

Technical Appendix 7.3

Clune Wind Farm

Protected Species Survey Report

RES Group



September 2024



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Version	Date	Reason
1.1	02/09/2024	Draft for internal review
1.2.	18/09/2024	For client issue



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1 Introduction

1.1 Terms of Reference

In September 2020, Atmos Consulting Ltd. (Atmos) was commissioned by Clune and Corryborough Estate, and then latterly RES Group, to undertake a protected mammals survey in relation to a proposed wind farm development (the “Proposed Development”) on land south of the village of Tomatin, Highland (hereafter referred to as the “Site”).

This Technical Appendix describes the methods followed and the findings from the survey.

1.2 Site Location and Description

The Site (Figure 7.3.1, Appendix A refers) is located approximately 20km south-east of Inverness, and approximately 3km south of the village of Tomatin. The Site is predominately managed upland grouse moorland with agricultural fields and mixed woodland in lower altitude areas. Clune Burn and Allt Lathach traverse the Site along with other smaller tributaries running into the River Findhorn that lies to the north-west, out with the Site boundary.

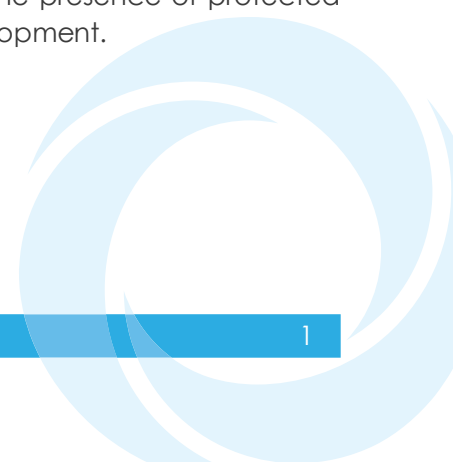
The Site inclines generally in a north-east to south-west direction, reaching the highest point of the Site, 750m, at Carn Dubh'lc an Deoir. The northern edge is bounded by the River Findhorn and the eastern boundary by the A9. The Site can be approximately divided by four main watercourses that flow north into the River Findhorn: Allt Phris, Clune Burn, Allt Lathach, and Wester Strathnoon Burn.

The Site is mainly used as a grouse moor, managed by grazing livestock such as sheep, and regular burning of mature heather to provide new growth. The Site also consists of small patches of grassland along the northern boundary used by grazing livestock, a block of conifer plantation in the north-east, and an area of ancient deciduous woodland on the banks of the Allt Phris. There is some evidence of grazing pressure from deer. The survey area contains a variety of plant communities including blanket bog, wet heath, acid grassland, scrub and deciduous woodland.

The proposed access track will be situated on the north-eastern boundary of the Site, connecting to the A9 just north of Slochd summit, using an existing minor junction. The plant communities within the access track boundary are a mix of heath, blanket bog, scrub, and birch *Betula* sp. woodland.

1.3 Objectives

The objective of the study was to undertake a survey of the Site and a buffer of 250m, where access allowed, to record any evidence indicating the presence of protected mammal species which could represent a constraint to development.



2 Legislation

Otter *Lutra lutra* and wildcat *Felis silvestris* are European Protected Species (EPS), listed in Annexe IV of the EC Habitats Directive and are fully protected in the UK under the Conservation (Natural Habitats, etc.) Regulations 1994 (the Habitats Regulations), as amended. The legislation specifies a number of offences which includes to deliberately or recklessly capture, kill, injure or disturb EPS (while using a resting place), or to damage or destroy breeding sites or resting places. It is also an offence to disturb EPS in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species or to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

Pine marten *Martes martes* are protected under Schedule 5 of the Wildlife and Countryside Act (1981), as amended (WCA). Under this legislation, it is an offence to intentionally or recklessly:

- Kill, injure or take a wild pine marten;
- Damage, destroy or obstruct access to any structure or place which such an animal uses for shelter or protection;
- Disturb such an animal when it is occupying a structure or place for that purpose; and
- Possess or control, sell, offer for sale or possess or transport for the purpose of sale any live or dead wild pine marten or any derivative of such an animal.

Water vole *Arvicola amphibius* are also afforded protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended. It is currently an offence to intentionally or recklessly:

- Damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection; and
- Disturb water voles while they are using such a place.

Badger *Meles meles* and their setts are fully protected by the Protection of Badgers Act 1992 (as amended by the Wildlife and Natural Environment Act 2011).

It is an offence to:

- Wilfully kill, injure, take or attempt to kill a badger;
- Possess a dead badger or any part of a dead badger;
- Cruelly ill-treat a badger, use badger tongs in the course of killing, taking or attempting to kill a badger, dig for a badger; and
- Possess, sell or offer for sale any live badger, or mark, tag or ring a badger.

It is also a crime to:

- Interfere with a badger sett by intentionally or recklessly causing or allowing damage to a sett or any part of it, destruction of a sett, obstruction of a sett access, or any entrance of it; and
- Allowing a dog to enter a sett, or disturb a badger when it is occupying a sett.

A badger sett is defined in law as any structure or place which displays signs of current use by a badger.

3 Methodology

3.1 Desktop Study

A desk study was undertaken to establish baseline information for the Site and to gather information about the presence of species of conservation interest. Various data sources were utilised including the website of the statutory agency, NatureScot via the 'Site Link Portal', publicly available datasets available for commercial use held on the National Biodiversity Network (NBN) website and aerial photography for the site.

The desk study identified statutory designations with non-avian, mammal species as a qualifying interest, such as Special Areas of Conservation (SACs), Ramsar wetlands, Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) within 10km of the Site. In addition, Local Nature Reserves (LNRs) and relevant non-statutory designations within a 5km radius of the site were searched for.

3.2 Field Surveys

Field surveys were undertaken on the 20th and 24th February 2023. (Surveys were re-scheduled from 2022 at the request of the estate.) Surveys followed (but were not limited to) the methodologies described for the main target species below and were carried out across an area comprising the Site and a 250m buffer (the Study Area).

3.2.1 Otter

The otter survey followed standard methodologies (Purseglove, 1995; Chanin, 2003; Bang and Dahlstrøm, 2006; Muir and Morris, 2013). As actual otter sightings are unlikely, the survey concentrated on locating field signs indicating otter presence or use. Such field signs include:

- Spraints;
- Footprints;
- Feeding remains – such as partially eaten fish or frogs;
- Slides / haul-outs – routes into and out of the water, which are usually associated with terrestrial routes, such as short cuts around meanders or along traditionally used otter paths / routes;
- Couches – resting place usually associated with cover, such as dense scrub, rushes or reed, flood debris or fallen trees;
- Holts – resting site with one or more chamber; and
- Natal holts – used for breeding.

3.2.2 Wildcat

A walkover survey for wildcat *Felis silvestris* was carried out within the Study Area. Features such as buildings, rocky outcrops, woodpiles, thick areas of scrub vegetation and hollow trees were targeted, along with any other potential features of interest, taking account of the SNH walkover survey methodology for Scottish wildcat (SNH, undated a). In addition, any evidence of use by wildcats such as scat, scratch marks, hair or prey remains were searched for and noted where present.

Evidence of wildcat signs/activity recorded during the survey was geo-referenced using a handheld GPS with the feature of interest photographed.

It is preferential to carry out surveys during the autumn or winter when vegetation is less likely to obscure den sites.

3.2.3 Pine Marten

The pine marten survey followed the methods described in Birks (2012). Pine marten are active all year round with the period between June - August being optimal as scats are most abundant.

The survey included a systematic search for signs of pine marten presence and potential den sites within the Study Area.

3.2.4 Water Vole

The water vole surveys were undertaken in accordance with the methodologies described in the Water Vole Conservation Handbook (Strachan *et al.*, 2011). As with otter, water vole sightings during survey were unlikely and, although such sightings would be recorded, water vole survey therefore relied on field signs, such as:

- Faeces – these are 8 -12mm long and 4-5mm wide, varying in colour from green to black, and odourless with a putty-like texture;
- Latrines – found throughout the territory, often comprising a pile of flattened droppings, with fresh droppings on top;
- Feeding stations – comprise a neat pile of chewed feeding remains;
- Burrows – these are typically wider than they are high, with a diameter of 4 – 8cm, and are usually located along the water's edge;
- Lawns – around burrows there is often an area of grazed vegetation, surrounded by taller vegetation, these are most often produced when the female is nursing young;
- Nests – these comprise a large ball of shredded material, often woven into the bases of rushes and reeds, and are normally found in areas where the water table is high, such as wetlands;
- Footprints – as with other rodents, the footprints of the fore foot, show four toes in a star arrangement, with the hind foot showing 5 toes. The size of footprints for the hind foot is 26-34mm;
- Runways – these are low tunnels within the vegetation; and
- Sounds – the characteristic 'plop' of the water vole entering the water that acts as a warning to other voles.

3.2.5 Badger

Badger survey was carried out in accordance with the methodology described in SNH (2003) and Harris *et al.*, (1989).

Within the survey area all fence lines, woodland and scrub habitats were systematically surveyed for evidence of badgers in the form of:

- Faeces - badgers usually deposit faeces in characteristic excavated pits, so-called latrines, concentrations of which are typically found at home range boundaries;

- Setts - entrances comprising either single isolated holes or a series of holes, likely to be interconnected underground;
- Paths - tracks between setts or leading to feeding areas;
- Scratching posts - evidence of scratching at the base of tree trunks;
- Snuffle holes - small scrapes where badgers have searched for insects, earthworms and plant tubers;
- Day nests - bundles of grass and other vegetation where badgers may sleep above ground;
- Hair traces - notably the distinct badger guard hairs; and
- Footprints.

When a sett is located the level of use and how active the sett is can be assessed using the following criteria:

- Number of well-used holes with one or more of the following: well-worn entrance, freshly excavated soil, bedding material);
- Number of partially used holes as indicated by leaves or twigs in the entrance and/or mosses and other plants growing in or around the entrance; and
- Number of disused holes that are partially or completely blocked, with considerable amounts of excavation being required for reoccupation.

3.2.6 Red Squirrel

The red squirrel *Sciurus vulgaris* survey was carried out in accordance with standard methodology and current SNH advice (Forestry Commission, 2009; NatureScot, 2020). Signs of presence were recorded in relation to sightings, feeding (half eaten seeds / cones, etc.), and dreys. These surveys can be carried out at all times of the year; however, it is easier to observe squirrels and their dreys during the autumn or winter in broad-leaved or larch *Larix* sp. woodland.

3.3 Limitations

The surveys were undertaken in suitable weather conditions with no snow during the winter period, which can be regarded as sub-optimal to determine the presence of certain species, such as water vole, but it does not significantly limit the chance of encountering evidence.

4 Results

4.1 Desk Study

4.1.1 Designated Sites

There are no designated sites with protected mammal species as a qualifying feature in the vicinity (< 10km) of the Site (Figure 7.3.2, Appendix A refers).

4.1.2 Species Records

A search of the NBN Atlas for the last 10 years within a 5km radius of the Site showed records for three species listed either under Annex IV of the EC Habitats Directive (92/43/EEC), Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), or the Protection of Badgers Act 1992 (undertaken under licence CC-BY, OGL, CC0) (Table 1 refers).

Table 1: Protected Species Historical Records (data from NBN Atlas)

Common Name	Summary of Records
Eurasian Red Squirrel <i>Sciurus vulgaris</i> ^{1,2}	24 records (2 from 2021, 7 from 2020, 4 from 2019, 2 from 2018, 2 from 2017, 3 from 2016, 1 from 2014, 1 from 2013, and 2 from 2012) with none located within the Site boundary, with records being from forest blocks along the River Findhorn.
Mountain Hare <i>Lepus timidus</i> ²	3 records (1 from 2018, 1 from 2017, and 1 from 2013) with records adjacent to the Site boundary to the west and east.
Common Lizard <i>Zootoca vivipara</i> ³	1 record from 2020 outwith the Site boundary to the east.
Eurasian Otter <i>Lutra lutra</i> ²	1 record from 2014 outwith the Site boundary to the east.
Daubenton's Bat <i>Myotis daubentonii</i> ²	1 record from 2017 outwith the Site boundary to the west, on the River Findhorn.
Natterer's Bat <i>Myotis nattereri</i> ⁴	1 record from 2014 outwith the Site boundary to the west, on the north bank of the River Findhorn.

¹ The Scottish Squirrel Database

² Highland Biological Records Group (HBRG) Vertebrates (not Badger) Dataset

³ Records of Amphibians and Reptiles Via IRecord

⁴ Roost Count

4.2 Field Survey

Survey results are shown on Figure 7.3.3 (Appendix A refers). Given the potential for persecution of badger to occur if sett details are released into the public domain, survey results pertaining to badger are included in a Confidential Appendix (**Technical Appendix 7.8: Confidential Protected Species Survey Report**).

4.2.1 Otter

A desktop study and field survey resulted in no evidence of otter. The main watercourses within the survey area and the banks of the River Findhorn were surveyed and no evidence recorded.

Results from the Fish Habitat Survey identified old otter spraint at three locations on the Allt Lathach (Appendix B, Target Notes 14 – 16 refer).

4.2.2 Wildcat

The Site does not offer optimal habitat for wildcat being mainly open moorland, maintained as a grouse moor. No evidence of this species was found during the field survey. The species is in significant decline, and this is not recognised as a priority area for wildcat.

4.2.3 Pine Marten

No signs of pine marten were recorded during the survey. Woodland along the northern edge of the Site along the River Findhorn is considered to be suitable habitat but no evidence was recorded in the survey area, including a 250m buffer.

4.2.4 Water Vole

Evidence of water vole was recorded along the middle to upper reaches of the Allt Lathach and Clune Burn. A burrow entrance with dropping was recorded on the Clune Burn (Target Note 3, Appendix B refers). Further upstream, a burrow was found with mud piles breaking through the surface (Target Note 8, Appendix B refers). Along the Allt Lathach, burrows were recorded close to the track (Target Notes 4, 5 and 7, Appendix B refers). More burrows were observed along the Coochan Leiteir (tributary of the Allt Lathach) (Target Note 6, Appendix B refers).

4.2.5 Badger

Results of the badger survey are included in **Technical Appendix 7.8: Confidential Protected Species Survey Report**.

Evidence of badger was found within the survey area at two locations in the north of the survey area.

4.2.6 Red Squirrel

A desktop study and field survey resulted in no evidence of red squirrel. The woodland along the northern Site boundary is suitable habitat for red squirrels, as was the neighbouring plantation until it was recently felled. However, no evidence of red squirrel was recorded within the Site or the 250m buffer.

5 Mitigation

The following measures are recommended in order to minimise the potential impact on badger, otter and water vole.

- Works will be overseen by an Ecological Clerk of Works (ECoW) and their role and responsibilities will be detailed in a Construction Environmental Management Plan (CEMP);
- Water Vole: A pre-construction survey for water vole will be undertaken, covering suitable habitat within 250m from Proposed Development infrastructure. This survey will be undertaken by a suitably qualified ecologist. The survey will aim to identify if these species activity levels continue as present and the results of the pre-construction survey will inform the need to amend the CEMP to include further mitigation with regards to protected species in respect of working practices or to consult with NatureScot if required;
- Badger: A pre-construction survey for badger will be undertaken, covering suitable habitat within 250m from Proposed Development infrastructure. This survey will be undertaken by a suitably qualified ecologist. The survey will aim to identify if these species activity levels continue as present and the results of the pre-construction survey will inform the need to amend the CEMP to include further mitigation with regards to protected species in respect of working practices or to consult with NatureScot if required;
- Excavations will be covered at the end of each working day or a means of ingress / egress placed inside to allow faunal species to escape, should they enter the excavation. Any temporarily exposed open pipe system would be capped in such a way as to prevent wildlife gaining access; and
- In the event that a protected species is discovered on site all work in that area would stop immediately and the ECoW would be contacted. Increased buffer areas may be required in these locations. Details of the local police Wildlife Crime Officer, NatureScot Area Officer and Scottish Society for the Prevention of Cruelty to Animals (SSPCA) relevant Officer would be held in the site emergency procedure documents.

6 References

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7 Appendices

Appendix A. Figures

- Figure 7.3.1 - Site Location Plan
- Figure 7.3.2 - Environmental Designations
- Figure 7.3.3 - Protected Species Survey Results

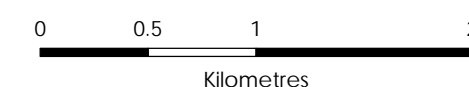
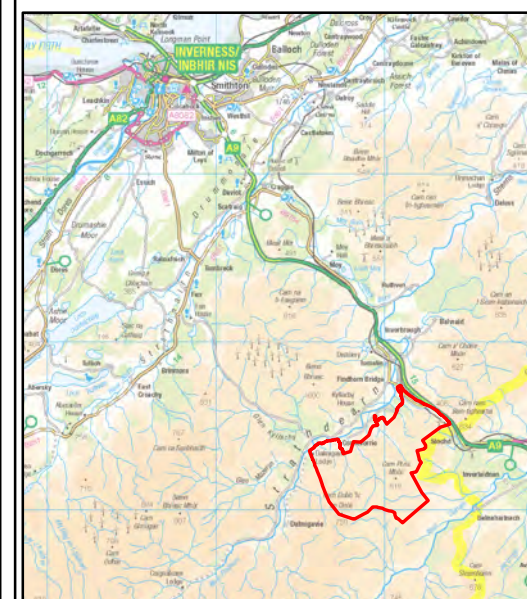
Clune Wind Farm



Figure 7.3.1
Site location Plan

Key

 Site boundary



Scale @ A3:
1:35,000



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Drawn by: LB Checked by: TH Approved by: JW

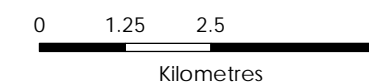
Clune Wind Farm



Figure 7.3.2
Designated Sites within 10 km

Key

- Site boundary
- 5km and 10km site buffers
- ▲ Proposed turbine
- Ancient Woodland Inventory
- Special Area of
- Special Protection Area
- National Nature Reserve
- Site of Special Scientific Interest
- RSPB Reserve
- Ramsar wetland
- RSPB Important Bird Areas

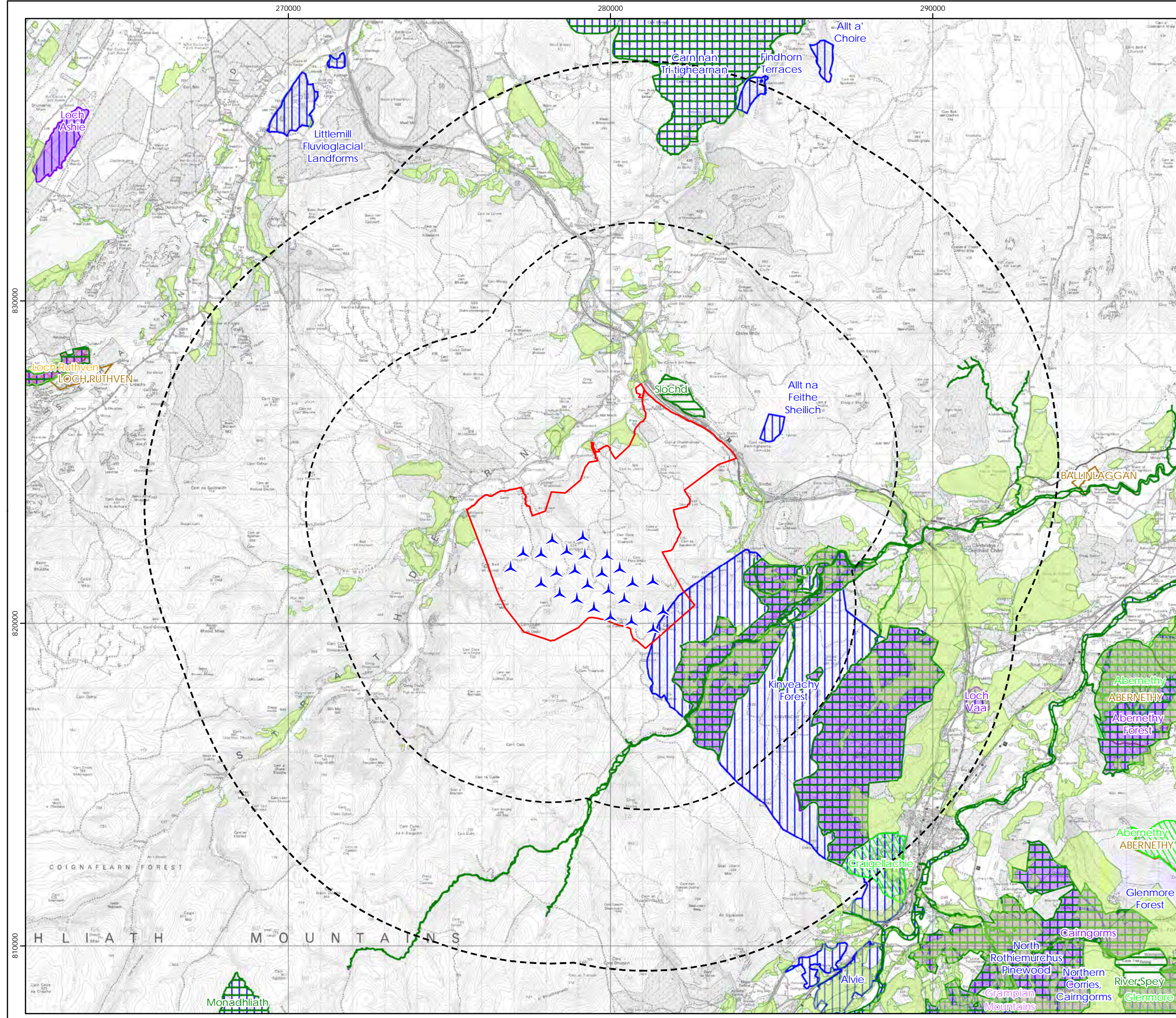


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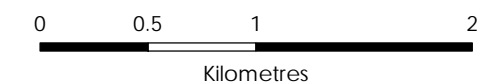
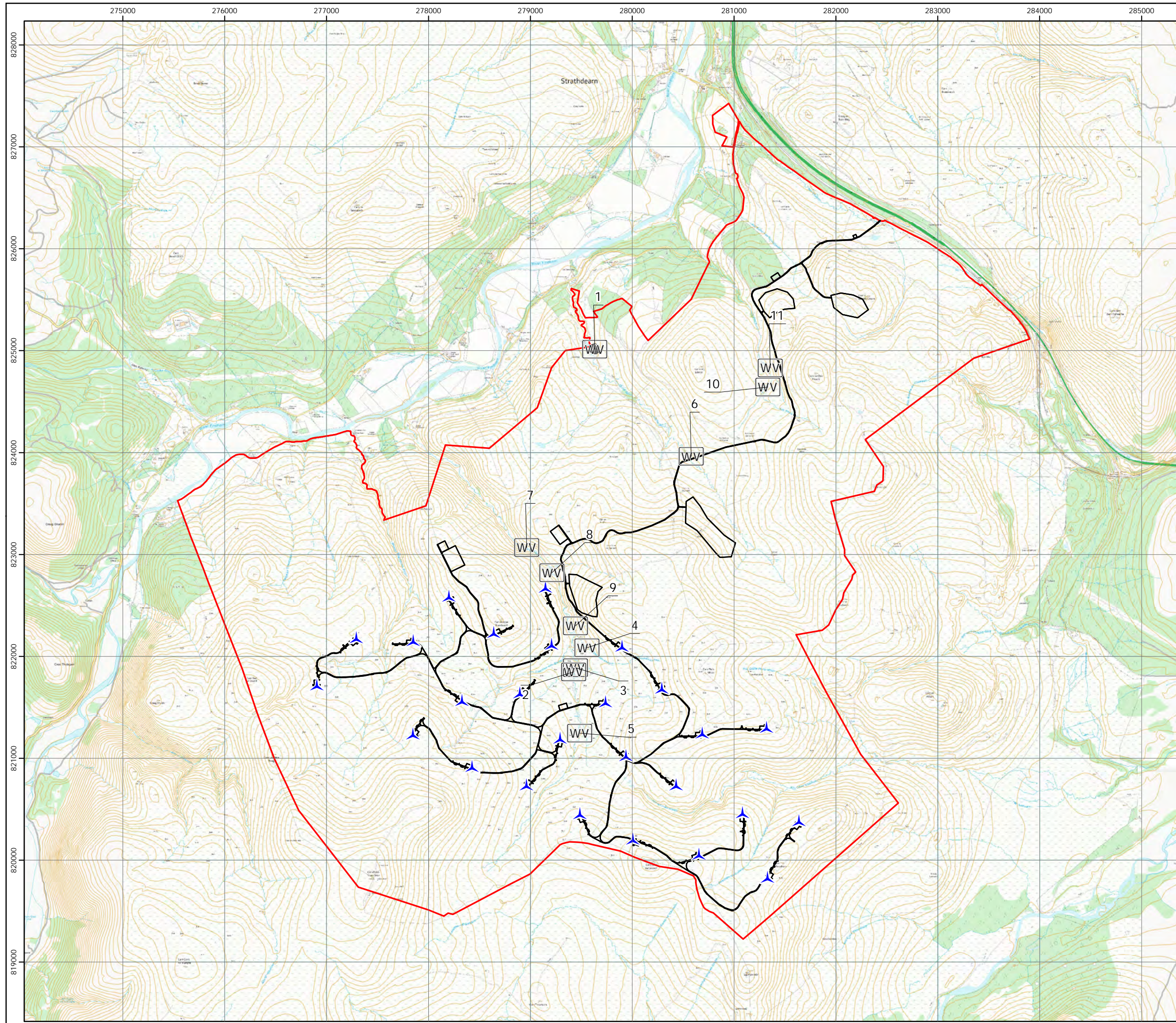
Clune Wind Farm



Figure 7.3.3
Protected Species Survey Results

Key

- Site boundary
- ▲ Proposed turbine
- Proposed Infrastructure
- Protected Mammal Species**
- WV Water vole - Burrow
- Water vole - Droppings



Scale @ A3:
1:35,000



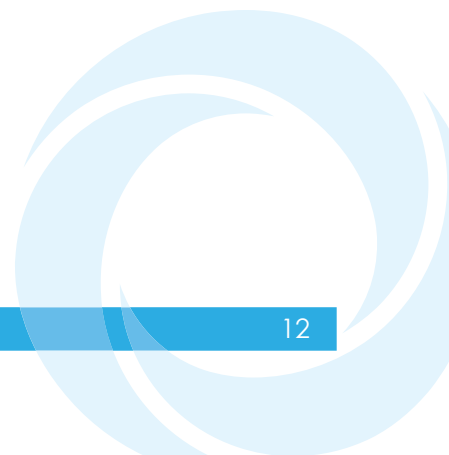
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Appendix B. Target Notes


Table 2: Protected Species Survey Target Notes



Description and Target Number	Photographs
<p>Target Note 1 Grid Ref.: NH 79600 25028 Description: A single burrow in the riverbank with a pile of droppings, indicative of water vole.</p>	<p>Photo 1:</p> 
<p>Target Note 2 Grid Ref.: NH 79430 21874 Description: A single burrow in the riverbank with a pile of fresh spoil and matted grass around the entrance.</p>	<p>Photo 1:</p> 

Description and Target Number	Photographs
<p>Target Note 3 Grid Ref.: NH 79436 21905 Description: A single burrow in the riverbank with matted grass around the entrance.</p>	<p>Photo 1:</p> 
<p>Target Note 4 Grid Ref.: NH 79558 22073 Description: A single burrow with matted grass around the entrance.</p>	<p>Photo 1:</p> 







Description and Target Number	Photographs
<p>Target Note 5 Grid Ref.: NH 79436 21905 Description: Two burrows in the riverbank with spoil around the entrances.</p>	<p>Photo 1:</p>  <p>Photo 2:</p> 

Description and Target Number	Photographs
	<p>Photo 3:</p> 
<p>Target Note 6 Grid Ref.: NH 80542 23985 Description: A single burrow with spoil around the entrance and various mud hills breaking through the surface in the surrounding area.</p>	<p>Photo 1:</p> 

Description and Target Number	Photographs
	<p>Photo 2:</p> 
<p>Target Note 7 Grid Ref.: NH 78912 23073 Description: Multiple burrows with spoils around the entrance.</p>	<p>Photo 1:</p> 

Description and Target Number	Photographs
<p>Target Note 8 Grid Ref.: NH 79201 22820 Description: Multiple burrows with spoils around the entrance.</p>	<p>Photo 1:</p> 
<p>Target Note 9 Grid Ref.: NH 79425 22296 Description: A single burrow with spoil around the entrance.</p>	<p>Photo 1:</p> 

Description and Target Number	Photographs
<p>Target Note 10 Grid Ref.: NH 81309 24642 Description: Multiple entrances with fresh spoil.</p>	<p>Photo 1:</p> 
<p>Target Note 11 Grid Ref.: NH 81336 24821 Description: A single burrow with spoil around the entrance.</p>	<p>Photo 1:</p> 
<p>Target Note 12 Grid ref: NH 79416 22276 Upper section of Allt Lathach. Incidental old otter spraint underneath bridge. Contains fishbones and scales.</p>	

Description and Target Number	Photographs
<p>Target Note 13 Grid ref: NH 77748 24305 Lower section of Allt Lathach. Incidental old otter spraint under bridge.</p>	
<p>Target Note 14 Grid ref: NH 77748 24303 Lower section of Allt Lathach. Incidental second old otter spraint under bridge.</p>	