



IN
BY
FOR

SHETLAND

RAMBOLL

Neshion Energy Park

Environmental Impact Assessment Report

Volume 5: Confidential

June 2026



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Confidential

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Summary

Alba Ecology Ltd. was commissioned by Neshion Ltd. ('the Applicant') to conduct a protected mammal survey for a proposed renewable energy park (the 'Proposed Development') in Shetland, Scotland. Protected mammal surveys were undertaken to assess the likelihood of the presence of otter (*Lutra lutra*) and mountain hare (*Lepus timidus*) in 2023-2024.

Evidence was recorded across the Study Area of use by otters. Some areas were noted as being more heavily used and more important than others. [REDACTED]

[REDACTED] This would suggest that part of the Study Area is regularly used by otter.

Mountain hares were recorded regularly across the Study Area, with two areas where higher incidence and activity levels were recorded. These areas were at the northern Site boundary and in a central area, around 200-300 m north of Sand Water, where a large amount of breeding behaviour was observed.

The results are discussed, and recommendations made in relation to informing potential constraints. Should the Proposed Development be consented, a Species Protection Plan (SPP) will need to be developed (as per NatureScot standing advice) that considers potential construction impacts on otters and mountain hares.

Introduction

Alba Ecology Ltd. was commissioned by Neshion Ltd. ('the Applicant') to conduct a protected terrestrial mammal survey for a proposed renewable energy park (the 'Proposed Development') comprised of up to eight wind turbines, a Battery Energy Storage System (BESS) and associated infrastructure adjacent to Sullom Voe Oil Terminal (SVT) and the Shetland Gas Plant in Shetland, Scotland. The Proposed Development is described in **Chapter 2: Proposed Development (EIAR Volume 2)**.

All terrestrial land mammals in Shetland are non-native species in Shetland, of which two species are specially protected. Consequently, protected terrestrial mammal surveys were undertaken to assess the likelihood of the presence of otter (*Lutra lutra*) and mountain hare (*Lepus timidus*) in 2023-2024.

The Study Area (**Figure 1: Map showing the Neshion Energy Park Protected Terrestrial Mammal Study Area**) included the Application Boundary (2022) that was correct at the time the surveys were undertaken plus a 200 m buffer which is the Study Area. **Figure 1** also has the final Application Boundary shown. The Study Area was characterised by undulating hill terrain (averaging around 60 m above sea level (a.s.l.)) e.g. **Photo 1**. The habitat was largely made up of open heath and grassland. The primary land use for the Study Area was sheep grazing.



Photo 1. Illustrative photograph of Study Area habitats from Hill of Garth looking towards Sand Water, Nugla Water and Loch of Bordigarth.

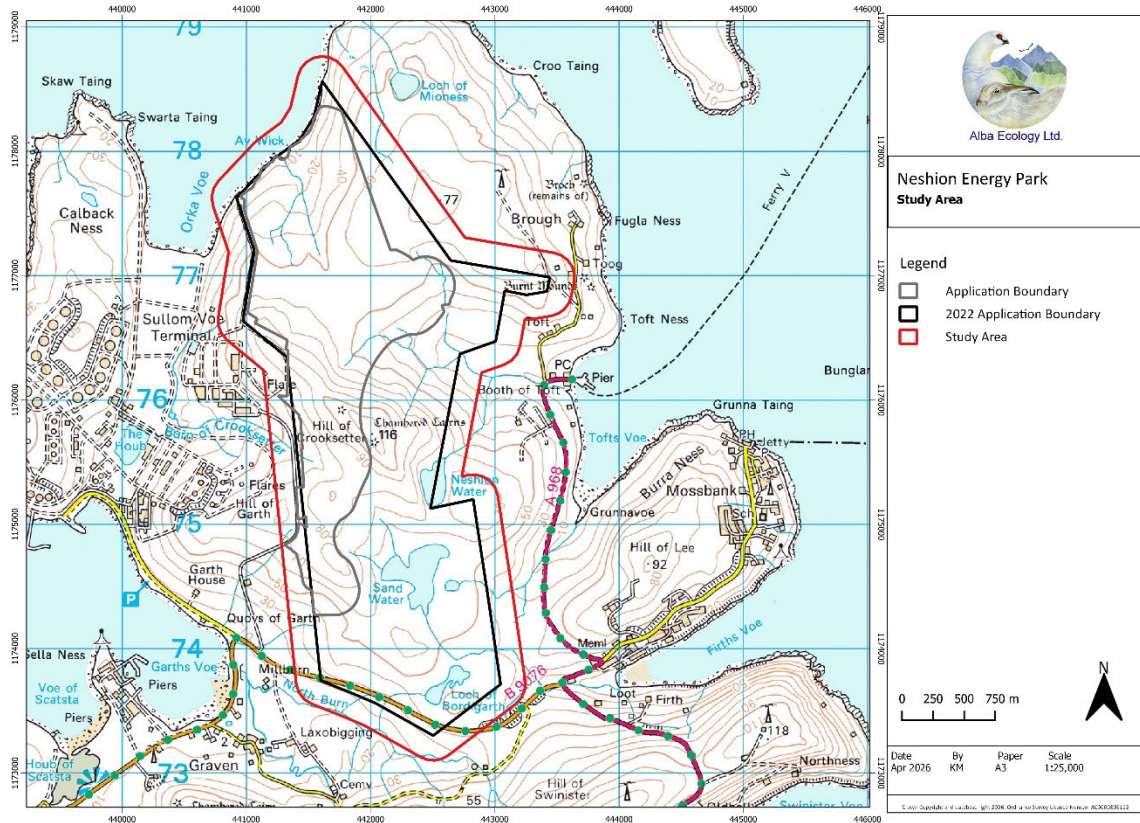


Figure 1: Map Showing the Neshion Energy Park Protected Terrestrial Mammal Study Area, the 2022 Application Boundary and the final Application Boundary.

This document reports on the findings of protected terrestrial mammal surveys, focussed on otter and mountain hare, undertaken in the Study Area by highly experienced Alba Ecology surveyors during 2023 and 2024.

Methods

Experienced ecologists Donald Shields (MCIEEM) and Dr Peter Cosgrove (FCIEEM) surveyed all potentially suitable habitats for otter and mountain hare within the Study Area in 2023 and 2024. The location of each mammal sign was recorded, representative photographs were taken and a note made along with an OS grid reference using a hand-held Garmin GPS.

The key recommended survey methods and references are listed in **Table 1** followed by summary details of the relevant survey methodology and legal protection.

Table 1: Key Otter and Mountain Hare Survey Methods.

Species	Main survey methods	Key references
Otter	Walkover survey of riparian habitat looking for places otters use for shelter, resting and protection (such as couches, lying-up sites and holts), or for signs of activity (such as slides or spraints).	Chanin, 2003. Standing advice for planning consultations - Otters NatureScot.
Mountain hare	Walkover survey for signs and visual sightings across whole Study Area (not sample transects as per guidance), i.e. survey coverage was more comprehensive than sample transects. Nocturnal mountain hare transect surveys using spot-lamping during the autumn (sometimes recommended) <u>not</u> undertaken.	The Mammal Society, 2012. Standing advice for planning consultations - Mountain Hare NatureScot.

Target Species

The following accounts summarise the legal protection afforded to otters and mountain hares. The informal, plain English nature of these summaries mean that they cannot be substituted for the actual legislation, its amendments or its subordinate Orders, Licences and Regulations and we therefore urge it to be used with care. Where a formal detailed or definitive answer on legal protection is needed, this requires the opinion of a qualified lawyer and reference to the original published legislation. In the case of potential licensing, specialist advice from NatureScot should be sought.

An important consideration, not addressed in the NatureScot standing guidance (nor Chartered Institute of Ecology and Environmental Management (CIEEM) best practice guidance), is that both otter and mountain hare are non-native in Shetland, despite being native in much of the rest of Scotland. There is plenty of government policy, advice and guidance around non-native species e.g. the Great Britain (GB) Non-Native Species Secretariat, which was brought in on the back of various bits of legislation (mostly focussed on *invasive* non-native species) to help coordinate action and to disseminate information.

Consequently, undertaking or recommending management supporting non-native species (both otter and mountain hare in this case) could reasonably be argued to be against

government policy and guidance. The NatureScot standing guidance on Biodiversity Enhancement for developers on these species is predicated on these species being native; which is not the situation in Shetland. According to CIEEM biodiversity enhancement or net gain is an approach to development that '*leaves biodiversity in a better state than before*'. Would carrying out biodiversity enhancement in support of non-native species in a locality such as Shetland be deemed to leave biodiversity in a '*better or worse state than before*'? Regardless of the answer to this question, and the apparent conflict within the guidance, the legal protection afforded to these species appears, from examples of other development work in Shetland, to take precedence over their non-native status in Shetland.

Otter

The otter is listed on Appendix 1 of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Appendix II of the Bern Convention and Annexes II and IV(a) of the EC Directive 92/43/EEC (the Habitats Directive). The Habitats Regulations state that the otter, as a European Protected Species, has been given special protection and it is an offence to deliberately capture, kill or disturb the otter, or to damage or destroy a breeding or a resting site of the otter. The otter gains further protection under Schedule 6 of the Wildlife & Countryside Act (1981) as amended by the Nature Conservation (Scotland) Act 2004.

Otter surveys were conducted during suitable weather conditions (during and after prolonged periods of several days of dry weather), following standard survey guidance (**Table 1**). This gave a reasonable period of prolonged low water, so that otter signs (spraints, latrines etc.) would have had time to build up and not get washed away. All watercourses/waterbodies and their riparian habitats within the Study Area were systematically surveyed for otters.

Surveyors walked the stream corridors searching for otter signs including holts, other resting sites, spraints and tracks for otters. A search was made of potential otter spraint sites such as elevated features including grass tussocks, peat hags and rocks. Muddy and sandy areas were checked for otter footprints. Suitable cover includes rock piles, areas of dense vegetation and banks suitable for digging were checked for the presence of holts or other resting sites. In addition, the coastal areas of the Study Area were searched for signs of otter.

Mountain hare

Since 2021, mountain hares have been protected by the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly:

- kill, injure or capture a mountain hare;
- disturb a mountain hare in its place of shelter;
- damage, destroy or obstruct access to a mountain hare's place of shelter.

This means that if mountain hares could be affected in these ways by a development, and no action is taken to prevent it, an offence may be committed. The advice below will help ensure that impacts on mountain hares are minimised and no offences occur.

Surveys of mountain hare at Neshion were conducted during April in 2023 and 2024. In addition, sightings during other times of the year (during other surveys), were also noted.

These surveys determined areas of high hare density, importance and activity rather than determining numbers of individuals present. As a result, adaptations to the standard survey methods (Cresswell, *et al.* 2012) were used. Guidance on mountain hare surveys suggests that surveys are generally conducted at night, due to the increased visibility of them when using spotlights. However, during the period when surveys occurred, the hares were only beginning to moult, and so were extremely visible during the day as largely white against the largely dark colour of the vegetation and bare peat.

In addition, at this time of year, their breeding behaviour meant they were highly active and visible. These surveys were conducted during walkover transect surveys within the Study Area and noting areas where hare numbers and activity was high.

Results

Most of the Study Area was relatively easy to survey, with exceptions being some areas at the coastal cliffs. Where these were present, binoculars were used to examine these inaccessible areas. For the avoidance of doubt, surveyors did not enter the SVT along the western buffer edge. Consequently, survey coverage of the Study Area was considered excellent.

Otter

In 2023-2024 several otter spraints, an active holt and potential couches were recorded along the main watercourses and waterbodies within the Study Area (e.g. **Photos 1-4**). Evidence of feeding was also recorded (**Photo 4**).

Table 2: Otter Signs and Potential Features Recorded in the Study Area in 2023-2024.

Location	Sign/potential feature
HU 41605 78394	Feeding remains
HU 41582 78266	Spraint
HU 41026 77671	Spraint
HU 40940 77604	Spraint
HU 41312 77881	Spraint
HU 42553 73998	Spraint
HU 42083 74630	Spraint
HU 42290 74635	Spraint
HU 42299 74676	Feeding remains
HU 42902 77221	Spraint

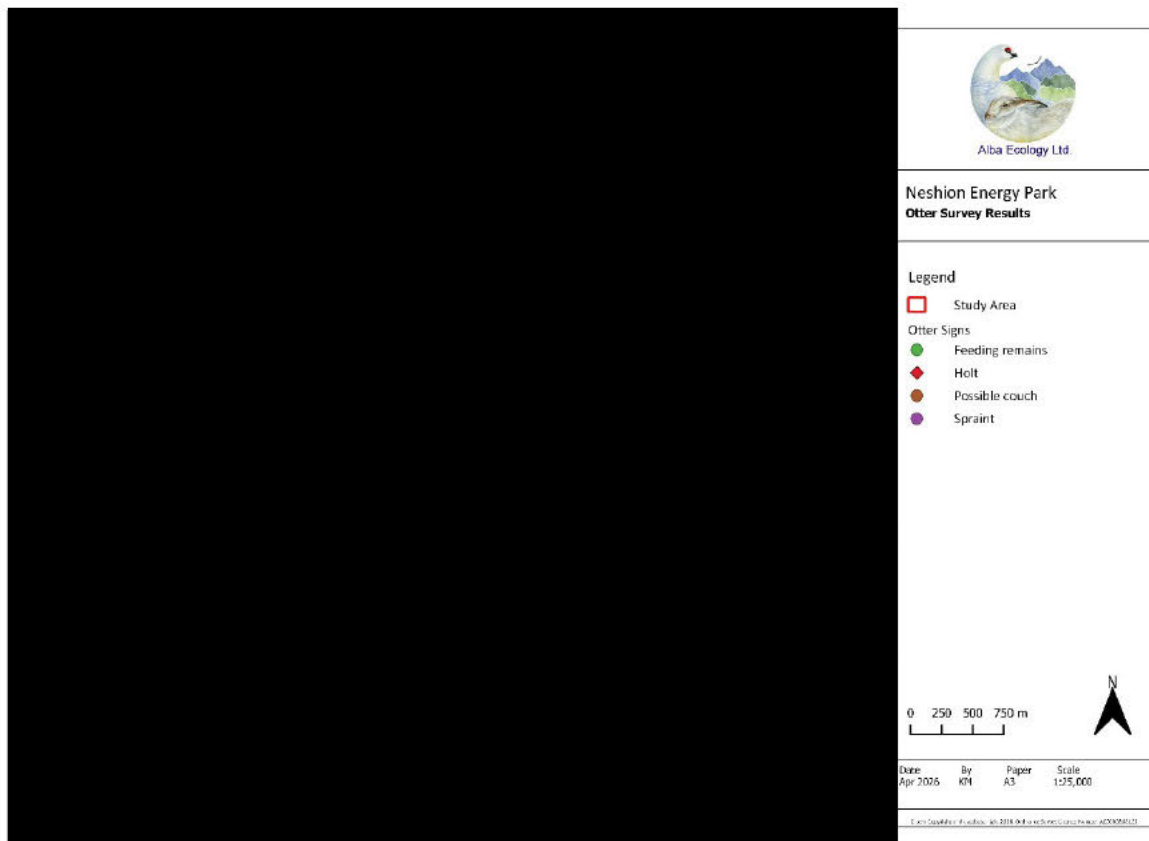


Figure 2: Results of Otter Survey at Neshion, 2023-2024.

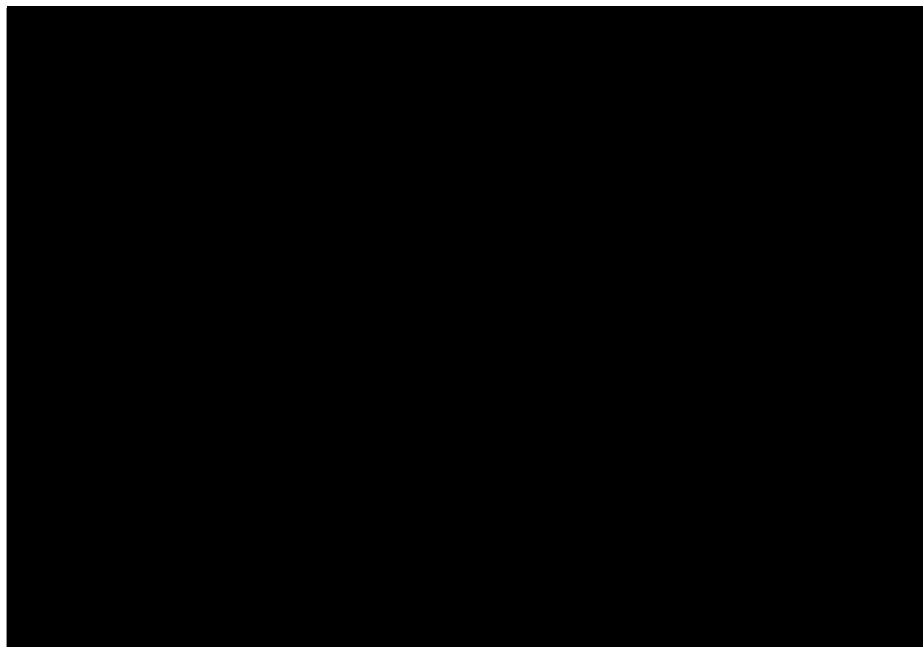




Photo 2: Spraints at HU 41582 78266.



Photo 3: Otter spraint at HU 42553 73998.



Photo 4: Feeding remains next to otter spraint.

Mountain hare

Mountain hares were recorded regularly across the Study Area, usually being flushed either from underfoot or nearby during 2023-2024. Signs of mountain hare (droppings, scrapes) were recorded but could easily be confused with those of European rabbits (*Oryctolagus cuniculus*) which were also present within the Study Area.

Two parts of the Study Area had a notably higher incidence of sightings of mountain hare, most being recorded within 200-300 m of the northern side of Sand Water and at the northern edge of the Study Area (**Figure 3: Areas of High Mountain Hare Occurrence/Activity**). This was breeding behaviour, with several males pursuing females in both 2023 and 2024. In one case mating was observed in the Study Area in 2023.

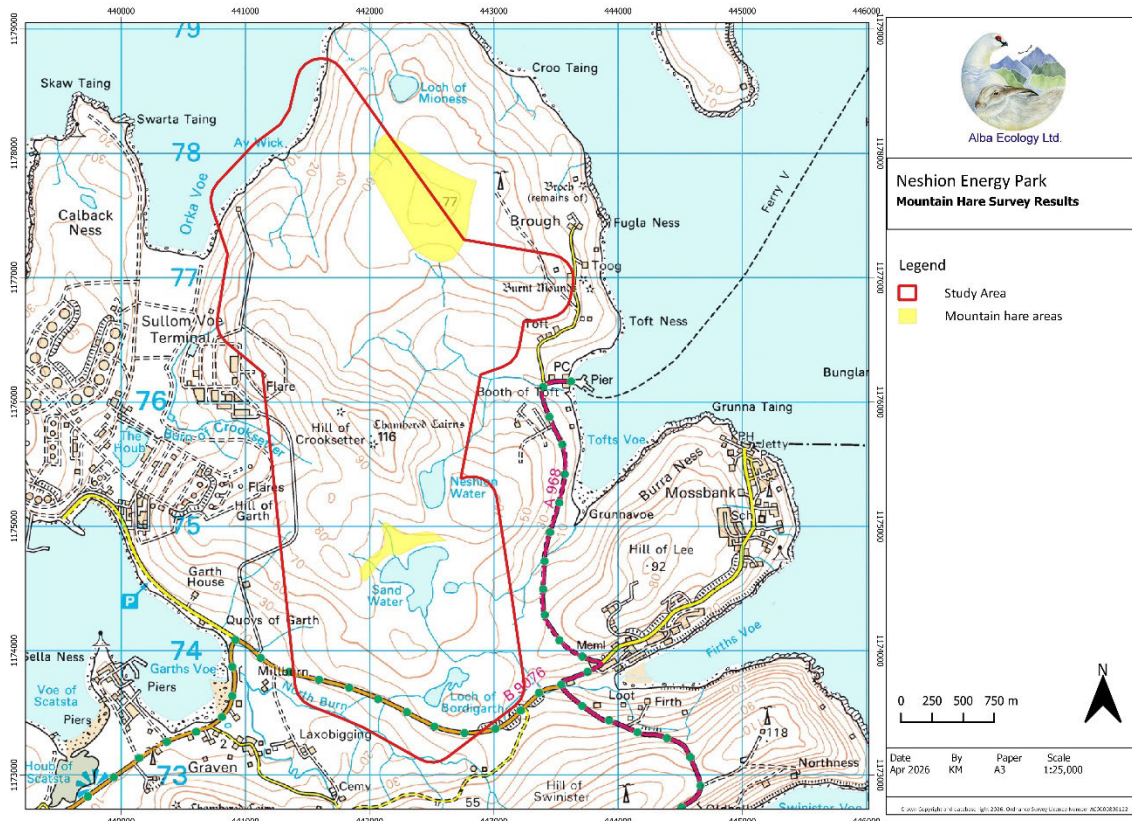


Figure 3: Areas of High Mountain Hare Occurrence/Activity.

Other terrestrial mammal species

European rabbits were frequently recorded.

Discussion

The main limitations of this survey are recognised to apply to most ecological surveys. The surveys undertaken in the Study Area were sampling techniques, not an absolute census. Results give an indication of numbers and activities of species at the particular times that surveys were carried out. Species occurrence changes over time; so, the results presented in this report are snapshots in time (specifically 2023-2024 spring-summer). Nevertheless, surveys were undertaken during the period of the year when otter and mountain hare activity would likely be high. Repeated walkover surveys, which were undertaken, provide greater confidence in the findings than a single one-off survey.

A small portion of the Study Area was inaccessible due to coastal cliffs, though this was able to be surveyed by the use of binoculars from the top of the cliffs. Consequently, survey coverage was considered to be excellent.

Otter

The presence of signs of otter recorded within the Study Area were largely restricted to the watercourses/waterbodies. The highest proportion of signs recorded were in the coastal areas of the north-western edge of the Study Area. This included spraints, feeding sites, couches and an active holt. This suggests that there is a resident otter(s) in the area and that the coastal areas are the most important for them. The relatively small number of spraints, feeding signs and potential couches within the central parts of the Study Area suggest that while they sometimes utilise these parts of the Study Area, it is not necessarily important for them.

The location of the otter holt [REDACTED] outwith the Yell Sound Coast Special Area of Conservation (SAC) (<https://sitelink.nature.scot/site/8409>), of which otter is a qualifying feature, [REDACTED]. However, given the evidence of otters all along the coastal areas of the Study Area, much of which falls within the SAC, it is reasonable to assume that the otters utilising the active holt are associated with and functionally linked with the SAC.

Due to the confirmed presence of resident otters within the Study Area, a pre-construction otter survey should be conducted before any construction work commences and the results should be used to inform and where necessary update the potential constraints map and related technical plans and documents. Should the Proposed Development be consented, an Otter Species Protection Plan (SPP) would need to be developed (as per NatureScot standing advice) that considers potential construction impacts on otters.

Mountain hare

According to NatureScot's standing guidance on mountain hares: *"If mountain hares are confirmed as present on a development site, a licence to disturb them and destroy resting places is likely to always be required before any work on site can commence, irrespective of the season"* ([Standing advice for planning consultations - Mountain Hare | NatureScot](#)). Consequently (and apparently regardless of its non-native status in Shetland), a NatureScot licence will be required for construction work to go ahead.

Whilst **Figure 3: Areas of High Mountain Hare Occurrence/Activity** highlights areas of relatively high abundance during 2023-2024, mountain hare populations demonstrate large fluctuations or population cycles with an average periodicity of nine years (range four-fifteen years). Population density can change more than ten-fold over such a cycle (Newey *et al.*, 2007). Therefore, it is important to recognise that the areas of relatively high density recorded during 2023-2024 survey may not necessarily reflect future abundance patterns.

It is not clear from NatureScot's standing guidance on mountain hares if potential licensing elements, such as undertaking compensation or enhancement measures for this non-native species in Shetland would be required or not. Based on non-native species policy and guidance, carrying out compensation or enhancement measures for such a species in a Shetland context could be seen as against government biodiversity policy and guidance and so it is recommended that this issue and any such compensation or enhancement measures are discussed and agreed with NatureScot before submitting a licence to disturb application.

As a Schedule 5 species it is illegal to 'Intentionally or recklessly damage, destroy or obstruct access to any structure or place which mountain hare uses for shelter or protection, or to disturb one when it is occupying a structure or place for that purpose' ([Standing advice for planning consultations - Mountain Hare | NatureScot](#)). It seems likely, given the relatively high abundance of mountain hares in parts of the Study Area in 2023-2024 that avoiding any structure or place which mountain hare uses for shelter or protection would likely be difficult and such scenarios should be considered during licensing discussions with NatureScot. In short, licensing to both disturb and damage and destroy structure or place which mountain hare uses for shelter or protection are likely to be required.

References

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

CIEEM. 2018. *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trehwella, W.J., Wells, D. and Wray, S. (2012). *UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society, Southampton.

NatureScot. Standing protected species advice (hyperlinks earlier in document) accessed: January 2025.

NatureScot. Sitelink protected areas (hyperlinks in document) accessed: January 2025.

Newey, S., Willebrand, T., Haydon, T., Dahl., Aebischer, N.J., Smith, A.A and Thirgood, S.J. 2007. *Do mountain hare populations cycle?* Oikos 116: 1547-1557.

The Mammal Society, 2012 (eds. Cresswell, W.J., Birks, J.D.S., Pacheco, M., Trehwella, W.J., Wells, D. and Wray, S. *UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. Southampton: The Mammal Society.

- Legend
- Development Footprint

Study Area - Mammal Surveys

Otter Signs

Holt

Confidential

Figure Title Confidential Protected Terrestrial Mammal Signs		
Project Name Neshion Energy Park		
Project No./File ID 1620016692-RAM-MA-IA-00033		
Date March 2026	Figure No. 6.6b	Revision 1.0
Prepared By KM	Scale 1: 20,000 @ A3	
Client Neshion Ltd		



Alta Ecology Ltd.



Technical Appendix 7.3: Confidential Information



Alba Ecology Ltd.



CONFIDENTIAL

May 2026

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INTRODUCTION

NatureScot's best practice guidance '*Environmental Statements and Annexes of Environmentally Sensitive Bird Information Guidance for Developers, Consultants and Consultees*'¹ sets out how to present sensitive information in a way that does not compromise or threaten the sensitive species being considered. Therefore, in accordance with NatureScot's best practice guidance, all non-sensitive ornithological survey information is provided in **Chapter 7: Ornithology (EIAR Volume 2)**. However, Schedule 1 nest site locations (and information such as flightlines that could lead to their discovery) are considered 'sensitive information' and are therefore presented in this confidential Technical Appendix.

Fieldwork information gathered on breeding Schedule 1 species was done under an appropriate NatureScot Animal Conservation Licence. All evidence of Schedule 1 breeding was annually supplied to NatureScot in accordance with Animal Conservation Licence conditions. In accordance with NatureScot best practice guidance, this report should be considered as confidential because it identifies the site-specific breeding location of two Schedule 1 species: red-throated diver and whimbrel. Therefore, it should not appear on any public planning portals.

The following environmentally sensitive information is linked to the relevant section of **Chapter 7: Ornithology (EIAR Volume 2)** where it would have appeared were it not for its sensitive and therefore confidential nature.

BASELINE SPECIES ACCOUNTS

Red-throated diver



Whimbrel



¹ SNH (2016). Environmental Statements and Annexes of Environmentally Sensitive Bird Information Guidance for Developers, Consultants and Consultees (version 2).

MITIGATION

The embedded mitigation measures of relevance to Schedule 1 species includes:

- [REDACTED]
- [REDACTED]

The following turbine movements were made during early design iterations in relation to ornithological constraints:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Wider Countryside bird species

Red-throated diver

LAND-TAKE

[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

² Ruddock, M. and Whitfield, P. (2007; and 2022 update). A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to SNH

[REDACTED]

[REDACTED]

[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
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[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Whimbrel

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Legend

-  Application Boundary
-  Proposed Turbine
-  Proposed Hardstanding
-  Proposed Construction Compound
-  Proposed Substation, BESS and Lidar Area
-  Proposed Borrow Pit Search Area
-  Proposed Operation and Maintenance Access Track
-  Proposed Access Tracks
-  Proposed Turning Heads
-  Earthworks - Cut
-  Earthworks - Fill
-  Red-throated diver breeding waterbody

Figure Title Red-throated diver breeding waterbodies 2022-2023 - Confidential		
Project Name Neshion Energy Park		
Project No./File ID 1620016691 / REH2024N00248		
Date May 2026	Figure No. 7.4	Revision 1.0
Prepared By DS	Scale 1: 20,000 @ A3	
Client Neshion Ltd		
		

Legend

-  Application Boundary
-  Proposed Turbine
-  Proposed Hardstanding
-  Proposed Construction Compound
-  Proposed Substation, BESS and Lidar Area
-  Proposed Borrow Pit Search Area
-  Proposed Operation and Maintenance Access Track
-  Proposed Access Tracks
-  Proposed Turning Heads
-  Earthworks - Cut
-  Earthworks - Fill

Whimbrel

-  2022
-  2023

Figure Title
Whimbrel territory centres
2022-2023

Project Name
Neshion Energy Park

Project No./File ID
1620016691 / REH2024N00248

Date	Figure No.	Revision
May 2026	7.10	1.0

Prepared By	Scale
DS	1: 20,000 @ A3

Client
Neshion Ltd



Legend

-  Application Boundary
-  Proposed Turbine
-  Proposed Hardstanding
-  Proposed Construction Compound
-  Proposed Substation, BESS and Lidar Area
-  Proposed Borrow Pit Search Area
-  Proposed Operation and Maintenance Access Track
-  Proposed Access Tracks
-  Proposed Turning Heads
-  Earthworks - Cut
-  Earthworks - Fill
-  Red-throated diver breeding waterbody
-  Flightlines 2022
-  Flightlines 2023

Figure Title
Focal watch flightlines of breeding red-throated divers 2022-2023 - Confidential

Project Name
Neshion Energy Park

Project No./File ID
1620016691 / REH2024N00248

Date	Figure No.	Revision
May 2026	7.15	1.0

Prepared By	Scale
DS	1: 20,000 @ A3

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