2.46)	0 (0-0)	0 (0-0)	1.89 (1.29-2.65)	64.3 (44.16-89.77)	27.76 (19.13-38.54)	221.26 (151.36-309.74)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.23 (1.31-3.5)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.23 (1.31-3.5)
Common Gull	2.17 (1.29-3.45)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.17 (1.29-3.45)
Lesser Black-backed Gull	1.99 (1.31-2.88)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.8 (5.78-12.73)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.79 (7.09-15.61)
Herring Gull	6.83 (4.55-9.82)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.83 (4.55-9.82)
Great Black-backed Gull	12.25 (8.07-17.7)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.48 (0.98-2.17)	0 (0-0)	0 (0-0)	0 (0-0)	9.38 (6.13-13.52)	23.11 (15.18-33.39)

Table 4. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0 (0-6.61)	0 (0-2.67)	0 (0-5.37)	0 (0-2.48)	0 (0-26.45)	0 (0-0)	0 (0-0)	0 (0-12.95)	0 (0-4.97)	0 (0-1.88)	0 (0-14.21)	0 (0-7.31)	0 (0-84.9)
Gannet	0 (0-0)	1.49 (0.67-2.76)	0 (0-0)	1.98 (0.9-3.56)	0 (0-0)	12.82 (5.93-23.54)	0 (0-0)	9.17 (4.13-16.81)	16.24 (7.63-29.28)	6.73 (3.05-12.21)	56.23 (25.37-103.7)	52.92 (24.25-97.78)	157.58 (71.93-289.64)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.54 (0.01-3.84)	0 (0-0)	0 (0-0)	0 (0-0)	0.54 (0.01-3.84)
Kittiwake	39.7 (30.49-50.07)	41.24 (31.53-52.19)	19.48 (15.09-24.83)	5.77 (4.41-7.32)	16.63 (12.86-21.04)	3.69 (2.81-4.65)	1.77 (1.36-2.25)	0 (0-0)	0 (0-0)	1.9 (1.47-2.41)	64.78 (49.45-82.13)	27.92 (21.45-35.4)	222.88 (170.92-282.29)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.07 (0.42-5.44)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.07 (0.42-5.44)
Common Gull	2.17 (1.47-3.07)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.17 (1.47-3.07)
Lesser Black-backed Gull	1.93 (0.84-3.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.78 (3.91-15.38)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.71 (4.75-18.78)
Herring Gull	6.88 (4.3-9.77)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.88 (4.3-9.77)
Great Black-backed Gull	12.28 (8.1-16.96)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.49 (0.99-2.05)	0 (0-0)	0 (0-0)	0 (0-0)	9.42 (6.41-13.02)	23.19 (15.5-32.03)

Table 5. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.47 (0.47-0.47)	0.21 (0.21-0.21)	0.5 (0.5-0.5)	0.2 (0.2-0.2)	1.87 (1.87-1.87)	0 (0-0)	0 (0-0)	1.48 (1.48-1.48)	0.64 (0.64-0.64)	0.19 (0.19-0.19)	0.96 (0.96-0.96)	0.74 (0.74-0.74)	7.26 (7.26-7.26)
Gannet	0 (0-0)	1.17 (1.16-1.19)	0 (0-0)	1.75 (1.72-1.85)	0 (0-0)	12.15 (11.99-12.53)	0 (0-0)	8.42 (8.26-8.78)	14.38 (14-15.27)	5.49 (5.45-5.55)	42.14 (41.67-42.77)	37.69 (37.16-38.38)	123.19 (121.41-126.32)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0.92-0.92)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0.92-0.92)
Kittiwake	26.88 (25.79-28.09)	29.92 (28.95-31)	15.65 (14.49-17.12)	4.86 (4.59-5.19)	14.59 (14-15.35)	3.31 (3.2-3.45)	1.58 (1.52-1.65)	0 (0-0)	0 (0-0)	1.42 (1.38-1.47)	45.12 (43.43-46.97)	18.48 (17.7-19.37)	161.81 (155.05-169.66)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (2.28-2.28)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (2.28-2.28)
Common Gull	2.22 (2.22-2.22)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.22 (2.22-2.22)
Lesser Black-backed Gull	2 (1.51-2)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7.84 (7.84-8.9)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.84 (9.35-10.9)
Herring Gull	5.22 (5.22-6.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.22 (5.22-6.92)
Great Black-backed Gull	9.36 (9.36-12.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.41 (1.32-1.5)	0 (0-0)	0 (0-0)	0 (0-0)	7.06 (7.06-9.5)	17.83 (17.74-23.4)

Table 6. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.47 (0.47-0.47)	0.21 (0.21-0.21)	0.5 (0.5-0.5)	0.2 (0.2-0.2)	1.87 (1.87-1.87)	0 (0-0)	0 (0-0)	1.48 (1.48-1.48)	0.64 (0.64-0.64)	0.19 (0.19-0.19)	0.96 (0.96-0.96)	0.74 (0.74-0.74)	7.26 (7.26-7.26)
Gannet	0 (0-0)	1.55 (1.55-1.55)	0 (0-0)	2.02 (2.02-2.02)	0 (0-0)	13.24 (13.24-13.24)	0 (0-0)	9.52 (9.52-9.52)	16.98 (16.98-16.98)	7.01 (7.01-7.01)	58.14 (58.14-58.14)	54.96 (54.96-54.96)	163.42 (163.42-163.42)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0.92-0.92)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0.92-0.92)
Kittiwake	39.78 (39.78-39.78)	41.37 (41.37-41.37)	19.67 (19.67-19.67)	5.79 (5.79-5.79)	16.68 (16.68-16.68)	3.71 (3.71-3.71)	1.78 (1.78-1.78)	0 (0-0)	0 (0-0)	1.91 (1.91-1.91)	65.1 (65.1-65.1)	27.99 (27.99-27.99)	223.78 (223.78-223.78)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (2.28-2.28)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (2.28-2.28)
Common Gull	2.22 (2.22-2.22)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.22 (2.22-2.22)
Lesser Black-backed Gull	2 (2-2)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.9 (8.9-8.9)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.9 (10.9-10.9)
Herring Gull	6.92 (6.92-6.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.92 (6.92-6.92)
Great Black-backed Gull	12.4 (12.4-12.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.5 (1.5-1.5)	0 (0-0)	0 (0-0)	0 (0-0)	9.5 (9.5-9.5)	23.4 (23.4-23.4)

Table 7. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-3.97)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-13.14)	0 (0-0)	0 (0-17.11)
Fulmar	0 (0-2.65)	0 (0-1.33)	0 (0-2.46)	0 (0-0.97)	0 (0-9.44)	0 (0-2.61)	0 (0-0.26)	0 (0-6.68)	0 (0-4)	0 (0-0.55)	0 (0-4.52)	0 (0-3.34)	0 (0-38.81)
Gannet	0.16 (0-2.76)	0.56 (0-3.84)	0 (0-3.17)	0.36 (0-4.46)	0 (0-8.16)	5.48 (0-29.08)	0 (0-2.85)	3.58 (0-13.15)	5.87 (0-19.57)	2.68 (0.31-12.23)	23.24 (6.99-132.8)	15.39 (0-42.17)	57.32 (7.3-274.24)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-1.29)	0 (0-2.84)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-4.13)
Great Skua	0 (0-0)	0 (0-0)	0 (0-2.04)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.03 (0-6.44)	0 (0-2.36)	0 (0-0)	0 (0-0)	0.03 (0-10.84)
Kittiwake	14.69 (6.24-124.69)	15.63 (3.46-40.11)	8.01 (0-92.99)	2.8 (0-52.38)	8.34 (0-37.94)	1.78 (0-9.28)	0.97 (0-4.77)	0 (0-4.33)	0.17 (0-3.33)	0.69 (0-9.09)	22.26 (0-49.53)	9.76 (2.69-37.85)	85.1 (12.39-466.29)
Black-headed Gull	0 (0-3.61)	0 (0-0)	0 (0-3.31)	0 (0-0)	0 (0-2.64)	0 (0-0)	0 (0-3.24)	0 (0-0)	0 (0-0)	0 (0-1.79)	0 (0-3.13)	0 (0-0)	0 (0-17.72)
Little Gull	0 (0-0)	0 (0-1.29)	0 (0-0)	0 (0-0)	0 (0-21.45)	0 (0-0)	0 (0-0)	0.05 (0-19.32)	0 (0-1.42)	0 (0-0)	0 (0-6)	0 (0-0)	0.05 (0-49.48)
Common Gull	0.92 (0-7.91)	0 (0-0)	0 (0-8.16)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-10.31)	0 (0-3.69)	0 (0-3.15)	0.92 (0-33.22)
Lesser Black-backed Gull	1.11 (0-8.48)	0 (0-3.74)	0 (0-3.55)	0 (0-3.59)	0 (0-0)	0 (0-0)	0 (0-4.63)	3.58 (0-17.45)	0 (0-0)	0 (0-1.99)	0 (0-3.95)	0 (0-4.91)	4.69 (0-52.29)
Herring Gull	2.7 (0-70.22)	0 (0-0)	0 (0-3.86)	0 (0-3.64)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-7.32)	0 (0-6.17)	2.7 (0-91.21)
Great Black-backed Gull	5.57 (0.77-158.24)	0 (0-4.56)	0 (0-3.69)	0 (0-6.49)	0 (0-0)	0 (0-0)	0 (0-0)	0.58 (0-25.84)	0 (0-0)	0 (0-0)	0 (0-17.3)	4.06 (0-15.07)	10.21 (0.77-231.19)

Table 8. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-3.7)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-5.95)	0 (0-0)	0 (0-9.65)
Fulmar	0.25 (0-1.32)	0.11 (0-0.74)	0.26 (0-1.17)	0.11 (0-1.23)	1.05 (0-3.03)	0 (0-1.79)	0 (0-0.35)	0.79 (0-1.86)	0.34 (0-1.42)	0.1 (0-0.61)	0.51 (0-1.25)	0.39 (0-1.53)	3.91 (0-16.3)
Gannet	0.8 (0-3.48)	0.79 (0-4.85)	0 (0-2.9)	0 (0-4.12)	0 (0-7.43)	6.76 (0-25.48)	0 (0-2.8)	4.86 (0-11.29)	8.67 (0-17.35)	3.58 (0.7-13.44)	29.68 (17.23-128.34)	28.06 (0-41.61)	83.2 (17.93-263.09)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0.77)	0 (0-1.61)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-2.38)
Great Skua	0 (0-0)	0 (0-0)	0 (0-1.68)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0-3.63)	0 (0-1.5)	0 (0-0)	0 (0-0)	0.49 (0-6.81)
Kittiwake	21.46 (10.73-150.7)	22.33 (5.71-48.84)	10.62 (0-98.52)	3.12 (0-53.09)	9 (0-37.5)	2 (0-10)	0.96 (0-5.53)	0 (0-5.14)	0.9 (0-3.81)	1.03 (0-11.35)	35.13 (0-60.74)	15.1 (4.25-49.68)	121.65 (20.69-534.9)
Black-headed Gull	0 (0-2.89)	0 (0-0)	0 (0-2.71)	0 (0-0)	0 (0-2.3)	0 (0-0)	0 (0-2.29)	0 (0-0)	0 (0-0)	0 (0-1.23)	0 (0-2.99)	0 (0-0)	0 (0-14.41)
Little Gull	0 (0-0)	0 (0-0.96)	0 (0-0)	0 (0-0)	0 (0-13.33)	0 (0-0)	0 (0-0)	1.25 (0-11.87)	0 (0-1.36)	0 (0-0)	0 (0-4.58)	0 (0-0)	1.25 (0-32.1)
Common Gull	1.2 (0-7.86)	0 (0-0)	0 (0-7.93)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-8.82)	0 (0-3.47)	0 (0-3.46)	1.2 (0-31.54)
Lesser Black-backed Gull	1.04 (0-8.26)	0 (0-3.61)	0 (0-4.01)	0 (0-3.4)	0 (0-0)	0 (0-0)	0 (0-4.66)	4.63 (0-15.06)	0 (0-0)	0 (0-2.35)	0 (0-3.69)	0 (0-4.71)	5.67 (0-49.75)
Herring Gull	3.59 (0-63.68)	0 (0-0)	0 (0-4.61)	0 (0-3.7)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-7.41)	0 (0-5.92)	3.59 (0-85.32)
Great Black-backed Gull	6.41 (1.28-137.59)	0 (0-4.84)	0 (0-2.82)	0 (0-6.07)	0 (0-0)	0 (0-0)	0 (0-0)	0.78 (0-23.29)	0 (0-0)	0 (0-0)	0 (0-17.29)	4.91 (0-14.19)	12.1 (1.28-206.09)

Table 9. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.25 (0.2-0.3)	0.11 (0.09-0.14)	0.26 (0.21-0.32)	0.11 (0.09-0.13)	0.99 (0.81-1.19)	0 (0-0)	0 (0-0)	0.78 (0.64-0.95)	0.34 (0.28-0.41)	0.1 (0.08-0.12)	0.51 (0.41-0.61)	0.39 (0.32-0.47)	3.84 (3.13-4.64)
Gannet	0 (0-0)	0.78 (0.54-1.1)	0 (0-0)	1.02 (0.69-1.43)	0 (0-0)	6.66 (4.54-9.23)	0 (0-0)	4.81 (3.2-6.7)	8.62 (5.87-12.03)	3.55 (2.42-4.94)	29.45 (20.01-41.86)	27.73 (19.01-39.14)	82.62 (56.28-116.43)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0.4-0.59)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0.4-0.59)
Kittiwake	21.11 (14.59-29.77)	22.12 (14.93-31.1)	10.46 (7.25-14.71)	3.09 (2.12-4.32)	8.9 (6.03-12.56)	1.97 (1.36-2.75)	0.95 (0.64-1.33)	0 (0-0)	0 (0-0)	1.02 (0.69-1.44)	34.56 (23.77-48.19)	14.91 (10.13-21.14)	119.09 (81.51-167.31)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (0.71-1.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (0.71-1.92)
Common Gull	1.18 (0.7-1.86)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.18 (0.7-1.86)
Lesser Black-backed Gull	1.03 (0.68-1.47)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.57 (3.03-6.63)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.6 (3.71-8.1)
Herring Gull	3.54 (2.31-5.13)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.54 (2.31-5.13)
Great Black-backed Gull	6.32 (4.16-9.21)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.77 (0.51-1.11)	0 (0-0)	0 (0-0)	0 (0-0)	4.81 (3.16-7.04)	11.9 (7.83-17.36)

Table 10. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0 (0-3.07)	0 (0-0.93)	0 (0-2.48)	0 (0-1.24)	0 (0-9.59)	0 (0-0)	0 (0-0)	0 (0-8.17)	0 (0-4.52)	0 (0-1.01)	0 (0-4.88)	0 (0-3.82)	0 (0-39.71)
Gannet	0 (0-0)	0.76 (0.34-1.41)	0 (0-0)	1 (0.46-1.81)	0 (0-0)	6.61 (2.94-11.83)	0 (0-0)	4.7 (2.16-8.49)	8.45 (3.83-15.26)	3.45 (1.59-6.29)	28.68 (12.91-51.6)	27.17 (12.34-49.2)	80.82 (36.57-145.89)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.29 (0-2.06)	0 (0-0)	0 (0-0)	0 (0-0)	0.29 (0-2.06)
Kittiwake	21.39 (16.48-27.06)	22.2 (17.13-28.33)	10.56 (8.12-13.34)	3.11 (2.38-3.93)	8.98 (6.96-11.28)	2 (1.54-2.51)	0.96 (0.74-1.21)	0 (0-0)	0 (0-0)	1.03 (0.79-1.3)	35.02 (27.2-44.51)	15.04 (11.57-19.1)	120.29 (92.91-152.57)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.1 (0.21-2.94)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.1 (0.21-2.94)
Common Gull	1.19 (0.79-1.68)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.19 (0.79-1.68)
Lesser Black-backed Gull	1.02 (0.45-1.78)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.53 (2.02-7.99)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.55 (2.47-9.77)
Herring Gull	3.57 (2.29-5.06)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.57 (2.29-5.06)
Great Black-backed Gull	6.4 (4.31-8.83)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.77 (0.51-1.06)	0 (0-0)	0 (0-0)	0 (0-0)	4.87 (3.31-6.79)	12.04 (8.13-16.68)

Table 11. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.25 (0.25-0.25)	0.11 (0.11-0.11)	0.26 (0.26-0.26)	0.11 (0.11-0.11)	0.99 (0.99-0.99)	0 (0-0)	0 (0-0)	0.79 (0.79-0.79)	0.34 (0.34-0.34)	0.1 (0.1-0.1)	0.51 (0.51-0.51)	0.39 (0.39-0.39)	3.85 (3.85-3.85)
Gannet	0 (0-0)	0.6 (0.59-0.61)	0 (0-0)	0.9 (0.88-0.94)	0 (0-0)	6.2 (6.12-6.4)	0 (0-0)	4.3 (4.22-4.49)	7.34 (7.15-7.78)	2.81 (2.78-2.83)	21.52 (21.27-21.84)	19.25 (18.98-19.57)	62.92 (61.99-64.46)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0.49-0.49)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0.49-0.49)
Kittiwake	14.52 (13.91-15.17)	16.14 (15.61-16.72)	8.43 (7.83-9.23)	2.62 (2.48-2.81)	7.87 (7.55-8.28)	1.79 (1.73-1.86)	0.85 (0.82-0.89)	0 (0-0)	0 (0-0)	0.77 (0.75-0.79)	24.34 (23.44-25.33)	9.98 (9.55-10.45)	87.31 (83.67-91.53)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.25 (1.25-1.25)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.25 (1.25-1.25)
Common Gull	1.2 (1.2-1.2)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.2 (1.2-1.2)
Lesser Black-backed Gull	0.79 (0.79-1.04)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.08 (4.08-4.63)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.87 (4.87-5.67)
Herring Gull	3.59 (2.71-3.59)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.59 (2.71-3.59)
Great Black-backed Gull	6.41 (4.84-6.41)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.78 (0.68-0.78)	0 (0-0)	0 (0-0)	0 (0-0)	3.65 (3.65-4.91)	10.84 (9.17-12.1)

Table 12. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.25 (0.25-0.25)	0.11 (0.11-0.11)	0.26 (0.26-0.26)	0.11 (0.11-0.11)	0.99 (0.99-0.99)	0 (0-0)	0 (0-0)	0.79 (0.79-0.79)	0.34 (0.34-0.34)	0.1 (0.1-0.1)	0.51 (0.51-0.51)	0.39 (0.39-0.39)	3.85 (3.85-3.85)
Gannet	0 (0-0)	0.79 (0.79-0.79)	0 (0-0)	1.03 (1.03-1.03)	0 (0-0)	6.76 (6.76-6.76)	0 (0-0)	4.86 (4.86-4.86)	8.67 (8.67-8.67)	3.58 (3.58-3.58)	29.68 (29.68-29.68)	28.06 (28.06-28.06)	83.43 (83.43-83.43)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0.49-0.49)	0 (0-0)	0 (0-0)	0 (0-0)	0.49 (0.49-0.49)
Kittiwake	21.46 (21.46-21.46)	22.33 (22.33-22.33)	10.62 (10.62-10.62)	3.12 (3.12-3.12)	9 (9-9)	2 (2-2)	0.96 (0.96-0.96)	0 (0-0)	0 (0-0)	1.03 (1.03-1.03)	35.13 (35.13-35.13)	15.1 (15.1-15.1)	120.75 (120.75-120.75)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.25 (1.25-1.25)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.25 (1.25-1.25)
Common Gull	1.2 (1.2-1.2)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.2 (1.2-1.2)
Lesser Black-backed Gull	1.04 (1.04-1.04)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.63 (4.63-4.63)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.67 (5.67-5.67)
Herring Gull	3.59 (3.59-3.59)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.59 (3.59-3.59)
Great Black-backed Gull	6.41 (6.41-6.41)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.78 (0.78-0.78)	0 (0-0)	0 (0-0)	0 (0-0)	4.91 (4.91-4.91)	12.1 (12.1-12.1)

Table 13. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-68.03)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-124.97)	0 (0-0)	0 (0-193)
Fulmar	1.24 (0-6.79)	0.55 (0-3.75)	1.21 (0-6.16)	0.51 (0-6.43)	5.06 (0-15.88)	0 (0-9.55)	0 (0-2.07)	4.05 (0.67-9.52)	1.79 (0-7.11)	0.49 (0-2.87)	2.46 (0-6.43)	1.92 (0-7.49)	19.28 (0.67-84.05)
Gannet	0 (0-6.53)	1.69 (0-9.33)	0 (0-7.82)	0.7 (0-10.99)	0 (0-19.42)	16.04 (0-65.83)	0 (0-6.68)	10.9 (0-29.55)	18.12 (0-41.91)	7.67 (1.22-29.23)	60.11 (29.89-284.43)	47.94 (0-87.65)	163.17 (31.11-599.37)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-25.43)	0 (0-50.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-75.7)
Great Skua	0 (0-0)	0 (0-0)	0 (0-21.97)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.72 (0-51.19)	0 (0-21.8)	0 (0-0)	0 (0-0)	6.72 (0-94.96)
Kittiwake	51.4 (21.86-406.9)	54.68 (12.4-135.38)	27.57 (0-307.56)	9.67 (0-177)	28.99 (0-126.72)	6.43 (0-31.18)	3.46 (0-15.89)	0 (0-15.19)	0 (0-11.73)	2.45 (0-30.22)	79.56 (0-162.27)	34.27 (9.4-125.22)	298.48 (43.66-1545.26)
Black-headed Gull	0 (0-12.45)	0 (0-0)	0 (0-10.94)	0 (0-0)	0 (0-9.75)	0 (0-0)	0 (0-10.71)	0 (0-0)	0 (0-0)	0 (0-6.62)	0 (0-11.13)	0 (0-0)	0 (0-61.6)
Little Gull	0 (0-0)	0 (0-1.17)	0 (0-0)	0 (0-0)	0 (0-14.28)	0 (0-0)	0 (0-0)	0.91 (0-13.72)	0 (0-1.27)	0 (0-0)	0 (0-4.31)	0 (0-0)	0.91 (0-34.75)
Common Gull	2.48 (0-19.12)	0 (0-0)	0 (0-20.61)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-24.45)	0 (0-9.64)	0 (0-7.64)	2.48 (0-81.46)
Lesser Black-backed Gull	2.71 (0-16.84)	0 (0-7.97)	0 (0-7.19)	0 (0-7.59)	0 (0-0)	0 (0-0)	0 (0-9.55)	8.84 (0-34.4)	0 (0-0)	0 (0-4.22)	0 (0-7.81)	0 (0-9.54)	11.55 (0-105.11)
Herring Gull	3.41 (0-77.65)	0 (0-0)	0 (0-4.44)	0 (0-4.57)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-8.74)	0 (0-7.43)	3.41 (0-102.83)
Great Black-backed Gull	6.68 (0.98-177.57)	0 (0-5.26)	0 (0-4.2)	0 (0-7.75)	0 (0-0)	0 (0-0)	0 (0-0)	0.54 (0-30.11)	0 (0-0)	0 (0-0)	0 (0-19.93)	4.99 (0-17.85)	12.21 (0.98-262.67)

Table 14. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-74.74)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-120.16)	0 (0-0)	0 (0-194.9)
Fulmar	1.25 (0-6.62)	0.57 (0-3.72)	1.33 (0-5.86)	0.55 (0-6.21)	4.56 (0-15.24)	0 (0-9.89)	0 (0-1.74)	3.96 (0.79-9.38)	1.72 (0-7.13)	0.51 (0-3.05)	2.55 (0-6.28)	1.96 (0-7.17)	18.96 (0.79-82.29)
Gannet	0 (0-9.42)	2.14 (0-10.69)	0 (0-7.84)	0 (0-11.16)	0 (0-20.12)	15.91 (0-68.96)	0 (0-7.59)	12.22 (0-30.56)	23.47 (0-46.95)	9.69 (1.89-36.37)	80.36 (46.63-347.43)	75.96 (0-112.63)	219.75 (48.52-709.72)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-25.52)	0 (0-53.08)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-78.6)
Great Skua	0 (0-0)	0 (0-0)	0 (0-24.04)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (0-51.88)	0 (0-21.35)	0 (0-0)	0 (0-0)	7.02 (0-97.27)
Kittiwake	74.48 (37.24-522.88)	77.47 (19.81-169.48)	36.84 (0-345.59)	10.84 (0-184.21)	31.23 (4.46-130.1)	6.94 (0-34.7)	3.33 (0-19.2)	0 (0-17.82)	0 (0-13.23)	3.58 (0-39.39)	121.89 (0-207.46)	52.41 (14.74-172.39)	419.01 (76.25-1856.45)
Black-headed Gull	0 (0-11.55)	0 (0-0)	0 (0-10.81)	0 (0-0)	0 (0-9.17)	0 (0-0)	0 (0-9.13)	0 (0-0)	0 (0-0)	0 (0-4.91)	0 (0-11.93)	0 (0-0)	0 (0-57.5)
Little Gull	0 (0-0)	0 (0-0.94)	0 (0-0)	0 (0-0)	0 (0-12.97)	0 (0-0)	0 (0-0)	1.22 (0-12.17)	0 (0-0.88)	0 (0-0)	0 (0-4.46)	0 (0-0)	1.22 (0-31.42)
Common Gull	3.08 (0-20.14)	0 (0-0)	0 (0-20.32)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-22.6)	0 (0-8.91)	0 (0-8.86)	3.08 (0-80.83)
Lesser Black-backed Gull	2.33 (0-18.44)	0 (0-8.06)	0 (0-8.96)	0 (0-7.58)	0 (0-0)	0 (0-0)	0 (0-10.41)	10.34 (0-33.61)	0 (0-0)	0 (0-5.24)	0 (0-8.23)	0 (0-10.5)	12.67 (0-111.03)
Herring Gull	4.4 (0-76.4)	0 (0-0)	0 (0-5.65)	0 (0-4.53)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-9.08)	0 (0-8.71)	4.4 (0-104.37)
Great Black-backed Gull	7.64 (1.53-165.9)	0 (0-5.77)	0 (0-5.04)	0 (0-7.24)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0-29.61)	0 (0-0)	0 (0-0)	0 (0-20.61)	6.59 (0-18.8)	15.16 (1.53-252.97)

Table 15. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	1.25 (1.01-1.5)	0.57 (0.46-0.69)	1.32 (1.08-1.6)	0.54 (0.44-0.66)	4.96 (4.03-5.95)	0 (0-0)	0 (0-0)	3.95 (3.23-4.8)	1.71 (1.4-2.08)	0.51 (0.41-0.62)	2.54 (2.08-3.07)	1.96 (1.59-2.37)	19.31 (15.73-23.34)
Gannet	0 (0-0)	2.11 (1.43-2.97)	0 (0-0)	2.75 (1.87-3.89)	0 (0-0)	18.1 (12.24-25.33)	0 (0-0)	12.9 (8.82-18.31)	23.18 (15.89-32.41)	9.63 (6.49-13.51)	79.86 (54.86-111.4)	74.98 (51.54-104.83)	223.51 (153.14-312.65)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.98 (5.72-8.5)	0 (0-0)	0 (0-0)	0 (0-0)	6.98 (5.72-8.5)
Kittiwake	73.62 (49.92-103.57)	76.44 (52.44-106.99)	36.45 (24.69-51.44)	10.78 (7.34-15.13)	30.93 (21.07-43.43)	6.87 (4.76-9.6)	3.28 (2.27-4.6)	0 (0-0)	0 (0-0)	3.53 (2.42-4.97)	120.4 (82.69-168.09)	51.98 (35.81-72.17)	414.28 (283.41-579.99)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.19 (0.7-1.87)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.19 (0.7-1.87)
Common Gull	3.01 (1.8-4.79)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.01 (1.8-4.79)
Lesser Black-backed Gull	2.31 (1.52-3.35)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.22 (6.72-14.79)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	12.53 (8.24-18.14)
Herring Gull	4.34 (2.89-6.25)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.34 (2.89-6.25)
Great Black-backed Gull	7.55 (4.97-10.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.91 (0.6-1.34)	0 (0-0)	0 (0-0)	0 (0-0)	5.79 (3.78-8.34)	14.25 (9.35-20.6)

Table 16. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	1.25 (1.25-1.25)	0.57 (0.57-0.57)	1.33 (1.33-1.33)	0.55 (0.55-0.55)	4.98 (4.98-4.98)	0 (0-0)	0 (0-0)	3.96 (3.96-3.96)	1.72 (1.72-1.72)	0.51 (0.51-0.51)	2.55 (2.55-2.55)	1.96 (1.96-1.96)	19.38 (19.38-19.38)
Gannet	0 (0-0)	2.14 (2.14-2.14)	0 (0-0)	2.79 (2.79-2.79)	0 (0-0)	18.3 (18.3-18.3)	0 (0-0)	13.15 (13.15-13.15)	23.47 (23.47-23.47)	9.69 (9.69-9.69)	80.36 (80.36-80.36)	75.96 (75.96-75.96)	225.86 (225.86-225.86)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (7.02-7.02)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (7.02-7.02)
Kittiwake	74.48 (74.48-74.48)	77.47 (77.47-77.47)	36.84 (36.84-36.84)	10.84 (10.84-10.84)	31.23 (31.23-31.23)	6.94 (6.94-6.94)	3.33 (3.33-3.33)	0 (0-0)	0 (0-0)	3.58 (3.58-3.58)	121.89 (121.89-121.89)	52.41 (52.41-52.41)	419.01 (419.01-419.01)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (1.22-1.22)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (1.22-1.22)
Common Gull	3.08 (3.08-3.08)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.08 (3.08-3.08)
Lesser Black-backed Gull	2.33 (2.33-2.33)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.34 (10.34-10.34)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	12.67 (12.67-12.67)
Herring Gull	4.4 (4.4-4.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.4 (4.4-4.4)
Great Black-backed Gull	7.64 (7.64-7.64)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)	0 (0-0)	0 (0-0)	0 (0-0)	5.86 (5.86-5.86)	14.43 (14.43-14.43)

Table 17. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	1.25 (1.25-1.25)	0.57 (0.57-0.57)	1.33 (1.33-1.33)	0.55 (0.55-0.55)	4.98 (4.98-4.98)	0 (0-0)	0 (0-0)	3.96 (3.96-3.96)	1.72 (1.72-1.72)	0.51 (0.51-0.51)	2.55 (2.55-2.55)	1.96 (1.96-1.96)	19.38 (19.38-19.38)
Gannet	0 (0-0)	1.62 (1.61-1.64)	0 (0-0)	2.43 (2.37-2.55)	0 (0-0)	16.79 (16.58-17.32)	0 (0-0)	11.64 (11.42-12.14)	19.87 (19.35-21.1)	7.59 (7.53-7.67)	58.25 (57.59-59.11)	52.09 (51.35-53.05)	170.28 (167.8-174.58)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (7.02-7.02)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (7.02-7.02)
Kittiwake	50.33 (48.29-52.59)	56.03 (54.2-58.05)	29.31 (27.14-32.05)	9.09 (8.6-9.72)	27.31 (26.2-28.75)	6.2 (5.99-6.46)	2.95 (2.84-3.08)	0 (0-0)	0 (0-0)	2.67 (2.59-2.75)	84.48 (81.31-87.94)	34.61 (33.13-36.27)	302.98 (290.29-317.66)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (1.22-1.22)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (1.22-1.22)
Common Gull	3.08 (3.08-3.08)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.08 (3.08-3.08)
Lesser Black-backed Gull	2.33 (1.76-2.33)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.11 (9.11-10.34)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.44 (10.87-12.67)
Herring Gull	3.32 (3.32-4.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.32 (3.32-4.4)
Great Black-backed Gull	5.77 (5.77-7.64)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.87 (0.81-0.93)	0 (0-0)	0 (0-0)	0 (0-0)	4.35 (4.35-5.86)	10.99 (10.93-14.43)

Table 18. Norfolk Vanguard East (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	1.25 (1.25-1.25)	0.57 (0.57-0.57)	1.33 (1.33-1.33)	0.55 (0.55-0.55)	4.98 (4.98-4.98)	0 (0-0)	0 (0-0)	3.96 (3.96-3.96)	1.72 (1.72-1.72)	0.51 (0.51-0.51)	2.55 (2.55-2.55)	1.96 (1.96-1.96)	19.38 (19.38-19.38)
Gannet	0 (0-0)	2.14 (2.14-2.14)	0 (0-0)	2.79 (2.79-2.79)	0 (0-0)	18.3 (18.3-18.3)	0 (0-0)	13.15 (13.15-13.15)	23.47 (23.47-23.47)	9.69 (9.69-9.69)	80.36 (80.36-80.36)	75.96 (75.96-75.96)	225.86 (225.86-225.86)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (7.02-7.02)	0 (0-0)	0 (0-0)	0 (0-0)	7.02 (7.02-7.02)
Kittiwake	74.48 (74.48-74.48)	77.47 (77.47-77.47)	36.84 (36.84-36.84)	10.84 (10.84-10.84)	31.23 (31.23-31.23)	6.94 (6.94-6.94)	3.33 (3.33-3.33)	0 (0-0)	0 (0-0)	3.58 (3.58-3.58)	121.89 (121.89-121.89)	52.41 (52.41-52.41)	419.01 (419.01-419.01)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (1.22-1.22)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.22 (1.22-1.22)
Common Gull	3.08 (3.08-3.08)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.08 (3.08-3.08)
Lesser Black-backed Gull	2.33 (2.33-2.33)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.34 (10.34-10.34)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	12.67 (12.67-12.67)
Herring Gull	4.4 (4.4-4.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.4 (4.4-4.4)
Great Black-backed Gull	7.64 (7.64-7.64)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)	0 (0-0)	0 (0-0)	0 (0-0)	5.86 (5.86-5.86)	14.43 (14.43-14.43)

Table 19. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-36.94)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-67.18)	0 (0-0)	0 (0-104.12)
Fulmar	0.67 (0-3.5)	0.29 (0-2)	0.64 (0-3.36)	0.27 (0-3.34)	2.64 (0-8.28)	0 (0-5.03)	0 (0-1.08)	2.1 (0-5.06)	0.95 (0-3.91)	0.25 (0-1.53)	1.28 (0-3.4)	1.01 (0-4.06)	10.1 (0-44.55)
Gannet	0.47 (0-3.54)	0.88 (0-4.75)	0 (0-3.97)	0.86 (0-5.47)	0 (0-9.84)	8.09 (0-33.52)	0 (0-3.48)	5.54 (0-15.36)	9.33 (0-21.95)	3.93 (0.6-15.05)	30.98 (15.23-148.76)	24.8 (0-44.94)	84.88 (15.83-310.63)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-13.64)	0 (0-26.79)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-40.43)
Great Skua	0 (0-0)	0 (0-0)	0 (0-12.2)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.57 (0-29.58)	0 (0-11.23)	0 (0-0)	0 (0-0)	3.57 (0-53.01)
Kittiwake	27.57 (12.37-224.27)	29.62 (6.7-73.06)	15.12 (0-167.07)	5.27 (0-94.67)	15.54 (0-68.98)	3.36 (0-17.06)	1.79 (0-8.83)	0 (0-7.97)	0.37 (0-6.36)	1.34 (0-16.6)	42.75 (0-89.28)	18.44 (5.22-67.61)	161.17 (24.29-841.76)
Black-headed Gull	0 (0-6.62)	0 (0-0)	0 (0-5.8)	0 (0-0)	0 (0-4.85)	0 (0-0)	0 (0-5.88)	0 (0-0)	0 (0-0)	0 (0-3.44)	0 (0-5.82)	0 (0-0)	0 (0-32.41)
Little Gull	0 (0-0)	0 (0-0.63)	0 (0-0)	0 (0-0)	0 (0-7.82)	0 (0-0)	0 (0-0)	0.42 (0-7.39)	0 (0-0.65)	0 (0-0)	0 (0-2.49)	0 (0-0)	0.42 (0-18.98)
Common Gull	1.36 (0-10.65)	0 (0-0)	0 (0-11.07)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-13.92)	0 (0-5.04)	0 (0-4.21)	1.36 (0-44.89)
Lesser Black-backed Gull	1.3 (0-9.34)	0 (0-3.97)	0 (0-3.75)	0 (0-4.01)	0 (0-0)	0 (0-0)	0 (0-5.01)	4.6 (0-17.87)	0 (0-0)	0 (0-2.26)	0 (0-4.26)	0 (0-5.22)	5.9 (0-55.69)
Herring Gull	1.79 (0-41.1)	0 (0-0)	0 (0-2.39)	0 (0-2.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-4.55)	0 (0-3.79)	1.79 (0-54.1)
Great Black-backed Gull	3.41 (0.51-92.21)	0 (0-2.81)	0 (0-2.19)	0 (0-3.67)	0 (0-0)	0 (0-0)	0 (0-0)	0.4 (0-14.91)	0 (0-0)	0 (0-0)	0 (0-10.24)	2.57 (0-8.96)	6.38 (0.51-134.99)

Table 20. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-40.13)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-64.51)	0 (0-0)	0 (0-104.64)
Fulmar	0.66 (0-3.51)	0.3 (0-1.97)	0.71 (0-3.11)	0.29 (0-3.29)	2.8 (0-8.07)	0 (0-4.77)	0 (0-0.92)	2.1 (0-4.97)	0.91 (0-3.78)	0.27 (0-1.62)	1.35 (0-3.33)	1.04 (0-4.09)	10.43 (0-43.43)
Gannet	1.1 (0-4.81)	1.09 (0-6.7)	0 (0-4)	0 (0-5.7)	0 (0-10.27)	9.34 (0-35.21)	0 (0-3.87)	6.72 (0-15.6)	11.99 (0-23.97)	4.95 (0.97-18.57)	41.03 (23.81-177.39)	38.78 (0-57.5)	115 (24.78-363.59)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-13.69)	0 (0-28.47)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-42.16)
Great Skua	0 (0-0)	0 (0-0)	0 (0-12.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (0-27.87)	0 (0-11.47)	0 (0-0)	0 (0-0)	3.77 (0-52.26)
Kittiwake	40.19 (20.1-282.17)	41.8 (10.69-91.46)	19.88 (0-184.47)	5.85 (0-99.41)	16.85 (0-70.21)	3.75 (0-18.73)	1.8 (0-10.36)	0 (0-9.62)	1.69 (0-7.14)	1.93 (0-21.26)	65.78 (0-113.73)	28.28 (7.95-93.03)	227.8 (38.74-1001.59)
Black-headed Gull	0 (0-6.16)	0 (0-0)	0 (0-5.77)	0 (0-0)	0 (0-4.89)	0 (0-0)	0 (0-4.87)	0 (0-0)	0 (0-0)	0 (0-2.62)	0 (0-6.36)	0 (0-0)	0 (0-30.67)
Little Gull	0 (0-0)	0 (0-0.51)	0 (0-0)	0 (0-0)	0 (0-7.1)	0 (0-0)	0 (0-0)	0.67 (0-6.33)	0 (0-0.73)	0 (0-0)	0 (0-2.44)	0 (0-0)	0.67 (0-17.11)
Common Gull	1.67 (0-10.9)	0 (0-0)	0 (0-10.99)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-12.23)	0 (0-4.82)	0 (0-4.79)	1.67 (0-43.73)
Lesser Black-backed Gull	1.21 (0-9.59)	0 (0-4.2)	0 (0-4.66)	0 (0-3.94)	0 (0-0)	0 (0-0)	0 (0-5.42)	5.38 (0-17.49)	0 (0-0)	0 (0-2.73)	0 (0-4.28)	0 (0-5.47)	6.59 (0-57.78)
Herring Gull	2.28 (0-40.51)	0 (0-0)	0 (0-2.93)	0 (0-2.35)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-4.71)	0 (0-3.77)	2.28 (0-54.27)
Great Black-backed Gull	3.95 (0.79-84.84)	0 (0-2.99)	0 (0-1.74)	0 (0-3.74)	0 (0-0)	0 (0-0)	0 (0-0)	0.48 (0-14.36)	0 (0-0)	0 (0-0)	0 (0-10.66)	3.03 (0-8.75)	7.46 (0.79-127.08)

Table 21. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.66 (0.54-0.8)	0.3 (0.25-0.37)	0.7 (0.57-0.85)	0.29 (0.23-0.35)	2.64 (2.15-3.18)	0 (0-0)	0 (0-0)	2.09 (1.71-2.54)	0.91 (0.74-1.09)	0.27 (0.22-0.33)	1.35 (1.1-1.63)	1.04 (0.85-1.25)	10.25 (8.36-12.39)
Gannet	0 (0-0)	1.08 (0.74-1.52)	0 (0-0)	1.41 (0.95-1.97)	0 (0-0)	9.21 (6.27-12.75)	0 (0-0)	6.65 (4.42-9.26)	11.91 (8.11-16.62)	4.91 (3.34-6.83)	40.7 (27.65-57.86)	38.33 (26.28-54.09)	114.2 (77.76-160.9)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.76 (3.09-4.55)	0 (0-0)	0 (0-0)	0 (0-0)	3.76 (3.09-4.55)
Kittiwake	39.53 (27.33-55.75)	41.41 (27.96-58.24)	19.59 (13.58-27.54)	5.78 (3.98-8.09)	16.67 (11.29-23.52)	3.69 (2.54-5.15)	1.78 (1.2-2.49)	0 (0-0)	0 (0-0)	1.92 (1.3-2.69)	64.7 (44.5-90.24)	27.92 (18.97-39.59)	222.99 (152.65-313.3)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.65 (0.38-1.03)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.65 (0.38-1.03)
Common Gull	1.64 (0.97-2.59)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.64 (0.97-2.59)
Lesser Black-backed Gull	1.19 (0.79-1.7)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.31 (3.51-7.71)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.5 (4.3-9.41)
Herring Gull	2.25 (1.47-3.26)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.25 (1.47-3.26)
Great Black-backed Gull	3.9 (2.57-5.68)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.47 (0.31-0.69)	0 (0-0)	0 (0-0)	0 (0-0)	2.96 (1.95-4.34)	7.33 (4.83-10.71)

Table 22. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.66 (0.66-0.66)	0.3 (0.3-0.3)	0.71 (0.71-0.71)	0.29 (0.29-0.29)	2.64 (2.64-2.64)	0 (0-0)	0 (0-0)	2.1 (2.1-2.1)	0.91 (0.91-0.91)	0.27 (0.27-0.27)	1.35 (1.35-1.35)	1.04 (1.04-1.04)	10.27 (10.27-10.27)
Gannet	0 (0-0)	1.09 (1.09-1.09)	0 (0-0)	1.42 (1.42-1.42)	0 (0-0)	9.34 (9.34-9.34)	0 (0-0)	6.72 (6.72-6.72)	11.99 (11.99-11.99)	4.95 (4.95-4.95)	41.03 (41.03-41.03)	38.78 (38.78-38.78)	115.32 (115.32-115.32)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (3.77-3.77)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (3.77-3.77)
Kittiwake	40.19 (40.19-40.19)	41.8 (41.8-41.8)	19.88 (19.88-19.88)	5.85 (5.85-5.85)	16.85 (16.85-16.85)	3.75 (3.75-3.75)	1.8 (1.8-1.8)	0 (0-0)	0 (0-0)	1.93 (1.93-1.93)	65.78 (65.78-65.78)	28.28 (28.28-28.28)	226.11 (226.11-226.11)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.67 (0.67-0.67)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.67 (0.67-0.67)
Common Gull	1.67 (1.67-1.67)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.67 (1.67-1.67)
Lesser Black-backed Gull	1.21 (1.21-1.21)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.38 (5.38-5.38)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.59 (6.59-6.59)
Herring Gull	2.28 (2.28-2.28)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (2.28-2.28)
Great Black-backed Gull	3.95 (3.95-3.95)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.48 (0.48-0.48)	0 (0-0)	0 (0-0)	0 (0-0)	3.03 (3.03-3.03)	7.46 (7.46-7.46)

Table 23. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.66 (0.66-0.66)	0.3 (0.3-0.3)	0.71 (0.71-0.71)	0.29 (0.29-0.29)	2.64 (2.64-2.64)	0 (0-0)	0 (0-0)	2.1 (2.1-2.1)	0.91 (0.91-0.91)	0.27 (0.27-0.27)	1.35 (1.35-1.35)	1.04 (1.04-1.04)	10.27 (10.27-10.27)
Gannet	0 (0-0)	0.83 (0.82-0.84)	0 (0-0)	1.24 (1.21-1.3)	0 (0-0)	8.58 (8.46-8.84)	0 (0-0)	5.94 (5.83-6.2)	10.15 (9.88-10.76)	3.88 (3.84-3.92)	29.75 (29.4-30.18)	26.6 (26.23-27.05)	86.97 (85.67-89.09)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (3.77-3.77)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (3.77-3.77)
Kittiwake	27.18 (26.04-28.4)	30.22 (29.23-31.31)	15.78 (14.66-17.28)	4.91 (4.64-5.26)	14.74 (14.14-15.51)	3.34 (3.23-3.49)	1.59 (1.53-1.67)	0 (0-0)	0 (0-0)	1.44 (1.4-1.49)	45.58 (43.89-47.42)	18.69 (17.88-19.57)	163.47 (156.64-171.4)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.67 (0.67-0.67)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.67 (0.67-0.67)
Common Gull	1.67 (1.67-1.67)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.67 (1.67-1.67)
Lesser Black-backed Gull	0.91 (0.91-1.21)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.74 (4.74-5.38)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.65 (5.65-6.59)
Herring Gull	2.28 (1.72-2.28)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (1.72-2.28)
Great Black-backed Gull	3.95 (2.98-3.95)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.48 (0.42-0.48)	0 (0-0)	0 (0-0)	0 (0-0)	2.25 (2.25-3.03)	6.68 (5.65-7.46)

Table 24. Norfolk Vanguard East (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Fulmar	0.66 (0.66-0.66)	0.3 (0.3-0.3)	0.71 (0.71-0.71)	0.29 (0.29-0.29)	2.64 (2.64-2.64)	0 (0-0)	0 (0-0)	2.1 (2.1-2.1)	0.91 (0.91-0.91)	0.27 (0.27-0.27)	1.35 (1.35-1.35)	1.04 (1.04-1.04)	10.27 (10.27-10.27)
Gannet	0 (0-0)	1.09 (1.09-1.09)	0 (0-0)	1.42 (1.42-1.42)	0 (0-0)	9.34 (9.34-9.34)	0 (0-0)	6.72 (6.72-6.72)	11.99 (11.99-11.99)	4.95 (4.95-4.95)	41.03 (41.03-41.03)	38.78 (38.78-38.78)	115.32 (115.32-115.32)
Arctic Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (3.77-3.77)	0 (0-0)	0 (0-0)	0 (0-0)	3.77 (3.77-3.77)
Kittiwake	40.19 (40.19-40.19)	41.8 (41.8-41.8)	19.88 (19.88-19.88)	5.85 (5.85-5.85)	16.85 (16.85-16.85)	3.75 (3.75-3.75)	1.8 (1.8-1.8)	0 (0-0)	0 (0-0)	1.93 (1.93-1.93)	65.78 (65.78-65.78)	28.28 (28.28-28.28)	226.11 (226.11-226.11)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.67 (0.67-0.67)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.67 (0.67-0.67)
Common Gull	1.67 (1.67-1.67)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.67 (1.67-1.67)
Lesser Black-backed Gull	1.21 (1.21-1.21)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.38 (5.38-5.38)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.59 (6.59-6.59)
Herring Gull	2.28 (2.28-2.28)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.28 (2.28-2.28)
Great Black-backed Gull	3.95 (3.95-3.95)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.48 (0.48-0.48)	0 (0-0)	0 (0-0)	0 (0-0)	3.03 (3.03-3.03)	7.46 (7.46-7.46)

Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 5

NV West seabird collision modelling results

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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1 INTRODUCTION

1. This appendix provides results of collision risk modelling (CRM) for the NV West wind farm.

2. Collision mortality estimates are presented for each month and summed across the year, produced using the Band CRM (2012) options 1 (site-based flight heights) and 2 (generic flight heights).

3. Modelling is presented for all the 9MW and 20MW turbine options under consideration.

4. Uncertainty in model parameters has been incorporated using stochastic collision models with the following parameters generated as random values:

    - Seabird density (using the bootstrapped samples – see Appendix 13.1 Methods for details);
    - Proportions at collision height (option 2 only) using data from Johnston et al. (2014);
    - Avoidance rate (using the mean and variance advised in JNCC et al. 2014); and
    - Nocturnal activity, using:
        i. Gannet - species and season specific values (Furness et al. subm.);
        ii. Kittiwake – species and season specific values (Furness et al. in prep);
        iii. Large gulls – randomly selected as either 25% or 50% in each simulation.
        iv. All other species – fixed value (see Annex 3 for values).

5. The parameters listed in point 4 were simulated in combination and also individually (i.e. with the other three set to fixed values) to illustrate the relative contributions of each to the overall uncertainty in the collision results.

6. As a final run, all parameters were set to fixed values (i.e. median for density and flight height, mean for avoidance rate) to generate deterministic collision estimates.

7. The input parameter values are provided in Annex 3.

8. Table A5 provides a key to table contents.

Table A5. Key to collision mortality output table numbers, for all combinations of turbine model and input parameters.

Band option	Turbine (MW)	Uncertain parameters					
		Seabird density Flight height Avoidance rate Nocturnal activity	**Seabird density**	**Avoidance rate**	**Flight height**	**Nocturnal activity**	**N/A deterministic**
2	**9**	1	2	3	4	5	6
	20	7	8	9	10	11	12
1	**9**	13	14	15	16	17	18
	20	19	20	21	22	23	24

Table 1. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-40.69)	0 (0-10.17)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-10.07)	0 (0-60.93)
Fulmar	0 (0-3.79)	0 (0-2.42)	0 (0-2.33)	0 (0-2.82)	0 (0-1.19)	0 (0-1.47)	0 (0-2.24)	0 (0-5.61)	0 (0-1.49)	0 (0-12.29)	0 (0-2.31)	0 (0-0.07)	0 (0-38.03)
Gannet	0 (0-3.46)	0.96 (0-4.77)	0 (0-11.26)	0 (0-0)	0 (0-6.61)	1.74 (0-8.47)	3.94 (0-23.17)	4.55 (0-27.6)	2.2 (0-11.28)	10.1 (0-59.45)	21.25 (7.71-49.29)	0 (0-0)	44.74 (7.71-205.36)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.2 (0-6.71)	0 (0-0)	0 (0-0)	0 (0-0)	0.2 (0-6.71)
Kittiwake	3.94 (0-10.18)	2.78 (0-8.35)	8.15 (0.86-25.36)	0 (0-14.81)	4.3 (0-13.16)	15.65 (3.19-40.48)	0 (0-25.28)	5.38 (0-14.12)	0 (0-12.81)	4.77 (0-15.67)	13.58 (1.97-42.05)	0 (0-3.65)	58.55 (6.02-225.92)
Black-headed Gull	0 (0-0)	0 (0-8.82)	0 (0-4.08)	0 (0-7.19)	0 (0-0)	0 (0-0)	0 (0-3.68)	0 (0-0)	0 (0-0)	1.12 (0-7.37)	0 (0-0)	0 (0-0)	1.12 (0-31.14)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.52 (0-4.15)	0 (0-0)	1.04 (0-5.74)	0 (0-0)	1.56 (0-9.89)
Common Gull	0 (0-0)	0 (0-10.24)	0 (0-12.94)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-6.25)	2.03 (0-9.01)	7.76 (0-33.72)	0 (0-0)	9.79 (0-72.16)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-6.15)	0 (0-5.91)	0 (0-0)	6.18 (0-24.78)	6.5 (0-32.24)	10.6 (0-40.5)	0 (0-16.9)	4.07 (0-23.6)	0 (0-0)	0 (0-0)	27.35 (0-150.08)
Herring Gull	0 (0-0)	0 (0-5.59)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.42 (0-6.25)	0 (0-0)	1.42 (0-11.84)
Great Black-backed Gull	2.65 (0-11.25)	6.42 (0-19.51)	0 (0-7.9)	0 (0-0)	0 (0-8.17)	0 (0-0)	0 (0-13.93)	0 (0-17.99)	9.27 (0-31.47)	0 (0-11.13)	3.82 (0-17.33)	0 (0-0)	22.16 (0-138.68)

Table 2. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	3.23 (0-9.65)	0 (0-4.59)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-4.79)	3.23 (0-19.03)
Fulmar	0.37 (0-1.49)	0.34 (0-1.03)	0.2 (0-0.78)	0.2 (0-0.97)	0.2 (0-0.61)	0 (0-1.21)	0 (0-1.65)	0.3 (0-2.83)	0.16 (0-0.57)	0.97 (0-5.98)	0.32 (0-0.96)	0 (0-0.56)	3.06 (0-18.64)
Gannet	0 (0-4.61)	1.52 (0-4.57)	0 (0-11.35)	0 (0-0)	0 (0-6.79)	2.29 (0-6.87)	4.62 (0-20.81)	5.57 (0-25.91)	3.29 (0-11.43)	16.01 (0-55.21)	31.09 (18.45-47.31)	0 (0-0)	64.39 (18.45-194.86)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0-3.74)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0-3.74)
Kittiwake	5.38 (0-14.29)	3.4 (0-10.19)	10.03 (2.01-27.95)	0 (0-16.82)	4.44 (0-13.33)	17.69 (4.42-42.01)	0 (0-26.99)	6.48 (0-15.11)	0 (0-15.38)	5.82 (0-19.41)	20.15 (3.53-49.61)	0 (0-5.31)	73.39 (9.96-256.4)
Black-headed Gull	0 (0-0)	0 (0-6.14)	0 (0-3.61)	0 (0-4.92)	0 (0-0)	0 (0-0)	0 (0-3.17)	0 (0-0)	0 (0-0)	1.17 (0-4.68)	0 (0-0)	0 (0-0)	1.17 (0-22.52)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.85 (0-2.95)	0 (0-0)	1.4 (0-3.97)	0 (0-0)	2.25 (0-6.92)
Common Gull	0 (0-0)	0 (0-10.33)	0 (0-12.21)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-6.24)	2.36 (0-7.09)	8.58 (0-27.9)	0 (0-0)	10.94 (0-63.77)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-6.06)	0 (0-6.16)	0 (0-0)	6.68 (0-20.03)	7.07 (0-26.54)	13.04 (2.17-31.8)	0 (0-15.96)	5.85 (0-19.5)	0 (0-0)	0 (0-0)	32.64 (2.17-126.05)
Herring Gull	0 (0-0)	0 (0-5.89)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.8 (0-6.13)	0 (0-0)	1.8 (0-12.02)
Great Black-backed Gull	2.44 (0-12.12)	6.92 (0-18.44)	0 (0-8.13)	0 (0-0)	0 (0-9.05)	0 (0-0)	0 (0-12.21)	0 (0-17.59)	10.76 (0-27.84)	0 (0-10.52)	4.21 (0-19.15)	0 (0-0)	24.33 (0-135.05)

Table 3. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	3.23 (2.63-3.88)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.23 (2.63-3.88)
Fulmar	0.37 (0.3-0.45)	0.34 (0.28-0.41)	0.2 (0.16-0.24)	0.2 (0.16-0.24)	0.2 (0.17-0.25)	0 (0-0)	0 (0-0)	0.3 (0.25-0.37)	0.16 (0.14-0.2)	0.96 (0.79-1.16)	0.32 (0.26-0.38)	0 (0-0)	3.05 (2.51-3.7)
Gannet	0 (0-0)	1.51 (1.03-2.12)	0 (0-0)	0 (0-0)	0 (0-0)	2.26 (1.57-3.16)	4.57 (3.14-6.42)	5.5 (3.76-7.68)	3.24 (2.19-4.52)	15.88 (10.82-22.08)	31.92 (21.67-45.01)	0 (0-0)	64.88 (44.18-90.99)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.76-1.12)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.76-1.12)
Kittiwake	5.34 (3.66-7.49)	3.35 (2.31-4.72)	9.95 (6.83-13.88)	0 (0-0)	4.4 (3.02-6.16)	17.47 (11.97-24.51)	0 (0-0)	6.43 (4.38-9.03)	0 (0-0)	5.74 (3.92-8.03)	20.36 (13.96-28.76)	0 (0-0)	73.04 (50.05-102.58)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.15 (0.66-1.8)	0 (0-0)	0 (0-0)	1.15 (0.66-1.8)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.83 (0.49-1.31)	0 (0-0)	1.36 (0.81-2.15)	0 (0-0)	2.19 (1.3-3.46)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.31 (1.35-3.63)	8.39 (4.9-13.41)	0 (0-0)	10.7 (6.25-17.04)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.64 (4.32-9.55)	7.86 (5.16-11.39)	12.85 (8.41-18.66)	0.85 (0.55-1.22)	5.78 (3.78-8.4)	0 (0-0)	0 (0-0)	33.98 (22.22-49.22)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.78 (1.16-2.58)	0 (0-0)	1.78 (1.16-2.58)
Great Black-backed Gull	2.4 (1.58-3.46)	6.89 (4.45-9.86)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.46 (7.56-16.55)	0 (0-0)	4.15 (2.74-6.03)	0 (0-0)	24.9 (16.33-35.9)

Table 4. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-41.35)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-41.35)
Fulmar	0 (0-3.84)	0 (0-3.86)	0 (0-1.62)	0 (0-2.62)	0 (0-2.41)	0 (0-0)	0 (0-0)	0 (0-3.77)	0 (0-1.91)	0 (0-11.19)	0 (0-3.37)	0 (0-0)	0 (0-34.59)
Gannet	0 (0-0)	1.46 (0.68-2.69)	0 (0-0)	0 (0-0)	0 (0-0)	2.21 (1.04-4.08)	4.44 (1.94-8.12)	5.37 (2.47-9.79)	3.18 (1.49-5.7)	15.45 (7.04-28.36)	31.25 (13.89-56.97)	0 (0-0)	63.36 (28.55-115.71)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.54 (0.01-3.99)	0 (0-0)	0 (0-0)	0 (0-0)	0.54 (0.01-3.99)
Kittiwake	5.36 (4.11-6.78)	3.39 (2.58-4.29)	9.99 (7.73-12.68)	0 (0-0)	4.44 (3.36-5.62)	17.61 (13.64-22.47)	0 (0-0)	6.46 (4.96-8.17)	0 (0-0)	5.82 (4.42-7.39)	20.56 (15.82-26.11)	0 (0-0)	73.63 (56.62-93.51)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.04 (0.19-2.8)	0 (0-0)	0 (0-0)	1.04 (0.19-2.8)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.77 (0.15-2.06)	0 (0-0)	1.26 (0.26-3.36)	0 (0-0)	2.03 (0.41-5.42)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.34 (1.53-3.23)	8.48 (5.64-11.97)	0 (0-0)	10.82 (7.17-15.2)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.47 (2.81-11.34)	7.74 (3.49-13.58)	12.58 (5.7-21.92)	0.84 (0.36-1.46)	5.64 (2.51-10.05)	0 (0-0)	0 (0-0)	33.27 (14.87-58.35)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.79 (1.14-2.55)	0 (0-0)	1.79 (1.14-2.55)
Great Black-backed Gull	2.41 (1.62-3.36)	6.87 (4.55-9.48)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.56 (7.68-15.9)	0 (0-0)	4.2 (2.78-5.78)	0 (0-0)	25.04 (16.63-34.52)

Table 5. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	3.23 (3.23-3.23)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.23 (3.23-3.23)
Fulmar	0.37 (0.37-0.37)	0.34 (0.34-0.34)	0.2 (0.2-0.2)	0.2 (0.2-0.2)	0.2 (0.2-0.2)	0 (0-0)	0 (0-0)	0.3 (0.3-0.3)	0.16 (0.16-0.16)	0.97 (0.97-0.97)	0.32 (0.32-0.32)	0 (0-0)	3.06 (3.06-3.06)
Gannet	0 (0-0)	1.15 (1.14-1.17)	0 (0-0)	0 (0-0)	0 (0-0)	2.1 (2.07-2.16)	4.21 (4.15-4.35)	4.93 (4.84-5.15)	2.78 (2.71-2.96)	12.54 (12.44-12.68)	23.41 (23.14-23.75)	0 (0-0)	51.12 (50.49-52.22)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)
Kittiwake	3.64 (3.49-3.8)	2.45 (2.38-2.54)	7.97 (7.38-8.71)	0 (0-0)	3.89 (3.73-4.08)	15.79 (15.27-16.49)	0 (0-0)	5.54 (5.27-5.9)	0 (0-0)	4.34 (4.22-4.48)	14.31 (13.78-14.92)	0 (0-0)	57.93 (55.52-60.92)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.17 (1.17-1.17)	0 (0-0)	0 (0-0)	1.17 (1.17-1.17)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.85 (0.85-0.85)	0 (0-0)	1.4 (1.4-1.4)	0 (0-0)	2.25 (2.25-2.25)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.36 (2.36-2.36)	8.58 (8.58-8.58)	0 (0-0)	10.94 (10.94-10.94)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.68 (6.09-6.68)	7.2 (7.2-7.95)	11.49 (11.49-13.04)	0.86 (0.73-0.86)	5.85 (4.72-5.85)	0 (0-0)	0 (0-0)	32.08 (30.23-34.38)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.8 (1.38-1.8)	0 (0-0)	1.8 (1.38-1.8)
Great Black-backed Gull	1.84 (1.84-2.44)	5.47 (5.47-6.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.6 (9.82-11.6)	0 (0-0)	3.23 (3.23-4.21)	0 (0-0)	22.14 (20.36-25.17)

Table 6. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	3.23 (3.23-3.23)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.23 (3.23-3.23)
Fulmar	0.37 (0.37-0.37)	0.34 (0.34-0.34)	0.2 (0.2-0.2)	0.2 (0.2-0.2)	0.2 (0.2-0.2)	0 (0-0)	0 (0-0)	0.3 (0.3-0.3)	0.16 (0.16-0.16)	0.97 (0.97-0.97)	0.32 (0.32-0.32)	0 (0-0)	3.06 (3.06-3.06)
Gannet	0 (0-0)	1.52 (1.52-1.52)	0 (0-0)	0 (0-0)	0 (0-0)	2.29 (2.29-2.29)	4.62 (4.62-4.62)	5.57 (5.57-5.57)	3.29 (3.29-3.29)	16.01 (16.01-16.01)	32.28 (32.28-32.28)	0 (0-0)	65.58 (65.58-65.58)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)
Kittiwake	5.38 (5.38-5.38)	3.4 (3.4-3.4)	10.03 (10.03-10.03)	0 (0-0)	4.44 (4.44-4.44)	17.69 (17.69-17.69)	0 (0-0)	6.48 (6.48-6.48)	0 (0-0)	5.82 (5.82-5.82)	20.65 (20.65-20.65)	0 (0-0)	73.89 (73.89-73.89)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.17 (1.17-1.17)	0 (0-0)	0 (0-0)	1.17 (1.17-1.17)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.85 (0.85-0.85)	0 (0-0)	1.4 (1.4-1.4)	0 (0-0)	2.25 (2.25-2.25)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.36 (2.36-2.36)	8.58 (8.58-8.58)	0 (0-0)	10.94 (10.94-10.94)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6.68 (6.68-6.68)	7.95 (7.95-7.95)	13.04 (13.04-13.04)	0.86 (0.86-0.86)	5.85 (5.85-5.85)	0 (0-0)	0 (0-0)	34.38 (34.38-34.38)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.8 (1.8-1.8)	0 (0-0)	1.8 (1.8-1.8)
Great Black-backed Gull	2.44 (2.44-2.44)	6.92 (6.92-6.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.6 (11.6-11.6)	0 (0-0)	4.21 (4.21-4.21)	0 (0-0)	25.17 (25.17-25.17)

Table 7. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-25.17)	0 (0-4.87)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-4.75)	0 (0-34.79)
Fulmar	0 (0-2.02)	0 (0-1.78)	0 (0-1.31)	0 (0-1.19)	0 (0-0.61)	0 (0-0.63)	0 (0-1.08)	0 (0-3.72)	0 (0-0.66)	0 (0-4.57)	0 (0-0.91)	0 (0-0.06)	0 (0-18.54)
Gannet	0 (0-1.77)	0.48 (0-2.43)	0 (0-5.74)	0 (0-0)	0 (0-3.29)	0.89 (0-4.26)	1.99 (0-11.88)	2.39 (0-13.91)	1.1 (0-6.15)	5.27 (0-30)	10.87 (3.98-24.51)	0 (0-0)	22.99 (3.98-103.94)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.12 (0-3.41)	0 (0-0)	0 (0-0)	0 (0-0)	0.12 (0-3.41)
Kittiwake	2.13 (0-5.52)	1.49 (0-4.59)	4.34 (0.55-13.83)	0 (0-7.81)	2.34 (0-7.1)	8.51 (1.53-22.06)	0 (0-13.4)	2.94 (0-7.55)	0 (0-6.86)	2.62 (0-8.72)	7.27 (1.03-22.32)	0 (0-1.93)	31.64 (3.11-121.69)
Black-headed Gull	0 (0-0)	0 (0-4.43)	0 (0-2.19)	0 (0-3.75)	0 (0-0)	0 (0-0)	0 (0-2.06)	0 (0-0)	0 (0-0)	0.59 (0-3.89)	0 (0-0)	0 (0-0)	0.59 (0-16.32)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.28 (0-2.21)	0 (0-0)	0.58 (0-3.08)	0 (0-0)	0.86 (0-5.29)
Common Gull	0 (0-0)	0 (0-5.42)	0 (0-6.76)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-3.3)	1.12 (0-5.06)	4.19 (0-18.07)	0 (0-0)	5.31 (0-38.61)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-3.16)	0 (0-3.03)	0 (0-0)	3.16 (0-12.53)	3.43 (0-17.38)	5.69 (0.44-21.27)	0 (0-9.06)	2.17 (0-12.1)	0 (0-0)	0 (0-0)	14.45 (0.44-78.53)
Herring Gull	0 (0-0)	0 (0-2.85)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.76 (0-3.19)	0 (0-0)	0.76 (0-6.04)
Great Black-backed Gull	1.35 (0-5.9)	3.36 (0-9.57)	0 (0-4.06)	0 (0-0)	0 (0-4.42)	0 (0-0)	0 (0-7.16)	0 (0-9.44)	4.77 (0-16.23)	0 (0-6)	1.97 (0-9.24)	0 (0-0)	11.45 (0-72.02)

Table 8. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	1.74 (0-5.21)	0 (0-2.46)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-2.57)	1.74 (0-10.24)
Fulmar	0.2 (0-0.79)	0.18 (0-0.54)	0.1 (0-0.42)	0.11 (0-0.51)	0.11 (0-0.33)	0 (0-0.64)	0 (0-0.76)	0.16 (0-1.5)	0.09 (0-0.3)	0.51 (0-3.17)	0.17 (0-0.51)	0 (0-0.3)	1.63 (0-9.77)
Gannet	0 (0-2.36)	0.78 (0-2.33)	0 (0-5.79)	0 (0-0)	0 (0-3.46)	1.17 (0-3.51)	2.36 (0-10.62)	2.85 (0-13.23)	1.68 (0-5.84)	8.17 (0-28.19)	16.48 (9.42-24.15)	0 (0-0)	33.49 (9.42-99.48)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0-1.75)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0-1.75)
Kittiwake	2.91 (0-7.71)	1.83 (0-5.5)	5.41 (1.08-15.08)	0 (0-9.08)	2.4 (0-7.19)	9.54 (2.39-22.67)	0 (0-14.56)	3.5 (0-8.02)	0 (0-8.3)	3.14 (0-10.48)	11.42 (1.9-27.61)	0 (0-2.87)	40.15 (5.37-139.07)
Black-headed Gull	0 (0-0)	0 (0-3.27)	0 (0-1.92)	0 (0-2.62)	0 (0-0)	0 (0-0)	0 (0-1.69)	0 (0-0)	0 (0-0)	0.62 (0-2.49)	0 (0-0)	0 (0-0)	0.62 (0-11.99)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.46 (0-1.62)	0 (0-0)	0.76 (0-2.17)	0 (0-0)	1.22 (0-3.79)
Common Gull	0 (0-0)	0 (0-5.59)	0 (0-6.61)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-3.38)	1.28 (0-3.84)	4.64 (0-15.09)	0 (0-0)	5.92 (0-34.51)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-3.15)	0 (0-3.21)	0 (0-0)	3.48 (0-10.43)	4.6 (0-13.79)	6.79 (1.13-16.55)	0 (0-8.3)	3.04 (0-10.15)	0 (0-0)	0 (0-0)	17.91 (1.13-65.58)
Herring Gull	0 (0-0)	0 (0-3.06)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0-3.18)	0 (0-0)	0.93 (0-6.24)
Great Black-backed Gull	1.26 (0-6.27)	3.58 (0-9.54)	0 (0-4.21)	0 (0-0)	0 (0-4.68)	0 (0-0)	0 (0-6.32)	0 (0-9.1)	5.57 (0-14.4)	0 (0-5.44)	2.18 (0-8.67)	0 (0-0)	12.59 (0-68.63)

Table 9. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	1.73 (1.41-2.09)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.73 (1.41-2.09)
Fulmar	0.2 (0.16-0.24)	0.18 (0.15-0.22)	0.1 (0.08-0.12)	0.11 (0.09-0.13)	0.11 (0.09-0.13)	0 (0-0)	0 (0-0)	0.16 (0.13-0.19)	0.09 (0.07-0.11)	0.51 (0.42-0.62)	0.17 (0.14-0.2)	0 (0-0)	1.63 (1.33-1.96)
Gannet	0 (0-0)	0.77 (0.52-1.08)	0 (0-0)	0 (0-0)	0 (0-0)	1.16 (0.79-1.64)	2.33 (1.62-3.26)	2.79 (1.92-3.94)	1.66 (1.13-2.33)	8.12 (5.53-11.3)	16.28 (11.08-22.72)	0 (0-0)	33.11 (22.59-46.27)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0.41-0.61)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0.41-0.61)
Kittiwake	2.87 (1.98-4.02)	1.81 (1.24-2.54)	5.39 (3.67-7.47)	0 (0-0)	2.37 (1.63-3.34)	9.47 (6.45-13.34)	0 (0-0)	3.44 (2.36-4.83)	0 (0-0)	3.11 (2.12-4.36)	11.06 (7.53-15.55)	0 (0-0)	39.52 (26.98-55.45)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.61 (0.36-0.97)	0 (0-0)	0 (0-0)	0.61 (0.36-0.97)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.45 (0.27-0.71)	0 (0-0)	0.74 (0.44-1.19)	0 (0-0)	1.19 (0.71-1.9)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.26 (0.73-2)	4.56 (2.69-7.14)	0 (0-0)	5.82 (3.42-9.14)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.43 (2.23-4.9)	4.06 (2.63-5.91)	6.76 (4.38-9.76)	0.44 (0.29-0.64)	3.01 (1.96-4.37)	0 (0-0)	0 (0-0)	17.7 (11.49-25.58)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0.6-1.32)	0 (0-0)	0.92 (0.6-1.32)
Great Black-backed Gull	1.25 (0.82-1.8)	3.53 (2.32-5.12)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.94 (3.88-8.65)	0 (0-0)	2.14 (1.4-3.13)	0 (0-0)	12.86 (8.42-18.7)

Table 10. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	0 (0-20.36)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-20.36)
Fulmar	0 (0-2.23)	0 (0-1.61)	0 (0-1.22)	0 (0-1.4)	0 (0-1.24)	0 (0-0)	0 (0-0)	0 (0-1.57)	0 (0-0.94)	0 (0-4.7)	0 (0-1.87)	0 (0-0)	0 (0-16.78)
Gannet	0 (0-0)	0.75 (0.34-1.34)	0 (0-0)	0 (0-0)	0 (0-0)	1.12 (0.5-2.07)	2.28 (1.03-4.11)	2.74 (1.23-4.99)	1.63 (0.75-2.93)	7.96 (3.62-14.4)	15.92 (7.27-29.12)	0 (0-0)	32.4 (14.74-58.96)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.3 (0-2)	0 (0-0)	0 (0-0)	0 (0-0)	0.3 (0-2)
Kittiwake	2.9 (2.25-3.67)	1.83 (1.4-2.31)	5.37 (4.13-6.81)	0 (0-0)	2.39 (1.84-3.02)	9.49 (7.25-12.03)	0 (0-0)	3.47 (2.67-4.38)	0 (0-0)	3.13 (2.38-3.95)	11.06 (8.51-14.03)	0 (0-0)	39.64 (30.43-50.2)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.55 (0.11-1.47)	0 (0-0)	0 (0-0)	0.55 (0.11-1.47)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.41 (0.08-1.12)	0 (0-0)	0.68 (0.13-1.91)	0 (0-0)	1.09 (0.21-3.03)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.26 (0.83-1.75)	4.62 (3.05-6.38)	0 (0-0)	5.88 (3.88-8.13)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.37 (1.52-5.93)	4.03 (1.86-7.18)	6.66 (3.01-11.54)	0.43 (0.19-0.76)	2.91 (1.28-5.12)	0 (0-0)	0 (0-0)	17.4 (7.86-30.53)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.92 (0.59-1.32)	0 (0-0)	0.92 (0.59-1.32)
Great Black-backed Gull	1.25 (0.84-1.74)	3.52 (2.37-4.89)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.96 (3.99-8.25)	0 (0-0)	2.17 (1.45-3)	0 (0-0)	12.9 (8.65-17.88)

Table 11. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	1.74 (1.74-1.74)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.74 (1.74-1.74)
Fulmar	0.2 (0.2-0.2)	0.18 (0.18-0.18)	0.1 (0.1-0.1)	0.11 (0.11-0.11)	0.11 (0.11-0.11)	0 (0-0)	0 (0-0)	0.16 (0.16-0.16)	0.09 (0.09-0.09)	0.51 (0.51-0.51)	0.17 (0.17-0.17)	0 (0-0)	1.63 (1.63-1.63)
Gannet	0 (0-0)	0.59 (0.58-0.6)	0 (0-0)	0 (0-0)	0 (0-0)	1.07 (1.06-1.11)	2.15 (2.12-2.22)	2.52 (2.47-2.63)	1.42 (1.38-1.5)	6.41 (6.35-6.47)	11.95 (11.82-12.13)	0 (0-0)	26.11 (25.78-26.66)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0.5-0.5)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0.5-0.5)
Kittiwake	1.96 (1.89-2.05)	1.33 (1.28-1.37)	4.29 (3.97-4.7)	0 (0-0)	2.1 (2.01-2.2)	8.53 (8.24-8.89)	0 (0-0)	2.99 (2.85-3.17)	0 (0-0)	2.34 (2.28-2.42)	7.72 (7.42-8.05)	0 (0-0)	31.26 (29.94-32.85)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.62 (0.62-0.62)	0 (0-0)	0 (0-0)	0.62 (0.62-0.62)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.46 (0.46-0.46)	0 (0-0)	0.76 (0.76-0.76)	0 (0-0)	1.22 (1.22-1.22)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.28 (1.28-1.28)	4.64 (4.64-4.64)	0 (0-0)	5.92 (5.92-5.92)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.48 (3.17-3.48)	3.74 (3.74-4.14)	5.98 (5.98-6.79)	0.38 (0.38-0.45)	2.46 (2.46-3.04)	0 (0-0)	0 (0-0)	16.04 (15.73-17.9)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.72-0.93)	0 (0-0)	0.93 (0.72-0.93)
Great Black-backed Gull	1.26 (0.95-1.26)	2.83 (2.83-3.58)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.08 (5.08-6)	0 (0-0)	2.18 (1.67-2.18)	0 (0-0)	11.35 (10.53-13.02)

Table 12. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 2. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	1.74 (1.74-1.74)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.74 (1.74-1.74)
Fulmar	0.2 (0.2-0.2)	0.18 (0.18-0.18)	0.1 (0.1-0.1)	0.11 (0.11-0.11)	0.11 (0.11-0.11)	0 (0-0)	0 (0-0)	0.16 (0.16-0.16)	0.09 (0.09-0.09)	0.51 (0.51-0.51)	0.17 (0.17-0.17)	0 (0-0)	1.63 (1.63-1.63)
Gannet	0 (0-0)	0.78 (0.78-0.78)	0 (0-0)	0 (0-0)	0 (0-0)	1.17 (1.17-1.17)	2.36 (2.36-2.36)	2.85 (2.85-2.85)	1.68 (1.68-1.68)	8.17 (8.17-8.17)	16.48 (16.48-16.48)	0 (0-0)	33.49 (33.49-33.49)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0.5-0.5)	0 (0-0)	0 (0-0)	0 (0-0)	0.5 (0.5-0.5)
Kittiwake	2.91 (2.91-2.91)	1.83 (1.83-1.83)	5.41 (5.41-5.41)	0 (0-0)	2.4 (2.4-2.4)	9.54 (9.54-9.54)	0 (0-0)	3.5 (3.5-3.5)	0 (0-0)	3.14 (3.14-3.14)	11.15 (11.15-11.15)	0 (0-0)	39.88 (39.88-39.88)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.62 (0.62-0.62)	0 (0-0)	0 (0-0)	0.62 (0.62-0.62)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.46 (0.46-0.46)	0 (0-0)	0.76 (0.76-0.76)	0 (0-0)	1.22 (1.22-1.22)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.28 (1.28-1.28)	4.64 (4.64-4.64)	0 (0-0)	5.92 (5.92-5.92)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.48 (3.48-3.48)	4.14 (4.14-4.14)	6.79 (6.79-6.79)	0.45 (0.45-0.45)	3.04 (3.04-3.04)	0 (0-0)	0 (0-0)	17.9 (17.9-17.9)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.93 (0.93-0.93)	0 (0-0)	0.93 (0.93-0.93)
Great Black-backed Gull	1.26 (1.26-1.26)	3.58 (3.58-3.58)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	6 (6-6)	0 (0-0)	2.18 (2.18-2.18)	0 (0-0)	13.02 (13.02-13.02)

Table 13. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	27.62 (0-82.02)	0 (0-37.18)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-39.27)	27.62 (0-158.47)
Fulmar	10.31 (0-41.08)	8.28 (0-28.87)	5.6 (0-24.53)	5.68 (0-25.11)	5.25 (0-18.14)	0 (0-33.55)	0 (0-42.88)	6.46 (0-80.65)	4.55 (0-16.27)	22.61 (0-166.48)	8.22 (0-26.34)	0 (0-14.56)	76.96 (0-518.46)
Gannet	0 (0-4.66)	1.53 (0-5.8)	0 (0-14.5)	0 (0-0)	0 (0-8.63)	2.78 (0-10.65)	5.94 (0-29.34)	6.84 (0-33.24)	3.44 (0-14.32)	16.32 (0-67.61)	32.13 (16.97-54.46)	0 (0-0)	68.98 (16.97-243.21)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.31 (0-38.67)	0 (0-0)	0 (0-0)	0 (0-0)	10.31 (0-38.67)
Kittiwake	11.56 (0-28.89)	8.16 (0-23.54)	23.74 (2.84-71.15)	0 (0-41.54)	12.4 (0-36.84)	46 (9.44-114.41)	0 (0-70.46)	15.75 (0-39.91)	0 (0-35.81)	14.15 (0-44.23)	40.2 (5.98-115.38)	0 (0-10.41)	171.96 (18.26-632.57)
Black-headed Gull	0 (0-0)	0 (0-51.58)	0 (0-27.67)	0 (0-42.33)	0 (0-0)	0 (0-0)	0 (0-24.04)	0 (0-0)	0 (0-0)	10.05 (0-43.58)	0 (0-0)	0 (0-0)	10.05 (0-189.2)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.02 (0-4.09)	0 (0-0)	1.67 (0-5.34)	0 (0-0)	2.69 (0-9.43)
Common Gull	0 (0-0)	0 (0-16.96)	0 (0-21.53)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-10.38)	3.61 (0-14.74)	13.74 (0-52.54)	0 (0-0)	17.35 (0-116.15)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-8.17)	0 (0-7.8)	0 (0-0)	9.5 (0-31.37)	10.46 (0-40.8)	16.77 (0-49.29)	0 (0-22.75)	6.5 (0-29.57)	0 (0-0)	0 (0-0)	43.23 (0-189.75)
Herring Gull	0 (0-0)	0 (0-7.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.09 (0-8.6)	0 (0-0)	2.09 (0-15.87)
Great Black-backed Gull	2.56 (0-10.22)	6.29 (0-17.36)	0 (0-7.26)	0 (0-0)	0 (0-7.92)	0 (0-0)	0 (0-13.26)	0 (0-16.7)	9.3 (0-28.8)	0 (0-10.37)	3.77 (0-16.5)	0 (0-0)	21.92 (0-128.39)

Table 14. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	26.27 (0-78.43)	0 (0-37.29)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-38.9)	26.27 (0-154.62)
Fulmar	10.08 (0-40.32)	9.24 (0-27.73)	5.29 (0-21.18)	5.37 (0-26.06)	5.49 (0-16.59)	0 (0-32.56)	0 (0-44.42)	8.18 (0-76.32)	4.45 (0-15.46)	26.04 (0-161.44)	8.62 (0-25.85)	0 (0-15.06)	82.76 (0-502.99)
Gannet	0 (0-6.53)	2.15 (0-6.47)	0 (0-16.06)	0 (0-0)	0 (0-9.6)	3.24 (0-9.72)	6.54 (0-29.45)	7.89 (0-36.67)	4.65 (0-16.18)	22.66 (0-78.13)	44 (26.11-66.95)	0 (0-0)	91.13 (26.11-275.76)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (0-40.17)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (0-40.17)
Kittiwake	15.58 (0-41.33)	9.83 (0-29.48)	29.02 (5.8-80.85)	0 (0-48.66)	12.85 (0-38.56)	51.17 (12.79-121.53)	0 (0-78.07)	18.74 (0-43.73)	0 (0-44.5)	16.85 (0-56.17)	58.3 (10.2-143.52)	0 (0-15.37)	212.34 (28.79-741.77)
Black-headed Gull	0 (0-0)	0 (0-45.84)	0 (0-26.94)	0 (0-36.7)	0 (0-0)	0 (0-0)	0 (0-23.68)	0 (0-0)	0 (0-0)	8.73 (0-34.94)	0 (0-0)	0 (0-0)	8.73 (0-168.1)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.07 (0-3.71)	0 (0-0)	1.75 (0-4.98)	0 (0-0)	2.82 (0-8.69)
Common Gull	0 (0-0)	0 (0-17.59)	0 (0-20.79)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-10.62)	4.01 (0-12.07)	14.61 (0-47.49)	0 (0-0)	18.62 (0-108.56)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-8.86)	0 (0-9.01)	0 (0-0)	9.76 (0-29.29)	10.33 (0-38.8)	19.07 (3.18-46.49)	0 (0-23.33)	8.55 (0-28.51)	0 (0-0)	0 (0-0)	47.71 (3.18-184.29)
Herring Gull	0 (0-0)	0 (0-8.2)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.5 (0-8.54)	0 (0-0)	2.5 (0-16.74)
Great Black-backed Gull	2.34 (0-11.66)	6.65 (0-17.74)	0 (0-7.82)	0 (0-0)	0 (0-8.7)	0 (0-0)	0 (0-11.75)	0 (0-16.92)	10.35 (0-26.78)	0 (0-10.12)	4.05 (0-18.42)	0 (0-0)	23.39 (0-129.91)

Table 15. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	26.21 (21.35-31.56)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	26.21 (21.35-31.56)
Fulmar	10.04 (8.2-12.14)	9.21 (7.55-11.16)	5.28 (4.31-6.36)	5.34 (4.36-6.45)	5.47 (4.45-6.62)	0 (0-0)	0 (0-0)	8.17 (6.67-9.9)	4.44 (3.66-5.36)	25.94 (21.19-31.18)	8.6 (7.01-10.33)	0 (0-0)	82.49 (67.4-99.5)
Gannet	0 (0-0)	2.13 (1.46-2.99)	0 (0-0)	0 (0-0)	0 (0-0)	3.2 (2.22-4.47)	6.47 (4.45-9.08)	7.78 (5.32-10.86)	4.59 (3.1-6.4)	22.47 (15.32-31.25)	45.17 (30.67-63.7)	0 (0-0)	91.81 (62.54-128.75)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.99 (8.18-12.01)	0 (0-0)	0 (0-0)	0 (0-0)	9.99 (8.18-12.01)
Kittiwake	15.45 (10.58-21.66)	9.7 (6.68-13.65)	28.8 (19.77-40.16)	0 (0-0)	12.74 (8.75-17.82)	50.53 (34.63-70.91)	0 (0-0)	18.61 (12.66-26.11)	0 (0-0)	16.6 (11.34-23.23)	58.89 (40.38-83.2)	0 (0-0)	211.32 (144.79-296.74)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.57 (4.94-13.44)	0 (0-0)	0 (0-0)	8.57 (4.94-13.44)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.05 (0.61-1.65)	0 (0-0)	1.7 (1.02-2.7)	0 (0-0)	2.75 (1.63-4.35)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	3.93 (2.29-6.18)	14.28 (8.34-22.84)	0 (0-0)	18.21 (10.63-29.02)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.71 (6.31-13.96)	11.48 (7.55-16.65)	18.78 (12.29-27.29)	1.24 (0.8-1.78)	8.45 (5.52-12.28)	0 (0-0)	0 (0-0)	49.66 (32.47-71.96)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.47 (1.62-3.59)	0 (0-0)	2.47 (1.62-3.59)
Great Black-backed Gull	2.31 (1.52-3.33)	6.63 (4.28-9.48)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.02 (7.27-15.92)	0 (0-0)	3.99 (2.64-5.8)	0 (0-0)	23.95 (15.71-34.53)

Table 16. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	26.27 (26.27-26.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	26.27 (26.27-26.27)
Fulmar	10.08 (10.08-10.08)	9.24 (9.24-9.24)	5.29 (5.29-5.29)	5.37 (5.37-5.37)	5.49 (5.49-5.49)	0 (0-0)	0 (0-0)	8.18 (8.18-8.18)	4.45 (4.45-4.45)	26.04 (26.04-26.04)	8.62 (8.62-8.62)	0 (0-0)	82.76 (82.76-82.76)
Gannet	0 (0-0)	2.15 (2.15-2.15)	0 (0-0)	0 (0-0)	0 (0-0)	3.24 (3.24-3.24)	6.54 (6.54-6.54)	7.89 (7.89-7.89)	4.65 (4.65-4.65)	22.66 (22.66-22.66)	45.69 (45.69-45.69)	0 (0-0)	92.82 (92.82-92.82)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (10.04-10.04)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (10.04-10.04)
Kittiwake	15.58 (15.58-15.58)	9.83 (9.83-9.83)	29.02 (29.02-29.02)	0 (0-0)	12.85 (12.85-12.85)	51.17 (51.17-51.17)	0 (0-0)	18.74 (18.74-18.74)	0 (0-0)	16.85 (16.85-16.85)	59.76 (59.76-59.76)	0 (0-0)	213.8 (213.8-213.8)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.73 (8.73-8.73)	0 (0-0)	0 (0-0)	8.73 (8.73-8.73)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.07 (1.07-1.07)	0 (0-0)	1.75 (1.75-1.75)	0 (0-0)	2.82 (2.82-2.82)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.01 (4.01-4.01)	14.61 (14.61-14.61)	0 (0-0)	18.62 (18.62-18.62)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.76 (9.76-9.76)	11.62 (11.62-11.62)	19.07 (19.07-19.07)	1.26 (1.26-1.26)	8.55 (8.55-8.55)	0 (0-0)	0 (0-0)	50.26 (50.26-50.26)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.5 (2.5-2.5)	0 (0-0)	2.5 (2.5-2.5)
Great Black-backed Gull	2.34 (2.34-2.34)	6.65 (6.65-6.65)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.16 (11.16-11.16)	0 (0-0)	4.05 (4.05-4.05)	0 (0-0)	24.2 (24.2-24.2)

Table 17. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	26.27 (26.27-26.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	26.27 (26.27-26.27)
Fulmar	10.08 (10.08-10.08)	9.24 (9.24-9.24)	5.29 (5.29-5.29)	5.37 (5.37-5.37)	5.49 (5.49-5.49)	0 (0-0)	0 (0-0)	8.18 (8.18-8.18)	4.45 (4.45-4.45)	26.04 (26.04-26.04)	8.62 (8.62-8.62)	0 (0-0)	82.76 (82.76-82.76)
Gannet	0 (0-0)	1.63 (1.62-1.65)	0 (0-0)	0 (0-0)	0 (0-0)	2.97 (2.93-3.06)	5.96 (5.88-6.16)	6.98 (6.85-7.28)	3.93 (3.83-4.18)	17.75 (17.6-17.94)	33.12 (32.74-33.61)	0 (0-0)	72.34 (71.45-73.88)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (10.04-10.04)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (10.04-10.04)
Kittiwake	10.53 (10.09-10.99)	7.1 (6.88-7.36)	23.06 (21.37-25.21)	0 (0-0)	11.24 (10.78-11.81)	45.67 (44.17-47.7)	0 (0-0)	16.03 (15.26-17.06)	0 (0-0)	12.56 (12.2-12.96)	41.4 (39.86-43.17)	0 (0-0)	167.59 (160.61-176.26)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.73 (8.73-8.73)	0 (0-0)	0 (0-0)	8.73 (8.73-8.73)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.07 (1.07-1.07)	0 (0-0)	1.75 (1.75-1.75)	0 (0-0)	2.82 (2.82-2.82)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.01 (4.01-4.01)	14.61 (14.61-14.61)	0 (0-0)	18.62 (18.62-18.62)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.76 (8.9-9.76)	10.52 (10.52-11.62)	16.79 (16.79-19.07)	1.26 (1.06-1.26)	8.55 (6.91-8.55)	0 (0-0)	0 (0-0)	46.88 (44.18-50.26)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.5 (1.92-2.5)	0 (0-0)	2.5 (1.92-2.5)
Great Black-backed Gull	1.77 (1.77-2.34)	5.26 (5.26-6.65)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.16 (9.45-11.16)	0 (0-0)	3.11 (3.11-4.05)	0 (0-0)	21.3 (19.59-24.2)

Table 18. Norfolk Vanguard West (1800MW). Collision mortality for the 9MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	26.27 (26.27-26.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	26.27 (26.27-26.27)
Fulmar	10.08 (10.08-10.08)	9.24 (9.24-9.24)	5.29 (5.29-5.29)	5.37 (5.37-5.37)	5.49 (5.49-5.49)	0 (0-0)	0 (0-0)	8.18 (8.18-8.18)	4.45 (4.45-4.45)	26.04 (26.04-26.04)	8.62 (8.62-8.62)	0 (0-0)	82.76 (82.76-82.76)
Gannet	0 (0-0)	2.15 (2.15-2.15)	0 (0-0)	0 (0-0)	0 (0-0)	3.24 (3.24-3.24)	6.54 (6.54-6.54)	7.89 (7.89-7.89)	4.65 (4.65-4.65)	22.66 (22.66-22.66)	45.69 (45.69-45.69)	0 (0-0)	92.82 (92.82-92.82)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (10.04-10.04)	0 (0-0)	0 (0-0)	0 (0-0)	10.04 (10.04-10.04)
Kittiwake	15.58 (15.58-15.58)	9.83 (9.83-9.83)	29.02 (29.02-29.02)	0 (0-0)	12.85 (12.85-12.85)	51.17 (51.17-51.17)	0 (0-0)	18.74 (18.74-18.74)	0 (0-0)	16.85 (16.85-16.85)	59.76 (59.76-59.76)	0 (0-0)	213.8 (213.8-213.8)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	8.73 (8.73-8.73)	0 (0-0)	0 (0-0)	8.73 (8.73-8.73)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.07 (1.07-1.07)	0 (0-0)	1.75 (1.75-1.75)	0 (0-0)	2.82 (2.82-2.82)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.01 (4.01-4.01)	14.61 (14.61-14.61)	0 (0-0)	18.62 (18.62-18.62)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	9.76 (9.76-9.76)	11.62 (11.62-11.62)	19.07 (19.07-19.07)	1.26 (1.26-1.26)	8.55 (8.55-8.55)	0 (0-0)	0 (0-0)	50.26 (50.26-50.26)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.5 (2.5-2.5)	0 (0-0)	2.5 (2.5-2.5)
Great Black-backed Gull	2.34 (2.34-2.34)	6.65 (6.65-6.65)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	11.16 (11.16-11.16)	0 (0-0)	4.05 (4.05-4.05)	0 (0-0)	24.2 (24.2-24.2)

Table 19. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density, proportions at collision height, avoidance rate and nocturnal activity.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	14.98 (0-45.09)	0 (0-20.4)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-21.24)	14.98 (0-86.73)
Fulmar	5.5 (0-21.31)	4.35 (0-15.12)	3.02 (0-13.35)	3.02 (0-13.59)	2.8 (0-9.87)	0 (0-17.69)	0 (0-22.61)	3.59 (0-42.37)	2.4 (0-8.46)	13.86 (0-89.05)	4.17 (0-14.26)	0 (0-7.88)	42.71 (0-275.56)
Gannet	0 (0-2.42)	0.78 (0-3.07)	0 (0-7.4)	0 (0-0)	0 (0-4.39)	1.42 (0-5.34)	3.08 (0-15.03)	3.65 (0-16.9)	1.77 (0-7.46)	8.98 (0-34.72)	16.25 (8.68-27.37)	0 (0-0)	35.93 (8.68-124.1)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.62 (0-20.41)	0 (0-0)	0 (0-0)	0 (0-0)	5.62 (0-20.41)
Kittiwake	6.19 (0-15.79)	4.41 (0-13.14)	12.69 (1.69-38.57)	0 (0-22.22)	6.81 (0-20.08)	24.81 (4.52-62.56)	0 (0-38.05)	8.55 (0-21.38)	0 (0-19.59)	7.72 (0-24.27)	21.84 (3.16-61.61)	0 (0-5.52)	93.02 (9.37-342.78)
Black-headed Gull	0 (0-0)	0 (0-25.2)	0 (0-13.86)	0 (0-22.37)	0 (0-0)	0 (0-0)	0 (0-12.58)	0 (0-0)	0 (0-0)	5.44 (0-22.66)	0 (0-0)	0 (0-0)	5.44 (0-96.67)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.54 (0-2.26)	0 (0-0)	0.92 (0-2.95)	0 (0-0)	1.46 (0-5.21)
Common Gull	0 (0-0)	0 (0-8.85)	0 (0-11.27)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-5.42)	1.98 (0-8.11)	7.35 (0-28.67)	0 (0-0)	9.33 (0-62.32)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-4.43)	0 (0-4.12)	0 (0-0)	5.04 (0-16.22)	5.43 (0-21.47)	9.17 (0.97-26.57)	0 (0-11.8)	3.38 (0-15.34)	0 (0-0)	0 (0-0)	23.02 (0.97-99.95)
Herring Gull	0 (0-0)	0 (0-3.84)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.11 (0-4.43)	0 (0-0)	1.11 (0-8.27)
Great Black-backed Gull	1.3 (0-5.54)	3.31 (0-8.81)	0 (0-3.79)	0 (0-0)	0 (0-4.24)	0 (0-0)	0 (0-6.76)	0 (0-8.7)	4.73 (0-14.91)	0 (0-5.72)	1.96 (0-8.58)	0 (0-0)	11.3 (0-67.05)

Table 20. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in seabird density only (mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	14.11 (0-42.32)	0 (0-20.02)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-20.88)	14.11 (0-83.22)
Fulmar	5.34 (0-21.37)	4.9 (0-14.7)	2.81 (0-11.22)	2.85 (0-13.81)	2.91 (0-8.79)	0 (0-17.26)	0 (0-20.6)	4.33 (0-40.45)	2.36 (0-8.19)	13.8 (0-85.56)	4.57 (0-13.7)	0 (0-7.98)	43.87 (0-263.63)
Gannet	0 (0-3.33)	1.1 (0-3.3)	0 (0-8.2)	0 (0-0)	0 (0-4.9)	1.65 (0-4.96)	3.34 (0-15.04)	4.03 (0-18.72)	2.38 (0-8.26)	11.57 (0-39.89)	23.33 (13.33-34.19)	0 (0-0)	47.4 (13.33-140.79)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (0-18.76)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (0-18.76)
Kittiwake	8.41 (0-22.3)	5.3 (0-15.91)	15.66 (3.13-43.63)	0 (0-26.26)	6.94 (0-20.81)	27.61 (6.9-65.58)	0 (0-42.13)	10.11 (0-23.2)	0 (0-24.01)	9.09 (0-30.31)	33.03 (5.51-79.87)	0 (0-8.3)	116.15 (15.54-402.31)
Black-headed Gull	0 (0-0)	0 (0-24.44)	0 (0-14.37)	0 (0-19.57)	0 (0-0)	0 (0-0)	0 (0-12.63)	0 (0-0)	0 (0-0)	4.66 (0-18.63)	0 (0-0)	0 (0-0)	4.66 (0-89.64)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.58 (0-2.03)	0 (0-0)	0.96 (0-2.73)	0 (0-0)	1.54 (0-4.76)
Common Gull	0 (0-0)	0 (0-9.52)	0 (0-11.25)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-5.75)	2.17 (0-6.53)	7.91 (0-25.7)	0 (0-0)	10.08 (0-58.75)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-4.61)	0 (0-4.69)	0 (0-0)	5.08 (0-15.24)	6.72 (0-20.16)	9.92 (1.65-24.19)	0 (0-12.14)	4.45 (0-14.83)	0 (0-0)	0 (0-0)	26.17 (1.65-95.86)
Herring Gull	0 (0-0)	0 (0-4.26)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.3 (0-4.43)	0 (0-0)	1.3 (0-8.69)
Great Black-backed Gull	1.21 (0-6.03)	3.44 (0-9.18)	0 (0-4.05)	0 (0-0)	0 (0-4.5)	0 (0-0)	0 (0-6.08)	0 (0-8.75)	5.35 (0-13.85)	0 (0-5.23)	2.09 (0-8.34)	0 (0-0)	12.09 (0-66.01)

Table 21. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in avoidance rate only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	14.05 (11.44-17.01)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	14.05 (11.44-17.01)
Fulmar	5.31 (4.33-6.44)	4.89 (4.03-5.92)	2.8 (2.28-3.37)	2.84 (2.32-3.45)	2.9 (2.37-3.5)	0 (0-0)	0 (0-0)	4.32 (3.52-5.25)	2.35 (1.93-2.85)	13.73 (11.29-16.67)	4.55 (3.74-5.48)	0 (0-0)	43.69 (35.81-52.93)
Gannet	0 (0-0)	1.09 (0.74-1.52)	0 (0-0)	0 (0-0)	0 (0-0)	1.64 (1.12-2.32)	3.3 (2.29-4.61)	3.96 (2.72-5.58)	2.35 (1.6-3.29)	11.49 (7.83-16)	23.03 (15.69-32.16)	0 (0-0)	46.86 (31.99-65.48)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.37 (4.38-6.5)	0 (0-0)	0 (0-0)	0 (0-0)	5.37 (4.38-6.5)
Kittiwake	8.31 (5.74-11.64)	5.24 (3.59-7.35)	15.59 (10.62-21.61)	0 (0-0)	6.86 (4.72-9.66)	27.4 (18.67-38.59)	0 (0-0)	9.95 (6.84-13.97)	0 (0-0)	8.99 (6.13-12.62)	31.99 (21.79-44.98)	0 (0-0)	114.33 (78.1-160.42)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.59 (2.7-7.21)	0 (0-0)	0 (0-0)	4.59 (2.7-7.21)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.57 (0.33-0.9)	0 (0-0)	0.93 (0.55-1.49)	0 (0-0)	1.5 (0.88-2.39)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.14 (1.24-3.4)	7.76 (4.58-12.15)	0 (0-0)	9.9 (5.82-15.55)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.02 (3.26-7.17)	5.93 (3.85-8.64)	9.88 (6.41-14.26)	0.64 (0.43-0.93)	4.4 (2.87-6.38)	0 (0-0)	0 (0-0)	25.87 (16.82-37.38)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.28 (0.84-1.84)	0 (0-0)	1.28 (0.84-1.84)
Great Black-backed Gull	1.2 (0.79-1.73)	3.4 (2.24-4.92)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.72 (3.73-8.32)	0 (0-0)	2.06 (1.34-3.01)	0 (0-0)	12.38 (8.1-17.98)

Table 22. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in proportions at collision height (Option 2) only (median values for seabird density and mean values for proportions at collision height, avoidance rate and nocturnal activity).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	14.11 (14.11-14.11)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	14.11 (14.11-14.11)
Fulmar	5.34 (5.34-5.34)	4.9 (4.9-4.9)	2.81 (2.81-2.81)	2.85 (2.85-2.85)	2.91 (2.91-2.91)	0 (0-0)	0 (0-0)	4.33 (4.33-4.33)	2.36 (2.36-2.36)	13.8 (13.8-13.8)	4.57 (4.57-4.57)	0 (0-0)	43.87 (43.87-43.87)
Gannet	0 (0-0)	1.1 (1.1-1.1)	0 (0-0)	0 (0-0)	0 (0-0)	1.65 (1.65-1.65)	3.34 (3.34-3.34)	4.03 (4.03-4.03)	2.38 (2.38-2.38)	11.57 (11.57-11.57)	23.33 (23.33-23.33)	0 (0-0)	47.4 (47.4-47.4)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (5.39-5.39)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (5.39-5.39)
Kittiwake	8.41 (8.41-8.41)	5.3 (5.3-5.3)	15.66 (15.66-15.66)	0 (0-0)	6.94 (6.94-6.94)	27.61 (27.61-27.61)	0 (0-0)	10.11 (10.11-10.11)	0 (0-0)	9.09 (9.09-9.09)	32.25 (32.25-32.25)	0 (0-0)	115.37 (115.37-115.37)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.66 (4.66-4.66)	0 (0-0)	0 (0-0)	4.66 (4.66-4.66)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.58 (0.58-0.58)	0 (0-0)	0.96 (0.96-0.96)	0 (0-0)	1.54 (1.54-1.54)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.17 (2.17-2.17)	7.91 (7.91-7.91)	0 (0-0)	10.08 (10.08-10.08)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.08 (5.08-5.08)	6.05 (6.05-6.05)	9.92 (9.92-9.92)	0.65 (0.65-0.65)	4.45 (4.45-4.45)	0 (0-0)	0 (0-0)	26.15 (26.15-26.15)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.3 (1.3-1.3)	0 (0-0)	1.3 (1.3-1.3)
Great Black-backed Gull	1.21 (1.21-1.21)	3.44 (3.44-3.44)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.77 (5.77-5.77)	0 (0-0)	2.09 (2.09-2.09)	0 (0-0)	12.51 (12.51-12.51)

Table 23. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations incorporating uncertainty in nocturnal activity only (median values for seabird density and mean values for proportions at collision height and avoidance rate).

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	14.11 (14.11-14.11)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	14.11 (14.11-14.11)
Fulmar	5.34 (5.34-5.34)	4.9 (4.9-4.9)	2.81 (2.81-2.81)	2.85 (2.85-2.85)	2.91 (2.91-2.91)	0 (0-0)	0 (0-0)	4.33 (4.33-4.33)	2.36 (2.36-2.36)	13.8 (13.8-13.8)	4.57 (4.57-4.57)	0 (0-0)	43.87 (43.87-43.87)
Gannet	0 (0-0)	0.83 (0.83-0.84)	0 (0-0)	0 (0-0)	0 (0-0)	1.52 (1.5-1.57)	3.04 (3-3.14)	3.56 (3.5-3.72)	2.01 (1.96-2.13)	9.07 (8.99-9.16)	16.92 (16.72-17.17)	0 (0-0)	36.95 (36.5-37.73)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (5.39-5.39)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (5.39-5.39)
Kittiwake	5.68 (5.46-5.93)	3.83 (3.71-3.97)	12.42 (11.5-13.61)	0 (0-0)	6.07 (5.82-6.38)	24.67 (23.83-25.73)	0 (0-0)	8.65 (8.23-9.17)	0 (0-0)	6.78 (6.59-7)	22.34 (21.48-23.28)	0 (0-0)	90.44 (86.62-95.07)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.66 (4.66-4.66)	0 (0-0)	0 (0-0)	4.66 (4.66-4.66)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.58 (0.58-0.58)	0 (0-0)	0.96 (0.96-0.96)	0 (0-0)	1.54 (1.54-1.54)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.17 (2.17-2.17)	7.91 (7.91-7.91)	0 (0-0)	10.08 (10.08-10.08)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.08 (4.63-5.08)	5.47 (5.47-6.05)	8.74 (8.74-9.92)	0.55 (0.55-0.65)	3.59 (3.59-4.45)	0 (0-0)	0 (0-0)	23.43 (22.98-26.15)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.3 (1-1.3)	0 (0-0)	1.3 (1-1.3)
Great Black-backed Gull	1.21 (0.91-1.21)	2.72 (2.72-3.44)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.89 (4.89-5.77)	0 (0-0)	2.09 (1.61-2.09)	0 (0-0)	10.91 (10.13-12.51)

Table 24. Norfolk Vanguard West (1800MW). Collision mortality for the 20MW turbine calculated using Band CRM Option 1. Values are the median and 95% confidence intervals calculated across 5,000 simulations with no uncertainty in any parameters.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Red-throated Diver	14.11 (14.11-14.11)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	14.11 (14.11-14.11)
Fulmar	5.34 (5.34-5.34)	4.9 (4.9-4.9)	2.81 (2.81-2.81)	2.85 (2.85-2.85)	2.91 (2.91-2.91)	0 (0-0)	0 (0-0)	4.33 (4.33-4.33)	2.36 (2.36-2.36)	13.8 (13.8-13.8)	4.57 (4.57-4.57)	0 (0-0)	43.87 (43.87-43.87)
Gannet	0 (0-0)	1.1 (1.1-1.1)	0 (0-0)	0 (0-0)	0 (0-0)	1.65 (1.65-1.65)	3.34 (3.34-3.34)	4.03 (4.03-4.03)	2.38 (2.38-2.38)	11.57 (11.57-11.57)	23.33 (23.33-23.33)	0 (0-0)	47.4 (47.4-47.4)
Great Skua	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (5.39-5.39)	0 (0-0)	0 (0-0)	0 (0-0)	5.39 (5.39-5.39)
Kittiwake	8.41 (8.41-8.41)	5.3 (5.3-5.3)	15.66 (15.66-15.66)	0 (0-0)	6.94 (6.94-6.94)	27.61 (27.61-27.61)	0 (0-0)	10.11 (10.11-10.11)	0 (0-0)	9.09 (9.09-9.09)	32.25 (32.25-32.25)	0 (0-0)	115.37 (115.37-115.37)
Black-headed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	4.66 (4.66-4.66)	0 (0-0)	0 (0-0)	4.66 (4.66-4.66)
Little Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0.58 (0.58-0.58)	0 (0-0)	0.96 (0.96-0.96)	0 (0-0)	1.54 (1.54-1.54)
Common Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	2.17 (2.17-2.17)	7.91 (7.91-7.91)	0 (0-0)	10.08 (10.08-10.08)
Lesser Black-backed Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.08 (5.08-5.08)	6.05 (6.05-6.05)	9.92 (9.92-9.92)	0.65 (0.65-0.65)	4.45 (4.45-4.45)	0 (0-0)	0 (0-0)	26.15 (26.15-26.15)
Herring Gull	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1.3 (1.3-1.3)	0 (0-0)	1.3 (1.3-1.3)
Great Black-backed Gull	1.21 (1.21-1.21)	3.44 (3.44-3.44)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	5.77 (5.77-5.77)	0 (0-0)	2.09 (2.09-2.09)	0 (0-0)	12.51 (12.51-12.51)

Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 6

Collision mortality boxplots

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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4	Internal Approval		
5	Final Client Approval		

1 INTRODUCTION

1. This appendix provides box plots of collision mortality estimated using the Band model option 2 with random variation in seabird density, avoidance rate, flight height and nocturnal activity. Further details on collision modelling methods are provided in Technical Appendix 13.1, input parameters in Annex 3, and tabulated outputs for NV East and NV West are provided in Annexes 4 and 5.

2. Table A6 provides a key to figure numbering.

Table A6. Key to figure numbering.

Site	Species	Figure number
Norfolk Vanguard East	Red-throated diver	1
	Fulmar	2
	Gannet	3
	Arctic skua	4
	Great skua	5
	Kittiwake	6
	Black-headed gull	7
	Little gull	8
	Common gull	9
	Lesser black-backed gull	10
	Herring gull	11
	Great black-backed gull	12
Norfolk Vanguard West	Red-throated diver	13
	Fulmar	14
	Gannet	15
	Great skua	16
	Kittiwake	17
	Black-headed gull	18
	Little gull	19
	Common gull	20
	Lesser black-backed gull	21
	Herring gull	22
	Great black-backed gull	23

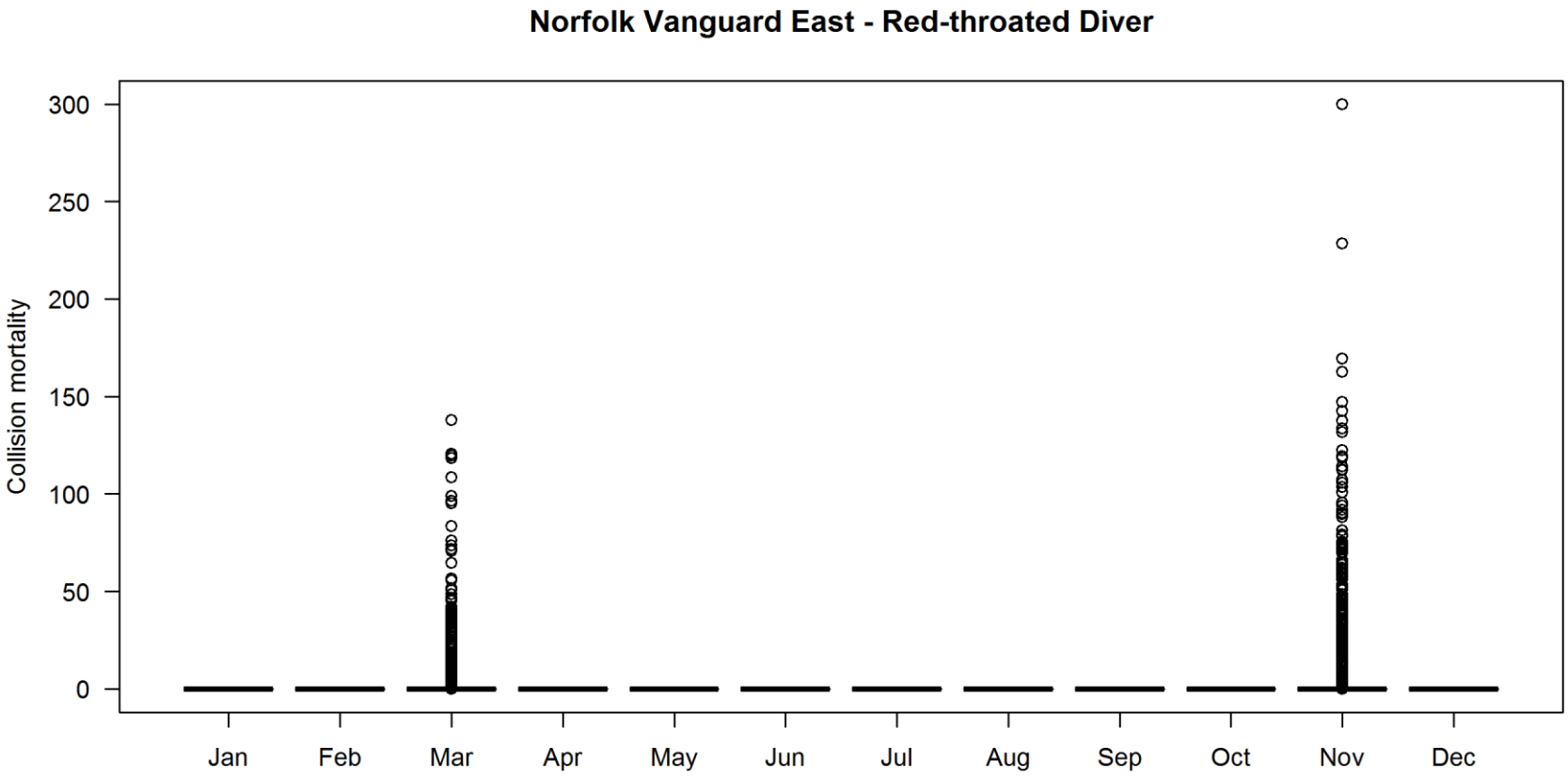


Figure 1. Norfolk Vanguard East, Red-throated Diver Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

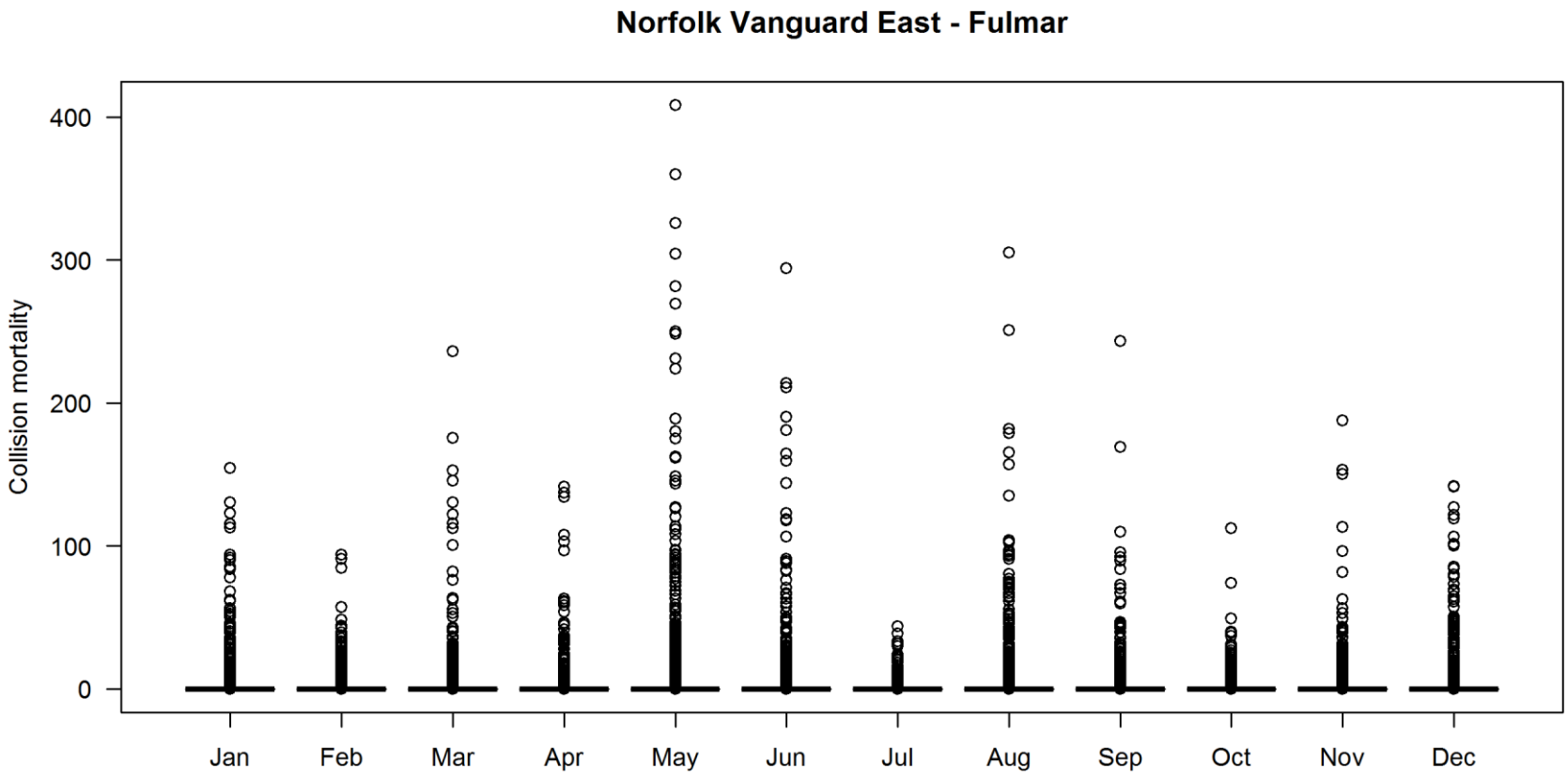


Figure 2. Norfolk Vanguard East, Fulmar Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

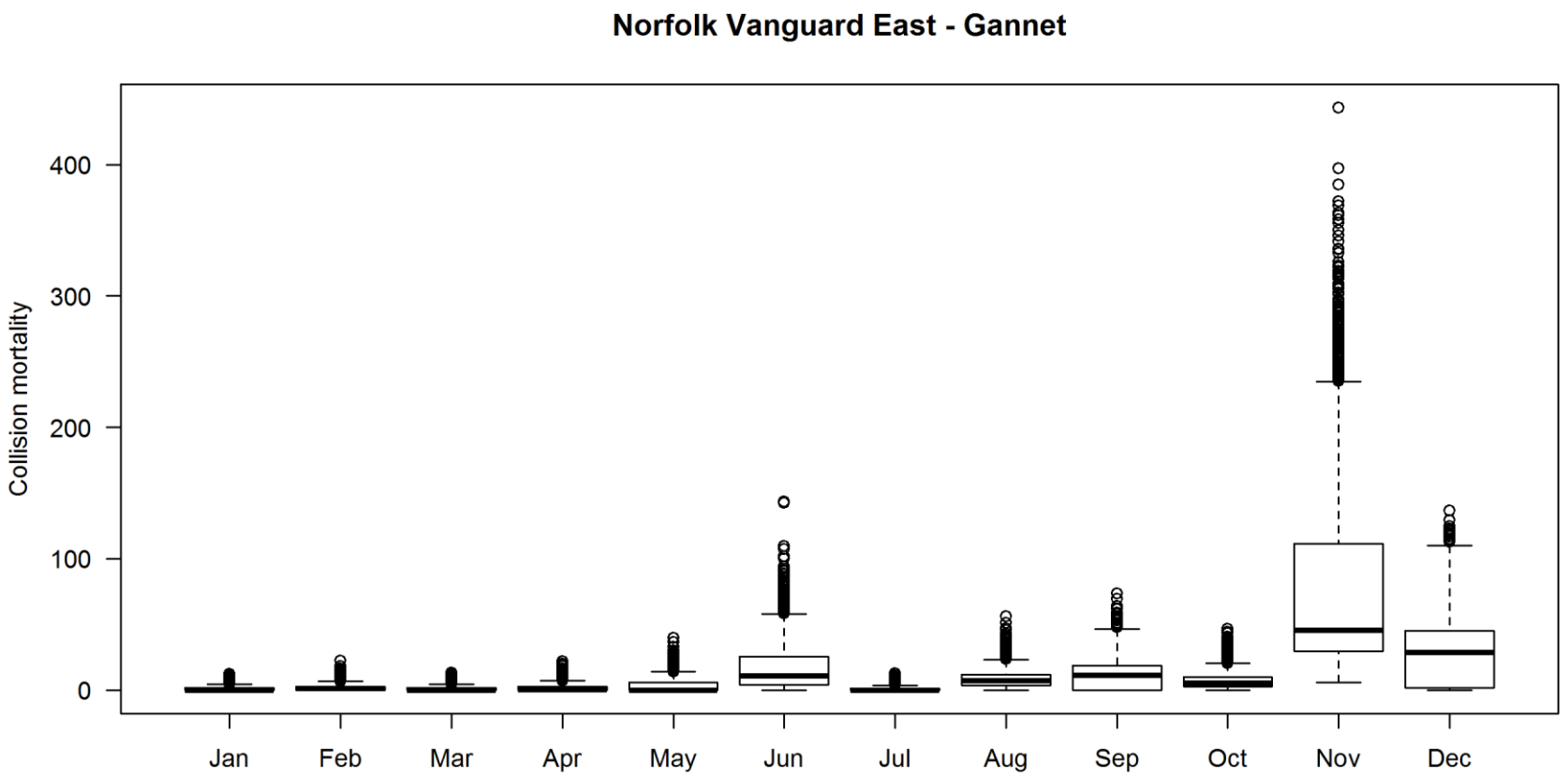


Figure 3. Norfolk Vanguard East, Gannet Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

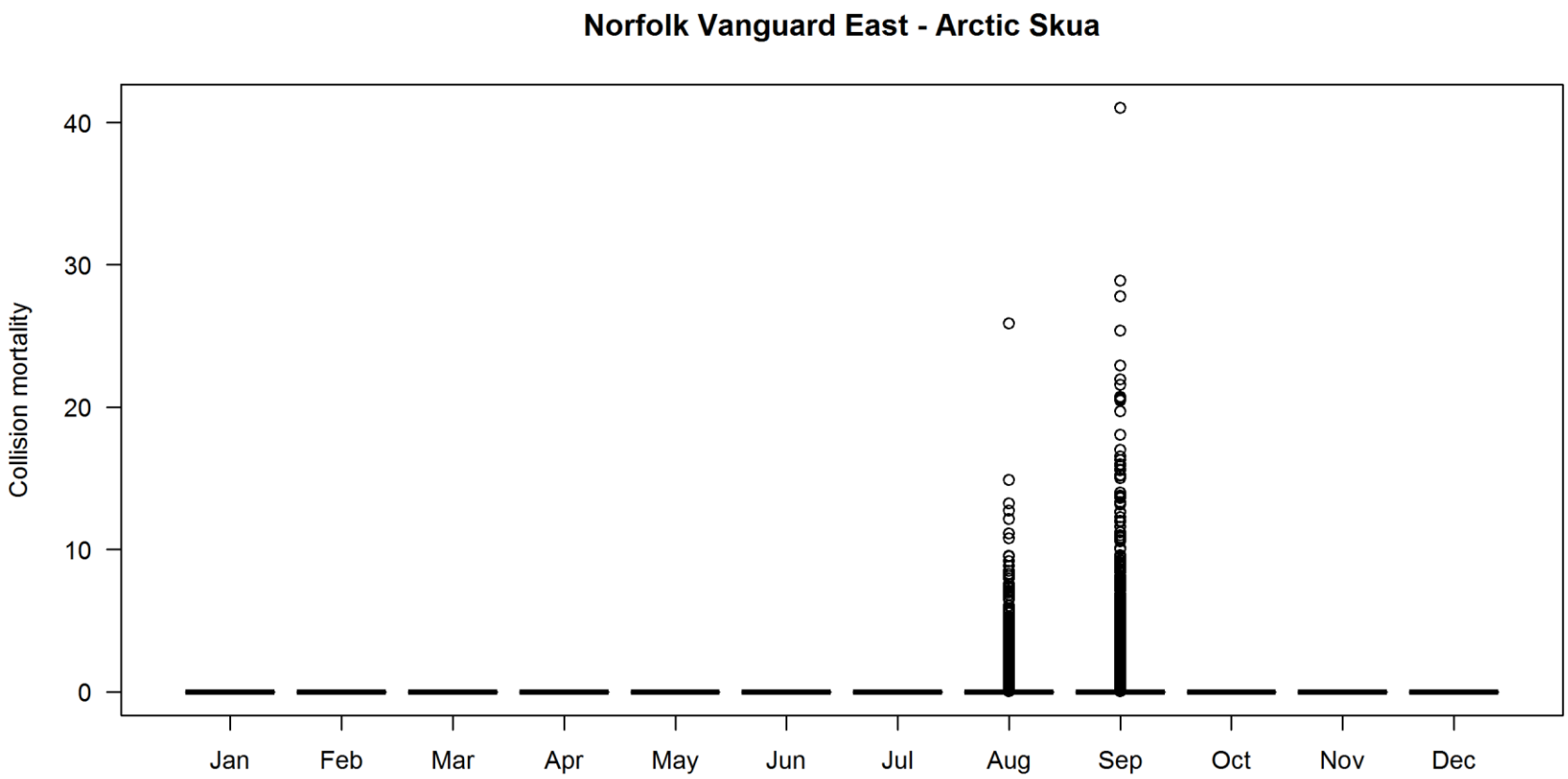


Figure 4. Norfolk Vanguard East, Arctic Skua Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

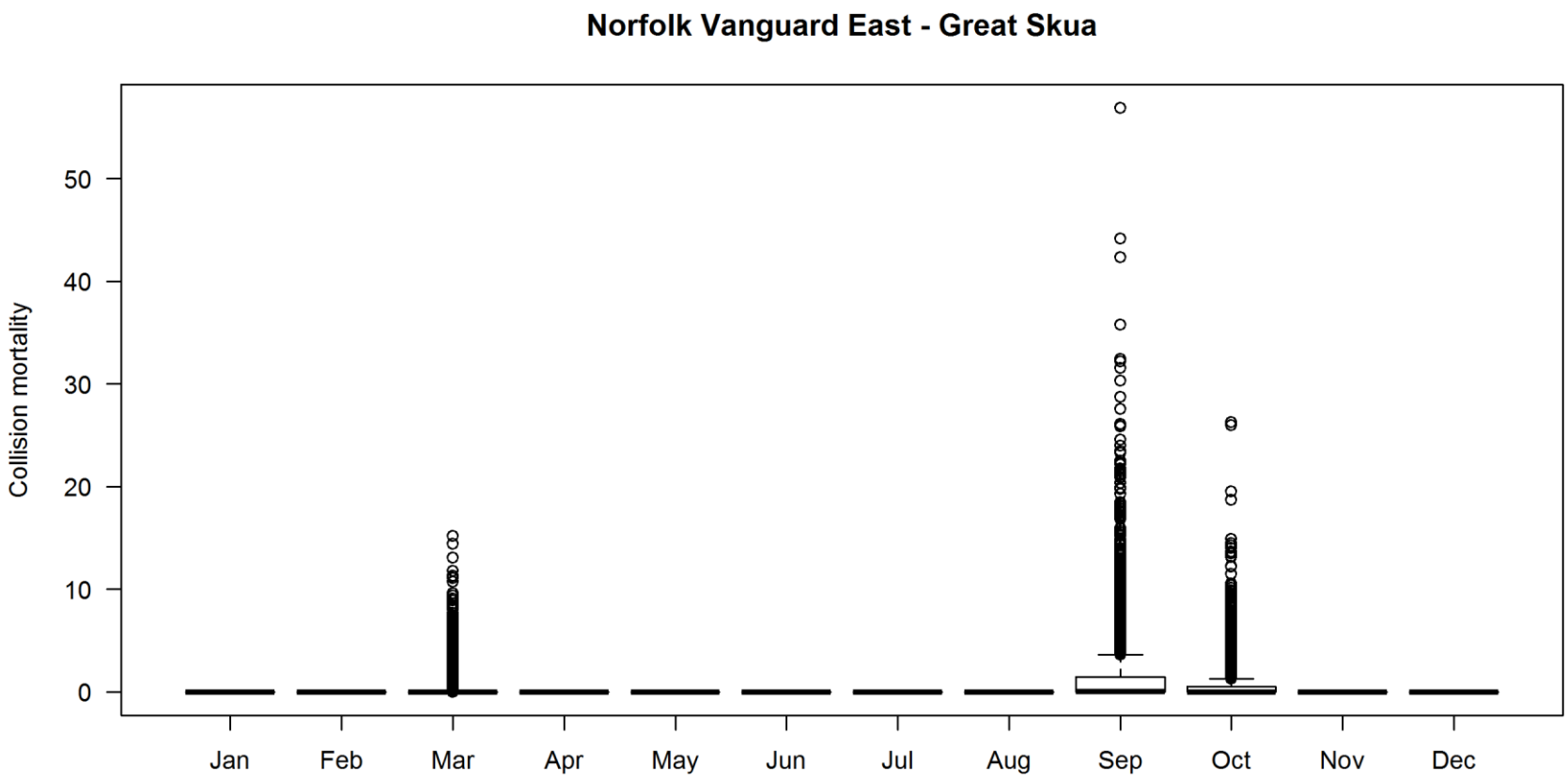


Figure 5. Norfolk Vanguard East, Great Skua Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

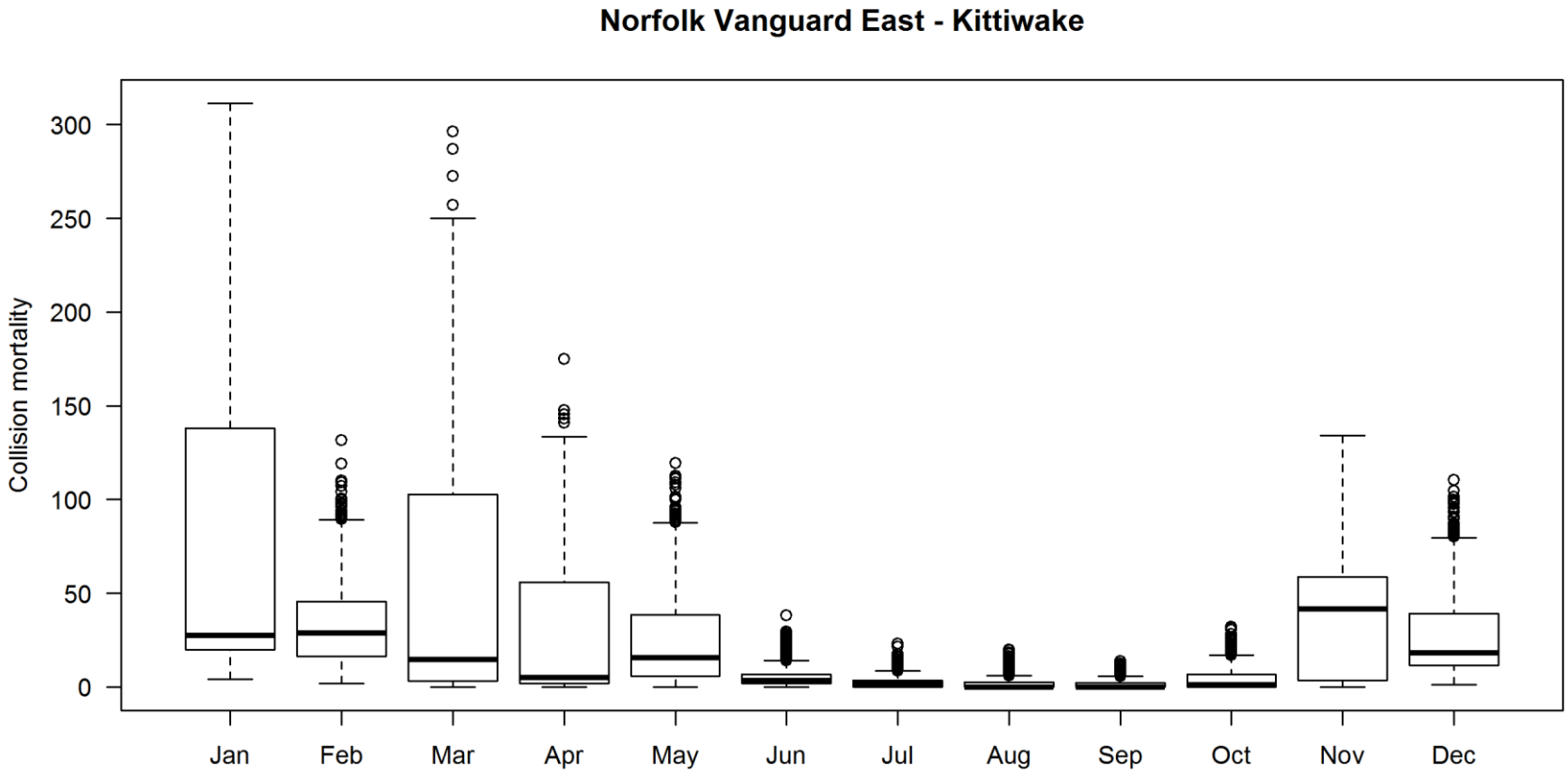


Figure 6. Norfolk Vanguard East, Kittiwake Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

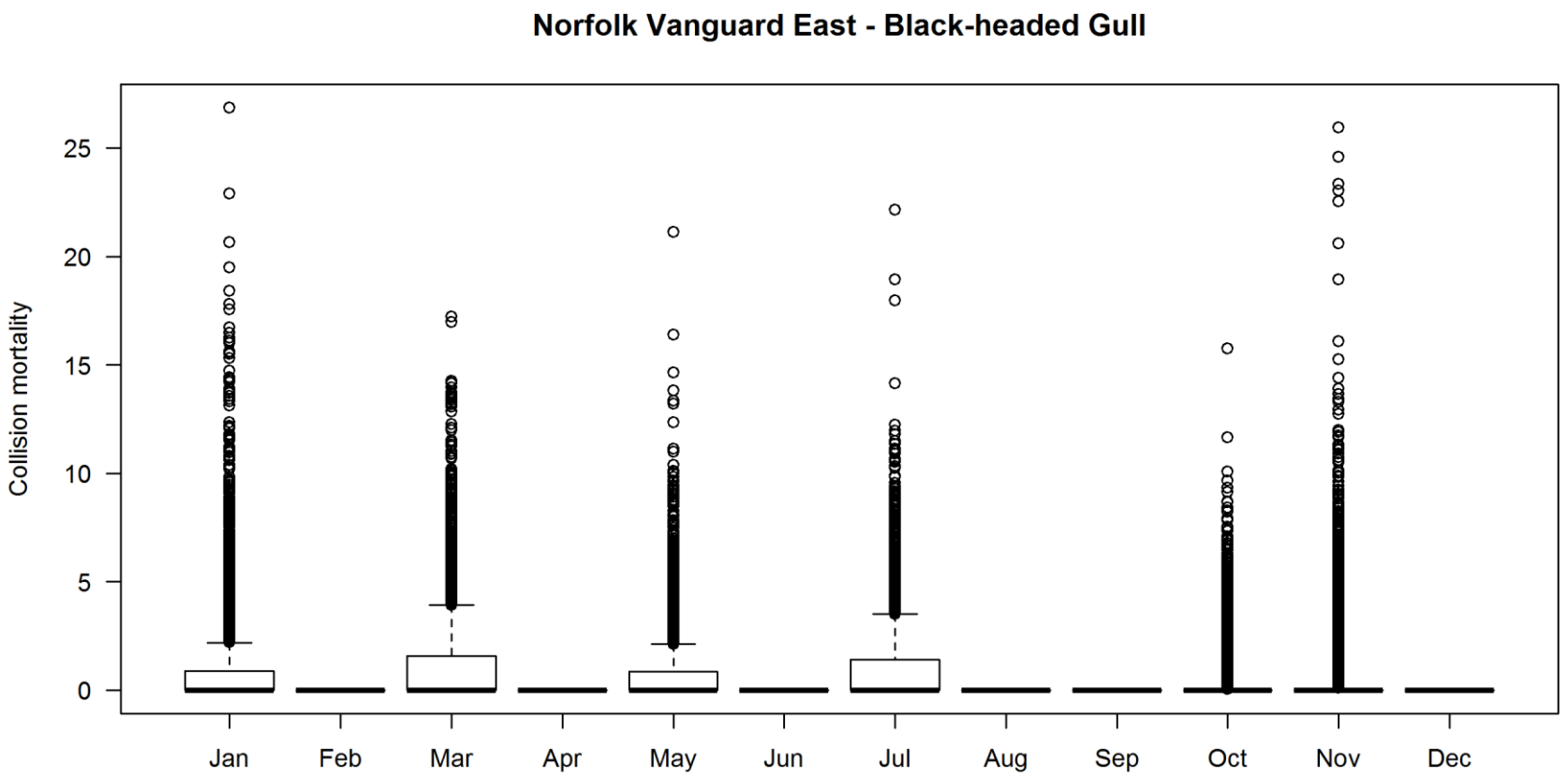


Figure 7. Norfolk Vanguard East, Black-headed Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

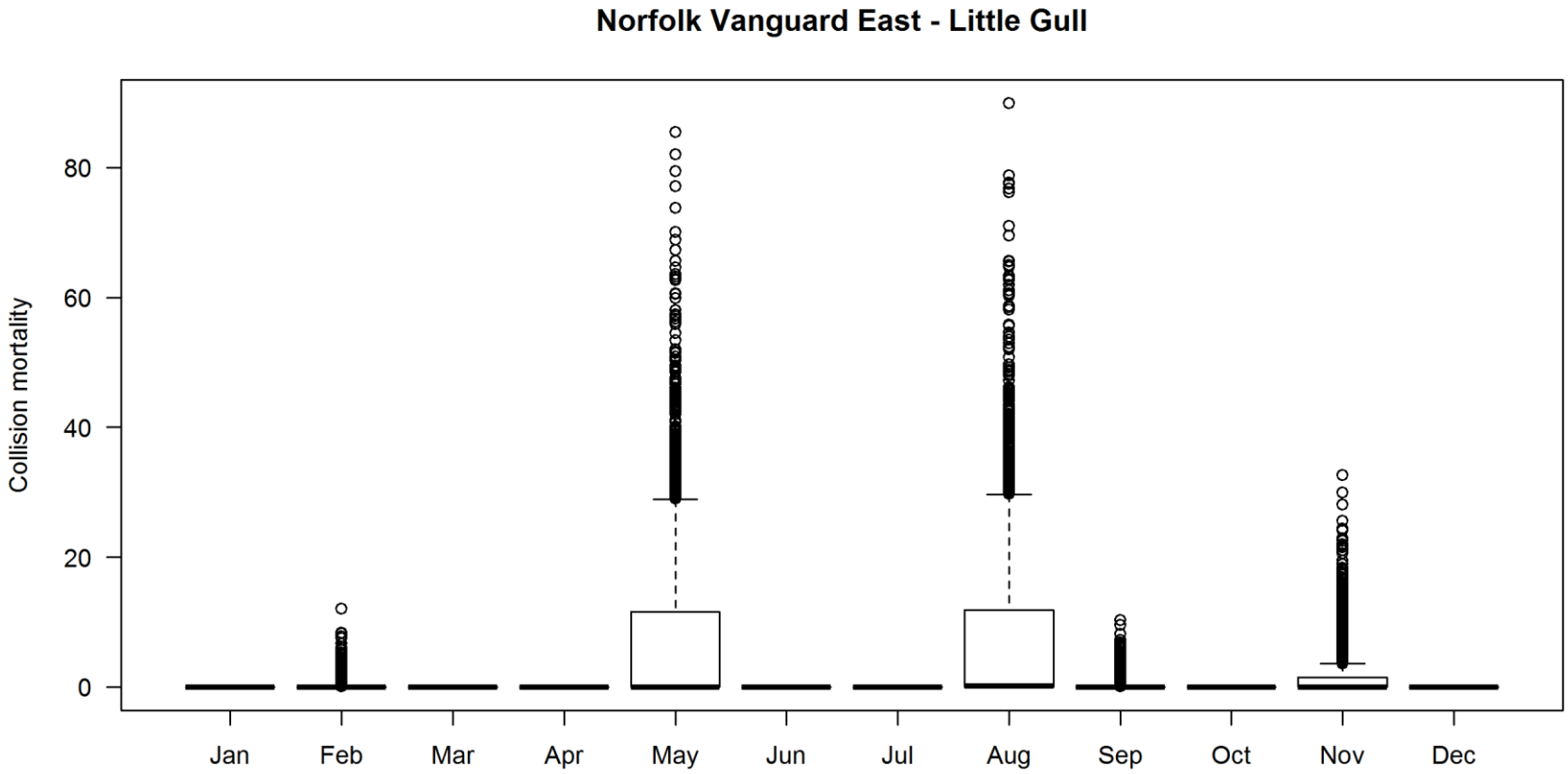


Figure 8. Norfolk Vanguard East, Little Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

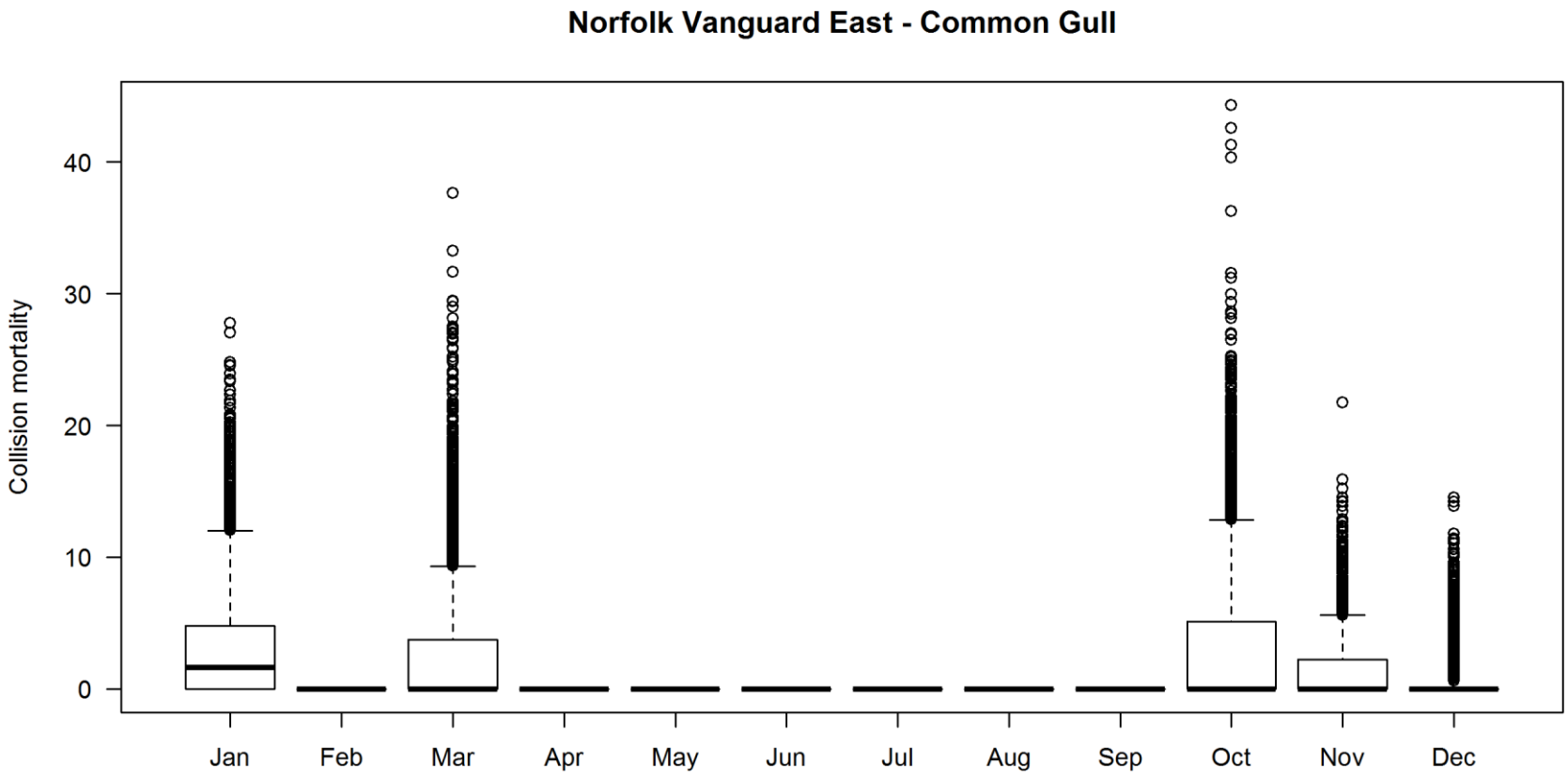


Figure 9. Norfolk Vanguard East, Common Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

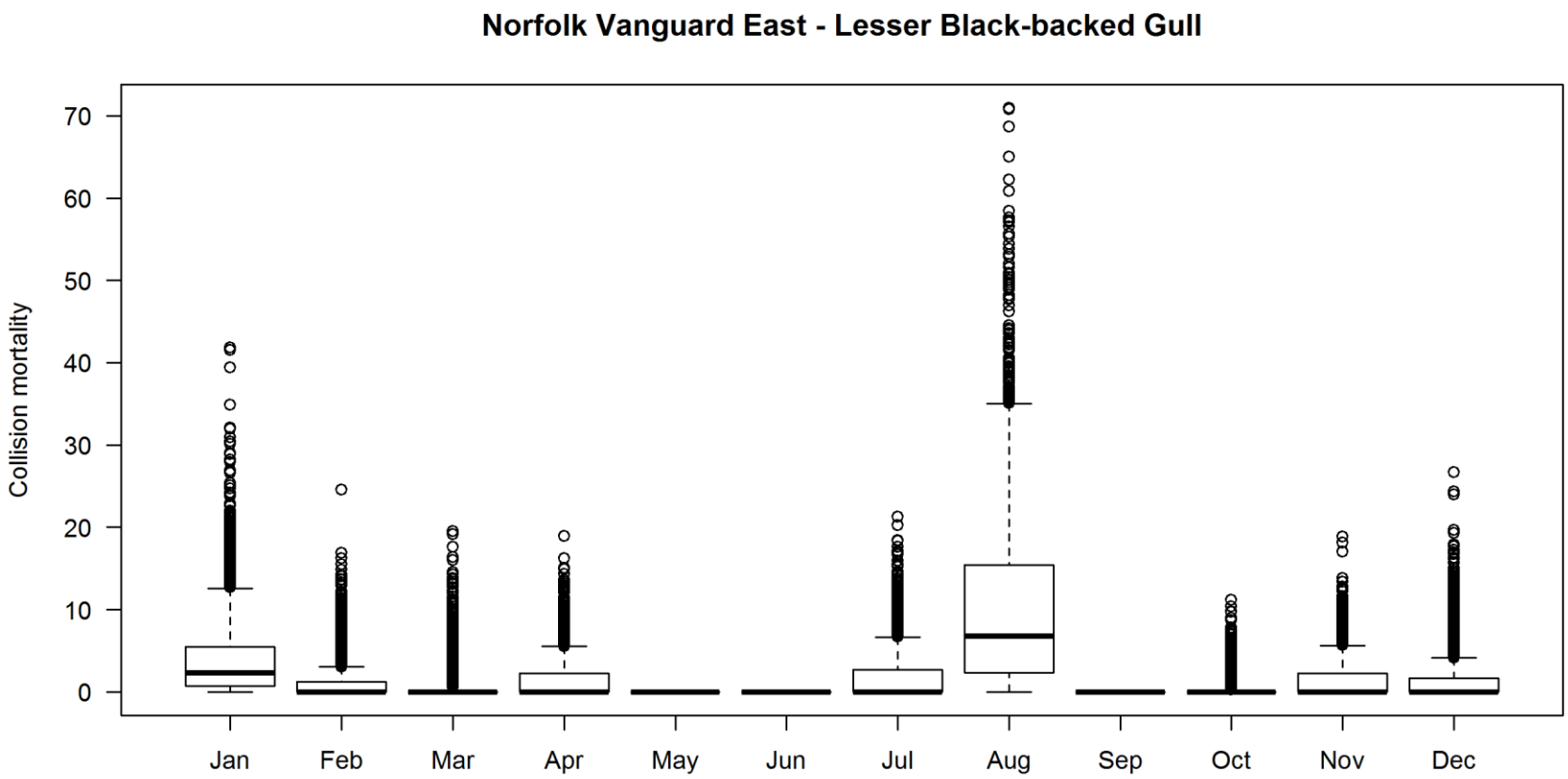


Figure 10. Norfolk Vanguard East, Lesser Black-backed Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

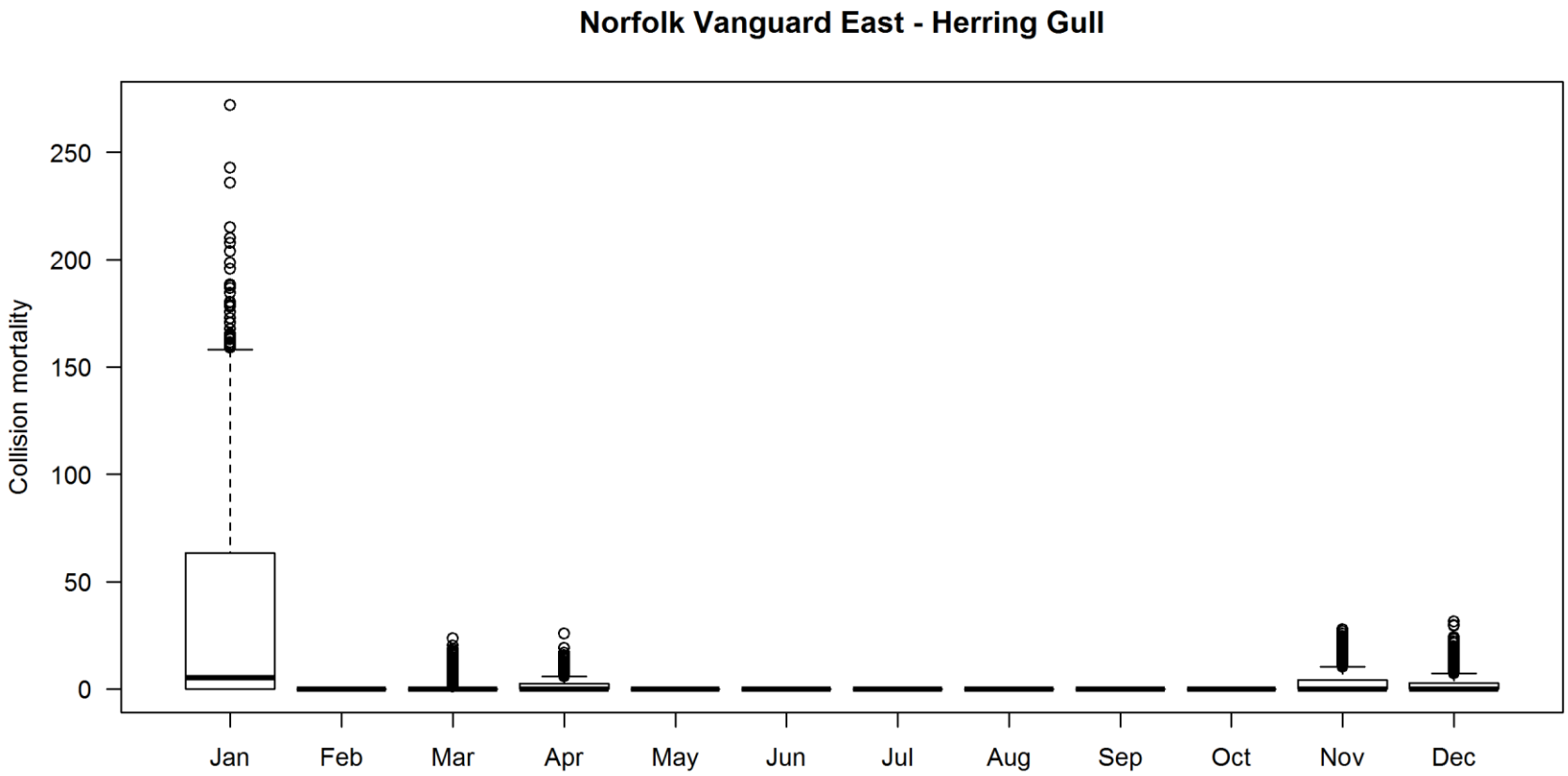


Figure 11. Norfolk Vanguard East, Herring Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

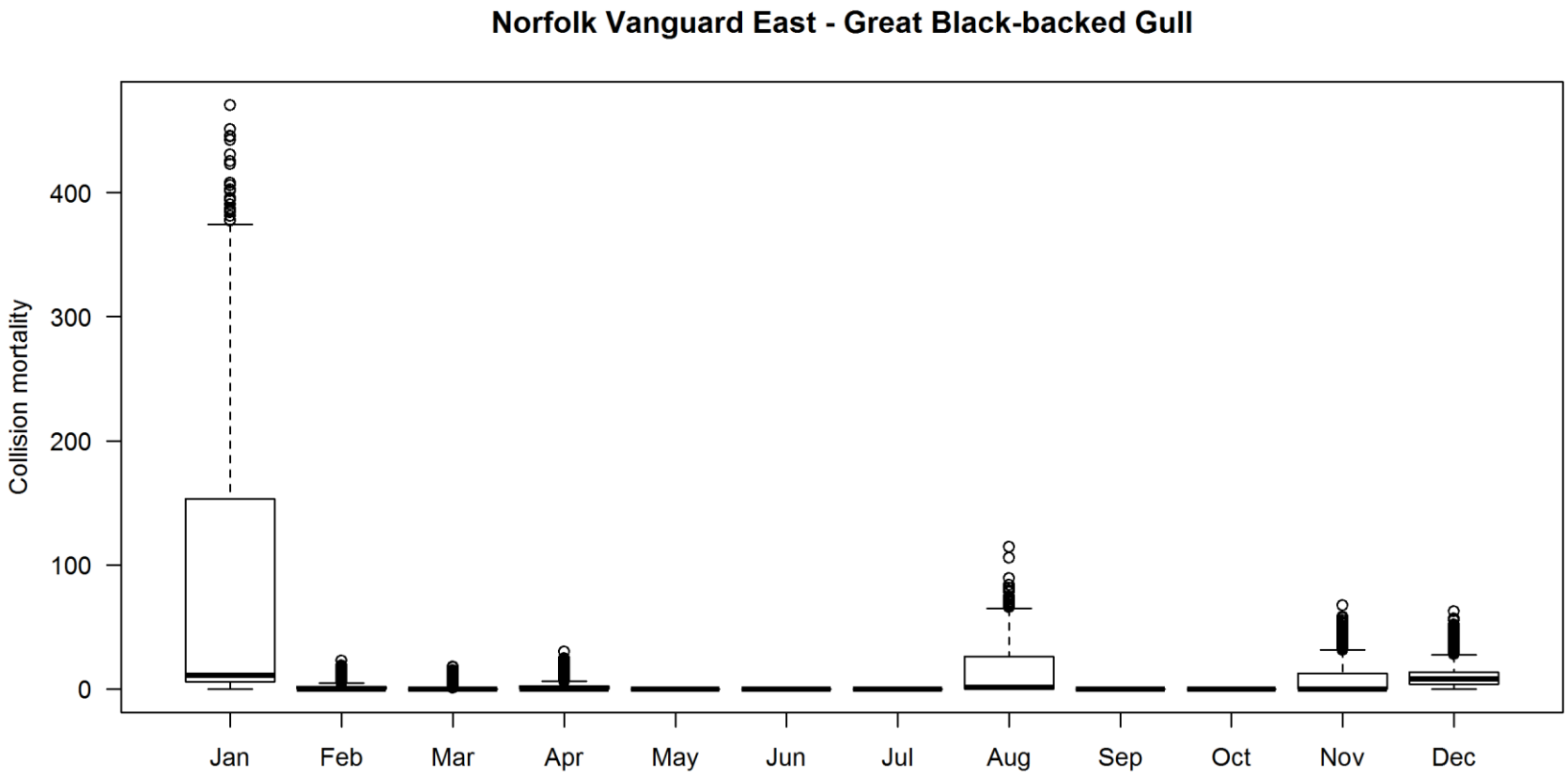


Figure 12. Norfolk Vanguard East, Great Black-backed Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

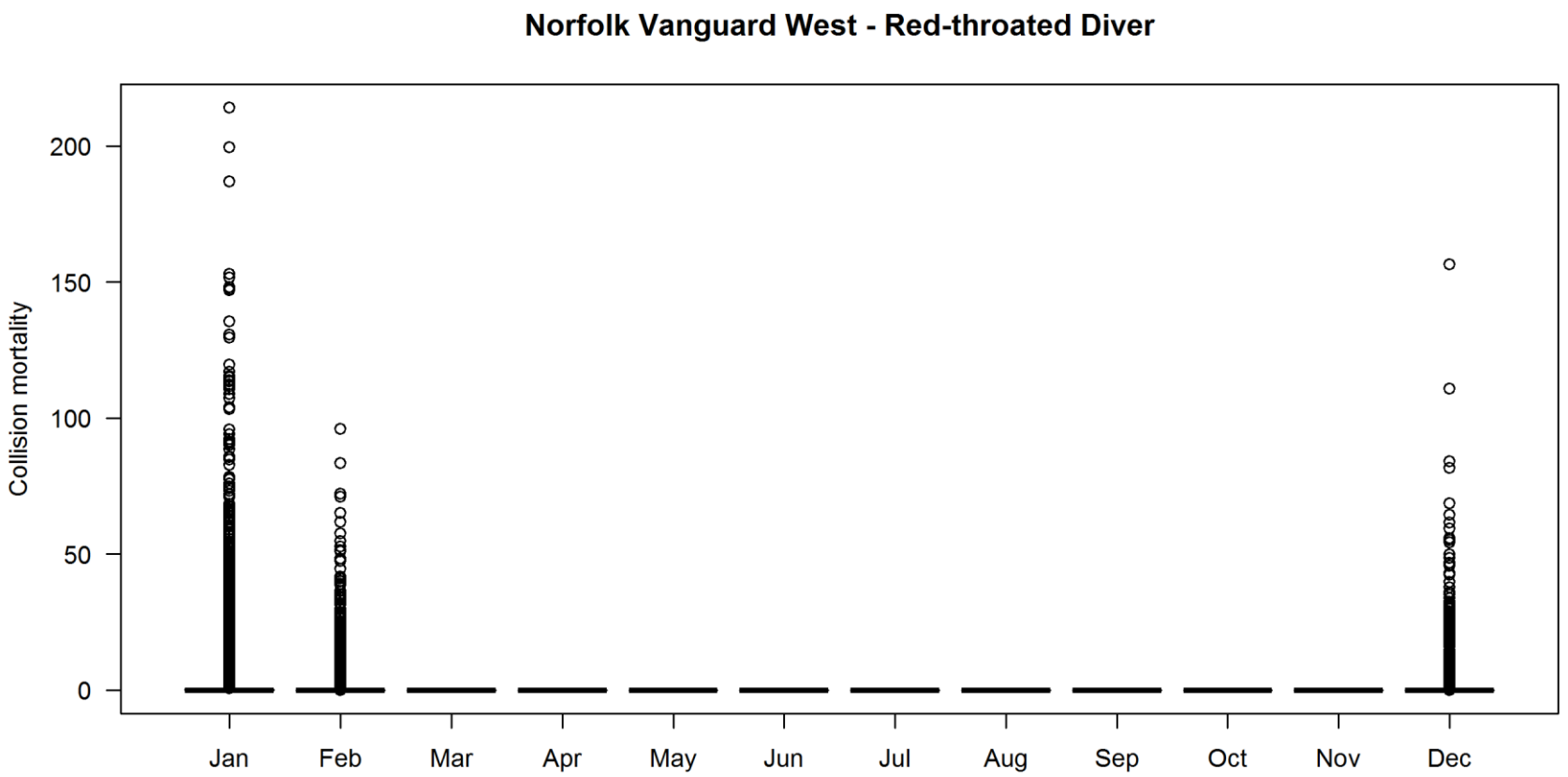


Figure 13. Norfolk Vanguard West, Red-throated Diver Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

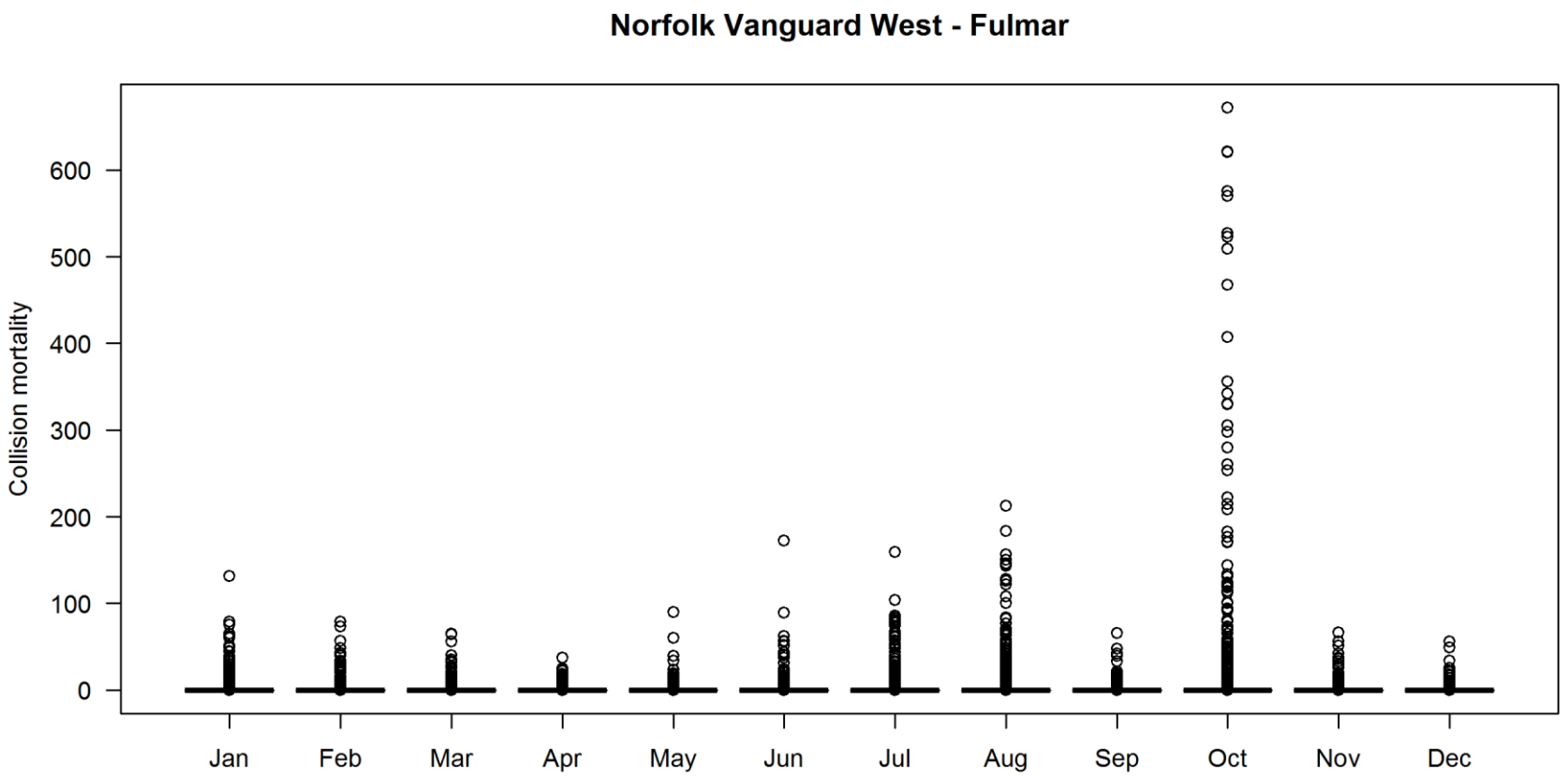


Figure 14. Norfolk Vanguard West, Fulmar Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

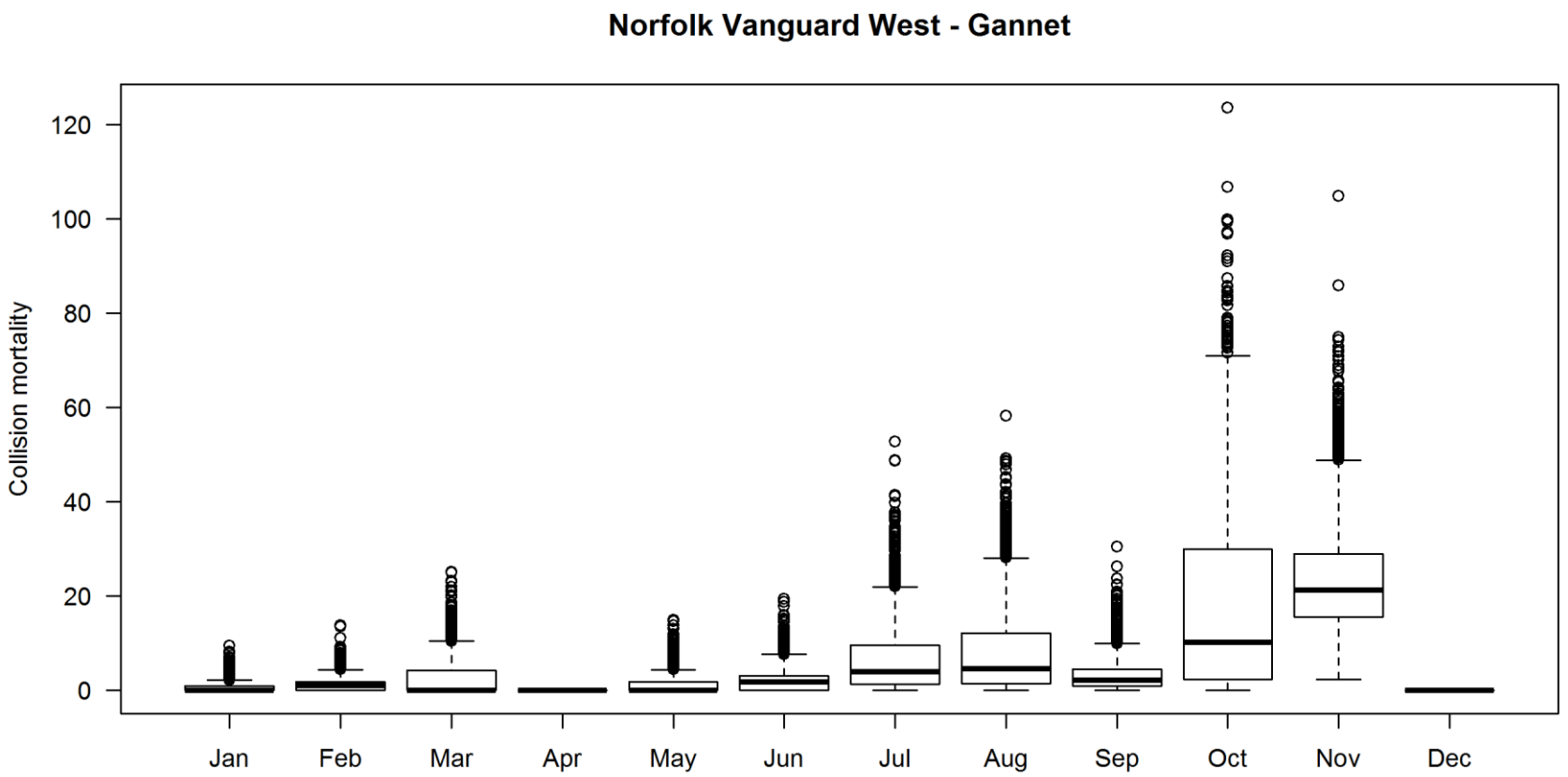


Figure 15. Norfolk Vanguard West, Gannet Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

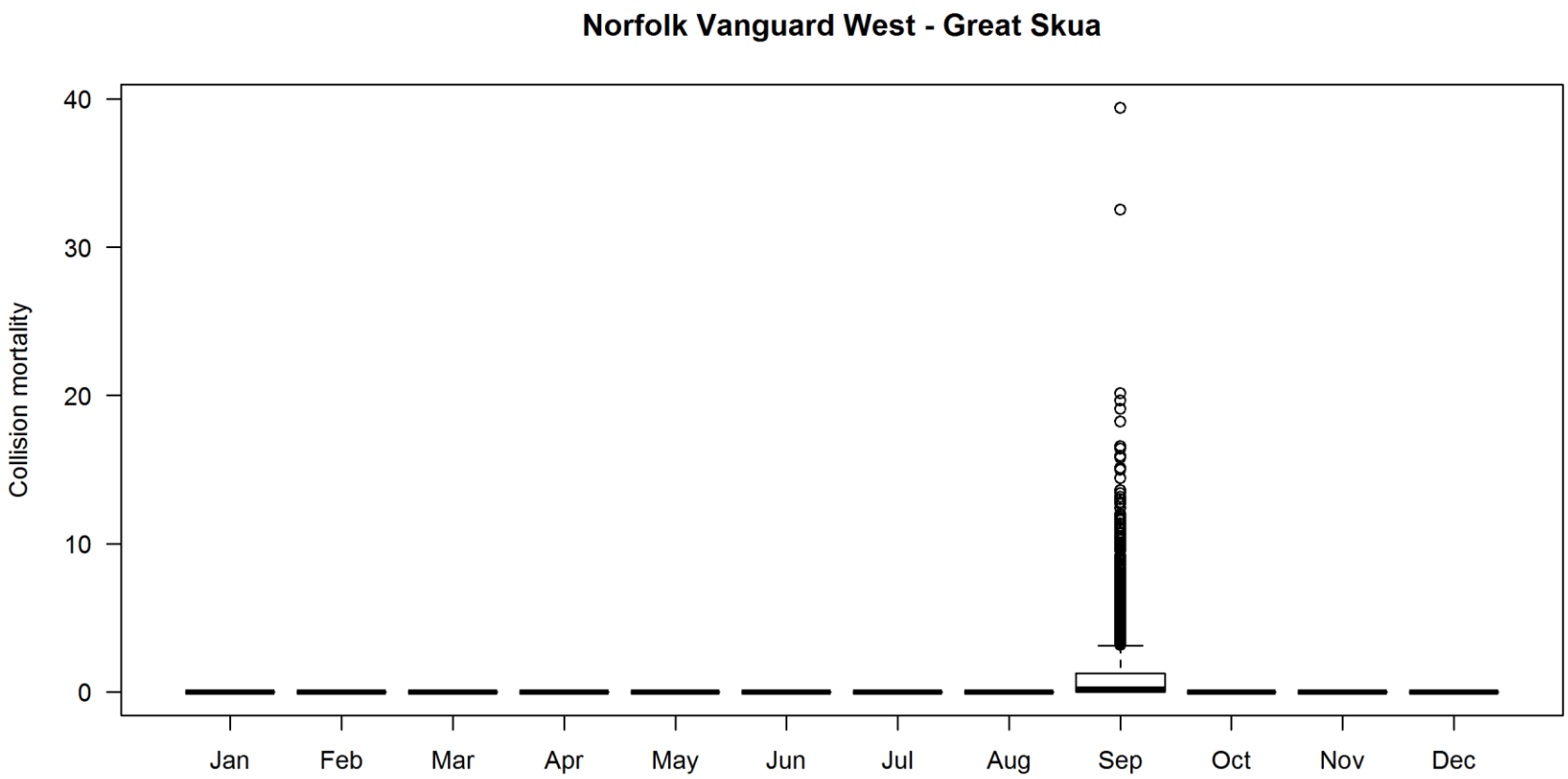


Figure 16. Norfolk Vanguard West, Great Skua Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

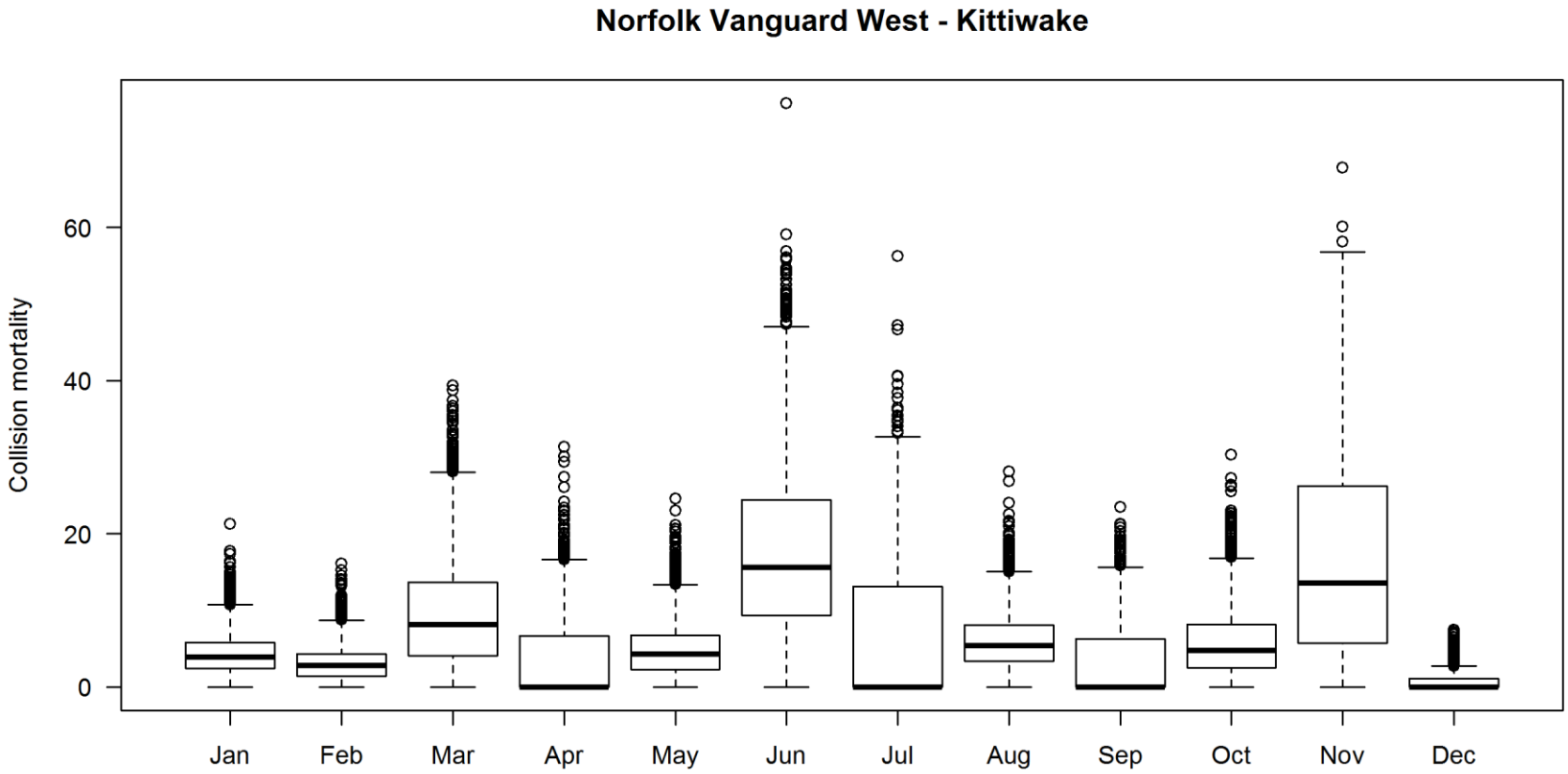


Figure 17. Norfolk Vanguard West, Kittiwake Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

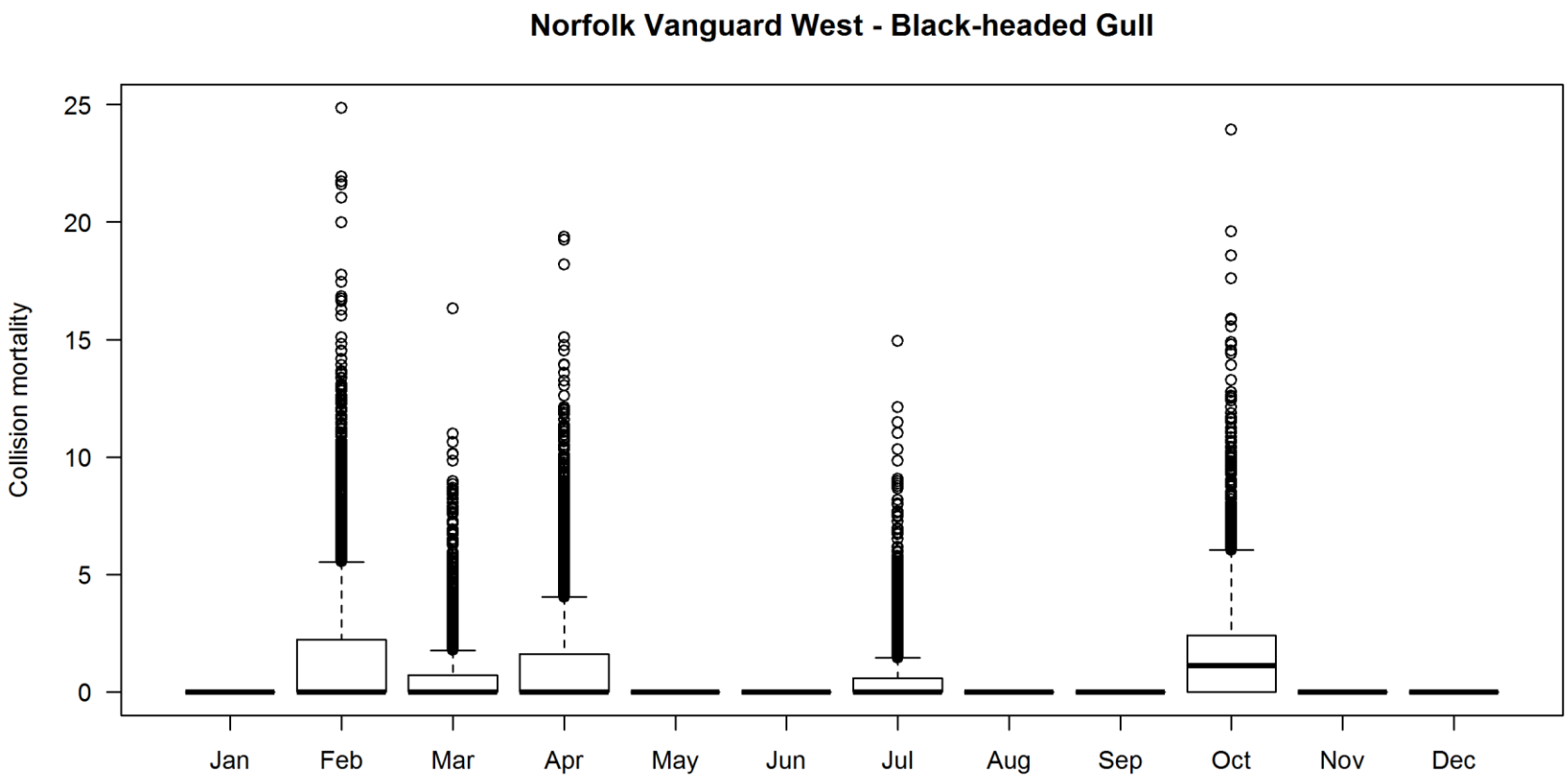


Figure 18. Norfolk Vanguard West, Black-headed Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

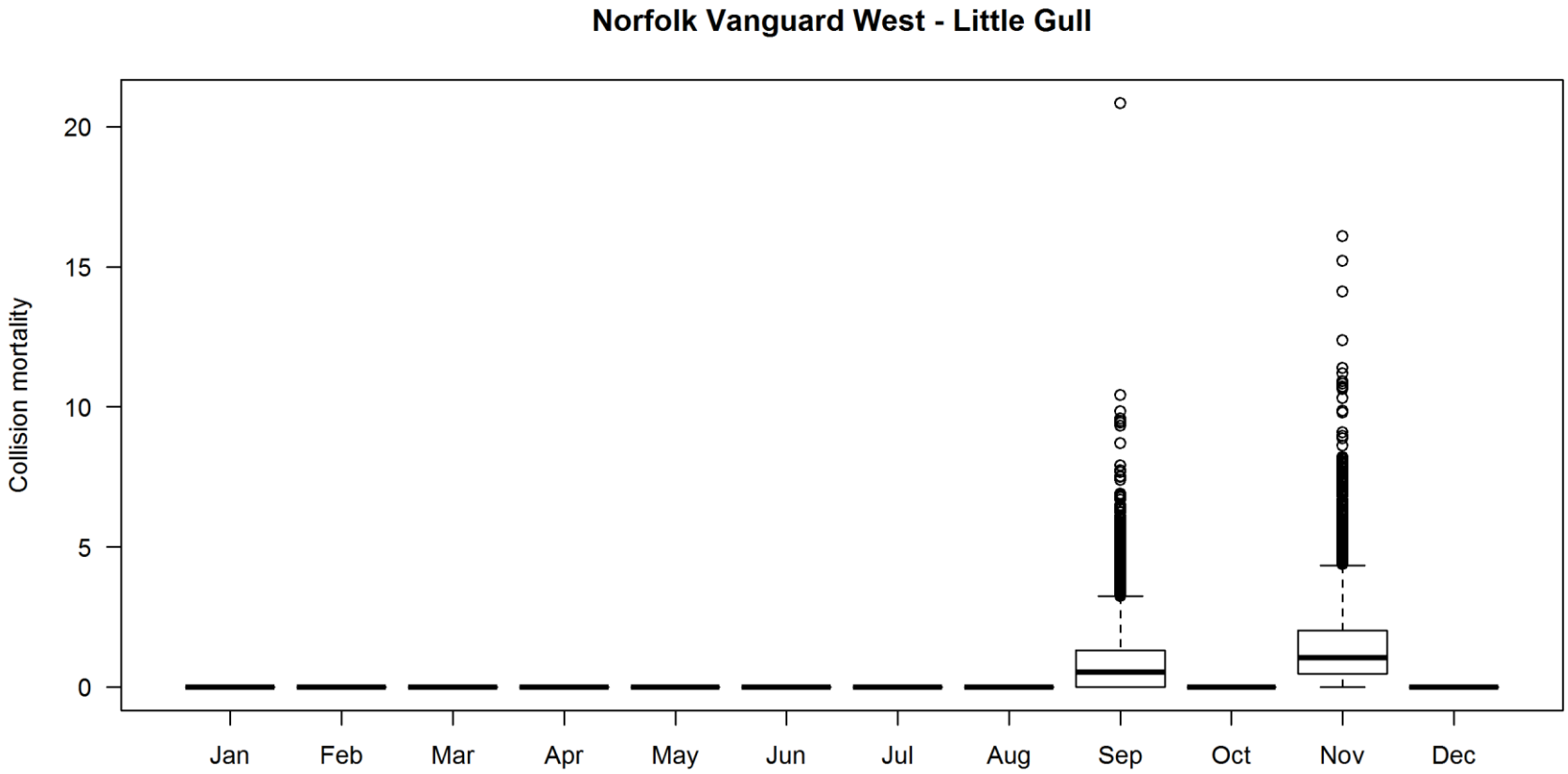


Figure 19. Norfolk Vanguard West, Little Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

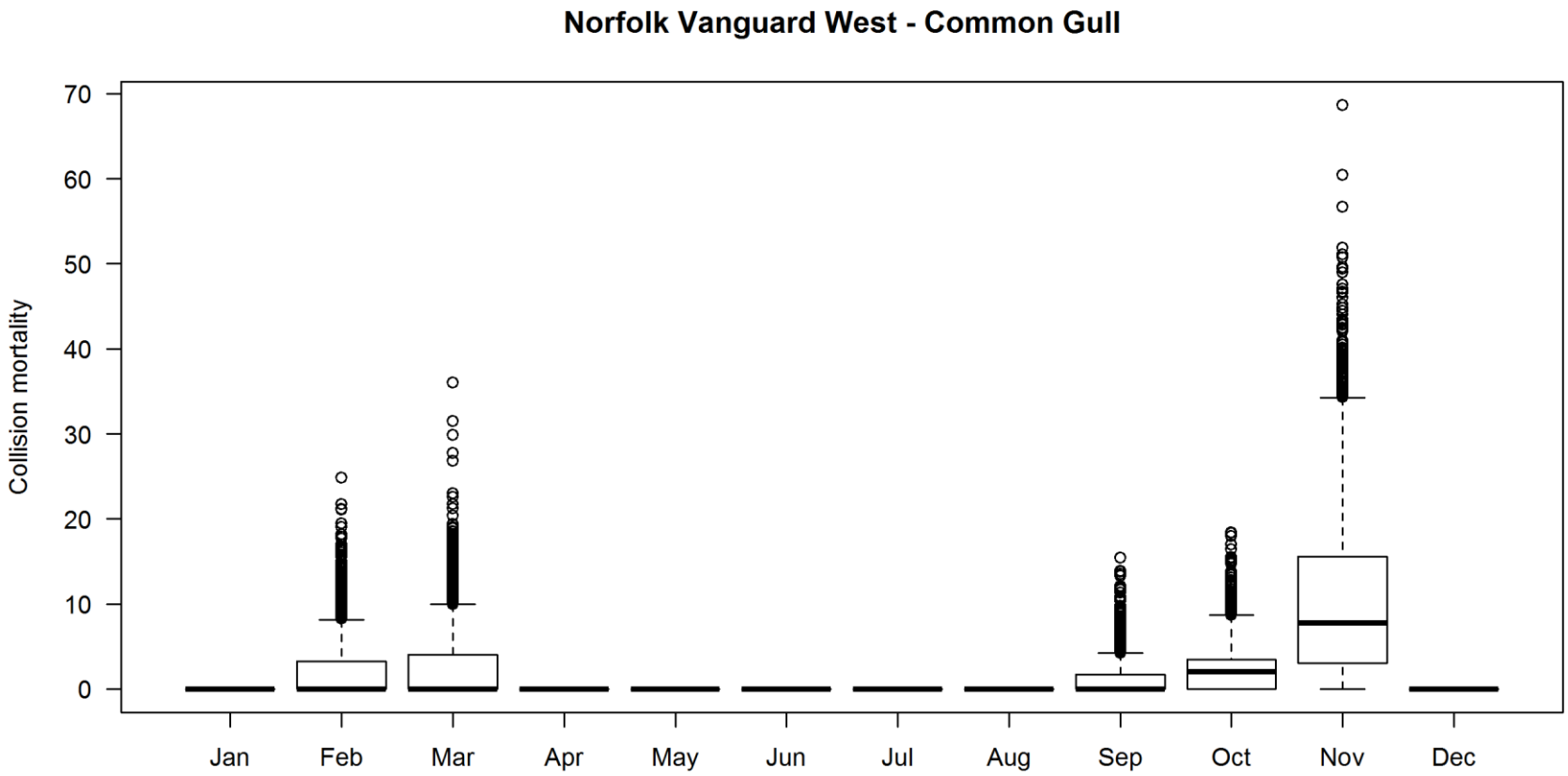


Figure 20. Norfolk Vanguard West, Common Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate and flight height. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

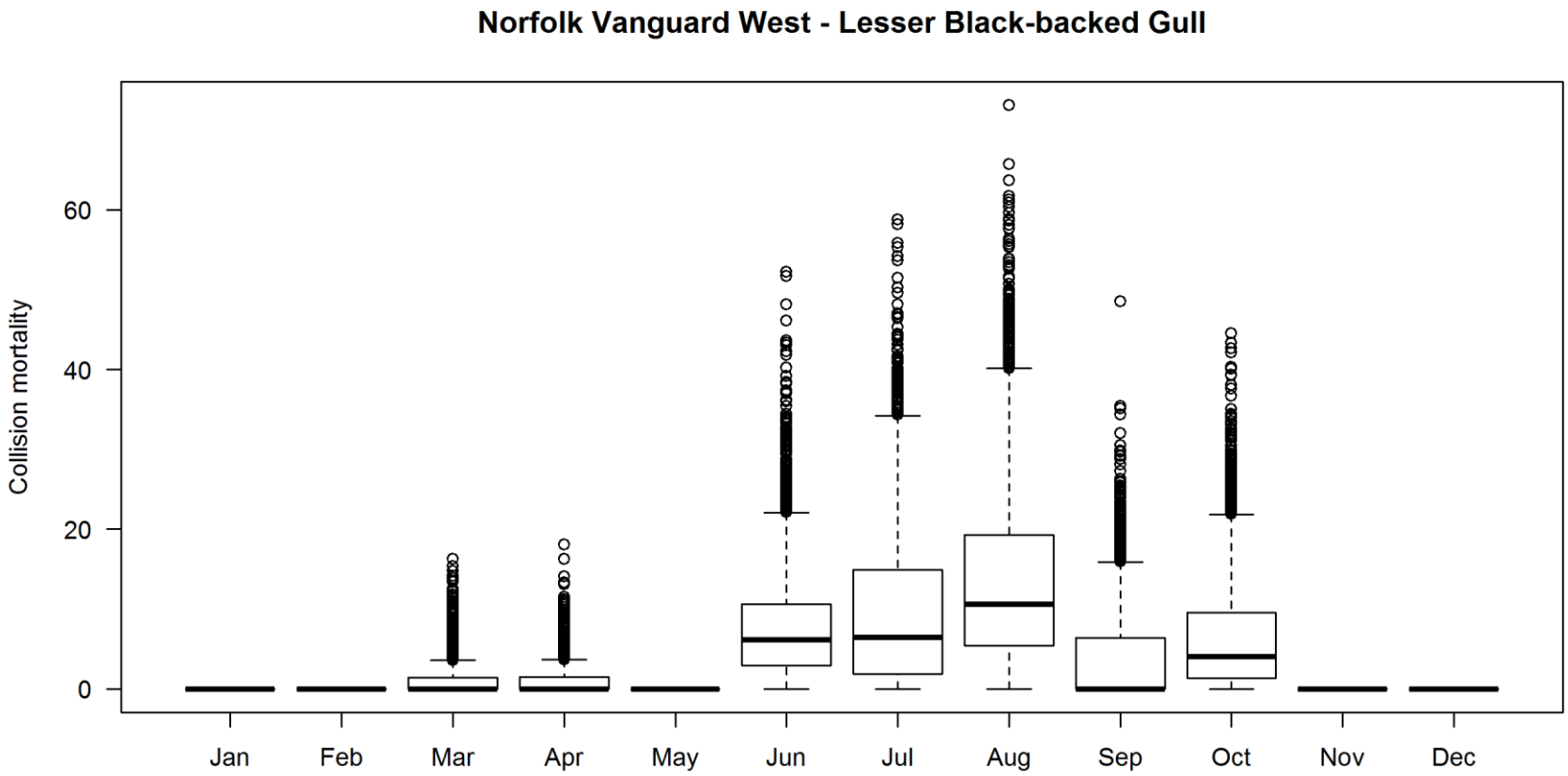


Figure 21. Norfolk Vanguard West, Lesser Black-backed Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

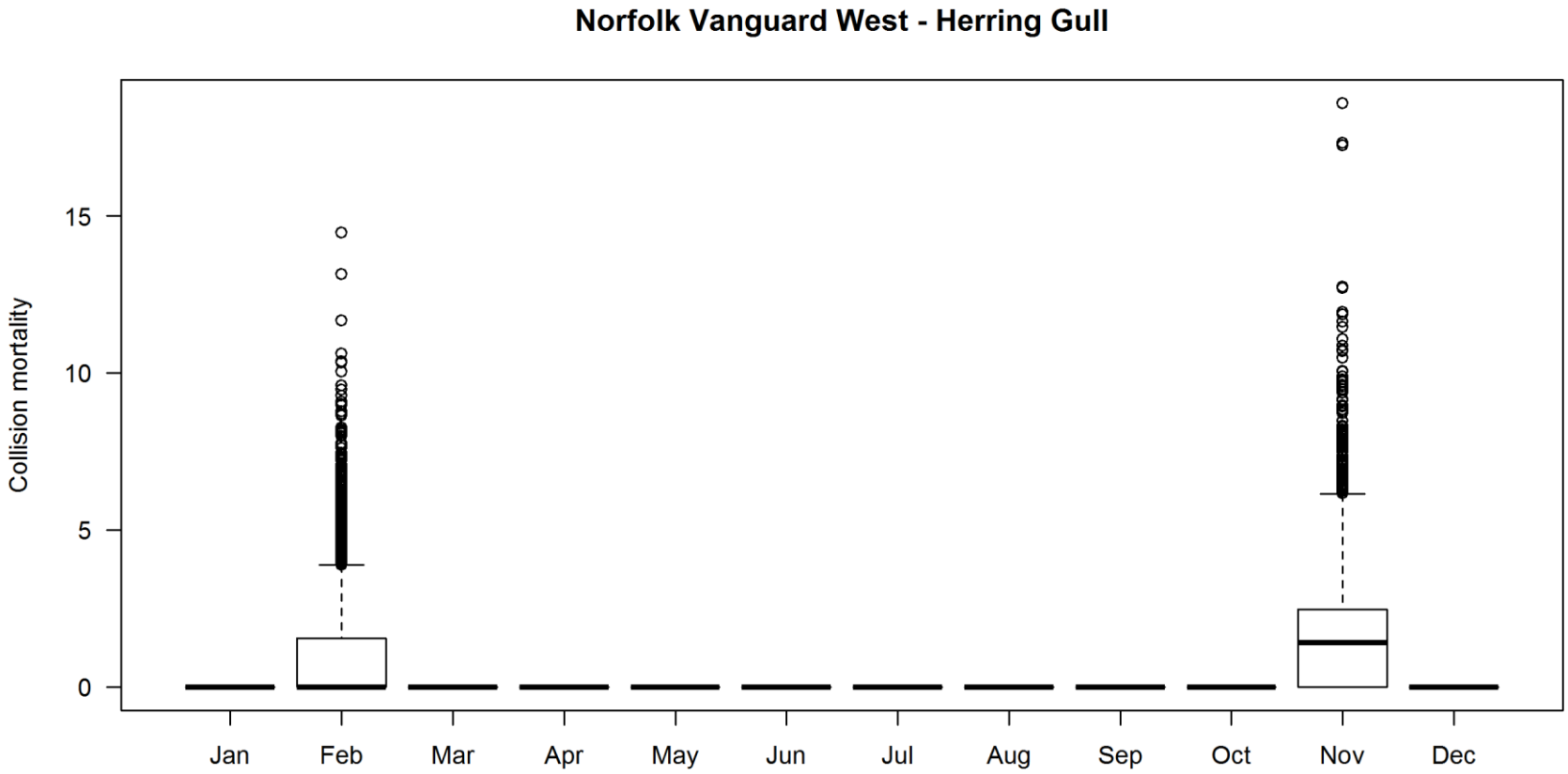


Figure 22. Norfolk Vanguard West, Herring Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

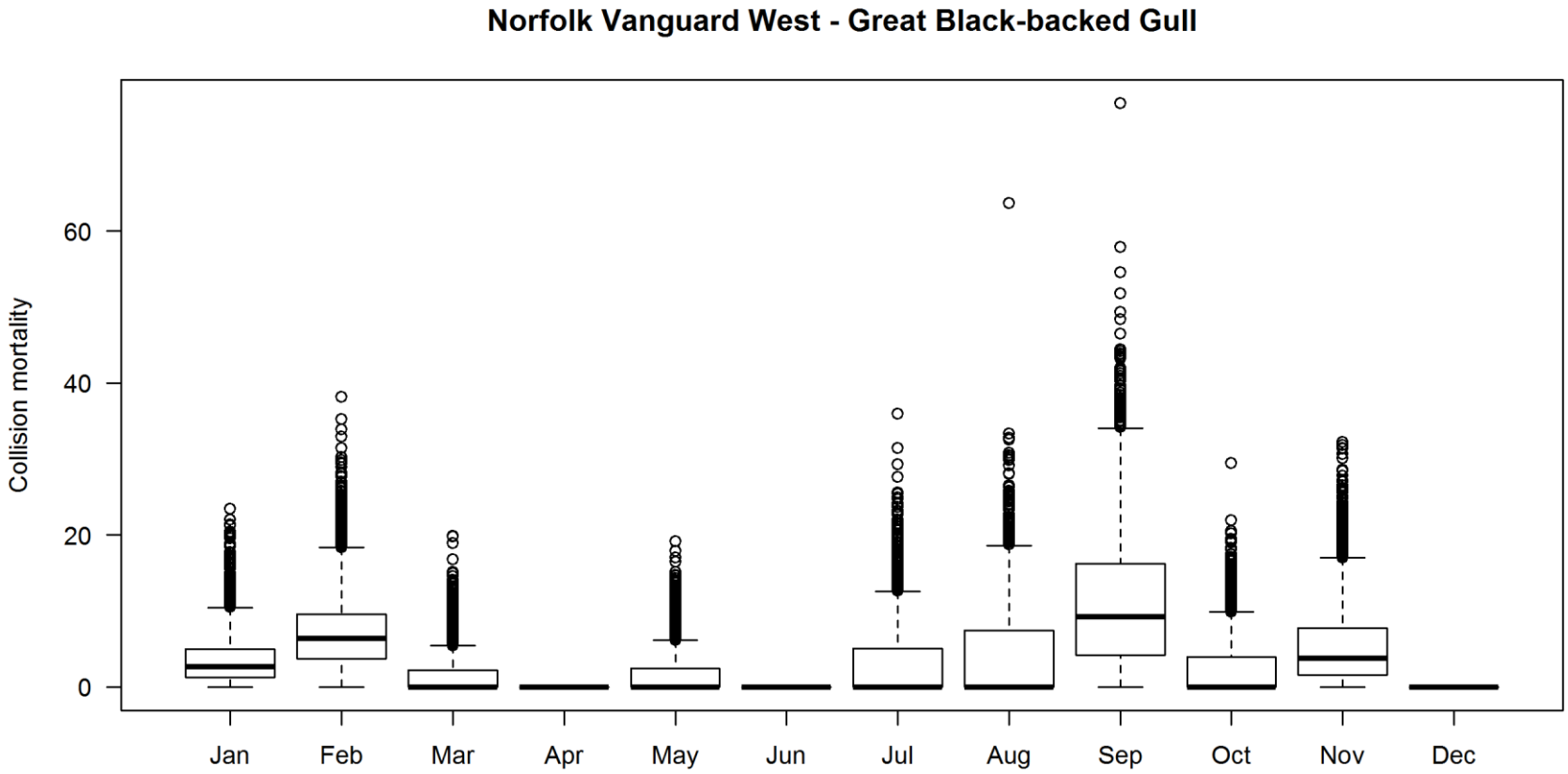


Figure 23. Norfolk Vanguard West, Great Black-backed Gull Option 2 collision mortality estimates calculated with stochasticity in seabird density, avoidance rate, flight height and nocturnal activity. Solid bars are the median, boxes indicate the 50% range, whiskers the 95% range and circles are outliers.

Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 7

Species abundance plots

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	29th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

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1	Draft	Mark Trinder	29/03/2018
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3	Updated		
4	Internal Approval		
5	Final Client Approval		

1 INTRODUCTION

1. This appendix provides plots of species abundance in each month for the NV East and NV West wind farm sites alone and with the inclusion of their respective 4km buffers. Where appropriate the abundance estimates include unidentified birds (e.g. large gulls, small gulls, auks), added to the positively identified species totals using species and survey specific proportions. Razorbill and guillemot totals have also been adjusted to account for availability bias. Details on analysis methods are provided in Appendix 13.1.

2. Table A7 provides a key to figure numbering.

Table A7. Key to figure numbering.

Species	Figure number
Common scoter	1
Red-breasted merganser	2
Red-throated diver	3
Black-throated diver	4
Great northern diver	5
Fulmar	6
Gannet	7
Cormorant	8
Arctic skua	9
Great skua	10
Puffin	11
Razorbill	12
Little auk	13
Guillemot	14
Sandwich tern	15
Commic tern	16
Kittiwake	17
Black-headed gull	18
Little gull	19
Common gull	20
Lesser black-backed gull	21
Herring gull	22
Great black-backed gull	23

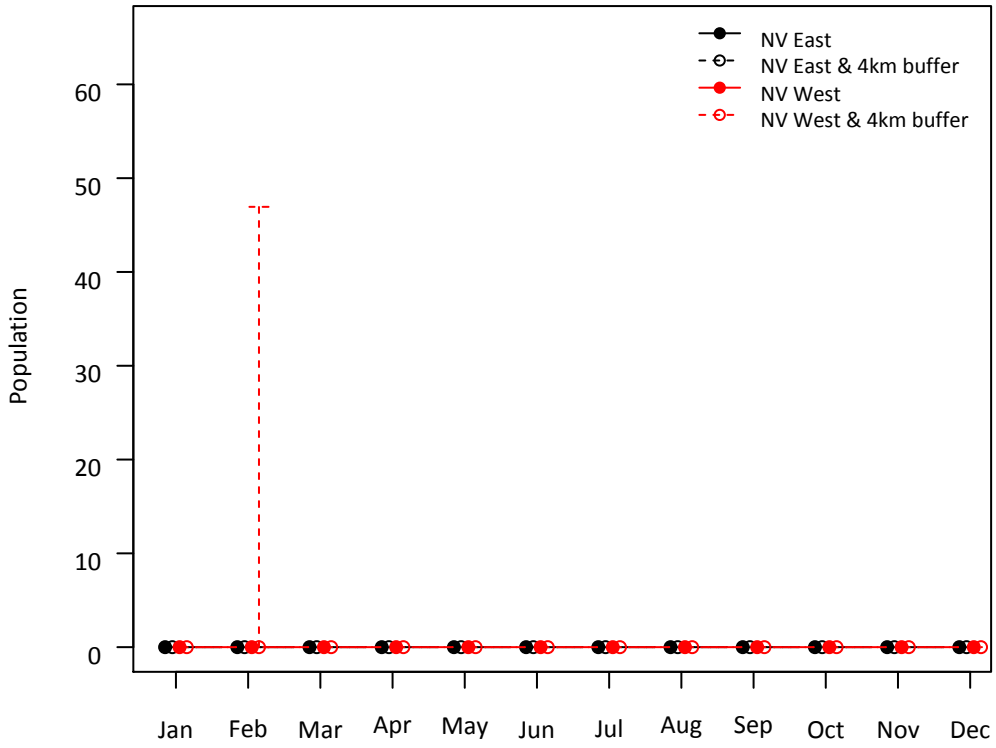


Figure 1. Common Scoter. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

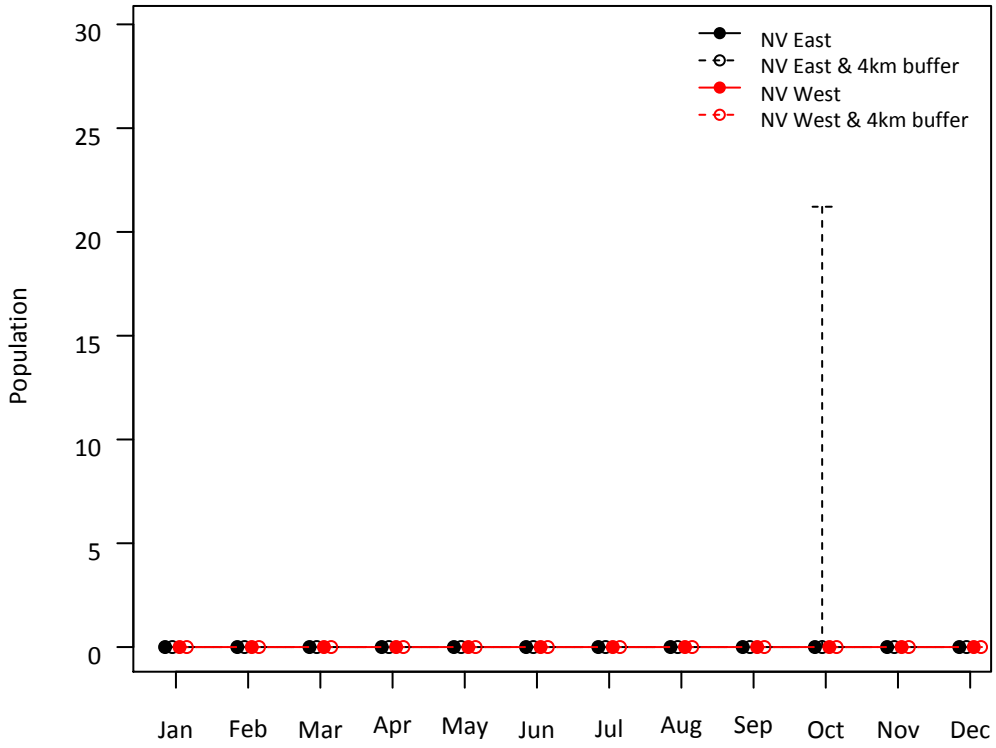


Figure 2. Red-breasted Merganser. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

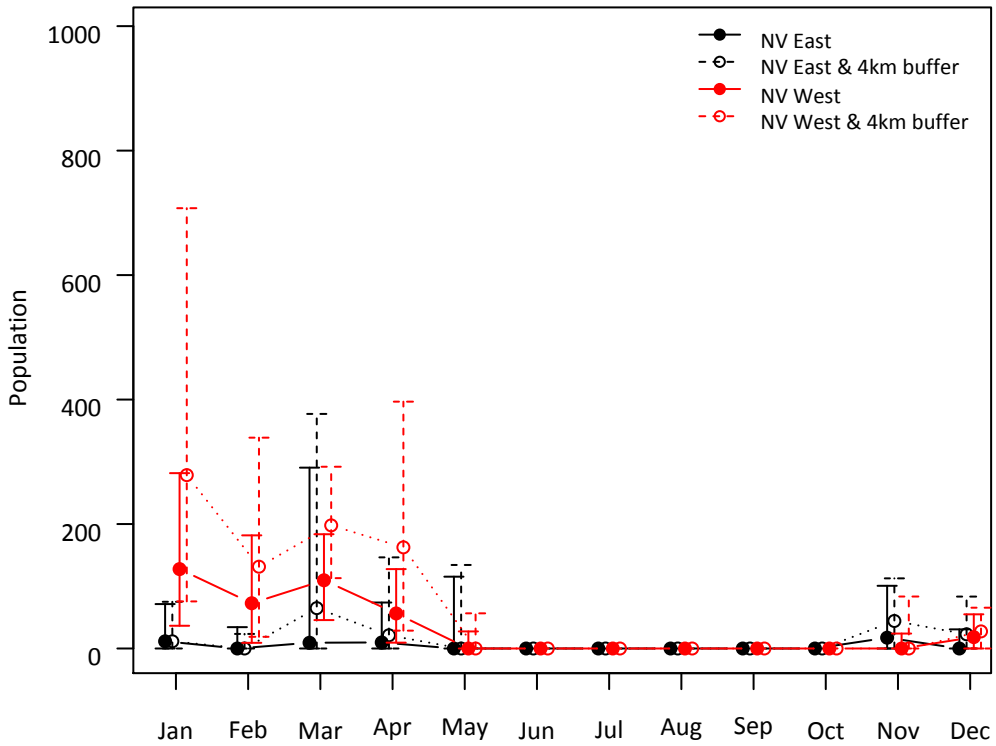


Figure 3. Red-throated Diver. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

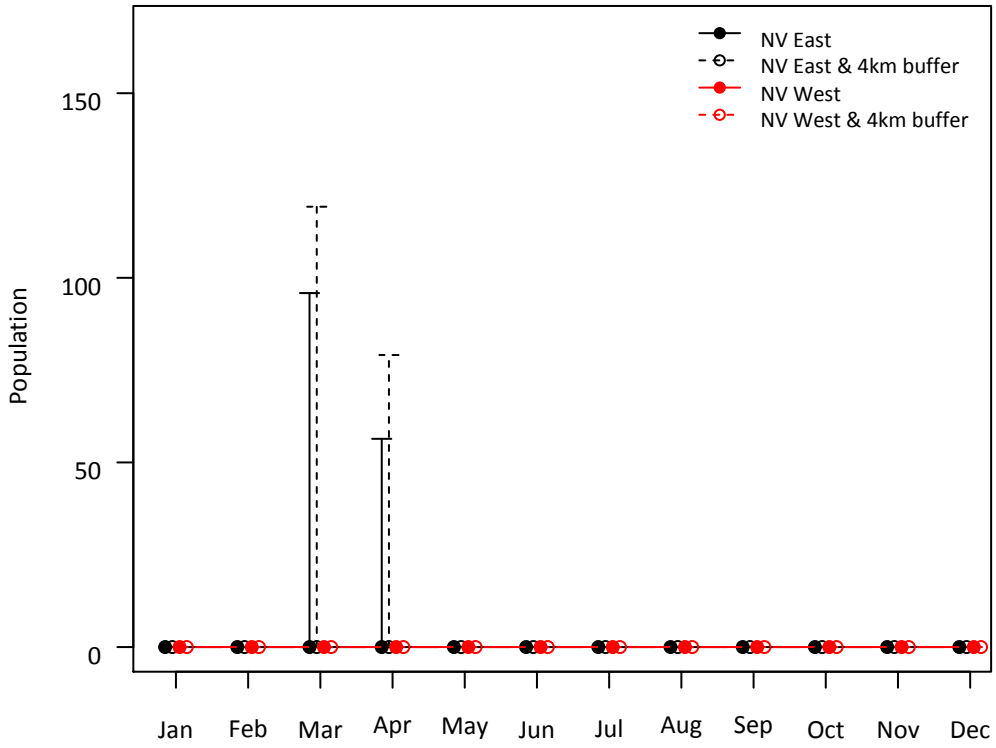


Figure 4. Black-throated Diver. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

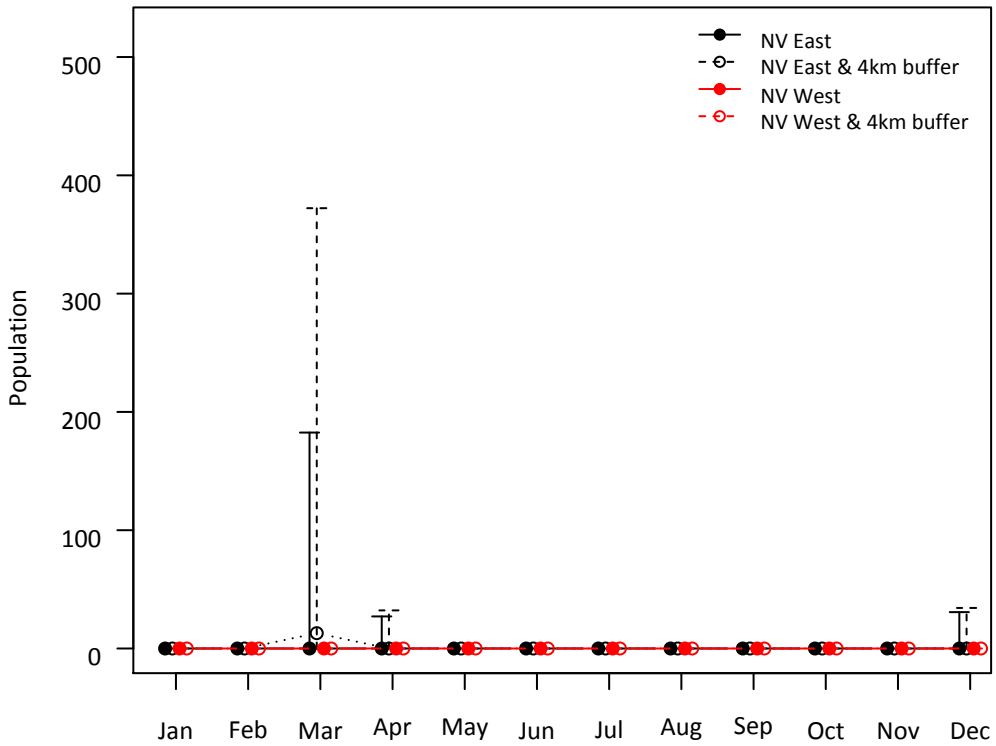


Figure 5. Great Northern Diver. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

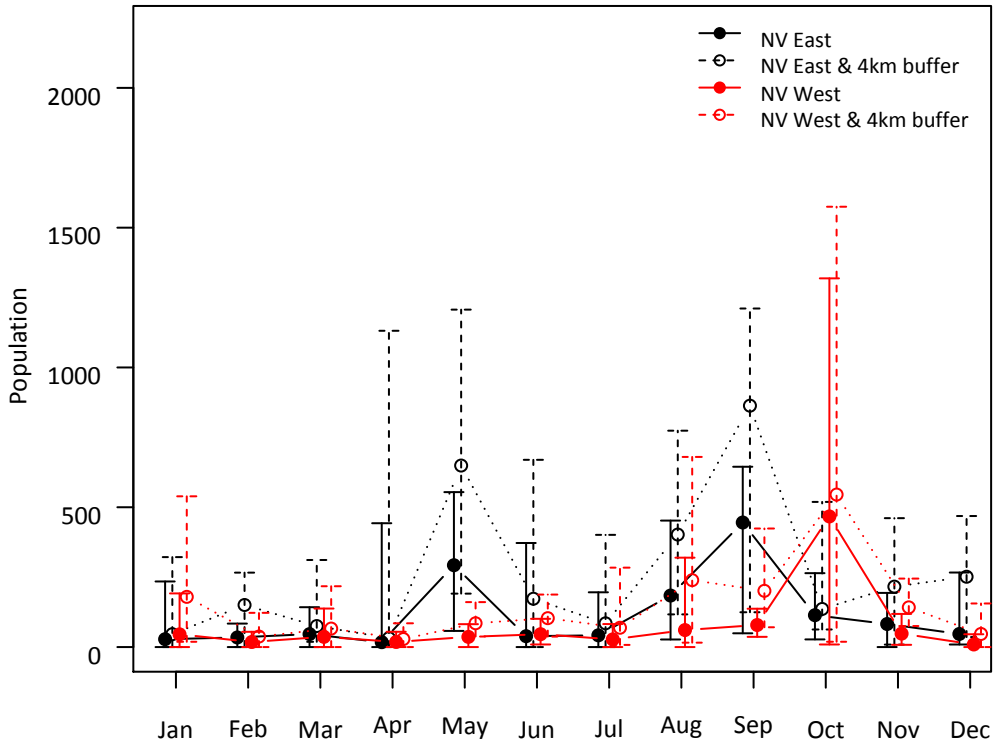


Figure 6. Fulmar. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

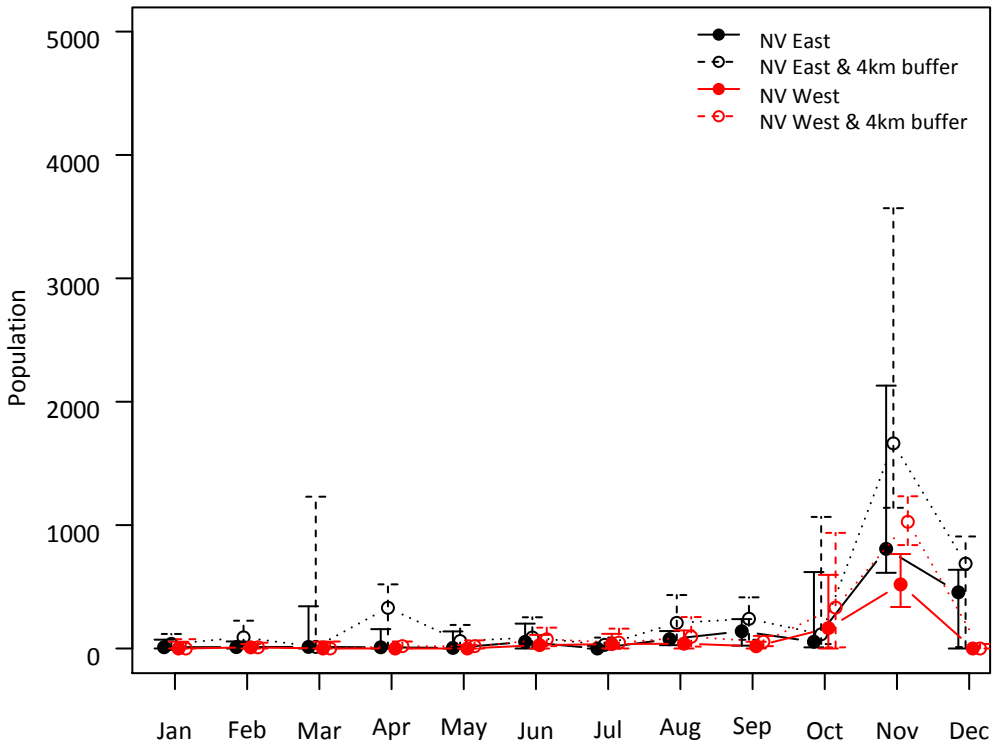


Figure 7. Gannet. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

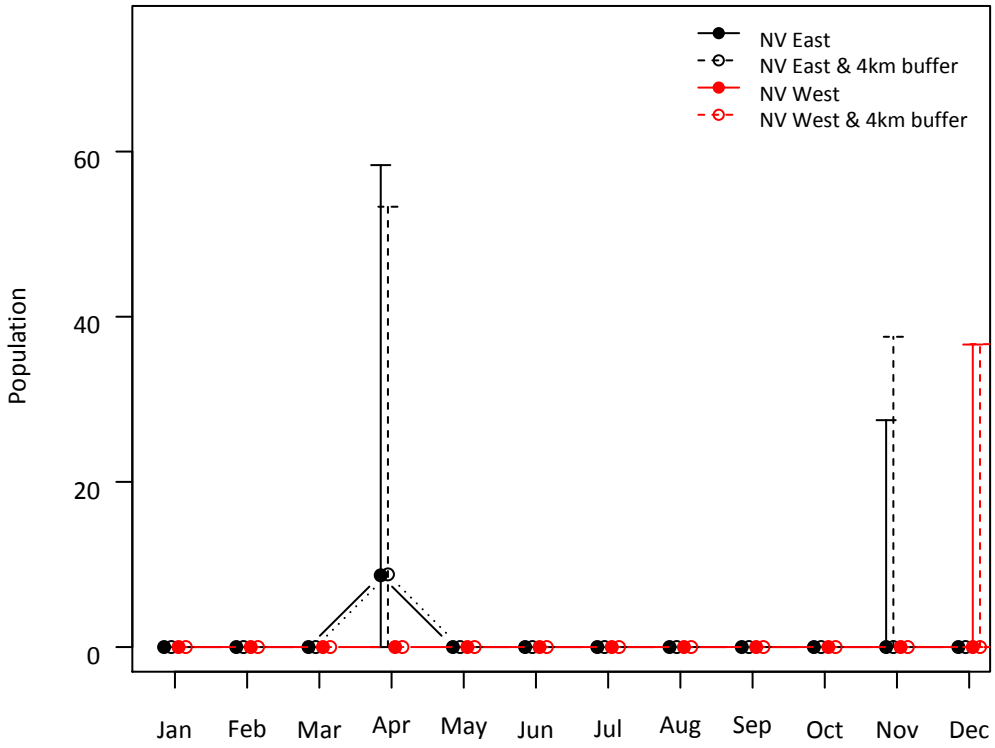


Figure 8. Cormorant. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

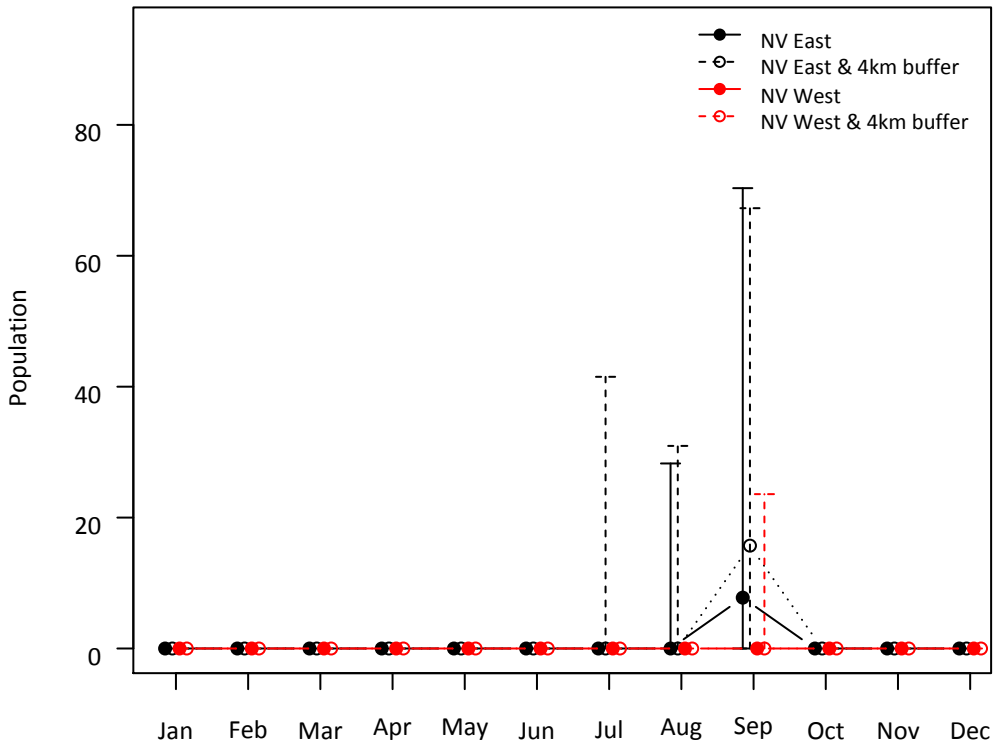


Figure 9. Arctic Skua. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

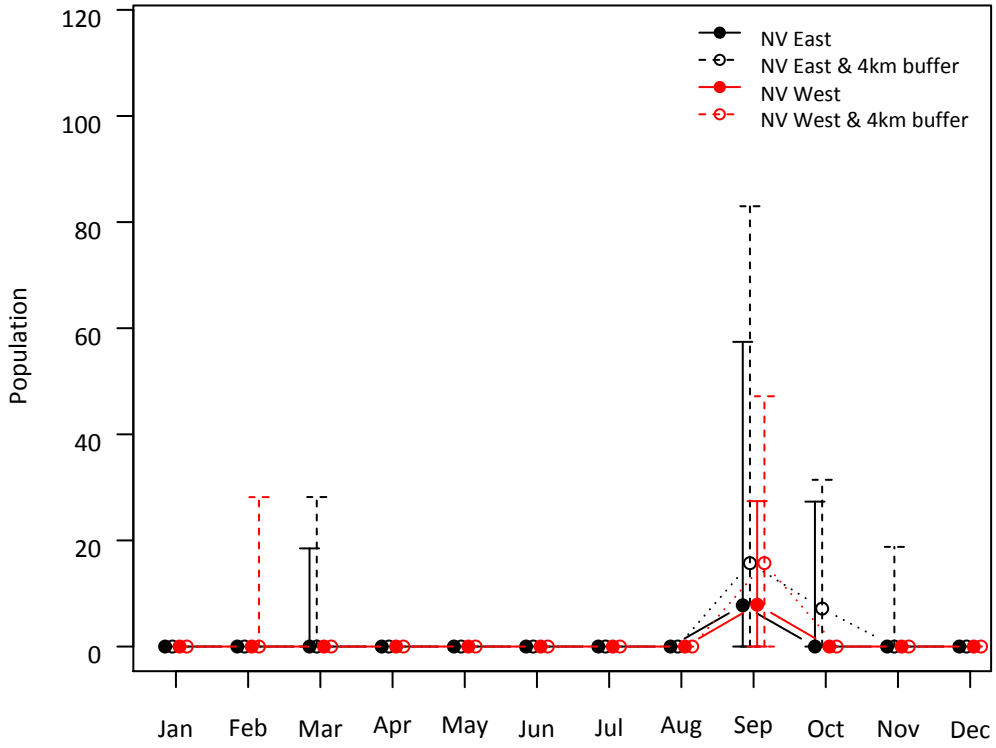


Figure 10. Great Skua. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

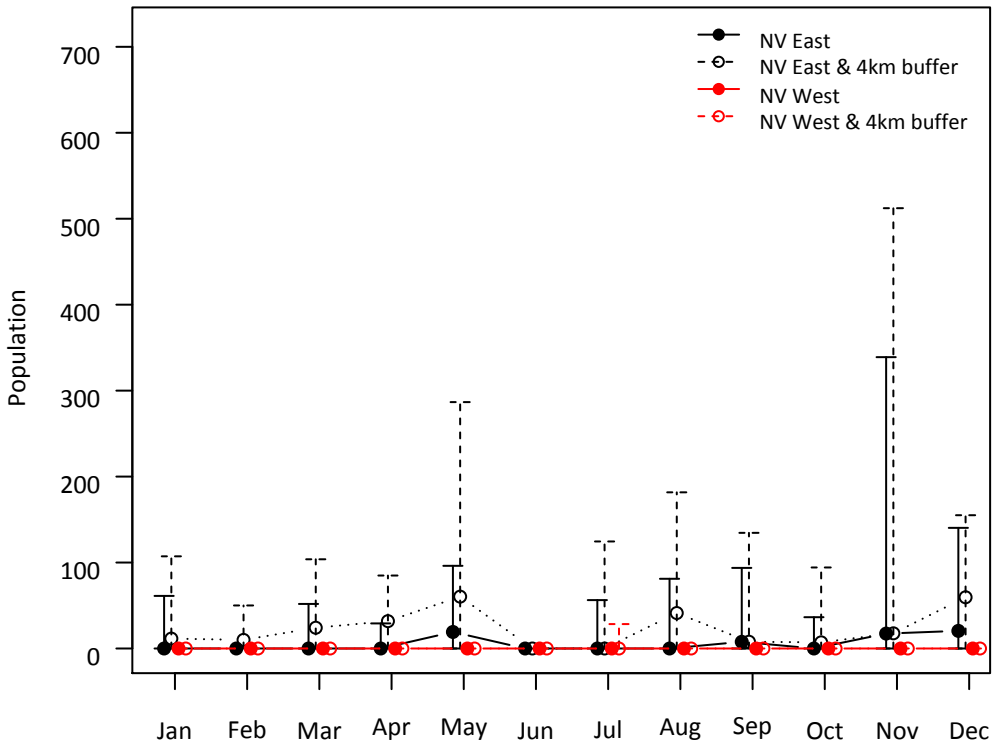


Figure 11. Puffin. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

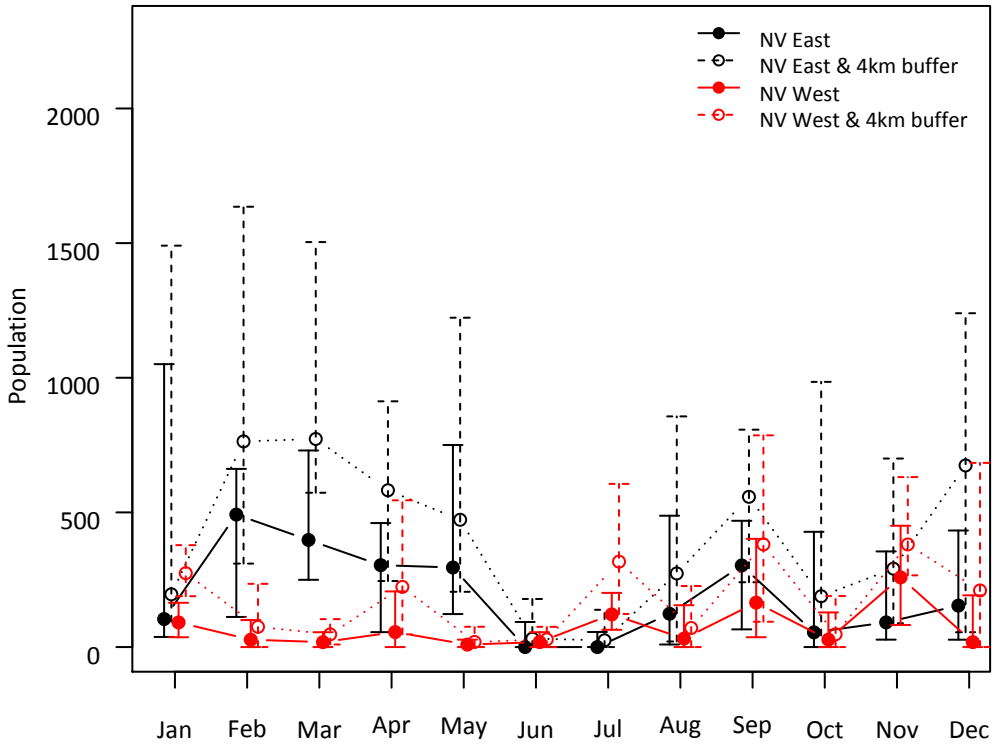


Figure 12. Razorbill. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

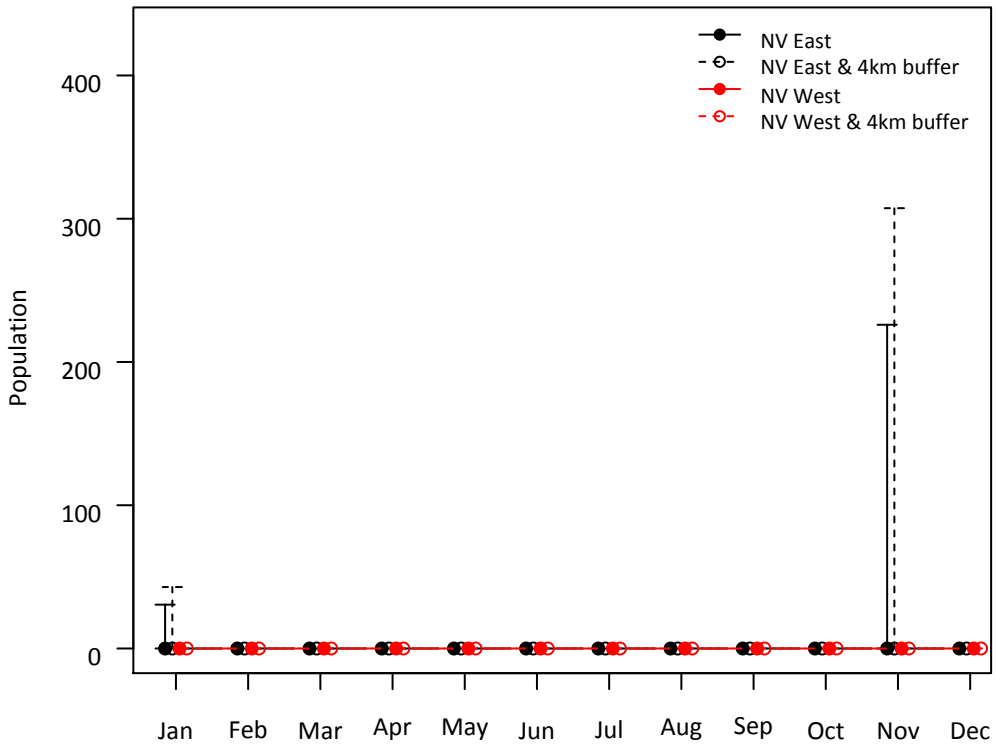


Figure 13. Little Auk. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

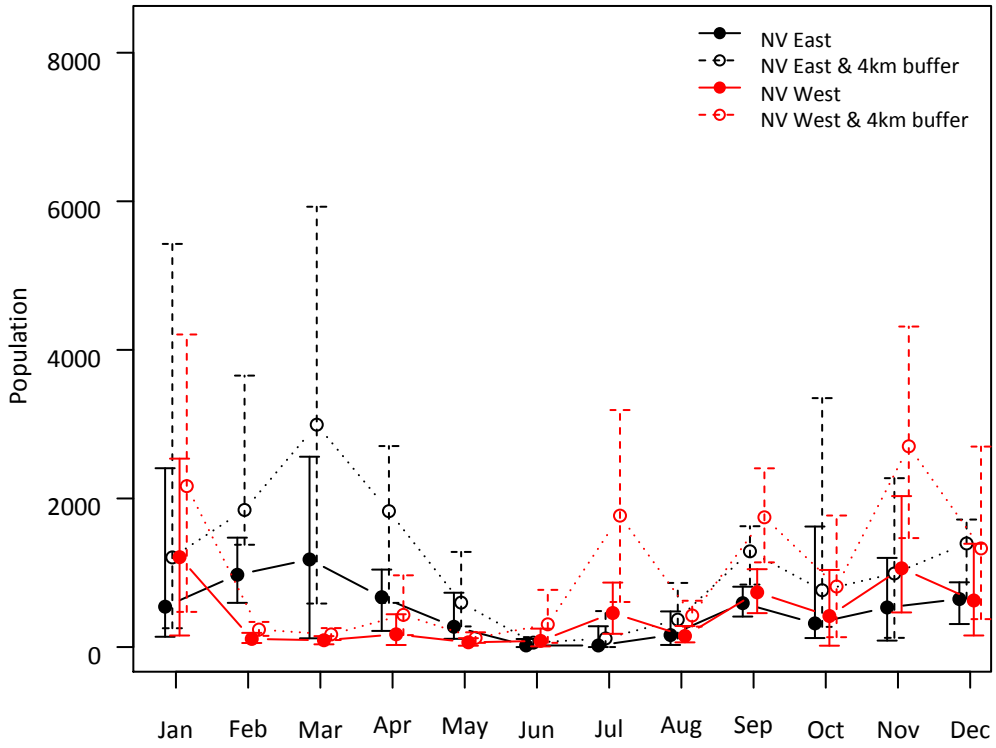


Figure 14. Guillemot. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

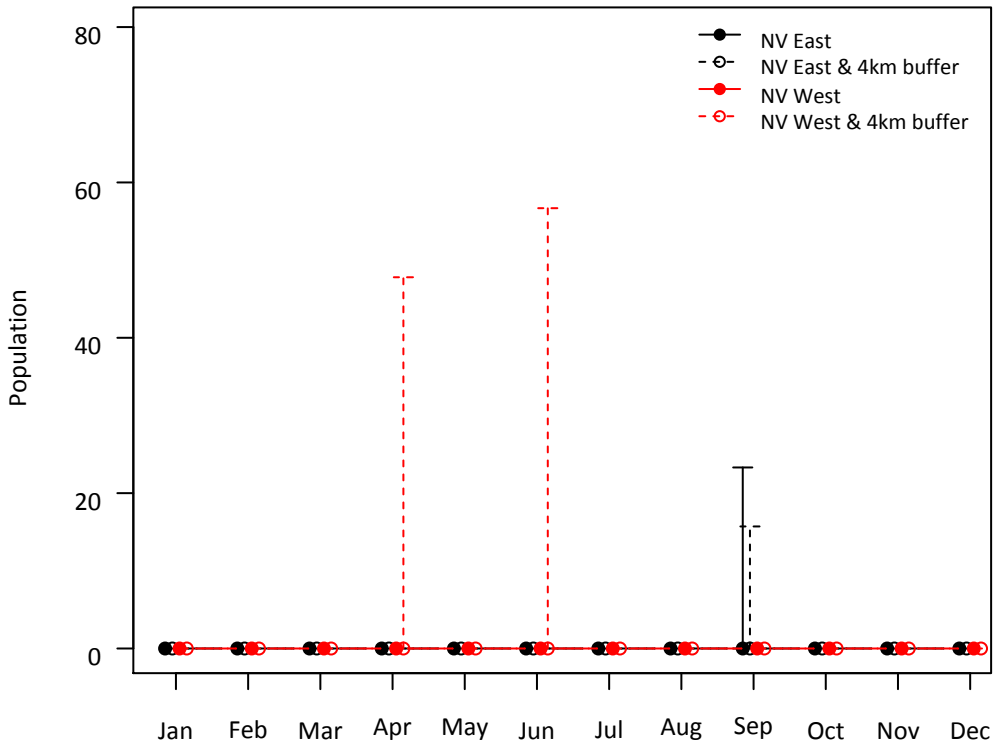


Figure 15. Sandwich Tern. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

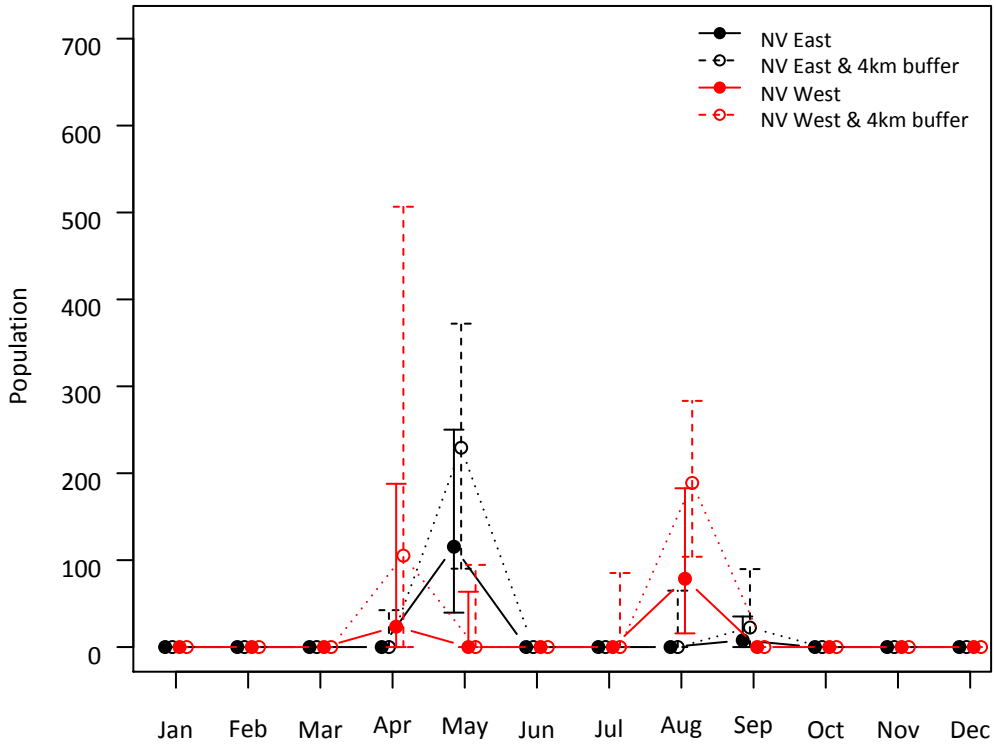


Figure 16. Commic Tern. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

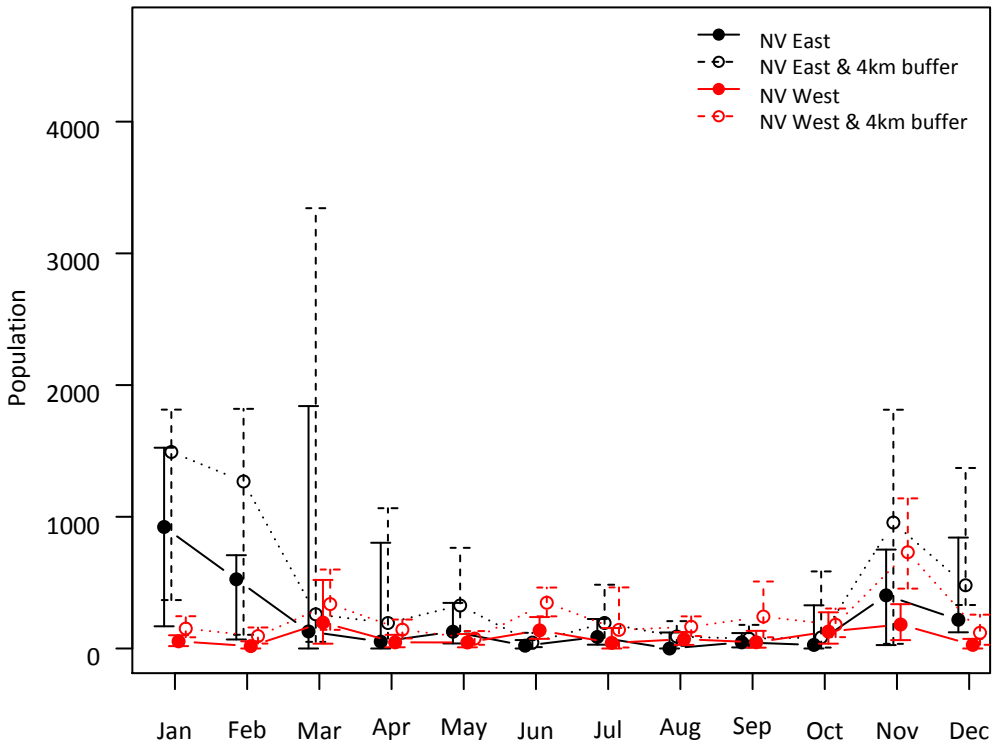


Figure 17. Kittiwake. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

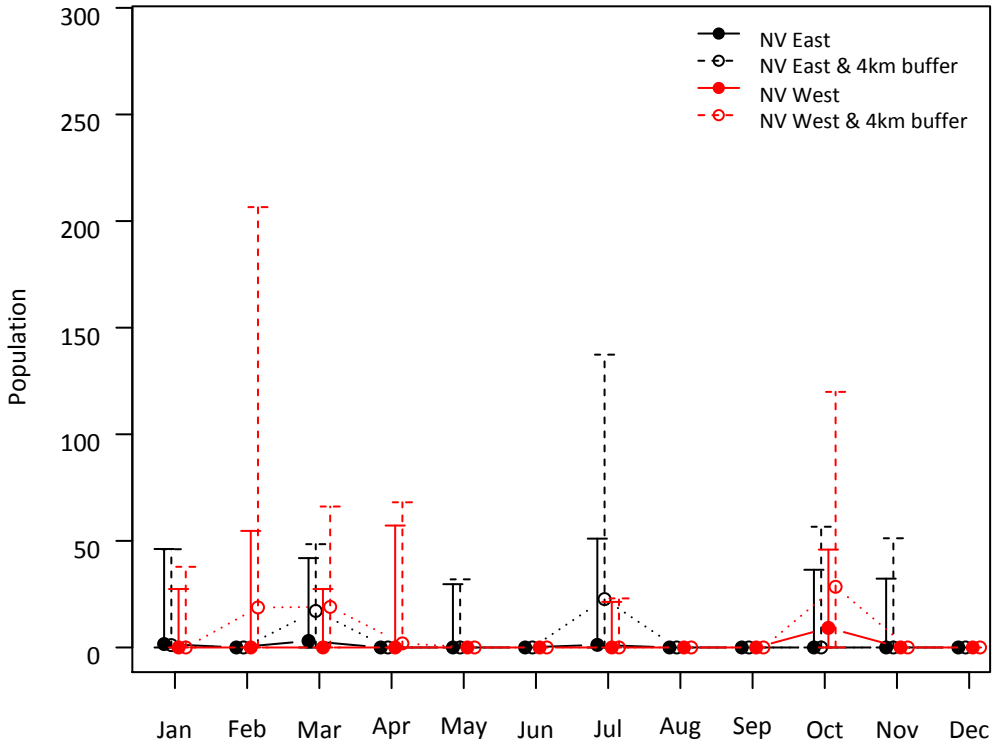


Figure 18. Black-headed Gull. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

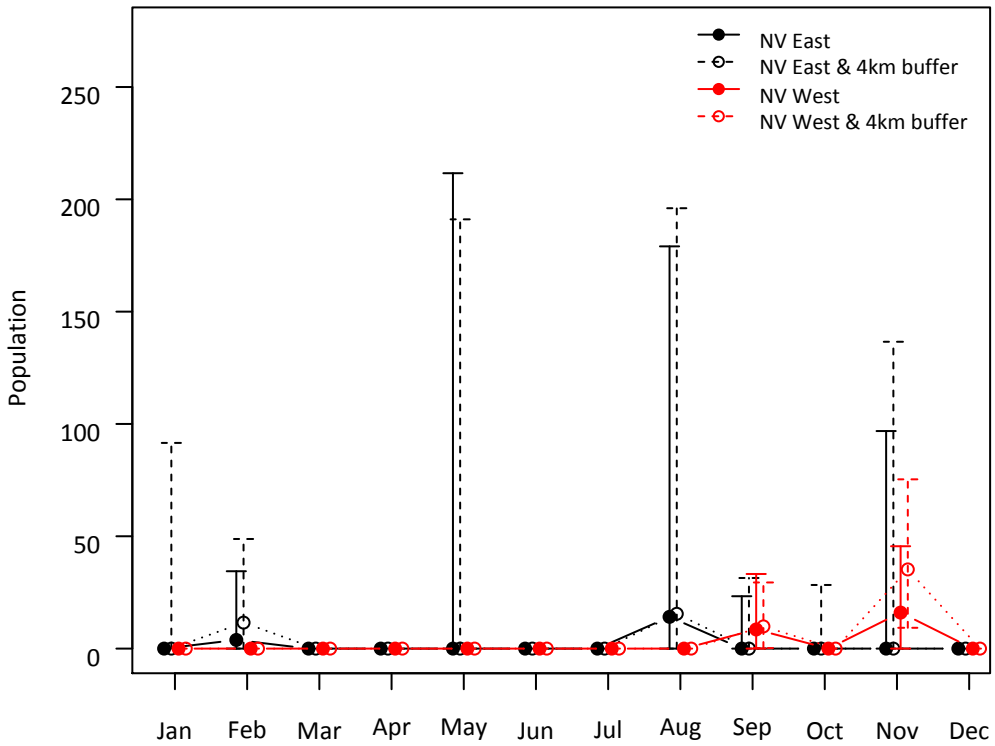


Figure 19. Little Gull. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

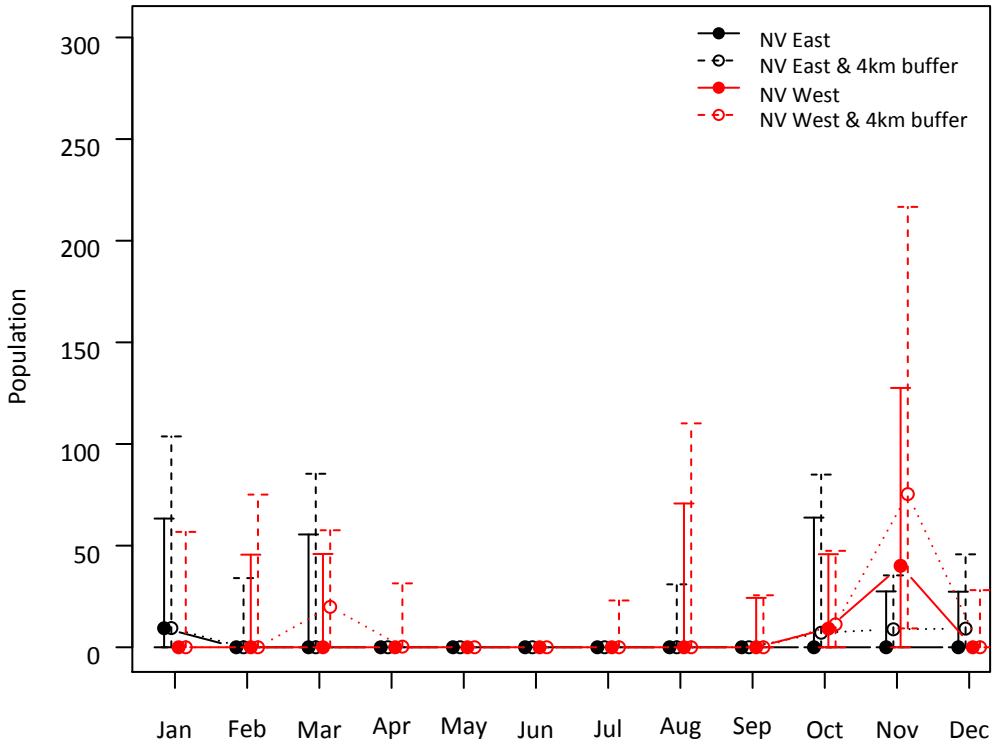


Figure 20. Common Gull. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

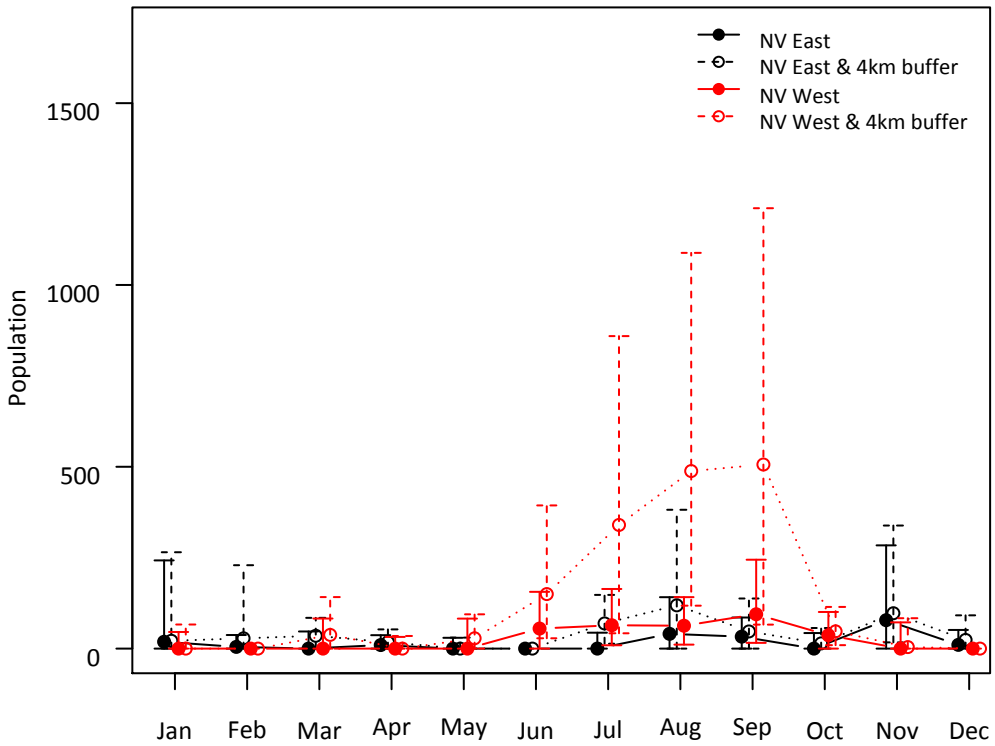


Figure 21. Lesser Black-backed Gull. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

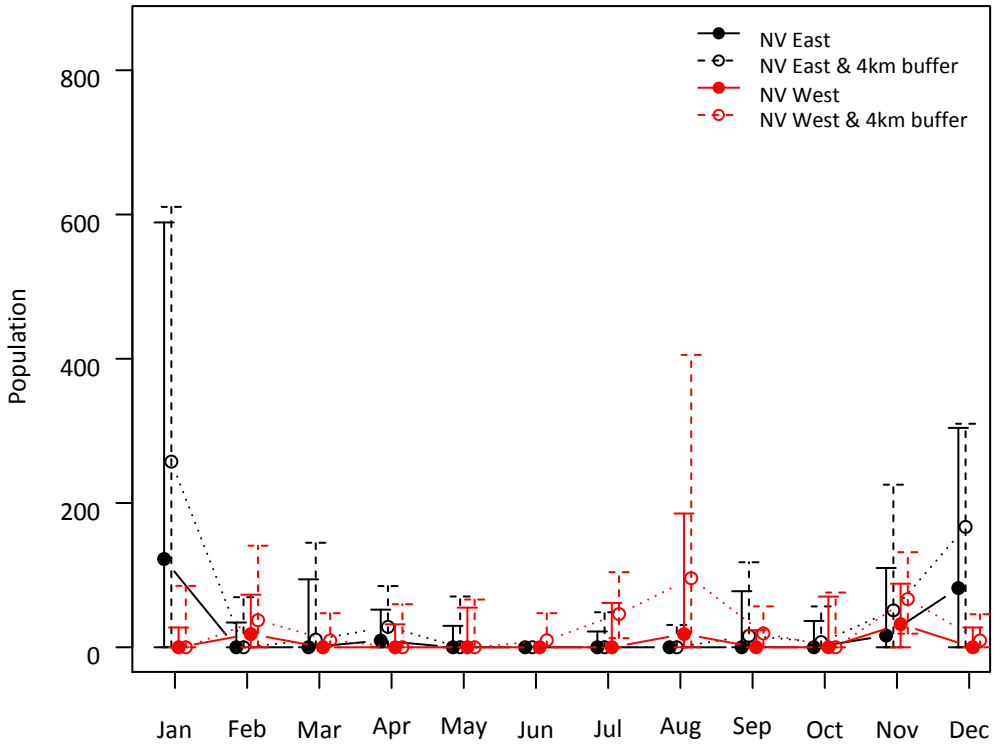


Figure 22. Herring Gull. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

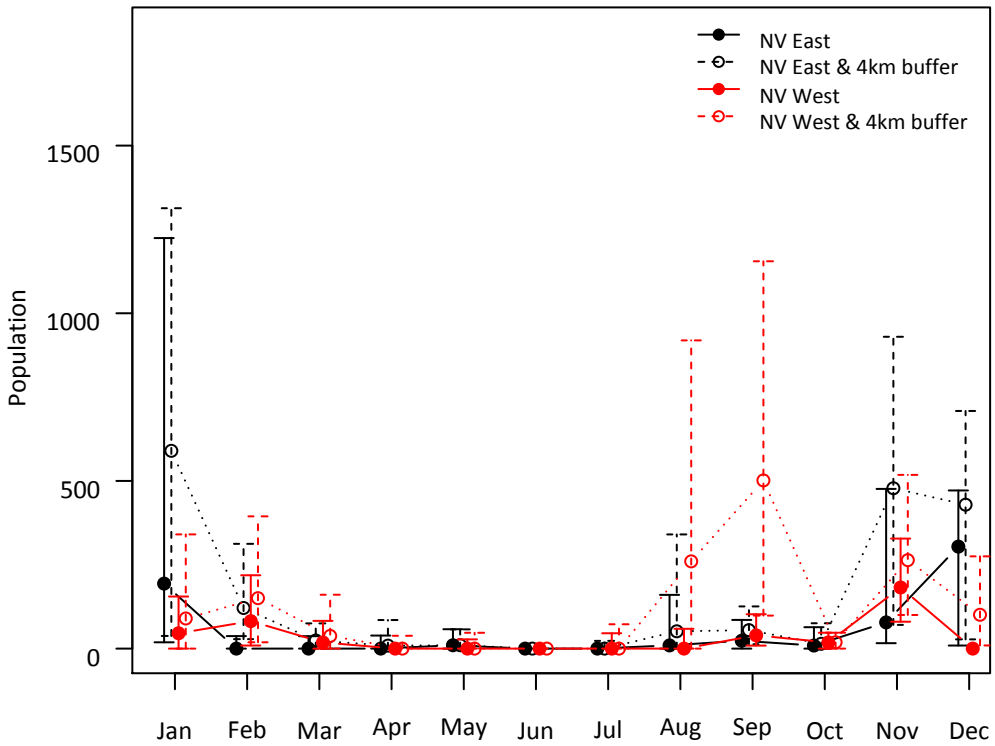


Figure 23. Great Black-backed Gull. Median design based abundance estimates (plus 95% confidence intervals) on NV East (black) and NV West (red). Filled circles indicate wind farm sites only, open circles indicate wind farms plus 4km buffer.

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Norfolk Vanguard Offshore Wind Farm

Appendix 13.1

Offshore Ornithology

Annex 8

Additional lesser black-backed gull analysis

Prepared by:	Mark Trinder
Authorised by:	Bob Furness
Date:	28th March 2018
Tel:	0141 342 5404
Email:	mark.trinder@macarthurgreen.com
Web:	www.macarthurgreen.com
Address:	95 South Woodside Road | Glasgow | G20 6NT

Document Quality Record.

Version	Status	Person Responsible	Date
1	Draft	Mark Trinder	28/03/2018
2	Reviewed	Bob Furness	12/04/2018
3	Updated		
3.1	Revisions		
4	Internal Approval		
5	Final Client Approval		

1.1 Lesser black-backed gull tracking data

The following figure has been reproduced (with permission) from:

- Thaxter, C.B., Ross-Smith, V.H., Bouten, W., Clark, N.A., Conway, G.J., Rehfisch, M.M. and Burton, N.H.K. (2015). Seabird–wind farm interactions during the breeding season vary within and between years: A case study of lesser black-backed gull *Larus fuscus* in the UK. Biological Conservation 186: 347-358

[note this is labelled as Figure 2 in the original publication but has been listed as Figure 1 here]

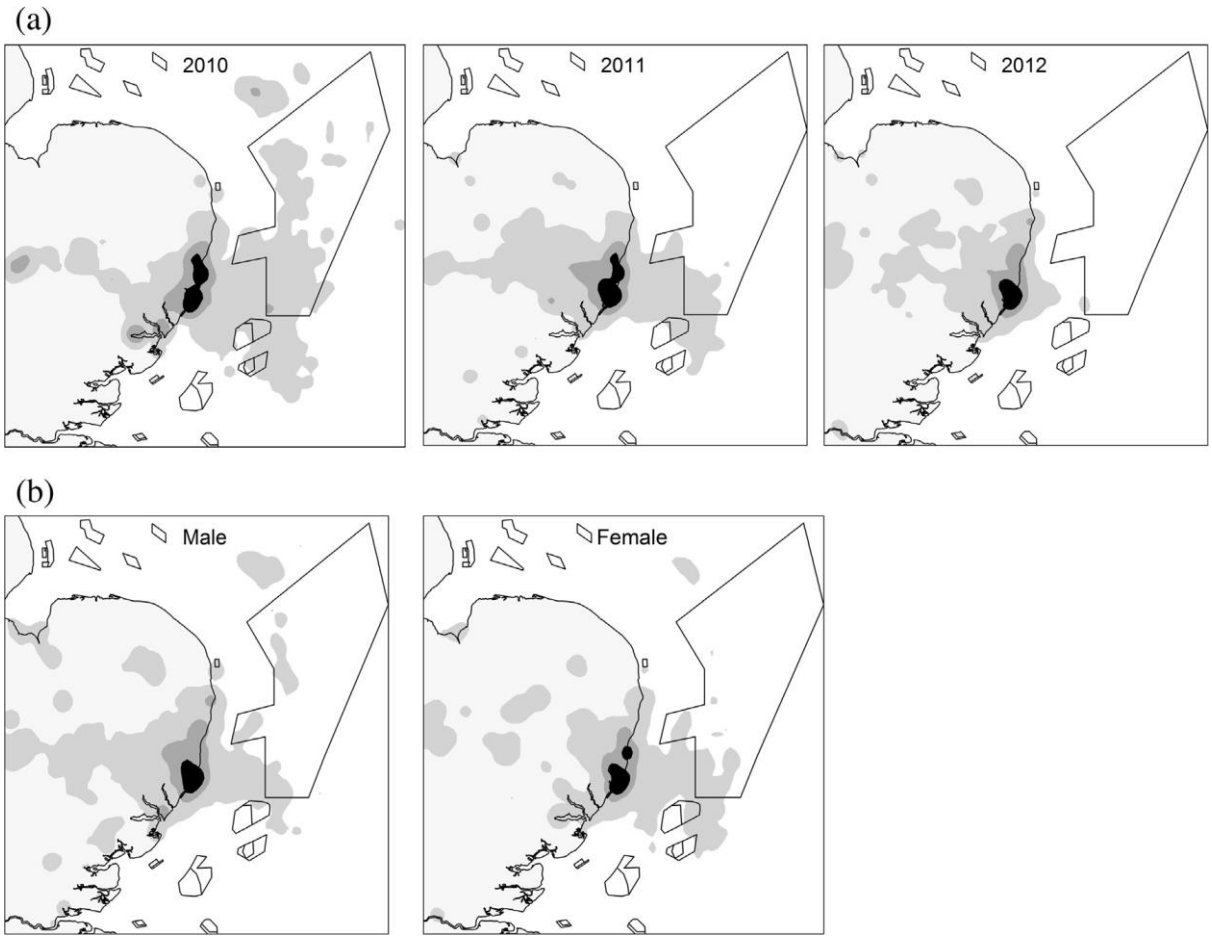


Fig. 1. Spatial area usage by lesser black-backed gulls given by: (a) year and (b) sex. Shown are the 95% KDE (light grey) representing total area usage, 75% KDE (medium grey) and 50% KDE (black), representing core area usage.

While the data presented in Figure 1 indicate low probabilities of connectivity with the Norfolk Vanguard site for breeding adult lesser black-backed gulls from the Alde Ore SPA, it is important to note that space use (as presented in Figure 1) is not intended to establish the magnitude of connectivity between sites. The results also only represent the behaviour of tagged individuals, and

there is likely to be a high degree of individual variation, as well as variations within individuals across years.

Norfolk Vanguard is not identified on Figure 1, however the wind farm sites are located in the northern section of the large polygon, as can be seen in Figure 2. It can be seen that there was virtually no overlap between gull foraging areas and either NV East or NV West.

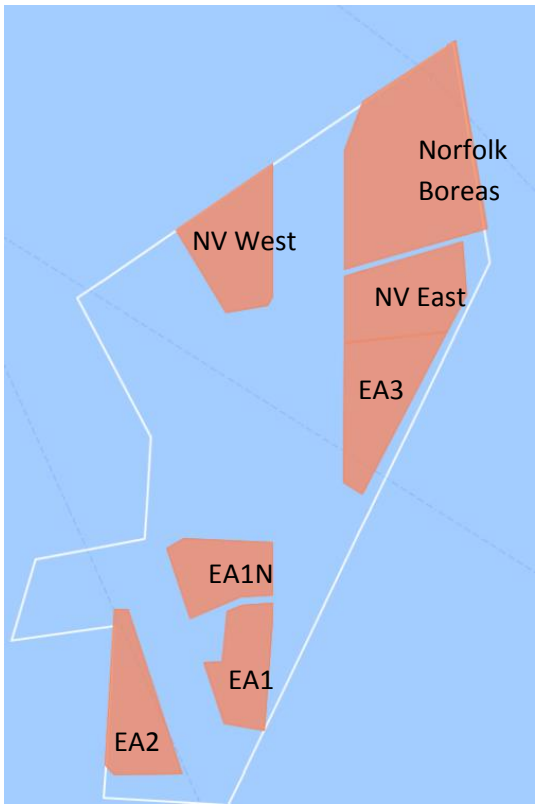


Figure 2. Overview of the former East Anglia Round 3 lease site, with consented (EA1 and EA3) and planned (NV, Norfolk Boreas, EA2 and EA1N) wind farms identified.

1.2 Flight directions and age ratios

During the first half of the breeding season (March to June) very few birds were recorded on the NV East site and 4km buffer, and no consistent flight directions were evident (Figure 3 and Table 1). In the late breeding season months July and August numbers increased and there was a consistent south-westerly orientation in flight directions.

Over 93% of the birds on NV East and the 4km buffer were identified as adults (Table 1). There was no seasonal pattern evident in the presence of non-adults.

On NV West during the early breeding season months (March to May) low numbers of bird were recorded on the site and 4km buffer and no consistent flight directions were evident (Figure 4 and Table 2). The number of birds increased between June and August and flight directions were oriented east-south-east and west-north-west.

Almost 87% of birds on NV West were identified as adults, with sub-adult numbers peaking in autumn (Table 2).

Overall, the sample sizes for flight direction and age analysis were small, limiting the weight which can be placed on the results obtained. For NV West there was little evidence for connectivity between the site and breeding birds at Alde-Ore Estuary SPA. On NV East there was a concentration of late breeding season flights oriented towards the SPA (although these only indicate return flights, not outward bound ones). Very few birds were reported as non-adults. On NV East there was no seasonal pattern in the presence of non-adults, however on NV West non-adults peaked in August and September.

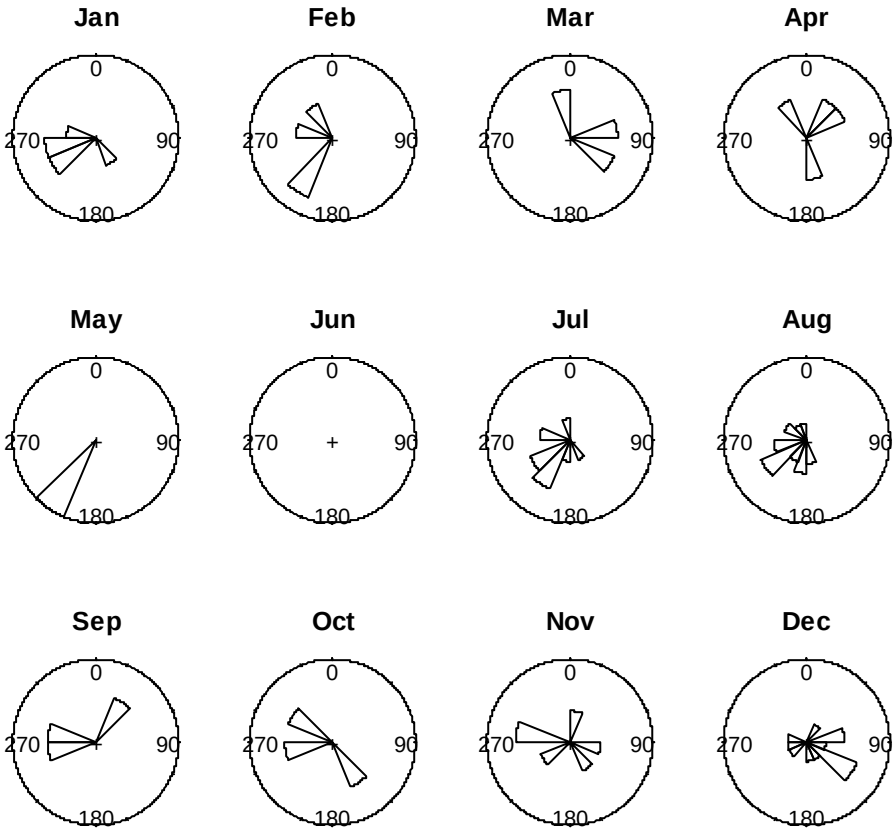


Figure 3. Lesser black-backed gull flight directions recorded on NV East and 4km buffer.

Table 1. Numbers of each age class recorded on NV East and 4km buffer.

Month	Adult	Sub-Adult	Unknown	Total
1	13	7		20
2	7			7
3	12			12
4	6	1		7
5	2			2
6	0			0
7	34			34

Month	Adult	Sub-Adult	Unknown	Total
8	35	1		36
9	17			17
10	7			7
11	41	3		44
12	21	2		23
Total	195	14	0	209

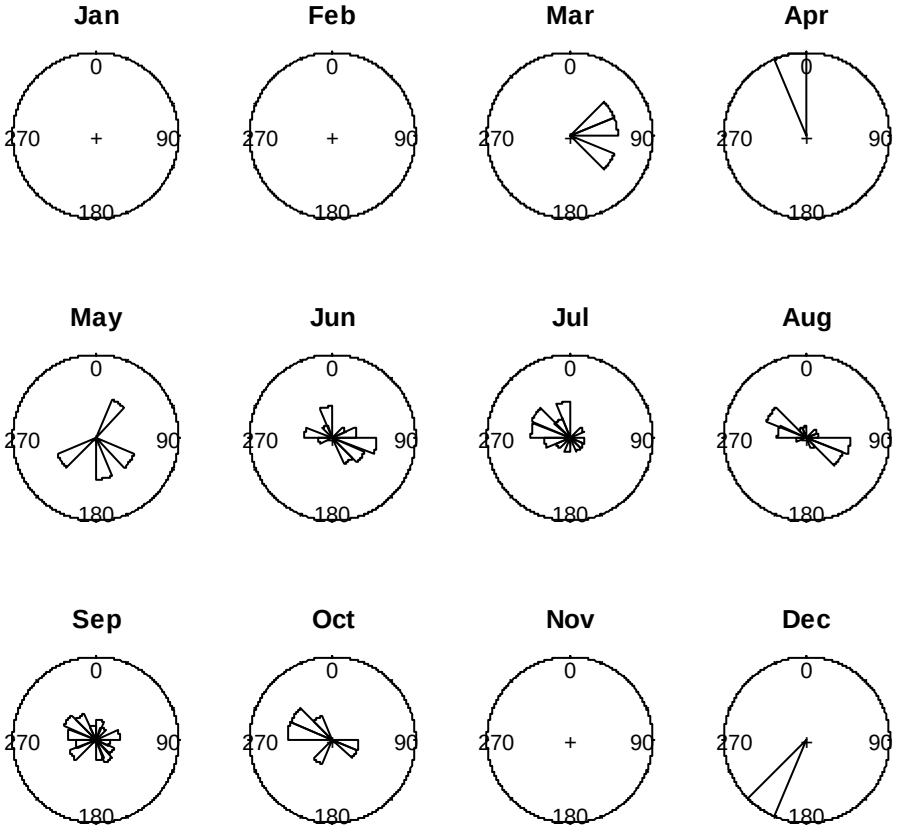


Figure 4. Lesser black-backed gull flight directions recorded on NV West and 4km buffer.

Table 2. Numbers of each age class recorded on NV West and 4km buffer.

Month	Adult	Sub-Adult	Unknown	Total
1	4			4
2	3			3
3	13			13
4	1			1
5	10		1	11
6	57	1		58
7	103	1	3	107

Month	Adult	Sub-Adult	Unknown	Total
8	106	10	4	120
9	92	35	3	130
10	8	4		12
11	6			6
12	1			1
Total	404	51	11	466

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2°20'0"E
2°30'0"E
2°40'0"E
2°50'0"E
3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

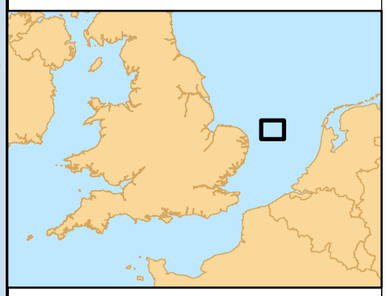
Species[1]

- Black-throated Diver
- Great Northern Diver
- Red-throated Diver
- Diver Species

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.1

Diver Species 2012 - 2017

0 5 10
km

MAP SCALE: 1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
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3°0'0"E
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VATTENFALL

Legend:

Count[1]

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- 11 - 20
- 21 - 40
- 40 +

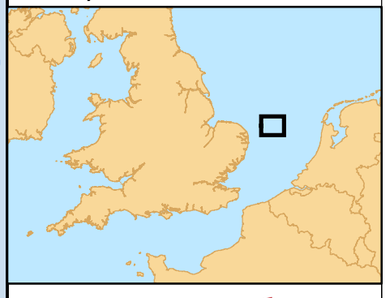
Season[1]

- Autumn Migration
- Winter
- Spring Migration
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1] **APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.2

Fulmar
2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
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VATTENFALL

Legend:

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- 11 - 20
- 21 - 40
- 40 +

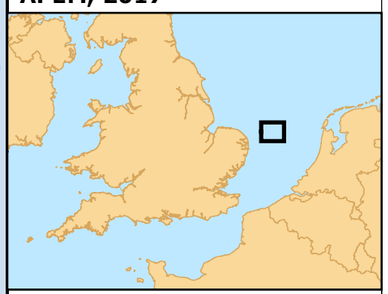
Season [1]

- Autumn Migration
- Spring Migration
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1] **APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.3

Gannet
2012 - 2017

0 5 10
km
MAP SCALE: 1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

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VATTENFALL

Legend:

Count[1]

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- 11 - 20
- 21 - 40
- 40 +

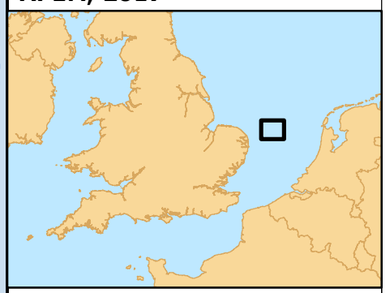
Species[1]

- Arctic Skua
- Great Skua

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1] **APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.4

Skua Species 2012 - 2017

N

0 5 10
km

MAP SCALE: 1:180,000 @ A3

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

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52°50'0"N

VATTENFALL

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- 11 - 20
- 21 - 40
- 40 +

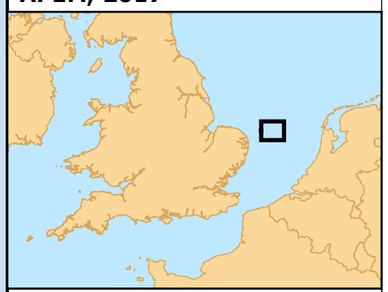
Season[1]

- Nonbreeding
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.5

Puffin
2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

GIS TM: BJF Checked: BJF Approved: MT Status: Rev4

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2°50'0"E
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52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

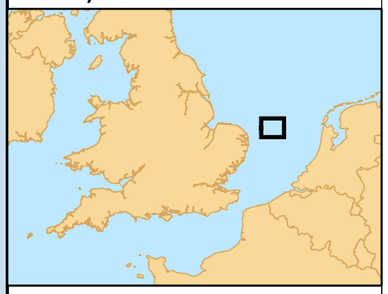
Season[1]

- Autumn Migration
- Winter
- Spring Migration
- Breeding

Sites and

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.6

Razorbill
2012 - 2017

0 5 10
km
MAP SCALE: 1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

GIS TM: BJF Checked: BJF Approved: MT Status: Rev4

Document Path: S:\Project GIS\VRW\Norfolk Vanguard\Figure_13.9.6_Razorbill_2012_2017_NV.mxd

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53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

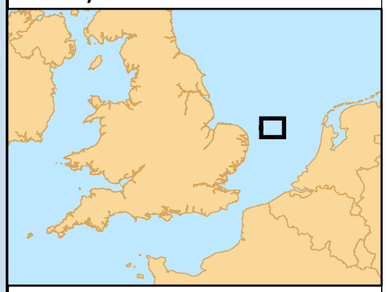
Season[1]

- Nonbreeding
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.7

Guillemot 2012 - 2017

0 5 10
km
MAP SCALE: 1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF

Document Path: S:\Project GIS\VRW\Norfolk Vanguard\Figure_13.9.7_Guillemot_2012_2017_NV.mxd

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3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

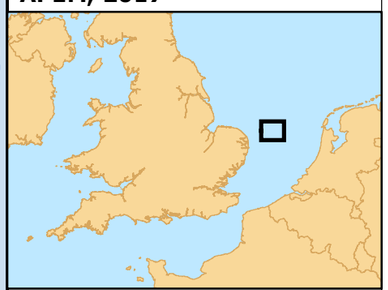
Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 41 - 107

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.8

Guillemot\Razorbill 2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @A3

N

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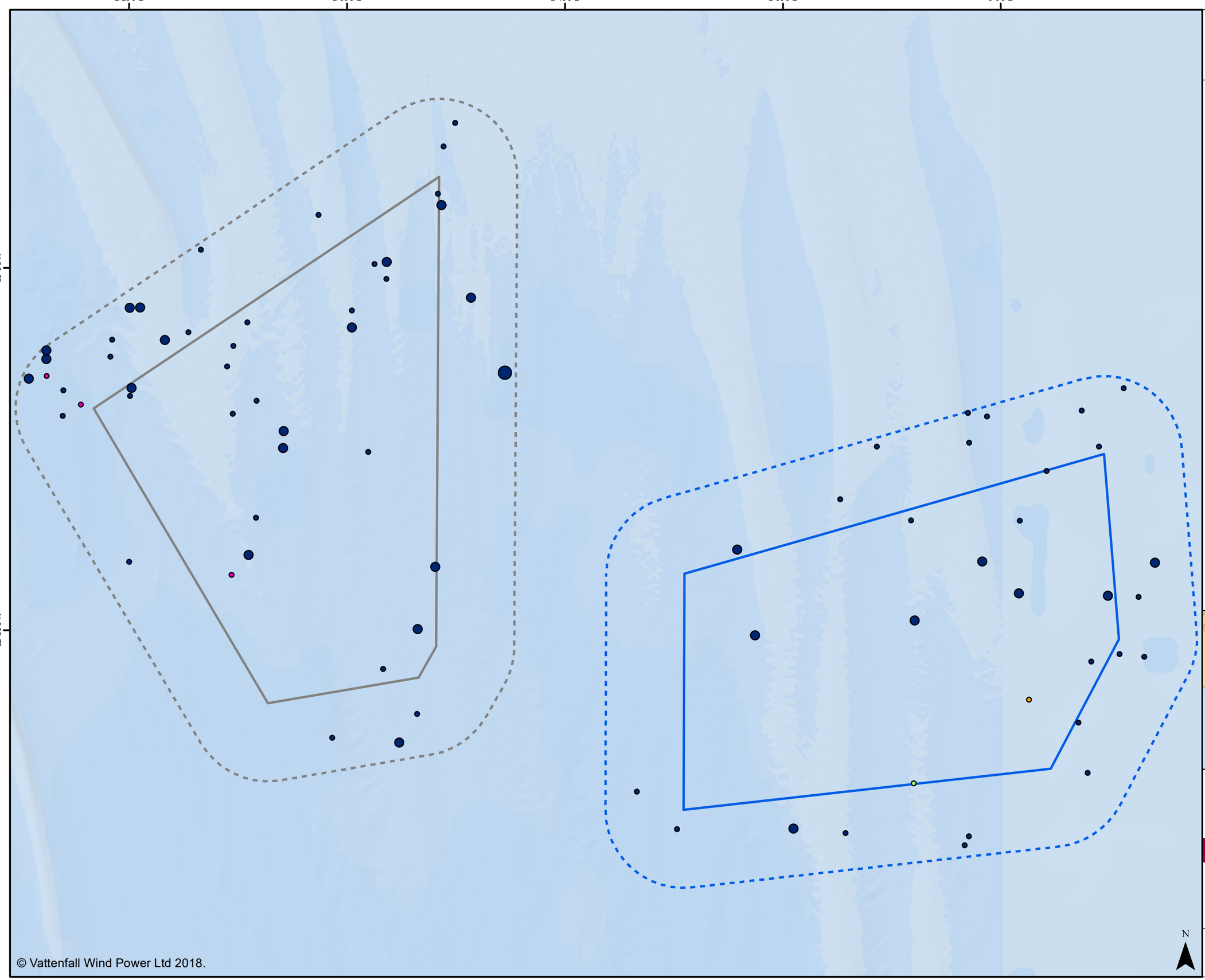
Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF
Document Path: S:\Project GIS\VRW\Norfolk Vanguard\Figure_13.9.8_Guillemot_Razorbill_2012_2017_NV.mxd

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2°40'0"E
2°50'0"E
3°0'0"E
53°0'0"N
52°50'0"N



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VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

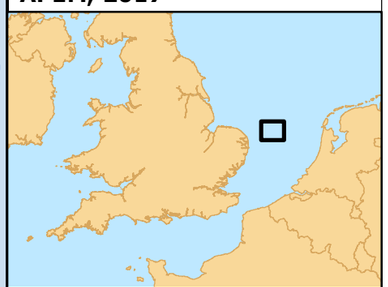
Species[1]

- Commic Tern
- Black Tern
- Tern Species
- Sandwich Tern

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1] **APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.9

Tern Species 2012 - 2017

0 5 10
km

MAP SCALE: 1:180,000 @ A3

N

Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4 Approved: MT Checked: BJF GIS TM: BJF

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VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

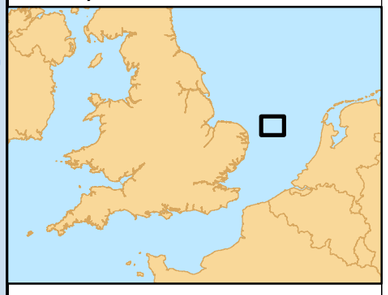
Season[1]

- Autumn Migration
- Spring Migration
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1] APEM, 2017



MacArthur Green

Norfolk Vanguard

Figure 13.9.10

Kittiwake
2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF
Document Path: S:\Project GIS\VRW\Norfolk Vanguard\Figure_13.9.10_Kittiwake_2012_2017_NV.mxd

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2°50'0"E
3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

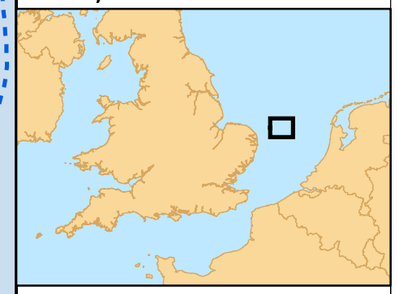
Species[1]

- Black-headed Gull
- Common Gull
- Little Gull

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

APEM, 2017



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Norfolk Vanguard

Figure 13.9.11

Small Gull Species 2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

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Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF
Document Path: S:\Project GIS\VRW\Norfolk Vanguard\Figure_13.9.11_Small_Gull_Species_2012_2017_NV.mxd

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2°40'0"E
2°50'0"E
3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

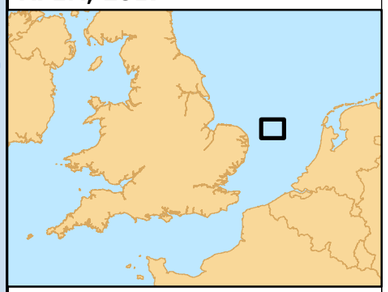
Season[1]

- Autumn Migration
- Winter
- Spring Migration
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.12

Lesser Black-backed Gull 2012 - 2017

N

0 5 10
km

MAP SCALE: 1:180,000 @ A3

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF
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2°40'0"E
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3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

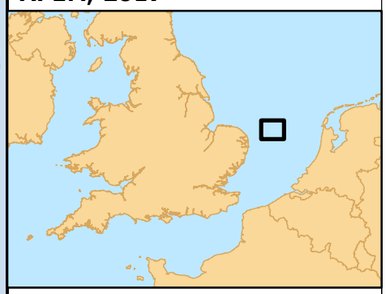
Season[1]

- Nonbreeding
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1] **APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.13

Herring Gull 2012 - 2017

0 5 10
km

MAP SCALE: 1:180,000 @ A3

N

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Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF
Document Path: S:\Project GIS\VRW\Norfolk Vanguard\Figure_13.9.13_Herring Gull_2012_2017_NV.mxd

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2°50'0"E
3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

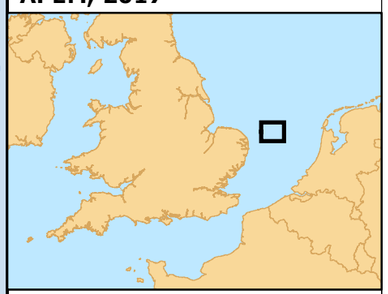
Season[1]

- Nonbreeding
- Breeding

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.14

Great Black-backed Gull 2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
Checked: BJF
GIS TM: BJF
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2°40'0"E
2°50'0"E
3°0'0"E
53°0'0"N
52°50'0"N

VATTENFALL

Legend:

Count[1]

- 1
- 2 - 10
- 11 - 20
- 21 - 40
- 40 +

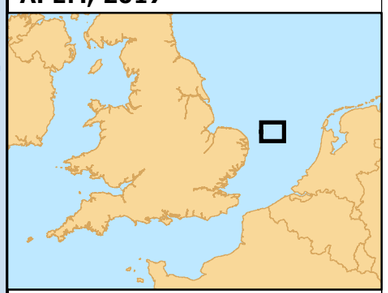
Species[1]

- Small Gull Species
- Large Gull Species
- Black-backed Gull Species

Sites and Buffers

- Norfolk Vanguard West
- Norfolk Vanguard West 4km Buffer
- Norfolk Vanguard East
- Norfolk Vanguard East 4km Buffer

[1]**APEM, 2017**



MacArthur Green

Norfolk Vanguard

Figure 13.9.15

Unidentified Species
Gull
2012 - 2017

0 5 10
km
MAP SCALE:1:180,000 @ A3

N

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Datum: ETRS1989, Projection: UTM 31N

Date: 11/05/2018

Status: Rev4
Approved: MT
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