



Technical Appendix 6.2: Protected Species Report

Dalfad Wind Farm

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Basis of Report

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Table of Contents

Basis of Report	ii
1.0 Introduction	1
1.1 Site Description	1
1.2 Scope of Study	1
1.3 Relevant Legislation and Planning Policy	1
2.0 Methodology	2
2.1 Desk Study	2
2.2 Field Survey	2
2.2.1 Survey Area	3
2.2.2 Survey Approach	3
2.3 Limitations	7
2.3.1 Land Access	7
2.3.2 Field Evidence	7
3.0 Results	8
3.1 Desk Study	8
3.1.1 Designated Sites	8
3.1.2 Online Data Search	8
3.2 Field Survey Results	10
4.0 Summary	12
4.1 Desk Study	12
4.2 Field Survey	12
5.0 References	13
5.1.1 Literature	13
5.1.2 Website	13
5.1.3 Legislation	14

Tables in Text

Table 3-1: Records of Protected / Notable Species within 5 km of the Site, Drawn from Existing Ecological Reports	9
Table 3-2: Protected Species Survey Results Summary	11



Annexes

Annex A	Relevant Legislation	15
Annex B	NBN Atlas Data Providers and Licences	19
Annex C	Field Survey Results.....	21



1.0 Introduction

MacArthur Green (now SLR Consulting Ltd¹) was commissioned by the Applicant to carry out a protected species survey for the proposed Dalfad Wind Farm (the 'Proposed Development'), located within East Ayrshire, Scotland.

1.1 Site Description

The Proposed Development ('the Site') is located approximately 6 km north-east of Cumnock and 28 km east of Ayr, within the East Ayrshire Council (EAC) administrative area (central Ordnance Survey [OS] grid reference NS 62781 21809). The Site is situated in a predominantly rural environment, characterised by agricultural land, forestry and former coal mining sites. The northern part of the Site is located on the former Dalfad Opencast Mine and part of the former Duncanziemere Coal Mine, with the southern part of the Site consisting predominantly of agricultural land. The Dalfad Opencast Mine is a partially restored brownfield site in need of restoration betterment, with the Duncanziemere Opencast Mine in need of further restoration. Both of these former coal mines are EAC priority areas for restoration. Many, but not all, of the opencast areas have been backfilled, with limited ongoing surface restoration being undertaken by the current landowner.

For full details of the Site and Proposed Development please refer to **Chapter 2: Project Description** of the Environmental Impact Assessment Report (EIAR).

1.2 Scope of Study

The objective of this protected species survey was to:

- provide baseline data relating to the presence, or likely presence, of protected or notable² species within the Site and appropriate survey buffers (where land access was permissible); and
- highlight any potential constraints to the Proposed Development and associated proposed infrastructure layout.

This report details methods applied to carry out the survey, the results obtained, and a summary of key findings.

Note, surveys relating to bats and fisheries were carried out separately and are reported on separately within **Technical Appendix 6.3: Bat Survey Report** and **Technical Appendix 6.4: Fish Population and Habitat Assessment**, respectively. Surveys relating to ornithological interests are presented in **Chapter 7: Ornithology** and associated technical appendices.

1.3 Relevant Legislation and Planning Policy

Nature conservation legislation and planning policy of relevance to this report includes:

- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended);
- Wildlife and Countryside Act 1981 (as amended) (WCA);
- The Protection of Badgers Act 1992; and

¹ Following acquisition, MacArthur Green Ltd became part of SLR Consulting Limited on 1 September 2025.

² Notable species relate to those with conservation designations (e.g. Scottish Biodiversity List species, local priority species, or nationally rare/scarce species), that may not receive specific legal protection.



- The Nature Conservation (Scotland) Act 2004 (as amended).

For further details relating to the protection status of protected mammal species, please refer to **Annex A**.

2.0 Methodology

2.1 Desk Study

2.1.1 Designated Sites

Data relating to statutory designated sites (Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs)) notified for non-avian nature conservation purposes within a 5 km radius of the Site were collated through use of the NatureScot Sitelink³ website.

Data relating to non-statutory designated sites (Local Nature Conservation Sites (LNCSs)) were gathered through the Spatial Hub Scotland Website⁴.

2.1.2 Online Data Search

This study consisted of the consultation of various online resources such as the National Biodiversity Network (NBN) Atlas (NBN Atlas Scotland, 2026), NatureScot Sitelink³, Saving Scotland's Red Squirrels (SSRS) (Scottish Squirrels, 2026), and the British Deer Society Deer Distribution Survey (The British Deer Society, 2026).

2.1.3 Existing Ecological Records

Ecological records gathered to inform baseline conditions for the following renewable energy development projects, located within 5 km the Site, were reviewed to provide further information of relevance to the desk study:

- In planning:
 - OnPath Energy (2026). *Glen Water Wind Farm Environmental Impact Assessment Report, Chapter 5 Ecology*; and
 - Wind Estate UK Ltd (2022). *Drum Wind Farm Environmental Impact Assessment Report, Chapter 11 Ecology*.
- Operational:
 - Banks Renewables (2019). *Lethans Wind Farm Environmental Impact Assessment Report, Chapter 6 Ecology*.

2.2 Field Survey

Dedicated surveys to record the presence or likely absence of protected and notable species have been undertaken, with a watching brief for any protected species signs also undertaken during other Site baseline ecology surveys for the Proposed Development.

The signs found can indicate type and intensity of activity and consequently help in the assessment of the importance of a particular area for the protected species. The survey methods used are described below.

³ <https://sitelink.nature.scot/home> [Accessed June 2026]

⁴ Details of Local Nature Conservation Sites in Scotland are available online at:
https://data.spatialhub.scot/dataset/local_nature_conservation_sites-is [Accessed June 2026]



2.2.1 Survey Area

The survey area within which the protected species survey was conducted is shown on **Figure 6.5** of **EIAR Chapter 6: Ecology**. The survey area in some areas extends beyond the Site boundary where land access permissions were in place; this reflects earlier and larger areas of interest which have been refined down during the iterative design process (see **Chapter 3: Design Evolution and Alternatives** of the EIAR). A section near the centre of the survey area was inaccessible and could not be surveyed due to access and health & safety restrictions around an unrestored area of old opencast mine – this area has been mapped and presented on **Figure 6.5** as a No Surveyor Area (NSA).

2.2.2 Survey Approach

2.2.2.1 Badger *Meles meles*

Land with the potential to support badger within the survey area was searched for field signs, with particular attention given to areas around woodland and areas underlain by mineral soils. Field signs of badger are described in Scottish Badgers (2018) and include:

- **setts** - these are underground tunnels where badgers rest. Setts can have large spoil heaps or discarded bedding material at the entrance. Badgers may use setts permanently or temporarily, which can thus be classed as active or inactive.

In most cases, each social group of badgers has more than one sett in its territory, which vary in status and level of use depending on social and environmental factors:

- **Main setts:** typically possess several entrances with large spoil heaps, which look well used. There are usually obvious paths to and from the sett and between entrances.
- **Annexe setts:** are clearly linked to the main sett (or sometimes setts of other rank) by well-worn badger tracks and normally located less than 150 m from the main sett. They may comprise several entrances however these may not be in use all the time.
- **Subsidiary setts:** these are usually at least 50 m from the main sett and do not have an obvious path connecting with another sett. Subsidiary setts support a variable number of entrance holes, normally in the range of three to eight. The frequency of use of subsidiary setts varies greatly, but they are rarely constantly occupied and often in sporadic use.
- **Outlier setts:** usually comprise one or two entrances with little spoil outside and have no obvious paths connecting them to another sett. They are often in sporadic use only but may display periods of highly active use when local seasonal resources are available (for example outlier setts near fruit trees may experience periods of high use during autumn).
- **Other:** In some cases, it can be difficult to assess the status of a sett, and it is open to interpretation. It is therefore recommended that if there is uncertainty as to the type of sett present, setts should be referred to as 'Other'.

Where setts were identified, the level of activity (e.g. well-used, partially used, disused etc) was assessed based on criteria provided in Scottish Badgers (2018).

- **prints:** badgers have characteristic footprints that can be found in soft ground and muddy substrate;
- **latrines and dung pits:** these are small, excavated pits in which droppings are deposited. Latrines are a collection of dung pits used as territorial markers;



- **hairs:** tufts of guard hair can often be found on fences, or in the entrances to setts;
- **feeding signs:** small scrapes, also known as snuffle holes, where badgers have searched for insects and plant tubers. Feeding signs can also include dug up wasp or bee nests and ripped up dung of other species including cattle;
- **scratching posts:** marks on trees (including fallen trees) where badgers have scratched leaving claw marks or ripped at areas of rotten bark to search for food; and
- **paths:** these are routes that badgers take when moving between setts and foraging areas.

2.2.2.2 Otter *Lutra lutra*

The otter survey comprised a walkover of all watercourses, waterbodies, and associated banks, and any other areas of suitable habitat within the survey area (where access permitted).

Otter field signs are described in Sargent and Morris (2003), Bang and Dahlstrøm (2006), and Chanin (2003a & b), and include:

- **holts:** these are typically underground features where otters shelter and rest. They can be tunnels within bank sides, underneath root-plates or boulder piles, and even man-made structures such as disused drains. Holts are used by otters to rest up during the day and may be used as natal or breeding sites. Otters may use holts permanently or temporarily;
- **couches:** these are typically above ground resting-up sites. They may be partially sheltered, or fully exposed. Couches may be regularly used, especially in reed beds and on in-stream islands. They have may also be used as natal and breeding sites. Couches can be very difficult to identify and may consist of an area of flattened grass or earth. Where rocks or rock armour are used as couches, these can be almost impossible to identify without observing the otter *in situ*;
- **resting site** – a collective term for features that otters may utilise for sheltering and resting purposes (encompassing both couches and holts);
- **prints:** otters have characteristic footprints that can be found in soft ground and muddy substrate;
- **spraints:** otter faeces may be used to mark territories, often 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;
- **feeding signs:** the 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:** these are terrestrial routes that otters 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:** slides are typically worn areas on steep slopes where otters slide on their bellies, often found between holts or couches and watercourses. Play areas are used by juvenile otters in play and are often evident by trampled vegetation and the presence of slides. These can be positioned in sheltered areas adjacent to the natal holt.



Features that surveyors considered to represent suitable otter resting sites, but where clear field evidence (such as spraint) were lacking to confirm this, were recorded as a 'potential' resting site (i.e. 'potential couch / holt').

Any of the above signs (apart from paths) are diagnostic of the presence of otter. However, it is often not possible to identify resting sites with confidence unless other field signs are also present. Spraints are the most reliably identifiable evidence of the presence of this species.

2.2.2.3 Water Vole *Arvicola amphibious*

The survey for water vole was carried out in conjunction with the otter survey, through which a walkover of all watercourses and waterbodies within the survey area was completed (where access permitted). Water vole habitat requirements and field signs are described in Strachan *et al.* (2011) and Dean *et al.* (2016). Key field signs include:

- **droppings:** these are recognisable by their size (approximately 8-12 mm long, 4-5 mm diameter), shape (cylindrical with rounded ends) and content (resemble a large tic-tac);
- **latrines:** droppings are often deposited at discrete locations, which are often used as territory markers during the breeding season;
- **feeding stations:** food items are often brought to feeding stations along pathways and hauled onto platforms. These are recognisable as neat piles of chewed vegetation up to 10 cm long with 45 degree cuts at the end. There can be crossover in size with field vole feeding signs, and therefore other signs may be required to provide diagnostic evidence of the presence of water vole;
- **burrows:** these appear as a series of holes along the water's edge; they can be distinguishable from rat or field vole burrows by their size, position and other characteristics;
- **lawns:** may appear as grazed areas around burrows;
- **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 bank side vegetation. Prints are distinguishable from rat and field vole footprints by their characteristics and size; and
- **runways in vegetation:** low tunnels pushed through vegetation near the water's edge; these are less obvious than rat runs and are only diagnostic of water vole in the presence of other signs.

Dean *et al.* (2016) states that water vole droppings are the only field sign that can be used to determine water vole presence reliably on their own. Experience is required to distinguish feeding signs, burrows and footprints of water voles from those of other species. A collection of these field signs found in close proximity can indicate water vole presence.

2.2.2.4 Pine Marten *Martes martes*

Where access allowed, areas of suitable habitat within the survey area (e.g. closed-canopy woodland and/or rocky hillsides) were searched for pine marten field signs. Pine marten field signs are described in Bright and Smithson (1997), O'Mahony *et al.* (2006), Bang & Dahlstrøm (2006) and Balharry *et al.* (2008) and include:

- **scats:** these are typically dark in colour and 4-12 cm long and 0.8-1.8 cm in diameter. They often have a coiled twisted appearance, typical of many mustelid scats. Scats will often contain food remains including fur, feathers, bone, plant content and seeds. Scats vary in size, shape and colour, and establishing a positive identification can be



challenging. Where scat identification is in doubt, DNA analysis may be used to confirm pine marten. Scats are deposited in latrines at well-used dens (e.g. on lids of den boxes), as well as elsewhere in an individual's home range (such as along access tracks or forest rides), where they probably fulfil a social communication role;

- **footprints:** the five-toed but slightly cat-like forefoot imprints measure approximately 40 x 45 mm for females and 55 x 65 mm for males; fur on the underside of feet in winter may blur prints and make them look larger, especially in soft snow. Indistinct trails of bounding martens (stride length 60-100 cm) may resemble those of hares, with prints in groups of two or three where one or both hind feet have registered over prints of forefeet; and
- **den sites:** dens are usually not distinctive unless revealed by visible concentration of scats. Elevated den sites are preferred to keep martens safe from predators and provide insulation and shelter from the elements, and so hollow trees, owl boxes and the roofs of dwelling houses are often used, as well as purpose-built pine marten den boxes. Where such elevated dens are absent, they may den on the ground in rabbit burrows, rocky outcrops or under tree root plate

Any of the above signs are diagnostic evidence of the presence of pine marten; however, it is often not possible to identify den sites with confidence unless other field signs are also present. Scats are the most reliable identifiable evidence of the presence of this species.

2.2.2.5 Red Squirrel *Sciurus vulgaris*

Where access allowed, areas of suitable woodland habitat within the survey area were assessed for squirrel field signs. Squirrel field signs are described in Bang and Dalstrøm (2006) and Gurnell *et al.* (2009) and include:

- **dreys** – these can be found in trees, usually built close to the main stem from 3 m above ground upwards, often much higher. These typically look like a cluster of sticks, 50 cm diameter and 30 cm deep;
- **feeding signs** – squirrels leave distinctive feeding signs in conifer forests, leaving pinecones that have been stripped from the broad end, leaving a small number of pine kernels still intact at the narrow end of the cone; and
- **sightings** - live squirrel observations.

There is no distinguishable difference between the dreys or feeding signs of a red squirrel and a grey squirrel therefore all dreys and feeding signs are counted as potential red squirrel presence unless accompanied by a live sighting.

2.2.2.6 Other Protected and/or Notable Species

Incidental sightings of any other protected or notable species (including reptiles and areas of suitable habitat) were also recorded during the survey.

Any further incidental sightings relating to non-avian protected or notable species that were observed during other survey types within the Site (e.g. ornithology surveys) have also been incorporated into this report.

2.2.2.7 Species Scoped Out

Surveys for beaver *Castor fiber*, wildcat *Felis silvestris* and great crested newt (GCN) *Triturus cristatus* were scoped out due to the absence of suitable habitat, or the Site being located outwith their known range or distribution.



2.3 Limitations

2.3.1 Land Access

2.3.1.1 Opencast Mines

A section of land within the centre of Site could not be directly surveyed due to health and safety access restrictions associated with a historic open mine cast void (displayed on **Figure 6.5** as NSA [No Survey Access]).

2.3.1.2 Active Site Operations

At the time of survey, certain areas of the Site were subject to ongoing operational activities, including the movement and operation of plant machinery, heavy goods vehicles (HGVs), and active land regeneration works. These activities, which included soil spreading and hydroseeding, restricted access to certain areas for health and safety reasons.

2.3.1.3 Land Ownership Restrictions

No land access was available for protected species survey outwith the Site. An exception to this includes an area of land to the west of the Site (**Figure 6.5**), of which reflects an area of development interest at an earlier stage of the design evolution process. Given these land access restrictions, it was not possible to maintain the following survey buffers from the Site boundary in accordance with relevant best practice guidance (these buffers have however been met from proposed infrastructure, where possible):

- badger - 100 m survey buffer from Site boundary in areas of suitable habitat (NatureScot, 2024a).
- otter - 200 m survey buffer up and down-gradient of watercourses that intersect the Site (NatureScot, 2024b).
- water vole - 50 m survey buffer up and down-gradient of watercourses that intersect the Site (NatureScot, 2024c).
- red squirrel – 50 m survey buffer from Site boundary in areas of suitable habitat (NatureScot, 2024d).
- pine marten – 250 m survey buffer from Site boundary in areas of suitable habitat (NatureScot, 2024e).

2.3.1.4 Livestock

The presence of livestock also limited access in some locations, particularly in field systems within the northwest and southern sections of the Site. The areas affected by livestock grazing comprised species-poor improved grassland, which is of generally low ecological value and offered limited opportunities for the protected species surveyed.

Despite the restrictions associated with land access described above, most of the Site (including all areas of proposed wind farm infrastructure) has been covered. The dataset gathered is therefore considered representative of protected species presence, or likely presence, within the Site and sufficient to inform the EIA.

2.3.2 Field Evidence

An ecological study provides only a 'snapshot' of the conditions prevailing at the time of survey. Lack of evidence of any one protected species does not necessarily preclude them from being present within the Site at a later date. Whilst it is considered unlikely that any significant



evidence of protected or otherwise notable mammal species has been overlooked, due to the nature of the subjects of ecological surveys it is feasible that species that use the Site may not have been recorded by virtue of their seasonality, habit or random chance. It is considered unlikely however that additional surveys of the Site at this time would materially alter the conclusions of this report.

3.0 Results

3.1 Desk Study

3.1.1 Designated Sites

There are two statutory designated sites (SAC and SSSI) and 16 non-statutory sites (LNCS) located within 5 km of the Site, for which all are notified for / the key interest features relate to habitats of importance for nature conservation (**Technical Appendix 6.1**). As such, there are no statutory or non-statutory designated sites for which protected mammal species are a notified / qualifying interest feature within the Site or within 5 km of the Site.

3.1.2 Online Data Search

3.1.2.1 NBN Atlas

A search of the NBN Atlas (NBN Atlas Scotland, 2026) for data relating to protected and / or notable mammal species recorded over the past 15 years (i.e. from 2011 onwards), within 5 km of the Site, returned records of the following protected or notable species:

- Adder *Viper berus*;
- common lizard *Zootoca vivipara*;
- palmate newt *Lissotriton helveticus*;
- brown hare *Lepus europaeus*;
- otter; and
- red squirrel.

Records of grey squirrel *Sciurus carolinensis*, an invasive non-native species (INNS) listed on Schedule 9 of the Wildlife and Countryside Act, were also noted within the dataset.

Details regarding licences and data providers for these records are included in **Annex B**.

3.1.2.2 Saving Scotland's Red Squirrels (SSRS)

Sightings of red squirrels have been recorded by SSRS within 5 km of the Site in 2022, 2023, 2024 and 2025 (Scottish Squirrels, 2026). The sightings are predominately based in the nearby town of Cumnock, to the southeast of the Site, with the exception of one observation recorded north of the Site.

Sightings of grey squirrels have been recorded within 5 km of the Site during years 2013-2015 and 2018-2025. Most of these records are also concentrated in Cumnock; however, several observations have also been documented in other directions in the vicinity of the Site.



Red Squirrel Priority Working Areas

The southwest of the Site intersects with a Priority Area for Red Squirrel Conservation (PARC)⁵.

3.1.2.3 Deer Distribution Survey

The Deer Distribution Survey results suggest that the following deer species are likely to be present or have been previously recorded in the wider area of the Site:

- roe deer *Capreolus capreolus*;
- red deer *Cervus elaphus*;
- fallow deer *Dama dama*; and
- sika deer *Cervus nippon*.

3.1.2.4 Existing Ecological Information

Details of existing desk-based records relating to protected and / or notable species, obtained through previous baseline studies within the local area, are summarised in **Table 3-1**.

Table 3-1: Records of Protected / Notable Species within 5 km of the Site, Drawn from Existing Ecological Reports

Species	Existing Ecological Information
Badger	Glen Water Wind Farm No evidence of badger identified during field surveys. Woodland habitats within the search area were considered likely to offer suitability for badger setts, particularly where these include steep slopes and border grassland fields. Drum Wind Farm No signs of badger were identified during field surveys. Habitats on site were considered to have suitability to support badgers. Lethans Wind Farm Evidence of badger, in the form of setts, guard hair, latrines, foraging signs, was identified within the respective survey area.
Otter	Glen Water Wind Farm Otter was found to be active within the general area of the site, and likely to be using the ground to navigate between preferred foraging areas. However, watercourses within the site generally lacked features suitable for resting sites. Drum Wind Farm A single otter spraint was recorded along the Gass Water during surveys. Suitable commuting and foraging habitat were recorded within the survey area. Lethans Wind Farm Otter field signs, in the form of resting sites and spraint, were recorded along watercourses that intersect the survey area.
Water vole	Glen Water Wind Farm No evidence of water vole identified during field surveys. Suitable habitat was considered likely to occur where ditch networks intersperse wetter grassland habitats.

⁵ The Saving Scotland's Red Squirrel (SSRS) Priority Working Areas dataset is available online at: <https://www.arcgis.com/home/item.html?id=5ba6742d74014b79af77d87e3cc02a50#overview>



Species	Existing Ecological Information
	Drum Wind Farm Evidence of water vole was recorded along two watercourses within the survey area (burrows, runs, feeding stations and latrines). Lethans Wind Farm No evidence to indicate the presence of water vole was identified during surveys.
Pine Marten	Glen Water Wind Farm Pine marten scoped out of EIA (assumed no field evidence identified). Drum Wind Farm No field signs of pine marten were recorded within the survey area. The site was however noted to support suitable habitat for pine marten, such as stands of conifer plantation. Lethans Wind Farm No evidence of pine marten recorded during surveys.
Red Squirrel	Glen Water Wind Farm No evidence of badger identified during field surveys. Drum Wind Farm No details pertaining to red squirrel available. Lethans Wind Farm Squirrel dreys were identified in woodland habitat during field surveys.
Reptiles	Glen Water Wind Farm Suitable habitats for all three of common lizard, slow-worm and adder were noted within the site. Incidental records of common lizard were recorded within the survey area. It was considered likely that such reptiles would be present at a low density. Drum Wind Farm No evidence of reptiles was recorded during surveys. Suitable habitat (moorland) was however noted immediately adjacent to the site boundary. Lethans Wind Farm No information relating to reptiles available.
Fish	Glen Water Wind Farm The Site had limited habitats present on watercourses with the potential to support fish populations. However, watercourses to the north and south of the site (Muirfoot Burn, River Nith catchment and Glenmuir Water) are known/likely to support salmonid populations. No data relating to presence/absence and population available. Drum Wind Farm No details pertaining to fish available. Lethans Wind Farm No details pertaining to fish available.

3.2 Field Survey Results

The survey for protected and notable mammals was carried out in August 2025. Weather conditions during the surveys were largely dry and warm with occasional showers. Watercourses were noted to be flowing at normal levels.



The survey results are summarised in **Table 3-2** below, with full detailed results provided within **Annex C**. Survey results are displayed on **Figure 6.5**.

Table 3-2: Protected Species Survey Results Summary

Species	Survey Results Summary	General Habitat Suitability
Badger	No field evidence pertaining to badger was recorded during the survey.	The Site itself is comprised of a mixture of improved and semi-improved grassland, with areas of rush pasture, blanket bog and wet heath also present. Badger may utilise the boundaries of agricultural field systems and watercourse banks as foraging areas and commuting corridors between areas of more suitable habitat. Mixed and coniferous woodland plantation, as well as stands of long-established woodland positioned within, and adjacent to, the Site, may serve as suitable habitat for badger sett creation.
Otter	Three spraints were recorded along a watercourse within the north of the survey area (Gass Water), north-east of Waterfall Weir. The spraints recorded ranged from older to relatively fresh. No otter resting sites (or potential resting sites) were recorded during the survey.	The watercourses within the Site are generally open with little sheltering opportunities, making them more suitable for commuting and foraging for otter. The lack of shelter means that there are limited resting site opportunities.
Water Vole	Two potential water vole burrows were recorded on the banks of Glass Water, within the north of the survey area. The size and location of the burrow entrances would suggest it could be evidence of water vole activity; however, it was not possible to confirm as there were no other distinguishable features or field signs recorded.	Gass Water and Glenmuir Water were considered to provide suitable habitat for water vole, with gently sloping to steep sided channel banks comprised largely of grass and rush vegetation. Boghead Burn, Glenmuir Burn, an unnamed watercourse near Whiteholm and unnamed tributary of Gass Water were noted to be dry during the survey. Due to the seasonally fluctuating nature of these watercourses, they were considered to be unsuitable for supporting populations of water vole.
Pine Marten	No field evidence pertaining to pine marten was recorded during the survey.	The Site supports a mix of plantation woodland and small pockets of ancient woodland which offer suitable habitat for pine marten to shelter and forage.
Red Squirrel	No field evidence pertaining to red squirrel was recorded during the survey.	Stands of coniferous woodland within the centre, and along the eastern periphery of the Site, as well as the stand of long-established woodland that intersects the western boundary of the Site were considered suitable for supporting red squirrel.



4.0 Summary

4.1 Desk Study

The online data search and review of existing ecological information collated from nearby renewable energy developments identified records of adder, common lizard, brown hare, otter and red squirrel within 5 km of the Site.

4.2 Field Survey

The protected and notable species survey conducted in August 2025 found that the generally open, agricultural and formerly industrial nature of the Site generally supports sub-optimal habitat for pine marten and red squirrel. The combination of plantation woodland (Glenmuir and The Drum) and small pockets of long-established woodland close to the peripheries of the Site (near Carbellow and Peat Hill) may however provide shelter and foraging opportunities for such species. No field evidence pertaining to pine marten or red squirrel was identified during the survey.

Habitats considered potentially suitable for supporting badger were identified around the peripheries of the Site, located adjacent to, and within, woodland habitats near Peat Hill, Carbellow and Glenmuir. No field evidence pertaining to badger was however identified during the survey.

Watercourses and riparian habitat within the Site were considered generally suitable for supporting populations of water vole, with the exceptions of those noted to be dry during the survey. While no confirmed evidence of water vole was recorded during the survey, potential burrow entrances were identified in the banks of Gass Water within the north of the Site. As such, potential exists for this species to be present within the Site.

The presence of otter field signs indicates that otters utilise watercourses and riparian features within the Site for commuting and foraging. However, a lack of shelter (trees/ tree roots/ bank features) indicates limited suitability for resting sites.



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Annex A Relevant Legislation



Otter

The otter is a European protected species that receives legal protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations) (as amended in Scotland). As such, 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 den 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 den 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.

It should be noted that otter resting places are legally protected at all times, whether an otter is present or not.

In addition to legal protection provided through the Habitats Regulations, the Nature Conservation (Scotland) Act 2004 places a duty on public bodies to further the conservation of biodiversity in Scotland. Under this Act, Scottish Ministers must designate one or more strategies for biodiversity conservation, as defined within the Scottish Biodiversity Strategy. They are also required publish lists of species of flora and fauna and habitats considered to be of principal importance for biodiversity conservation in Scotland, which have been defined through creation of the Scottish Biodiversity List (SBL). Otter is included within the SBL and is therefore considered to be a species of principle importance for biodiversity conservation in Scotland.

Water Vole

Water vole receive partial protection through its listing on Schedule 5 of The Wildlife and Countryside Act 1981 (as amended). In Scotland, this legal protection is currently restricted only to the water vole places of shelter or protection; it does not extend to the animal itself. 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; or
- Disturb a water vole while it is using any such place of shelter or protection.

Water vole is also defined within the SBL, where it is listed for both conservation action and for avoidance of negative impacts. This species has suffered significant declines in recent decades, mainly due to habitat loss and degradation, population fragmentation and predation by American mink *Neogale vison*.



Badger

Both badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended in Scotland). Under this legislation it is an offence to:

- Wilfully take, injure or kill a badger or inflict cruelty;
- Interfere with a sett (whether intentionally or recklessly), of which includes:
 - Damaging or destroying a sett or any part of it;
 - Obstruct access to a sett;
 - Disturb a badger whilst it is occupying a sett; and
 - Allow a dog to enter a sett.
- Possess, sell or offer for sale a live badger; or
- Marking or ringing of a badger.

Pine Marten

Pine marten receive full protection under Schedule 5 of The Wildlife and Countryside Act 1981 (as amended). In short, it is an offence to intentionally or recklessly:

- Kill, injure or take a pine marten;
- Damage, destroy or obstruct access to any structure or place a pine marten uses for shelter or protection;
- Disturb a pine marten when it is occupying a nest or den for shelter or protection (except when this is inside a dwelling house);
- 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; or
- Knowingly cause or permit any of the above acts to be carried out.

Pine marten is also listed within the SBL and as such is a species of principal importance for biodiversity conservation in Scotland.

Red Squirrel

Red squirrels and their dreys receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended). In short, 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;
- Disturb a red squirrel when it is occupying a structure or place for shelter or protection;
- 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; or
- Knowingly causing or permitting any of the above acts to be carried out.

Red squirrel is also listed within the SBL and as such are a species of principal importance for biodiversity conservation in Scotland.



Reptiles

Under the Wildlife and Countryside Act 1981 (as amended), the three native species of reptile to Scotland (adder, slow worm and common lizard) are protected against:

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

The adder is also listed within the SBL as a species of principal importance for biodiversity conservation in Scotland.



Annex B

NBN Atlas Data Providers and Licences



Table B-1: Data Providers and Licence Details for NBN Atlas Scotland Records Used

Species	Conservation Status	Data Citation	License
Adder	Protected species (Wildlife and Countryside Act 1981)	Amphibian and Reptile Conservation and Biological Records Centre (2026) Records verified via iRecord	CC-BY ⁶
Brown hare	Protected species (Wildlife and Countryside Act 1981)	British Trust for Ornithology (2026)	CC-BY ⁶
Common lizard	Protected species (Wildlife and Countryside Act 1981)	Amphibian and Reptile Conservation and Biological Records Centre (2026) Records verified via iRecord	CC-BY ⁶
Grey squirrel	Invasive non-native species (INNS)	Scottish Wildlife Trust (2026) The Scottish Squirrel Database Occurrence dataset accessed through the NBN Atlas.	CC-BY ⁶
Otter	Protected species (Conservation (Natural Habitats, &c.) Regulations 1994 (as amended))	British Trust for Ornithology (2026) Occurrence dataset accessed through the NBN Atlas	CC-BY ⁶
Red squirrel	Protected species (Wildlife and Countryside Act 1981), Nature Conservation (Scotland) Act 2004)	Scottish Wildlife Trust (2026) The Scottish Squirrel Database. Occurrence dataset accessed through the NBN Atlas	CC-BY ⁶

⁶ Creative Commons with Attribution 4.0 (CC-BY) <https://creativecommons.org/licenses/by/4.0/> [Accessed February 2026].



Annex C Field Survey Results



Table C-1 details the relevant data collected for protected species during surveys for the Proposed Development, sorted by species, then survey date (see also **Figure 6.5**).

Table C-1: Protected Species Survey Results

TN Number	Species	Sign	Easting	Northing	Notes
1	Otter	Spraint	262757	623701	Old/dried up with only bones left. Located on large rock at the rivers edge (Gass Water).
2	Otter	Spraint	262757	623714	Three spraints on a large rock in watercourse (Gass Water) with one looking slightly fresher than the other two.
3	Otter	Spraint	262793	623402	Looks recent, with several older spraints nearby on rock in watercourse (Gass Water).
4	Water vole	Potential burrow	262926	623281	At least two potential entrances in riverbank. Approximately 10 cm in diameter. Unable to get close enough for scale photo/measurement. No other field signs were found nearby. Of a size and location suitable for water vole.
5	Water vole	Habitat Suitability Target Note	263062	624249	Boghead Burn: section in the north-west noted to be completely dry during the survey (e.g. GR NS 63020 24282). The south-east section was however wetter with rush and vegetation cover suitable for water vole (e.g. NS 63222 24155).
6	Water vole	Habitat Suitability Target Note	263085	623116	Gass Water: Steep sided with rush and grass vegetation that is suitable for supporting water vole, particularly in eastern section. Further north-west the watercourse is less suitable due to a lack of vegetation cover.
7	Water vole	Habitat Suitability Target Note	263268	619139	Glenmuir Water: Larger watercourse with banks comprising vegetation suitable for water vole foraging and burrow creation, particularly in narrower and / or more meandering sections.
8	Water vole	Habitat Suitability Target Note	262356	620617	Glenmuir Burn: Channel was dry during the survey, thereby considered unsuitable for water vole.
9	Water vole	Habitat Suitability Target Note	262855	619995	Un-named burn near Whiteholm: Channel was dry during the survey, thereby considered unsuitable for water vole.
10	Water vole	Habitat Suitability Target Note	262927	622820	Un-named tributary of Gass Water: Channel was dry during the survey, therefore considered unsuitable for water vole.





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