

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025

Appendix 13.1 Legislation, Policy and guidance

Ardersier Port Extension

784-B069769

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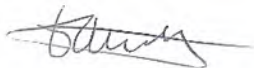
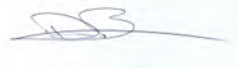
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1.1 LEGISLATION, POLICY AND GUIDANCE

Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and

fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow any plant in the wild outwith its native range.

It is recommended that plant material of invasive non-native species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2021 (Eaton *et al*, 2021) and identified 70 red list species, 103 amber species, and 72 green species. The criteria are complex, but generally:

Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.

Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed.

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

- LBAPs identify habitat and species conservation priorities at the local level, often including Habitat Action Plans (HAPs) and Species Action Plans (SAPs) for key bird species.
- These plans guide and inform local decision-making for ornithological conservation

National Planning Framework

- NPF4 is the top tier of planning policy in Scotland.
- Policy 1 gives significant weight to the nature crisis, ensuring biodiversity is prioritised in all plans and decisions.
- Policy 4 protects and enhances natural heritage, including ornithological interests.
- Policy 3 requires development to secure positive effects for biodiversity, including birds, by conserving, restoring, and enhancing habitats and nature networks.
- Adverse impacts on the natural environment, including cumulative impacts on bird populations and habitats, must be minimised.
- Development proposals must demonstrate conservation, restoration, and enhancement of biodiversity, including ornithological interests.

See here for full details: <https://www.gov.scot/publications/national-planning-framework-4/>

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Appendix 13.2 Methodology

Ardersier Port Extension

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Appendix 13.2: Methodology

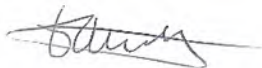

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1.0 METHODOLOGY - ORNITHOLOGY

1.1 ECOLOGICAL IMPACT ASSESSMENT METHODOLOGY

This appendix provides a summary of the assessment methodology.

1.1.1 Guidance

The EclA follows the Chartered Institute of Ecology and Environmental Management (CIEEM)¹ 2024 guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine Version 1.3. The assessment integrates both desk-based and field survey data to identify and evaluate the likely significant ecological effects of the proposed Ardersier Port Extension.

1.1.2 Site terminology

For the purposes of this EclA chapter, the term “site” refers specifically to the terrestrial extension land proposed for development as part of the Ardersier Port Extension. This area comprises woodland and gorse scrub habitats and differs significantly from the consented port footprint assessed in the 2018 EIA, which was limited to previously developed (brownfield) land.

The inclusion of semi-natural habitats introduces new ecological considerations and has informed the updated assessment of potential impacts and mitigation requirements. In addition to the terrestrial site, this chapter also considers potential impacts on marine ecology associated with the proposed additional dredging area, hereafter referred to as the “dredged channel.” A full description of both the site and its context is provided in Chapter 3 (Project Description) of the EIAR.

1.1.3 Zone of influence

The Zone of Influence (Zoi) was defined to assess direct and indirect ecological effects beyond the site boundary. Desk studies included data from National Biodiversity Network (NBN) Gateway, Multi-Agency Geographic Information for the Countryside (MAGIC), and aerial imagery, with search radii tailored to the important ecological features.

- 10km for sites of International Importance (e.g. Special Protection Area (SPA), Ramsar sites);
- 2km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI), protected or otherwise notable species and non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS)); and
- 2km for biological records.

1.1.4 Importance

The importance of ornithological features was determined using a schedule of geographic criteria (Table 1), considering factors such as the quality or extent of designated sites and habitats, species or habitat rarity, degree of threat across their range, and rate of decline.

¹ Chartered Institute of Ecology and Environmental Management (CIEEM). (2024). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.3. Winchester: CIEEM.

Value was assessed based on conservation significance, contribution to conservation objectives, and potential for restoration if degraded. Where relevant, cultural or economic value was also considered, supported by available evidence.

Sensitivity was defined as the feature’s susceptibility to environmental change.

Features were considered important where they exhibited characteristics such as naturalness, rarity, irreplaceability, or high habitat diversity. This includes:

- Rare or declining species.
- Endemic or locally distinct populations.
- Large or concentrated populations of threatened species.
- Habitats with strong connectivity or typical bird assemblages.
- Additional considerations included feature size, seasonal presence, role in ecosystem function, and species at the edge of their range, particularly those vulnerable to climate change.

Table 1. Level of Importance

Level of Importance	Sites	Habitats	Species
International	Designated, candidate or proposed Special Areas of Conservation, Special Protection Areas and Ramsar sites; UNESCO (Ecological) World Heritage Sites; UNESCO Biosphere Reserves; Biogenetic Reserves.	A viable area of habitat included in Annex I of the EC Habitats Directive; a habitat area that is critical for a part of the life cycle of an internationally important species.	A European Protected Species; an IUCN Red Data Book species that is globally Vulnerable, Endangered or Critically Endangered; a Category A internationally important bryophyte assemblage ² .
National (UK)	Sites of Special Scientific Interest/Areas of Special Scientific Interest; National Nature Reserves; Nature Conservation Review Sites; Marine Conservation Zones (UK offshore).	An area of habitat fulfilling the criteria for designation as an SSSI/ASSI or MCZ; a habitat area that is critical for a part of the life cycle of a nationally important species.	Schedule 1 bird species (Wildlife and Countryside Act 1981), due to their special legal protection, are considered of National (UK) importance where present or potentially affected. An IUCN Red Data Book species that is Vulnerable, Endangered or Critically Endangered in the UK; a

² Averis, A.B.G, Gennyey, D.R, Hodgetts, N.G, Rothero, G.P. & Bainbridge, I.P. 2012. *Bryological assessment for hydroelectric schemes in the west highlands* – 2nd edition. Scottish Natural Heritage Commissioned Report No. 449b

Level of Importance	Sites	Habitats	Species
			species that is Rare in the UK (<15 10km grid squares); any species protected under national (UK) legislation where there is the potential for a breach of the legislation; a species that is Vulnerable, Endangered or Critically Endangered in The Vascular Plant Red Data List for Great Britain ³ .
National (England, Scotland, Wales, Northern Ireland)	National Parks (Scotland); Marine Protected Areas (Scotland offshore); Marine Consultation Areas (Scotland).	Habitats of principal importance for biodiversity in the relevant countries.	Species of principal importance for biodiversity in the relevant countries, including; SBL Priority Species and PMFs (Scotland).
Regional	Regional (Scotland).		A species that is Nationally Scarce in the UK (present in 16-100 10km grid squares); a species that is included in the Regional LBAP; an assemblage of regionally scarce species.
County / Metropolitan	Royal Society for the Protection of Birds Sites; Local Wildlife Sites (Scotland).		A species that is included in the County LBAP; an assemblage of species that are scarce at the county level.
Local			Species as defined by Local Authority lists (if available).
Site			Common and widespread species not covered above.
Negligible			

³ Cheffings, C.M. & Farrell, L. (eds), Dines, T.D., Jones, R.A., Leach, S.J., McKean, D.R., Pearman, D.A., Preston, C.D., Rumsey, F.J., Taylor, I. (2005) The Vascular Plant Red Data List for Great Britain. Species Status No. 7. JNCC, Peterborough. Available at: <https://hub.jncc.gov.uk/assets/cc1e96f8-b105-4dd0-bd87-4a4f60449907>

Level of Importance	Sites	Habitats	Species
Negative			An Invasive Non-Native Species (INNS) as defined by the GB Non-Native Species Secretariat (NNS) and supported by the GB Invasive Non-native Species Strategy (2015); legally controlled species under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended by the relevant country legislation).

1.1.5 Significance Matrix

The significance of ecological effects has been assessed in accordance with CIEEM EcIA guidance (2018; updated 2023), which recommends considering both the importance of the ecological feature and the magnitude of the predicted impact. The matrix below provides a structured approach to assist professional judgment, supported by clear definitions for transparency.

Definitions

Importance (Value of Ecological Feature):

- International: Critical for global biodiversity (e.g., Ramsar site, SAC of global relevance).
- National: Key to maintaining UK biodiversity (e.g., SSSI, nationally rare species).
- Regional: Important within a region or county (e.g., Local Biodiversity Action Plan priority habitat).
- County: Important within a single county or administrative area.
- Local: Contributes to local ecological networks or green infrastructure.

Magnitude of Impact:

- Major: Permanent or long-term loss or severe degradation of feature integrity.
- Moderate: Partial loss or significant alteration, reversible only in the long term.
- Minor: Small-scale, short-term, or reversible change with limited effect on integrity.
- Negligible: No measurable effect on structure, function, or viability.

Significance of Effect:

- Significant: Likely to influence decision-making or require mitigation/compensation.
- Not Significant: No material influence on decision-making; minor or negligible effect.

Table 2. Significance Matrix

Importance	Major	Moderate	Minor	Negligible
International	Very High (Significant)	High (Significant)	Moderate (May be Significant)	Negligible
National	High (Significant)	Moderate (Significant)	Low (Not Significant)	Negligible
Regional	Moderate (Significant)	Low-Moderate	Low	Negligible
County	Low-Moderate	Low	Negligible	Negligible
Local	Low	Negligible	Negligible	Negligible
Site	Negligible	Negligible	Negligible	Negligible

1.1.6 Assessment Methods

Establishing the Baseline

Baseline ecological conditions were established through a combination of desk study and field surveys, following current best practice and published guidance. The baseline describes the ornithological features present within the zone of influence in the absence of the proposed development, taking into account recent trends, management activities, and other relevant projects. Where appropriate, future baseline conditions were predicted based on available evidence and professional judgement.

All surveys were undertaken by suitably qualified and experienced ornithologist, using standard methodologies appropriate to the habitats and species present. Limitations to data collection, such as seasonal constraints or access restrictions, are clearly identified and their implications for the assessment are discussed.

Identification and Evaluation of Important Ecological Features

Ecological features (habitats, species, and ecosystems) were identified and evaluated for their importance using criteria set out in the CIEEM Guidelines. Importance was assigned within a defined geographical context (international, national, regional, or local), considering factors such as conservation status, rarity, legal protection, and functional role in the landscape. Only those features considered important and potentially affected by the project were taken forward for detailed assessment.

Impact Assessment

The likely impacts of the proposed development on important ornithological features were identified and characterised for all relevant project phases (construction, operation, decommissioning). Impacts were described with reference to:

- Nature of impact: positive or negative
- Extent: spatial area affected
- Magnitude: size or intensity of change
- Duration: short-term, long-term, permanent, or temporary
- Frequency and timing: how often and when impacts occur
- Reversibility: whether effects are reversible or irreversible
- Assessment considered both direct and indirect impacts, as well as cumulative effects arising from other relevant projects or activities.

Mitigation, Compensation, and Enhancement

A sequential approach was adopted to avoid, mitigate, and compensate for negative ornithological impacts, in line with the mitigation hierarchy. Where appropriate, opportunities for ornithological enhancement and biodiversity net gain were identified. The likely effectiveness of proposed measures was evaluated based on current evidence and professional judgement.

Assessment of Residual Effects and Significance

Following the implementation of mitigation and compensation measures, residual effects were assessed for each important ornithological feature. The significance of these effects was determined with reference to the conservation objectives for the feature and the relevant geographical scale. The assessment followed the definitions and approach set out in the CIEEM Guidelines, applying the precautionary principle where uncertainty remained.

Assessment of Cumulative Impacts

Cumulative impacts were assessed by considering the combined effects of the proposed development in conjunction with other relevant projects and activities within the defined zone of influence. This included projects that are consented, under construction, or reasonably foreseeable, as identified through consultation with statutory bodies, review of planning applications, and desk-based data sources. The assessment considered additive and synergistic effects, particularly where ecological features may already be exposed to background levels of threat or pressure. Cumulative impacts were characterised in terms of their nature, extent, magnitude, duration, frequency, and reversibility, consistent with the approach used for direct and indirect impacts. Where appropriate, cumulative effects were evaluated at the relevant geographical scale and with reference to conservation objectives for important ecological features.

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Appendix 13.3 Desk Study

Ardersier Port Extension

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Appendix 13.3: Desk Study

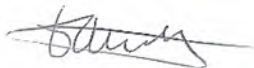
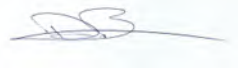
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1.0 DESK STUDY - ORNITHOLOGY

1.1 DESIGNATED SITES

Internationally designated sites of ornithological interest located within 10km of both the terrestrial site ‘the site’ and the ‘dredge channel’ are summarised in Table 1. Additionally, nationally designated sites and local non-statutory sites within 2km of the site are included. Sites designated solely for ornithological features, which would not be subject to direct or indirect impacts only from dredging activities, have been excluded from the Dredged Channel desk study to ensure relevance and focus in the assessment.

Table 1. Statutory and non-statutory designated sites identified during the desk study.

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
Inner Moray Firth	SPA	c.20m north of the site c.50m north of the Dredged Channel	<p>Qualifying Interest: Inner Moray Firth SPA qualifies under Article 4.1 by regularly supporting populations of European importance of the Annex 1 species: osprey <i>Pandion haliaetus</i> forage throughout the SPA (2008 to 2012, up to 25 territories within feeding range, 12.5% of the GB population, with 4 pairs breeding within the site, 4% of the GB population); common tern <i>Sterna hirundo</i> (310 pairs, 2% of the GB population) and bar-tailed godwit <i>Limosa lapponica</i> (1992/93 to 1996/97 a winter peak mean of 1,090 individuals, 2% of the GB population).</p> <p>The Inner Moray Firth SPA further qualifies under Article 4.2 by regularly supporting populations of European importance of the migratory species (1992/93 to 1996/97 winter peak means): greylag goose <i>Anser anser</i> (2,651 individuals, 3% of the Iceland/UK/Ireland biogeographic population); red-breasted merganser <i>Mergus serrator</i> (1,184 individuals, 1% of the NW &</p>	International

¹ Geographic importance refers to the conservation value of ecological features assessed at scales ranging from international to site level, based on legal designations, rarity, and ecological significance.

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<p>Central Europe biogeographic population), and redshank <i>Tringa totanus</i> (1,621 individuals, 1% of the Eastern Atlantic biogeographic population).</p> <ul style="list-style-type: none"> Inner Moray Firth SPA also qualifies under Article 4.2 by regularly supporting in excess of 20,000 individual waterfowl. Between 1992/93 to 1996/97 a winter peak mean of 26,800 individual waterfowl comprising 16,800 wildfowl and 10,000 waders including nationally important populations of the following species: scaup <i>Aythya marila</i> (118 individuals, 1% of the GB population); curlew <i>Numenius arquata</i> (1,262 individuals, 1% of the GB population); goosander <i>Mergus merganser</i> (325 individuals, 4% of the GB population); goldeneye <i>Bucephala clangula</i> (218 individuals, 1% of the GB population); teal <i>A. crecca</i> (2,066 individuals, 1% of the GB population); wigeon <i>Anas penelope</i> (7,310 individuals, 3% of the GB population); cormorant <i>Phalacrocorax carbo</i> (409 individuals, 3% of the GB population); redshank (1,621 individuals, 1% of the GB population); red-breasted merganser (1,184 individuals, 12% of the GB population); greylag goose (2,651 individuals, 3% of the GB population) and bar-tailed godwit (1,090 individuals). In the five-year period 1991/92 to 1995/96, a winter peak mean of 33,148 individual waterfowl was recorded with the assemblage additionally including a nationally important population, greater than 2,000 individuals, of oystercatcher <i>Haematopus ostralegus</i> (3,063 individuals, 0.9% of the GB population). 	
Inner Moray Firth	Ramsar	c.20m north of the site	Inner Moray Firth Ramsar Site qualifies under Ramsar Criterion 1 by virtue of it containing a variety of wetland types:	International

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
		c.50m north of the Dredged Channel	<ul style="list-style-type: none"> • Intertidal mudflats and sandflats supporting areas of saltmarsh are exceptionally well represented throughout the Inner Moray Firth. On the Beaully Firth a large area of saltmarsh covers the mudflats and sandflats. The bays at Munlochy, Longman and Castle Stuart are particularly dominated by extensive mudflats. Of specific importance are the large and dense eelgrass beds. • At Whiteness Head, there are sand dunes and a shingle bar. The shingle bar encloses a building intertidal system including, sandflats and associated saltmarsh. Sand dunes and further extensive areas of sandflats, lie to the southwest of the bar. <p>Inner Moray Firth Ramsar Site also qualifies under Ramsar Criterion 2 by supporting:</p> <ul style="list-style-type: none"> • Osprey <i>Pandion haliaetus</i> forage throughout the Ramsar Site (2008 to 2012, up to 25 territories within feeding range, 12.5% of the GB population, with 4 pairs breeding within the site, 4% of the GB population), and • Common tern <i>Sterna hirundo</i> (310 pairs, 2% of the GB population). <p>Inner Moray Firth Ramsar Site further qualifies under Ramsar Criterion 5 by regularly supporting waterbirds in numbers of 20,000 individuals or more. In the five-year period 1992/93 to 1996/97, a winter peak mean of 26,800 individual waterbirds was recorded, comprising 16,800 wildfowl and 10,000 waders. The site also qualifies under Ramsar Criterion 4 by supporting the following waterbird species at a critical stage in their life cycles:</p> <ul style="list-style-type: none"> • Scaup <i>Aythya marila</i> (118 individuals, 1% of the GB population). • Curlew <i>Numenius arquata</i> (1,262 individuals, 1% of the GB population) 	

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<ul style="list-style-type: none"> • Goosander <i>Mergus merganser</i> (325 individuals, 4% of the GB population). • Goldeneye <i>Bucephala clangula</i> (218 individuals, 1% of the GB population). • Teal <i>A. crecca</i> (2,066 individuals, 1% of the GB population). • Wigeon <i>Anas penelope</i> (7,310 individuals, 3% of the GB population), and • Cormorant <i>Phalacrocorax carbo</i> (409 individuals, 3% of the GB population). • In the five-year period 1991/92 to 1995/96, a winter peak mean of 33,148 individual waterbirds was recorded with the assemblage additionally including a nationally important population, greater than 2,000 individuals, of: • Oystercatcher <i>Haematopus ostralegus</i> (3,063 individuals, 0.9% of the GB population). <p>Bar-tailed godwit, greylag goose, red-breasted merganser and redshank are also components of the waterbird assemblage. Inner Moray Firth Ramsar site qualifies under Ramsar Criterion 6 by regularly supporting 1% or more of the individuals in a population of waterbirds (1992/93 to 1996/97, winter peak means):</p> <ul style="list-style-type: none"> • Bar-tailed godwit <i>Limosa lapponica</i> (1,090 individuals, 1% of the Western European biogeographic population). • Greylag goose <i>Anser anser</i> (2,651 individuals, 3% of the Iceland/UK/Ireland biogeographic population). • Red-breasted merganser <i>Mergus serrator</i> (1,184 individuals, 1% of the NW & Central Europe biogeographic population), and 	

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			Redshank <i>Tringa totanus</i> (1,621 individuals, 1% of the Eastern Atlantic biogeographic population).	
Moray Firth	SPA	c.730m from the site c.250m northwest of the Dredged Channel	<p>Qualifying Interest:</p> <p>The Moray Firth Special Protection Area (SPA) qualifies under Article 4.1 by regularly supporting a non-breeding population of European importance of the following Annex 1 species: great northern diver <i>Gavia immer</i> (a mean peak annual non-breeding population of 144 individuals (5.8% of the Great Britain population) for the years 2001/02-2006/07), red throated diver <i>Gavia stellata</i> (a mean peak annual non-breeding population of 324 individuals (1.9% of the Great Britain population) for the years 2001/02-2006/07) and Slavonian grebe <i>Podiceps auritus</i> (a mean peak annual non-breeding population of 43 individuals (3.9% of the Great Britain population) for the years 2001/02-2005/06).</p> <p>The site further qualifies under Article 4.2 by regularly supporting populations of European importance of the following migratory species: greater scaup <i>Aythya marila</i> (a mean peak annual non-breeding population of 930 individuals (17.9% of the Great Britain population) for the years 2001/02 to 2005/06), common eider <i>Somateria mollissima</i> (a mean peak annual non-breeding population of 1,733 individuals (2.9% of the Great Britain population) for the years of 2001/02 to 2006/07), long-tailed duck <i>Clangula hyemalis</i> (a mean peak annual non breeding population of 5,001 individuals (45.5% of the Great Britain population) for the years of 2001/02 to 2005/6), common scoter <i>Melanitta nigra</i> (a mean peak annual non-breeding population of 5,479 individuals (5.5% of the</p>	International

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<p>Great Britain population) for the years 2001/02 to 2005/06), velvet scoter <i>Melanitta fusca</i> (a mean peak annual non-breeding population of 1,488 individuals (59.5% of the Great Britain population) for the years 2001/02 to 2005/06), common goldeneye <i>Bucephala clangula</i> (a mean peak annual non-breeding population of 907 individuals (4.5% of the Great Britain population) for the years 2001/02 to 2005/06), red breasted merganser <i>Mergus serrator</i> (a mean peak annual non-breeding population of 151 individuals (1.8% of the Great Britain population) for the years of 2001/02 to 2005/06) and European shag <i>Phalacrocorax aristotelis</i> (at least 6,462 individuals during the non-breeding season (3.2% of the biogeographic population and 5.9% of the Great Britain population) and 5,494 individuals during the breeding season ((2.7% of the biogeographic population & 10.2% of the Great Britain population) for the years 1980-2006).</p>	
Moray and Nairn Coast	SPA	c. 8.2km east from the site	<p>Qualifying Interest N.B All figures relate to numbers at the time of classification except where amended by the 2001 SPA Review (osprey, dunlin, oystercatcher, wigeon) and/or subsequent surveys (foraging osprey): Moray and Nairn Coast SPA qualifies under Article 4.1 by regularly supporting populations of European importance of the Annex 1 species: osprey <i>Pandion haliaetus</i> forage throughout the SPA (2008 to 2012, five year mean of up to 9 territories within feeding range, 4.5% of the GB population and 7 pairs breeding within the site, 7% of the GB population) and bar-tailed godwit <i>Limosa lapponica</i> (five year winter peak mean 1989/90 to 1993/94 of 899 individuals, 2% of the GB</p>	International

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<p>population). Moray and Nairn Coast SPA further qualifies under Article 4.2 by regularly supporting populations of European importance of the migratory species: pink-footed goose <i>Anser brachyrhynchus</i> (1988/89 to 1992/93, winter peak mean of 7,538 individuals, 4% of the Eastern Greenland/Iceland/UK biogeographic population); greylag goose <i>Anser anser</i> (1988/89 to 1992/93, winter peak mean of 3,023 individuals, 3% of the Iceland/UK/Ireland biogeographic population) and redshank <i>Tringa totanus</i> (1989/90 to 1993/94, winter peak mean of 1,690 individuals, 1% of the Eastern Atlantic biogeographic population). Moray and Nairn Coast SPA also qualifies under Article 4.2 by regularly supporting in excess of 20,000 individual waterfowl. In the five-year period 1989/90 to 1993/94, a winter peak mean of 24,000 individual waterfowl was recorded comprising 14,500 wildfowl and 9,500 waders including nationally important populations of the following species: bar-tailed godwit (899 individuals); pink-footed goose (7,538 individuals, 4% of the GB population); greylag goose (3,023 individuals, 3% of the GB population); redshank (1,690 individuals, 2% of the GB population); red-breasted merganser <i>Mergus serrator</i> (102 individuals, 1% of the GB population). A winter peak mean of 20,250 individual waterfowl was recorded, including nationally important populations in the five year period 1991/92 to 1995/96, greater than 2,000 individuals of the following species: dunlin <i>Calidris alpina alpina</i>(2,689 individuals, 0.5% of the GB population); oystercatcher <i>Haematopus ostralegus</i> (2,171 individuals, 0.6% of the GB population); and wigeon <i>Anas penelope</i> (2,600 individuals, 0.9% of the GB population).</p>	

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
Moray and Nairn Coast	Ramsar	c. 8.2km east from the site	<p>The Moray and Nairn Coast Ramsar site qualifies under Ramsar Criterion 1 by virtue of it containing a variety of wetland types:</p> <ul style="list-style-type: none"> • Sand dunes, at Culbin. • Recently deposited and more stable vegetated shingle (with a diverse flora including dune grassland and herb-rich heath), forms extensive bars at Culbin with additional beaches and a smaller bar at Spey Bay. Culbin Bar lies offshore and is 7km long. • Large intertidal mudflats (with sizable eelgrass beds) and sandflats support saltmarsh, at Culbin, Findhorn Bay and Spey Bay. All are relatively unaffected by reclamation or industrial development. • On the more stable river shingles at Spey Bay and the Lower River Spey, estuarine alder woodland (dominated by alder with areas of willow and mixed stands of alder/ash), considered to be among the best natural examples of this habitat in Britain. <p>The Moray and Nairn Coast Ramsar site qualifies under Ramsar Criterion 2 by supporting:</p> <p>Vascular plants:</p> <ul style="list-style-type: none"> • The nationally scarce sea centaury <i>Centaureum littorale</i> particularly associated with the saltmarsh habitat. • The vulnerable dwarf eelgrass <i>Zostera noltei</i> on the saltmarsh of the intertidal mudflats. • On the shingle two nationally scarce plants oysterplant <i>Mertensia maritima</i> and in damp slacks within the shingle Baltic rush <i>Juncus balticus</i>. 	International

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<p>Invertebrates:</p> <ul style="list-style-type: none"> Ochthebius lenensis, a water beetle, found near freshwater and brackish waterbodies within the intertidal mudflats, saltmarsh and estuarine alder woodland, and Tetanocera freyi, a snail killing fly, on the saltmarshes. The plant species are all associated with the specified Ramsar habitats and are protected and managed as part of them. <p>The Moray and Nairn Coast Ramsar site also qualifies under Ramsar Criterion 2 by supporting:</p> <ul style="list-style-type: none"> Osprey Pandion haliaetus, which forage throughout the Ramsar site (2008 to 2012, five year mean of up to 9 territories within feeding range, 4.5% of the GB population and 7 pairs breeding within the site, 7% of the GB population) Bar-tailed godwit Limosa lapponica (1989/90 to 1993/94, five year winter peak mean of 899 individuals, 2% of the GB population). <p>The Moray and Nairn Coast Ramsar site further qualifies under Ramsar Criterion 5 by regularly supporting waterbirds in numbers of 20,000 individuals or more. In the five-year period 1989/90 to 1993/94 a winter peak mean of 24,000 individual waterbirds was recorded comprising 14,500 wildfowl and 9,500 waders. The site also qualifies under Ramsar Criterion 4 by supporting the following waterbird species at a critical stage in their life cycles:</p> <ul style="list-style-type: none"> Red-breasted merganser Mergus serrator (102 individuals, 1% of the GB population). A winter peak mean of 20,250 individual waterbirds was recorded, including nationally important populations in the five year 	

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<p>period 1991/92 to 1995/96, greater than 2,000 individuals of the following species:</p> <ul style="list-style-type: none"> • Dunlin <i>Calidris alpina alpina</i> (2,689 individuals, 0.5% of the GB population). • Oystercatcher <i>Haematopus ostralegus</i> (2,171 individuals, 0.6% of the GB population). • Wigeon <i>Anas penelope</i> (2,600 individuals, 0.9% of the GB population). Bar-tailed godwit, pink-footed goose, greylag goose and redshank are also components of the waterbird assemblage. The Moray and Nairn Coast Ramsar site also qualifies under Ramsar Criterion 6 by regularly supporting 1% or more of the individuals in a population of waterbirds: • Pink-footed goose <i>Anser brachyrhynchus</i> (1988/89 to 1992/93, winter peak mean of 7,538 individuals, 4% of the Eastern Greenland/Iceland/UK biogeographic population). • Greylag goose <i>Anser anser</i> (1988/89 to 1992/93, winter peak mean of 3,023 individuals, 3% of the Iceland/UK/Ireland biogeographic population). • Redshank <i>Tringa totanus</i> (1989/90 to 1993/94, winter peak mean of 1,690 individuals, 1% of the Eastern Atlantic biogeographic population). 	
Cromarty Firth	SPA	c. 8.6km north from the site	Qualifying Interest N.B All figures relate to numbers at the time of classification except where amended by the 2001 SPA Review (osprey, dunlin) and/or subsequent surveys (foraging osprey and oystercatcher): Cromarty Firth SPA qualifies under Article 4.1 by regularly supporting populations of European importance of the Annex 1 species: osprey <i>Pandion haliaetus</i> forage throughout the SPA (2008 to 2012, five year mean of up to 25 territories within	International

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			<p>feeding range, 12.5% of the GB population, with 1 pair breeding within the site, 1% of the GB population); common tern <i>Sterna hirundo</i> (1989 to 1993 mean of 294 pairs; 2% of the GB population); whooper swan <i>Cygnus cygnus</i> (1992/93 to 1996/97 winter peak mean of 64 individuals, 1% of the GB population) and bartailed godwit <i>Limosa lapponica</i> (1,355 wintering individuals, 3% of the GB population). Cromarty Firth SPA further qualifies under Article 4.2 by regularly supporting a population of European importance of the migratory species: greylag goose <i>Anser anser</i> (1992/93 to 1996/97 winter peak mean of 1,782 individuals; 2% of the Iceland/UK/Ireland biogeographic population). Cromarty Firth SPA also qualifies under Article 4.2 by regularly supporting in excess of 20,000 individual waterfowl. In the five-year period 1992/93 to 1996/97, a winter peak mean of 30,200 individual waterfowl was recorded, comprising 14,800 wildfowl and 15,400 waders including nationally important populations of the following species: redshank <i>Tringa totanus</i> (1,149 individuals, 1% of the GB population); curlew <i>Numenius arquata</i> (1,313 individuals, 1% of the GB population); knot <i>Calidris canutus</i> (4,312 individuals, 1% of the GB population); red-breasted merganser <i>Mergus serrator</i> (204 individuals, 2% of the GB population); scaup <i>Aythya marila</i> (295 individuals, 3% of the GB population); pintail <i>Anas acuta</i> (319 individuals, 1% of the GB population); wigeon <i>Anas penelope</i> (9,204 individuals, 3% of the GB population); greylag goose (1,782 individuals, 2% of the GB population); bar-tailed godwit (1,355 individuals) and whooper swan (64 individuals). In the five-year period 1991/92 to 1995/96, a winter peak mean of 34,847 individual waterfowl was recorded with the assemblage additionally including nationally important populations greater than 2,000 individuals of: dunlin <i>Calidris alpina alpina</i></p>	

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
Loch Flemington	SPA	c. 4.7km south from the site	Loch Flemington SPA is a small, shallow eutrophic loch 8 km southwest of Nairn. The undisturbed aquatic plant community includes diverse submerged and emergent vegetation, and sedge fen. The boundary of the SPA generally follows a line 20m from the shore of Loch Flemington, within the Kildrummie Kames SSSI. The site is of special nature conservation and scientific importance within the European Community because it supports a nationally important population of breeding Slavonian grebe <i>Podiceps auritus</i> . Within the EC this species breeds only in Britain, Sweden and Finland, and because of its rarity it is listed as requiring special conservation measures under Article 4.1 of The Wild Birds Directive. From 1991 to 1995 an average of 6 pairs of Slavonian grebe bred within the Loch Flemington SPA, representing 10% of the GB breeding population. During this period the average productivity of the site was 0.7 chicks per pair, well above the average productivity for the British population. In Britain, Slavonian grebes only breed in Scotland where breeding was first recorded in 1909, since when the population has risen slowly to its current level of around 60 pairs (1992-1995 mean population). The grebes remain on the loch during the breeding season, nesting in the sedge beds and feeding in the open water. Recent research has shown that the breeding success of the grebes may be adversely affected by disturbance and the Loch Flemington SPA includes a small area of the land fringing the loch.	International
Whiteness Head	SSSI	c.20m northeast and c.250 northwest of the site	Site of Special Scientific Interest (SSSI) notified natural features: Geological <ul style="list-style-type: none"> • Geomorphology: Coastal geomorphology of Scotland Biological	National

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
		c.50m north of the Dredged Channel	<ul style="list-style-type: none"> • Birds: Bar-tailed godwit <i>Limosa lapponica</i> issue, non-breeding • Birds: Knot <i>Calidris canutus</i>, non-breeding • Intertidal marine habitats: Sandflats • Coastlands: Saltmarsh • Coastlands: Sand dunes • Coastlands: Shingle 	
Rosemarkie and Shandwhich Coast	SSSI	c.5.6km west of the site	<p>Notified natural features:</p> <p>Geological:</p> <ul style="list-style-type: none"> • Structural and metamorphic geology: Moine • Stratigraphy: Callovian • Palaeontology: Mesozoic Palaeobotany <p>Biological:</p> <ul style="list-style-type: none"> • Coastlands: Maritime cliff • Coastlands: Sand dune • Woodlands: Upland birch woodland • Vascular plants: Purple mountain milk-vetch (<i>Oxytropis halleri</i>) <p>Birds: Breeding Cormorant</p>	National
Longman and Castle Stuart Bays	SSSI	c.7.3km southwest of the site	<p>Notified natural features:</p> <p>Biological</p> <ul style="list-style-type: none"> • Coastlands: Eelgrass beds • Coastlands: Mudflat • Coastlands: Saltmarsh • Birds: Cormorant <i>Phalacrocorax carbo</i> • Birds: Goldeneye <i>Bucephala clangula</i> • Birds: Red-breasted merganser <i>Mergus serrator</i> • Birds: Redshank <i>Tringa totanus</i> 	National

Site Name	Designation	Distance and direction from site	Reasons for designation	Geographic importance ¹
			Birds: Wigeon <i>Anas penelope</i>	

1.2 SCHEDULE 1 BIRDS

Table 2 Results of the NBN data search for protected birds within 5km of site.

Species	Scientific name	Schedule 1 ²	Importance
Barn Owl	<i>Tyto alba</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Bearded Tit	<i>Panurus biarmicus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Bittern	<i>Botaurus stellaris</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Black Grouse	<i>Lyrurus tetrix</i>	No	National (UK) importance: Red-listed species of conservation concern.
Black Redstart	<i>Phoenicurus ochruros</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).

² Schedule 1 species are birds protected under the Wildlife and Countryside Act 1981 from disturbance during nesting, with additional safeguards for their nests and dependent young.

Species	Scientific name	Schedule 1 ²	Importance
Black-tailed Godwit	<i>Limosa limosa</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Black-throated Diver	<i>Gavia arctica</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Brambling	<i>Fringilla montifringilla</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Capercaillie	<i>Tetrao urogallus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Common Scoter	<i>Melanitta nigra</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Crested Tit	<i>Lophophanes cristatus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Crossbill	<i>Loxia curvirostra</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Fieldfare	<i>Turdus pilaris</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).

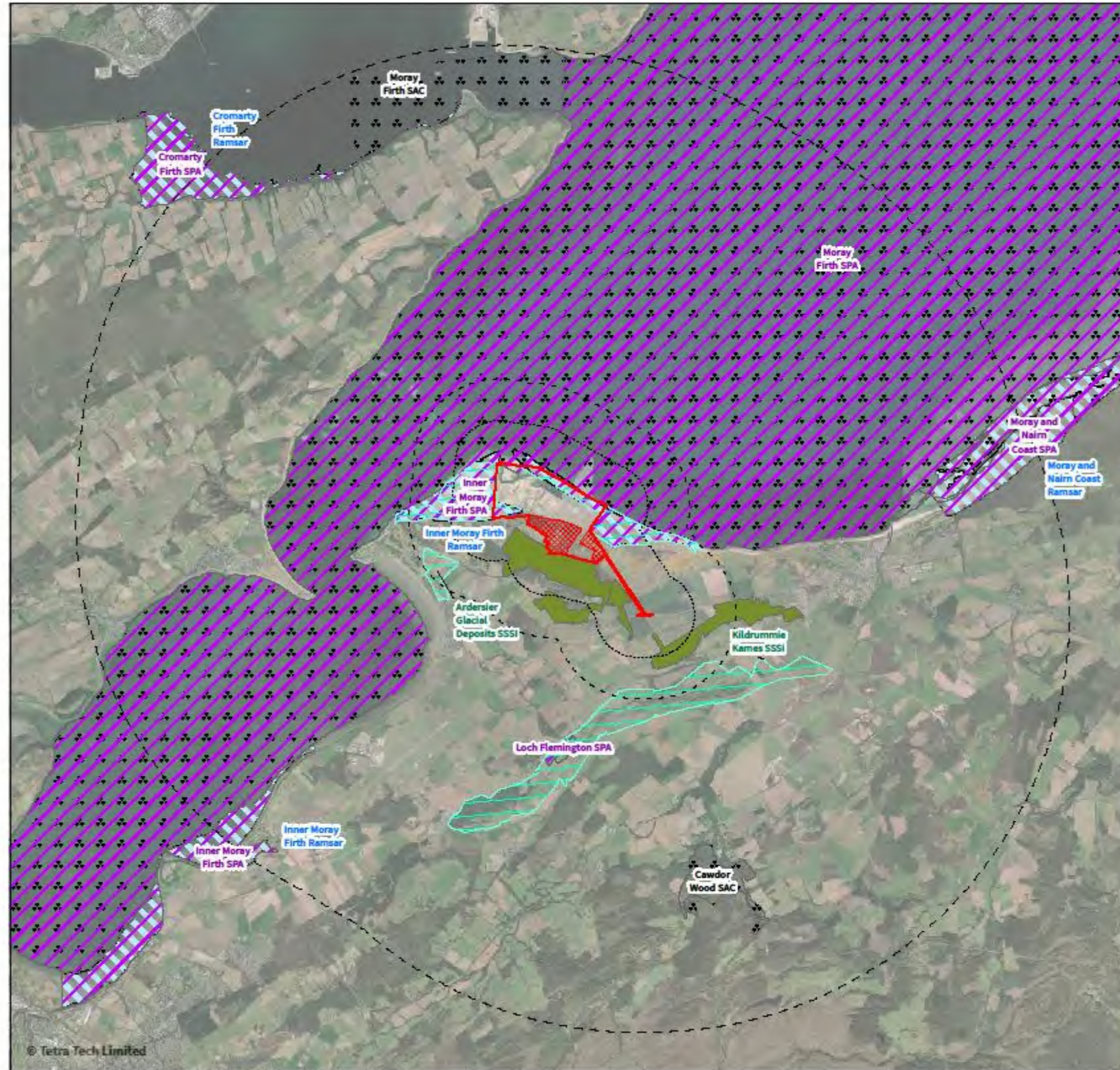
Species	Scientific name	Schedule 1 ²	Importance
Garganey	<i>Spatula querquedula</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Goldeneye	<i>Bucephala clangula</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Great Northern Diver	<i>Gavia immer</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Greenland White-fronted Goose	<i>Anser albifrons flavirostris</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Greenshank	<i>Tringa nebularia</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Kingfisher	<i>Alcedo atthis</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Leach's Petrel	<i>Hydrobates leucorhous</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Little Gull	<i>Hydrocoloeus minutus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).

Species	Scientific name	Schedule 1 ²	Importance
Little Tern	<i>Sternula albifrons</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Long-tailed Duck	<i>Clangula hyemalis</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Mediterranean Gull	<i>Ichthyaetus melanocephalus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Merlin	<i>Falco columbarius</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Peregrine	<i>Falco peregrinus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Pintail	<i>Anas acuta</i>	No	National (UK) importance: Amber-listed species of conservation concern.
Quail	<i>Coturnix coturnix</i>	No	National (UK) importance: UKBAP Priority Species.
Red-throated Diver	<i>Gavia stellata</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Ruff	<i>Calidris pugnax</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).

Species	Scientific name	Schedule 1 ²	Importance
Scaup	<i>Aythya marila</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Slavonian Grebe	<i>Podiceps auritus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Snow Bunting	<i>Plectrophenax nivalis</i>	No	National (UK) importance: Amber-listed species of conservation concern.
Velvet Scoter	<i>Melanitta fusca</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Whimbrel	<i>Numenius phaeopus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).
Whooper Swan	<i>Cygnus cygnus</i>	Yes	National (UK) importance: Species protected under national (UK) legislation (Schedule 1, Wildlife and Countryside Act 1981).

2.0 FIGURE

Figure 1 Statutory Designated Sites



Designated Sites - Ardersier Port Expansion

Haventus Legend

- Proposed port boundary
- Proposed port extension
- Site boundary buffer (10 km)
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)
- Ramsar
- Site boundary buffer (2 km)
- Sites of Special Scientific Interest (SSSI)
- Site boundary buffer (1 km)
- Scottish Ancient Woodland Inventory

Drawn by: CHRIS.DAWE
Checked by: Sam King

Figure No. 1
Revision No. A
03 September 2025

0 1 2 3 4 Kilometers
Scale 1:50,000 @A3

British National Grid
NGR: 281240E 857082N

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ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025

Appendix 13.4 Mitigation

Ardersier Port Extension

784-B069769

Appendix 13.4: Mitigation

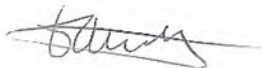

Hventus

September 2025

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DOCUMENT CONTROL

Document:	Appendix 13.4: Mitigation
Project:	Ardersier Port Extension
Client:	Haventus
Project Number:	784-B069769

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1.5 Summary of Mitigation and Enhancement Measures.....9

1.0 MITIGATION - ORNITHOLOGY

1.1 EMBEDDED MITIGATION

This section sets out the mitigation hierarchy and enhancement measures required to avoid, reduce, or compensate for significant adverse effects on ornithological receptors identified in Section 1.5 of Chapter 13 (Ornithology). The approach follows CIEEM (2024)¹ best practice, with embedded, additional, and compensatory measures designed to address the specific sensitivities of SPA/SSSI/Ramsar waders, breeding birds, raptors, and pinewood specialists. Any effects which cannot be mitigated or reduced are referred to as residual effects in Chapter 13 (Ornithology) Section 1.7.

A 3 m high earth bund has been constructed along the consented boundary to provide a physical barrier between construction activities and adjacent intertidal habitats. This bund functions as an embedded avoidance measure to reduce visual and acoustic disturbance to the statutory designated sites' wader assemblages during both construction and operation. The proposed extension works will remain within the existing bunded zone, ensuring the effectiveness of this mitigation feature is maintained throughout the project lifecycle.

In addition to the existing 3 m bund, a further 2 m bund is proposed along the eastern boundary to provide additional visual screening and reduce potential disturbance to waders. The location and design of this bund will be confirmed in consultation with the project team and statutory consultees. Consideration is being given to strategic placement to further reduce line-of-sight impacts and maintain the effectiveness of this embedded mitigation feature.

The design of the proposed development has incorporated a range of embedded mitigation measures to avoid or minimise ornithological effects from the outset.

These measures apply across SPA/SSSI/Ramsar waders, onsite breeding birds, raptors/Schedule 1 and pinewood specialists unless receptor-specific text states otherwise (see Chapter 13 (Ornithology) Section 1.6 and Tables 13.5–13.6):

- Bund screening and visual/noise screening at sensitive interfaces;
- ECoW-verified setback buffers at mapped roosts/shoreline and adaptive scheduling to avoid peak high-tide windows and severe cold snaps;
- Directional, shielded and curfewed lighting to minimise spill to intertidal and retained woodland;
- Disciplined access/traffic controls along shore-adjacent corridors;
- SEPA GPP-aligned drainage, turbidity and pollution controls (CEMP); and
- Vessel-management protocol for assembly & tow-out (slow, predictable transits on agreed routes; avoid peak periods where practicable; on-water observation with adaptive response) as secured in Appendix 13.9.
- Retention of Key Habitats: Where feasible, retention of woodland edges, scrub, and buffer zones adjacent to intertidal habitats to maintain habitat connectivity and reduce edge effects, illustrated in Figure Woodland Buffer in Chapter 3 (Project Description).

¹ Chartered Institute of Ecology and Environmental Management (CIEEM). (2024). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.3. Winchester: CIEEM.

- **Timing of Works:** Where feasible and if required, programme clearance and construction activities outside the main breeding season for birds (March–August) and outside peak high-tide roost periods for waders, wherever practicable.

1.2 CONSTRUCTION PHASE MITIGATION

The species mitigation plans for sensitive ornithological receptors should include, but are not limited to, the following measures.

For SPA/SSSI/Ramsar Waders:

- **Noise and Visual Screening:** Where physical screening is not feasible, implement an activity schedule to minimise disturbance. Noisy works such as piling, dredging, and heavy vehicle movements will be programmed to avoid peak periods of sensitivity, including the wader breeding season.
- Prior to works near intertidal margins, the ECoW will confirm roost/foraging locations and set no-go/setback buffers, refining adaptively based on monitoring. Noisy works such as piling and heavy vehicle movements will be scheduled to avoid peak high-tide periods and severe cold snaps, applying adaptive scheduling rather than blanket seasonal shut-downs. Traffic discipline will be enforced near intertidal margins, with defined access routes and speed limits to minimise repeated disturbance.
- **Sediment and Pollution Control:** Implement robust silt fencing, bunding, and spill response protocols to prevent sediment plumes and pollution from reaching intertidal habitats, in accordance with SEPA Guidance for Pollution Prevention (GPP)² and the CEMP Pollution Prevention Plan.

Water-quality (turbidity/sedimentation) controls:

- **Implement a CEMP and HMP covering:** silt fencing, settlement/attenuation measures, cofferdams where appropriate, secondary containment, and designated refuelling/maintenance zones away from water.
- **Spill prevention & response:** on-plant spill kits, trained operatives, and stop-work triggers in adverse weather.
- **Drainage isolation/booms as required;** turbidity/visual monitoring during sensitive near-shore activities where an ornithological pathway exists.
- **The construction drainage design** (e.g., two-stage cut-off drains, staged platforming, permeable paving/infiltration, inlet screening) are relied upon to prevent off-site sediment delivery to SPA supporting habitats.

Construction pollution risk (fuels, oils, concrete/cement washings, silt-laden runoff):

- Secure storage of fuels/chemicals; bunded tanks ($\geq 110\%$); designated refuelling areas with drip-trays and interception.
- Concrete management: controlled washout areas; capture and correct disposal of cementitious waters and sediments.
- Wheel-wash / housekeeping: clean internal/local haul routes; manage stockpiles; maintain spill logs; ECoW oversight with authority to enforce stop-works.

² Scottish Environment Protection Agency (SEPA). *Guidance for Pollution Prevention (GPPs)*. Available at: <https://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-pgps-and-replacement-series-gpps/>

- Pollution control will follow SEPA GPP practice for storage, refuelling, concrete washout and spill response; these measures interrupt source–pathway–receptor links to supporting intertidal habitats.

Noise & visual disturbance controls for SPA/Ramsar waders:

Embedded measures include the existing ~3 m bund along the consented boundary and an additional ~2 m bund on the eastern boundary to improve visual/acoustic screening to adjacent roosts, plus ECoW-verified roost buffers and adaptive scheduling to avoid peak high-tide windows and severe cold snaps wherever practicable.

- Programme high-disturbance tasks (e.g., piling, concentrated HGV runs) to avoid peak high-tide windows and severe cold snaps, wherever practicable.
- ECoW-verified setback buffers to mapped high-tide roosts, with daily checks during shore-proximal works.
- Directional, shielded lighting with dimming/curfew regimes to minimise spill toward intertidal areas. Lighting performance and commissioning may include:
 - Prepare a site Lighting Plan (CEMP annex) showing fittings, optics, tilt, CCT and expected horizontal illuminance to sensitive edges;
 - Pre-commissioning design check and post-commissioning field verification (lux mapping) along the shore-facing boundary and at mapped roost margins;
 - Select low-spill optics and warm-white sources to reduce blue-light content;
 - Use dimming/curfew and switching hierarchies to maintain the minimum safe lighting needed for the task;
 - Record aiming/focus settings at handover and add to the Mitigation Log; correct exceedances with shielding/re-aiming before works proceed.
- Contingency quiet-roost measures (e.g., supratidal scrape/berm) if monitoring evidences sustained displacement pressure.

These measures are secured through the Outline CEMD → CEMP and the Habitat Management Plan.

Assembly & tow-out vessel-management protocol

- Timing of tow-out and near-shore operations to avoid peak periods for SPA qualifying features, where practicable.
- Tow-out will be conducted at low speeds (~3–4 knots), using agreed transit routes to minimise residence time in near-shore SPA waters, and avoiding peak non-breeding periods where practicable. Operational protocols will limit the use and speed of RIBs and implement on-water observation with adaptive responses if notable bird displacement is detected.

For Onsite Breeding Birds:

- **Pre-Works Checks:** During the nesting bird season (typically March to August), a qualified ecologist will carry out pre-works nesting bird checks within 48 hours of any vegetation clearance. If active nests are found, works must cease within a minimum 10–50 m buffer (species-specific, following NatureScot guidance) until fledging is complete, as per NatureScot and Goodship & Furness (2022)³.
- **Dissuasion (if required):** Where early clearance is not possible, use non-lethal dissuasion (e.g. strimming, bird scarers) before the breeding season to discourage nesting in areas scheduled for disturbance.

³ Goodship, N.M. & Furness, R.W. (2022). *Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species*. NatureScot Research Report 1283.

- Apply lighting controls adjacent to retained habitats during the breeding season to avoid unnecessary light spill.

For Raptors and Pinewood Specialists:

- **Nest Protection:** Identify and map all active raptor and Schedule 1 nests prior to works. Implement species-specific exclusion zones. Works requiring disturbance licence will be supervised by a specialist ornithologist.
- **Schedule of Felling:** Schedule felling in areas of woodland with known or potential raptor nests outside the core bird breeding season (typically March–August), applying species-specific evidence and licence conditions where timing outside this window is required. If active raptor nests are identified, establish a suitable species-specific buffer within which no felling or disturbance will take place until the breeding season has concluded.
- **Licensing:** Where disturbance to Schedule 1 birds (including raptors and pinewood specialists) cannot be avoided through timing and exclusion zones, works will proceed only under a NatureScot Schedule 1 disturbance licence, with supervision by a specialist ornithologist.
- **Toolbox Talks:** All site personnel will receive ornithology toolbox talks, including legal obligations and nest reporting protocols.

Note: Where seasonal constraints and exclusion zones cannot be fully implemented, a suitably qualified ornithologist will be present on site to advise and implement additional mitigation measures as required, ensuring compliance with legal protections and project commitments.

1.3 OPERATIONAL PHASE MITIGATION

- **Directional Lighting:** Install downward-facing, shielded lighting to minimise light spill onto adjacent intertidal and woodland habitats, maintaining dark corridors for nocturnal and crepuscular species. The lighting strategy will be developed in accordance with the Lighting Plan appendix and will inform the final design.
- **Vessel operations** (operational tow-out protocol): Maintain the tow-out vessel-management protocol for episodic operational movements: slow speeds (~3–4 knots) on agreed routes, timing to avoid peak periods for SPA qualifying features where practicable, and on-water observation with adaptive response if notable displacement is detected.
- **Habitat Management:** Manage the retained buffer habitat to support key species by retaining mature conifers for crossbill, create standing deadwood for crested tit, and consider specific habitat needs for woodcock.
- **Access Control:** Prohibit access to sensitive retained habitat areas (e.g., roosts, retained woodland) for all site personnel. These areas will be clearly demarcated with fencing and signage, and no entry will be permitted except by authorised ecological staff for monitoring purposes.

1.4 MONITORING AND ADAPTIVE MANAGEMENT

Post-Construction Monitoring:

- **Post-Construction Monitoring:** Monitoring of wader roosts, breeding bird territories, and raptor nest sites will be undertaken in accordance with the Habitat Management Plan (HMP) and reviewed annually as part of the HMP review process. Results will be assessed by a qualified ornithologist and reported to NatureScot and The Highland Council (THC).
- **Habitat Establishment Monitoring:** Monitoring of habitat establishment and the use of artificial nest sites will be carried out as set out in the HMP and reviewed annually in line with the HMP review process.

Trigger Points for Action:

- If monitoring identifies significant on-site declines in key bird populations or failure of compensatory habitats to establish, additional measures (e.g., further habitat creation, enhanced exclusion zones) will be implemented in consultation with statutory agencies. These actions will be guided by and incorporated into the Habitat Management Plan (HMP), which will be reviewed annually in consultation with statutory consultees

Monitoring outputs will be reported annually to NatureScot and The Highland Council (THC). During early construction in shore-adjacent areas, the ECoW will keep short notes during periodic checks for the first fortnight, then weekly unless triggers are reached (e.g., repeated flushes at mapped roosts; adverse-weather constraint breaches). A weekly dashboard to the PMT will record compliance and any adaptive refinements agreed with the Site Manager. Roost-use spot counts at agreed high tides (≥ 2 per week in peak winter months) within the nearest supratidal cells; trigger = $\geq 25\%$ sustained reduction versus pre-construction baseline over two consecutive weeks \rightarrow enact temporary quiet-roost (scrape/berm) and reschedule high-noise tasks away from peak tides. At the end of each near-shore construction phase, the ECoW will issue a short close-out memorandum summarising observed responses, any trigger activations and the adaptive refinements agreed with the Site Manager; the memo will be filed within the CEMP Mitigation Log.

The Habitat Management Plan (HMP) will be reviewed annually in consultation with statutory consultees, and adaptive management measures will be implemented as required.

Hydrodynamic / coastal-process commitments

The competent authority can ascertain no AEoI for the Inner Moray Firth SPA/Ramsar subject to:

- Final coastal-process/hydrodynamic assessment demonstrating no material change to inundation regime, intertidal morphology or supporting processes in SPA-adjacent areas; and
- securing dredge/armour parameters, post-dredge monitoring, and corrective actions via enforceable consent conditions.

Where model outputs indicate material changes (e.g., increased tidal velocities, altered inundation frequency) within SPA-adjacent intertidal areas, design will be refined and the AA updated to ensure the assessed HRA envelope is not exceeded. These commitments will be implemented through a Dredge/Coastal Processes Management Plan (DCMP), including pre-dredge verification, post-dredge monitoring, reporting and corrective action protocols aligned to consent conditions.

1.5 SUMMARY OF MITIGATION AND ENHANCEMENT MEASURES

A range of targeted mitigation and enhancement measures will minimise effects on key ornithological receptors. For SPA/SSSI/Ramsar waders, exclusion zones and visual/acoustic screening will reduce disturbance at sensitive roosts, while robust sediment and pollution controls will safeguard intertidal habitats.

Prior to vegetation clearance, ecologists will conduct nesting bird checks and apply species-specific buffers. Toolbox talks will ensure all site personnel understand legal obligations and reporting protocols.

For raptors and pinewood specialists, active nests will be mapped and protected using appropriate exclusion zones. Woodland felling will be scheduled outside the breeding season where practicable. Where seasonal constraints or exclusion zones cannot be fully applied, a qualified ornithologist will be present on site to advise and implement supplementary mitigation measures, ensuring legal compliance and alignment with project commitments.

Operational effects will be reduced through directional lighting, and noise management.

Where confirmed nest sites loss is unavoidable, compensatory artificial nest sites for key species will be provided, in agreement with NatureScot. Post-construction, annual monitoring of key bird populations and habitats will be undertaken in line with the annual review of the HMP. If mitigation proves ineffective, adaptive measures will be implemented in consultation with statutory agencies.

A detailed schedule of mitigation, compensation, and management measures is provided in Table 7 of Chapter 13 (Ornithology), specifying actions, licensing, responsible persons, and timing for each receptor. This schedule should be used as a reference throughout pre-construction, construction, and operational phases, and must be read in conjunction with the CEMP and HMP.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025

Appendix 13.5 Pinewood Bird Survey Report

Haventus Ardersier Port

Pinewood Bird Survey

MARCH 2025 FOR HAVENTUS



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1.0 Introduction

Highland Ecology and Development Limited (herein referred to as HED Ltd) were commissioned by Haventus to carry out pinewood bird surveys (PBS) on approximately 45ha of commercial woodland surrounding the port of Ardersier, centred at NH 80870 57354 (Figure 1).

This survey follows on from breeding bird surveys carried out by HED Ltd in the 2024 as part of a preliminary ecological appraisal ahead of the proposed port expansion. The following report outlines the pinewood bird species inhabiting the woodland for breeding and wintering purposes to identify any ornithological constraints associated with the proposed works.

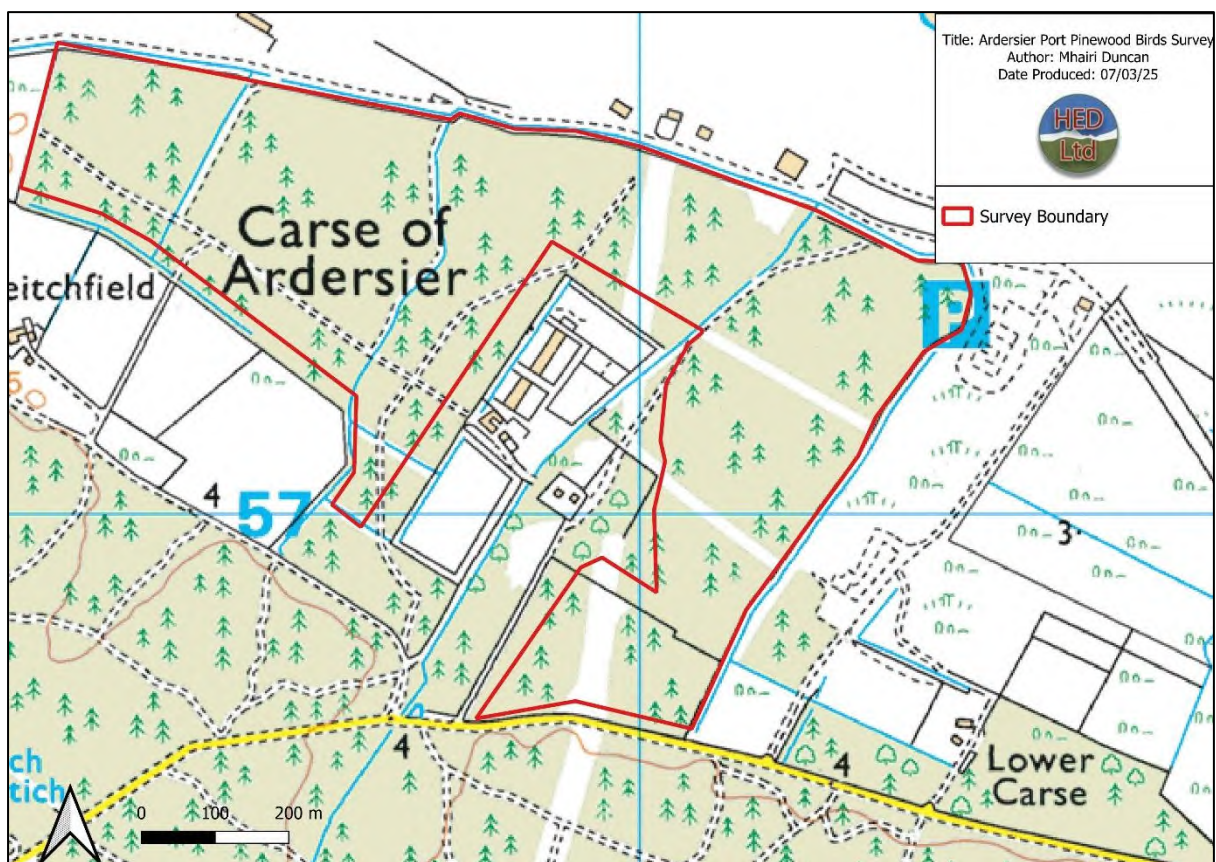


Figure 1: Pinewood Bird Survey Area

2.0 Methodology

2.1 Pinewood Bird Survey

The PBS was undertaken by an experienced and qualified ecologist from HED Ltd following an adapted methodology as described by Gilbert et al (1998) and British Trust for Ornithology (BTO) / Joint Nature Conservancy Council (JNCC) Common Bird Census (CBC). The surveys were carried out over three visits between November and March with at least one month between each visit, all visits occurred during favourable weather conditions. Triangular transects were walked at an ambling pace between the hours of 09:00 and 13:00 ensuring sufficient coverage of the survey area. Equipment utilised included binoculars, range finder, maps, field sheets, mobile applications, and writing implements.

Data on the predicted breeding status of birds which breed early in the year was gathered as well as data on non-breeding priority species such as those listed under Schedule 1 of the Wildlife and Countryside Act (WCA) 1981, Highland Biodiversity Action Plan (BAP) 2021-2026, and Red/Amber listed birds on the Birds of Conservation Concern report (BoCC) 2021.

Factors indicative of breeding or territory holding are:

- Bird observed displaying or singing;
- Nests, eggs, or young observed;
- Adults repeatedly alarm-calling when approached;
- Distraction behaviours displayed when approached;
- Territories disputed observed; or
- A pair of birds are observed together in suitable habitat.

Data was gathered using recording sheets, and sightings were geo-referenced in the field using the mobile application *Avenza Maps* and later displayed on one final map using mapping software *QGIS (version 3.36.1)*.

2.3 Survey Limitations

Ecological surveys are limited by several factors that affect the presence of flora and fauna (weather, climate, animal behaviour, etc). Evidence of Schedule 1 protected species is not always found during a survey, this does not confirm that species are absent from an area or will not be present in the future.

The unavoidable proximity to active construction during the surveys interfered with audible detectability of some songs and calls produced by birds to an extent. This was managed by recording bird sounds using a mobile and later analysing them in finer detail.

3.0 Results

3.1 Pinewood Bird Survey

A total of twenty species were recorded across the three surveys, two of which were listed under Schedule 1 of the WCA 1981. Three species were listed as amber, one was listed as red on the BoCC 2021, and zero priority species under the Highland BAP were recorded. Survey results are quantified in Table 1 below.

Breeding behaviours observed included prominent singing by males in distinct locations, males and females spotted in pairs within suitable habitat, and alarm calls made by birds when approached. All birds observed displaying these behaviours are typically reported to lay their eggs from mid-February (wren) to April (coal tit).

Species diversity remained consistent across the dense woodland, with typical species such as coal tit and chaffinch being the most abundant. Small peaks in diversity occurred at scrub-rich rides associated with ditches and powerline wayleaves where wren and bullfinches were observed defending territories and pairing up. Three suspected crested tit breeding territories were recorded in central and western areas of the woodland (Figure 2). A single flight call from a common crossbill was recorded however no observations were made of the sex or age of the bird to confirm breeding status, nonetheless the woodland did provide favourable nesting habitat.

Corvids were recorded on three occasions. One of which was the flight call of a raven, a species which has been historically reported nesting in the vicinity. While no observations of nesting were made during this survey, it is likely that the species will nest here in early March through to July, deduced by the presence of large, abandoned nests typical of corvids and/or raptors.

Table 1: Results from Pinewood Bird Survey

Common Name	Latin Name	Schedule 1	Conservation Status	Total Count		
				Survey 1	Survey 2	Survey 3
Blue Tit	<i>Cyanistes caeruleus</i>					2
Bullfinch*	<i>Pyrrhula pyrrhula</i>		Amber		2	
Carrion Crow	<i>Corvus corone</i>			2		
Chaffinch*	<i>Fringilla coelebs</i>				2	5
Coal Tit*	<i>Periparus ater</i>			2	10	10
Common Crossbill	<i>Loxia curvirostra</i>	Yes				1
Crested Tit*	<i>Lophophanes cristatus</i>	Yes			2	2
Dunnock*	<i>Prunella modularis</i>		Amber	4		
Goldcrest*	<i>Regulus regulus</i>				3	1
Goldfinch	<i>Carduelis carduelis</i>					4
Great Spotted Woodpecker	<i>Dendrocopos major</i>				1	
Great Tit	<i>Parus major</i>			1	2	1
Hooded Crow	<i>Corvus cornix</i>					3
Jackdaw	<i>Coloeus monedula</i>					1
Long-tailed Tit	<i>Aegithalos caudatus</i>			1		
Raven	<i>Corvus corax</i>				1	
Robin	<i>Erithacus rubecula</i>					1
Siskin	<i>Spinus spinus</i>					1
Eurasian Treecreeper	<i>Certhia familiaris</i>				1	2
Woodcock	<i>Scolopax rusticola</i>		Red	3		1
Wren*	<i>Troglodytes troglodytes</i>		Amber	1	4	2

* Evidence of breeding behaviour

4.0 Conclusion and Recommendations

This survey provides a baseline record for a range of pinewood species including rare ground nesting specialists (woodcock), keystone species (great spotted woodpecker) and Schedule 1 protected species (crested tit, common crossbill). The site offers suitable habitat to support birds for nesting and wintering purposes. It is advised that the proposed programme of works is designed in line with the standard mitigation hierarchy whereby avoidance, mitigation and compensatory provisions are set in place to manage any impact on the conservation status of the bird species recorded.

The following actions should be implemented as part of a site-specific breeding bird protection plan by the client and contractors.

- Any vegetation stripping/felling and ground-breaking works must be carried out following a pre-works check by the onsite EnvCoW no more than 48hrs ahead of works. An Eco-permit should be issued documenting any provisions in place for works to proceed.
- Where appropriate, employ dissuasion techniques to discourage birds from nesting in an area of land programmed for clearance. Dissuasion techniques may include bird scarers, vegetation strimming, or decoy hawks. The use of deterrents does not replace the need for pre-works checks unless advised by an EnvCoW.
- If a nesting bird and/or active nest is encountered during works, all works within the immediate vicinity must cease and a supervisor / EnvCoW informed. An appropriate exclusion zone must be implemented as instructed by the onsite EnvCoW. If the EnvCoW is not on site then an emergency exclusion zone of 50m or the maximum disturbance buffer for Schedule 1 species as advised by NatureScot (Ruddock., 2007) must be implemented.
- Only the EnvCoW may amend exclusion zones following risk assessment based on the construction activities, local topography, provision of screening, species specific disturbance tolerances etc.
- The exclusion zone must remain in place until the EnvCoW has confirmed the nest is no longer in use, at this stage the EnvCoW may remove the nest (unless the nest belongs to a species listed under Schedule A1 of the WCA 1981).

- A landscaping plan should be produced incorporating locally sourced native shrub and tree species into its planting regimes to compensate for the loss of favourable habitat.

References

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Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747. Available online at <https://britishbirds.co.uk/content/status-our-bird-populations> (Accessed: 05/03/25).

Appendix 1: Survey Maps

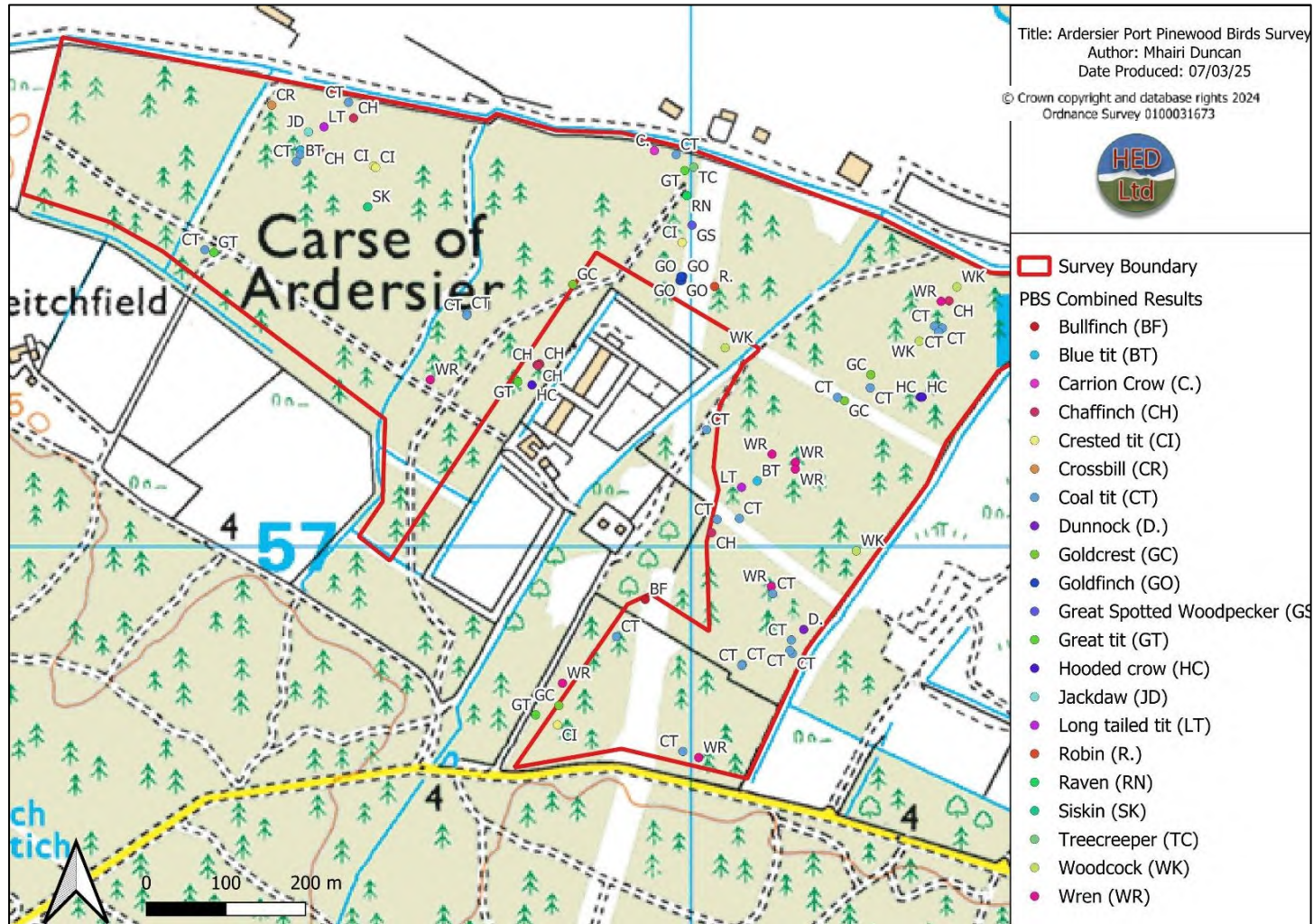


Figure 2: Combined Records from PBS

Appendix 2: Breeding Birds Legislation

Legislative Protection

For any wild bird species, it is an offence to intentionally or recklessly:

- kill, injure, or take a bird.
- take, damage, destroy or interfere with a nest of any bird while it is in use or being built.
- obstruct or prevent any bird from using its nest.
- take or destroy an egg of any bird.

For any wild bird species listed on Schedule 1, it is an offence to disturb:

- any bird while it is building a nest.
- any bird while is in, on, or near a nest containing eggs or young.
- any bird while lekking.
- the dependent young of any bird.

Further protection is given to birds listed under schedule 1A and A1 all year round.

For any wild bird species listed on Schedule 1A, it is an offence to intentionally or recklessly harass any bird. For any wild bird species listed on Schedule A1, it is an offence to intentionally or recklessly take, damage, destroy or interfere at any time with a nest habitually used by any bird.

It is also an offence to:

- possess or control a living or dead wild bird
- possess or control an egg of a wild bird (or any such derivatives)
- knowingly cause or permit any of the above acts to be carried out.

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025

Appendix 13.6 Breeding Birds

Haventus Ardersier Port

Technical Appendix: Breeding Birds

JULY 2025 FOR HAVENTUS



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1.0 Background

This Technical Appendix (TA) was commissioned by Haventus in respect of proposals for the expansion of the Ardersier Port redevelopment area. Breeding bird surveys (BBS) were carried out on approximately 166ha of habitats, including saltmarsh, dunes, pine and deciduous woodland, gorse scrub, grassland and a lagoon, surrounding the port of Ardersier, centred at NH 80870 57354 (Figure 1). The purpose of this BBS was to provide baseline data to inform a comprehensive assessment of the predicted impact on breeding birds during the construction and operation phases of the port facility. The survey findings are provided within this document along with industry-approved guidance on licensing requirements, recommended mitigation and compensation initiatives.

2.0 Methodology

2.1 Breeding Bird Survey

The BBS was undertaken by an experienced and qualified ecologist from HED Ltd following an adapted methodology as described by British Trust for Ornithology (BTO) / Joint Nature Conservancy Council (JNCC) / Royal Society for the Protection of Birds (RSPB) Breeding Bird Survey (Stanbury et al., 2021). The surveys were carried out over 8 visits between April and June (inclusive), all visits occurred during favourable weather conditions (light winds, full to moderate sun and no rain). Surveys commenced 1 hour after sunrise and, where possible, 2no. 1 km transect routes were walked through each distinct habitat parcel, with at least 500m between each transect route. Where this method was not possible due to habitat parcel size, a shorter transect route was walked with observation points occurring at 200m intervals. Data was collected using the mobile application *Avenza Maps* and later mapped digitally using QGIS (*version 3.28.2*).

2.2 Limitations

Ecological surveys are limited by several factors that affect the presence of flora and fauna (weather, climate, animal behaviour, etc). Evidence of protected species and/or invasive species is not always found during a survey; this does not confirm that species are absent from an area or will not be present in the future. During the April surveys, a section of the spit to the east of the survey area was inaccessible due to dredging works, this area is noted in Figure 1 below. As this area was captured within the June surveys, it is not anticipated that the loss of data will significantly affect the results of the overall survey.

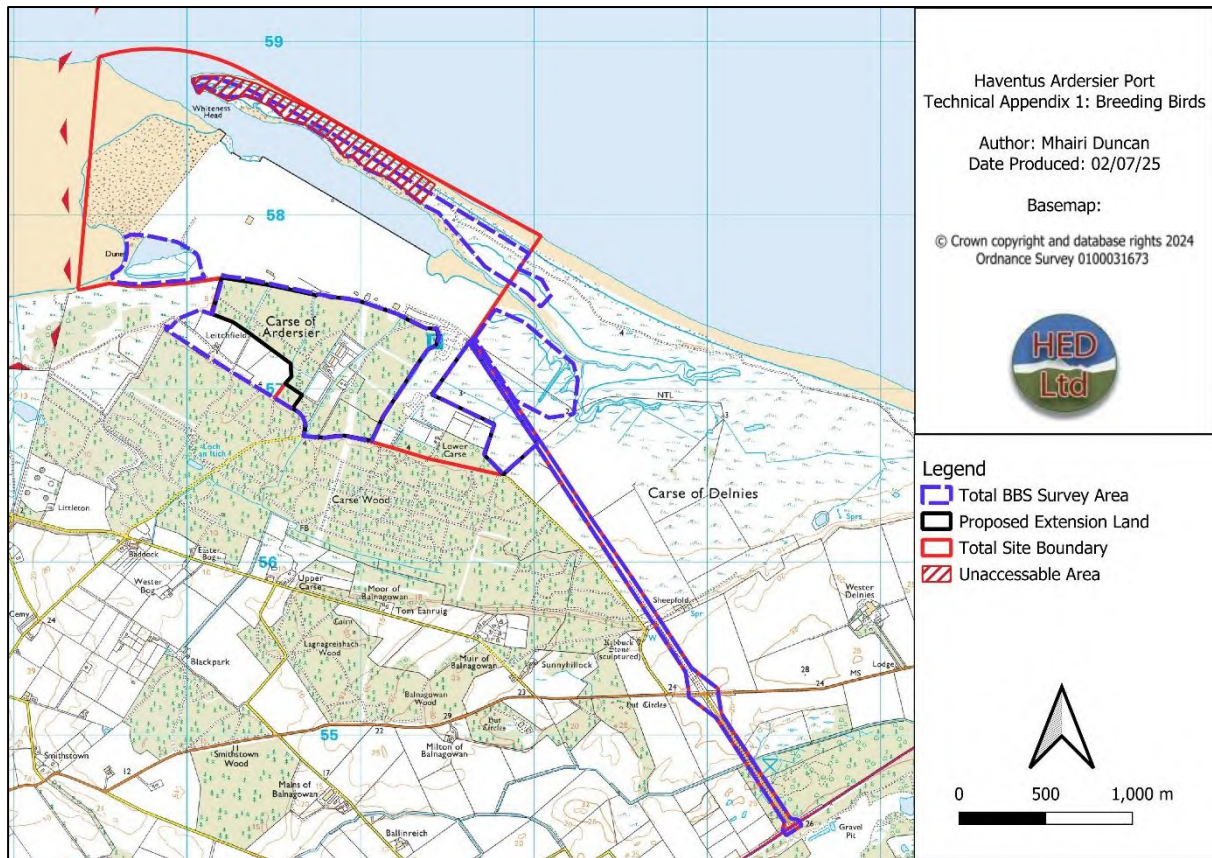


Figure 1: Whiteness Head Access Restrictions During April BBS.

3.0 Results

The results from the breeding bird transect are provided in Table 1 below. A total of 333 birds were recorded within the expansion area across the entire survey period, accounting for 42 species. None of the species recorded are listed under Schedule 1 of the Wildlife and Countryside Act (WCA., 1981), however 10 species are categorised as Amber or Red under the Birds of Conservation Concern 5 report by Stanbury et al., 2021, 3 of which are also included within the UK Biodiversity Action Plan by the Biodiversity Reporting and Information Group (BRIG.,2017).

The scrubland to the Southeast offered favourable perching, foraging and nesting habitat for a diversity of species, with an abundance of passerines recorded in this area. The Scots Pine plantation offered favourable nesting habitat for corvids and raptors, with a number of historic nests and several plucks noted throughout the survey area indicating raptor territories present within the woodland. The species recorded are suspected to be breeding based on typical breeding behaviours observed such as singing (by males), territorial displaying/fighting, alarm calling, pairing-up, nest building and provisioning. A summary of the findings from each round of surveys is provided in Table 1 and 2 below, findings are also illustrated in Figures 2 and 3.

Table 1: BBS Results April 2025

Species	Schedule 1 (WCA., 1981)	Conservation Status (BoCC., 2021)	UK BAP (BRIG., 2007)
Blackbird (<i>Turdus merula</i>)	N	Green	-
Blue Tit (<i>Cyanistes caeruleus</i>)	N	Green	-
Buzzard (<i>Buteo buteo</i>)	N	Green	-
Carrion Crow (<i>Corvus corone</i>)	N	Green	-
Chaffinch (<i>Fringilla coelebs</i>)	N	Green	-
Chiffchaff (<i>Phylloscopus collybita</i>)	N	Green	-
Coal Tit (<i>Periparus ater</i>)	N	Green	-
Dunnock (<i>Prunella modularis</i>)	N	Amber	-
Goldcrest (<i>Regulus regulus</i>)	N	Green	-
Goldfinch (<i>Carduelis carduelis</i>)	N	Green	-
Great Tit (<i>Parus major</i>)	N	Green	-
Long-tailed Tit (<i>Aegithalos caudatus</i>)	N	Green	-
Pheasant (<i>Phasianus colchicus</i>)	N	Green	-
Redpoll (<i>Acanthis flammea</i>)	N	Red	-
Robin (<i>Erithacus rubecula</i>)	N	Green	-
Siskin (<i>Spinus spinus</i>)	N	Green	-
Skylark (<i>Alauda arvensis</i>)	N	Red	S1 UKBAP
Song Thrush (<i>Turdus philomelos</i>)	N	Red	S1 UKBAP
Treecreeper (<i>Certhia familiaris</i>)	N	Green	-
Willow Warbler (<i>Phylloscopus trochilus</i>)	N	Amber	-
Woodpigeon (<i>Columba palumbus</i>)	N	Amber	-
Wren (<i>Troglodytes troglodytes</i>)	N	Amber	-
Yellowhammer (<i>Emberiza citrinella</i>)	N	Red	S1 UKBAP

Table 2: BBS Results June 2025

Species	Schedule 1 (WCA., 1981)	Conservation Status (BoCC., 2021)	UK BAP (BRIG., 2007)
Blackbird (<i>Turdus merula</i>)	N	Green	-
Blue Tit (<i>Cyanistes caeruleus</i>)	N	Green	-
Carrion crow (<i>Corvus corone</i>)	N	Green	-
Chaffinch (<i>Fringilla coelebs</i>)	N	Green	-
Chiffchaff (<i>Phylloscopus collybita</i>)	N	Green	-
Coal Tit (<i>Parus ater</i>)	N	Green	-
Dunnock (<i>Prunella modularis</i>)	N	Amber	-
Goldcrest (<i>Regulus regulus</i>)	N	Green	-
Goldfinch (<i>Carduelis carduelis</i>)	N	Green	-
House Martin (<i>Delichon urbicum</i>)	N	Red	-
Long-tailed Tit (<i>Aegithalos caudatus</i>)	N	Green	-
Robin (<i>Erithacus rubecula</i>)	N	Green	-
Rook (<i>Corvus frugilegus</i>)	N	Amber	-
Siskin (<i>Spinus spinus</i>)	N	Green	-
Treecreeper (<i>Certhia familiaris</i>)	N	Green	-
Willow Warbler (<i>Phylloscopus trochilus</i>)	N	Amber	-
Woodpigeon (<i>Columba palumbus</i>)	N	Amber	-
Wren (<i>Troglodytes troglodytes</i>)	N	Amber	-
Yellowhammer (<i>Emberiza citrinella</i>)	N	Red	S1 UKBAP

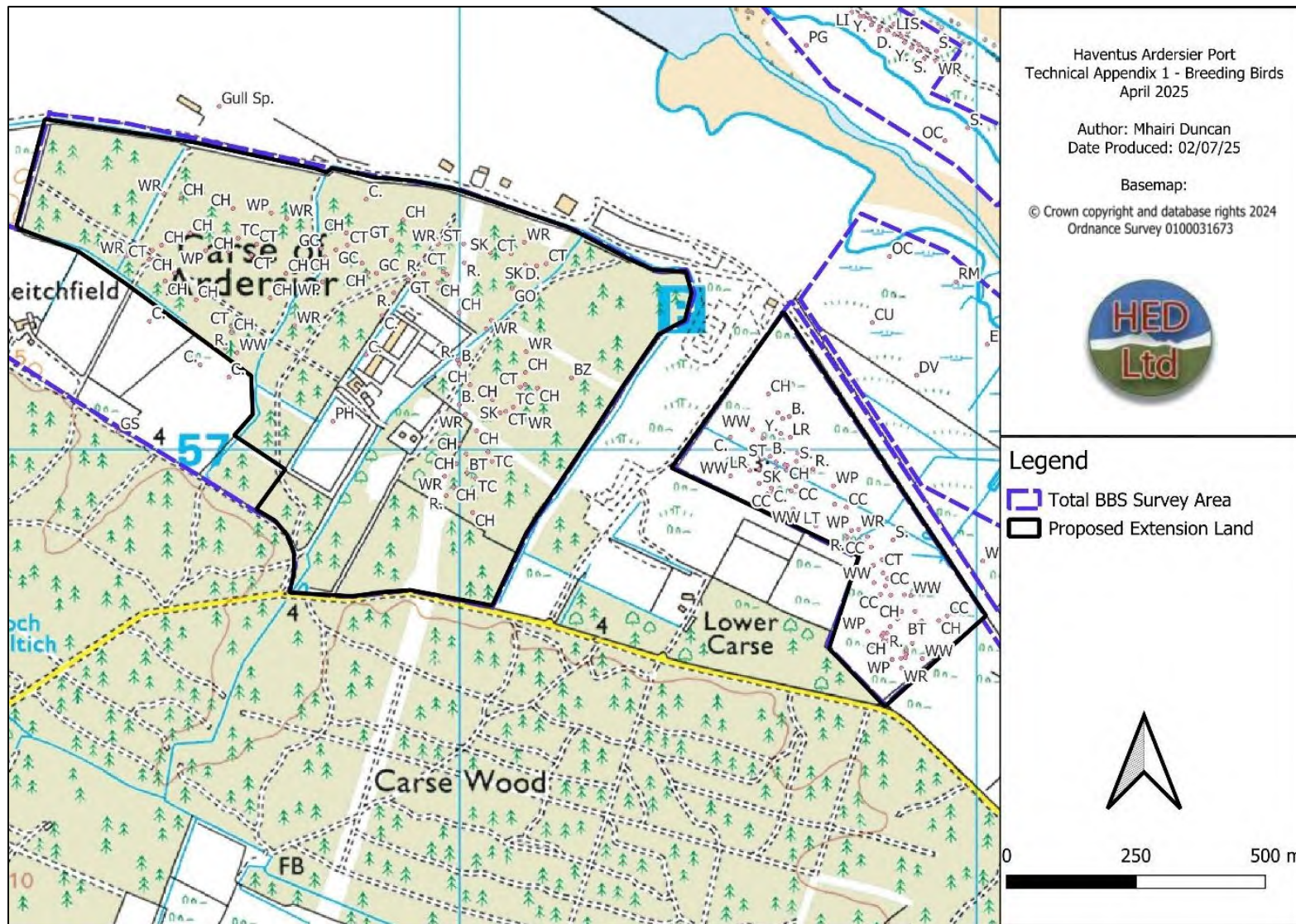


Figure 2: Results from BBS April 2025

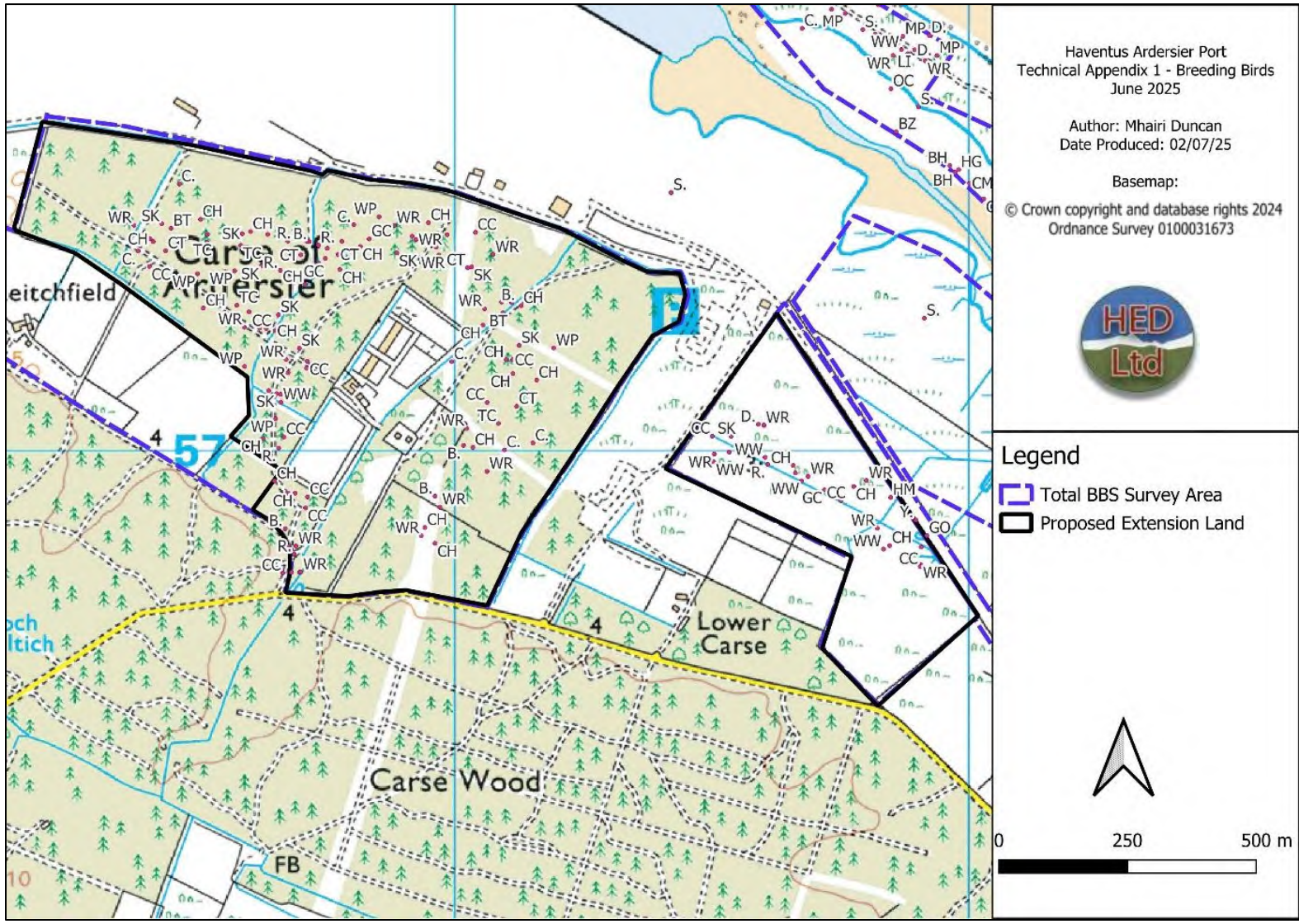


Figure 3: Results from BBS June 2025

4.0 BTO Species Codes

Table 3: BTO Species Codes (extracted from BTO website).

BTO SPECIES CODES							
AC	Arctic Skua	GA	Godwall	LE	Long-eared Owl	SM	Sand Martin
AE	Arctic Tern	GX	Gannet	LT	Long-tailed Tit	SS	Sanderling
AV	Avocet	GW	Garden Warbler	MG	Maggie	TE	Sandwich Tern
BO	Barn Owl	GY	Garganey	MA	Mallard	VI	Savi's Warbler
BY	Barnacle Goose	GC	Goldcrest	MN	Mandarin Duck	SQ	Scarlet Rosefinch
BA	Bartailed Godwit	EA	Golden Eagle	MX	Manx Shearwater	SP	Scaup
BR	Bearded Tit	OL	Golden Oriole	MR	Marsh Harrier	CY	Scottish Crossbill
BS	Berwick's Swan	GF	Golden Pheasant	MT	Marsh Tit	SW	Sedge Warbler
BI	Bittern	GP	Golden Plover	MW	Marsh Warbler	NS	Serin
BK	Black Grouse	GN	Goldeneye	MP	Meadow Pipit	SA	Shag
TY	Black Guillemot	GO	Goldfinch	MU	Mediterranean Gull	SU	Shelduck
BX	Black Redstart	GD	Goosander	ML	Merlin	SX	Shorelark
BJ	Black Tern	GI	Goshawk	M	Mistle Thrush	SE	Short-eared Owl
B	Blackbird	GH	Grasshopper Warbler	MO	Montagu's Harrier	SV	Shoveler
BC	Blackcap	GB	Great Black-backed Gull	MH	Moorhen	SK	Siskin
BH	Black-headed Gull	GG	Great Crested Grebe	MS	Mute Swan	S	Skylark
BN	Black-necked Grebe	ND	Great Northern Diver	N	Nightingale	SZ	Slavonian Grebe
BW	Black-tailed Godwit	NX	Great Skua	NJ	Nightjar	SN	Snipe
BV	Black-throated Diver	GS	Great Spotted Woodpecker	NH	Nuthatch	SB	Snow Bunting
BT	Blue Tit	GT	Great Tit	OP	Osprey	ST	Song Thrush
BU	Bluethroat	GE	Green Sandpiper	OC	Oystercatcher	SH	Sparrowhawk
BL	Brambling	G	Green Woodpecker	PX	Peafowl/Peacock	AK	Spotted Crane
BG	Brent Goose	GR	Greenfinch	PE	Peregrine	SF	Spotted Flycatcher
BF	Bullfinch	GK	Greenshank	PH	Pheasant	DR	Spotted Redshank
BZ	Buzzard	H	Grey Heron	PF	Pied Flycatcher	SG	Starling
CG	Canada Goose	P	Grey Partridge	PW	Pied Wagtail	SD	Stock Dove
CP	Capercaillie	GV	Grey Plover	PG	Pink-footed Goose	SC	Stonechat
C	Carrian Crow	GL	Grey Wagtail	PT	Pintail	TN	Stone-curlew
CW	Cetti's Warbler	GJ	Greylog Goose	PO	Pochard	TM	Storm Petrel
CH	Chaffinch	GU	Guillemot	PM	Ptarmigan	SL	Swallow
CC	Chiffchaff	FW	Guineafowl (Helmeted)	PU	Puffin	SI	Swift
CF	Chough	HF	Hawfinch	PS	Purple Sandpiper	TO	Tawny Owl
CL	Cirl Bunting	HH	Hen Harrier	Q	Quail	T	Teal
CT	Coal Tit	HG	Herring Gull	RN	Raven	TK	Temminck's Stint
CD	Collared Dove	HY	Hobby	RA	Razorbill	TP	Tree Pipit
CM	Common Gull	HZ	Honey Buzzard	RG	Red Grouse	TS	Tree Sparrow
CS	Common Sandpiper	HC	Hooded Crow	KT	Red Kite	TC	Treecreeper
CX	Common Scoter	HP	Hoopoe	ED	Red-backed Shrike	TU	Tufted Duck
CN	Common Tern	HM	House Martin	RM	Red-breasted Merganser	TT	Turnstone
CO	Coat	HS	House Sparrow	RQ	Red-crested Pochard	TD	Turtle Dove
CA	Cormorant	JD	Jackdaw	FV	Red-footed Falcon	TW	Twite
CB	Corn Bunting	J	Jay	RL	Red-legged Partridge	WA	Water Rail
CE	Comcrake	K	Kestrel	NK	Red-necked Phalarope	W	Wheatear
CI	Crested Tit	KF	Kingfisher	LR	Redpoll (Lesser)	WM	Whimbrel
CR	Crossbill (Common)	KI	Kitwake	RK	Redshank	WC	Whinchat
CK	Cuckoo	KN	Knot	RT	Redstart	WG	White-fronted Goose
CU	Curlew	LM	Lady Amherst's Pheasant	RH	Red-throated Diver	WH	Whitethroat
DW	Dartford Warbler	LA	Lapland Bunting	RE	Redwing	WS	Whooper Swan
DI	Dipper	L	Lapwing	RB	Reed Bunting	WN	Wigeon
DO	Dottrel	TL	Leach's Petrel	RW	Reed Warbler	WT	Willow Tit
DN	Dunlin	LB	Lesser Black-backed Gull	RZ	Ring Ouzel	WW	Willow Warbler
D	Duncock	LS	Lesser Spotted Woodpecker	RP	Ringed Plover	OD	Wood Sandpiper
EG	Egyptian Goose	lw	Lesser Whitethroat	RI	Ring-necked Parakeet	WO	Wood Warbler
E	Eider	LI	Linnat	R	Robin	WK	Woodcock
FP	Feral Pigeon	ET	Little Egret	DV	Rock Dove (not feral)	WL	Woodlark
ZL	Feral/hybrid goose	LG	Little Grebe	RC	Rock Pipit	WP	Woodpigeon
ZF	Feral/hybrid mallard type	LU	Little Gull	RO	Rook	WR	Wren
FF	Fieldfare	LO	Little Owl	RS	Roseate Tern	WY	Wryneck
FC	Firecrest	LP	Little Ringed Plover	RY	Ruddy Duck	YW	Yellow Wagtail
F	Fulmar	AF	Little Tern	RU	Ruff	Y	Yellowhammer

5.0 Legislative Protection

For any wild bird species, it is an offence to intentionally or recklessly:

- kill, injure, or take a bird.
- take, damage, destroy or interfere with a nest of any bird while it is in use or being built.
- obstruct or prevent any bird from using its nest.
- take or destroy an egg of any bird.

For any wild bird species listed on Schedule 1, it is an offence to disturb:

- any bird while it is building a nest.
- any bird while is in, on, or near a nest containing eggs or young.
- any bird while lekking.
- the dependent young of any bird.

Further protection is given to birds listed under schedule 1A and A1 all year round.

For any wild bird species listed on Schedule 1A, it is an offence to intentionally or recklessly harass any bird. For any wild bird species listed on Schedule A1, it is an offence to intentionally or recklessly take, damage, destroy or interfere at any time with a nest habitually used by any bird.

It is also an offence to:

- possess or control a living or dead wild bird
- possess or control an egg of a wild bird (or any such derivatives)
- knowingly cause or permit any of the above acts to be carried out.

6.0 References

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ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025

Appendix 13.7 Raptors

Hventus Ardersier Port

Technical Appendix: Raptors

JULY 2025 FOR HAVENTUS



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1.0 Background

This Technical Appendix (TA) was commissioned by Haventus to support proposals for the expansion of the Ardersier Port. As part of the Protected Species Surveys (PSS) and wider ornithological surveys, targeted raptor surveys were conducted to determine the presence of raptor species within the site and surrounding area.

The aim of these raptor surveys was to provide baseline data to inform the ornithological impact assessment of the proposed port development on raptor species. These data will support the development of effective protection measures for breeding raptor species in the area.

Survey findings are presented in this document, along with guidance on species-specific disturbance assessments, and recommended mitigation and compensation strategies.

2.0 Methodology

2.1 Raptor Survey Methodology

The survey methodology was informed by guidance from Hardey (2007) in *Raptors: A Field Guide for Surveys and Monitoring* and Gilbert (2011) *Bird Monitoring Methods*, both of which outline appropriate field techniques for surveying for raptors. Both vantage point surveys and walkover surveys were used, with specific methods detailed in sections 2.1.1 and 2.1.2. Predicted impact on different raptor species was informed by Goodship and Furness (2022) *Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species*.

2.1.1 Vantage Point Surveys

Vantage Point (VP) surveys were used to detect raptor species presence and flightlines/territories, with VP locations selected which offered good visibility of the development site and key habitats adjacent to it. Locations were informed by habitat features, elevation, and prior knowledge of raptor presence within certain area. The VP surveys were spaced across the breeding season, with 2 surveys being conducted a month from March – June (see Table 1 for survey schedule). Each VP survey lasted 3 hours.

During the survey, raptor species presence, behaviour (e.g., foraging, territorial displays), and flight patterns were all recorded on premade recording sheets, with data later being added to QGIS (*version 3.36.1*).

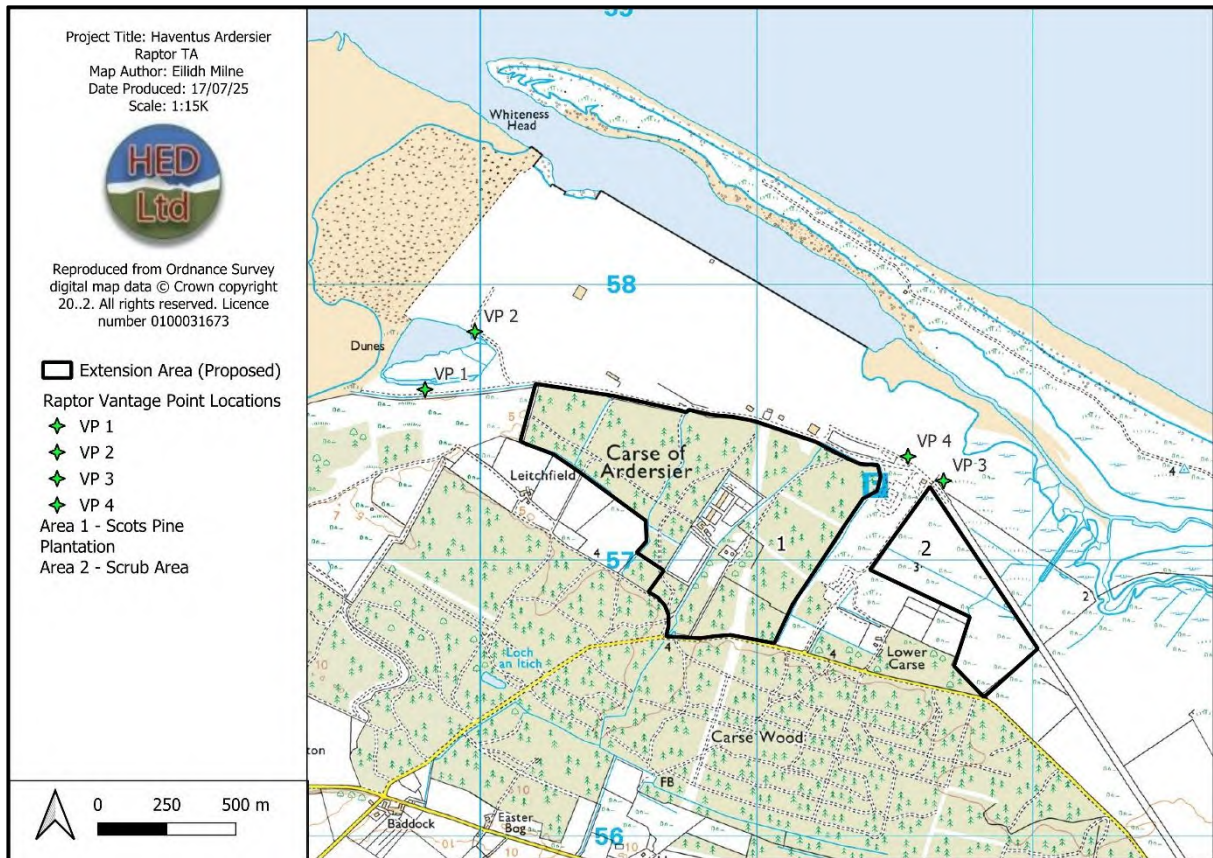


Figure 1: Vantage point locations

Table 1: Vantage point survey schedule.

Date	Surveyor	Conditions	Location	VP ID
10/03/25	WM	Favorable	Lagoon / site (279729 857603)	VP 2
10/03/25	WM	Favorable	Lagoon / site (279729 857603)	
07/04/25	WM	Favorable	Lagoon (280071 857709)	VP 1
07/04/25	WM	Favorable	Lagoon (280071 857709)	
27/05/25	EM	Favorable	Lagoon (280071 857709)	VP 1

27/05/25	MP	Favorable	Saltmarsh (281708 857345)	VP 3
20/06/25	PH	Favorable	Lagoon (280071 857709)	VP 1
20/06/25	PH	Favorable	Saltmarsh / site (281708 857345)	VP 4

2.1.1 Walkover Surveys

Walkover surveys were also undertaken within the proposed expansion area. These surveys were principally conducted to detect signs of terrestrial protected species, however all suspected raptor nest structures were also recorded, as well as any field signs indicating raptor presence (e.g., whitewash beneath perch sites, prey remains and/or plucking posts, pellets). Walkover surveys were conducted over 5 days in March 2025, when most species will be preparing nesting sites for breeding attempts.

2.2 Limitations

Ecological surveys are limited by several factors that affect the presence of flora and fauna (weather, climate, animal behaviour, etc). Evidence of protected species and/or invasive species is not always found during a survey. This does not confirm that species are absent from an area.

Due to the dense nature of the woodland and the flat topography of the surrounding landscape, it was not possible to select a vantage point offering full visibility of the proposed expansion area.

Walkover surveys were conducted in March, with no follow up visit scheduled to establish breeding attempts or the presence of newly constructed nests to avoid disturbance of potentially nesting raptors.

3.0 Results

3.1 Vantage Point Surveys

The results of the raptor vantage point surveys are summarised below. Maps from each survey showing digitised flightlines are presented in Appendix 1. The surveys conducted confirmed the presence of buzzard (*Buteo buteo*), sparrowhawk (*Accipiter nisus*), peregrine (*Falco peregrinus*) and kestrel (*Falco tinnunculus*) in the wider area surrounding the port expansion area. Buzzard were most frequently observed species, with a total of 24 observations recorded during the full vantage point survey effort.

Table 2: For location of VP IDS

Date	Location	Summary of Observations
10/03/25	VP 2 - Lagoon / site (279729 857603)	4x Buzzard Observations
10/03/25	VP 2 - Lagoon / site (279729 857603)	1x Peregrine Observation 1x Sparrowhawk Observation 2x Buzzard Observations
07/04/25	VP 1 - Lagoon (280071 857709)	3x Buzzard Observation Sparrowhawk Observation
07/04/25	VP 1 - Lagoon (280071 857709)	4x Buzzard Observation
27/05/25	VP 1 - Lagoon (280071 857709)	6x Buzzard Observation
27/05/25	VP 3 - Saltmarsh (281708 857345)	4x Buzzard Observations 1x Sparrowhawk Observation
20/06/25	VP 1 -Lagoon (280071 857709)	1x Buzzard Observation
20/06/25	VP 4 - Saltmarsh / site (281708 857345)	1x Kestrel Observation

3.2 Walkover Surveys

The proposed expansion area consists of Scots pine woodland (1) and area of scrubland (2) (see Figure 1).

The Scots pine plantation area (1) is suitable nesting habitat for woodland dwelling raptor species, such as buzzard (*Buteo buteo*), red kite (*Milvis milvus*), sparrowhawk (*Accipiter nisus*) and goshawk (*Accipiter gentilis*). 11 suspected raptor nests and 4 plucking sites were identified within this area during walkover surveys, as shown in Figure 2. It was not possible to positively identify the species to which nests belonged in the field. Plucking sites are generally

associated with sparrowhawk or goshawk, often indicating the presence of a nest in the nearby area (Hardey et al., 2013).

The scrub area (2) offers some areas of suitable nesting habitat in the form of isolated stands of coniferous trees. However, this area offers greater suitability for raptor foraging. No nests or plucks were identified within this area during the walkover surveys.

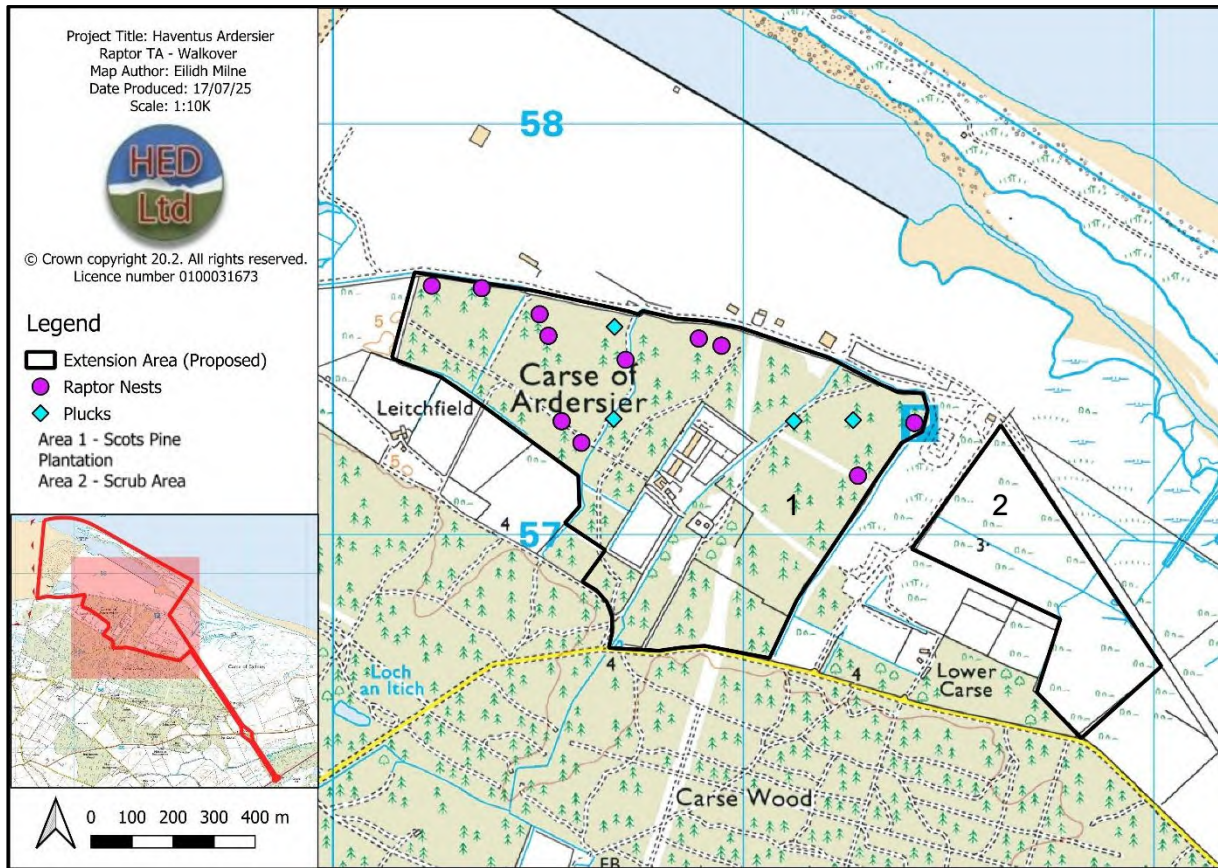
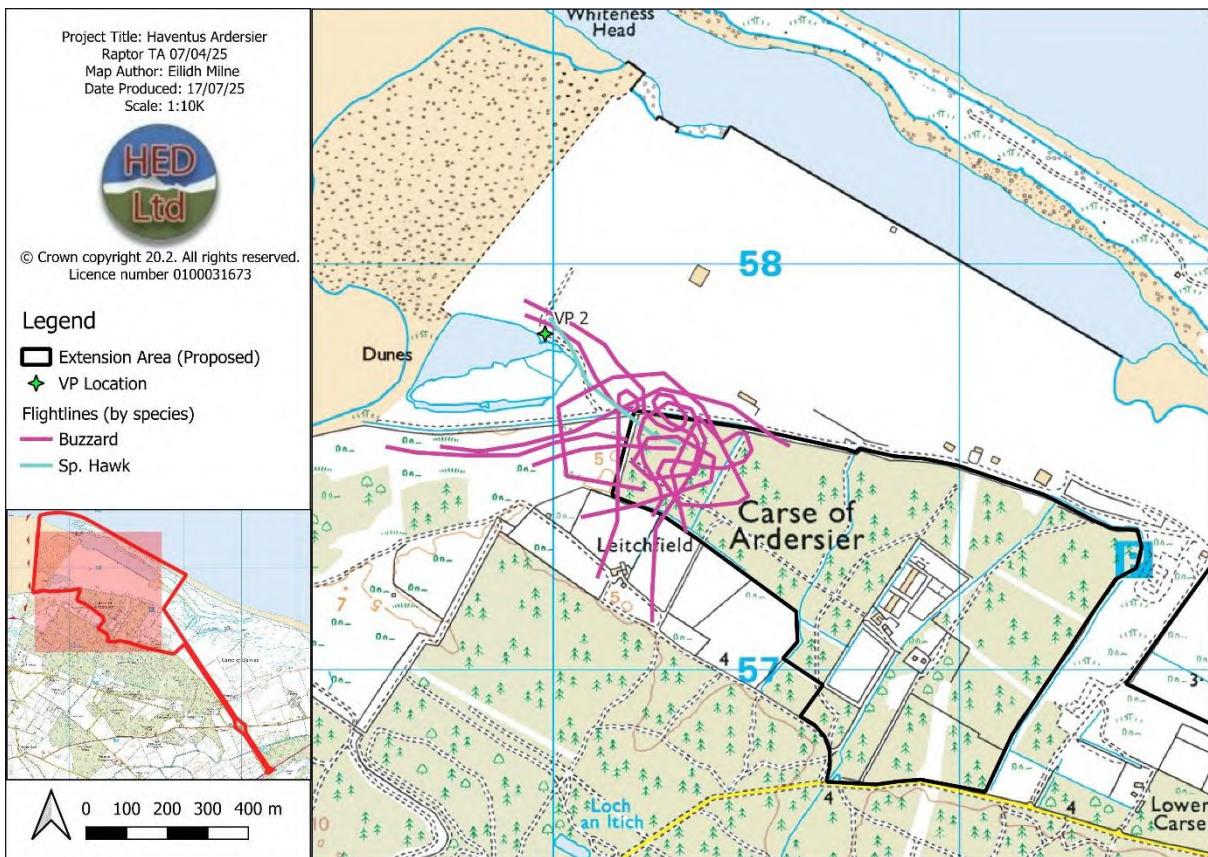
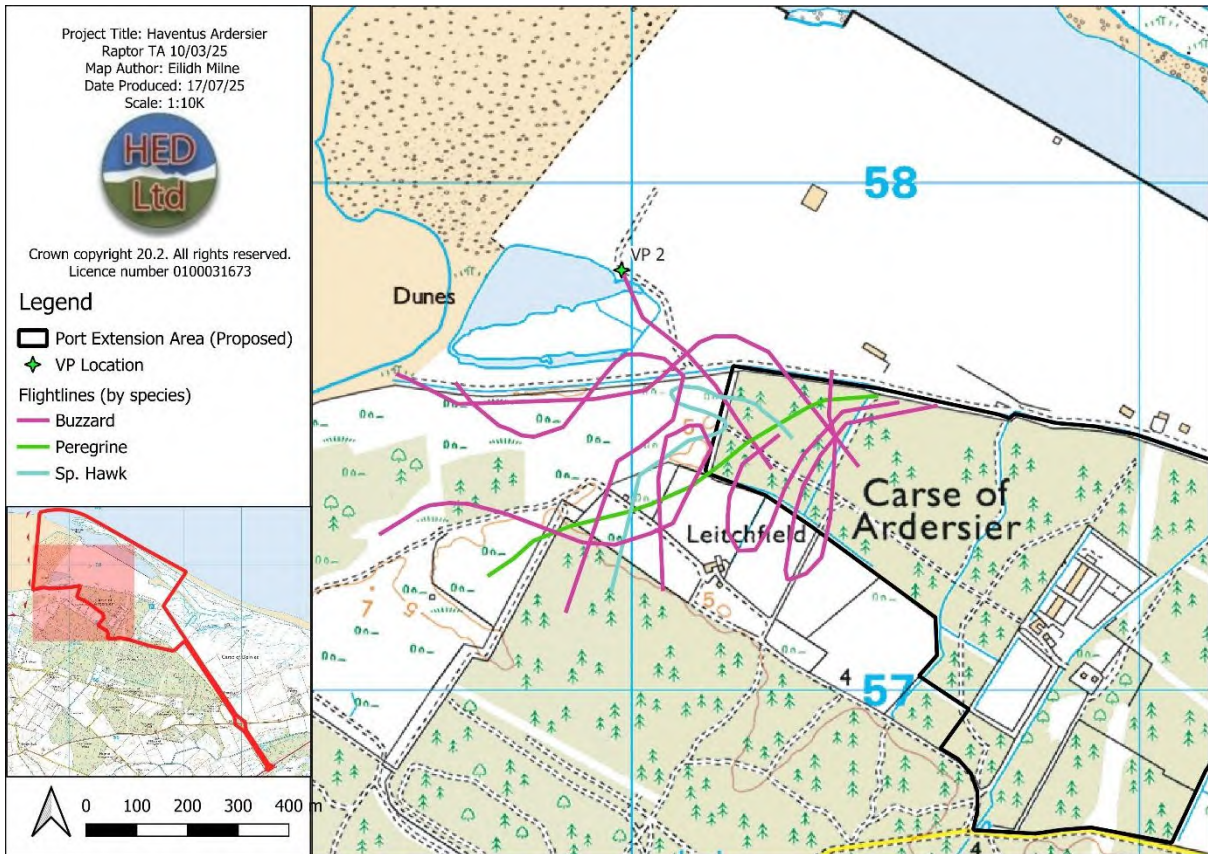
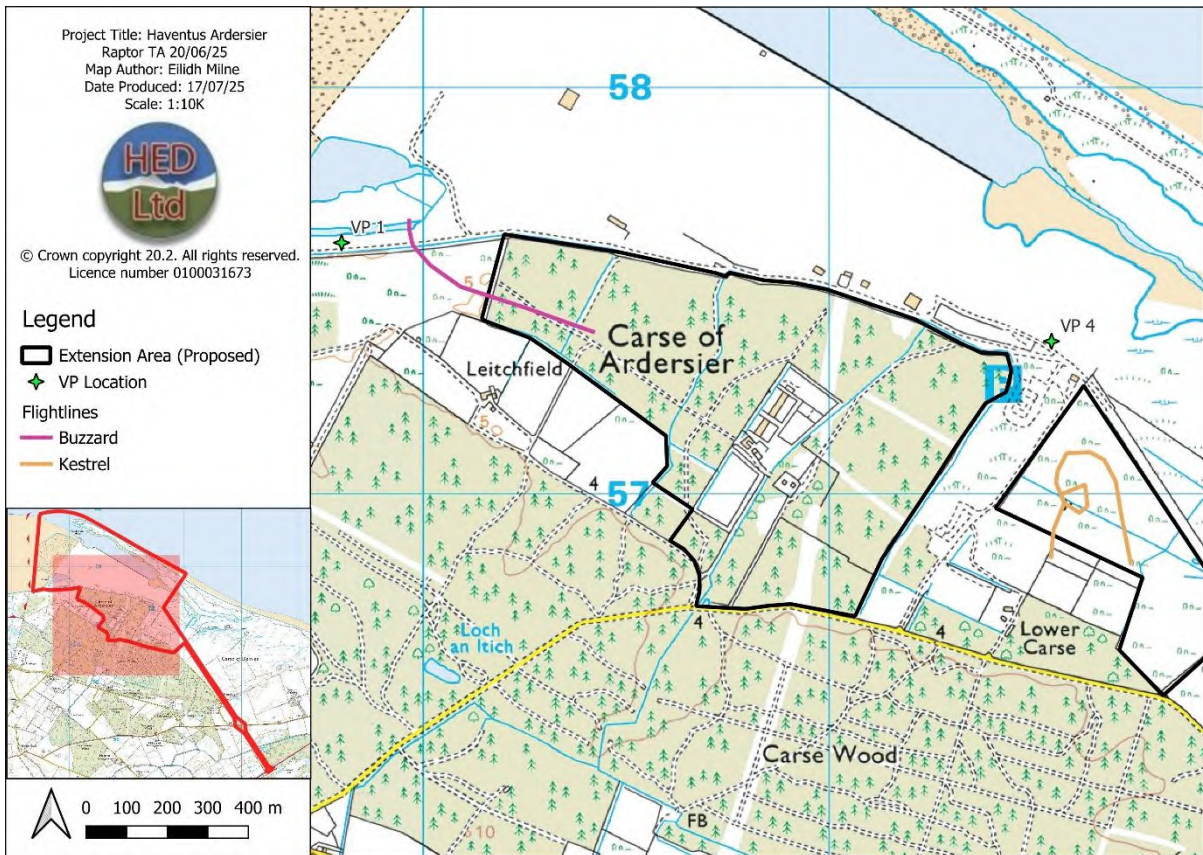
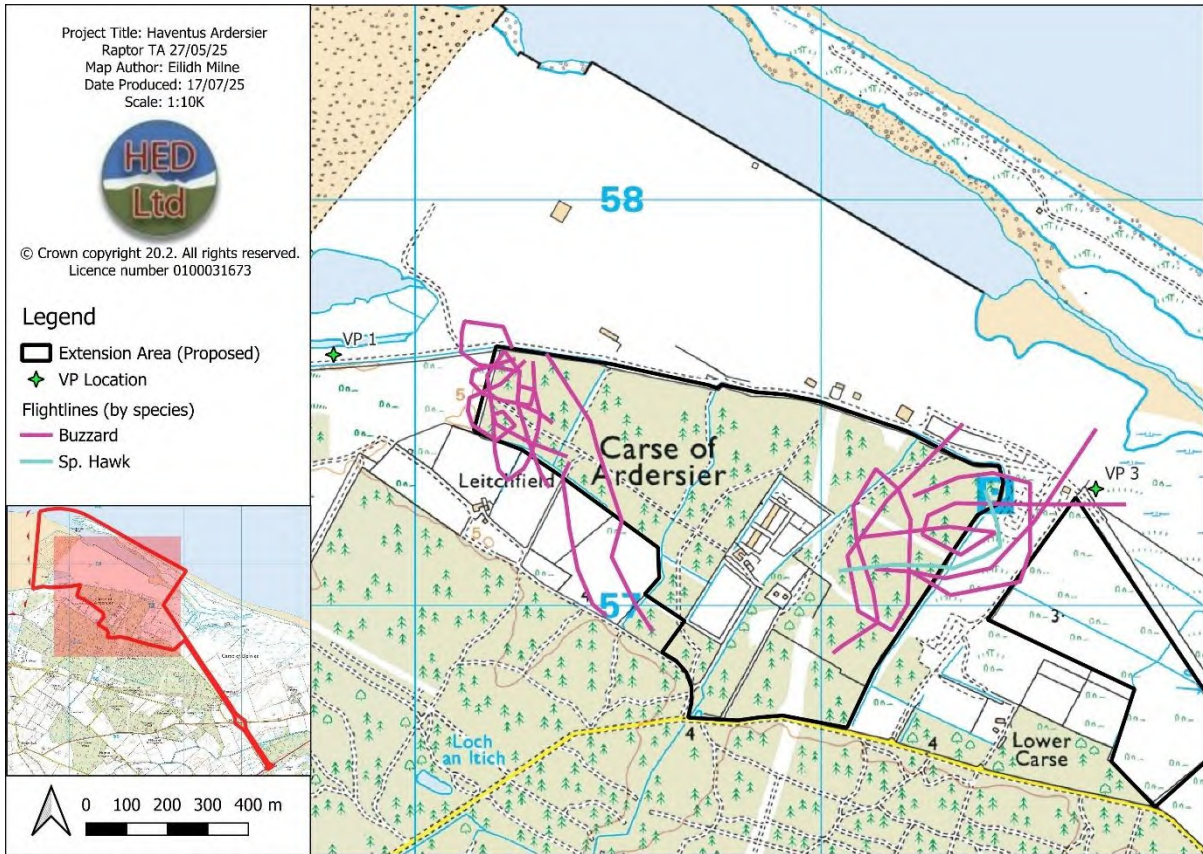


Figure 2: Raptor walkover results.

Appendix 1: Vantage Point Survey Flightlines





Appendix 2: Photos from Walkover Survey

Ref	Description	Image
1	Historic pluck of small passerine bird (280687 857287)	
2	Raptor nest (280534 857474)	

4.0 References

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