voltalia

CRUACH CLENAMACRIE WIND FARM

APPENDIX 10.2 PROTECTED SPECIES SURVEY REPORT

Voltalia

CRUACH CLENAMACRIE WIND FARM

Appendix 10.2 Protected Species Survey Report

NOVEMBER 2024

PUBLIC

Voltalia

CRUACH CLENAMACRIE WIND FARM

Appendix 10.2 Protected Species Survey Report

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 70092018

DATE: NOVEMBER 2024

WSP

110 Queen Street
Glasgow
G1 3BX

Phone: +44 141 429 3555

WSP.com

QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	First Issue	Second Issue		
Date	September 2024	November 2024		
Prepared by	H Smith	S Bremner		
Signature				
Checked by	A Gow	A Miller		
Signature				
Authorised by	S Kydd	A Miller		
Signature				
Project number	70092018	70092018		
Report number	V2	V3		
File reference	\\uk.wspgroup.com\central data\Projects\70092xxx\70092018 - Cruach WF Ecology\03 WIP\EIA\Appendices\Appendix 10.2 Protected Species report	\\uk.wspgroup.com\central data\Projects\70092xxx\70092018 - Cruach WF Ecology\03 WIP\EIA\Appendices\Appendix 10.2 Protected Species report		

CONTENTS

TABLES

ANNEXES

EXECUTIVE SUMMARY

WSP UK Ltd. was commissioned by the Applicant to undertake protected species surveys at the proposed Cruach Clenamacrie Wind Farm, located to the east of Oban, Argyll and Bute Council (hereafter the 'Site'). At the time of writing, the proposed Wind Farm will comprise six turbines, hereafter, the 'Proposed Development'.

The Proposed Development encompasses the wind farm infrastructure of six turbines, and the access track. The Application Boundary is the extent of the area relating to the consent application. The Site is situated within an area of upland habitats and is adjacent to both mixed and conifer woodlands consisting of primarily conifer plantation. The 'Study Area' for protected species comprised the Proposed Development and up to a 250 metre (m) buffer, depending on the species. The Study Area was subject to the following data collection exercise and field surveys:

- Desk based data collection;
- Badger *Meles meles* survey within 100m;
- Bat Preliminary Roost Assessment (PRA) of suitable habitat and features within 30m;
- Fish and freshwater pearl mussel (FWPM) *Margaritifera margaritifera* habitat suitability survey (not including the access track);
- Otter *Lutra lutra* survey covering 200m up and downstream of watercourse crossings;
- Pine marten *Martes martes* survey up to 250m where suitable habitat prevails;
- Red squirrel *Sciurus vulgaris* survey up to 50m where suitable habitat prevails;
- Water vole *Arvicola amphibius* habitat suitability assessment covering 100m up and downstream of watercourse crossings; and
- Habitat Suitability Index (HSI) for great crested newts *Triturus cristatus* (GCN) of water bodies within 500m.

These surveys were undertaken to identify the ecological baseline of the Survey Area. The surveys described in this report are valid for a period of 18 months and will require to be updated should construction not commence before December 2025.

The protected species surveys identified suitable habitat to support badger, bats, fish, FWPM, otter, red squirrel, pine marten, and water vole.

Definitive signs of species presence were noted for otter and red squirrel.

Note details of bat activity surveys are covered separately in **Appendix 10.3.**

1

INTRODUCTION

PUBLIC

1 INTRODUCTION

WSP UK Ltd. was commissioned by the Applicant to undertake a desk based ecological study and field based protected species survey of the proposed Cruach Clenamacrie Wind Farm, located to the east of Oban, Argyll and Bute Council (hereafter the 'Site'). The Site is located at approximate central Ordnance Survey grid reference NM 94187 29995.

At the time of writing, it is expected that Cruach Clenamacrie Wind Farm will comprise six turbines, hereafter the 'Proposed Development'.

1.1 SCOPE AND OBJECTIVES

A review of existing ecological information to provide baseline context for the Site and wider area such as sites designated for nature conservation. The desk study aimed to identify protected areas, and legally protected and notable species which may fall within the Proposed Development's potential zone of influence[1]. Surveys were originally done in October 2022 and were updated in May 2024. The species subject to survey were:

- Badger *Meles meles*
- Bats Chiroptera;
- Fish and freshwater pearl mussel (FWPM) *Margaritifera margaritifera* habitat suitability survey;
- Otter *Lutra lutra*;
- Pine marten *Martes martes*;
- Red squirrel *Sciurus vulgaris*; and

Water vole *Arvicola amphibius* Additionally, any incidental records or habitat suitability to support other protected or notable species was also recorded.

The 'Study Area' comprised of the following areas:

- 'Wind Farm Protected Species Study Area' with 100m track and turbine buffers for general protected species, and 200m for otter (upstream and downstream of watercourse crossings);
- 'Access Track Protected Species Study Area' with 50m buffer surrounding the track and 100m borrow pit buffers for general protected species survey. A 200m buffer for otters (upstream and downstream of watercourse crossings) and 250m buffer around borrow pits for pine marten only.
- These surveys were undertaken to identify the ecological baseline of the Study Area.

1.2 LEGISLATIVE CONTEXT

The study has been compiled with reference to the following relevant nature conservation legislation and Scottish biodiversity guidance from which the protection of sites, habitats and species is derived in Scotland.

- The Wildlife and Countryside Act 1981 (as amended);

[1] The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This can be determined via best practice guidance and/or professional judgement.

- The UK Post-2010 Biodiversity Framework (2011-2020);
- Environment Act 1995;
- The Wild Mammals (Protection) Act 1996;
- The Conservation (Natural habitats &c.) Regulations 1994 (as amended in Scotland);
- Nature Conservation (Scotland) Act 2004;
- Wildlife and Natural Environment (Scotland) Act 2011;
- Protection of Wild Mammals (Scotland) Act 2002;
- Code of Practice on Non-Native Species (Scottish Government, 2012);
- Scottish Biodiversity List (SBL)[2];
- Scottish National Planning Framework 4 (2023);
- Scottish Planning Policy (2014);
- Scotland's biodiversity: it's in your hands (Scottish Government, 2004);
- 2020 Challenge for Scotland's Biodiversity (Scottish Government, 2013);
- UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021;
- Argyll and Bute Council Local Development Plan (Argyll and Bute Council, 2015)[3]; and
- Argyll and Bute Council Local Biodiversity Action Plan 2010 – 2015 (Argyll and Bute Council, 2010).

Legislation pertaining to each protected species surveyed is detailed in **Annex B**.

[2] The Scottish Biodiversity List is a list of flora, fauna and habitats considered by the Scottish Ministers to be of principal importance for biodiversity conservation. The publication of the SBL satisfies the requirements of Section 2(4) of The Nature Conservation (Scotland) Act 2004. The development of the list has been a collaborative effort involving a great many stakeholders overseen by scientists from the Scottish Biodiversity Forum. The SBL is a tool for public bodies and others doing their Biodiversity Duty as required by Section 2(4) of the Nature Conservation (Scotland) Act 2004.

[3] A second Local Development Plan (LDP2) is being prepared and is currently under examination by the Scottish Government.

2

METHODS

PUBLIC

2 METHODS

2.1 PROTECTED AND PRIORITY SPECIES

2.1.1 The desk study included recent (previous 10 years, 2014-2024) data from:

- Butterfly conservation (for protected and notable species of conservation concern within 2 kilometres (km) of the Site); and
- Forestry Land Scotland (for protected and notable species of conservation concern within 2km of the Site, and any records for bat roots within 6km of the Site); and
- National Biodiversity Network (NBN) Atlas[4] (protected or priority species within 2km of the Site).

Only datasets that are freely available for commercial use were searched and included those with Open Government Licence (OGL), Creative Commons No rights reserved (CCO) and Creative Commons licence with attribution (CC-BY).

2.1.2 Protected or priority species include those listed as a European Protected Species (EPS), protected under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended), the 'Habitats Regulations'[5], those identified as priority species on the Scottish Biodiversity List[6] (SBL), the Local Biodiversity Action Plan (LBAP) and/or protected under national legislation such as the Wildlife and Countryside Act 1981[7] as amended (WCA) or Protection of Badger Act 1992[8] (PBA).

The protected species surveys were carried out in October 2022 for the original protected species surveys and an updated survey was conducted in May 2024 (excluding GCN), along with additional bat surveys in 2023 and 2024. The original survey was led by WSP Consultant Ecologist, who is 'capable' level of competence in the ecological assessment of the pertinent species (CIEEM, 2021). The second surveyor was an Assistant Ecologist and had formal training in fish habitat surveying through the Scottish Fisheries Coordination Centre (SFCC). The updated electrofishing survey was conducted by Argyll Fisheries Trust who are experienced and Scottish Fisheries Coordination Centre (SFCC) accredited fish habitat and fish population survey experts.

2.2 BADGER

A badger survey was conducted of the Wind Farm Protected Species Study Area and Access Track Protected Species Study Area with reference to industry-standard methodology and standing advice for planning consultants from NatureScot (Scottish Badgers, 2018 and NatureScot, 2020a).

Where present, evidence indicative of badgers was recorded, including:

[4] Data Licenses, NBN Atlas, https://docs.nbnatlas.org/data-licenses/ [Accessed: June 2024]
[5] The Conservation (Natural Habitats, &c.) Regulations 1994, UK Government. http://www.legislation.gov.uk/uksi/1994/2716/contents/made [Accessed: June 2024]
[6] The Scottish Biodiversity List is a list of animals, plants and habitats that Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland, as required by the Nature Conservation (Scotland) Act 2004.
[7] Wildlife and Countryside Act 1981, UK Government. https://www.legislation.gov.uk/ukpga/1981/69 [Accessed: June 2024]
[8] Protection of Badgers Act 1992, UK Government. https://www.legislation.gov.uk/ukpga/1992/51/contents [Accessed: June 2024]

- Setts;
- Dung pits and latrines;
- Prints;
- Mammal paths;
- Hairs; and
- Other evidence including snuffle holes, feeding remains and scratching posts.

Where setts were recorded, their status and level of activity were noted. Sett status is broadly categorised as follows:

- Main - generally, the largest sett within a badger social group home range, with a relatively large number of sett entrances with well-worn pathways between them, and conspicuous spoil mounds. This type of sett tends to be occupied throughout the year and be used for breeding.
- Annex - normally found within 150m of the main sett and comprising multiple entrances, this type of sett is connected to the main sett by one or more obvious well-worn pathways. It may not be occupied throughout the year and can be used for breeding if there is more than one breeding sow within the social group.
- Subsidiary - similar to an annex sett, but typically located further from the main sett (at least 50m away). This type of sett will not be occupied throughout the year and lacks the well-worn paths connecting it to another sett that are associated with main and annex setts.
- Outlier - normally consisting of one or two entrances, often with little spoil outside and with no obvious path connecting it to another sett. This type of sett will tend to be found furthest from the main sett and will only be used sporadically throughout the year.

In addition to sett entrances there may be:

- Collapses - where a tunnel has collapsed in on itself.
- Air holes - where badgers have made a small hole in a tunnel roof from below which is visible from above.

Sett use or level of activity was broadly categorised as follows:

- Well-used sett/hole - shows evidence of current use, such as fresh spoil or bedding, well-worn pathways between entrances and the presence of badger hair.
- Partially used sett/hole - no evidence present indicating current occupation (as distinct from current use), though hairs may be present, as these can persist for some time. The sett may be occupied intermittently and cannot be categorically described as disused. It could easily be re-occupied; for example, it may contain some leaves or sticks in tunnel entrances, but entrances are not blocked, and it would take little effort for a badger to reoccupy it. Badger field signs may not have decayed to the extent they can be categorically considered to no longer indicate current use.
- Disused sett/hole - a badger sett that appears to have been abandoned by a badger social group is described as ‘disused’; these differ from partially used setts which can be temporarily disused (not in current occupation, but in current use). Disused setts are often completely blocked with vegetation or have collapsed, and badger field signs are no longer present, or have decayed to the extent they do not indicate current use.

2.3 BATS

Note details on bat activity surveys are covered separately in **Appendix 10.3.**

Preliminary Roost Assessment (PRA) (2022)

Habitats encountered were assessed for their overall suitability to support bats. A PRA (2022) was undertaken from ground level of the trees and structures occurring within 30m of the track and turbine areas (safe access permitting) to identify features with the potential to support roosting bats (Potential Roost Features [PRFs]). Where PRFs were identified that could be used by roosting bats they were recorded and classified as 'Low', 'Moderate' or 'High' suitability following best practice guidance (Collins, 2016 and NatureScot, 2020b) when the original surveys were conducted. See **Annex C** for category descriptions.

Daytime Bat Walkover (DBW) (2024)

The May 2024 surveys followed the newly published best practice guidance (Collins, 2023). A DBW consisted of a ground-level bat PRA which was undertaken to identify PRFs for bats within woodland habitats, standalone trees, and rockfaces within 30m of the Proposed Development (safe access permitting). PRAs can be undertaken at any time of the year and provide an initial indication of suitability that will inform any recommendation for further bat surveys during the active bat season (May to September, inclusive).

The DBW of trees were assessed visually from the ground for their suitability to support roosting bats. Where needed, a high-powered torch and binoculars were used to further inspect potentially suitable features such as cracks, crevices, and hazard beams. Notes on each PRF extent, location, and evidence of bat activity was noted. Examples of tree PRFs used by bats for roosting or hibernating include hazard beams, knot holes and decay hollows. Trees identified during DBW surveys were categorised in line with BCT guidance[9], presented in **Table 2-1** below:

Table 2-1 - Guidelines for Assessing Bat Suitability in Trees[9]

Classification	Description
NONE	Either no PRFs in the tree or highly unlikely to be any.
FAR	Further Assessment Required (FAR) to establish if PRFs are present in the tree.
PRF	A tree with at least 1 PRF present.

[9] Collins, J (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). Bat Conservation Trust, London.

Aerial inspection surveys 2023

Follow up PRF inspection surveys were conducted in July 2023 of the trees identified in October 2022. These roost inspections consisted of aerial inspection surveys utilising tree-climbing equipment, torches, and endoscope inspection cameras, undertaken by licenced bat surveyor and assistant (both with NPTC climb and rescue certification).

Each identified PRF was inspected for evidence indicating use by roosting bats such as droppings, urine staining, and scratch marks / characteristic staining (from fur oils). Notes on the PRFs extent, location and evidence found were recorded.

Trees categorised as 'Low' suitability for roosting bats had one inspection conducted, those categorised as 'Moderate' were subject to two inspections.

Aerial inspection surveys 2024

Three trees: TN08, TN09 and TN17 identified during the DBW as requiring further surveys, were inspected (in August 2024) to identify the presence of PRFs (of the FAR trees) and assign the roosting suitability of identified PRFs. The survey included ground-level inspections, utilising ladders, and aerial inspection surveys utilising tree-climbing equipment, torches, polekam and endoscope inspection cameras undertaken by licenced bat surveyor and assistant (both with NPTC climb and rescue certification).

Each identified PRF was inspected for evidence indicating use by roosting bats such as droppings, urine staining, and scratch marks / characteristic staining (from fur oils). Notes on the PRFs extent, location and evidence found were recorded.

Upon completion of the first aerial survey, the categorisation of the inspected trees' bat roost suitability was reassessed (due to the change in survey guidelines) in line with criteria from the bat guidelines as shown in **Table 2-2**.

Table 2-2 - PRF Suitability Categories[9]

Classification	Description
PRF - I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF - M	PRF is suitable for multiple bats and may therefore be used as a maternity colony.

It is assumed that all trees with PRFs also have the potential to support hibernating bats over the winter period, particularly those assessed as having moderate to high roost suitability during the summertime (Middleton, 2019).

2.4 AQUATIC WALKOVER SURVEY

An aquatic habitat survey was carried out on tributaries of Allt an t-Sean-achaidh and Eas nam Meirleach watercourses in order to identify suitable spawning and nursery salmonid habitat and to scope for the requirement for further assessment or data collection.

This survey included an assessment of water depth; channel, bank and bed widths; flow, substrate composition; and bank[10] characteristics of watercourses within the Study Area that would be impacted by the Proposed Development. The vegetation structures present, along with percentage canopy cover and percentage fish cover, were also recorded to assess overall habitat suitability for fish. The SFCC survey methodology was supplemented by additional sources of guidance on habitat suitability for salmonids (Hendry and Cragg-Hine, 1997).

In addition, an assessment of habitat suitability for other protected and notable aquatic species was made based on standard sources of guidance on habitat suitability assessment for key faunal groups including FWPM (Skinner at al., 2003), European eel *Anguilla anguilla* (Tesch, 2007), and aquatic macroinvertebrates (Drake *et al*., 2007; Kirby, 2001). This was supplemented by professional experience and judgement, through observing the habitat types present in the watercourse.

Note this survey only pertains to the aquatic walkover survey for the Wind Farm Protected Species Study Area itself, the access track is included within **Appendix 10.4.**

2.5 OTTER

An otter survey was undertaken in 2022 and updated in 2024 along the banks of the watercourses within the outlined Wind Farm Protected Species Study Area and the Access Track Protected Species Study Area (200m upstream and downstream of watercourse crossings). The survey followed best practice guidelines (Chanin, 2003a and b and NatureScot, 2020c). The surveys involved conducting a thorough visual inspection of the banks and immediate vicinity for otters or their field signs. Otter field signs can include:

- Resting sites - including temporary and permanent sites;
- Prints - characteristic footprints often observed in soft ground and muddy areas;
- Spraints - otter faeces that may be used to mark territories, often observed on in-stream boulders. They can be present within or outside the entrances of holts and couches. Spraints have a characteristic smell and often contain fish remains. Features with two or more spraints of mixed age are considered to be spraint sites, with signs of regular use;
- Anal jelly - like spraint often observed on prominent in-stream boulders;
- Feeding signs - remains of prey items may be found at preferred feeding stations. Remains of fish, crabs, or skinned amphibians can indicate the presence of otter;
- Paths - terrestrial routes that otters can take when moving between resting sites and watercourses, or at high flow conditions when they will travel along bank sides in preference to swimming; and
- Slides and play areas - typically worn areas on steep slopes where otters slide on their front, often found between holts/couches and watercourses. Play areas are used by juvenile otters and are often evident by trampled vegetation and the presence of slides. These are often in sheltered areas adjacent to natal holt.

[10] left-hand bank (LHB) and right-hand bank (RHB) determined when facing downstream

Terminology used for resting sites is as follows:

- Resting site - collective term for holts and couches;
- Potential resting site - a site considered to provide suitable resting habitat together with inconclusive signs of use or potential use;
- Holt - an underground, resting site, often underneath heather root matrices or within tree roots;
- Couch - an above-ground resting site that can be used for sleeping or grooming;
- Breeding site - a term used to identify an area of land in which otters breed, within which a natal holt (see below) is located;
- Natal holt - a discrete holt that is used by the female to birth the cubs and where they can remain for up to three months; and
- Nursery area - an area within a breeding site with high levels of activity associated with cubs. Holts within these areas are considered unlikely to be the primary natal holts where cubs are born.

2.6 PINE MARTEN

A pine marten survey was completed taking into account industry standard guidance (O'Mahony et al., 2005 and NatureScot, 2020d). This comprised a search for signs within the 250m buffer of the Wind Farm Protected Species Study Area and Access Track Protected Species Study Area where suitable habitat prevailed. This search involved looking for the following field signs:

- Den sites: such as elevated tree cavities, roof voids of buildings or barns, owl boxes, large raptor or corvid nests, squirrel dreys, root plates of fallen trees and rocky outcrops with elevated crevices. In the absence of elevated den sites, a large diversity of den sites will be utilised. Current use may be indicated by the presence of scats beneath the entrance.
- Scats: highly variable size and shape depending on their contents. Typically found on pathways, rides and tracks through woodland or rocky habitat; and
- Prints: more likely to be present in snow as pine marten generally avoid mud.

2.7 RED SQUIRREL

A red squirrel survey was completed taking into account industry standard guidance (Gurnell et al., 2009 and NatureScot, 2020e). This comprised a systematic search of the woodland for field signs within the 50m buffer of the Wind Farm Protected Species Study Area and Access Track Protected Species Study Area. In addition to noting any visual observations of individual red squirrels, the following were recorded, where seen:

- Prints;
- Foraging signs, including chewed or stripped cones with top section remaining untouched, which are often discarded on prominent features at feeding stations; and Dreys: nest sites within trees (can be conifer or broadleaf species) and comprising of spherical collections (c. 0.3m) of twigs and leaves and usually located at least 3m up, in the fork of branches closes to the trunk. Incidental sightings of grey squirrel *Sciurus carolinensis* (if present) were recorded.

2.8 GREAT CRESTED NEWT

Waterbodies within 500m of the Site boundary were assessed for their potential to support GCN, with a HSI being calculated for waterbodies of a certain size (ARG 2010, derived from Oldham *et al*., 2000), this was undertaken in October 2022 (The HSI survey was not updated as part of the 2024

update surveys, as it was considered that the 2022 result remained valid). The HSI is a measure of habitat suitability for GCN. Ten key habitat criteria are assessed for the calculation: Geographic location (SI1), pond area (SI2), pond permanence (SI3), water quality (SI4), pond shading (SI5), number of waterfowl (SI6), occurrence of fish (SI7), pond density (SI8), terrestrial habitat quality (SI9) and macrophyte content (SI10). Each habitat criterion is assigned a value between 0 (highly unsuitable) and 1 (highly suitable). The geometric mean of these values provides an overall suitability score for the waterbody using the following equation:

HSI = (SI1 x SI2 x SI3 x SI4 x SI5 x SI6 x SI7 x SI8 x SI9 x SI10) 1/10

This score is then used to categorise a waterbody's suitability for use by GCN as shown below:

- < 0.5 = Poor;
- 0.5–0.59 = Below Average;
- 0.6–0.69 = Average;
- 0.7–0.79 = Good; and
- >0.8 = Excellent.

The Site is located in Category C in terms of geographic suitability in line with ARG (2010), (derived from Oldham *et al*., 2000) and O'Brien *et al*. (2017) which has been updated in relation to geographic suitability zones within Scotland.

2.9 WATER VOLE

A water vole survey was undertaken within the Wind Farm Protected Species Study Area and the Access Track Protected Species Study Area, within 100m upstream and downstream of watercourse crossings, following industry-standard methodology (Dean *et al*. 2016 and NatureScot, 2020b). The survey involved walking the applicable lengths of the watercourse to conduct a thorough visual inspection of the banks and immediate vicinity for water voles or their field signs. Water vole field signs include the following:

- Faeces - recognisable by their size, shape and content. If not too dried-out, these are also distinguishable from rat droppings by their colour;
- Latrines - faeces deposited at discrete location such as dead driftwood, raised banks, or at the entrance of burrows or along runways;
- Feeding stations - food items are often brought to feeding stations along pathways and hauled onto platforms. Recognisable as neat piles of vegetation, chewed at a 45-degree angle and up to 10 centimetre (cm) long;
- Burrows - appear as a series of holes along the water's edge, distinguishable from rat burrows by size and position;
- Lawns - may appear grazed areas around land holes;
- Nests - where the water table is high above ground, woven nests may be found;
- Footprints - tracks may occur at the water's edge and lead into bankside vegetation. May be distinguishable from rat footprints by size; and,
- Runways in vegetation: low tunnels pushed through vegetation near the water's edge; these are less obvious than brown rat runs.

Additionally, any field signs or evidence relating to other relevant wildlife that may preclude the presence of water vole (for example American mink *Neovison vison* or brown rat *Rattus norvegicus*) was recorded.

2.10 OTHER PRIORITY AND PROTECTED SPECIES

During the protected species survey, any incidental records of protected or priority species were recorded as well as any habitat to support such species.

2.11 LIMITATIONS

Every effort has been made to provide a comprehensive description of the Site; however, the following specific limitations apply to this assessment:

- The coniferous plantation woodland surrounding the Site was not subject to survey due to access constraints and so was assessed from the perimeter for its suitability to support protected species.
- The survey undertaken in October 2022, was outside of the optimal survey window for water vole, however the update surveys in May 2024 was conducted within the survey window, and as such it is considered that the results provide an accurate assessment of suitability with respect to the species. Faunal species are transient and can move between favoured habitats regularly throughout and between years. This survey provides recommendations on the snapshot of field signs and habitat suitability observed during the survey.
- Survey data is typically valid for 18 months unless otherwise specified, for example, if conditions are likely to change more quickly due to ecological processes or anticipated changes in management (CIEEM, 2019).

3

RESULTS

PUBLIC

3 RESULTS

3.1 DESK STUDY

The results provided for the desk study are not 10 digit grid references and so are not accurate to 1m by 1m area or an exact pin point location. Therefore, the distances are not accurate to location but an approximation. The grid references provided by FLS were eight digit and so are a 10m by 10m area. The results provided by the butterfly conservation were six digit grid references and so are 100m by 100m area.

The results of the desk study are summarised below in **Table 3-1**.

Table 3-1 – Legally Protected and Priority Species within 2km of the Site

Species	Number of records	Date	Approximate distance and direction of closest record from the Site
Mammals			
Badger	3	2000 - 2022	1.6km south
Pine marten	1	2022	3.3km east
Red squirrel	1	2022	2.2km south-east
Squirrel sp.	1	2023	2.1km south
Amphibians			
Common toad *Bufo bufo*	2	2018-2022	-
Common frog *Rana temporaria*	1	2018	-
Terrestrial Invertebrates			
Chequered Skipper *Carterocephalus palaemon*	10	N/A	1.7km north
Forester *Adscita statices*	2	2014	3.8km north-east
Marsh Fritillary *Euphydryas aurinia*	8	N/A	3.7km north-east[11]
Rannoch Brindled Beauty *Lycia lapponaria*	1	2014	0.7km north

[11] It is noted that known populations of this species have been recorded in Clais Dhearg SSSI located immediately to the north of the Proposed Development, and Airds Park and Coille Nathais SSSI which at the closest point, is located C.170m west of the main access track.

Species	Number of records	Date	Approximate distance and direction of closest record from the Site
Small Pearl-bordered Fritillary *Boloria selene*	5	N/A	1.8km south
Transparent Burnet *Zygaena purpuralis*	54	2017 - 2023	1.5km south
Wood Ant *Formica rufa*	31	2022	2.6km west

3.2 FIELD SURVEYS

The Site predominantly comprised of degraded blanket bog and wet heathland. The Study Area contained pockets of largely immature upland birchwood and mixed woodland and was surrounded to the west, south and east beyond the Study Area by coniferous plantation woodland. A single water body and several watercourses are present within the Study Area. The watercourses lead to Allt an t-Sean-achaidh and Eas nam Meirleach beyond the Study Area.

The results of the protected species survey are detailed below and shown on **Figure 10.2.1 (Annex A)** and Target Notes (TN) are detailed in **Annex D**.

BADGER

No evidence of badger was recorded within the Study Area. The surrounding woodland and heathland provide suitable habitat for sett creation and badger could forage and commute throughout the area.

BATS

PRA (2022) / DBW (2024)

Nine trees were identified within the Study Area with PRFs suitable for roosting bats (TN07, 08, 09, 17, 18, 19, 27, 37 and 44). The trees have features including knot holes and hollow cavities that could provide roosting features for bats. Additionally, linear habitats including the water courses and woodland edges provide suitable foraging and commuting habitat for bats throughout the Study Area.

Aerial tree climb

Of the above nine trees, three trees: TN08, TN09 and TN17 were located within the Study Area and were therefore inspected further via a climbed assessment in August 2024. No bats or evidence of bats was recorded for any of the trees. These surveys concluded that in trees TN08 and TN09 PRFs were recorded with the potential to support a low number of bats on an ad-hoc basis only; TN17 did not have features suitable to support roosting bats It was also noted that TN09 could support nesting birds.

A summary of the findings is provided in Table 3-2 below.

Table 3-2 – Aerial Tree Survey Results

Tree reference	Features	Suitability
TN08	A hazard beam which is sitting almost vertically in the crown on the western side at about 7m AGL There are small cavities as the feature extends in either direction into the limb,	PRF-1. Suitable to support a single bat at most on an ad-hoc basis.
TN09	5.5m tear out on northside with a dry cavity extending north within the limb for about 30cm. The space is narrow. The cavity has a clear view towards the field.	PRF-1. Suitable for use as a roost for one or two bats only.
TN17	Tear out at 5m and a large basal cavity at ground level. No PRF at the tear out.	PRF-Neg. The cavity is large but has an opening at the top and would be fully accessible by predators (squirrel, pine martin etc.).

AQUATIC WALKOVER SURVEY

The watercourses that drained the north-eastern and central parts of the Site were small upland headwaters that had limited salmonid and overall fish habitat. The upper extents of these headwaters were characterised by overgrown bankside vegetation, poor connectivity/substrate heterogeneity and a lack of channel structure (TN01, 05 and 06). Small areas of localised habitat suitability were observed within the Site, however, the continuity of available habitat as well as accessibility for fish was restricted due to the above factors. Outwith the Site, the headwaters draining the Site converged downstream to form larger burns, namely Allt an t-Sean-achaidh and Eas nam Meirleach.

Suitable substrate and flow types for juvenile salmonids were observed at c.200m downstream of the Site in areas of the Eas nam Merileach burn (TN02), see **Figure 10.2.1 Annex A** for location of the watercourse. These watercourses were mainly characterised by run and riffle flow types, a mixture of cobble and pebble substrates and good fish cover provided by undercut banks and draped bankside vegetation. Suitable juvenile salmonid habitat was present consistently within these reaches owing to the above characteristics.

Overall suitability for FWPM throughout the Site was poor due to several factors, including poor connectivity, and a lack of suitable substrate and flow conditions.

OTTER

Two otter spraints were recorded, one under a bridge (TN38) and another adjacent to the proposed access track (TN45). Suitable resting features were also identified along the water courses (TN7) and to the west of the Site and given the connectivity to the wider area through the Allt an t-Sean-achaidh and Eas nam Meirleach, the habitat is suitable for resting sites, foraging and commuting by otter.

RED SQUIRREL AND PINE MARTEN

One red squirrel was observed (TN34) and one possible drey (TN36) were recorded during the survey. The woodland within and surrounding the Site provides suitable foraging and commuting habitat for red squirrel and pine marten. Mature trees within the coniferous plantation provides suitable habitat for constructing squirrel dreys and any woodland and rock outcrops throughout the area provide suitable denning opportunities for pine marten. Pine marten could also forage amongst the bog and heathland habitats (for species such as field vole *Microtus agrestis*).

WATER VOLE

The survey undertaken in October 2022, was outside of the optimal surveys window for water vole, however the update surveys in May 2022 was conducted within the survey window. The watercourses within the Study Area had a slow-moderate flow suitable for water vole as well as suitable banks for burrowing and plentiful foraging opportunities throughout. Overall, the Study Area has suitable habitat to support water vole, although no evidence of the species was recorded.

GREAT CRESTED NEWT

The results of the GCN HSI assessment, carried out on the two ponds within 500m of the Site, is shown below in **Table 3-3**.

Table 3-3 – Habitat Suitability Index Results

HSI Criteria	Pond 1	Pond 2 (Lochan na Creige Deirge)
Geographic Location (Grid Reference)	C (NM 94799 30211)	C (NM 94327 30768)
Area (m^2)	1500	3700[12]
Permanence (Never dries, Rarely dries, Sometimes dries, Dries annually)	Never dries	Never dries
Water Quality (Good, Moderate, Bad, Poor)	Moderate	Moderate
Shade	0	0
Waterfowl (Absent, Minor, Major)	Minor	Minor

[12] Criteria omitted for Pond 2 due to size exceeding 2000 m^2

HSI Criteria	Pond 1	Pond 2 (Lochan na Creige Deirge)
Fish (Absent, Possible, Minor, Major)	Possible	Possible
Pond Count	1	1
Terrestrial Habitat (Good, Moderate, Bad, Poor)	Good	Good
Macrophytes (%)	10	10
Overall Score	**0.48**	**0.49**
GCN Habitat Suitability	**Poor**	**Poor**

OTHER PROTECTED AND PRIORITY SPECIES

The wetland habitats present within the Study Area could support amphibians including common frog *Rana temporaria* and common toad *Bufo bufo*. Similarly, the waterbody could be used for breeding by amphibians.

The heathland, degraded bog and woodland rides/edge as well as stone tracks and rock outcrop for basking provides suitable habitat for reptiles including common lizard *Zootoca vivipara*, slow worm *Anguis fragilis* and adder *Vipera berus*. Deforested woodland brash piles and tussocks present within the degraded blanket bog and heathland provides hibernacula for reptiles.

Wildcat could utilise the woodland edges within the Site and wider Study Area and are known to occur in a mosaic of habitats including woodland, scrub, rough grassland and moorland. Additionally, wildcat could forage throughout these habitats within the Site for foods such as field vole.

Two scats were noted possibly belonging to mustelid (TN15 & 16) however, species could not be established.

The habitat recorded within the Study Area could be suitable for brown hare *Lepus europaeus* and mountain hare *Lepus timidus*. However, is unlikely to support hedgehog *Erinaceus europaeus* due to its upland nature.

Field signs of wood ants *Formica rufa* were present in the form of 10 nests (TN11, 12, 13, 39, 40, 41, 42, and 43) and many individuals identified (TN20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, and 35).

Caledonian Conservation Ltd conducted identification surveys of wood ant nests from a previously considered access track (Caledonian Conservation Ltd, 2023). In this survey they identified both Scottish wood ants and hairy wood ants. However, they also noted any wood ant nest may host the shining guest ant, which is a SBL species. This species is extremely difficult to detect, and any wood ant nest should be considered to potentially support the shining guest ant.

4

CONCLUSION

PUBLIC

4 CONCLUSION

The survey data in this report is considered valid for up to 18 months (CIEEM, 2019). Should construction of the Proposed Development not commence before December 2025, it is recommended that an update to the surveys described in this report is undertaken, as per the methods section of this report, to ensure there has been no significant change to the ecological baseline.

REFERENCES

ARG UK (2010) Amphibian and Reptile Groups of the United Kingdom, ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index. Available online at: https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file (accessed July 2024).

Argyll and Bute Council (2010) The Argyll and Bute Local Biodiversity Action Plan 2010 – 2015. Available online: https://www.argyll-bute.gov.uk/sites/default/files/planning-and-environment/AandB%20BAP%20Draft.pdf (accessed July 2024).

Argyll and Bute Council (2015) Local Development Plan. Available online: https://www.argyll-bute.gov.uk/ldp (accessed July 2024).

Argyll Fisheries Trust (2024). Cruach Clenamacrie Wind Farm, Argyll 2024.

Caledonian Conservation Ltd. (2023) WSP Cruach Wood Ants.

Chanin, P. R. F. (2003a) Ecology of the European otter Lutra lutra. Conserving Natura 2000 Rivers Conservation Ecology Series No. 10, English Nature, Peterborough.

Chanin, P. (2003b) Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.

CIEEM (2019) Advice note on the Lifespan of Ecological Reports and Surveys. Available online: https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf (accessed July 2024).

CIEEM (2021) Competency Framework. Available online: https://cieem.net/wp-content/uploads/2022/01/Competency-Framework-2022-Web.pdf (accessed July 2024).

CIRIA (2015) Environmental good practice on site (Fourth edition) (C741) Charles, P., Edwards, P (eds). CIRIA, London.

Collins J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

Collins J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). Eds Fiona Matthews and Paul Chanin. The Mammal Society, London.

Drake CM, Lott DA, Alexander KNA & Webb J (2007) Surveying terrestrial and freshwater invertebrates for conservation evaluation. Natural England Research Report NERR005. Natural England, Peterborough.

Gurnell, J., Lurz, P., McDonald, R. and Pepper, H. (2009) Practical Techniques for Surveying and Monitoring Squirrels. Practice Note. Forestry Commission, Edinburgh.

Hendry, K., & Cragg-Hine, D. (1997) Restoration of Riverine Salmon Habitats: A Guidance Manual. R&D Technical Report W44. Environment Agency, Bristol.

Kirby, P. (2001) Habitat Management for Invertebrates: A Practical Handbook. RSPB, Sandy.

Middleton, N. (2019) Assessing Sites for Hibernation Potential. A Practical Approach, including a Proposed Method & Supporting Notes.

NatureScot (2020a) Standing advice for planning consultations – Badgers. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-badgers (Accessed July 2024)

NatureScot (2020b) Standing advice for planning consultations – Bats. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-bats (Accessed July 2024)

NatureScot (2020c) Standing advice for planning consultations – Otters. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-otters (Accessed July 2024)

NatureScot (2020d) Standing advice for planning consultations – Pine Martens. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-pine-martens (Accessed July 2024)

NatureScot (2020e) Standing advice for planning consultations – Red Squirrels. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-red-squirrels (Accessed July 2024)

NatureScot (2020f) Standing advice for planning consultations – Water Voles. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-water-voles (Accessed July 2024)

O'Brien et al., (2017) Testing the validity of a commonly-used habitat suitability index at the edge of a species' range: great crested newt Triturus cristatus in Scotland. Amphibia-Reptilia 38, 265-273.

O'Mahony, D., O'Reilly, C. and Turner, P. (2005) National Pine Marten Survey of Ireland 2005. Available online at: https://pinemarten.ie/wp-content/uploads/2018/11/2005-National-Pine-Marten-Survey-Ireland.pdf (Accessed July 2024)

NetRegs (2022) Guidance for Pollution Prevention (GPPs) - Full list. Available online: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/ (accessed July 2024).

Scottish Badgers (2018) Surveying for Badgers. Good Practice Guidelines. Available Online at: https://www.scottishbadgers.org.uk/wp-content/uploads/2020/12/Surveying-for-Badgers-Good-Practice-Guidelines_V1-2020-2455979.pdf (Accessed July 2024)

Scottish Government (2004) Scotland's biodiversity: it's in your hands. Available online: https://www.gov.scot/binaries/content/documents/govscot/publications/corporate-report/2018/09/scotlands-biodiversity---its-in-your-hands/documents/scotlands-biodiversity---its-in-your-hands/scotlands-biodiversity---its-in-your-hands/govscot%3Adocument/Scotland%2527s%2BBiodiversity%2BStrategy%2B-%2BSeptember%2B2004.pdf?forceDownload=true (accessed July 2024).

Scottish Government (2012) Code of Practice on Non-Native Species. Available online: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2012/08/non-native-species-code-practice/documents/00398608-pdf/00398608-pdf/govscot%3Adocument/00398608.pdf (accessed July 2024).

Scottish Government (2013) 2020 Challenge for Scotland's Biodiversity. Available online: https://www.gov.scot/publications/2020-challenge-scotlands-biodiversity-strategy-conservation-enhancement-biodiversity-scotland/ (accessed July 2024).

Skinner, A., Young, M. and Hastie, L. (2003) Ecology of the Freshwater Pearl Mussel. Conserving Natura 2000 Rivers Ecology Series No. 2 English Nature, Peterborough.

Tesch, F.W. (2007) The Eel: Third Edition. Blackwell Science, Oxford.

Annex A

FIGURES

Public

FIGURE 10.2.1 – PROTECTED SPECIES SURVEY RESULTS

Annex B

PROTECTED SPECIES LEGISLATION

Public

PROTECTED SPECIES LEGISLATION

BADGER

Both badgers and their setts are protected under the Protection of Badgers Act 1992 as amended by the Wildlife and Natural Environment (Scotland) Act 2011.

Offences under the Act include:

- Wilfully taking, injuring or killing a badger;
- Cruelty to a badger;
- Intentional or reckless interference with a badger sett;
- Sale or possession of a badger; and
- Marking or ringing of a badger.

Interfering with a badger sett includes:

- Damaging or destroying a sett or any part of it;
- Obstructing access to a sett;
- Disturbing a badger while it is in a sett; and
- Causing or allowing a dog to enter a badger sett.

The 1992 Act defines a badger sett as "*any structure or place which displays signs indicating current use by a badger*". There is no case law to clarify what signs of current use means, however NatureScot considers the presence of "*field signs such as bedding, fresh spoil heaps, signs of recent digging, hair, latrines, or footprints in or around the potential sett or evidence of badgers entering or exiting the structure or place in question*" as indication of current use (NatureScot, 2020h).

BATS

All bat species found in Scotland are classed as EPS and receive full protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

For any wild bat species, it is an offence to deliberately or recklessly:

- Capture, injure or kill a bat;
- Harass a bat or group of bats;
- Disturb a bat in a roost (any structure or place it uses for shelter or protection);
- Disturb a bat while it is rearing or otherwise caring for its young;
- Obstruct access to a bat roost or otherwise deny an animal use of a roost;
- Disturb a bat in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- Disturb a bat in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young; and
- Disturb a bat while it is migrating or hibernating.

It's also an offence to:

- Damage or destroy a breeding site or resting place of such an animal (whether or not deliberately or recklessly); and

- Keep, transport, sell or exchange, or offer for sale or exchange any wild bat (or any part or derivative of one) obtained after 10 June 1994.

FISH

Species listed in Schedule 3 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) include river lamprey *Lampetra fluviatilis*, Atlantic salmon *Salmo salar* (protected in freshwater only), allis shad *Alosa alosa*, twaite shad *Alosa fallax*, vendace *Coregonus albula* and powan *Coregonus lavaretus*. For Schedule 3 species, it is an offence to use certain methods to catch or take fish in freshwater.

FRESHWATER PEARL MUSSEL

FWPM is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a wild animal;
- Damage, destroy or obstruct access to any structure or place which such an animal uses for shelter or protection; and
- Disturb such an animal when it is occupying a structure or place for shelter or protection.
- It is also an offence to:
- Possess or control a living or dead FWPM; and
- Sell, offer for sale, or possess or transport for the purpose of sale any living or dead FWPM (or any such derivatives).

Knowingly causing or permitting any of the above acts to be carried out is also an offence.

OTTER

As European Protected Species (EPS), otter are fully protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

It is an offence to deliberately or recklessly:

- Capture, injure or kill an otter;
- Harass an otter or group of otters;
- Disturb an otter in a holt or any other structure or place it uses for shelter or protection;
- Disturb an otter while it is rearing or otherwise caring for its young;
- Obstruct access to a holt or other structure or place otters use for shelter or protection, or otherwise deny the animal use of that 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 or not deliberately or recklessly); and
- Keep, transport, sell or exchange, or offer for sale or exchange any wild otter (or any part or derivative of one) obtained after 10 June 1994

Otter shelters are legally protected whether or not an otter is present.

PINE MARTEN

Pine marten receives full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Certain methods of killing or taking pine martens are illegal under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a pine marten;
- Damage, destroy or obstruct access to a nest or den – i.e. any structure or place which such an animal uses for shelter or protection; and
- Disturb such an animal when it is occupying a nest or den for shelter or protection (except when this is inside a dwelling house).

Possession, sale and transport offences are ones of strict liability (they don't require intention or recklessness). It is an offence to:

- Possess or control, sell, offer for sale or possess or transport for the purpose of sale any living or dead pine marten or any derivative of such an animal

It is also an offence to knowingly cause or permit any of the above acts to be carried out.

RED SQUIRREL

Red squirrels and their dreys (resting places) receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a red squirrel;
- Damage, destroy or obstruct access to a drey or any other structure or place which a red squirrel uses for shelter or protection; and
- Disturb a red squirrel when it is occupying a structure or place for shelter or protection.

This protection does not apply to areas where red squirrels only feed.

It is also an offence to possess or control, sell or offer for sale, or possess or transport for the purpose of sale any living or dead red squirrel or any derivative of such an animal.

Knowingly causing or permitting any of the above acts to be carried out is also an offence.

WATER VOLE

The water vole receives partial protection in Scotland 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 and doesn’t extend to the animal itself. Full protection, to also cover the animal, is proposed.

It is 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 of shelter or protection.

REPTILES AND AMPHIBIANS

Great crested newts (GCN) are EPS and have full protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

It is an offence to deliberately or recklessly:

- Capture, injure or kill a wild animal;
- Disturb an animal while using any structure or place it uses for shelter or protection – e.g. breeding pond, hibernation site;
- Obstruct access to a breeding site or resting place of an animal, or otherwise deny the animal use of that site;
- Disturb an animal in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species; and
- Disturb an animal 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's also an offence to:

- Damage or destroy a breeding site or resting place of any such animal (whether or not deliberately or recklessly); and
- Keep, transport, sell or exchange, or offer for sale or exchange any such animal (or any part or derivative of one) obtained after May 1994.

All other amphibian and reptile species found naturally in Scotland are given limited protection under the Wildlife and Countryside Act 1981 (as amended).

Under the Act, common lizard, slow worm and adder are protected against:

- intentional or reckless killing and injury; and
- trade – i.e. sale, barter, exchange, transport for sale, or advertise for sale or to buy.

Smooth and palmate newts, common frog and common toad are also protected against trade.

WILDCAT

The wildcat is a EPS and is fully protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

The Scottish Wildcat Conservation Action Plan aims to restore viable populations of the species north of the Highland Boundary Fault.

It is an offence to deliberately or recklessly:

- capture, injure, kill or harass a wildcat;
- disturb a wildcat in a den or any other structure or place it uses for shelter or protection;
- disturb a wildcat while it is rearing or otherwise caring for its young;
- obstruct access to a den or other structure or place wildcats use for shelter or protection or otherwise deny the animal use of that place;
- disturb a wildcat in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species; and

- disturb a wildcat 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 or not deliberately or recklessly); and
- keep, transport, sell or exchange, or offer for sale or exchange any wildcat (or any part or derivative of one) obtained after 10 June 1994.

HARES

Brown hares are a quarry species which may be legally controlled during the open season but is protected in the closed season under the Wildlife and Countryside Act 1981 (as amended). The closed season for brown hare is 1 February - 30 September. It is an offence to intentionally or recklessly kill, injure or take a brown hare in its closed season without a licence. It is also an offence to possess or control, sell or offer for sale, or transport for the purpose of sale any living or dead brown hare (or rabbit), or any derivative of such an animal, which has been killed without a legal right to do so.

From Monday 1 March 2021, mountain hare is included on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended), giving them full protection. This means that at any time of the year, anyone who intentionally or recklessly kills, injures or takes mountain hare without a licence will be acting unlawfully. It is also an offence to possess or control, sell or offer for sale, or transport for the purpose of sale any living or dead mountain hare, or any derivative.

The mountain hare is also a species of 'Community interest' listed on Annex V of the Habitats Directive and so has some protection under the Habitats Regulations 1994 (as amended).

Annex C

BAT ROOST FEATURE SUITABILITY

Public

BAT ROOST FEATURE SUITABILITY

Table C-1 - Bat Roost Feature Suitability (taken from best practice guidelines Collins, 2016)

Suitability	Description	
	Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats	Negligible habitat features on site likely to be used by commuting or foraging bats
Low	A structure with one or more potential roost sites that could be used opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis (i.e. unlikely to be suitable for maternity or hibernation roosts). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but not isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A tree or structure with one or more potential roost sites that are obviously suitable for use by large number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Annex D

TARGET NOTES

Public

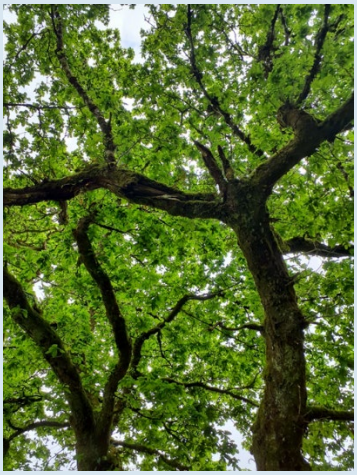
TARGET NOTES

Table D-1 – Target Notes

Target Note (TN)	Grid Reference	Description	Photo
01	NM 94957 30635	The watercourse has limited suitability for fish due to nature of the watercourse being an upland drain.	 
02	NM 94606 30586	Beginning of suitable fish habitat, the confluence point of watercourses that drain the Site.	 
03	NM 94521 30526	Limited suitable fish habitat upstream of confluence point.	 

Target Note (TN)	Grid Reference	Description	Photo
04	NM 94469 30397	The watercourse narrows upstream of woodland area where the habitat suitability for fish is limited.	
05	NM 94616 30551	Upstream of this point has limited habitat suitability for fish as it is overgrown and more characteristic of fen habitat.	
06	NM 93602 30230	Limited fish suitability due to nature of the watercourse being an upland drain.	
07	NM 94612 30568	Overall, the habitat has excellent features for resting places for otter under exposed tree roots.	
08	NM 95116 30680	A semi-mature rowan *Sorbus aucuparia* tree. The tree is twin-stemmed with a tear out feature on one stem which has led to hollowing out. The feature extends up stem and opens into cavity. The tree has been assessed as having **moderate** potential to support roosting bats.	

Target Note (TN)	Grid Reference	Description	Photo
09	NM 94590 30596	Mature silver birch *Betula pendula* with knot hole. The feature cannot be fully inspected and looks to go inwards towards the cambium of the tree. The tree has been assessed as having **low** potential to support roosting bats.	 
10	NM 95050 30270	Semi-mature silver birch with a tear-out hollow cavity. The tree has been assessed as having **moderate** potential to support roosting bats.	
11	NM 97152 32062	Ants nest by road	
12	NM 97160 32016	Ants nest by road	
13	NM 97102 31586	2 ant nests by road	
14	NM 96914 31602	Quarry at end of buffer	
15	NM 97212 30837	Scat possible Mustelid	
16	NM 97323 32314	Scat possible Mustelid	

Target Note (TN)	Grid Reference	Description	Photo
17	NM 97291 32100	Sycamore - tear out cavity decay at 4m west facing	
18	NM 97222 32116	Oak - loose bark on dead lower limb 3m east and PRF at 7m west facing	
19	NM 97179 32123	Oak - hazard beam on north limb at 4m	
20	NM 97162 32110	Wood ants	
21	NM 97163 32112	Wood ants	

Target Note (TN)	Grid Reference	Description	Photo
22	NM 97154 32123	Wood ants	
23	NM 97134 32136	Wood ants	
24	NM 97154 32143	Wood ants	
25	NM 97088 32238	Wood ant	
26	NM 97136 32242	Wood ants	
27	NM 97215 32337	Tear out on north limb down facing at 5m	
28	NM 97168 32114	Wood ants	
29	NM 96911 32087	Wood ants	
30	NM 96944 32045	Wood ants	
31	NM 96953 32071	Wood ants	
32	NM 97065 32110	Wood ants	
33	NM 97140 32063	Wood ants	
34	NM 97071 31876	Red Squirrel observed no obvious drey	

Target Note (TN)	Grid Reference	Description	Photo
35	NM 97088 31807	Wood ants	
36	NM 97137 30127	Possible squirrel drey	
37	NM 96183 30049	4 dead trees by river PRF	  
38	NM 97038 32386	Otter spraint under bridge	
39	NM 67166 32104	Wood ants nest x 2	
40	NM 97137 32175	Wood ants nest	
41	NM 97084 32215	Wood ants nest	
42	NM 97098 32231	Wood ants nest	
43	NM 97108 32243	Wood ants nest	

Target Note (TN)	Grid Reference	Description	Photo
44	NM 94542 30511	Rowan tree multiple PRF	 
45	NM 96897 32117	A wet otter spraint present on the riverbank	
46	NM 96877 32118	Dried spraint on boulder in the centre of the river	

110 Queen Street
Glasgow
G1 3BX

wsp.com

PUBLIC