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Subject: Urgent Request for Priority Habitat Designation: Habitat under threat

Date: 01 October 2024 20:18:07

Attachments: DKS1194.2 Cratemans Farm, Cowfold, RH13 8DX - PEA - arborweald REPORT .pdf

Field A and B plant list May 2024.pdf Meadows A and B plantlist June 2024.docx

Dear Sir,

I am writing to request that you consider for designation as Priority Habitat Lowland Meadow, land at Cratemans Farm near Cowfold in West Sussex. This land is within the DCO boundary of the Rampion 2 Offshore Windfarm, which is currently the subject of a National Infrastructure Project application by RWE. The area is under threat of destruction by the cable route and haul road to the site currently chosen for the nearby onshore substation, if this proposal goes ahead in its proposed form.

These fields are currently undesignated; there has been no reason, up to now, to formally assess the habitats and wildlife of this untouched area. However, it has long been known by locals as a richly biodiverse habitat, which includes dense scrub around and across the meadows and which is a very successful nightingale breeding habitat. This cannot be separated out from the grassland areas which are so destroyed by this process.

During the Examination, principal ecologist at Arborweald Consultancy, prepared a report for the site which shows it to be Priority Habitat Lowland Meadow, and also clearly demonstrates the high ecological value of the site and surrounding area in general. Natural England has, of course, been involved in the DCO and may already be familiar with the situation, but I have attached his report for your information. Also attached are the species lists for the site, now verified by the Sussex Biodiversity Records Centre, and photographs of the site.

Biodiversity 2020 makes specific reference to Natural England's existing SSSI Notification Strategy, "Natural England will consider the impact of climate change and other long-term processes on the existing SSSI network through its Notification Strategy, which will also **identify gaps in the present coverage of priority habitats** and will ensure "more, bigger and less fragmented areas for wildlife, with no net loss of priority habitat and an increase in the overall extent of priority habitats by at least 200,000 ha."

I urge you to act as soon as possible to protect this rare site.

Mr would be happy to answer any questions you may have regarding the site.

Yours faithfully,

Meera Smethurst



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Preliminary Ecological Appraisal

Cratemans Farm

Dragons Lane

Cowfold

West Sussex

RH13 8DX

TQ 21837 20771





FAO. Janine Creaye



Arborweald Environmental Planning Consultancy

Woodland Enterprise Centre Hastings Road Flimwell East Sussex TN5 7PR



Document information

| Report title: | DKS/1194.2 Preliminary E | DKS/1194.2 Preliminary Ecological Appraisal | | | |
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| Client: | Cowfold Vs. Rampion; c/o | Cowfold Vs. Rampion; c/o Janine Creaye | | | |
| Document ref: | DKS/1194.2 PEA | | | | |
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| Report date: | 29 th May 2024 | | | | |
| Updated: | Initials: | Update: | | | |
| Declaration : The information which I have prepared and provided for this report is true | | | | | |
| | and has been prepared and provided in accordance with the CIEEM's Code of | | | | |

Declaration: The information which I have prepared and provided for this report is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct; I confirm that the opinions expressed are my true and professional bona fide opinions.

Printed: BSc (Hons.), FDSc, ACIEEM – Principal Ecologist Signed:

Notice to Interested Parties

The author has prepared this report for the sole use of the commissioning party in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party without the prior written permission of the author. The content of this report is, at least in part, based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third party has not been independently verified by the author, unless otherwise stated in the report.

No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations completely defined the degree or extent of species abundances or habitat management efficacy described in the report.

The material presented in this report is confidential. This report has been prepared for the exclusive use of the client and shall not be distributed or made available to any other company or person without the knowledge and written consent of the author. Notwithstanding confidentiality, this document may be utilised and publicly displayed with reference to the development proposal planning application.

This report and all survey work have been prepared to British Standard 42020 and rely on information and methodology from the Joint Nature Conservation Committee and the Chartered Institute of Ecological and Environmental Management.

Additionally, this report relies on information from other third parties, some of which may include, but not be limited to; DEFRA's MAGIC database, local record centres, local wildlife spotter groups such as badger groups, and the NBN atlas.



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1 INTRODUCTION

- 1.1 Arborweald Environmental Planning Consultancy (AEPC) were commissioned by Ms Janine Creaye on behalf of Cowfold Vs. Rampion, a local action group to undertake a Preliminary Ecological Appraisal (PEA) of land at Cratemans Farm, Dragons Lane, Cowfold, RH13 8DX to provide an ecological baseline to inform routing, and mitigation, compensation and enhancement measures provided as a part of the proposed Rampion 2 wind farm development.
- 1.2 The objectives of the PEA were to assess the potential of the site to support protected species and/or species of conservation importance by identifying potential habitat for protected species and/or species of conservation concern and by evaluating the constraints that the presence of any protected species or species of conservation concern may place on the proposed re-development of the site.
- 1.3 Survey work was undertaken with full permission of the landowner.

Legislation and Policy

- 1.4 Certain habitats and species including nesting birds, bats, dormice, and great crested newts, are afforded protection under the Conservation of Habitats and Species Regulations 2017 and the Wildlife & Countryside Act 1981 (as amended). Further information on the legislation is included in Appendix A.
- 1.5 In general, the above legislation makes it an offence to:
 - Deliberately/intentionally or recklessly kill, injure or take a protected species;
 - Intentionally or recklessly damage, destroy or obstruct access to any place that a protected species uses for shelter or protection whether the species is present or not;
 - Intentionally or recklessly disturb a protected species while it is occupying a structure or place that it uses for shelter or protection;
 - Deliberately take or destroy the eggs of species protected by this legislation (such as nesting birds).
- 1.6 Section 41 of the Natural Environment and Rural Communities Act (2006) lists the species and habitats of principal importance for the conservation of biodiversity in England and acts as a guide to local authorities in implementing their duties under Section 40, to have regard to the conservation of biodiversity in England.
- 1.7 The Protection of Badgers Act (1992) prohibits reckless and/or intentional cruelty, injury or killing of badgers and the interference with badger setts.
- 1.8 Under The National Planning Policy Framework (NPPF, 2023) protected sites and species are a material consideration in determining planning applications in terms of minimising impacts on biodiversity.



- 1.9 National Planning Policy guidance uses a mitigation hierarchy, whereby potential impacts are first avoided through changes to design plans; then unavoidable impacts are mitigated against to reduce the negative effect of the impact; finally, residual impacts that remain after avoidance and mitigation measures are applied are compensated for (BS 42020, 2013, Section 5.2). Further to this, it is a requirement under National Planning Policy for developers to actively enhance the biodiversity value of development projects.
- 1.10 Schedule 14 of the Environment Act 2021 mandates the need for a minimum 10% net gain in biodiversity value for development sites.

Qualifications

- 1.11 Arborweald are a professional environmental consultancy first established in 2012, renowned for high quality and holistic ecological, arboricultural and landscape surveys and assessments. Arborweald's portfolio includes production of the Horsham District Council (HDC) Tree Strategy, an important habitat management document informing HDC's policy and management practice, including the use of ecosystem services and reinforcing / creating climate change resilience.
- 1.12 Additionally, Arborweald specialise in environmental reporting, and have done so for dozens of multi-unit residential developments, and management of land for private companies and municipal bodies such as the High Weald Area of Outstanding Natural Beauty Partnership, as well as providing ecological, arboricultural and woodland specialist services including planning inquiries to a number of Local Planning Authorities such as Barnet, Brighton and Hove, Arun, and Wealden.
- 1.13 The author, holds a BSc (hons.) in ecology, and a Foundation Degree (FDSc) in countryside management, as well as being an Associate member of the Chartered Institute of Ecological and Environmental Management (CIEEM). He has over 6 years professional experience in ecological and arboricultural consultancy and has worked in the countryside sector in the fields of habitat management, tree surgery and environmental consultancy for 11 years.
- 1.14 achievements include provision of expert witness documentation for planning inquiries including the recently refused development at Downlands Farm in Uckfield, East Sussex, as well as being the lead on the statistical analysis and ecosystem services elements as a part of production of the Horsham District Tree Strategy.
- 1.15 work is often highly technical, and includes data management, analysis and AutoCAD and GIS mapping. He specialises in habitat classification and botanical surveys.

Site Description

1.16 The site is located to the south-east of Cowfold, West Sussex, RH13 8DX (Ordnance Survey Grid Reference for the centre of the site: TQ 21837 20771). The area in question comprises Field A and Field B, both semi-improved meadows as a part of Cratemans Farm set on Dragons Lane.



Purpose of evidence

- 1.17 The purpose of this written representation document is to analyse and where necessary contest the value of habitats stated in Rampion's documentation and compare and contrast the different approaches taken by Rampion and Arborweald. This analysis will ensure that the facts of the case are delivered to the inspectorate, which will allow an impartial and fully informed decision to be achieved under the obligations imposed on the inspectorate by Section 40 of the NERC Act 2006 and Section 99 the Environment Act 2021.
- 1.18 This evidence shall be used to inform routing of the proposed Rampion 2 cable route across Cratemans Farm.
- 1.19 To gather evidence of biodiversity value, a Preliminary Ecological Appraisal (PEA), was undertaken in May 2024 to provide a holistic and complete view of habitats within Field A and Field B at Cratemans Farm. Data was also gathered to inform a future Biodiversity Metric assessment.
- 1.20 The objectives of the PEA were to:
 - Assess the type of habitats on site, providing species lists where appropriate, and making condition assessments to the standards of the Natural England Biodiversity Metric.
 - Assess the potential of those habitats to support protected species and/or species of conservation importance by identifying and evaluating the constraints that the presence of any protected species or species of conservation concern may place on the proposed re-development of the site.

Appendices pertinent to this document

- 1.21 The following documents should be appended to this document to give site context; they comprise:
 - List of plant species recorded by Janine Creaye and Cowfold Vs. Rampion, including photographs
 - Contextual map of Fields A and B with regards to the Rampion 2 cable route (Figure 1.1)
 - Written representation for College Wood Farm 'DKS1003.6 College Wood Farm Wiston Written Representation Report'



2 METHODS

Desk Study

- 2.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (DEFRA) was consulted for information with regard to protected habitats and species within 2 km of the proposed development (red line) boundary.
- 2.2 Aerial photos of the site (Google, 2020) were examined to determine habitats surrounding the site and hence species likely to be present in order to make appropriate recommendations in the wider landscape context.
- 2.3 Following guidance contained within sections 5.5 and 6.2.1 of BS 42020:2013, records from the local biodiversity record centre may be deemed necessary, in which case the results are screened for relevance. This involves an analysis (in conjunction with DEFRA's MAGIC map software) of connectivity between recorded instances and the site boundary. Records are also screened for age; records are prioritised from the last 10 years, with records from the past 20 and 40 years deemed as less accurate, but still included where possible.

Field Survey

- 2.4 The survey was conducted in accordance with The Handbook for Phase 1 Habitat Survey (JNCC, 2016), and included searches for signs of protected species, as described in the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017).
- 2.5 A Preliminary Ecological Appraisal survey of the site was carried out by suitably qualified ecologist on the 24th May 2024 in order to evaluate any habitat on the site with the potential to support protected species and/or other species of conservation concern that could be relevant in respect of planning policies.
- 2.6 In addition, the habitats within the survey area were assessed for their potential to support legally protected or otherwise notable flora and fauna. Where suitable habitat was identified on site, a search was conducted for signs indicating the presence of protected species such as droppings, burrows, tracks and evidence of feeding. Where species are not specifically evaluated, this indicates that no habitat of potential value for these species was identified during the survey.
- 2.7 Consideration was also given to habitats outside the site boundary, in order to evaluate the ecological context of the site within the wider landscape. Adjacent habitats were also considered with respect to their own ecological value and their potential to enhance the ecological value of habitats within the site.
- 2.8 Searches were made for invasive non-native plant species focusing on those species currently listed in the revised Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Species were listed split into non-natives and invasive non-natives with different advice for each.



- 2.9 The plant species nomenclature follows that of Stace (2019). Plant species observed within each habitat type were recorded using the DAFOR system which stands for Dominant, Abundant, Frequent, Occasional or Rare.
- 2.10 All references to relevant literature required to maintain industry best practice and compliance with legislation is listed in the References section of this report.

Survey Constraints

- 2.11 Due to seasonal behaviour of animals and the seasonal growth patterns of plants, ecological surveys may be limited by the time of year in which they are undertaken.
- 2.12 The information gathered for this ecological survey has facilitated an evaluation of the habitats on site and the likely use of the site by legally protected and notable species. This survey has also given appropriate baseline data for the determination of the requirement for further surveys and/or mitigation and enhancement works.



3 RESULTS

Desk Study

3.1 Records of designated sites and European sites within 2 km of the site boundary were obtained from Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra).

Designated sites

- 3.2 There are no international / European designated sites within 3km of the proposed site.
- 3.3 There are no statutory designated sites within 2km of the proposed site.

Designated habitats

3.4 The habitats in the wider landscape comprise arable, semi-improved grassland, semi-natural deciduous woodland, and urban residential. Further to this, the wider landscape contains three Habitats of Principal Importance (HPIs) covered under Section 41 of the Natural Environment and Rural Communities Act, consisting of deciduous woodland including ancient woodland, traditional orchard, and wood pasture and parkland.

Field Study

Phase 1 Habitat Survey

- 3.5 The site at Cratemans Farm comprises a pair of fields, Field A in the south and Field B in the north. The fields are separated by a mature species rich hedgerow with trees associated with ditch or bank, as well as a pocket of mixed scrub that bisects Field B.
- 3.6 The Rampion 2 cable route will bisect Fields A and B from south-west to north-east in a strip up to 50m wide with 'notching' through hedgerows a process whereby a path no more than 6m will be cut through hedgerows.
- 3.7 The habitats within the site boundary comprise good quality unimproved grassland and hedgerows.

Unimproved grassland

- 3.8 Field A comprises a meadow of unimproved grassland that is occasionally grazed as pasture by a small flock of sheep. At the time of survey Field A was highly diverse supporting a range of species and sward heights. Vegetation coverage is over 95% across the field, with herb coverage exceptionally high at a minimum of 60%, around 80% on average but up to 95% in places indicating no dominance of grasses. Sward heights are varied from a minimum 10cm up to an average of 50cm with taller areas up to 90cm in places.
- 3.9 Grass species include common species such as creeping bent *Agrostis stolonifera*, rough stalked meadow grass *Poa trivialis*, and red fescue *Festuca rubra*. There is almost a complete lack of perennial rye-grass *Lolium perenne*.



- 3.10 Other grass species include cocksfoot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus*, crested dogs tail *Cynosurus cristatus*, meadow foxtail *Alopecarus pratensis*, sweet vernal grass *Anthoxanthum odoratum*, quaking grass *Briza media*, false oat grass *Arrhenatherum elatius*, and smooth meadow grass *Poa pratensis*.
- 3.11 In total, eleven (11) grass species were recorded on site.
- 3.12 Herb coverage was extensive with a mixture of common species and indicators of unimprovement. Species included (at the following levels of dominance):

Abundant: red clover *Trifolium pratense*, meadow buttercup *Ranunculus acris*, creeping buttercup *Ranunculus repens*, grass vetchling *Lathyrus nissolia*, tufted vetch *Viccia cracca*, and common knapweed *Centaurea nigra*.

Frequent: red bartsia Odontites vernus, black medick Medicago lupulina, common sorrel Rumex acetosa, birds foot trefoil Lotus corniculatus, rough hawkbit Leontodon hispidus, cutleaf cranesbill Geranium dissectum, cuckoo flower Cardamine pratensis, meadow vetchling Lathyrus pratensis, common vetch Vicia sativa, oxeye daisy Leucanthemum vulgare, lesser stitchwort Stellaria graminea, yarrow Achillea millefolium, soft rush Juncus effusus, field wood rush Luzula campestris, creeping cinquefoil Potentilla reptans, ribwort plantain Plantago lanceolata, common cats ear Hypochaeris radicata and wood dock Rumex sanguineus.

Occasional common spotted orchid *Dactylorhiza fuchsi*, fleabane *Pulicaria dysenterica*, ground ivy *Glechoma hederacea*, dandelion *Taraxacum officinale*, pignut *Conopodium majus*, agrimony *Agrimonia eupatoria*, and great burnet *Sanguisorba officinalis*.

3.13 In total, thirty-one (31) herbaceous species were recorded on site.

Hedgerow

- 3.14 The entire site is bounded by mature hedgerows with Fields A and B separated by another. All the hedgerows are classified as native species-rich examples with mature trees associated with ditch / bank systems. They also contain veteran field maple Acer campestre trees.
- 3.15 Structurally the hedgerows are all over 1.5m tall and over 1.5m thick averaging 3m up to 6m tall in places and around 3m thick along their entire length.
- 3.16 Tree species include field maple, dog rose Rosa canina, hawthorn Crataegus monogyna, blackthorn Prunus spinosa, spindle Euonymus europeus, English oak Quercus robur, hazel Corylus avellana, and dogwood Cornus sanguineus.
- 3.17 The field layer includes cow parsley *Anthriscus sylvestris*, bluebell *Hycainthoides non-scripta*, ground ivy, marsh woundwort *Stachys palustris*, and nettle *Urtica dioica*, in addition to the same species as the unimproved grassland.
- 3.18 All hedgerows on site have a minimum 8 woody species, with additional features comprising bank and ditch systems, gaps less than 10% of length, over 1 tree per 50m of length, and a minimum 3 woodland ground flora species.
- 3.19 Furthermore, all hedgerows on site have a minimum of 4 features of connectivity (other hedgerows or pockets of woodland / scrub), comprising a minimum of 2 other hedgerows.



3.20 As such, all hedgerows on site are classified as 'important' under the Hedgerow Regulations Act 1997.

Protected and notable species

- 3.21 The habitats present on site provide suitable potential to support a range of protected species including badgers, bats, breeding birds, dormice, great crested newts, and reptiles.
- 3.22 Of particular note were the bird and invertebrate communities present which were indicative of high-quality grassland.
- 3.23 An abundance of songbirds was recorded during the survey, with species being both heard and seen. Species recorded included blackbird *Turdus merula*, blue tit *Cyanistes caeruleus*, great tit *Parus major*, wren *Troglodytes troglodytes*, jackdaw *Corvus monedula*, house sparrow *Passer domestica*, and starling *Sturnus vulgaris*.
- 3.24 Other species recorded included grassland and scrub quality indicator species such as the red listed species nightingale *Luscinia megarhynchos*, cuckoo *Cuculus canorus* yellowhammer *Emberiza citrinella*, skylark *Alauda arvensis*, and linnet *Linaria cannabina*.
- 3.25 All of the habitats on site provide nesting opportunities for breeding birds, with further opportunities found within the wider landscape.



4 EVALUATION

Habitats

Unimproved grassland

Importance of unimproved grasslands

4.1 Unimproved grasslands cover less than 6,000ha of the land surface of England, and since the late 1960's the habitat has sustained large losses due to drainage, ploughing and re-seeding and from the use of high rates of fertilisers.

Natural England

- 4.2 Natural England Technical Information Note TIN147 describes unimproved grassland NVC 'MG5' as:
 - "The primary biological interest of MG5 grassland Cynosurus cristatus Centaurea nigra or in English crested dog's-tail common knapweed, is the rich assemblage of mostly widespread, unsown, native plants rather than the presence of rare species (Rodwell 1992)..."
 - "...Herbaceous plants usually comprise a substantial proportion of the herbage and exceptionally may be as high as 95% cover (Cooper 1997). MG5 grasslands are species-rich ranging from around 12 to 38 plant species in a 4 m2 quadrat with an average of around 23/species/4 m2 (Rodwell 1992)"
- 4.3 Characteristic herbs include:

| Species | Present at Cratemans Farm? |
|---|----------------------------|
| Common knapweed Centaurea nigra; | Yes |
| Ox-eye daisy Leucanthemum vulgare; | Yes |
| Bird's-foot trefoil Lotus corniculatus; | Yes |
| Lady's bedstraw Galium verum; | No |
| Common sorrel Rumex acetosa; | Yes |
| Yellow meadow vetchling Lathyrus pratensis; | Yes |
| Meadow buttercup Ranunculus acris; | Yes |
| Ribwort plantain Plantago lanceolata; | Yes |
| Cowslip Primula veris; | No |
| Common cat's-ear Hypochaeris radicata. | Yes |



4.4 Characteristic grasses include:

| Species | Present at Cratemans Farm? | | | | |
|---|----------------------------|--|--|--|--|
| sweet vernal grass Anthoxanthum odoratum; | Yes | | | | |
| yellow oat-grass Trisetum flavescens; | No | | | | |
| red fescue Festuca rubra; | Yes | | | | |
| common bent Agrostis capillaris. | Yes | | | | |
| crested dog's-tail Cynosurus cristatus; | Yes | | | | |
| quaking grass <i>Briza media</i> ; | Yes | | | | |

- 4.5 On average, grassland diversity was over 30 species per 4m² quadrat, with herb coverage at a minimum of 60% averaging around 80%.
- 4.6 Some wetter areas of the site also contained great burnet with meadow foxtail found throughout the grassland indicating the conditions associated with MG4 grassland 'seasonally flooded unimproved neutral grassland' which would match the ground conditions in these areas.
- 4.7 The classification of Fields A and B as unimproved MG5 grassland with patches of MG4 towards the eastern side where the site bounds the Cowfold Stream is such that the site also qualifies for designation as a lowland meadow.

DEFRA's ELS and HLS system

4.8 The fields are also classified as unimproved grassland under the DEFRA definition which states that:

To qualify as unimproved grassland, at least 2 of these need to apply:

- cover of both ryegrass and white clover is less than 10%
- the sward is species rich (more than 15 species per square metre, including grasses)
- there is a high cover (more than 30%) of wildflowers and sedges, excluding white clover, buttercup, and injurious weeds (no definition of injurious weeds is provided in the HLS FEP Manual, but the following examples are given in the Entry Level Stewardship: creeping thistle, spear thistle, curly dock, bitter dock).

The grassland at Cratemans Farm achieves all three of these criteria.

UK BAP

4.9 Furthermore, the grassland on site meets United Kingdom Biodiversity Action Plan (UKBAP) criteria for unimproved grassland as



'A wide-ranging approach is adopted in this plan to lowland grasslands treated as lowland meadows. They are taken to include most forms of unimproved neutral grassland across the enclosed lowland landscapes of the UK. In terms of National Vegetation Classification plant communities, they primarily embrace each type of Cynosurus cristatus-Centaurea nigra grassland, Alopecurus pratensis-Sanguisorba officinalis floodplain meadow and Cynosurus cristatus-Caltha palustris flood-pasture.'

'The plan is not restricted to grasslands cut for hay, but also takes into account unimproved neutral pastures where livestock grazing is the main land use. On many farms in different parts of the UK, use of particular fields for grazing pasture and hay cropping changes over time, but the characteristic plant community may persist with subtle changes in floristic composited.'

4.10 This is in contrast to:

'Improved grassland; This type includes species poor, grass dominated swards occurring on all soil types that have been either sown or created by modification of unimproved grassland by fertilisers and selective herbicides, for agricultural or recreational purposes. It includes grassland that has been reseeded for more than one year.' This is not the case at Cratemans Farm which has been organically and holistically managed for 60 years.

4.11 Springy turf moss Rhytidiadelphus squarrosus was recorded throughout the site, indicating excellent grassland health and complex soil conditions.

Hedgerows

- 4.12 Hedgerows on site are all considered to be of a high quality and value being large and dense. Although a full hedgerow assessment was not conducted as a part of this PEA, information can be gleaned from the survey results when put through the HRA framework.
- 4.13 All hedgerows on site are considered to be 'important' as they match the criteria below:

An "important" hedgerow must have been in existence for at least 30 years and must fulfil more specific criteria pertaining to its archaeological and historical aspects, as well as its wildlife and landscape value. The relevant criteria for determining this, in addition to the requisite time period are as follows:

a) at least 7 woody species;

OR

- b) at least 6 woody species, and has associated with it at least 3 of the features specified in sub-paragraph (4);
- c) at least 6 woody species, including one of the following-
 - black-poplar tree (Populus nigra ssp betulifolia);
 - large-leaved lime (Tilia platyphyllos);
 - small-leaved lime (Tilia cordata);
 - wild service-tree (Sorbus torminalis); or



- d) at least 5 woody species, and has associated with it at least 4 of the features specified in sub-paragraph defined below
 - a bank or wall for at least half the length;
 - a ditch for at least half the length;
 - gaps over no more than 10 percent of the length;
 - at least one standard tree per 50m;
 - at least three ground flora woodland species as defined in Schedule 2 of the Regulations within 1m of the hedgerow;
 - connections scoring four or more points, where connection to a hedgerow counts as one, a broad-leaved woodland or pond counts as two; and
 - a parallel hedge within 15m.
- 4.14 All hedgerows on site have a minimum 8 woody species, and also match the other criteria by having standard trees every 50m, at least 3 woodland ground flora species within 1m, connections with other hedgerows and areas of woodland, and gaps of no more than 10% of their length.

Protected species

4.15 The impact of the proposals on nesting and scarce bird populations is unacceptable in its current state. The presence of four red-listed bird species recorded during the survey undertaken by Arborweald is indicative of the fact that these species are regularly present on site, and this is further reinforced by the results gathered by the client and their representative from the Sussex Ornithological Society.

Rampion's approach

- 4.16 Rampion's approach to surveying at Cratemans Farm has concluded that the grassland on site that separates Fields A and B is 'improved', and that both Fields A and B are 'poor quality semi-improved' grassland. It is the author's professional opinion that the independent surveys carried out by Arborweald strongly indicate that this is not the case.
- 4.17 Rampion have employed the same approach at Cratemans as elsewhere on the route. Arborweald have already provided a detailed written representation for another landowner at College Wood Farm in Wiston, 'DKS1003.6 College Wood Farm, Wiston-Written Representation Report' which summarises the main issues with Rampion's approach to biodiversity on the route.
- 4.18 It is the author's professional opinion that the issues highlighted in the above referenced written representation DKS/1003.6 are applicable to the site at Cratemans Farm.



5 CONCLUSION

- 5.1 The proposed development site is currently considered to have high ecological value within a local context as it comprises locally scarce habitats supporting locally abundant species typical of designated sites in the wider landscape.
- 5.2 The biodiversity value of the total site area is largely attributed to the following factors:
 - The high plant diversity on the site when compared with the immediate surrounding fields, which are predominantly used for horse grazing.
 - The good vegetative structure and connectivity within the development boundary, and connectivity with higher quality habitat in the wider landscape; and
 - The ease with which the proposed scheme could avoid the site through HDD methodology, as the site is immediately adjacent to an area that will be utilised for HDD when crossing the Cowfold Stream.
- 5.3 It is the author's professional opinion that the fields surveyed at Cratemans Farm comprise unimproved grassland bounded by species rich hedgerows that are 'important' as per the Hedgerow Regulations Act 1997. Both fields are identified as 'unimproved' grassland under the BAP, DEFRA and Natural England framework for assessing grasslands.
- 5.4 Local planning authorities use a mitigation hierarchy to determine planning applications. Prior to the Environment Act 2021 this was comprised of three parts: avoid, mitigate, and compensate / enhance. This has been strengthened by Schedule 14 Section 99 of the Environment Act 2021 which has increased the importance of biodiversity net gain, legislated methods to measure biodiversity net gain (with the Natural England Biodiversity Metric) and put greater emphasis on enhancement.
- 5.5 The most environmentally favourable option for the development is for the cable route to cross land of less ecological value and to avoid sensitive features in their entirety. This would also deliver savings in ecological surveys and the associated works required.
- 5.6 The most desirable option would be for the impact of the development to be reduced by undertaking the cable laying with Horizontal Directional Drilling (HDD) or 'Thrust boring'. This method will have to be applied to other areas of the cable route and would reduce the environmental impact on Cratemans Farm, particularly with regard to disturbing the valuable soil layers which have formed over decades of grazing and no-improvement.
- 5.7 If this method was adopted on Cratemans Farm, then ecological mitigation, compensation and enhancement measures could be directed at smaller areas used as access points to the boring sites, and to smaller sections of open cut at each end.



REFERENCES

Amphibian and Reptile Group UK (ARG UK). (2010). ARG UK Advice Note 5 Great Crested Newt Habitat Suitability Index, ARG UK

Barn Owl Trust. (2012). Barn Owl Conservation Handbook, Pelagic

British Standards Institute (BSI). (2013). BS42020: Biodiversity – Code of practice for planning and development, BSI

Chanin P. (2003). Ecology of the European Otter. Conserving Natura 2000

Rivers Ecology Series No. 10. English Nature, Peterborough

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal (CIEEM http://www.cieem.net/).

Collins J. (Ed). (2016). Bat surveys: good practice guidelines. London, Bat Conservation Trust

Corbet G. B. and Harris S. (1991). The handbook of British mammals, Blackwell Scientific

Dean M, Strachan R, Gow D and Andrews R; Mathews F and Chanin P (Ed). (2016). The Water Vole Mitigation Handbook, The Mammal Society

Edgar, P., Foster, J. and Baker, J. (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.

Froglife. (2001). Great Crested Newt Conservation Handbook, Froglife

Gent T. and Gibson S. (2003). Herpetofauna Workers Manual, Joint Nature Conservation Committee (JNCC)

Harris, S, Cresswell, P and Jeffries, D. (1986). Surveying Badgers, Mammal Society

Harris S. and Yalden D. (2008). Mammals of the British Isles, Mammal Society

Joint Nature Conservation Council (JNCC). (2003). Herpetofauna Workers Manual, JNCC

JNCC. (2016). Phase 1 Habitat Survey Handbook, JNCC

Mitchell-Jones A.J (2004) Bat Mitigation Guidelines. English Nature.

Mitchell - Jones A. J. and McLeish A. P. (2004). Bat workers' manual. Peterborough, JNCC

Natural England (NE). (2006). The dormouse conservation handbook, NE

Natural England (NE). (2011). Reptile mitigation guidelines, NE

NE. (2014) Otters standing advice, NE

NE. (2015) Water vole standing advice, NE

NE. (2015). Bats standing advice, NE

NE. (2015). Reptiles: surveys and mitigation for development projects, NE

NE. (2015). Great crested newts: surveys and mitigation for development projects, NE

NE. (2015). Great crested newt Standing Advice, NE



NE. (2015). Reptiles Standing Advice, NE

NE. (2015). Standing Advice Species Sheet Wild Birds (including Barn Owls). NE

NE. (2015). Bats: surveys and mitigation for development projects, NE

NE. (2015). Standing Advice: Dormouse, NE

NE. (2015). Standing Advice: Badger, NE

Ransome, R. (1990). The natural history of hibernating bats. London, Christopher Helm

Secretary of State, (1981 [as amended]). Wildlife and Countryside Act, HMSO

Secretary of State, (1992). Badger Act, HMSO

Secretary of State, (2000 [as amended]). Countryside and Rights of Way Act, HMSO

Secretary of State, (2010/2017) The Conservation of Habitats and Species Regulations, HMSO

Secretary of State, (2021). Environment Act, HMSO

Shawyer C R. (2011). Barn Owl *Tyto alba* Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting, IEEM

Stace, C (2019) *New Flora of the British Isles* 3rd Edition, Cambridge University Press, Cambridge.



FIGURES

Figure 1.1 Location of site



Park Little

Rampion 2 Provisional cable route outlined in red - Gratwicke across to Kent Street, just south of proposed Oakendene Substation Surveys of two species rich, unimproved meadows on public footpaths which would be dug up by the cable construction. Marked as Field A and Field B

APPENDIX A Wildlife Legislation

The Wildlife and Countryside Act 1981 (as amended)

Schedule 1

Applies to all wild birds where it is an offence:

- to take, damage or destroy a nest whilst it is being built or in use
- to kill, injure or take any wild bird (subject to certain exceptions and / or licencing)
- · to take or destroy the egg of any wild bird.

It is also an offence to disturb any wild bird listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended):

- while it is nest building
- at a nest containing eggs or young
- to disturb the dependant young of any such bird.

Schedule 5

Other protected animals are listed in Schedule 5; a full list of protected species can be found on the Legislation.gov.uk website. Schedule 5 contains several advancing levels of protection outlined below:

Protected under section 9(5) of Schedule 5, it is an offence:

to sell or advertise for sale, or participate in the sale of these species; many species
of invertebrate are listed under this section including butterflies, moths and beetles as
well as common frog, palmate and smooth newts

Protected under section 9(1) of Schedule 5, it is an offence:

 to intentionally kill or injure or take these species – this applies to adder, grass snake, common lizard and slow worm

For animals fully protected under Schedule 5 - which includes, the hazel dormouse, otter, water vole, pine marten, shrews, hedgehog, great crested newt, natterjack toad, sand lizard, smooth snake, red squirrel and all bats – all of the above apply, however it is also an offence:

- to intentionally or recklessly damage or destroy or obstruct access to any structure or place which a species uses for shelter or protection, at any time even if the animal is not present.
- to intentionally or recklessly disturb whilst it is occupying a place which it uses for shelter or protection.

Schedule 8

Specific species of plants listed in Schedule 8 are protected. It is an offence: to intentionally pick, uproot or destroy a wild plant listed in Schedule 8.

Schedule 9

Invasive non-native species are listed under Schedule 9. It is an offence:

to plant or otherwise cause to grow in the wild.



• If soils are contaminated by invasive non-native plant species it becomes classified as 'controlled waste' under the Environmental Protection Act 1990 (England, Wales & Scotland), and must be disposed of accordingly.

The Conservation of Habitat and Species Regulations 2017

Schedule 2 applies to all European Protected Species (EPS) which includes all bat species, great crested newts, otter and dormice. The protection afforded is overlapping but separate from the Wildlife and Countryside Act 1981 (as amended)

The Protection of Badgers Act 1992

Under this Act it is an offence:

- To intentionally or recklessly interfere by damaging, destroying, obstructing access to, or disturbing a badger whilst in a sett either directly or through causing a dog to enter a badger sett
- To wilfully kill, injure or take a badger, or to attempt to do so; in a case of attempt, if there is reasonable evidence to suggest an offence may have been committed, evidence would be required to prove innocence
- To possess or be under control of a dead badger, or part of, or anything derived from a dead badger which may have been killed in contravention of the above
- To sell, possess or attempt / offer to sell a live badger

Where interference with a badger sett cannot be avoided during development, a licence from Natural England must be applied for.







DATA AND EVIDENCE GATHERED THIS YEAR SO FAR

| | Meadow A pl | antlist 24th May | | Meado | ow B plantlist 30 th May ente | red as TQ21 | .942094 | |
|---------------------------|--------------------|-------------------------------------|------------------|---------------------|--|-------------|---------|------|
| Plant common name comment | | | | 30th May | comment | | | * |
| Meadow fox-tail grass | х | | | x | | | | |
| Yorkshire fog grass | х | | | х | | | | |
| sweet vernal grass | x | abundant | | х | | | | |
| crested dog's-tail grass | | Not seen yet this year | | | | | | |
| Cocks foot grass | x | | | x | abundant | | | |
| Timothy grass | | | | x | | | | |
| Tufted vetch | × | | | x | | | | |
| Bird's-foot-trefoil | х | abundant | | x | abundant | | | |
| Common spotted orchid | × | Patch in SE corner | | | | | | |
| Common knapweed | х | abundant | | x | | | | |
| creeping thistle | | | | х | | | | |
| meadow buttercup | x | abundant | | х | | | | |
| red clover | × | abundant | | x | widespread | | | |
| yarrow | | | | x | Abundant throughout | | | |
| black medick | х | | | х | | | | |
| pignut | х | | | x | | | | |
| cinquefoil | x | widespread | | x | widespread | | | |
| self-heal | х | · | | x | | | | 11.0 |
| Ground ivy | х | Field edge only | | x | Field edge only | | | |
| Meadow vetchling | 200 | Present last year | | | Not obvious yet | | | |
| common mouse-ear | х | | | x | | | | |
| Ribwort plantain | х | | | x | | | | |
| Common sorrel | × | | | x | | | | |
| Lesser stitchwort | х | Abundant throughout | | х | Patches throughout | | | |
| Cuckooflower | x | | | | | | | |
| common fleabane | х | Leaves present | | | | | | |
| soft rush | х | Patches throughout | | | | | | |
| field woodrush | х | Only abundant this year | | x | | | | |
| Glaucous sedge | х | | | х | | | | |
| Oval sedge | х | p (*) | | x | | | | |
| Cut leaved cranesbill | x | | | x | | | | |
| Grass vetchling | × | | | x | Abundant west side | | | |
| Creeping thistle | | | | x | | | | |
| Oxeye daisy | | | | х | Large patch | | | |
| silverweed | | | | x | | | | |
| Red bartsia | | | | | Not seen yet | | | |
| spindle tree | х | Cowfold stream edge | | | | | | |
| Yellow sedge | | 3 | | x | | | | |
| | d A. little in fie | ld B and no dandelions in flower. E | road leaved dock | only at extreme fie | ld edge | | | - |

| | Field A, Meadow | plantlist 16 th June 2024 | | | Fiel | d B plantlist 20 th June 2024 | |
|-----------------------------|-----------------|--|----------|---------|--------|--|-----|
| Plant common name comment | | | | comment | | | |
| Meadow fox-tail grass | х | abundant | | | Х | | |
| Yorkshire fog grass | х | abundant | | | Х | | |
| sweet vernal grass | х | abundant | | | Х | | |
| Crested dog's-tail grass | x | In flower and abundant | | | X | | |
| Cocks foot grass | x | widespread | | | X | | |
| Timothy grass | X | little | | | X | | |
| Tufted vetch | х | abundant | | | X | | |
| Bird's-foot-trefoil | × | abundant | | | х | | |
| Common spotted orchid | X | Still flowering SE corner | | | | | |
| Common knapweed | X | Abundant just flowering | | | Х | | |
| creeping thistle | | Some in field B | | | X | | |
| meadow buttercup | х | abundant | | | X | | |
| red clover | × | abundant | | | x | | + + |
| varrow | ^ | More on field B | | + | x | | + + |
| black medick | x | patches | | + | X | | + + |
| pignut | X | Present more on field B | | | X | | + + |
| cinquefoil | × | widespread | | + | x | | |
| self-heal | x | Abundant this year | | + | x | | |
| Ground ivy | X | Field edge only | | | x | | |
| Meadow vetchling | X | Flowering now | | | X | | |
| common mouse-ear | X | Difficult to see now but present | 1 | | X | + | |
| Ribwort plantain | X | patches | 1 | | X | + | |
| Common sorrel | X | patches | 1 | | X | + | |
| Lesser stitchwort | X | Abundant throughout | | | X | - | |
| Cuckooflower | X | Abundant throughout No longer flowering | | | X X | No longer flowering | |
| common fleabane | X | Leaves present | | | X X | No longer nowering | + + |
| | | Patches throughout | | | | | |
| soft rush field woodrush | X | Crowded out now but still there | | | X | - | |
| | | | | | Х | | |
| Glaucous sedge | X | Wetter areas | | | X | | |
| Oval sedge | X | ala una da nata | | | X | | |
| Cut leaved cranesbill | Х | abundant | | | Х | | |
| Grass vetchling | Х | Abundant this year | | | Х | | + + |
| Oxeye daisy | | Field B only | | | Х | | |
| silverweed | | Field B only | | | Х | | |
| Red bartsia | | Field B only | | | | Not yet seen | |
| Yellow sedge | - | 51 | | | Х | | + + |
| Meadow barley | Х | Flowering now | | | Х | | + + |
| Soft brome | Х | | | | X | | + + |
| Hard rush | Х | Eastern edge by stream | | | Х | | |
| Compact rush | Х | Eastern edge by stream | | | | | |
| Smooth tare | Х | Tiny vetch | | | | | |
| Common vetch | Х | patches | | | X | | |
| Agrimony | Х | | | | X | | |
| _ | | | | | | | |
| Dog rose | Х | Cowfold stream edge | | | | | |

Meadow plant bugs both male and female, hundreds of tiny meadow grasshoppers, five-spot burnet moth, seven spot ladybird, burnet companion moth, common blue butterfly, many meadow brown butterflies, skylarks nesting at field edges, lesser white throat nesting in hedge north east edge, swallows swooping over adjacent field.