



A30 Chiverton to Carland Cross Environmental Statement

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A30 CHIVERTON TO CARLAND CROSS

DORMOUSE SURVEY REPORT

CONFIDENTIAL

JANUARY 2018



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DORMOUSE SURVEY REPORT

Highways England

Final Confidential

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1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1 WSP was commissioned by Highways England to undertake ecological surveys in respect of the proposed A30 Chiverton to Carland Cross Scheme (hereafter referred to as 'the proposed Scheme'). The proposed Scheme involves a new dual carriageway to run alongside the existing single carriageway road to relieve traffic pressures within the area. Surveys are required in order to inform an Ecological Impact Assessment (EcIA) forming part of an Environmental Statement (ES) supporting a Development Consent Order (DCO) Application for the proposed Scheme.
- 1.1.2 The presence of habitat suitable for dormice *Muscardinus avellanarius* within close proximity of the proposed Scheme was established during a Phase 1 Habitat Verification Survey¹ undertaken in August 2015. Accordingly, a dormouse survey was recommended.
- 1.1.3 The objective of the survey was to identify the presence or likely absence of dormice in suitable habitat that may be affected by the proposed Scheme. If dormouse presence was confirmed, the results would enable the potential effects of the proposed Scheme to be established, and measures required to mitigate or compensate for significant adverse effects to be determined.

1.2 SITE CONTEXT

- 1.2.1 The A30 is a major trunk road running through the centre of Cornwall from west to east. The A30 forms an important route through the county of Cornwall and is under pressure during the summer months due to the high number of tourists. The section of road between Chiverton and Carland Cross is a traffic pinch point, where the dual carriageway narrows to single carriageway in both directions between the two junctions. The single carriageway sits between grid references SW 74759 46978 at the western end and SW 84665 53957 at the eastern end.
- 1.2.2 A scoping exercise identified 14 wooded areas within 500 m of the proposed route options. Suitable habitat within 100m of the proposed Scheme that was directly linked to these were surveyed in 2016 (eight areas) and 2017 (nine areas) (these are hereafter collectively referred to as the 'survey area'). It should be noted that at the early stage of the survey design, the preferred Scheme option had not been finalised. As such, the survey area incorporated additional Scheme options and variations that have subsequently been removed.
- 1.2.3 The proposed Scheme area covers a variety of habitats including heathland, farmland and woodland. The existing soft estate along this section of road contains hedgerows in some areas, but also includes wide grass verges in others. The road at times is raised up offering panoramic views and at others it is cut into the bed rock with steep banks above.

1.3 DORMOUSE ECOLOGY

1.3.1 Dormice are small arboreal nocturnal rodents of the Gliridae family that live at low population densities. They are primarily found in highly diverse broadleaved woodlands with well-developed

¹WSP|PB (2015). A30 Carland Cross to Chiverton Cross Phase 1 Habitat Verification Survey. A Report to Highways England

understoreys and species-rich hedgerows². However, they have also been found within reed beds, culm grassland and conifer plantations³. These findings in the UK are consistent with research in wider Europe⁴.

- 1.3.2 Dormice are known to be present in Cornwall and are largely restricted to the south of England. However, their distribution is patchy, possibly due to their specialist ecological requirements⁴ and sensitivity to weather conditions².
- 1.3.3 Dormice feed mainly upon flowers, fruits, nuts, seeds, insects and caterpillars².
- Dormice are primarily arboreal and are not considered to cross large areas of open ground. They construct their nests from honeysuckle bark in the woodland understorey in the summer, and descend to the ground to hibernate within for example, the roots of trees and moss in the winter⁵. Further research, including a Passive Integrated Transponder (PIT) tagging study on the A30 Temple to Carblake, in Bodmin, Cornwall and other studies in Europe, have, however, confirmed that dormice will traverse open ground to access food sources and for dispersal. They have been found to cross the carriageway at the western end of the A30 Temple to Carblake Improvement Scheme⁴.
- 1.3.5 Dormice spend much of their time in a dormant state, entering winter hibernation in October or November until April or May⁵, although this can be shorter in Cornwall due to the warmer climate (pers. comm, Dr Paul Chanin). Dormice breed between May and September, and can enter summer torpor when food is short or the weather conditions curtail foraging. Summer torpor is used to save energy and dormice may enter this state on a regular basis². Further dormouse ecology information can be found in The Dormouse Conservation Handbook².

1.4 LEGISLATION

- 1.4.1 The dormouse is a European Protected Species (EPS) and is therefore fully protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). Dormice also receive protection under the Wildlife and Countryside Act (1981, as amended) and are listed as a Species of Principal Importance (SPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006).
- 1.4.2 It is an offence to: deliberately kill, injure or capture dormice; deliberately disturb them; and damage or destroy dormouse breeding sites or resting places.

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² Bright, P. W., Morris, P. A. & Mitchell-Jones, A. J. (2006) The Dormouse Conservation Handbook, 2nd Edition. Natural England, Peterborough

³ Chanin, P and Woods, M.J., 2003 Surveying dormice using nest tubes. Results and experiences from the South West Dormouse Project. English Nature Research Project Report 524. English Nature, Peterborough DEFRA (2004). European Species Guidance Note, DEFRA, Bristol

⁴ Chanin, P. & Gubert, L., 2012. Common dormouse (*Muscardinus avellanarius*) movements in a landscape fragmented by roads. Lutra 55(1):3-15

⁵ Bright, P. and Morris, P. 1993. A Practical Guide to Dormouse Conservation. Occasional publication No.11 The Mammal Society, London

2 METHODOLOGY

2.1 DESK STUDY

- 2.1.1 A desk study was completed in 2015 as part of the Phase 1 Habitat Verification Survey. A search for any statutory or non-statutory designated sites where dormice are an interest feature within 5 km of the existing A30 between Chiverton Cross and Carland Cross was undertaken.
- 2.1.2 Records of dormice were also requested from the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) within this study area.
- 2.1.3 Desk study records of relevance within 2 km of the proposed Scheme have been accessed to inform this baseline report.
- 2.1.4 The ecological desk study provides background information on the biodiversity interest of the site, which complements data collected in the field by providing additional context for the site and its surroundings. It should be noted that an absence of desk study records for particular species or habitat does not necessarily convey an absence of such species or habitat in that area, but may be indicative of under-recording.

2.2 SURVEY SCOPING

- 2.2.1 A high-level scoping exercise was carried out using aerial photography and desk study data to identify woodlands potentially suitable to support dormice² within the area surrounding the proposed Scheme (an approximate 500 m area was assessed). These woodlands are shown on Figure 1.
- 2.2.2 The surveys carried out within 2016 were then conducted in suitable habitats such as hedgerows and woodland subject to potential impacts from the proposed Scheme alignments that were connected to these woodlands. Surveys were conducted within an approximate 100 m buffer from an approximate centre line of the proposed routes at the time of survey (which included the proposed Scheme) and targeted to the most suitable areas within this buffer, as shown on Figure 2.
- 2.2.3 Additional surveys were carried out in 2017 within areas where inconclusive results were obtained during 2016. Where possible, these surveys were extended outside of the 100 m area used in 2016 into habitats that could be considered to have potential to support source populations of dormice in order to optimise the opportunities for identifying presence, as shown on Figure 3.

2.3 FIELD SURVEY

- 2.3.1 The field survey was carried out using the standard methodologies recommended in The Dormouse Conservation Handbook² and Chanin and Woods (2003)³.
- 2.3.2 A total of 710 nest tubes were set up in eight distinct areas in 2016 as shown in Figure 2 (Areas 1 8) and as described in Table 1. These tubes were set up on the 25-28th April 2016.

Table 1: Dormouse Survey areas and habitats 2016

| Area | TOTAL NUMBER OF TUBES | LOCATION |
|------|--------------------------|--|
| 1 | | Western end of the Scheme, at Chiverton Cross, on either side of the A3705 in hedgerows. |

| A rea | TOTAL NUMBER OF TUBES | LOCATION |
|--------------|--------------------------|--|
| 2 | 67 | Near the Chybucca junction, to the north of the A30 within hedgerows and woodland edge. |
| 3 | 72 | At Nanteague Farm, south of the A30, within hedgerows and belts of trees. |
| 4 | 80 | At Nancarrow Farm, south of the A30, within mature hedgerows and woodland belt edge. |
| 5 | 98 | At Chyverton Park, north of the A30, within mature hedgerows and woodland edge. |
| 6 | 150 | Along the Zelah bypass section of the A30, to the north and south, within mature hedgerows and woodland block edges. |
| 7 | 75 | At the eastern end of the Scheme, to the south of the A30 within mature hedgerows and woodland belt edge. |
| 8 | 100 | At the eastern end of the Scheme, surrounding Carland Cross roundabout, to the north and south of the road, within mature hedgerows. |

- 2.3.3 These tubes were checked on the following dates:
 - à 25th & 26th May 2016;
 - à 19th & 20th July 2016;
 - à 19th & 20th September 2016; and
 - 28th, 29th and 30th November 2016.
- 2.3.4 A total of 475 nest tubes were set up in nine distinct areas in 2017 as shown in Figure 3 (Areas 1 9) and as described in Table 2. These tubes were set up on the 26-28th April 2017.

Table 2: Dormouse Survey areas and habitats 2017

| Area | TOTAL NUMBER OF TUBES | LOCATION |
|------|-----------------------|---|
| 1 | 50 | Western end of the Scheme, at Chiverton Cross, on either side of the A3705 in hedgerows. |
| 2 | 50 | Near the Chybucca junction, to the north of the A30 within hedgerows. |
| 3 | 50 | At Nanteague Farm, south of the A30, within woodland block and line of trees. |
| 4 | 50 | At Nancarrow Farm, south of the A30, within mature hedgerows. |
| 5 | 50 | At Chyverton Park, north of the A30, within the woodland. |
| 6 | 75 | Within the fields to the south of the A30 along the Zelah bypass section within mature hedgerows. |
| 7 | 50 | Along the Zelah bypass to the north of the A30, within the scrub along the embankment. |
| 8 | 50 | At the eastern end of the Scheme, to the south of the A30 within mature hedgerows and woodland edge south of Ventonteague Farm. |

| Area | TOTAL NUMBER OF TUBES | LOCATION |
|------|--------------------------|---|
| 9 | 50 | At the eastern end of the Scheme, north of Carland Cross roundabout, along the woodland edge and woodland strip / hedgerow. |

- 2.3.5 These tubes were checked on the following dates:
 - à 27th & 28th June 2017;
 - à 16th & 17th August 2017; and
 - à 17th & 18th October 2017.
- 2.3.6 The Dormouse Conservation Handbook specifies the index of probability of finding dormice present in nest tubes in a given month throughout the active dormouse season (Table 2.1). A score of at least 20 must be obtained for an adequate survey to confirm likely absence. Natural England states that the "score applies from when the nest tubes are deployed to when they are removed, not just the months where the tubes are physically checked"⁶. The tubes were in-situ between 28th April and 22nd November 2016, and between 26th April and 18th October 2017.
- 2.3.7 In accordance with standard best-practice guidance⁷, the survey visits were carried out once every other month with sufficient time to let the tubes bed in and increase the likelihood of dormice using them.

Table 3: Index of probability of finding dormouse in a given month (Dormouse Conservation Handbook)

| Монтн | POINTS (50 TUBES) | POINTS (100 TUBES) |
|-----------|-------------------|--------------------|
| April | 1 | 2 |
| May | 4 | 8 |
| June | 2 | 4 |
| July | 2 | 4 |
| August | 5 | 10 |
| September | 7 | 14 |
| October | 2 | 4 |
| November | 2 | 4 |

2.3.8 At least 20 points were achieved for all eight Areas in 2016 and all nine Areas in 2017, thereby providing an adequate survey to determine likely absence. Points are calculated and shown

⁶ Natural England. Interim Natural England Advice Note – Dormouse surveys for mitigation licensing – best practise and common misconceptions. WML-G37 (12/11)

⁷ Natural England, 2015. Guidance. Hazel or common dormice surveys and mitigation for development projects. accessed from https://www.gov.uk/guidance/hazel-or-common-dormice-surveys-and-mitigation-for-development-projects 31/10/2017.

within Tables 4 and 5 below.

- 2.3.9 The tubes were checked on each occasion by a licensed ecologist or an accredited agent. The tubes were inspected using either a mirror on a long handle or the tube would be carefully slid open to check for anything within.
- 2.3.10 If evidence of inhabitants was noted, the entrance to the tube was temporarily sealed. The tube was then carefully removed from the branch and opened fully within a large clear bag in order to prevent escape of any inhabitants and allow the nest or evidence to be inspected fully. The tube was then replaced in its original position with the nest still intact within and the temporary seal removed.

2.4 LIMITATIONS

- 2.4.1 The areas surveyed during this study only represented the most suitable habitats to support dormice within the survey area. It was considered that this targeted approach did not pose any constraints to the survey; particularly in consideration of the two seasons of survey effort employed.
- 2.4.2 During the 2016 surveys, health and safety concerns were raised with the presence of cattle in fields in Area 3 and Area 4. As such, sections of the survey were not conducted and the surveyors resumed checks once safely on the other side of the cattle. Within Area 7 up to 27 tubes had been tampered with by cows. These were repositioned as required, and the remaining 48 tubes in this area still provided sufficient points to achieve a valid survey. Additionally the survey carried out within 2017 further corroborated the results found in this area.
- Additionally, in 2016 there were 43 tubes (out of a total 150) that became lost or were removed by the landowner during the course of the survey period in Area 6. As such, these could not be surveyed and the surveyors proceeded with the survey only where the tubes were present. This area was further surveyed in 2017.
- 2.4.4 Due to health and safety constraints during June 2017, Area 7 was not surveyed. This was due to high levels of spray off the road and the proximity of the traffic to the verge in poor visibility conditions. In addition, Area 4 was not surveyed in June 2017 due to access limitations. The survey of Areas 4 and 7 was recommenced in August and October. As a result, there is potential that any nests built in the period April to May, and found in this Area in the August survey, could have deteriorated to an extent that they would not be recognisable. Upon re-starting the surveys, the majority of these tubes were recorded as being empty and no discernible signs of a deteriorated nest were evident.
- 2.4.5 Part of Area 6 was not surveyed in August 2017 due to the presence of cows in the fields. It was considered to be a health and safety risk due to their behaviour. The survey was recommenced in October. As a result, there is potential that any nests built in the period July to August, and found in this Area in the October survey, could have deteriorated to an extent that they would not be recognisable. Upon re-starting the surveys, the majority of these tubes were recorded as being empty and no discernible signs of a deteriorated nest were evident.

3 RESULTS

3.1 DESK STUDY

3.1.1 The desk study did not return any records for dormice or for designated sites with dormice as an interest feature within 2 km of the proposed Scheme.

3.2 SCOPING

- 3.2.1 The Scoping identified suitable habitat for dormice in the landscape surrounding the proposed Scheme (refer to Figure1). These habitats included large deciduous and mixed woodland habitats, with connectivity to the proposed Scheme through additional woodland, scrub and hedgerows.
- 3.2.2 Eight areas (Areas 1 8, Figure 2) were selected for survey in 2016 and nine areas (Areas 1 9, Figure 3) were selected for survey in 2017 where these suitable woodland habitats were connected to additional, suitable dormouse habitat (predominately woodland and species-rich hedgerows) within the proposed Scheme footprint.

3.3 FIELD SURVEY

3.3.1 The 2016 survey identified the presence of wood mouse *Apodemus sylvaticus*, shrew *Sorex araneus*, and harvest mouse *Micromys minutus* within the survey areas. No definitive results for dormice were found during the field survey. However, two tubes were found to contain the possible start of dormouse nests, which were then considered to be occupied by wood mice during the following survey. These nests were identified as potential dormice due to the presence of stripped material such as grass and some green leaves, however were not conclusive due to the lack of woven structure. A summary of the results is shown in Table 4 and a full account of the survey results can be found in Appendix A.

Table 4: Summary of 2016 field survey results

| AREA | TOTAL NUMBER OF TUBES SET OUT | DORMOUSE RESULTS | OTHER SPECIES RESULTS (MAXIMUM TUBES WITH EVIDENCE) |
|------|-------------------------------------|---|---|
| 1 | 68 | Possible dormouse nest identified on survey 3 (20 th September), no longer present/recognisable by survey 4 (28 th November). | Wood mouse (3) |
| 2 | 67 | Possible start of dormouse nest on check 1, taken over by wood mouse by survey 2 (19 th July) (droppings present). | Wood mouse (9) |
| 3 | 72 | - | Wood mouse (4) |
| 4 | 80 | - | Wood mouse (1) |
| 5 | 98 | - | Wood mouse (3) |
| 6 | 150 | - | Wood mouse (25), harvest mouse (6), shrew (1) |
| 7 | 75 | - | Wood mouse (2) |
| 8 | 100 | - | Wood mouse (2) |

3.3.2 The 2017 survey identified the presence of wood mouse and harvest mouse within the survey

area. No evidence of dormice was found during the field survey. A summary of the results is shown in Table 5 and a full account of the survey results can be found in Appendix A.

Table 5: Summary of 2017 field survey results

| AREA | TOTAL NUMBER OF TUBES SET OUT | DORMOUSE RESULTS | OTHER SPECIES RESULTS (MAXIMUM TUBES WITH EVIDENCE) |
|------|-------------------------------------|------------------|---|
| 1 | 50 | - | Wood mouse (4) |
| 2 | 50 | - | Wood mouse (7) |
| 3 | 50 | - | Wood mouse (1) |
| 4 | 50 | - | Wood mouse (3) |
| 5 | 50 | - | - |
| 6 | 75 | - | Wood mouse (6) |
| 7 | 50 | - | Wood mouse (5), harvest mouse (2), shrew (1) |
| 8 | 50 | - | - |
| 9 | 50 | - | Wood mouse (4) |

3.4 SUMMARY

- 3.4.1 Dormouse surveys were carried out in 2016 and 2017 within suitable habitats along the length of the proposed scheme. Suitable habitats were identified within 500 m of the alignment options in 2016 and those at risk of impacts from the scheme were surveyed for the presence of dormice.
- 3.4.2 Due to inconclusive results in 2016, and the low densities of dormice in Cornwall, further survey was carried out in 2017, with the focus upon areas where inconclusive results were found, along with habitat with potential to support source populations.
- 3.4.3 A total of 710 tubes were deployed in 2016 across eight areas, with 475 tubes being deployed in 2017 across nine areas. The survey identified the presence of wood mice, harvest mice and shrews. No evidence of dormice was found in 2017, based on the standard guidance that 20 points were achieved during two seasons of survey, it is considered that dormice are likely absences from the survey area.

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Appendix A

SURVEY RESULTS

2016 Dormouse Survey Results

| | | A | rea 1 | |
|----------|------------|--------------|-----------------|------------|
| Tub e | check 1 | check 2 | check 3 | check 4 |
| | 25/05/2016 | 19/07/2016 | 20/09/2016 | 28/11/2016 |
| 1 | N | N | N | YWM |
| 2 | N | N | N | YWM |
| 3 | N | N | N | N |
| 4 | N | N | N | N |
| 5 | N | N | N | N |
| 6 | N | WM cache | WM cache | N |
| 7 | N | N | N | N |
| 8 | N | N | YWM | N |
| 9 | N | N | N | N |
| 10 | N | N | N | N |
| 11 | N | N | N | N |
| 12 | N | CNF | N | N |
| 13 | N | N | N | N |
| 14 | N | N | N | N |
| 15 | N | N | N | N |
| 16 | N | N | Y poss DM start | Y wet nest |
| 17 | N | CNF | N | N |
| 18 | N | N | N | N |
| 19 | N | N | N | N |
| 20 | N | N | N | N |
| 21 | N | N | N | N |
| 22 | N | N | N | N |
| 23 | N | N | N | N |
| 24 | N | N | N | N |
| 25 | N | N | N | N |
| 26 | N | N | N | N |
| 27 | N | CNF | CNF | N |
| 28 | N | N | N | N |
| 29 | N | N | N | N |
| 30 | N | N | N | N |
| 31 | N | N | N | N |
| 32 | N | N | N | N |
| 33 | N | repositioned | N | N |
| 34 | N | N | N | N |
| 35 | N | N | N | N |
| 36 | N | N | N | N |
| 37 | N | N | N | N |
| 38 | N | N | N | N |
| 39 | N | N | N | N |
| 40 | N | N | N | N |
| 41 | N | N | N | N |
| 42 | N | N | N | N |
| 43 | N | N | N | N |

| 44 | N | N | N | N |
|----|---|----------------|----------|---------|
| 45 | N | N | N | N |
| 46 | N | N | N | N |
| 47 | N | N | N | N |
| 48 | N | N | N | N |
| 49 | N | N | N | N |
| 50 | N | N | Y WM (2) | YWM |
| 51 | N | CNF | CNF | N |
| 52 | N | N | N | N |
| 53 | N | CNF | CNF | N |
| 54 | N | N | N | N |
| 55 | N | CNF | N | N |
| 56 | N | CNF | CNF | CNF |
| 57 | N | CNF | CNF | CNF |
| 58 | N | N | N | N |
| 59 | N | CNF | CNF | CNF |
| 60 | N | CNF | CNF | CNF |
| 61 | N | N | CNF | N |
| 62 | N | N | N | N |
| 63 | N | N | N | N |
| 64 | N | N | N | N |
| 65 | N | N | N | N |
| 66 | N | N | N | N |
| 67 | N | N | N | N |
| 68 | N | insert missing | missing | missing |

| | Area 2 | | | |
|----------|--|------------------------|--------------|------------|
| Tub e | check 1 | check 2 | check 3 | check 4 |
| | 25/05/2016 | 19/07/2016 | 20/09/2016 | 28/11/2016 |
| 1 | N | N | N | N |
| 2 | N | N | N | N |
| 3 | N | N | YWM | YWM |
| 4 | N | N | Y WM (2) | YWM |
| 5 | N | N | N | YWM |
| 6 | N | N | WM cache | N |
| 7 | N | N | N | N |
| 8 | N | N | N | N |
| 9 | N | N | YWM | N |
| 10 | N | N | N | N |
| 11 | N | N | N | N |
| 12 | N | N | repositioned | N |
| 13 | N | N | N | Y HM? |
| 14 | N | N | N | N |
| 15 | N | N | N | N |
| 16 | Y possible start of DM nest (green leaves) | Y WM droppings present | N | N |
| 17 | N | N | N | N |

| 18 | N | N | YWM | YWM |
|----|---|-----|----------|-----|
| 19 | N | N | Y WM (1) | YWM |
| 20 | N | N | N | N |
| 21 | N | N | N | N |
| 22 | N | N | N | N |
| 23 | N | N | N | N |
| 24 | N | N | N | N |
| 25 | N | N | N | N |
| 26 | N | N | CNF | N |
| 27 | N | N | N | N |
| 28 | N | N | N | N |
| 29 | N | N | N | N |
| 30 | N | N | N | N |
| 31 | N | N | N | N |
| 32 | N | N | N | N |
| 33 | N | N | N | N |
| 34 | N | N | N | N |
| 35 | N | N | N | N |
| 36 | N | N | YWM | N |
| 37 | N | N | N | N |
| 38 | N | N | N | N |
| 39 | N | N | N | N |
| 40 | N | N | N | N |
| 41 | N | CNF | CNF | N |
| 42 | N | N | N | N |
| 43 | N | N | N | N |
| 44 | N | N | N | N |
| 45 | N | N | N | N |
| 46 | N | N | N | N |
| 47 | N | N | N | N |
| 48 | N | N | N | N |
| 49 | N | N | N | N |
| 50 | N | N | YWM | N |
| 51 | N | N | N | N |
| 52 | N | N | N | N |
| 53 | N | N | N | N |
| 54 | N | N | CNF | N |
| 55 | N | N | N | N |
| 56 | N | N | N | N |
| 57 | N | N | N | N |
| 58 | N | N | YWM | N |
| 59 | N | N | N | N |
| 60 | N | N | N | N |
| 61 | N | N | N | N |
| 62 | N | N | N | N |
| 63 | N | N | N | N |
| 64 | N | N | N | N |
| 65 | N | N | N | N |
| 66 | N | N | N | N |

| 67 | N | N | N | N |
|----|---|---|---|---|
| 68 | | | | |

| | Area 3 | | | | |
|----------|------------|--------------------------|-----------------|------------|--|
| Tub e | check 1 | check 2 | check 3 | check 4 | |
| | 25/05/2016 | 19/07/2016 | 20/09/2016 | 28/11/2016 | |
| 1 | N | N | N | N | |
| 2 | N | N | N | N | |
| 3 | N | N | N | N | |
| 4 | N | N | N | N | |
| 5 | N | N | N | N | |
| 6 | N | N | N | N | |
| 7 | N | N | N | N | |
| 8 | N | cows in field H&S issues | N | N | |
| 9 | N | cows in field H&S issues | N | N | |
| 10 | N | cows in field H&S issues | N | N | |
| 11 | N | cows in field H&S issues | YWM | N | |
| 12 | N | cows in field H&S issues | N | N | |
| 13 | N | cows in field H&S | N | N | |
| 14 | N | cows in field H&S | N | N | |
| 15 | N | cows in field H&S | CNF | N | |
| 16 | N | cows in field H&S | CNF | N | |
| 17 | N | cows in field H&S | N | N | |
| 18 | N | cows in field H&S | N | N | |
| 19 | N | cows in field H&S issues | N | N | |
| 20 | N | cows in field H&S | N | N | |
| 21 | N | cows in field H&S | N | N | |
| 22 | N | cows in field H&S | N | N | |
| 23 | N | cows in field H&S issues | CNF | N | |
| 24 | N | cows in field H&S | N | N | |
| 25 | N | cows in field H&S | insert replaced | N | |

| 26 | N | cows in field H&S issues | N | N |
|----------|---------------|--------------------------|----------------|---------|
| 27 | N lost insert | cows in field H&S | insert missing | CNF |
| 28 | N | N | N | N |
| 29 | N | CNF | N | N |
| 30 | N | CNF | N | N |
| 31 | N | N | N | N |
| 32 | N | N | N | N |
| 33 | N | N | CNF | N |
| 34 | N | N | N | N |
| 35 | N | CNF | CNF | N |
| 36 | N | N | YWM | YWM |
| 37 | N | N | N | N |
| 38 | N | CNF | N | N |
| 39 | N | N | N | N |
| 40 | N | N | CNF | N |
| 41 | N | CNF | N | N |
| 42 | N | WM cache | N | N |
| 43 | N | N | N | N |
| 44 | N | N | N | N |
| 45 | N | N | N | N |
| 46 | N | repositioned | N | N |
| 47 | N | N | N | N |
| 48 | N | CNF | CNF | N |
| 49 | N | N | N | N |
| 50 | YWM | N | N | N |
| 51 | N | N | N | N |
| 52 | N | N | N | N |
| 53 | N | N | N | N |
| 54 | N | N | N | N |
| 55 | N | N | N | N |
| 56 | N | N | YWM | N |
| 57 | | N | N | N |
| 58 | N | missing | missing | missing |
| 59 | | N | N | N |
| 60 | N | N | N | N |
| 61 | N | N | N | N |
| 62 | N | N N | N N | N N |
| 63 | | | | |
| 64 | | N N | N N | N N |
| 65 66 | N N | N | missing | missing |
| 67 | N | N | N | N |
| 68 | N | N | YWM | YWM |
| 69 | N | N | N | N |
| 70 | N | N | repositioned | N |
| 71 | N | N | N | N |
| 72 | N | N | N | N |
| 12 | 14 | IN | IN | IN |

| | Area 4 | | | | |
|----------|------------|------------------------------|-----------------|------------|--|
| Tub e | check 1 | check 2 | check 3 | check 4 | |
| | 26/05/2016 | 19/07/2016 | 20/09/2016 | 29/11/2016 | |
| 1 | N | CNF | CNF | N | |
| 2 | N | CNF | CNF | N | |
| 3 | N | N | N | N | |
| 4 | N | N | N | N | |
| 5 | N | N | N | N | |
| 6 | N | N | N | N | |
| 7 | N | N | N | N | |
| 8 | N | insert missing | insert replaced | CNF | |
| 9 | N | N | N | N | |
| 10 | N | Y small pile of green leaves | N | N | |
| 11 | N | N | N | N | |
| 12 | N | N | N | CNF | |
| 13 | N | N | N | N | |
| 14 | N | N | N | N | |
| 15 | N | N | N | N | |
| 16 | N | N | N | N | |
| 17 | N | N | N | N | |
| 18 | N | N | N | N | |
| 19 | N | N | N | N | |
| 20 | N | N | N | flailed | |
| 21 | N | N | N | N | |
| 22 | N | N | N | flailed | |
| 23 | N | N | N | N | |
| 24 | N | N | N | flailed | |
| 25 | N | N | N | YWM | |
| 26 | N | N | N | N | |
| 27 | N | N | N | N | |
| 28 | N | N | N | N | |
| 29 | | N | N | N | |
| 30 | N | N | N | N | |
| 31 | N | N | YWM | YWM | |
| 32 | N | N | N | YWM | |
| 33 | N | N | N | N | |
| 34 | N | N | N | N | |
| 35 | N | N | N | N | |
| 36 | N | N | N | N | |
| 37 | N | N | N | N | |
| 38 | N | N | N | N | |
| 39 | N | N | N | N | |
| 40 | N | N | N | N | |
| 41 | N | N | N | N | |
| 42 | N | N | N | N | |
| 43 | N | N | N | N | |

| 44 | N | N | N | N |
|----|---------------------|---------|--------------|-----|
| 45 | N | N | N | N |
| 46 | N | N | N | N |
| 47 | N | N | N | N |
| 48 | N | N | N | N |
| | N | N | N | N |
| 49 | | | | |
| 50 | N | N | N | N |
| 51 | N | N | N | N |
| 52 | N | N | N | N |
| 53 | N | N | N | N |
| 54 | N | N | N | YWM |
| 55 | N | N | N | YWM |
| 56 | N | N | N | N |
| | Cattle in field H&S | missing | missing | N |
| 57 | issue | | | |
| | Cattle in field H&S | missing | repositioned | N |
| 58 | issue | | | |
| | Cattle in field H&S | missing | N | N |
| 59 | issue | | | |
| | Cattle in field H&S | missing | missing | N |
| 60 | issue | | | |
| | Cattle in field H&S | N | N | N |
| 61 | issue | | | |
| | Cattle in field H&S | missing | missing | CNF |
| 62 | issue | | | |
| | Cattle in field H&S | missing | missing | N |
| 63 | issue | | | |
| | Cattle in field H&S | missing | CNF | CNF |
| 64 | issue | | | |
| | Cattle in field H&S | missing | CNF | CNF |
| 65 | issue | | | |
| | Cattle in field H&S | N | CNF | CNF |
| 66 | issue | | | |
| | Cattle in field H&S | missing | CNF | CNF |
| 67 | issue | | | |
| | Cattle in field H&S | missing | CNF | CNF |
| 68 | issue | | | |
| | Cattle in field H&S | missing | CNF | CNF |
| 69 | issue | | | |
| | Cattle in field H&S | missing | missing | CNF |
| 70 | issue | | | |
| | Cattle in field H&S | N | CNF | CNF |
| 71 | issue | | | |
| | Cattle in field H&S | missing | CNF | CNF |
| 72 | | | | |
| | Cattle in field H&S | missing | missing | CNF |
| 73 | | | | |
| | Cattle in field H&S | missing | missing | CNF |
| 74 | issue | | | |

| | Cattle in field H&S | repositioned | N | CNF |
|----|---------------------|----------------|---------------|-----|
| 75 | issue | | | |
| | Cattle in field H&S | missing | missing | CNF |
| 76 | issue | | | |
| | Cattle in field H&S | N | N | N |
| 77 | issue | | | |
| | Cattle in field H&S | repositioned | N | N |
| 78 | issue | | | |
| | Cattle in field H&S | insert missing | insert mising | N |
| 79 | issue | | | |
| | Cattle in field H&S | N | N | N |
| 80 | issue | | | |

| | Area 5 | | | | |
|-----|------------|------------|------------|------------|--|
| Tub | check 1 | check 2 | check 3 | check 4 | |
| е | | | | | |
| | 25/05/2016 | 19/07/2016 | 20/09/2016 | 29/11/2016 | |
| 1 | N | N | N | N | |
| 2 | N | N | N | N | |
| 3 | N | N | N | N | |
| 4 | N | N | N | N | |
| 5 | N | N | N | N | |
| 6 | N | N | N | N | |
| 7 | N | N | N | N | |
| 8 | N | N | N | N | |
| 9 | N | N | N | N | |
| 10 | N | N | N | N | |
| 11 | N | N | N | N | |
| 12 | N | N | N | N | |
| 13 | N | N | N | N | |
| 14 | N | N | N | N | |
| 15 | N | N | N | N | |
| 16 | N | N | N | N | |
| 17 | N | N | N | N | |
| 18 | N | N | N | N | |
| 19 | N | N | N | N | |
| 20 | N | N | N | N | |
| 21 | N | N | N | N | |
| 22 | N | N | N | N | |
| 23 | N | N | N | N | |
| 24 | N | N | N | N | |
| 25 | N | CNF | CNF | CNF | |
| 26 | N | N | N | N | |
| 27 | N | N | N | N | |
| 28 | N | N | N | N | |
| 29 | N | N | N | N | |
| 30 | N | N | N | N | |
| 31 | N | N | N | N | |
| 32 | N | N | N | N | |

| 33 | N | N | N | N |
|----|---|----------------|-----------------|---|
| 34 | N | N | N | N |
| 35 | N | N | N | N |
| 36 | N | insert missing | insert replaced | N |
| 37 | N | N | N | N |
| 38 | N | N | N | N |
| 39 | N | N | N | N |
| 40 | N | N | N | N |
| 41 | N | N | N | N |
| 42 | N | N | N | N |
| 43 | N | N | N | N |
| 44 | N | N | N | N |
| 45 | N | N | N | N |
| 46 | N | N | N | N |
| 47 | N | N | N | N |
| 48 | N | N | N | N |
| 49 | N | N | N | N |
| 50 | N | N | N | N |
| 51 | N | N | N | N |
| 52 | N | N | N | N |
| 53 | N | N | N | N |
| 54 | N | N | N | N |
| 55 | N | N | N | N |
| 56 | N | N | N | N |
| 57 | N | CNF | N | N |
| 58 | N | N | N | N |
| 59 | N | N | N | N |
| 60 | N | N | N | N |
| 61 | N | N | N | N |
| 62 | N | N | N | N |
| 63 | N | N | N | N |
| 64 | N | N | N | N |
| 65 | N | N | N | N |
| 66 | | N | N | N |
| 67 | N | CNF | N | N |
| 68 | N | N | N | N |
| 69 | N | N | N | N |
| 70 | N | N | N | N |
| 71 | N | N | N | N |
| 72 | N | N | N | N |
| 73 | N | N | N | N |
| 74 | N | N | N | N |
| 75 | N | N | N | N |
| 76 | N | N | N | N |
| 77 | N | N | N | N |
| 78 | N | N | N | N |
| 79 | N | N | N | N |
| 80 | N | N | N | N |
| 81 | N | N | N | N |

| 82 | N | N | N | N |
|----|---|---|---------------|-----|
| 83 | N | N | N | N |
| 84 | N | N | N | N |
| 85 | N | N | N | N |
| 86 | N | N | CNF | N |
| 87 | N | N | N | N |
| 88 | N | N | N | N |
| 89 | N | N | N | N |
| 90 | N | N | N | N |
| 91 | N | N | Y WM (2) | N |
| 92 | N | N | N | N |
| 93 | N | Ν | WM food cache | N |
| 94 | N | N | N | N |
| 95 | N | Ν | N | YWM |
| 96 | N | N | N | N |
| 97 | N | N | N | N |
| 98 | N | N | YWM | N |

| | Area 6 | | | |
|------|-----------------|-----------------|----------------|------------|
| Tube | check 1 | check 2 | check 3 | check 4 |
| | 26/05/2016 | 20/07/2016 | 19/09/2016 | 29/11/2016 |
| 1 | insert missing | insert replaced | N | N |
| 2 | N | CNF | CNF | CNF |
| 3 | N | N | Y WM (1) | N |
| 4 | N | N | YWM | N |
| 5 | N | N | N | N |
| 6 | N | N | N | N |
| | N | N | YWM | Y WM shrew |
| 7 | | | | present |
| 8 | N | CNF | N | N |
| 9 | N | N | N | N |
| 10 | N | CNF | YWM | YWM |
| 11 | repositioned | N | N | N |
| 12 | insert replaced | N | YHM | YWM |
| 13 | N | CNF | CNF | CNF |
| 14 | N | CNF | N | CNF |
| 15 | N | N | YWM | YWM |
| 16 | insert missing | insert missing | insert missing | N |
| 17 | N | N | N | N |
| 18 | repositioned | N | YWM | N |
| 19 | N | N | N | N |
| 20 | repositioned | N | Y WM (2) | YWM |
| 21 | N | N | N | N |
| 22 | repositioned | N | N | N |
| 23 | N | CNF | N | N |
| 24 | N | CNF | CNF | CNF |
| 25 | N | N | N | N |
| 26 | N | N | N | N |
| 27 | CNF | N | CNF | CNF |

| 28 | N | N | N | N |
|----|-----------------|-----------------|-----------------|--------------|
| 29 | N | N | YWM | N |
| 30 | N | N | YWM | N |
| 31 | N | N | YWM | N |
| 32 | N | N | CNF | CNF |
| 33 | N | N | N | N |
| 34 | N | N | N | N |
| 35 | N | N | N | N |
| 36 | N | N | N | N |
| 37 | insert missing | insert replaced | N | N |
| 38 | N | N | N | N |
| 39 | N | N | N | N |
| 40 | N | N | N | N |
| 41 | N | N | YWM | Y HM? |
| 42 | insert replaced | insert replaced | N | N |
| 43 | N | N | YHM | Y HM? |
| 44 | N | YWM | YHM | CNF |
| 45 | N | N | N | N |
| 46 | N | insert replaced | N | CNF |
| 47 | missing | missing | N | CNF |
| 48 | repositioned | Y WM (1) | YWM | N |
| 49 | N | N | YWM | N |
| 50 | N | N | YWM | N |
| 51 | N | CNF | N | N |
| 52 | repositioned | N | N | N |
| 53 | N | N | CNF | N |
| 54 | N | N | YWM | Y WM + SHREW |
| 55 | N | Y WM (1) | YWM | YWM |
| 56 | repositioned | N | insert replaced | N |
| 57 | N | N | YHM | Y HM? |
| 58 | N | N | Y WM (1) | N |
| 59 | N | N | N | N |
| 60 | N | N | YWM | N |
| 61 | repositioned | N | N | N |
| 62 | N | N | N | N |
| 63 | insert replaced | N | N | N |
| 64 | repositioned | insert replaced | insert replaced | N |
| 65 | N | N | N | N |
| 66 | N | N | N | N |
| 67 | repositioned | N | YHM | Y HM? |
| 68 | N | N | N | N |
| 69 | N | N | N | N |
| 70 | N | N | N | N |
| 71 | N | N | repositioned | N |
| 72 | insert replaced | insert replaced | N | N |
| 73 | N | N | insert replaced | N |
| 74 | N | N | YWM | N |
| 75 | N | N | N | N |
| 76 | N | N | N | N |

| 77 | missing | CNF | CNF | CNF |
|-----|----------------|----------------|----------------|-----|
| 78 | N | N | N | CNF |
| 79 | N | N | N | N |
| 80 | N | N | N | N |
| 81 | N | CNF | YWM | N |
| 82 | N | N | N | N |
| 83 | N | N | N | N |
| 84 | N | N | N | N |
| 85 | N | N | N | CNF |
| 86 | N | CNF | CNF | CNF |
| 87 | N | N | N | CNF |
| 88 | N | N | N | CNF |
| 89 | N | N | N | CNF |
| 90 | N | N | N | CNF |
| 91 | N | N | N | N |
| 92 | N | N | N | CNF |
| 93 | farmer removed | farmer removed | farmer removed | CNF |
| 94 | farmer removed | farmer removed | farmer removed | CNF |
| 95 | farmer removed | farmer removed | farmer removed | CNF |
| 96 | farmer removed | farmer removed | farmer removed | CNF |
| 97 | farmer removed | farmer removed | farmer removed | CNF |
| 98 | farmer removed | farmer removed | farmer removed | CNF |
| 99 | N | CNF | CNF | CNF |
| 100 | farmer removed | farmer removed | farmer removed | CNF |
| 101 | farmer removed | farmer removed | farmer removed | CNF |
| 102 | farmer removed | farmer removed | farmer removed | CNF |
| 103 | farmer removed | farmer removed | farmer removed | CNF |
| 104 | farmer removed | farmer removed | farmer removed | CNF |
| 105 | insert missing | CNF | CNF | CNF |
| 106 | insert missing | CNF | CNF | CNF |
| 107 | missing | missing | missing | CNF |
| 108 | insert missing | CNF | CNF | CNF |
| 109 | insert missing | CNF | CNF | CNF |
| 110 | missing | missing | missing | CNF |
| 111 | N | CNF | N | N |
| 112 | repositioned | CNF | YWM | N |
| 113 | insert missing | CNF | N | N |
| 114 | repositioned | N | N | N |
| 115 | N | N | N | N |
| 116 | N | insert missing | N | N |
| 117 | insert missing | N | missing | CNF |
| 118 | N | N | N | N |
| 119 | repositioned | N | Y WM (1) | N |
| 120 | repositioned | N | missing | CNF |
| 121 | missing | missing | repositioned | N |
| 122 | insert missing | repositioned | repositioned | N |
| 123 | N | N | missing | CNF |
| 124 | missing | missing | missing | CNF |
| 125 | N | insert missing | N | N |

| 126 | N | N | YWM | N |
|-----|-------------------|-----------------|------------------|----------|
| 127 | N | N | N | N |
| 128 | N | N | N | N |
| 129 | N | N | N | N |
| 130 | N insert replaced | N | repositioned | CNF |
| 131 | N | N | missing | CNF |
| 132 | N | insert replaced | missing | CNF |
| 133 | YWM | N | YWM | N |
| 134 | N | N | YWM | N |
| 135 | N | N | N | N |
| | N | N | Y poss DM (woven | Y DM/HM? |
| 136 | | | grass structure) | |
| 137 | N | CNF | N | N |
| 138 | N | insert missing | insert missing | N |
| 139 | N | N | N | N |
| 140 | N | N | N | N |
| 141 | N | N | N | N |
| 142 | N | N | N | N |
| 143 | N | N | N | N |
| 144 | N | N | N | N |
| 145 | N | N | N | N |
| 146 | N | N | N | N |
| 147 | N | N | N | N |
| 148 | N | N | repositioned | N |
| 149 | N | N | N | N |
| 150 | missing | missing | repositioned | N |

| | Area 7 | | | |
|------|----------------|-----------------|----------------|----------------|
| Tube | check 1 | check 2 | check 3 | check 4 |
| | 26/05/2016 | 20/07/2016 | 19/09/2016 | 30/11/2016 |
| 1 | repositioned | missing | missing | missing |
| 2 | repositioned | N | N | N |
| 3 | repositioned | insert missing | CNF | CNF |
| 4 | repositioned | insert replaced | N | N |
| 5 | repositioned | N | N | N |
| 6 | repositioned | missing | missing | missing |
| 7 | repositioned | insert missing | insert missing | insert missing |
| 8 | repositioned | missing | CNF | CNF |
| 9 | insert missing | insert replaced | N | N |
| 10 | insert missing | missing | missing | missing |
| 11 | repositioned | missing | missing | missing |
| 12 | repositioned | N | N | N |
| 13 | repositioned | N | CNF | CNF |
| 14 | repositioned | N | YWM | YWM |
| 15 | missing | N | CNF | CNF |
| 16 | missing | N | CNF | CNF |
| 17 | missing | N | CNF | CNF |
| 18 | missing | N | CNF | CNF |
| 19 | missing | N | CNF | CNF |

| 20 | N | N | N | N |
|----|-----------------|--------------|--------------|--------------|
| 21 | N | repositioned | CNF | CNF |
| 22 | N | N | YWM | YWM |
| 23 | CNF | missing | missing | missing |
| 24 | N | N | N | N |
| 25 | N | N | N | N |
| 26 | N | N | N | N |
| 27 | N | N | N | N |
| 28 | N | N | repositioned | repositioned |
| 29 | N | CNF | N | N |
| 30 | N | repositioned | N | N |
| 31 | N | N | missing | missing |
| 32 | N | N | N | N |
| 33 | N | N | N | N |
| 34 | N | N | N | N |
| 35 | N | N | N | N |
| 36 | N | N | N | N |
| 37 | N | CNF | CNF | CNF |
| 38 | insert replaced | N | CNF | N |
| 39 | N | missing | missing | missing |
| 40 | missing | missing | missing | N |
| 41 | N | N | N | N |
| 42 | N | CNF | CNF | N |
| 43 | N | CNF | N | CNF |
| 44 | repositioned | N | CNF | N |
| 45 | repositioned | N | N | N |
| 46 | N | N | N | N |
| 47 | missing | missing | missing | N |
| 48 | N | N | N | N |
| 49 | N | N | N | N |
| 50 | N | N | N | N |
| 51 | N | N | N | N |
| 52 | N | N | N | YWM |
| 53 | N | N | N | N |
| 54 | N | N | N | N |
| 55 | N | N | N | N |
| 56 | insert replaced | CNF | missing | N |
| 57 | N | CNF | N | CNF |
| 58 | N | N | N | CNF |
| 59 | N | missing | N | CNF |
| 60 | N | N | N | N |
| 61 | N | N | N | N |
| 62 | N | N | N | N |
| 63 | N | N | N | N |
| 64 | N | N | N | N |
| 65 | N | N | N | CNF |
| 66 | N | N | N | CNF |
| 67 | N | N | N | CNF |
| 68 | N | N | N | CNF |

| 69 | N | N | N | CNF |
|----|----------------|---------|--------------|-----|
| 70 | insert missing | missing | missing | N |
| 71 | N | N | repositioned | N |
| 72 | N | CNF | CNF | CNF |
| 73 | N | N | N | N |
| 74 | N | N | N | N |
| 75 | N | N | N | N |

| | Area 8 | | | |
|------|-----------------|-----------------|-------------------|------------|
| Tube | check 1 | check 2 | check 3 | check 4 |
| | 26/05/2016 | 20/07/2016 | 19/09/2016 | 30/11/2016 |
| 1 | N | N | repositioned | N |
| 2 | N | N | N | N |
| 3 | N | N | N | N |
| 4 | N | CNF | N | N |
| 5 | N | CNF | repositioned | N |
| 6 | N | N | N | N |
| 7 | N | N | N | N |
| 8 | N | N | N | N |
| 9 | N | CNF | N 1/2 flailed | CNF |
| 10 | N | N | N | N |
| 11 | N | N | N | N |
| 12 | N | N | N | YWM |
| 13 | N | N | N | N |
| 14 | N | CNF | missing (flailed) | CNF |
| 15 | N | N | missing (flailed) | CNF |
| 16 | N | N | N | N |
| 17 | N | insert missing | insert missing | CNF |
| 18 | N | N | N | CNF |
| 19 | insert replaced | N | N | N |
| 20 | N | N | N | N |
| 21 | N | N | insert replaced | CNF |
| 22 | N | CNF | CNF | CNF |
| 23 | N | N | N | CNF |
| 24 | N | N | N | N |
| 25 | N | N | CNF | N |
| 26 | N | insert missing | insert missing | N |
| 27 | N | N | N | YWM |
| 28 | N | N | YWM | N |
| 29 | insert missing | insert missing | insert missing | N |
| 30 | N | N | N | YWM |
| | insert replaced | N | CNF | CNF |
| 32 | | repositioned | insert replaced | N |
| 33 | repositioned | insert replaced | N | N |
| 34 | N | N | N | YWM |
| 35 | • | N | N | YWM |
| 36 | N | CNF | CNF | CNF |
| 37 | N | repositioned | insert replaced | YWM |
| 38 | N | N | N | N |

| 39 | N | N | N | N |
|----|-----------------|---|-------------------|-----|
| 40 | N | N | N | CNF |
| 41 | N | N | N | N |
| 42 | N | N | N | N |
| 43 | N | N | N | N |
| 44 | N | N | N | N |
| 45 | N | N | N | N |
| 46 | N | N | N | N |
| 47 | N | N | N | N |
| 48 | N | N | N | N |
| 49 | N | N | N | N |
| 50 | N | N | N | N |
| 51 | N | N | N | N |
| 52 | N | N | N | N |
| 53 | N | N | N | N |
| 54 | insert replaced | N | CNF | CNF |
| 55 | N . | N | repositioned | N |
| 56 | N | N | YWM | N |
| 57 | N | N | repositioned | N |
| 58 | N | N | N | N |
| 59 | N | N | N | N |
| 60 | N | N | N | N |
| 61 | N | N | repositioned | N |
| 62 | N | N | N | N |
| 63 | N | N | N | N |
| 64 | N | N | N | YWM |
| 65 | N | N | N | N |
| 66 | N | N | missing (flailed) | CNF |
| 67 | N | N | N | N |
| 68 | N | N | N | N |
| 69 | N | N | YWM | N |
| 70 | N | N | missing (flailed) | CNF |
| 71 | insert replaced | N | insert replaced | N |
| 72 | insert replaced | N | N | N |
| 73 | N | N | repositioned | N |
| 74 | N | N | repositioned | N |
| 75 | insert replaced | N | insert replaced | N |
| 76 | repositioned | N | insert missing | N |
| 77 | N | N | N | YWM |
| 78 | N | N | N | N |
| 79 | N | N | N | N |
| 80 | N | N | N | N |
| 81 | N | N | N | N |
| 82 | N | N | N | N |
| 83 | N | N | N | N |
| 84 | N | N | N | N |
| 85 | N | N | N | N |
| 86 | N | N | N | YWM |
| 87 | N | N | N | N |

| 88 | N | N | N | N |
|-----|---|---|---|-------|
| 89 | N | N | N | Y HM? |
| 90 | N | N | Ν | N |
| 91 | N | N | N | N |
| 92 | N | N | N | N |
| 93 | N | N | Ν | N |
| 94 | N | N | N | N |
| 95 | N | N | Ν | N |
| 96 | N | N | N | N |
| 97 | N | N | N | N |
| 98 | N | N | N | N |
| 99 | N | N | Ν | N |
| 100 | N | N | N | N |

2017 Dormouse Survey Results

| | | Area 1 | |
|------|------------|------------|-----------------|
| Tube | check 1 | check 2 | check 3 |
| | 28/08/2017 | 15/08/2017 | 18/10/2017 |
| 1 | N | N | N |
| 2 | N | N | WM nest |
| 3 | N | N | N |
| 4 | N | N | N |
| 5 | N | N | N |
| 6 | N | N | N |
| 7 | N | N | N |
| 8 | N | N | N |
| 9 | N | N | N |
| 10 | N | N | WM nest |
| 11 | N | N | N |
| 12 | CNF | N | N |
| 13 | N | N | N |
| 14 | N | N | N |
| 15 | N | N | N |
| 16 | N | N | N |
| 17 | N | N | CNF |
| 18 | CNF | N | N |
| 19 | CNF | CNF | WM nest + cache |
| 20 | N | N | N |
| 21 | CNF | CNF | CNF |
| 22 | N | N | N |
| 23 | N | N | N |
| 24 | N | N | N |
| 25 | N | N | N |
| 26 | CNF | N | N |
| 27 | CNF | N | N |
| 28 | CNF | N | N |
| 29 | CNF | CNF | N |
| 30 | N | N | N |
| 31 | CNF | N | N |
| 32 | CNF | CNF | WM cache |
| 33 | CNF | CNF | N |
| 34 | CNF | CNF | N |
| 35 | CNF | CNF | CNF |
| 36 | CNF | CNF | CNF |
| 37 | CNF | CNF | N |
| 38 | CNF | CNF | N |
| 39 | CNF | CNF | CNF |
| 40 | N | N | CNF |
| 41 | N | N | N |
| 42 | N | N | N |

| 43 | N | N | N |
|----|-----|---|-----|
| 44 | N | N | N |
| 45 | N | N | CNF |
| 46 | N | N | N |
| 47 | N | N | N |
| 48 | CNF | N | N |
| 49 | CNF | N | N |
| 50 | CNF | N | N |

| | | Area 2 | |
|------|------------|------------|------------|
| Tube | check 1 | check 2 | check 3 |
| | 27/06/2017 | 15/08/2017 | 18/10/2017 |
| 1 | N | N | N |
| 2 | N | N | N |
| 3 | N | N | N |
| 4 | N | N | N |
| 5 | N | N | N |
| 6 | N | N | N |
| 7 | N | N | WM nest |
| 8 | N | N | N |
| 9 | N | N | N |
| 10 | N | N | N |
| 11 | CNF | N | N |
| 12 | N | N | N |
| 13 | N | N | N |
| 14 | N | N | N |
| 15 | N | N | N |
| 16 | N | N | N |
| 17 | N | N | N |
| 18 | N | N | N |
| 19 | N | N | N |
| 20 | N | N | N |
| 21 | N | N | WM nest |
| 22 | N | N | N |
| 23 | N | N | N |
| 24 | N | N | N |
| 25 | CNF | N | N |
| 26 | N | N | WM cache |
| 27 | N | N | N |
| 28 | N | N | N |
| 29 | N | WM nest | WM nest |
| 30 | WM nest | N | N |
| 31 | WM nest | N | WM nest |
| 32 | N | N | WM cache |
| 33 | WM nest | N | N |
| 34 | N | N | CNF |
| 35 | N | N | CNF |
| 36 | N | N | N |

| 37 | N | N | N |
|----|----------|---|----------------|
| 38 | N | N | N |
| 39 | N | N | N |
| 40 | N | N | N |
| 41 | N | N | WM nest + 2 WM |
| 42 | WM cache | N | N |
| 43 | N | N | N |
| 44 | N | N | N |
| 45 | N | N | N |
| 46 | N | N | N |
| 47 | N | N | N |
| 48 | N | N | N |
| 49 | N | N | N |
| 50 | N | N | N |

| | Area 3 | | |
|------|--------------|------------|------------|
| Tube | check 1 | check 2 | check 3 |
| | | 15/08/2017 | 18/10/2017 |
| 1 | | N | N |
| 2 | | N | N |
| 3 | | N | N |
| 4 | | N | N |
| 5 | | N | N |
| 6 | | N | N |
| 7 | | N | N |
| 8 | | N | N |
| 9 | | N | N |
| 10 | | CNF | N |
| 11 | | CNF | N |
| 12 | | N | N |
| 13 | Ω | N | N |
| 14 | NOT SURVEYED | N | N |
| 15 | — <u>—</u> — | N | N |
| 16 | Ä | N | N |
| 17 | ง | N | N |
| 18 | TC | N | N |
| 19 | ž | N | N |
| 20 | | N | N |
| 21 | | N | N |
| 22 | | N | N |
| 23 | | N | N |
| 24 | | N | N |
| 25 | | N | N |
| 26 | | N | N |
| 27 | | N | N |
| 28 | | N | N |
| 29 | | N | N |
| 30 | | N | N |
| 31 | | N | N |

| 32 | N | N |
|----|---------|---|
| 33 | N | N |
| 34 | N | N |
| 35 | N | N |
| 36 | N | N |
| 37 | N | N |
| 38 | N | N |
| 39 | N | N |
| 40 | N | N |
| 41 | N | N |
| 42 | N | N |
| 43 | WM nest | N |
| 44 | N | N |
| 45 | N | N |
| 46 | N | N |
| 47 | N | N |
| 48 | N | N |
| 49 | N | N |
| 50 | N | N |

| | Area 4 | | |
|------|------------|-----------|------------|
| Tube | check 1 | check 2 | check 3 |
| | 27/06/2017 | | 18/10/2107 |
| 1 | N | | N |
| 2 | N | | N |
| 3 | N | | N |
| 4 | N | | N |
| 5 | N | | N |
| 6 | N | | N |
| 7 | N | | N |
| 8 | N | | N |
| 9 | N | | N |
| 10 | N | | N |
| 11 | N | S | N |
| 12 | N | NO ACCESS | N |
| 13 | N | J Ö | N |
| 14 | N | J | N |
| 15 | N | Q | N |
| 16 | N | | CNF |
| 17 | N | _ | N |
| 18 | N | _ | WM cache |
| 19 | N | _ | N |
| 20 | N | | CNF |
| 21 | N | | N |
| 22 | N | | N |
| 23 | N | | N |
| 24 | N | | CNF |
| 25 | N | | N |
| 26 | N | | N |

| 27 | N | N |
|----|---|----------------|
| 28 | N | N |
| 29 | N | N |
| 30 | N | N |
| 31 | N | WM nest + 2 WM |
| 32 | N | N |
| 33 | N | N |
| 34 | N | N |
| 35 | N | N |
| 36 | N | N |
| 37 | N | N |
| 38 | N | N |
| 39 | N | N |
| 40 | N | N |
| 41 | N | N |
| 42 | N | N |
| 43 | N | N |
| 44 | N | N |
| 45 | N | N |
| 46 | N | N |
| 47 | N | N |
| 48 | N | N |
| 49 | N | N |
| 50 | N | WM nest + 3 WM |

| | Area 5 | | |
|------|------------|------------|------------|
| Tube | check 1 | check 2 | check 3 |
| | 27/06/2017 | 15/08/2017 | 18/10/2017 |
| 1 | N | N | N |
| 2 | N | N | N |
| 3 | N | N | N |
| 4 | N | N | N |
| 5 | N | N | N |
| 6 | N | N | N |
| 7 | N | N | N |
| 8 | N | N | N |
| 9 | N | N | N |
| 10 | N | N | N |
| 11 | N | N | N |
| 12 | N | N | N |
| 13 | N | N | N |
| 14 | N | N | N |
| 15 | N | N | N |
| 16 | N | CNF | N |
| 17 | N | CNF | N |
| 18 | N | CNF | N |
| 19 | N | N | N |
| 20 | N | N | N |
| 21 | N | N | N |

| | N | N | N |
|----|-------------|---|-----|
| 23 | N | N | N |
| 24 | N | N | N |
| 25 | N | N | N |
| 26 | N | N | N |
| 27 | Ν | N | N |
| 28 | N | N | N |
| 29 | N | N | N |
| 30 | N | N | N |
| 31 | N | N | N |
| 32 | N | N | N |
| 33 | N | N | N |
| 34 | N | N | N |
| 35 | N | N | N |
| 36 | N | N | N |
| 37 | N | N | N |
| 38 | N | N | N |
| 39 | 1 piece of | | |
| | shredded | | |
| | honeysuckle | N | N |
| 40 | Ν | N | N |
| 41 | N | N | N |
| 42 | N | N | N |
| 43 | N | N | N |
| 44 | N | N | N |
| 45 | N | N | N |
| 46 | N | N | N |
| 47 | N | N | N |
| 48 | N | N | CNF |
| 49 | N | N | N |
| 50 | N | N | N |

| | Area 6 | | |
|------|------------|----------------|------------|
| Tube | check 1 | check 2 | check 3 |
| | 28/06/2017 | 15/08/2017 | 17/10/2017 |
| 1 | N | N | N |
| 2 | N | N | N |
| 3 | N | N | N |
| 4 | N | N | N |
| 5 | N | N | N |
| 6 | N | N | WM cache |
| 7 | N | N | N |
| 8 | N | N | CNF |
| 9 | N | N | N |
| 10 | N | N | N |
| 11 | N | N | CNF |
| 12 | N | ca ttl e | N |
| 13 | N | | WM nest |
| 14 | N | | N |

| 15 | N | WM nest |
|----------|---------|--------------|
| 16 | CNF | CNF |
| 17 | N | WM nest |
| 18 | N | N |
| 19 | N | CNF |
| 20 | N | CNF |
| 21 | N | N |
| 22 | N | CNF |
| 23 | N | CNF |
| 24 | N | N |
| 25 | CNF | CNF |
| 26 | CNF | CNF |
| 27 | N | CNF |
| 28 | N | N |
| 29 | N | CNF |
| 30 | CNF | N |
| 31 | CNF | N |
| 32 | CNF | N |
| 33 | CNF | N |
| 34 | N | N |
| | | N |
| 35 36 | N N | N |
| 37 | N | flailed |
| 38 | N | flailed |
| | CNF | |
| 39 | CNF | flailed |
| 40 | N | flailed |
| 41 | N | WM nest N |
| 42 | N | flailed |
| 43 | WM nest | N |
| 45 | N | N |
| 45 | N | N |
| 47 | N | N |
| 48 | N | N |
| 49 | N | N |
| 50 | N | flailed |
| 51 | N | flailed |
| 52 | N | flailed |
| 53 | N | |
| 53 | N | N N |
| 55 | N | N |
| | N | N |
| 56 57 | N | WM cache |
| 58 | N | N cache |
| | | |
| 59 | N N | N N |
| 60 | | |
| 61 | N | N |
| 62 | N | N |
| 63 | N | N |

| 64 | N | N |
|----|-----|---------|
| 65 | N | CNF |
| 66 | N | N |
| 67 | N | N |
| 68 | N | N |
| 69 | N | N |
| 70 | N | flailed |
| 71 | CNF | flailed |
| 72 | N | flailed |
| 73 | N | flailed |
| 74 | N | flailed |
| 75 | N | flailed |

| | Area 7 | | |
|------|---|------------|------------|
| Tube | check 1 | check 2 | check 3 |
| | | 15/08/2017 | 17/10/2017 |
| 1 | | N | N |
| 2 | | N | N |
| 3 | | N | CNF |
| 4 | | N | N |
| 5 | | N | N |
| 6 | | N | N |
| 7 | | N | N |
| 8 | | N | N |
| 9 | | N | N |
| 10 | de | N | N |
| 11 | ds | N | N |
| 12 | oa | N | CNF |
| 13 | NO ACCESS - H&S of spray on roadside | N | CNF |
| 14 | <u> </u> | N | CNF |
| 15 | o ra | N | CNF |
| 16 | ls J | N | HM nest |
| 17 | 0 | N | N |
| 18 | <u>×</u> | N | WM nest |
| 19 | | N | CNF |
| 20 | S | N | N |
| 21 | Щ | N | CNF |
| 22 | $\bigcup_{i \in \mathcal{I}} \mathcal{G}_i$ | N | N |
| 23 | Α (| N | N |
| 24 | Ž | N | N |
| 25 | | N | N |
| 26 | | N | WM nest |
| 27 | | N | HM nest |
| 28 | | N | N |
| 29 | | N | CNF |
| 30 | | N | N |
| 31 | | N | N |
| 32 | | N | N |
| 33 | | N | N |

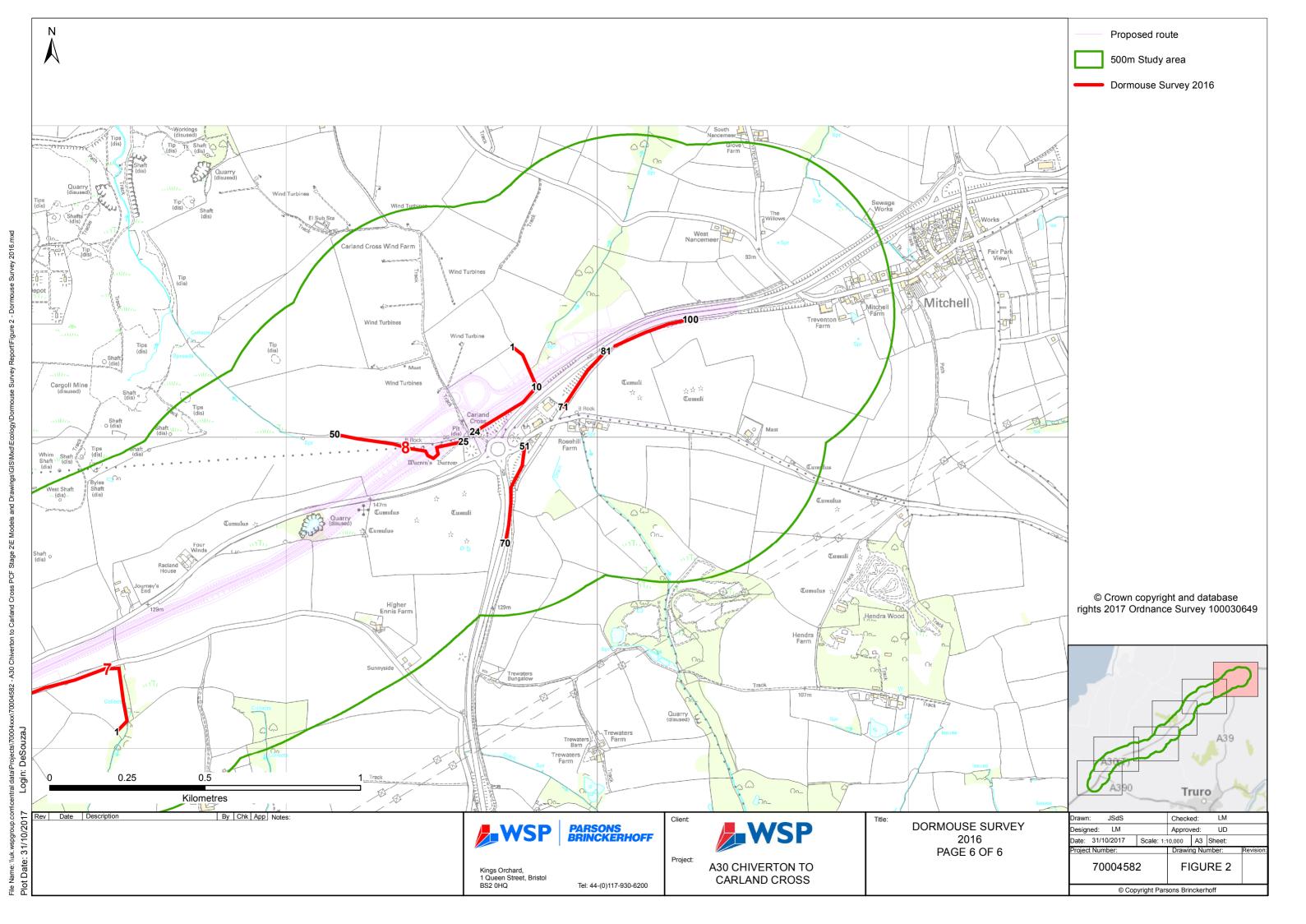
| 34 | N | N |
|----|---|--------------|
| 35 | N | N |
| 36 | N | N |
| 37 | N | N |
| 38 | N | N |
| 39 | N | N |
| 40 | N | N |
| 41 | N | N |
| 42 | N | N |
| 43 | N | WM nest |
| 44 | N | WM nest 3 WM |
| 45 | N | N |
| 46 | N | WM nest |
| 47 | N | CNF |
| 48 | N | N |
| 49 | N | N |
| 50 | N | N |

| | Area 8 | | |
|------|------------|------------|------------|
| | 27/06/2017 | 15/08/2017 | 17/10/2017 |
| Tube | check 1 | check 2 | check 3 |
| 1 | N | N | N |
| 2 | N | N | N |
| 3 | N | N | N |
| 4 | N | N | N |
| 5 | N | N | N |
| 6 | N | N | N |
| 7 | N | N | N |
| 8 | N | N | N |
| 9 | N | N | N |
| 10 | N | N | N |
| 11 | N | N | N |
| 12 | N | N | N |
| 13 | N | N | N |
| 14 | N | N | N |
| 15 | N | N | N |
| 16 | N | N | N |
| 17 | N | N | N |
| 18 | N | N | CNF |
| 19 | N | N | CNF |
| 20 | N | N | N |
| 21 | N | N | CNF |
| 22 | N | CNF | N |
| 23 | N | N | N |
| 24 | N | CNF | N |
| 25 | N | N | N |
| 26 | N | N | N |
| 27 | CNF | CNF | CNF |
| 28 | N | CNF | CNF |

| 29 | N | CNF | N |
|----|-----|-----|-----|
| 30 | N | N | N |
| 31 | N | N | N |
| 32 | N | N | N |
| 33 | N | CNF | N |
| 34 | N | N | N |
| 35 | N | N | N |
| 36 | N | N | N |
| 37 | N | CNF | CNF |
| 38 | N | CNF | CNF |
| 39 | N | CNF | N |
| 40 | N | CNF | CNF |
| 41 | N | N | N |
| 42 | CNF | N | CNF |
| 43 | CNF | N | CNF |
| 44 | N | N | N |
| 45 | N | CNF | CNF |
| 46 | N | N | N |
| 47 | N | N | N |
| 48 | N | N | N |
| 49 | N | N | N |
| 50 | N | N | N |

| | Area 9 | | |
|------|------------|------------|-----------------|
| | 27/06/2017 | 15/08/2017 | 17/10/2017 |
| Tube | check 1 | check 2 | check 3 |
| 1 | N | N | N |
| 2 | N | N | N |
| 3 | N | N | N |
| 4 | N | CNF | N |
| 5 | N | N | N |
| 6 | N | N | CNF |
| 7 | N | N | N |
| 8 | N | N | N |
| 9 | N | N | N |
| 10 | N | N | N |
| 11 | N | N | N |
| 12 | N | N | N |
| 13 | N | N | N |
| 14 | CNF | CNF | N |
| 15 | N | N | N |
| 16 | N | CNF | N |
| 17 | N | N | N |
| 18 | N | N | N |
| 19 | N | N | N |
| 20 | N | N | N |
| 21 | N | N | N |
| 22 | N | N | WM nest + cache |
| 23 | N | N | WM nest + cache |

| 24 | N | N | N |
|----|-----|-----|----------|
| 25 | N | CNF | N |
| 26 | N | N | N |
| 27 | CNF | N | N |
| 28 | N | CNF | N |
| 29 | N | N | N |
| 30 | N | N | N |
| 31 | N | N | N |
| 32 | N | N | WM cache |
| 33 | N | CNF | N |
| 34 | N | N | N |
| 35 | N | N | N |
| 36 | N | N | N |
| 37 | N | N | N |
| 38 | N | N | N |
| 39 | N | N | WM nest |
| 40 | N | N | N |
| 41 | N | N | N |
| 42 | N | N | N |
| 43 | N | N | N |
| 44 | N | N | N |
| 45 | N | N | N |
| 46 | N | CNF | N |
| 47 | N | CNF | CNF |
| 48 | CNF | CNF | N |
| 49 | CNF | CNF | N |
| 50 | N | N | N |



A30 Chiverton to Carland Cross PCF Stage 2\E Models

