

## Appendix 8.3

### Protected Species Survey Report





**SPEN**

**Glenmuckloch to  
Glenglass  
Reinforcement Project  
Appendix 8.3 Protected  
Species Survey Report**

**Final report**  
Prepared by LUC  
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**SPEN**

**Glenmuckloch to Glenglass Reinforcement Project**  
**Appendix 8.3 Protected Species Survey Report**

**Project Number**  
 10191

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# Chapter 1

## Introduction

**1.1** This Technical Appendix details the full methods and results of the protected species surveys undertaken to inform the Environmental Impact Assessment (EIA) of the proposed Glenmuckloch to Glenglass 132 kilovolt (kV) Reinforcement Project ('the GGRP'). The appendix also presents the findings of a desk study undertaken to inform the EIA.

**1.2** This Appendix should read in conjunction with **Chapter 8: Ecology** and **Chapter 9: Ornithology** of the Environmental Impact Assessment (EIA) Report and the following Appendices:

- **Appendix 8.1:** Legislation Context and Desk Study
- **Appendix 8.2:** Habitats and Vegetation Survey Report
- **Appendix 8.4:** Badger Survey Report (Confidential)

**1.3** This Technical Appendix is supported by the following figures which are included in **Appendix A:**

- **Figure 8.3.1:** Ecology Survey Area
- **Figure 8.3.2:** Protected Species Map

### Scope

**1.4** LUC was appointed by SP Energy Networks (SPEN) to complete a suite of ecological surveys, including protected species surveys, to inform the EIA of the proposed GGRP.

**1.5** In December 2019 LUC submitted a Scoping Report<sup>1</sup> (on behalf of the Applicant) as a means of agreeing the full scope of surveys relevant to the EIA.

**1.6** A suite of surveys for the following species were undertaken between August 2019 and September 2022:

- Bats (Preliminary Bat Roost Assessment).
- Otter.
- Pine marten.
- Red squirrel.
- Water vole.

**1.7** Surveys for badger were also completed, however due to the persecution of this species, survey methods, findings and interpretation are reported separately, in **Appendix 8.4: Confidential Badger Survey**.

**1.8** The scoping report also identified the potential requirement for pine marten, reptiles and great crested newt surveys. The phase 1 habitat survey undertaken did not identify suitable habitats for great-crested newts, therefore these were scoped out. The habitats within the Study Area were suitable for reptiles, however the assumption was made that these species were likely to be present within the Study area and that standard mitigation measures could be adopted within the project to safeguard these species, therefore further survey was not required.

**1.9** Ornithology is outwith the scope of this report as this is assessed separately in **Chapter 9: Ornithology** of the Environmental Statement.

**1.10** In addition, phase 1 habitat survey and National Vegetation Classification surveys were also undertaken, the findings of these are provided in **Appendix 8.2**.

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<sup>1</sup> LUC (2019) The Glenmuckloch to Glenglass Reinforcement Project. Environmental Impact Assessment – Scoping Report

## Chapter 2 Method

**2.1** A desk study was undertaken to inform protected species surveys. An account of the method adopted, and findings, is provided in **Appendix 8.1: Legislation Context and Desk Study**, which also sets out the legislative provisions afforded to protected species. As such, the Desk Study is not discussed further in this Technical Appendix.

### Field Survey

**2.2** All protected species surveys were undertaken over a two year period, between August 2019 and September 2022. Surveys were completed during accepted survey seasons, in appropriate weather conditions, and by experienced and, where necessary, licenced field ecologists. All survey data was collected on GIS-enabled field tablets to increase accuracy and facilitate robust interpretation.

**2.3** Surveys sought to identify suitable habitat for, and, where appropriate, direct evidence of, protected species. Suitable habitat was considered to include opportunities to shelter, rest, forage and commute. All surveys followed good practice methods, as described in detail below. Surveys were undertaken within pre-defined Study Areas, as defined by good practice methods.

**2.4** Study Areas are shown **Appendix A, Figure 8.3.1**.

### Bats - Preliminary Bat Roost Assessment

**2.5** A Preliminary Bat Roost Assessment (PBRA) was undertaken in August 2019 based on current good practice methods<sup>2</sup>. The survey aims to identify those features that may support roost features and may subsequently require further targeted survey effort. There were very few structures and trees within the Study Area that required assessments to be undertaken, therefore ground level inspections were conducted on all of these features.

**2.6** The site walkover undertaken by field ecologists identified potentially suitable features and used the criteria set out in **Table 2.1** to determine their BRP category. All potential features were recorded on GIS-enabled field tablets with accompanying feature descriptions.

**Table 2.1: Preliminary Bat Roost Potential Categories**

BRP Category	Roosting Habitat Features	Commuting and Foraging Habitat Features	Survey Requirement
Negligible	Negligible habitat features likely to support roosting, commuting or foraging bats.		No surveys required.
Low	Structures in this category offer one or more potential roost sites for individual, opportunistically roosting bats. These sites do not offer the space, shelter, or appropriate conditions to support large numbers of bats or maternity roosts.  Trees in this category include those of sufficient size and age to support suitable	Habitat on and around the Site could be used by a small number of commuting bats. This category includes densely urbanised landscapes or linear vegetation features poorly connected to the wider landscape (e.g. defunct hedges in an agricultural context).	One dusk or dawn survey required for structures.  No surveys required for trees.

<sup>2</sup> Collins, J. (ed) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition). The Bat Conservation Trust, London. (Online) Available at: <https://www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-3rd-edition> (Accessed 10 October 2022)

BRP Category	Roosting Habitat Features	Commuting and Foraging Habitat Features	Survey Requirement
	roosting features, but none are visible from the ground.		
Moderate	Structures and trees in this category offer one or more roost site that, due to their space, shelter or conditions, offer roosting potential for a range of species. Roosts may be more permanent, rather than opportunistic. Small maternity roosts of common species may form in one of these roost sites.	Habitat on and around the Site is well-connected to wider continuous habitat and offers commuting and foraging habitat to a larger number of bats across a number of species (e.g. tree lines or linked gardens in the urban context, or continuous hedge/tree lines and watercourses in an agricultural setting).	One dusk and one dawn survey required for both structures and trees.  Tree-climbing may be an appropriate alternative to dusk and dawn surveys.
High/ Confirmed	Structures and trees in this category have one or more potential roost sites that are suitable for large number of bats. Roosts are likely to be permanent and include maternity roosts. Potential roost sites exist for a wide range of species or species of particular conservation interest.	Habitat on and around the Site is diverse, continuous and linked to extensive suitable habitat. This category includes well-vegetated rivers, streams, hedgerows and woodland edge.  Habitat is sufficiently diverse to offer opportunities to a wide range of species or those of particular conservation interest.	One dawn and one dusk survey, plus one further dusk or dawn survey.

### Otter

**2.7** An otter survey was undertaken between August 2019 and September 2022 on all watercourses located within the Study Area in accordance with recognised best practice<sup>3</sup>. Ecologists searched for evidence of suitable habitat for, and direct evidence of, otter. Watercourses were categorised into four suitability classifications based on a variety of characteristics including wet width, water depth, suitable foraging resources, suitable resting sites, and connectivity to suitable habitats. Descriptions of suitability categories are provided in **Table 2.2**.

**Table 2.2: Water Course Suitability for Otter**

Suitability	Description
Optimal	Typically larger, main watercourses (at least 1m in wet width). These watercourses contain flow at all times of year (not just in spate) and will support foraging resources (such as amphibians and fish). Rocky banksides or vegetation overhangs will provide suitable resting places, and large boulders will provide ideal sprinting sites.

<sup>3</sup> Scottish Natural Heritage (2016). Protected Species Advice for Developers Otters.[Online]. Available at: <https://www.nature.scot/sites/default/files/2018-09/Species%20Planning%20Advice%20-%20Otter.pdf> (Accessed 10 October 2022)



Suitability	Description
Sub-optimal	Generally a substantial watercourse, greater than 0.5m in width. These watercourses will comprise stone and rock substrate, with occasional boulders. There may be limited resting opportunities, however, vegetation overhangs and occasional rocky crevices may be present.
Suitable	These watercourses may be sporadically used by otter, with connectivity to optimal or sub-optimal watercourses. The watercourses themselves will typically be no wider than 0.5m, with a relatively shallow flow of water. Substrate may comprise stone and earth, and banksides may comprise grassland
Unsuitable	Generally will be a narrow channel, which may contain very little water. The channel may be very densely vegetated with limited suitability to support otter foraging resources.

2.8 Where watercourses were considered suitable to support otter, a detailed survey was undertaken for field signs which included:

- Resting sites;
- Spraint (including age and description: fresh, recent, old);
- Prints, tracks, slides and runs; and
- Feeding remains.

2.9 Where resting sites were recorded, these were assessed for their potential to be used as a breeding or natal site. Resting sites were classified in accordance with descriptions detailed in **Table 2.1**.

Table 2.3: Otter Resting Site Classifications

Resting Site Type	Description
Natal Holt	A discreet holt site that is used by a bitch to birth cubs, where they will normally remain for up to three months, before being moved to a secondary holt. These sites are seldom located during surveys and they are rarely recorded without the aid of camera traps. It is generally accepted that most natal holts will contain bedding material and sprainting activity is minimal whilst occupied.
Holt	A cavity or hole on or adjacent to a watercourse. It may be in the ground, under tree roots, within rocks or caves; where it cannot be readily observed. If a holt is confirmed as active it usually contains field evidence such as spraint.
Hover	A bolt hole or ledge that provides temporary cover or a place to eat prey. It is not fully enclosed, and the back of the feature can normally be observed. There may be spraints, footprints and feeding evidence present.
Couch	An above-ground shelter normally used for lying-up and grooming. They may take the form of a depression in tall vegetation or may be covered in a vegetated grass 'roof'.
Breeding Site	An area of land in which otters breed. The site may be large, and it is usually more important to protect this site than an individual natal holt.

2.10 The assessment of resting site status was determined by the quality of the feature and the ability to provide key requirements for otters. This included cover and seclusion for an individual to sleep or rest, the provision of nursery or breeding habitat (including

potential for natal holt), the supply of critical factors such as feeding resources (ponds, lochs and water features), freshwater for cleaning and drinking, and the provision of suitable seclusion away from disturbance.

2.11 This assessment was subjective and corroborated by the abundance of field evidence located in, or around, the features. Diagnostic evidence (such as spraints, urination "green" spots, spraint mounds, sign heaps, grooming hollows, footprints, paths, and slides) was interpreted to determine the status of the feature.

2.12 Where spraint was recorded, it was allocated an age class in accordance with the following descriptions:

- Fresh:** The spraint is still very moist and pungent, and was likely to have been deposited within the last few hours or days.
- Recent:** The spraint has become decayed but retains consistency and some odour. It is dry and colour is more faded. It is likely to have been deposited within the last week or two.
- Old:** The spraint is desiccated and powdery having lost its shape and most odours. Usually remains are still evident and identifiable, usually by the abundance of fish-bone or scales. It is likely to have been deposited approximately a month ago (sometimes longer).

2.13 All survey evidence was collected and recorded using GIS-enabled field tablets for accuracy. Where appropriate field evidence was photographed for later analysis.

#### Red Squirrel and Pine Marten

2.14 Due to their overlapping habitat requirements, surveys for pine marten and red squirrel were completed in parallel. Surveys were completed between August 2019 and September 2022 in line with good practice methods.<sup>4, 5, 6</sup>

2.15 During the survey, competent field ecologists walked the Study Area, noting all habitat with potential to support each species. This extended to mature coniferous and mixed woodlands/forests and treelines. Within suitable habitat, direct evidence of each species was searched for. In small features, a complete search was made. In larger areas, such as extensive forest coups, transect walks were undertaken. Transects generally followed defined wayleaves, firebreaks and access tracks. Field signs searched for are listed in **Table 2.4**:

Table 2.4: Pine Marten and Red Squirrel Field Signs

Field Signs	Pine Marten	Red Squirrel
	Scat (including age classification)	Foraged cones (diagnostic)
	Dens	Dreys (non-diagnostic)
	Tracks and prints	Tracks and prints

#### Water Vole

2.16 Surveys for suitable habitat for, and direct evidence of, water vole undertaken in August 2019 and September 2022, following good practice survey methods.<sup>7</sup> Surveys were completed by competent field ecologists and all suitable watercourses and waterbodies within the Study Area were visited.

2.17 Watercourses were classified for their suitability to support water vole depending on a variety of characteristics including bankside composition, substrate, water flow rate and bankside vegetation. Descriptions of watercourse suitability categories are detailed in **Table 2.5** below.

<sup>4</sup> Gurnell, J & Pepper, H (1994). Red Squirrel Conservation: Field Study Methods. Research Information Note 255. Forestry Commission, Edinburgh.[Online]. Available at: <https://www.forestryresearch.gov.uk/documents/666/fcpn011.pdf> [Accessed 10 October 2022].

<sup>5</sup> NatureScot (n.d.). Protected Species Advice for Developers: Red Squirrel [Online]. Available at: <https://www.nature.scot/sites/default/files/2018-09/Species%20Planning%20Advice%20-%20red%20squirrel.pdf> [Accessed 10 October 2022].

<sup>6</sup> The Mammal Society (2012). UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation.

<sup>7</sup> Strachan, R. & Moorhouse, T. (2006). Water Vole Conservation Handbook 2nd Edition. Wildlife Conservation Research Unit, University of Oxford, Oxford.

Table 2.5: Water Course Suitability for Water Voles

Suitability	Description
Optimal	These watercourses will typically have a very slow flow rate and will comprise peaty bankside and substrate. Banksides will also comprise tussocky vegetation, including rushes (a common food source of water vole). The watercourses will generally be deep to enable predatory escape.
Sub-Optimal	Typically, these watercourses will have a relatively slow flow rate. Banksides may be peaty but may not be very steep, therefore not allowing burrows to account for varying water levels. Rushes will be present, providing foraging resource.
Suitable	Banksides may comprise earth allowing for some burrowing. Herbaceous vegetation will generally be lacking, and invertebrates, amphibians and fish will be sparse. Flow rate will be slow to moderate; however, watercourse may comprise rocky substrate.
Unsuitable	Watercourses will comprise rock and stone substrate and banksides. The flow rate will be moderate or fast flowing and rushes will be absent from bankside vegetation

**2.18** Where watercourses were considered suitable, these were surveyed with the aim of identifying and recording presence of water vole. Ecologists searched for evidence of suitable habitat for, and direct evidence of water voles as follows:

- Burrows and tunnel systems.
- Runs, tracks and slides.
- Latrines (with droppings categorised as fresh, recent, or old).
- Feeding stations and remains.
- Physical sightings.

**2.19** All survey evidence was collected and recorded using GIS-enabled field tablets for accuracy. Where appropriate field evidence was photographed for later analysis.

### Other Observations

**2.20** While surveys for other species were not specifically undertaken, incidental observations of other species were made, particularly where legislation protections were relevant. For example, ad-hoc sightings of reptiles, and amphibians were noted on GIS-enabled field tablets.

### Constraints and Limitations

**2.21** All ecological surveys represent a snap-shot in time. Habitats and species assemblages are dynamic and change over time in response to a range of variables. Data presented in this report should not be considered a long-term interpretation of ecological data and should not be relied upon as such.

**2.22** All surveys aimed to avoid periods directly following heavy rainfall, particularly for otter and water vole. This was to minimise the risk of surveying areas where evidence had been washed away and to reduce the health and safety risk of these surveys. Whilst weather conditions were generally optimal, occasional rainfall was unavoidable. It is considered unlikely that this rainfall will have caused a significant reduction in evidence being present and therefore is not considered to have had a negative effect on the assessment.

**2.23** All areas of woodland were surveyed for evidence of protected species, where possible. Areas which posed a health and safety risk (such as wind-blown trees or dense plantation) were not surveyed in full. However, a cautious approach was taken; areas were surveyed from a distance and accessed where possible. It is therefore considered unlikely that this will have negatively affected the assessment.

## Chapter 3 Baseline and Discussion

**3.1** Detailed descriptions of protected species activity are provided in the following sections.

**3.2** The habitats within the Study Area are generally broadly similar to those within the wider area. So while the Study Area provides optimal conditions, and low levels of protected species evidence was identified, it should be recognised that a much wider habitat resource is available and that it, too, is likely to support populations of protected species.

**3.3** When considering the data provided below, reference should be made to the following figures which are available at the end of this report:

- **Appendix A, Figure 8.3.1:** Study Area.
- **Appendix A, Figure 8.3.2:** Protected Species Survey Findings.
- **Appendix B:** Photography showing examples of suitable habitats for protected species within the Study Area.

### Preliminary Bat Roost Potential

**3.4** The habitats present within the Study Area provided sub-optimal commuting and foraging resources for bats. A Preliminary Bat Roost Assessment (PBRA) identified that there were very few roosting opportunities within the Study Area for bats, further detail on these is provided in **Table 3.1** and within **Appendix A, Figure 8.3.2**.

**Table 3.1: Bat Roost Potential Survey Results**

Feature and Location	Description	Bat Roost Potential
Building 1	Building is sheet metal clad with brick on lower level. The building appears to be relatively new and is in a good state of repair. Building material appears to be too slippery to allow bats to land on. No visible features.	Negligible
Building 2 (Whiteside windfarm storage room)	Whiteside windfarm storage room is comprised of rough cast walls with an equal pitched roof and is in general state of repair. No visible external feature.	Negligible
Stone Cottage (North of the Study Area)	Stone cottage with double pitched roof in good general state of repair. Many potential entry points within the roof in the form of slipped, cracked or lifted roof tiles, Route has been altered to avoid this feature.	Moderate
Mature Birch Tree (River Nith)	Located on the bank of the River Nith. Tree has a single fissure suitable for roosting bats	Moderate
Small Group of Birch Trees (South of River Nith)	Small group of Birch trees with some small cracks that may be suitable as transitional roosts. Treeline may also be used for commuting.	Low

**3.5** The Study Area supported very limited sheltering resources for bats. Foraging and commuting resources were also sub-optimal. Therefore, while the Study Area may support a bat population, it is unlikely that the study Area will support significant numbers to be of importance to breeding for these species.

### Otter

**3.6** There are a number of watercourses and drainage ditches within the Study Area. The water courses and drainage channels within the Study Area generally provide suitable sheltering, commuting and foraging resources for otters. However, the bankside vegetation was poached and trampled by livestock in many locations. It is recognised that the drainage channels present within the commercial coniferous woodland plantation are likely to periodically dry out therefore the suitability of these areas is reduced for otter.

**3.7** One resting site was identified, spraint was also identified in five separate locations within the central section of the proposed route. See **Appendix A, Figure 8.3.2** and **Table 3.2** for further information.

**Table 3.2: Otter Survey Results**

Field Sign and Location	Context and Description
Hover (Kello Water)	On the banks of the Kello Water under overhanging boulder
Spraint (Various locations) See <b>Appendix B, Photo 2</b>	<ul style="list-style-type: none"> <li>■ Kello Water Site A – two spraint in close proximity</li> <li>■ Kello Water Site B – spraint and anal jelly</li> <li>■ Polbroc Burn – two spraint in close proximity</li> <li>■ Guttie Burn Unnamed water course which feeds into Polbroc Burn, Site A – two spraint</li> <li>■ Guttie Burn Unnamed water course which feeds into Polbroc Burn, Site B - single spraint at conjunction of 2 streams at road culvert</li> </ul>

**3.8** The Study Area supported relatively limited evidence of otter. Crucially, the only evidence of resting sites was limited to a low status hover feature. This suggests that while the Study Area forms part of an otter population, it is unlikely to be a core territorial area, unlikely to be of importance to breeding.

### Red Squirrel and Pine Marten

**3.9** Central Dumfries and Galloway is considered to be a 'hot spot' for red squirrel, which is normally associated with the County's extensive coniferous forestry habitats.

**3.10** The Study Area offers suitable sheltering and foraging habitat for red squirrel and pine marten, primarily in the form of broadleaved and coniferous plantation woodland which is one of the dominant habitat types across the area. The majority of woodland within the Study Area is managed for commercial forestry purposes. Therefore it is expected that these areas are subject to a significant degree of management and disturbance, as part of routine Forestry Design Plans.

**3.11** No dreys or dens were identified during surveys, red squirrel foraging remains were recorded at several locations within the east of FLS Eucharhead Plantation in the Study Area. Evidence of red squirrel was recorded within the Plantation woodland to the south of the Study Area. Feeding remains were identified within the Forestry and Land Scotland Corserig Plantation close to the centre of the Study Area and also in the Forestry and Land Scotland Eucharhead Plantation to the north-east of Glenglass Sub-station (See **Appendix A, Figure 8.3.2**).

**3.12** A single record of pine marten scat was also made within the same area the Forestry and Land Scotland Eucharhead Plantation to the north-east of Glenglass Sub-station (See **Appendix A, Figure 8.3.2**).

**3.13** Further information of the field signs recorded are included within **Table 3.3**.

**Table 3.3: Red Squirrel and Pine Marten Sites and Field Signs**

Species	Field Sign and Location	Context and Description
Red squirrel	Feeding remains Forestry and Land Scotland Corserig Plantation	Small number of feeding remains identified in proximity to the north of the plantation.

Species	Field Sign and Location	Context and Description
Red squirrel	Feeding remains Forestry and Land Scotland Eucharhead Plantation to South-east of Glenglass See <b>Appendix B, Photo 1</b>	Small number of cones in proximity to the eastern edge of a section of semi-mature very mossy conifer plantation.
Pine Marten	Pine marten scat Forestry and Land Scotland Eucharhead Plantation to South-east of Glenglass See <b>Appendix B, Photo 1</b>	A single pine marten scat was identified in proximity to the eastern edge of a section of semi-mature very mossy conifer plantation.

**3.14** The Study Area supported very limited feeding evidence of red squirrel; these were confined to sections of commercial forestry. No dreys were identified within the Study Area. The relatively short-term nature of the plantation habitats subject to commercial forestry further reduces the suitability of the Study Area for the Species. The limited evidence of red squirrel suggests that the Study Area does not form a core area important for breeding of the local population.

### Water Vole

**3.15** There are a number of water courses and drainage ditches within the site boundary. The water courses and drainage channels within the Study Area generally provide suitable sheltering, commuting and foraging resources for otters and water voles. However, bankside vegetation was poached and trampled by livestock in many locations. The fast flow, particularly on the River Nith and Kello Water largely precludes water vole. It is recognised that the drainage channels present within the commercial coniferous woodland plantation are likely to periodically dry out therefore the suitability of these areas is reduced for water vole.

**3.16** Several water vole burrows were identified on the Euchar Water (See **Appendix B, Photo 2**) and on a drainage channel to the north of Kello Water (See **Appendix B, Photo 3**). A single latrine was also recorded in the vicinity of the burrows on the drainage channel to the north of Kello Water. Further information is provided in **Table 3.4** and **Appendix A, Figure 8.3.2**

**Table 3.4: Water Vole Sites and Field Signs**

Field Sign and Location	Context and Description
Burrow 1 (Barr Burn watercourse to the north of Euchar Water)	Burrow on bank of Barr Burn watercourse to the north of Euchar Water. No other evidence of water vole along watercourse at the time of survey, habitat is suitable for the species in this area.
Burrow 2 (Euchar Water)	Burrow on bank of Euchar Water partially blocked by vegetation. Droppings recorded nearby.
Burrow 3 (Euchar Water)	Burrow on bank of Euchar Water partially blocked by vegetation. Droppings recorded nearby.
Latrine 1 (Euchar Water)	Latrine on bank of Euchar Water, bank close by partially eroded.

**3.17** The Study Area supported low levels of field evidence of sheltering and foraging water voles, this was confined to the Euchar Water and Barr Burn. These areas are connected to the network of drainage channels and water courses within the wider landscape. Water voles in the uplands exist as metapopulations, and while territories are generally maintained, the structure and location of burrows within those territories are dynamic. A series of standard mitigation measures have been adopted within the development to avoid and protect water courses.

### Other Observations

**3.18** The Study Area provides potentially suitable habitats for common lizards and other reptiles. Although targeted surveys were not undertaken for reptiles, several sightings of common lizard were recorded during protected species and habitats surveys. It is reasonable to assume that common lizards and reptiles are present in low densities throughout the Study area. Further information is provided in **Appendix A, Figure 8.3.2, Appendix B Photo 4** and **Table 3.5**.

**Table 3.5: Reptile Sightings**

Species and Location	Context and Description
Common lizard (Drumbrue Moorhead)	Direct sighting of a single individual. Good habitat at this location.
Common lizard (Inkinstall Plantation to the North of the Study Area)	Direct sighting of a single individual. Good habitat at this location.

### Precautionary Mitigation

**3.19** A series of species-specific mitigation measures set out in **Table 3.6**. These measures represent a combination of standard, well-rehearsed techniques and measures specifically designed for the development.

**Table 3.6: Protected Species - Precautionary Mitigation**

Ecological Feature	Specific Mitigation
Site Wide Mitigation Measures	<ul style="list-style-type: none"> <li>■ Preparation of Species Protection Plans for felling and construction phases, as part of the project's wider CEMP. The Species Protection Plans should set out measures to protect all species covered by legislation in the UK.</li> <li>■ Presence of an Environmental Clerk of Works (ECoW) during all operations to provide ongoing support and monitoring. The ECoW role should be developed in accordance with current good practice guideline.</li> </ul>
Red Squirrel	<ul style="list-style-type: none"> <li>■ Pre-construction surveys, no more than six months prior to felling, to identify changes in baseline. This should include trees within proposed passing places.</li> <li>■ Species licensing route where surveys suggest presence of resting sites.</li> <li>■ Sensitive timing of felling works to avoid breeding season where pre-construction surveys identify presence of dreys.</li> <li>■ Toolbox talks for all site contractors.</li> </ul>
Otter and Water Vole	<ul style="list-style-type: none"> <li>■ Pre-construction surveys, no more than six months prior to felling, to identify changes in baseline.</li> <li>■ Species licensing route where surveys suggest presence of resting sites.</li> <li>■ Sensitive timing of works when otters are likely to be most active (i.e. sunrise and sunset).</li> <li>■ Toolbox talks for all site contractors.</li> </ul>
Common lizard	<ul style="list-style-type: none"> <li>■ Finger-tip vegetation to clear animals from areas of optimal reptile habitat immediately prior to vegetation is to be cleared.</li> <li>■ Toolbox talks for all site contractors.</li> </ul>

## Chapter 4

### Conclusion

**4.1** The Study Area supported low levels of field evidence of sheltering and foraging red squirrel, otter, water voles and reptiles. Although the Study Area is likely to be part of territories for these species, it is unlikely to form important core territories to support breeding. The Study Area is well connected to similar habitats in the wider landscape. A series of standard mitigation measures have been adopted within the development to safeguard legal compliance in relation to protected species and to avoid and protect water courses.

# Appendix A

## Figures





Figure 8.3.1: Study Area.

Figure 8.3.2: Protected Species Survey Findings.

# Appendix B

## Photography

Table B.1: Protected Species Photography

Site Photographs	
 <p>Photo1: Plantation to the north-east of Glenglass Sub-station</p>	 <p>Photo 2: Kello Water</p>
 <p>Photo 3: Euchan Water</p>	 <p>Photo 4: Grassland Habitats Suitable for Common Lizard</p>