

SSE Renewables

Achany Extension Wind Farm

Otter and Water Vole Survey Report





Report for

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1. Introduction

1.1 Purpose of this Report

- 1.1.1 Wood Group UK Ltd (Wood) was commissioned by SSE Renewables (SSER) to undertake survey work in relation to protected species at the proposed Achany Extension Wind Farm, 'the Site'.
- This report provides the results of an otter (*Lutra lutra*) and water vole (*Arvicola amphibius*) survey carried out in August 2020. The aim of the survey was to identify the presence of, and/or potentially suitable habitat for, otter and water vole, as well as any other features of ecological interest that may pose a potential constraint to works. Protected species legislation relevant to this report is summarised in **Annex A**.
- 1.1.3 This report outlines the methods employed to carry out the survey, followed by presentation of results and a summary of key findings.

1.2 Site and Study Area Description

- 1.2.1 The Proposed Development is a 20-turbine extension to the existing Achany Wind Farm; an operational 19-turbine wind farm situated south-east of the Site. The Site itself is located onGlencassley and Glenrossal Estates, approximately 4.5km north of the village of Rosehall, and approximately 11km west-north-west of Lairg within the Scottish Highlands (central Ordnance Survey [OS] grid reference: NC 45997 07903).
- 12.2 The Site is positioned on the east side of Glen Cassley, approximately 1.5km from the River Cassley which runs parallel to the south-western part of Site. The elevation of the Site ranges from approximately 220 metres (m) Above Ordnance Datum (AOD) at Allt an Rāsail watercourse, to 476m AOD at the summit of Beinn Sgeireach. Landscape within the Site is formed of open upland habitat, comprised primarily of wet heath, blanket bog, and marshy grassland habitat. There are two main watercourses within the Site the Allt an Rāsail and Allt Ban na t-Sagairt, with associated minor tributaries. The Allt an Leacach watercourse lies just outside the Site, defining the north-western red-line boundary. All watercourses flow into the into the River Cassley catchment.
- 1.2.3 The otter and water vole 'Study Area' is defined by the Site boundary and associated 200m buffer (**Figure 8.3.1**). The existing access route through the operational Achany Wind Farm Site was subject to an Extended Phase 1 Habitat walkover and has been further informed through the completion of annual water vole monitoring surveys, most recently in April 2021.



2. Methodology

2.1 Desk Study

Data Search

^{2.1.1} To inform the survey design and provide context for assessment, records of protected species within 2km of the Site boundary were requested from the Highland Biological Records Group (HBRG). These data were obtained in March 2020 (Wood, 2021).

Previous Survey Work

- ^{2.1.2} The Glencassley Wind Farm Environmental Statement (ES) (Environ, 2012) details the results of protected species survey work carried out in 2011, which has been reviewed to provide contextual information about the Study Area.
- 2.1.3 A recent report relating to the Habitat Management Plan (HMP) for the operational Achany Wind Farm (Applied Ecology, 2020) was also reviewed to provide information on the potential presence of protected species adjacent to the Study Area and along the proposed Site access track.

2.2 Field Survey

^{2.2.1} The otter and water vole survey was carried out by Hannah Rowding (BSc, MSc, ACIEEM) and David Knox (BSc, MEnSt, MCIEEM) between 04th and 06th August 2020. Both surveyors meet the CIEEM competency standards for undertaking protected species surveys (CIEEM, 2013a and b).

Otter

- The survey for otter comprised a walkover assessment of all water features, associated banks, and up to 50 meters (m) from bank tops, plus any other areas of suitable otter habitat, within the Study Area (**Figure 8.3.1**). Surveyors walked along alternative watercourse edges/banksides in order to cover the area efficiently, and to comply with health and safety requirements associated with work in/near water.
- 2.2.3 Otter field signs were recorded by location, type, condition, and age. Field signs are described by Harris and Yalden (2008), Bang and Dahlstom (2006), and Chanin (2003), and include the following:
 - Holt underground features where otters shelter and rest. They are often situated in natural cavities, such as tunnels along the edge of riverbanks, underneath tree root plates, heather root matrices, or boulder piles. Holts can also be located within man-made structures such as drains or embankments;
 - Couch typically above ground resting sites that are used for sleeping or grooming. Often
 located on the banks of watercourses, ponds or lochans, and occasionally found further inland
 in thick vegetation or reed beds. Rolling places, where the otter dries and grooms its fur after
 leaving the water, may also be used as couches. For ease of description, couches have been
 categorised into 'covered' or 'open' within this report, as described below:
 - Couch (covered) Resting sites providing cover from above, however lack a distinct underground tunnel system, e.g. below overhanging peat turves; and



- Couch (open) Resting sites that do not provide overhead cover, such as lying out sites in rushes or heather.
- Spraints otter faeces, which tend to be black or green-black in colour. They have distinct aromas and are generally composed of fish remains and crustacean shells. Spraints are often located on prominent features within the channel or river bank, such as large rocks, and can also be found close to, or within, the entrance to holts or couches;
- Sign heap a small mound of sand, gravel, grass, or mud scraped up by an otter to form a prominent landmark on which to deposit spraint.
- Feeding signs remains of prey such as fish and skinned amphibians;
- Prints otters have five toes and unique footprints that can be identified in mud, silt or sand at the edge of waterbodies;
- Paths routes that otters use to traverse across land, often between watercourses and resting places; and
- Play areas/ slides located in areas where otters travel down a steep, often grassy, bank, sliding down on their tummy.
- 2.2.4 Features that surveyors considered to support suitable otter habitat, e.g. as resting sites, but where clear signs were lacking, were recorded as 'potential resting sites' and categorised as above.

Water vole

- A search for water vole was carried out in conjunction with the otter survey, during which all watercourses and waterbodies within the Study Area were assessed.
- 22.6 Water vole field signs are described in Strachan and Moorhouse (2011), and include the following:
 - Faeces cylindrical droppings with blunt ends, measuring approximately 12mm long and 4-5mm wide, resembling a large 'tic-tac'. Colour can vary depending on diet, ranging from green to dark purple/ black;
 - Latrines these are the most distinctive field signs left by water voles. Latrines are faeces that are often deposited in discrete locations. Latrines can be used to mark territories between February and November;
 - Feeding stations water voles often bring food items to feeding stations along their pathways, at burrow entrances, or on platforms along the water's edge. These include neat piles of chewed vegetation (such as coarse grasses, reeds, sedges and rushes) up to 10cm long that are left after feeding. Sections typically have 45-degree cuts to their ends;
 - Burrows these appear as a series of holes along the water's edge within banking, up to 3m from the water's edge. Holes typically have a diameter of 4-8cm;
 - Runways low tunnels leading through vegetation close to the water's edge; and
 - Nests in some areas of rush pasture, water voles make woven nests above ground amongst tussocks. Nests are generally around 20cm wide.

2.3 Survey Limitations

It was not possible to survey the lower section of the Allt bad na t-Saigairt (positioned within the 200m buffer surrounding the Site boundary) in detail as the watercourse flowed into a deep



wooded ravine as it travelled downgradient, which was not possible to access for health and safety reasons. This section of watercourse was therefore surveyed from a safe distance at the top of the ravine with the use of binoculars. Despite this limitation, it is considered that a robust set of data relating to otter activity within the Study Area has been obtained.



3. Results

3.1 Desk Study

Data Search

Statutory and Non- Statutory Designated Sites

- 3.1.1 Seven statutory designated sites are present within 10km of the Site boundary, one of which (Caithness & Sutherland Peatlands Special Area of Conservation [SAC]) supports otter as a qualifying feature. The boundary of this SAC borders the eastern perimeter of the Site.
- A review of the most recent condition monitoring assessment of Caithness & Sutherland Peatlands SAC otter population was undertaken (Findlay *et al.*, 2015). The Caithness & Sutherland Peatlands SAC was reported to be in favourable condition in 2003-04. The most recent assessment (2011-12) showed a continued decline in otter presence and the SAC was suggested in this report to be in unfavourable condition. Less than 80% of sites were found to have evidence of otter, coupled with a reduction in positive sites for two consecutive cycles and an apparent contraction in range from peripheral areas.
- ^{3.1.3} In addition, while otter may not be listed as a qualifying feature of the River Oykel SAC, the River Cassley forms part of its catchment area (located approximately 1.5km south-west of Site), of which is likely to support suitable commuting, foraging, and resting habitat for otter.
- 3.1.4 For full details relating to statutory and non-statutory site descriptions and locations, please refer to **Technical Appendix 8.1 (Desk Study and Phase 1 Habitat Survey Report)**.

Protected and notable species

The data search carried out by HBRG for legally protected/ priority species within 2km of the Site boundary returned no records of otter or water vole within the last 10 years (2010 -2020).

Previous Survey work

3.1.6 Protected species surveys were carried out by Alba Ecology between June and July 2011 to support the 2012 ES. The results of these surveys are summarised below:

Otter

- 3.1.7 No evidence of otter was identified within the Site boundary during the 2011 survey. Otter field signs were however identified within the wider study area (outside the Site boundary) including:
 - A single otter spraint on a boulder within the Allt an Rāsail watercourse, just outside the Site boundary;
 - An otter couch and spraint within the lower reaches of Allt an Dubh Loch Bhig; and
 - Otter sightings and single spraint were recorded at the edge of Loch Langwell.

Water vole

3.1.8 A patchy distribution of water vole field signs and suitable habitat was identified within the Site boundary, including:



- Burrows, runways, and latrines within marshy grassland habitat along the mid-reaches of the Allt an Rāsail watercourse;
- Inactive (old) water vole burrows present along the Allt an Leacach watercourse;
- Water vole field signs present along a small tributary of the Allt Langwell;
- Burrows and a water vole sighting identified within marshy grassland adjacent to Allt an Dubh Loch Bhig; and
- Potential water vole habitat along the banks of Dubh Loch Mor outflow burn.
- 3.1.9 For full details of previous survey results, please refer to Environ (2012).
- In addition to ecological information presented within the 2012 ES, water vole data relating to the existing Achany Wind Farm HMP was considered. HMP objectives included the implementation of water vole habitat enhancement works, which were carried out in two main areas of Achany Wind Farm. Post construction monitoring for water vole has subsequently been conducted between years 2008 and 2021.
- 3.1.11 Water vole activity within the habitat enhancement area adjacent to the lower reaches of Allt Sron nan larnachan/ start of Allt a' Bhadain was recorded consistently between 2010 and 2015, however this reduced to only intermittent field signs until late 2018/ early 2019. In contrast, water vole activity within the second habitat enhancement area (situated near the headwaters of the unnamed tributaries of the Ghruididh Burn) was identified throughout the ten-year post-construction monitoring period, with all enhancement sites showing evidence of occupation or use as habitat corridors.
- 3.1.12 A review of the most recent 2021 survey records for Achany Wind Farm HMP identified the presence of seven discrete water vole colonies within the operational wind farm site boundary (Applied Ecology, 2021). Water vole colonies were located along the following watercourses:
 - The Allt a' Bhadain and Allt Sron nan larnachan positioned within 20m of the existing wind farm access track at its closest point. The access track also crosses the Allt a' Bhadain near the site entrance;
 - Three un-named tributaries of the Ghruididh Burn positioned approximately 70m from an operational turbine and 470m from the main wind farm access track; and
 - Adjacent to the headwaters of a further un-named tributary of the Ghruididh Burn, within the north-west of the wind farm site, approximately 100m from the existing wind farm access track.

3.2 Field Survey

3.2.1 The results of the 2020 otter and water vole field survey are described below. Target notes (TNs) relating to the location of field signs are displayed in **Tables B.1** and **B.2** in **Annex B**, while representative photographs are displayed in **Annex C**. The TNs are designed to accompany the mapped results in **Figures 8.3.2** [Confidential] and **Figure 8.3.3**. Confidential records are presented separately in **Annex D**.

Otter

Widespread evidence of otter activity was identified along the two main watercourses within the Study Area – the Allt an Rāsail and Allt Bad na t-Sagairt (Figure 8.3.2). Otter field signs observed include spraints (TNs 1 – 18, and TN 24), prints (TNs 20, 26, and 27), three active resting sites (TNs



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19, 25 and 28) and three potential resting sites (TNs 21 - 23). No evidence of otter activity was recorded along the Allt an Leacach watercourse within the north-west of the Study Area.

- 3.2.3 Survey results indicate that the highest level of otter activity was recorded along the Allt an Rāsail watercourse. This is illustrated in **Figure 8.3.2** by the presence of numerous spraints along the main stem of the watercourse and associated minor tributaries. An otter couch (TN 19) was also recorded on the south-eastern bank of the main stem of the watercourse. Further upstream, within the banks of a small hill loch (of which is connected to the Allt an Rāsail watercourse by a minor outflow stream), a potential holt was recorded (TN 21). In addition, otter prints were recorded within peaty substrate along the edge of Loch an Rāsail (TN 20) in the upper reaches of the Allt an Rāsail (TN 27).
- Otter activity was also identified along the Allt Bad na t-Sagairt, whereby two potential holts (TN 22 and 23), and an otter couch (TN 25) were identified on the south bank of the watercourse. Further upstream, otter prints and scratch marks were identified within peaty substrate along the southern edge of the watercourse (TN 26).
- An otter holt was also recorded within the lower reaches of the Allt Bad na t-Sagairt, outside of the study area. The holt was characterised by the presence of several old spraints within a deep sheltered alcove formed by boulders on the south bank of the watercourse (TN 28).

Water vole

- 3.2.6 Suitable upland water vole habitat (comprising well-vegetated banks of rush vegetation and/ or purple moor grass mire) was found to exist along sections of all watercourses and associated tributaries within the Study Area.
- ^{3.2.7} During the survey, water vole field signs were identified adjacent to the Allt an Rāsail watercourse and associated tributaries, and within the upper reaches of the Allt Bad na t-Sagairt (**Figure 8.3.3**).
- Two main areas of water vole activity were identified along the Allt an Rāsail watercourse. The first was positioned adjacent to a minor tributary within the south of the survey area (TNs 29 – 30), whereby water vole burrows, fresh droppings, and runways were recorded within marshy grassland habitat immediately adjacent to the watercourse. The second, and most extensive, area of water vole activity was recorded within the upper reaches of the Allt an Rāsail, along the eastern boundary of Site. Here, several pockets of active habitat (with substantial burrow systems, runways and fresh latrines) were identified (TNs 39-45). For example, one pocket of active habitat contained a minimum count of 40 burrows, with well-defined runways between entrances, and large latrine areas (TN 39), indicating a high population density of water vole in this area.
- In addition to active water vole habitat, evidence of old, potentially inactive, water vole burrows were also identified along the central stretch of the Allt an Rāsail (TNs 31-34, 46 and 47).
- 3.2.10 Water vole habitat (in the form of burrows and runways) was also recorded along the upper reaches of the Allt Bad na t-Sagairt (TNs 35 38).



4. Summary

4.1 Desk Study

- ^{4.1.1} The data search carried out by HBRG for legally protected/ priority species within 2km of the Site boundary returned no records of otter or water vole within the last 10 years (2010 -2020). Survey work carried out in 2011 also identified very limited evidence of otter activity within the Site.
- 4.1.2 Evidence of active water vole habitat was identified within the Site (along the mid-reaches of the Allt an Rāsail watercourse) during survey work carried out in 2011 to support the 2012 ES. In addition, active water vole habitat is also known to exist along watercourses that intersect the adjacent Achany Wind Farm, in the form of seven discrete water vole colonies. Further survey work undertaken in April 2021 along the Allt a' Bhadain and the Allt Sron nan lamachan (watercourses located in close proximity to the proposed access track) have further informed any required mitigation for protection of active water vole habitat that may otherwise be affected by the Proposed Development.

4.2 Field Survey

Otter

- The survey carried out in August 2020 identified widespread evidence of otter activity along watercourses within the Study Area, in the form of spraints, prints, and resting places. A total of three resting places (two couches and one holt) were identified, with an additional three potential resting places (one potential couch and two potential holts) also recorded within the Study Area.
- 4.2.2 The highest level of otter activity appears to be located along the Allt an Rāsail, as highlighted by numerous spraints and presence of resting sites identified along the surveyed stretch of this watercourse.
- The overall level of otter field signs recorded within the Study Area during the 2020 surveys was found to be greater than those recorded in 2011, which may be related to seasonal and temporal variations in the pattern of otter activity, climatic conditions, or changes in food source.
- ^{4.2.4} The results of the 2020 field survey indicate that otters utilise watercourses within the Study Area for foraging, commuting and resting purposes. Any development within the Site should therefore consider the presence of this European Protected Species (**Annex A**). Further survey work may be required, along with the incorporation of appropriate mitigation measures, if the Proposed Development is considered to have direct or indirect effects on this species.

Water vole

4.2.5 Evidence of active water vole habitat was identified in pockets along watercourses within the Study Area, in the form of burrows, runways, and latrines. The most extensive areas of active water vole habitat were distributed along the upper reaches of the Allt an Rāsail watercourse, of which defines part of the eastern boundary of the Site. Smaller pockets of active habitat were also present to the south of the Study Area and along the upper reaches of the Allt Bad na t-Sagairt watercourse. These results correspond with findings of previous studies (e.g. Lambin et al, 1998; Aars et al, 2001), of which suggest that upland water vole populations tend to be naturally fragmented, formed of small, widely scattered colonies. This pattern of distribution is likely to be related to the localised nature of preferred habitat, resulting in several small populations occupying favourable habitat



patches, separated from similar populations by areas of less suitable land (Aars et al, 2001; Capreolus Wildlife Consultancy, 2005).

- The overall distribution of water vole field signs recorded along Allt an Rāsail and Allt Bad na t-Sagairt watercourses appears be greater during surveys carried out in 2020 than those recorded during the 2011. This may be attributed to spatial and temporal changes in the suitability of habitat to sustain water vole populations (Capreolus Wildlife Consultancy, 2005), and may also indicate a natural pattern of multi-annual fluctuations in water vole abundance (Aars *et al.* 2001).
- 4.2.7 In addition to active water vole habitat, areas of rush and purple moor grass mire vegetation with potential to support water vole (in which field signs were not recorded) exist along all watercourses within the Study Area. Potential therefore remains for water vole to colonise different parts of the watercourses in the future. On this basis, appropriate mitigation measures have been considered within **Chapter 8 Ecology**.



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Annex A Relevant Legislation

Otter

The otter is a European Protected Species and receives full protection under the Conservation (Natural Habitats & c.) Regulations 1994 (as amended) (The Habitats Regulations) ¹. This legislation makes it an offence to deliberately or recklessly:

- capture, injure or kill such an otter;
- harass an otter or group of otters;
- disturb an otter while it is occupying a structure or place used for shelter or protection;
- disturb an otter while it is rearing or otherwise caring for its young;
- obstruct access to a breeding site or resting place, or deny an otter use of a breeding site or resting place;
- disturb an otter in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species; and
- disturb an otter in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

It is also an offence to:

- damage or destroy a breeding site or resting place of such an animal (whether deliberately or recklessly); and
- keep, transport, sell or exchange, or offer for sale or exchange, and wild otter (or any part or derivative of one) obtained after 10 June 1994.

Any activity which is likely to affect such species requires consultation with the relevant statutory nature conservation organisation prior to any works commencing. In Scotland, this is NatureScot.

Water vole

The water vole receives partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In Scotland, this legal protection is currently restricted to the water vole's places of shelter or protection. This legislation makes it an offence to intentionally or recklessly:

- damage, destroy or obstruct access to any structure or place that water voles use for shelter or protection; and
- disturb a water vole while it is using any such place for shelter or protection.

Any work that may potentially cause disturbance to such species requires prior consultation with NatureScot.



¹ The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) have been amended by the Conservation (Natural Habitats, &c.) (EU Exit) (Scotland) (Amendment) Regulations 2019. The regulations as detailed above therefore remain in force following the UK's departure from the European Union.

Annex B Otter and Water vole Field Signs

Table B.1 Otter Field Signs

TN	Field sign	Grid reference	Description
1	Spraint	NC 49042 05516	Three old spraints (shells and bones remaining) on large mossy boulder in centre of watercourse.
2	Spraint	NC 46312 06900	Small, fresh spraint on boulder on eastern side of watercourse
3	Spraint	NC 46172 07083	Fresh otter spraint on boulder in centre of watercourse.
4	Spraint	NC 46087 07275	Fresh spraint on boulder in watercourse.
5	Spraint	NC 46072 07313	Old spraint (scales and bones remaining) on soil mound on north- east edge of watercourse.
6	Spraint	NC 46023 07399	Old spraint on boulder in centre of watercourse.
7	Spraint	NC 45986 07467	Small, old spraint on boulder in centre of watercourse.
8	Spraint	NC 45948 07584	Recent otter spraint on rock on western bank of watercourse.
9	Spraint	NC 46021 07906	Recent otter spraint on rock on south bank of watercourse.
10	Spraint	NC 46012 08043	Old otter spraint on rock in centre of watercourse.
11	Spraint	NC 46015 08057	Old otter spraint on rock in centre of watercourse.
12	Spraint	NC 46009 08206	One recent and one old spraint on rock in centre of small watercourse.
13	Spraint	NC 46010 08310	Old otter spraint on rock in centre of watercourse.
14	Spraint	NC 46083 07908	Fresh otter spraint on rock on north bank of watercourse.
15	Spraint	NC 46132 07900	Recent otter spraint on boulder in centre of watercourse.
16	Spraint	NC 46632 08430	Very fresh otter spraint on rock in centre of watercourse.
17	Spraint	NC 46697 08440	Very fresh otter spraint on rock in centre of watercourse.
18	Spraint	NC 46734 08435	One very fresh and one old spraint on large boulder in centre of watercourse.
19	Couch (covered)	NC 46966 08649	Otter resting place in east bank of watercourse – comprise of overhanging heather that forms a sheltered alcove, stretching approximately 3m along the bankside. Two old otter spraints present on rocks inside.
20	Prints	NC 47384 08680	Otter prints in peat on south bank of loch.
21	Potential holt	CONFIDENTIAL ANNEX D	
22	Potential holt	CONFIDENTIAL ANNEX D	

B2



TN	Field sign	Grid reference	Description
23	Potential holt	CONFIDENTIAL ANNEX D	
24	Spraint	NC 44358 10238	Old Spraint on boulder in watercourse.
25	Couch (covered)	NC 44407 10222	Overhanging peat turves on south bank of watercourse has created a shallow (up to 0.5m depth) sheltered alcove. One recent and one very old spraint on rock at entrance. Grass at entrance also looks slightly flattened.
26	Prints	NC 44770 10226	Many otter prints (with scratch marks also present) in peat substrate on southern edge of watercourse.
27	Prints	NC 47090 09220	Otter prints in peat at edge of watercourse.
28	Holt	CONFIDENTIAL ANNEX D	





Table B.2 Water vole Field Signs

TN	Field sign	Grid reference	Description
29	Burrows	NC 46365 06916	Water vole burrows with fresh droppings present within marshy grassland habitat adjacent to a minor tributary. Several burrows were observed within 1m of the watercourse (e.g. one burrow at NC 46365 06916, three at NC 46370 06919 and one at NC 46383 06929).
30	Burrows	NC 46400 06984	Water vole burrows with droppings also present on both sides of watercourse at this location. A minimum count of three burrows were noted within two meters of the watercourse. Both fresh and old droppings present. Runways also observed throughout rushes.
31	Burrows	NC 46133 07165	Water vole burrows situated on western bank of watercourse, next to a stretch of very slow flowing water. However, there was no fresh evidence observed to suggest burrows are currently active.
32	Burrows	NC 45909 07694	Single old burrow present on eastern edge of watercourse – no signs to indicate burrow is currently in use.
33	Burrows	NC 45890 07823	Single old burrow present on eastern edge of watercourse – no signs to indicate burrow is currently in use.
34	Burrows	NC 45935 07830	Two old burrows in marshy grassland habitat on southern bank of watercourse - no signs to indicate burrow is currently in use.
35	Burrows	NC 45365 10533	Minimum count of eight burrows identified along a 7m stretch of watercourse between NC 45356 10540 and NC 45368 10530 (on southern side). While no droppings or clippings were observed at this location, the burrows are well defined and smooth inside, with clear connecting runways along the water edge. One burrow also appeared to be blocked with mud and grass, suggesting current use. Burrows measured 12-15cm diameter at entrances.
36	Burrows	NC 45374 10518	Well defined runways in rushes on both sides of the watercourse, with a minimum count of three burrows present.
37	Burrows	NC 45395 10504	Single burrow on north side of watercourse with fresh clippings near entrance. Runways present within rushes until NC 45400 10483.
38	Burrows	NC 45735 10529	Minimum count of three burrows next to watercourse. Well defined, however no other field signs present.
39	Burrows	NC 46929 09736	Water vole colony present within marshy grassland habitat on east side of watercourse. Evidence of presence starts at NC 46929 09736 and continues approximately 40m up the tributary watercourse to NC 46959 09785. A minimum count of 40 burrows was noted, although there is likely to be more. Well defined runways throughout rushes and large latrine areas also present within runways.
40	Burrows	NC 46988 09830	Pocket of five water vole burrow with connecting runways in rushes on both sides of watercourse.
41	Burrows	NC 46985 09816	Seven water vole burrows noted next to watercourse. Burrows are well defined with smooth, muddy entrances.
42	Burrows	NC 46959 09681	Two water vole burrows on east side of watercourse (within 1m of bank). Entrances are well defined, however no other field evidence observed.



B4



TN	Field sign	Grid reference	Description
43	Burrows	NC 46986 09648	Water vole colony in marshy grassland (rush) habitat on both sides of a minor watercourse. A minimum count of 30 burrows was recorded. Droppings were also observed within runways on the north-west side of the watercourse. Field signs stat at NC 46985 09648 and end at NC 47008 09683.
44	Burrows	NC 47085 09351	Minimum count of 18 burrows observed on west side of watercourse. These may be old burrows as do not look as well utilised as those noted previously. Two burrows were also noted on the east side of the watercourse in this location, however seemed slightly overgrown. Field signs started at NC 47085 09351 and ended at NC 47098 09318.
45	Burrows	NC 47090 09195	Six water vole burrows with recent clippings and droppings present on east side of watercourse. Nine burrows were also observed on the west side of the watercourse in this location.
46	Historic burrows	NC 45920 07691	Location of water vole burrows recorded during previous surveys – however no signs of recent water vole activity or obvious burrows were observed on the western bank of the watercourse during 2020 survey.
47	Historic burrows	NC 45885 07796	Location of water vole burrows recorded during previous surveys – no signs of recent activity or obvious burrows in area during 2020 survey.
48	Historic burrows	NC 43662 11807	Location of water vole burrows recorded during previous surveys – however no signs of recent water vole activity or obvious burrows were observed on during 2020 survey.



B5

wood.

Annex C Representative Photographs



Photo 1: Recent otter spraint on rock at edge of watercourse (TN 8)



Photo 2: Otter prints in muddy substrate at edge of watercourse (TN 20)



Photo 3: Otter couch formed of overhanging peat turves (TN 19)



Photo 4: Potential holt in banking of small lochan (TN 21)





Photo 5: Example of suitable water vole habitat adjacent to the Allt an Rāsail watercourse



Photo 6: Example of a water vole burrow present on the Site (TN 31)



Photo 7: Old water vole droppings (TN 30)





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