

**Beauly to Blackhillock to New Deer to
Peterhead 400 kV Project
Environmental Impact Assessment Report
Volume 5 | Appendices**

Appendix 9.1 - Ornithology Technical Report



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1 Introduction

1.1 Background

- 111 WSP UK Ltd (WSP) was commissioned by Scottish and Southern Electricity Networks Transmission (SSEN Transmission), operating under licence held by Scottish Hydro Electric Transmission plc under the 1989 Act, (hereafter referred to as the Applicant) to undertake a programme of ornithological surveys to inform an Ornithological Impact Assessment (OIA) in support of the proposed Beauly to Blackhillock to New Deer to Peterhead 400 kV Overhead Line (OHL) Project (the Proposed Development).
- 112 A two-year programme of breeding and non-breeding bird surveys was undertaken between September 2022 and July 2024 to inform the OIA. Surveys commenced during the corridor selection stage and continued through the route and alignment selection stages of the Proposed Development. A consultation exercise with ornithological interest groups and relevant land management organisations was also undertaken to gather recent historical data, to inform surveys and support the findings of the survey programme. All surveys were carried out in accordance with the relevant NatureScot^{1, 2, 3, 4} (as was available at the time of the baseline studies) and Applicant's guidance⁵.
- 113 This Ornithological Technical Report provides details of the methods and results of the ornithological field surveys and data consultation exercise conducted to inform the OIA for the Proposed Development. The surveys and subsequent reporting concentrate on legally protected and notable species of conservation concern (referred to hereafter as 'Target Species'), recorded along and in close proximity to the Proposed Development. Target Species are those which correspond to any of the following criteria, in accordance with the relevant NatureScot and SHE Transmission guidance:
- birds listed on Annex I of the EU Directive on the Conservation of Wild Birds 79/409/EEC (the 'Birds Directive');
 - birds that are qualifying features of European designated sites of nature conservation importance for birds (i.e., Special Protection Areas (SPAs) and Wetlands of International Importance (Ramsar Sites)), occurring in proximity or potentially connected to the Proposed Development;
 - birds listed on Schedule 1 (including Schedule 1A and / or A1) of the Wildlife and Countryside Act (1981); and
 - birds listed as 'Red' Birds of Conservation Concern 2021 (BoCC)⁶.
- 114 Other species which are typically recognised as being potentially vulnerable to the effects of OHL developments, but which do not fall under any of the above categories, such as other waterfowl species, were also recorded as Target Species (e.g. mute swan). Passerines (songbirds) are not typically considered as Target Species as it is generally accepted that they are not significantly impacted by OHL developments². However, this Technical Report presents information concerning regionally and nationally important passerine Target Species collected during the desk study exercise and field surveys (as outlined further in **Section 2.1.7** below).
- 115 In accordance with NatureScot guidance⁷, sensitive information pertaining to the nest and lek site locations of rare and vulnerable species, particularly those which may be at risk of persecution, has been omitted from this report. This information is instead presented in **Appendix 9.2: Confidential Ornithological Information**.

¹ Formally Scottish Natural Heritage (SNH).

² NatureScot (2016). Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds. Version 1, July 2016. Available at: <https://www.nature.scot/doc/guidance-assessment-and-mitigation-impacts-power-lines-and-guyed-meteorological-masts-birds>

³ NatureScot (2017). Recommended bird survey methods to inform impact assessment of onshore windfarms. Version 2, March 2017. Available at: <https://www.nature.scot/doc/recommended-bird-survey-methods-inform-impact-assessment-onshore-windfarms>

⁴ Changes in the guidance are not considered fundamental to the baseline data collected and used in this assessment.

⁵ Coleman, M., Fitchet, A., Seller, J., Williams, F. & Wright, P. (2016). SHE Transmission Ornithology Workshop – Ornithology Methods for Transmission Developments. SHE Transmission.

⁶ Royal Society for the Protection of Birds (2021) Birds of Conservation Concern 5. Available at: <https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf>

⁷ NatureScot (2016). Environmental Statements and Annexes of Environmentally Sensitive Bird Information. Available at: <https://www.nature.scot/doc/environmental-statements-and-annexes-environmentally-sensitive-bird-information>

2 Methods

2.1 Desk Study

- 2.1.1 To help inform the ornithological survey programme and the OIA, a consultation exercise was undertaken in 2023 to request records of protected and notable species of conservation concern (i.e. records of Target Species) from the past 10 years (2013-2022 inclusive). The data was originally requested during the Route Selection Stage, encompassing the route selection options extending to a 2 km buffer (**Figure 9.1.1**). The following land management organisations and ornithological interest groups were consulted for any relevant data they may hold:
- Highland Raptor Study Group (HRSG);
 - North East Raptor Study Group (NERSG);
 - The Roy Dennis Foundation (RDF);
 - The Royal Society for the Protection of Birds (RSPB) Scotland; and
 - Forestry and Land Scotland (FLS).
- 2.1.2 Data obtained from the above sources was used to inform the field surveys as and when it became available (e.g. to identify focal survey areas for particular species, or to locate raptor nest sites or black grouse *Lyrurus tetrix* or capercaillie *Tetrao urogallus* lek sites).
- 2.1.3 Capercaillie data was also provided by RSPB Scotland for 2023 and 2024.
- 2.1.4 Information on the occurrence and activity patterns of Target Species was also obtained from the Environmental Impact Assessment (EIA) Reports for other nearby (i.e. within 2 km of the Proposed Development) large-scale developments, such as windfarms and other OHL projects where surveys were undertaken in the last 10 to 15 years. Data was also provided for other SEN Transmission projects within 1 km of the Proposed Development.
- 2.1.5 Anecdotal records were provided by landowners for the Assich Forest / Strathdearn Foothills and New Dear to Peterhead Focal Areas.
- 2.1.6 To help identify potential areas of importance for congregations of waterbird Target Species, the British Trust for Ornithology's (BTO) Wetland Bird Survey (WeBS) core count areas were reviewed to identify any sites within 500 m of the Proposed Development.
- 2.1.7 Additionally, high level information on the distribution, and hence potential presence, of regionally to nationally important passerine Target Species along the OHL route was obtained from a review of Balmer et al. (2013)⁸. For the purposes of this report and OIA, regionally and nationally important passerine Target Species are taken to be those listed on either Annex A of the EU Birds Directive or Schedule 1 of the Wildlife and Countryside Act (1981), and / or those with restricted ranges within the UK which overlap with the Proposed Development. Four species were identified to qualify as passerine Target Species which may potentially occur within 1 km of the Proposed Development, including:
- Common crossbill *Loxia curvirostra*;
 - Scottish crossbill *Loxia scotica*;
 - Crested tit *Lophophanes cristatus*; and,
 - Corn bunting *Emberiza calandra*.

⁸ Balmer, D.E., Gillings, S., Caffery, B.J., Swann, R.L., Downie, I.S., and Fuller, R.J. (2013). Bird Atlas 2007-2011: the Breeding and Wintering Birds of Britain and Ireland. BTO Books, Thetford.

2.2 Field Surveys

- 2.2.1 Ornithological field surveys were undertaken by suitably experienced, qualified and professional sub-consultants Carrol Ecology and Redwing Ecology (formerly Stagfire Ecology).
- 2.2.2 Given the scale of the Proposed Development, a pragmatic approach to the scope of the field survey programme was devised and agreed with NatureScot during the early stages of the Proposed Development's Corridor and Route Selection Stages as further detailed in **Table 9.1 of Chapter 9: Ornithology**. This was informed by a high-level assessment of the suitability of the habitats within the study areas under consideration during the Corridor and Route Selection Stages for supporting Target Species (i.e. the habitat suitability assessment described in **Paragraph 9.2.9 of Chapter 9: Ornithology**).
- 2.2.3 A high-level assessment of the suitability of habitats for supporting Target Species within the Proposed Development's initial broad corridor options was undertaken during the Proposed Development's Corridor Selection Stage (see **Chapter 4: The Routeing Process and Alternatives**).
- 2.2.4 At that stage, the broad corridor options spanned a large area extending from the coastal plains of Inverness-shire and Moray to the foothills of the Cairngorms in the western half, and the vast swathes of intensively managed agricultural land of Aberdeenshire in the eastern half. The low-lying agricultural land associated with the coastal plain of Inverness-shire and Moray represented potentially suitable foraging habitat for overwintering waterfowl associated with coastal and estuarine wetland habitats; such as swans, geese and wading birds, particularly those associated with designated sites. These lowland areas are interspersed with moderate to large areas of forestry considered to have potential to support various raptor Target Species, including red kite *Milvus milvus*, osprey *Pandion haliaetus* and goshawk *Accipiter gentilis* as well as capercaillie. Further inland the land rises up and upland habitats associated with the foothills of the Cairngorms were considered to have potential to support other sensitive species such as breeding wading birds, black grouse, peregrine *Falco peregrinus*, hen harrier *Circus cyaneus* and possibly golden eagle *Aquila chrysaetos*. Additionally, the various agricultural, woodland and upland habitats located in Inverness-shire and Moray were considered likely to support a range of other Target Species including passerines such as those listed above in **Section 2.1.6**. In the eastern half of the corridor options, the landscape is dominated by a patchwork of intensive agricultural land interspersed by small blocks of woodland. Coastal areas including estuarine and freshwater wetland habitats were recognised as having potential to represent suitable foraging habitat for overwintering waterfowl such as swans, geese and wading birds; including species associated with designated sites. Inland from the coast, agricultural fields and scattered woodlands could potentially support raptor species such as red kite and goshawk, as well as a range of other Target Species (i.e. passerines) during the breeding and non-breeding seasons. Through consultation with RSPB Scotland, Scotland's only breeding pairs of common crane *Grus grus* are also understood to occur in proximity to the Proposed Development in the eastern half of the corridor options.

Field Survey Focal Areas

- 2.2.5 Based on the initial habitat suitability assessment and desk study, a survey programme was devised to focus on key areas of potentially suitable habitat for Target Species within 2 km of the Proposed Route (Route Study Area). Such habitat includes riparian corridors, open moorland / forest edge habitats and foraging areas for overwintering waterfowl, particularly where they may be associated with coastal designated sites. The 'Focal Areas' selected for inclusion in the bird survey programme were as follows, and are shown on **Figure 9.1.2**:
- Beaully River Corridor (south of Beaully);
 - The Aird (southwest of Inverness);
 - River Ness / Caledonian Canal Corridor (southwest of Inverness);
 - Drummoissie Muir and River Nairn Corridor (south of Inverness);
 - Assich Forest / Strathearn Foothills (east of Inverness and south of Nairn);
 - Dulsie Wood and Associated Woodlands (south of Nairn);

- Dava Moorlands (southeast of Nairn);
- Bednawinny Moss Moorlands and Newtyle Forest (southwest of Elgin);
- Glen Latterach Moorlands and Woodland Associated with Hill of Mulundy and Wangie Wood (southwest of Elgin);
- Brown Muir (southwest of Elgin);
- River Spey Corridor and Wood of Ordiequish (southeast of Elgin and northwest of Keith); and
- River Isla Corridor (north of Keith).

2.2.6 Additionally, two areas were identified for dedicated survey effort for determining the presence of, and breeding activity by, common crane, based on records obtained from RSPB Scotland during the consultation exercise. These additional Focal Areas, which are also shown on **Figure 9.1.2**, were located along:

- the River Deveron Corridor (where the Proposed Development passes between Huntly and Aberchirder); and
- between New Deer and the Proposed Development's eastern extent, immediately west of Peterhead.

2.2.7 A programme of winter goose surveys was undertaken along the Proposed Development's eastern section between New Deer and the immediate west of Peterhead, as shown on **Figure 9.1.2**. This was in response to public consultation which identified large number of overwintering geese overflying the area and using fields for foraging and loafing. The survey area comprised the potential alignment, as confirmed at the time, plus an additional survey buffer of 500 m either side.

2.2.8 To inform the optioneering process and ultimately the OIA, a 22-month programme of ornithological surveys was carried out between September 2022 and July 2024. The surveys focussed on the Focal Areas identified above. This survey programme included the following:

- Flight activity surveys;
- Scarce breeding bird surveys;
- Capercaillie surveys;
- Back grouse surveys;
- Common crane surveys; and
- Goose field use surveys.

2.2.9 Further details on these surveys and their methodologies are presented below.

Flight Activity Surveys

2.2.10 Flight activity surveys were carried out following NatureScot's survey guidance for assessing the impacts of OHLs on birds⁹. They were undertaken from 16 strategically positioned vantage points (VPs), overlooking areas of suitable habitat for Target Species (particularly overwintering waterfowl and raptors), occurring along the footprint of the Proposed Development⁹. The majority of VPs were positioned overlooking river valleys, woodlands, and areas of open moorland, while one VP was also informed by responses from local residents obtained during consultation at the routeing stage. The focal areas of each VP, which are listed in west to east order, are listed below and are shown on **Figure 9.1.3**, along with each VP's 2 km, 180° viewing arcs.

- VP 1 – Beaulie River Corridor¹⁰;
- VP 17 – The Aird;
- VP 2 – River Ness / Caledonian Canal Corridor;
- VP 18 and VP 3 – Drummoissie Muir and River Nairn Corridor;

⁹ VP surveys started at an early stage in the Route Selection stage, originally based on the Preferred Corridor and then refined to the Proposed Route and have continued to be refined as the OHL routeing process has evolved. Original VPs that became irrelevant were removed from the survey programme.

¹⁰ This VP location was moved from field (VP 1a) to road side (VP 1b) as field was 'cropped' during the breeding season and access was no possible.

- VPs 4/19 and VP 5 – Assich Forest / Strathdearn Foothills¹¹;
- VP 8 – Dulsie Wood and Associated Woodlands;
- VP 20 and VP 21 - Dava Moorlands;
- VP 22 – Bednawinny Moss Moorlands and Newtyle Forest;
- VP 11 – River Spey Corridor and Wood of Ordiequish¹²;
- VP 16 – River Isla Corridor; and
- VP 23 and VP 24 - New Deer to Peterhead.

- 2.2.11 **Figure 9.1.3** also shows the visible viewsheds within each viewing arc. These principally represent the areas of airspace which were visible from 10 m above ground level, which approximately correspond to the lowest height of the conductors (rounded up from 9 m). This represents visibility of 100% of the airspace at which birds may be at risk from collision (Potential Collision Height (PCH)) with the conductors & earth wire. Several of the visible viewsheds are also shown from 23.75 m and 37.5 m above ground level. These viewsheds represent visibility of the uppermost 75% and 50% of PCH. Additionally, they provide a degree of reassurance in the suitability of the VPs and the detectability of birds and potential collision height, where visibility from the lowest conductor height (10 m) may not have been very extensive. Visibility of the upper 50% of the PCH should ensure coverage of the earth wire in all cases.
- 2.2.12 All VPs, with the exception of VPs 3, 4 and 16¹³, covered the 2023 breeding season (taken as March to August, inclusive) while only VPs 1 to 16 covered the 2022 / 23 non-breeding season (taken as September to February inclusive, except for VP 16 which was extended into March to account for migratory waterfowl). This is because they were part of an original set of VPs identified from the very start of the survey programme, to cover areas of potential importance for overwintering waterfowl within the much wider corridor options under consideration at that time. As the Proposed Development's preferred option evolved, many of those VPs became irrelevant and were dropped / repositioned.
- 2.2.13 Following public consultation, identifying the regular occurrence of large numbers of geese over the eastern end of the Proposed Development between Maud and Peterhead, further flight activity surveys were conducted from two additional VPs (VP 23 and VP 24). These were undertaken over the 2023 / 24 non-breeding season (taken as September to March inclusive) to account for migratory waterfowl. The main aim of these surveys was to determine the frequency and distribution of flight activity by overwintering geese and to identify connectivity with SPAs in the wider surrounding area (Loch of Strathbeg SPA and Ythan Estuary, Forvie Sands and Meikle Loch SPA).
- 2.2.14 All VPs were subject to 36 hours of survey effort across each season (breeding / non-breeding). Additionally, 36 hours of survey effort was conducted from VPs 23 and 24 during the 2023 autumn passage period (mid-September to mid-November), to capture any potential peak in autumnal goose migration activity. Survey effort was spread throughout the daytime period when daylight hours best represent temporal flight activity patterns. Each survey was undertaken by a single observer in good conditions (i.e. visibility of at least 2 km) and was limited to a maximum of three hours by a single observer, with a minimum half an hour break between any two consecutive surveys. Detailed survey information is provided in **Annex A - Table A1**.
- 2.2.15 Once a bird or flock was detected, it was observed until it had landed or flown out of sight. The paths of all observed flights (flight lines) were drawn directly onto 1:10,000 OS maps, while the following associated flight data was also recorded:
- flight start time;
 - species (where identification was uncertain, observations were identified to species group level at a minimum);

¹¹ VP 4 was originally established to overlook the open ground and moorland to the north of Saddle Hill, before the Preferred Route was defined. Once the Preferred Route was identified, the VP location was moved further south to better overlook this section of the Preferred Route, and was re-numbered VP 19.

¹² Orientation of VP 11 was altered slightly from VP 11a to VP 11b to achieve better coverage of the emerging Preferred Alignment.

¹³ VP 4 was relocated and became VP 19. VP 3 and VP 16 were targeted at locations for overwintering waterfowl.

- number of birds / flock size;
- flight duration;
- bird(s) occupancy at four height bands above ground level (corresponding to the OHL's indicative lower and upper conductor heights¹⁴) for each 15 second flight time interval; and
- behaviour (including territorial or nesting behaviour).

2.2.16 Following the completion of surveys and confirmation of the Proposed OHL Alignment, flight data was analysed to determine flights at potential risk of collision (PRC). Flights at PRC included those which recorded time at PCH (heights of between 10 and 60 m) and overlapped with the Proposed OHL Alignment.

Scarce Breeding Bird Surveys

2.2.17 Scarce Breeding Bird Surveys were carried out in the following Focal Areas, as shown on **Figure 9.1.3**:

- Beaully River Corridor: raptor-specific surveys across the Beaully River corridor;
- The Aird: open moorland habitats associated with An-Leacainn;
- Drum Mossie Muir and River Nairn Corridor: open moorland habitats of Drum Mossie Muir;
- Assich Forest / Strathdearn Foothills: open moorland habitats along the Strathdearn Foothills-Assich Forest transmission zone;
- Dava Moorlands: open moorland habitats associated with Cairn Duhie, Cairn Eney and to the west of Berryburn Wind Farm;
- Bednawinny Moss Moorlands and Newtyle Forest and associated Woodlands: open moorland habitats associated with Mull Buie and Moss of Bednawinny;
- Glen Latterach Moorlands and Woodlands associated with Hill of Mulundy and Wangie Wood: open moorland habitats associated with Glen Latterach;
- Brown Muir: open moorland habitats associated with Brown Muir; and
- River Spey Corridor / Wood of Ordiequish: raptor-specific surveys over Wood of Ordiequish.

2.2.18 Surveys comprised at least four survey visits to each Focal Area between mid-March and July 2023 (inclusive) and involved an amalgamation of two different methodologies:

- Moorland Breeding Bird Survey (BBS) using a modified version of the Brown and Shepherd methodology (Brown and Shepherd, 1993)¹⁵ as summarised in Gilbert¹⁶, targeting breeding waders within the BBS areas, where access permitted; and
- Scarce breeding raptor surveys, broadly following standard methodology for assessing raptor populations set out by Hardey *et al.* (2013)¹⁷ and Gilbert *et al.* (1998)¹⁶.

2.2.19 These surveys were combined for efficiency given the size of the Focal Areas being surveyed and involved broad walkovers interspersed with short, periodic watches from suitable VPs which offered wider views over open areas to establish presence and breeding activity by Target Species. Survey effort within the Beaully River Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas only involved VP surveys overlooking areas of suitable habitat (for breeding waders or raptor species).

2.2.20 As part of the scarce breeding bird surveys, checks of waterbodies were undertaken for the presence of, and breeding activity by red or black-throated divers (*Gavia stellata* and *Gavia arctica*) following the guidance described in Gilbert *et al.* (1998)¹⁶.

¹⁴ Height bands were: HB 1 = <10m, HB 2 = 10-40m, HB 3 = 40-60m, HB 4 = >60m).

¹⁵ Brown, A.F., and Shepherd, K.B. (1993). A method for censusing upland breeding waders. *Bird Study*, 40: 189-195.

¹⁶ Gilbert, G., Gibbons, D.W., and Evans, J. (1998). *Bird Monitoring Methods*. RSPB, Sandy.

¹⁷ Hardey, J., Crick, H., Wernham, C., Riley, Etheridge, B., and Thompson, D. (2013). *Raptors. A Field Guide for Surveys and Monitoring*. SNH. Inverness.

- 2.2.21 All surveys were conducted during daylight hours, but where black grouse surveys (which are undertaken around dawn, as described below) were also being undertaken in the same Focal Areas, the scarce breeding bird survey effort and coverage commenced from sunrise and was conducted concurrently with the black grouse survey. Black grouse and scarce breeding bird surveys therefore often occurred concurrently between late March and mid-May (the survey period of black grouse surveys is described below). Detailed survey information is provided in **Annex A - Table A2**.
- 2.2.22 The scarce breeding bird surveys were repeated in 2024 in selected sections of the Beaully River Corridor, Drummoissie Muir, Assich Forest and Strathdearn Foothills, Dava Moorlands and Glen Latterach Moorlands Focal Areas. Focal Areas selected for coverage by follow up surveys were based upon findings of the 2023 surveys. Follow up surveys aimed to provide a second year of survey effort in areas where confirmed or probable breeding sites / territories of scarce breeding birds were previously identified. Unlike the much more extensive coverage of the 2023 surveys however, the 2024 surveys were refined to the Proposed Development plus a surrounding buffer of 750 m. The areas covered by the 2024 follow up surveys are shown on the relevant Focal Area figures (**Figure 9.1.3**), with detailed survey information provided in **Annex A - Table A2**.

Capercaillie Surveys

- 2.2.23 Capercaillie surveys were carried out in all suitable woodland blocks within each relevant Focal Area. Suitable woodlands were identified based on records collected during the desk study (mainly those provided by the RSPB Scotland who undertake capercaillie monitoring) and where there was potential for connectivity with the Darnaway and Lethan Forrest SPA (designated for supporting capercaillie). Potential connectivity with Darnaway and Lethan Forrest SPA was determined as suitable habitat out with the SPA boundary, adjoining or in proximity to the SPA. Focal Areas and associated woodlands identified for capercaillie survey are shown on **Figure 9.1.3** and included:
- Dulsie Wood and associated Woodlands:
 - Blackmill Wood and Loch of Boath Wood (central OS grid reference NH 88895 46422);
 - Clunas Wood, Knockaneorn Wood and Newlands of Fleenas Wood (central OS grid reference NH 90360 46040);
 - Keppernach Wood (central OS grid reference NH 92138 47664);
 - Achagour Woodlands (central OS grid reference NH 93798 46855);
 - Dulsie Wood (central OS grid reference NH 93233 44815);
 - Dalnaheiglish Wood and Lodge Wood (central OS grid reference NH 95029 44051);
 - Ferness Woodlands, including New Inn Wood and Logie Wood (central OS grid reference NH 95426 43928); and
 - Airdrie Plantations / Wood of Tilliglens (NH 98739 46811);
 - Bednawinny Moss Moorlands and Newtyle Forest and associated Woodlands:
 - Newtyle Forest / Bogawood Wood (central OS grid reference NJ 05169 52980);
 - Romach Hill (central OS grid reference NJ 06311 50949); and
 - Hill of Tomechole Plantations (central OS grid reference NJ 06570 49335);
 - Glen Latterach Moorlands, Brown Muir and Wangie Wood and associated Woodlands:
 - Hill of Mulundy (central OS grid reference NJ 10249 53129); and
 - Wangie Wood (central OS grid reference NJ 13799 53791); and.
 - River Spey Corridor / Wood of Ordiequish:
 - Wood of Ordiequish, including Slorach's Wood, Leitch's Wood, Gallows Hill, Whiteash Wood, Scotch Hill and Sound Moor (central OS grid reference NJ 36018 56478).

- 2.224 All woodland areas targeted for capercaillie survey were identified to and approved in advance with the RSPB Scotland Capercaillie Project Officer, in accordance with NatureScot's Schedule 1 Bird Survey licence conditions. Through this process it was advised that the surveys to inform the Proposed Development should not include Dulsie Wood, in order to avoid excess disturbance as the RSPB Scotland would be surveying it themselves. Instead, they would provide the results of their surveys to inform this assessment.
- 2.225 The surveys followed NatureScot's Capercaillie Survey Methods (SNH, 2013¹⁸) and involved an initial programme of presence / absence surveys in late winter / early spring, to identify areas of most suitable lekking habitat within each targeted area of woodland. This included recording of any sightings of capercaillie or evidence of their presence, such as droppings, feathers or dustbaths. Suitable capercaillie habitat typically comprises mature, open, semi-natural pinewoods with extensive heather and blaeberry ground cover, while leks sites tend to be on raised knolls in more open areas including along forest rides¹⁸.
- 2.226 Initial surveys were followed by a programme of capercaillie lek surveys, conducted in the most suitable areas of lekking habitat, occurring between mid-April and early May. Lek surveys included checks at known lek locations provided by RSPB Scotland. The principle aim of these surveys was to identify capercaillie leks and record the number of lekking males and any attending female birds. These surveys were conducted around dawn, typically between an hour before to two hours after sunrise, and in dry and still weather conditions. Detailed survey information is provided in **Annex A - Table A3**.

Black Grouse Surveys

- 2.227 Black grouse surveys were carried out in the following Focal Areas, as shown on **Figure 9.1.3**:
- The Aird: open moorland habitats associated with An-Leacainn;
 - Drum Mossie Muir and River Nairn Corridor: open moorland habitats of Drum Mossie Muir;
 - Assich Forest / Strathdearn Foothills: open moorland habitats along the Strathdearn Foothills-Assich Forest transmission zone;
 - Dava Moorlands: open moorland habitats associated with Cairn Duhie, Cairn Eney and to the west of Berryburn Wind Farm;
 - Bednawinny Moss Moorlands and Newtyle Forest and associated Woodlands: open moorland habitats associated with Mull Buie and Moss of Bednawinny;
 - Glen Latterach Moorlands and Woodlands associated with Hill of Mulundy and Wangie Wood: open moorland habitats associated with Glen Latterach; and
 - Brown Muir: open moorland habitats associated with Brown Muir.
- 2.228 Surveys followed the standard methodology described in Gilbert *et al.* (1998)¹⁶ and involved at least two visits to each Focal Area. Black grouse surveys focussed on areas of most suitable habitat, including; moorland, heathland, rough grazing and woodland areas. Where present native broadleaved woodlands were included, especially where these met open habitats with a scattered (or 'feathered') edge. Surveys were conducted between an hour before to two hours after sunrise, and in dry and still weather conditions, between late March and mid-May. The principle aim of these surveys was to establish the presence of black grouse, identify active lek sites and to record the number of lekking males and any attending female birds. Detailed survey information is provided in **Annex A – Table A4**.

¹⁸ SNH (2013) Capercaillie Survey Methods. February 2013.

2024 Follow Up Surveys

- 2.2.29 Black grouse surveys were repeated in 2024 in selected sections of the Assich Forest and Strathdearn Foothills and Dava Moorlands Focal Areas. These surveys aimed to provide a second year of survey effort in areas where confirmed or probable lekking sites were identified in 2023. The surveys focussed on previously identified lek sites located within the potential alignment plus a surrounding buffer of 750 m. The areas covered by the 2024 survey are shown on the relevant Focal Area figures (**Figure 9.1.3**) with detailed survey information provided in **Annex A – Table A4**.

Common Crane Surveys

- 2.2.30 Common crane surveys were conducted across the agricultural fields and small pockets of woodland in the River Deveron Corridor and New Deer to Peterhead Focal Areas, as shown in **Figure 9.1.3**. Surveys were informed by records received from RSPB Scotland. In the absence of a defined survey methodology, the common crane surveys involved a combination of drive-arounds and ad hoc VPs undertaken in strategic locations overlooking areas of suitable breeding and foraging habitat. Recording was based on the criteria set out in the Rare Breeding Birds Panel's (RBBP) guidance for common crane surveys (RBBP, undated¹⁹). Suitable breeding and foraging habitat comprised wetland areas (ideally >200 ha) such as reedbed, fen, lowland raised bog and floodplain grasslands, while foraging habitat can also extend to grasslands and arable farmland (Stanbury and the UK Crane Working Group, 2011²⁰).
- 2.2.31 Surveys were conducted monthly in each Focal Area between April and July 2023. The main aim of these surveys was to establish the presence of, and any breeding activity by common cranes and ideally locate their nest sites. Detailed survey information is provided in **Annex A – Table A5**.

2024 Follow Up Surveys

- 2.2.32 Common crane surveys were repeated in 2024 to provide a second year of survey effort and results. The 2024 surveys covered the same areas as covered in 2023 (**Figure 9.1.3**). Detailed survey information is provided in **Annex A – Table A5**.

Goose Field Use Surveys

- 2.2.33 Goose field use surveys were conducted across the agricultural fields within the New Deer to Peterhead Focal Area, see **Figure 9.1.3**, and involved a combination of drive-arounds and ad hoc VPs overlooking areas of suitable goose foraging habitat (principally arable and pastoral farmland).
- 2.2.34 Surveys were conducted monthly between September 2023 and March 2024. The main aim of these surveys was to establish the presence, distribution, abundance and frequency of occurrence of foraging goose flocks along this section of the Proposed Development. Detailed survey information is provided in **Annex A – Table A6**.

Incidental Observations

- 2.2.35 Observations and records of breeding / roosting Target Species were recorded on an ad hoc basis during ecology and habitat surveys in 2023 / 24, and more systematically during pre-construction surveys for the enabling works in 2024. Data collected during the above surveys, where not specifically corroborated by the ornithology surveys, are provided within the relevant Focal Areas / Non-Focal Areas as detailed in **Section 3**.

¹⁹ Rare Breeding Birds Panel (n.d.). Common Crane breeding evidence in the UK. Available at: https://www.rbbp.org.uk/wp-content/uploads/2020/10/sp_guidelines_common_crane.pdf

²⁰ Stanbury, A. and the UK Crane Working Group (2011). The Changing Status of the Common Crane in the UK. British Birds 104, 432-447. August 2011.

Site Investigation Pre-Works Check Records (2024-25)

- 2.2.36 Three additional nest sites were located during site investigations pre-works checks in 2024 and 2025. A summary of these records is provided within the results section of the relevant Focal Areas with full details provided in **Appendix 9.2: Confidential Ornithological Information**.

2.3 Limitations

- 2.3.1 As detailed in **Section 2.1** and **Section 2.2**, the ornithology surveys were designed to focus on areas identified as having the greatest potential to support Target Species, as identified through a rigorous desk study undertaken throughout the route selection stage. As such, areas outside Focal Areas were not subject to field surveys undertaken by WSP. These areas, however, were subject to a detailed desk study to acquire records of Target Species relevant to the baseline. The full suite of data, from field surveys and desk study, have been used to inform the baseline and subsequent assessment. The OIA includes a qualitative assessment of collision risk for Target Species across non-Focal Areas where appropriate, to ensure the assessment is robust. Based on the above it is not considered that the baseline data gathered represents a limitation to undertaking a robust assessment on the effects of the Proposed Development on ornithological receptors.

3 Results

3.1 Overview

- 3.1.1 The following sections present the findings from the desk study and field surveys conducted to inform the baseline for OIA of the Proposed Development. The findings are split between the Focal Areas (**Section 3.2**) in which dedicated survey effort was undertaken, and Non-Focal Areas (**Section 3.3**) where no survey effort was undertaken but relevant information was returned through the desk study exercise and incidental observations.

3.2 Focal Bird Survey Areas

Beauly River Corridor

- 3.2.1 The Beauly River Corridor Focal Area covered the western extent of the Proposed Development and included the River Beauly itself as well as the patchwork of agricultural fields and mixed woodlands of the river's floodplain, including Rattle Wood (**Figure 9.1.3a**). Multiple existing Transmission OHLs are present within the Focal Area associated with the Beauly Substation.

Desk Study

- 3.2.2 **Table 3.1** below provides a summary of the Target Species records relevant to the Beauly River Corridor Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.1: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Osprey	Locations and occupation / activity status of three breeding territories in 2021 and 2022.	HRSG
Honey buzzard	Sightings records, including of a pair potentially indicating a breeding site, from between 2020 and 2022.	HRSG
Red kite	Location and occupation / activity status of one breeding territory from 2019.	HRSG
Peregrine	Sighting records from between 2019 and 2022.	HRSG

- 3.2.3 There is one withdrawn OHL development and another ongoing OHL development located within or in close proximity to the Beauly River Corridor Focal Area as follows;
- LT37 Beauly to Blackhillock OHL Reinforcement Project: the route corridor for which traversed the majority of the Beauly River Corridor Focal Area, broadly following the same corridor as the Proposed Development; and,
 - Spittal – Loch Buidhe – Beauly 400 kV Connection Project: the southern section for which overlaps with the western section of this Focal Area.
- 3.2.4 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded regular flight activity by pink-footed geese *Anser brachyrhynchus* along the Beauly River Corridor and to a lesser extent by greylag geese *Anser anser* during the winter and autumn and spring passage months. Red kite and osprey were also frequently recorded along the river valley.
- 3.2.5 Data obtained from the Spittal – Loch Buidhe – Beauly 400 kV Connection Project during raptor surveys undertaken in June and July 2024, identified three raptor nests within Ruttie Wood, including; two active osprey nests and one active red kite nest. One of the osprey nests corresponded with breeding raptor data provided by the HRSG and described in **Table 3.1**. The other osprey nest and the red kite nest were located elsewhere along the Beauly River Corridor and within Ruttie Wood respectively. Flight activity surveys also recorded large numbers of osprey and red kite flights within this area. Additionally, pink-footed goose, greylag goose, and hen harrier flights were recorded in low numbers.
- 3.2.6 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and crested tit occur in the 10 km grid squares NH44 and NH54, within which the Beauly River Corridor Focal Area sits, where these species are most likely affiliated with coniferous woodland habitats.

Field Surveys – 2022 / 23

- 3.2.7 Surveys conducted in this Focal Area involved a 12-month programme of flight activity surveys from VP 1 and raptor-specific scarce breeding bird surveys.

Flight Activity Surveys

- 3.2.8 A total of six Target Species comprising 28 flights were recorded throughout the year at VP 1, as presented in **Table 3.2** and **Figure 9.1.4a**. Flights were typically recorded across woodland and agricultural habitats of the River Beauly valley. Red kite and pink-footed goose comprised the majority of flights with 16 and six respectively. Of the flights recorded, three were at PRC, one of red kite and two of pink-footed goose. No interaction with any existing OHL was recorded. A summary of the species most frequently recorded, red kite and pink-footed goose is provided below:
- Red kite – the majority of flights (14 of 16) were recorded during the non-breeding season, with all but one flight recorded north of the Proposed OHL Alignment. The single flight recorded at PRC flew south over the Proposed OHL Alignment at Balblair Wood; and
 - Pink-footed goose – flights were recorded between November 2022 and April 2023 and typically comprised commuting flights along and across the River Beauly. Flock size recorded ranged from two to 180 with a total count of 346 across all flights. Two flights, comprising flocks of six and 19 birds, were recorded at PRC, one when crossing Balblair Wood and another crossing the River Beauly further east.
- 3.2.9 Other species of waterfowl and wading birds recorded along the river valley included greylag goose, whooper swan *Cygnus cygnus*, curlew *Numenius arquata*, and oystercatcher *Haematopus ostralegus*, but these were infrequent and / or involved small numbers of birds. None of these flights were recorded at PRC.

Table 3.2: Summary of Flight Activity Recorded from VP 1

Species	No. of Flights	Constituent No. of Birds	No. of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	16	18	1	1
Pink-footed goose	6	346	2	25
Oystercatcher	2	4	0	0
Greylag goose	2	5	0	0
Curlew	1	1	0	0
Whooper swan	1	14	0	0

Scarce Breeding Bird Surveys

- 3.2.10 A summary of scarce breeding bird records is provided below and within **Figure 9.1.5a** with full details of sensitive records provided in **Appendix 9.2: Confidential Ornithological Information**. Two scarce breeding bird territories were identified within the Focal Area:
- Red kite – two nest sites were identified, with the closest approximately 550 m north of the Proposed Development. Numerous sightings of red kite were recorded in the Focal Area during the surveys; and
 - Osprey – two nest sites were recorded with the closest approximately 1.1 km from the Proposed Development.
- 3.2.11 Observations of Target Species where no breeding was indicated comprised the following:
- Honey buzzard *Pernis apivorus* – Three observations of single honey buzzard were recorded in June 2023 in the Ruttle Wood area. One of the sightings overflew the Proposed OHL Alignment; and
 - Peregrine falcon – Sightings of individual birds in vicinity of Ruttle Wood in June and July 2023. Historic nest site provided by HRSR was visited but was not active in 2023.
- 3.2.12 Field surveys in 2024 comprised follow up scarce breeding bird surveys across a condensed survey area in comparison to the 2023 surveys (**Figure 9.1.2**).
- 3.2.13 A summary of scarce breeding bird records is provided below and within **Figure 9.1.5a** with full details of sensitive records provided in **Appendix 9.2: Confidential Ornithological Information**. Observations indicative of a goldeneye *Bucephala clangula* breeding territory was identified approximately 600 m southeast of the Proposed Development.
- 3.2.14 Observations of Target Species where no breeding was indicated comprised six observations of individual red kite, primarily in flight, between April and July 2024.

The Aird

- 3.2.15 The Aird Focal Area covered the extensive coniferous plantation forestry and adjacent open moorland habitats of The Aird – an area of high ground to the southwest of Inverness between the Beauly and Ness River corridors (**Figure 9.1.3b**). There are no existing Transmission OHLs within the VP viewshed in this Focal Area.

Desk Study

- 3.2.16 **Table 3.3** below provides a summary of the Target Species records provided through the consultation exercise, specifically records from within 2 km of the Proposed Development where it passes through The Aird Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.3: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Black grouse	Location of a lek site attended by five males from 2017.	RSPB Scotland

- 3.217 There is one withdrawn OHL development located within or in close proximity to The Aird Focal Area:
- LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor which traversed the same forested part of The Aird as the Proposed Development.
- 3.218 Ornithological data for the LT37 Beauly to Blackhillock Reinforcement Project was collected between 2015 and 2017. Surveys recorded negligible flight activity by Target Species over the section which corresponds with this Focal Area.
- 3.219 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and crested tit occur in the 10 km grid square NH54 within which The Aird Focal Area sits, where they are most likely affiliated with coniferous woodland habitats.

Field Surveys - 2023

- 3.220 Surveys conducted in this Focal Area involved a 6-month programme of breeding season flight activity surveys from VP 17 overlooking the forestry, and black grouse and scarce breeding bird surveys over the open moorland.

Flight Activity Surveys

- 3.221 A total of two Target Species, comprising eight flights, were recorded throughout the 2023 breeding season at VP 17, as presented in **Table 3.4** below and **Figure 9.1.4b**. A summary of flights by species is provided below:
- Red kite – seven flights were recorded over the forestry during the breeding season, including one of a pair of birds. Two flights, each of a single bird, were recorded at PRC; and
 - Curlew – three flights totalling four birds, two of which were recorded at PCH, both involving individual birds.

Table 3.4: Summary of Flight Activity Recorded from VP 17

Species	No. Of Flights	Constituent No. of Birds	No. Of At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	7	8	2	2
Curlew	3	4	1	1

Scarce Breeding Bird Surveys

- 3.222 There were no scarce breeding bird territories identified within the Focal Area.
- 3.223 Observations of Target Species where no breeding was indicated comprised the following (**Figure 9.1.5b**):
- Golden eagle – a single sighting of a male bird in July 2023 flying over moorland approximately 2.2 km south of the Proposed Development; and,
 - Merlin *Falco columbarius* – a single sighting in May 2023 of an individual hunting bird over moorland approximately 1.5 km south of the Proposed Development.
- 3.224 Three moorland breeding bird territories were recorded in the Focal Area comprising single territories of lapwing *Vanellus vanellus*, curlew and snipe *Gallinago gallinago* (**Figure 9.1.6a**). All territories were recorded in a cluster approximately 2.3 km south of the Proposed Development.

Black Grouse Surveys

- 3.2.25 Three black grouse leks, all of single males, were recorded across open moorland to the south of the Proposed Development in March / April 2023. The nearest lek was located approximately 1.2 km south of the Proposed Development. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

River Ness / Caledonian Canal Corridor

- 3.2.26 The River Ness / Caledonian Canal Focal Area covered the agricultural fields and mixed woodlands either side of these two watercourses. Two existing Transmission OHLs are present within the VP Viewshed in this Focal Area (**Figure 9.1.3c**).

Desk Study

- 3.2.27 **Table 3.5** below provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development, where it passes through the River Ness / Caledonian Canal Corridor Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.5: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Honey buzzard	Sighting records of a pair potentially indicating a breeding site, from between 2020 and 2021.	HRSG

- 3.2.28 There is one withdrawn OHL development located within or in close proximity to the River Ness / Caledonian Canal Corridor Focal Area:
- LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which traversed the same section of the River Ness / Caledonian Canal Corridor as the Proposed Development.
- 3.2.29 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded regular flight activity by red kite along the River Ness valley throughout the year and by osprey during the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded along the River Ness valley during the winter, and autumn / spring passage months.
- 3.2.30 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and crested tit occur in the 10 km grid square NH64 within which the River Ness / Caledonian Canal Corridor Focal Area sits, where these species are most likely affiliated with coniferous woodland habitats.

Field Surveys

- 3.2.31 Surveys conducted in this Focal Area involved a 12-month programme of flight activity surveys from a single VP (VP 2).

Flight Activity Surveys

- 3.2.32 A total of four Target Species, comprising 53 flights, were recorded throughout the year at VP 2, as presented in **Table 3.6** and **Figure 9.1.4c**. The most numerous flights recorded were those of red kite and pink-footed goose with 40 and seven flights respectively. No interaction with the existing OHLs were noted for any of the flights. A summary of flights by species is provided below:
- Red kite - 40 flights were recorded through the breeding and non-breeding season, with records predominantly comprising single birds; however, pairs of birds were recorded on eight occasions and three birds on a single occasion. Flights were concentrated over the agricultural fields and mixed woodland north of the Proposed Development and predominantly comprised hunting and soaring birds. Two flights were recorded at PRC, one flying northeast and the other circling over the Proposed OHL Alignment; and

- Pink-footed geese – seven flights were recorded in late winter to early spring 2023. All flights comprised commuting flocks along and over the River Ness valley with a peak count of 107 recorded. No flights were recorded at PRC.

3.2.33 Other species of waterfowl and wading birds recorded along the river valley were greylag goose and oystercatcher, both with three flights. One flight of greylag goose comprising 13 birds was recorded at PRC.

Table 3.6: Summary of Flight Activity Recorded from VP 2

Species	No. of Flights	Constituent No. of Birds	No. of 'At Risk' Flights	Constituent No. 'At Risk' Birds
Red kite	40	50	2	2
Pink-footed goose	7	436	0	0
Greylag goose	3	24	1	13
Oystercatcher	3	5	0	0

Drumossie Muir and River Nairn Corridor

3.2.34 The Drumossie Muir and River Nairn Focal Area covered the open moorland and coniferous woodlands of Drumossie Muir, and small areas of agricultural fields and mixed woodlands associated with the River Nairn corridor (**Figure 9.1.3d**). Existing OHL Transmission lines are present within the VP 18 viewshed, occurring within this focal area.

Desk Study

3.2.35 **Table 3.7** below provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development, where it passes through the Drumossie Muir and River Nairn Corridor Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.7: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Osprey	Locations and occupation / activity status of two breeding territories between 2018 and 2022.	HRSG
Red kite	Location and occupation / activity status of one breeding territory from 2021.	HRSG
Peregrine	Location and occupation / activity status of one breeding territory from between 2018 and 2022.	HRSG
Capercaillie	Record of a single male in open ground from 2013.	RSPB Scotland

3.2.36 There is one withdrawn OHL development located within or in close proximity to the Drumossie Muir and River Nairn Corridor Focal Area:

- LT37 Beaully to Blackhillock OHL Reinforcement Project, the route corridor for which broadly traversed the same areas as the Drumossie Muir and River Nairn Corridor Focal Area and Proposed Development.

3.2.37 Ornithological data for the LT37 Beaully to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded regular flight activity by red kite over Drumossie Muir and along the River Nairn valley throughout the year and by osprey during the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded along the River Nairn valley during the winter and autumn and spring passage months. The recorded presence of honey buzzard over the woodland along this section during the breeding season was also notable.

- 3.238 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and crested tit occur in the 10 km grid squares NH63, NH64, NH73 and NH74 which the Drum Mossie Muir and River Nairn Corridor Focal Area covers, where these species are most likely affiliated with coniferous woodland habitats.

Field Surveys – 2022 / 23

- 3.239 Surveys conducted in this Focal Area involved a 6-month programme of breeding season flight activity surveys from VP 18; and a programme of black grouse and scarce breeding bird surveys over the open moorland habitats of Drum Mossie Muir. Additionally, a 6-month programme of non-breeding season flight activity surveys was undertaken from VP 3 overlooking the River Nairn corridor. Note that the viewshed of VP 3 does not encompass the Proposed Development. Records from VP 3 are included to provide additional information on Target Species activity in the wider area, including directly adjacent to the Proposed Development.

Flight Activity Surveys

- 3.240 A total of seven Target Species, comprising 61 flights, were recorded during the breeding season at VP 18, as presented in **Table 3.8** below and **Figure 9.1.4d**. The most numerous flights recorded were those of red kite, osprey and curlew with 36, 13 and 7 flights respectively. No interaction with the existing OHLs were noted for any of the flights. A summary of flights by species is provided below:
- Red kite - 36 flights were recorded through the breeding season with the majority of records comprising hunting birds or flights associated with the breeding territories recorded in the area. Flights were observed scattered throughout the moorland / woodland mosaic habitat and eight of the flights were recorded at PRC;
 - Osprey – 13 flights were recorded through the breeding season with records including individual birds, pairs of birds and three birds observed on one occasion. Flights were recorded scattered throughout the moorland / woodland mosaic habitat with one flight recorded at PRC when crossing the Proposed OHL Alignment west of the B861; and
 - Curlew – seven flights were recorded across moorland overlapping and to the south of the Proposed OHL Alignment. Flights recorded in spring 2023 comprised of both single birds and pairs associated with the breeding territories recorded in the area. A single flight was recorded at PRC.
- 3.241 Other species of waterfowl and wading birds recorded included pink-footed goose, greylag goose, lapwing and snipe but these were infrequent and / or involved small numbers of birds. One flight of greylag goose was recorded at PRC.

Table 3.8: Summary of Flight Activity Recorded from VP 18

Species	No. Of Flights	Constituent No. of Birds	No. Of At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	36	49	8	10
Osprey	13	18	1	1
Curlew	7	9	1	1
Pink-footed goose	2	122	0	0
Greylag goose	1	7	1	7
Lapwing	1	1	0	0
Snipe	1	1	0	0

- 3.2.42 A total of five Target Species (including unidentified grey goose species), comprising 32 flights, were recorded during the non-breeding season at VP 3, as presented in **Table 3.9** and **Figure 9.1.4e**.
- 3.2.43 The most numerous flights recorded were those of red kite and greylag goose with 23 and four flights respectively. As the viewshed does not encompass the Proposed Development, no flights were recorded at PRC. A summary of flights by species is provided below:
- Red kite - 23 flights were recorded through the non-breeding season with the majority of records comprising hunting birds over the open habitat of the River Nairn valley. Flights predominantly were of single birds with eight records of two birds and three records of three birds; and
 - Greylag goose – four flights were recorded with flock sizes ranging from single birds to nine birds. Three of the four flights comprised flocks taking off or landing from fields in the River Nairn valley.
- 3.2.44 Other species of waterfowl and wading birds recorded included pink-footed goose and whooper swan, but these were infrequent and / or involved small numbers of birds. Flight records included two flocks of 'grey' geese not identified to species level.

Table 3.9: Summary of Flight Activity Recorded from VP 3

Species	No. Of Flights	Constituent No. of Birds	No. Of At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	23	37	0	0
Greylag goose	4	14	0	0
Unidentified goose sp.	2	260	0	0
Pink-footed goose	2	420	0	0
Whooper swan	1	19	0	0

Scarce Breeding Bird Surveys

- 3.2.45 A summary of scarce breeding bird records is provided below and within **Figure 9.1.5c** with full details of sensitive records provided in **Appendix 9.2: Confidential Ornithological Information**. A total of four scarce breeding bird territories from three species were identified within the Focal Area:
- Barn owl *Tyto alba* - an occupied barn owl box was identified within a small block of woodland approximately 500 m from the Proposed Development. There were no additional sightings;
 - Red kite – a confirmed nest was identified approximately 620 m from the Proposed Development. There were numerous sightings of red kite throughout the 2023 breeding season within the Focal Area; and,
 - Osprey – three confirmed nest sites were identified with the closest approximately 730 m from the Proposed Development. There were numerous sightings of osprey throughout the 2023 breeding season within the Focal Area.
- 3.2.46 Observations of Target Species where no breeding was indicated comprised the following:
- Merlin – three records of individual birds were recorded over moorland to the south of the Proposed Development in May and July 2023;
 - Peregrine falcon – two sightings of individual birds in March and May 2023 to the north of the Proposed Development; and,
 - White-tailed eagle *Haliaeetus albicilla* – a sighting of a single bird to the north of the Proposed Development in April 2023.
- 3.2.47 A total of 32 breeding territories comprising four species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below with territories shown spatially on **Figure 9.1.6b**:
- Snipe – 16 territories were recorded scattered throughout the Focal Area. Seven territories were recorded within approximately 500 m of the Proposed Development;

- Curlew – nine territories were recorded with the majority in the southern half of the Focal Area. Three territories were recorded within approximately 500 m of the Proposed Development;
- Lapwing – six territories were recorded scattered throughout the Focal Area. Four territories were recorded within 500 m of the Proposed Development; and
- Oystercatcher – a single territory was recorded to the west of the Focal Area approximately 700 m south of the Proposed Development.

Black Grouse Surveys

- 3.2.48 At least one lekking male was heard, but not seen, approximately 2 km south of the Proposed Development in April 2023. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**. Further sightings of non-lekking birds, including two observations of two male birds together, were recorded in 2023 across open moorland to the south of the Proposed Development (**Figure 9.1.7a**).

Field Surveys – 2024

- 3.2.49 Field surveys in 2024 comprised follow up scarce breeding bird surveys across a condensed survey area in comparison to the 2023 surveys (**Figure 9.1.2**).
- 3.2.50 A summary of scarce breeding bird records is provided below and within **Figure 9.1.9b** with full details of sensitive records provided in **Appendix 9.2: Confidential Ornithological Information**. An active osprey nest was recorded approximately 1.2 km south of the Proposed Development, the same nest site as recorded during the 2023 surveys. An additional sighting of an osprey, away from the nest site, was observed in April 2024.
- 3.2.51 Observations of Target Species where no breeding was indicated comprised a single observation of an individual red kite in flight in April 2024.
- 3.2.52 A total of seven breeding territories comprising two species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below with territories shown spatially on **Figure 9.1.10a**:
- Snipe – four territories were recorded scattered throughout the Focal Area and all were recorded within approximately 500 m of the Proposed Development; and,
 - Curlew – three territories were recorded throughout the Focal Area, two of which were recorded within approximately 500 m of the Proposed Development.

Assich Forest / Strathdearn Foothills

- 3.2.53 The Assich Forest / Strathdearn Foothills Focal Area covers the extensive open moorland and adjacent coniferous forest edge habitats which mark the transition between Assich Forest and the Strathdearn Foothills (**Figure 9.1.3e**). Existing Transmission OHLs are present within both VP viewsheds within this Focal Area.

Desk Study

- 3.2.54 There is one withdrawn OHL development located within or in close proximity to Assich Forest / Strathdearn Foothills Focal Area:
- LT37 Beaulay to Blackhillock OHL Reinforcement Project, the route corridor for which broadly traversed the same areas as the Assich Forest / Strathdearn Foothills Focal Area and Proposed Development.
- 3.2.55 Ornithological data for the LT37 Beaulay to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded limited data on Target Species along the section which corresponds with this Focal Area.

- 3.256 Anecdotal data provided by landowners for the Assich Forest / Strathdearn Foothills Focal Area comprised records of curlew, golden plover, snipe, woodcock *Scolopax rusticola*, goshawk, hen harrier, peregrine, short-eared owl, tawny owl *Strix aluco* and black grouse. This included the locations of five black grouse leks.
- 3.257 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill and Scottish crossbill occur in the 10 km grid squares NH73, NH74, NH83 and NH84 within which the Assich Forest / Strathdearn Foothills Focal Area sits; while crested tit occur in the grid squares NH73 and NH74, where these species are most likely affiliated with coniferous woodland habitats.

Field Surveys – 2022 / 23

- 3.258 Surveys conducted in this Focal Area involved a 12-month programme of flight activity surveys from a combination of VP 4 and VP 1911 overlooking the moorland and woodland habitats surrounding Saddle Hill, and from VP 5 overlooking Clunas Reservoir and surrounding moorlands. Additionally, a programme of black grouse and scarce breeding bird surveys was undertaken over the extensive open moorland habitats.

Flight Activity Surveys

- 3.259 Flight records of VP 4 and VP 19 are combined as they encompass overlapping viewsheds. A total of nine Target Species, comprising 49 flights, were recorded during the 12-month survey period, as presented in **Table 3.10** below and **Figure 9.1.4f**.
- 3.260 The most numerous flights recorded were those of red kite, pink-footed goose and goshawk with 25, 12 and four flights respectively. A summary of flights by these species is provided below:
- Red kite - 25 flights were recorded, 14 of which were recorded during the breeding season. Flights were recorded over the coniferous woodland and adjacent moorland habitats. Ten flights were recorded at PRC when crossing the Proposed OHL Alignment where it transects woodland edge habitat southwest of Saddle Hill;
 - Pink-footed goose – 12 flights of commuting birds were recorded between November 2022 and April 2022 with flocks ranging in size from 17 to 445. Flights were typically recorded to the north of the Proposed OHL Alignment flying from west to east. A single flight of 395 birds was recorded at PRC west of Saddle Hill; and
 - Goshawk - four flights were recorded, three of which, including a pair displaying, were recorded in early spring 2023. Flights were recorded over coniferous woodland at Saddle Hill. One flight was recorded at PRC in this area.
- 3.261 Other species were recorded infrequently and / or in low numbers. These species included single observations of golden eagle, merlin, white-tailed eagle and black grouse. The flights of golden eagle and white-tailed eagle were recorded at PRC in the vicinity of Saddle Hill, the former of which comprised a pair of birds.

Table 3.10: Summary of Flight Activity Recorded from VP 4 and VP 19

Species	No. Of Flights	Constituent No. of Birds	No. Of At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	25	29	10	11
Pink-footed goose	12	1764	1	395
Goshawk	4	5	1	1
Greylag goose	3	9	1	2
Curlew	1	2	1	2
Golden eagle	1	2	1	2
Merlin	1	2	0	0
White-tailed eagle	1	1	1	1
Black grouse	1	1	0	0

- 3.2.62 A total of seven Target Species, comprising 27 flights, were recorded during the 12-month survey period at VP 5, as presented in **Table 3.11** below and **Figure 9.1.4g**.
- 3.2.63 The most numerous flights recorded were those of red kite with eleven followed by curlew and greylag goose (both five). Of the 27 flights, eight were recorded at PRC. No interaction with the existing OHL was recorded for any flight. A summary of flights by species is provided below:
- Red kite - eleven flights were recorded, five of which were recorded during the breeding season. Flights were predominantly recorded over open moorland north and south of Clune Reservoir. Two flights were recorded at PRC when crossing the Proposed OHL Alignment to the north of Clune Reservoir;
 - Curlew – five flights by displaying / calling birds were recorded in early spring 2023 over the open moorland. One flight to the west of Clune Reservoir was recorded at PRC; and
 - Greylag goose – five flights were recorded comprising between one and three birds. Four of the five flights were recorded flying east to west roughly parallel with the Proposed OHL Alignment. Three flights were recorded at PRC.
- 3.2.64 Other species were recorded infrequently and / or in low numbers. Wildfowl and waders comprised three flights of pink-footed goose and a single flight of golden plover *Pluvialis apricaria*. Single observations of goshawk and merlin were also recorded with the former species recorded at PRC to the west of Clune Reservoir.

Table 3.11: Summary of Flight Activity Recorded from VP 5

Species	No. Of Flights	Constituent No. of Birds	No. Of At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	11	12	2	2
Curlew	5	6	1	1
Greylag goose	5	9	3	6
Pink-footed goose	3	82	1	63
Goshawk	1	1	1	1
Golden plover	1	36	0	0
Merlin	1	1	0	0

Scarce Breeding Bird Surveys

- 3.2.65 A summary of scarce breeding bird records is provided below and within **Figure 9.1.5d** with full details of sensitive records provided in **Appendix 9.2: Confidential Ornithological Information**. A single scarce breeding bird territory was identified within the Focal Area:
- Merlin – a confirmed and probable nest site were identified in moorland approximately 2.7 km and 1.7 km from the Proposed Development respectively. Additional sightings, predominantly of hunting birds, were recorded across the central section of the Focal Area; and
 - Red kite – a nest was identified outside the Focal Area incidentally during travel between Drum Mossie Muir and River Nairn Corridor and Assich Forest / Strathdearn Foothills Focal Areas. The nest was identified approximately 1.1 km from the Proposed Development. Numerous red kite sightings were recorded through the Focal Area.
- 3.2.66 Observations of Target Species where no breeding was indicated comprised the following:
- White-tailed eagle – three white-tailed eagle sightings, all of individual birds, were recorded across the open moorland habitat to the south of the Proposed Development;
 - Red kite – numerous observations of red kite were recorded throughout the Focal Area but no evidence of breeding was recorded (with the exception of the above-noted nest site recorded approximately outside the Focal Area);
 - Golden eagle – two sightings of birds in flight recorded in April and June 2023 across moorland to the south of the Proposed Development (with the closet record approximately 1.7 km south);

- Goshawk – four sightings of individual birds (comprising records of both male and female birds) recorded between May and July 2023. One record was recorded flying across the Proposed Development;
- Hen harrier – two records of hunting males in May 2023 recorded west of Bhuidhe Mhor approximately 2.2 km south of the Proposed Development;
- Osprey – A single sighting in June 2023 of a bird in flight south of Clunas Reservoir; and
- Red-throated diver – three observations of up to two birds between March and May 2023 on Clunas Reservoir.

3.2.67 A total of 27 breeding territories comprising six species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below with territories shown spatially on **Figure 9.1.6c**:

- Snipe – eleven territories were recorded scattered throughout the Focal Area. Six territories were recorded within approximately 500 m of the Proposed Development;
- Curlew – seven territories were recorded throughout the Focal Area. Three territories were recorded within approximately 500 m of the Proposed Development;
- Golden plover – four territories were recorded throughout the Focal Area but none of these were recorded within 500 m of the Proposed Development;
- Lapwing – three territories were recorded throughout the Focal Area, two of which were recorded within 500 m of the Proposed Development;
- Oystercatcher – two territories were recorded to the east of the Focal Area, both within 500 m of the Proposed Development; and
- Common gull – a single colony comprising approximately eight pairs was recorded in the east of the Focal Area and was within 500 m of the Proposed Development.

Black Grouse Surveys

3.2.68 One black grouse lek, of a single male, was recorded approximately 250 m from the Proposed Development in April 2023. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**. An additional sighting of an individual non-lekking bird was also recorded in the Focal Area in 2023 (**Figure 9.1.7b**).

Field Surveys – 2024

3.2.69 Field surveys in 2024 comprised follow up scarce breeding bird surveys and black grouse surveys across a condensed survey area in comparison to the 2023 surveys (**Figure 9.1.2**).

Scarce Breeding Bird Surveys

3.2.70 A summary of scarce breeding bird records is provided below and within **Figure 9.1.9c**. No scarce breeding bird breeding territories were identified during the 2024 surveys.

3.2.71 Observations of Target Species where no breeding was indicated comprised the following:

- Red kite – 22 observations of individual birds in flight located throughout the survey area;
- Merlin – three observations of an individual adult bird in flight in the vicinity of Saddle Hill on the same day in April 2024;
- Osprey – a single observation of an individual adult in flight west of Saddle Hill in May 2024;
- White-tailed eagle – two observations of individual birds over open habitats in April and May 2024; and
- Red-throated diver – four observations, including three of a pair of birds, present on or taking off from Clunas Reservoir in April and May 2024.

3.2.72 A total of nine breeding territories comprising four species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below with territories shown spatially on

Figure 9.1.10b:

- Curlew – five territories were recorded scattered throughout the Focal Area. Two territories were recorded within approximately 500 m of the Proposed Development;
- Oystercatcher – two territories were recorded in the east of the Focal Area, both of which were recorded within approximately 500 m of the Proposed Development;
- Golden plover – a single territory was recorded in the east the Focal Area and was within 500 m of the Proposed Development; and
- Common gull – a single colony comprising approximately ten pairs was recorded in the east of the Focal Area and was within 500 m of the Proposed Development.

Black Grouse Survey

3.2.73 No lekking black grouse were recorded during the 2024 surveys. Sightings of individual female and male birds were recorded across open moorland approximately 500 m south of the Proposed Development in April / May 2024 (**Figure 9.1.7c**).

Site Investigation Pre-Works Check Records (2024-25)

3.2.74 A single red kite nest site was identified within the Assich Forest / Strathtearn Foothills Focal Area in 2025. This was considered active with a pair believed to be incubating eggs.

Dulsie Wood and Associated Woodlands

3.2.75 This Focal Area covers the extensive coniferous forestry centred around Dulsie Wood and included other named woodlands such as Clunas Wood and Newlands of Fleenas Wood in the west and New Inn Wood, Airdrie Plantations and Tilliglens Wood in the east (**Figure 9.1.3f**). An existing Transmission OHL is present within the VP viewshed in this Focal Area.

Desk Study

3.2.76 **Table 3.12** provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development where it passes through the Dulsie Wood and Associated Woodlands Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.12: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Capercaillie	Numerous sightings and field evidence (droppings / footprints) records. Locations of roost sites and two lek sites, including details of its activity status between 2014 and 2022. The identified lek sites were attended by a single displaying male, most recently in 2021.	RSPB Scotland

3.2.77 There is one withdrawn OHL development located within or in close proximity to Dulsie Wood and Associated Woodlands Focal Area:

- LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which broadly traversed the same areas as the Dulsie Wood and Associated Woodlands Focal Area and Proposed Development.

- 3.2.78 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded regular flight activity by red kite and greylag geese throughout the year, and by osprey during the breeding season, particularly over and around Loch of Boath and the fishery ponds at Achagour. Regular flight activity by pink-footed geese was also recorded over the corresponding area during the winter, autumn and spring passage months, as were less frequent flights by whooper swan. Goshawk and lekking black grouse were also recorded in the vicinity of this Focal Area.
- 3.2.79 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and crested tit occur in the 10 km grid square NH94 within which the Dulsie Wood and Associated Woodlands Focal Area sits, where these species are likely to occur throughout the affiliated coniferous woodland habitats.

Field Surveys

- 3.2.80 Surveys conducted in this Focal Area involved a 12-month programme of flight activity surveys from VP 8 overlooking the woodlands associated with Dulsie Wood and Newlands of Fleenas Wood, as well as a programme of capercaillie surveys.

Flight Activity Surveys

- 3.2.81 A total of eleven Target Species, comprising 37 flights, were recorded during the 12-month survey period at VP 8, as presented in **Table 3.13** and **Figure 9.1.4h**.
- 3.2.82 The most numerous flights recorded were those of pink-footed goose, red kite and osprey with 16, six and four flights respectively. Of the 37 flights, five were recorded at PRC. No interaction with the existing OHL was recorded for any flight. A summary of flights by species is provided below:
- Pink-footed goose – 16 flights recorded between October 2022 and early June 2023. Flights typically comprised commuting flocks of between one and 350 birds with no directional pattern present in flight routes. Some flights were recorded as presumed landing in area distant from the viewshed; however, no flights comprised flocks taking off or landing from the viewshed. The two pink-footed goose flights recorded at PRC also crossed the existing OHL just to the north of the Proposed OHL Alignment;
 - Red kite – six flights of individual birds were recorded during the breeding season predominantly over woodland to the north of the Proposed OHL Alignment. No flights were recorded at PRC; and
 - Osprey – four flights were recorded predominately across open areas to the north of the Proposed OHL Alignment. One flight was recorded at PRC to the west of Achagour. This osprey flight took off from a tower of the existing OHL and flew south across the Proposed OHL Alignment. This same bird had previously deposited nesting material on a tower of the existing OHL but no further breeding activity was observed.
- 3.2.83 Other species were recorded infrequently and / or in low numbers. Wildfowl and waders include unidentified grey goose sp., greylag goose, whooper swan, curlew, oystercatcher and whimbrel *Numenius phaeopus*, with no flights recorded at PRC. Additionally, raptors recorded in low numbers comprised a single goshawk flight in July 2023 and two white-tailed eagle flights involving single birds on separate dates in January and June 2023. Both the latter flights were recorded at PRC although both also crossed the existing OHL directly north of the Proposed OHL Alignment.

Table 3.13: Summary of Flight Activity Recorded from VP 8

Species	No. Of Flights	Constituent No. of Birds	No. Of At Risk' Flights	Constituent No. of 'At Risk' Birds
Pink-footed goose	16	1400	2	222
Red kite	6	6	0	0
Osprey	4	4	1	1
Goose sp.	2	3	0	0
Greylag goose	2	3	0	0
White-tailed eagle	2	2	2	2
Curlew	1	1	0	0
Goshawk	1	1	0	0
Oystercatcher	1	2	0	0
Whimbrel	1	1	0	0
Whooper swan	1	6	0	0

Capercaillie Surveys

- 3.2.84 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands associated with Dulsie Wood (excluding Dulsie Wood itself which was surveyed by RSPB Scotland). An incidental sighting of a single female capercaillie was recorded crossing a B-road to the east of Dulsie Wood in March 2023.

The following notable incidental observations of Target Species were recorded during capercaillie surveys in the Focal Area (**Figure 9.1.5e**):

- Goshawk – two sightings in March 2023, including that of a displaying bird. The closest record was approximately 500 m south of the Proposed Development; and,
- Red kite – a single sighting of a red kite over woodland approximately 650 m south of Proposed Development.

Site Investigation Pre-Works Check Records (2024-25)

- 3.2.85 Two osprey nest sites were identified within the Dulsie Wood and Associated Woodlands Focal Area in 2024. One was considered active due to the presence of an adult pair. The other showed evidence of a nest that was likely active earlier in the breeding season but was no longer in use.

Dava Moorlands

- 3.2.86 The Dava Moorlands Focal Area covers the open moorland and forest edge habitats associated with Cairn Duhie, Cairn Eney and an area to the west of Berryburn Wind Farm (**Figure 9.1.3g**). Existing Transmission OHLs are present within both VP viewsheds within this Focal Area.

Desk Study

- 3.2.87 **Table 3.14** provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development where it passes through the Dava Moorlands Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.14: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Goshawk	Location and occupation / activity status of one breeding territory between 2018 and 2022.	HRSRG
Capercaillie	Two field evidence (droppings / footprints) records from 2014 and 2016.	RSPB Scotland

- 3.2.88 There are two proposed windfarm developments and one withdrawn OHL development located within or in close proximity to the Dava Moorlands Focal Area:
- Cairn Duhie Wind Farm located within the western part of the Dava Moorlands Focal Area, associated with the hill of Cairn Duhie, the northern part of which overlaps with the Proposed Development;
 - Clash Gour Wind Farm, the western part of which is located within the east of the Dava Moorlands Focal Area, is associated with open moorland to the west of Carn Ghiubhais. Berryburn Wind Farm is also located here, small parts of which overlap with the Proposed Development; and
 - LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which broadly traversed the same areas as the Dava Moorlands Focal Area and Proposed Development.
- 3.2.89 Surveys to inform the assessment for the proposed Cairn Duhie Wind Farm were undertaken between 2011 and 2012, with update surveys undertaken during the 2019 / 20 non-breeding season. These surveys identified a range of Target Species over and around the proposed windfarm site, including; a variety of scarce raptors (e.g. hen harrier, osprey, goshawk, peregrine, merlin, short-eared owl *Asio flammeus*), red and black-throated diver, black grouse, breeding waders (e.g. golden plover, curlew, lapwing) and overwintering waterfowl (pink-footed and greylag geese and whooper swan). Of these aforementioned species, breeding within the proposed windfarm site and immediately surrounding area (i.e. 500 m) was only confirmed by curlew and golden plover. Within the wider surrounding area breeding by goshawk, black-throated diver, lapwing and lekking black grouse was identified. Flight activity was highest for curlew and greylag goose with all other species being recorded infrequently.
- 3.2.90 Surveys to inform the assessment for the corresponding part of the proposed Clash Gour Wind Farm were undertaken between 2013 and 2014, with update surveys undertake between January and August 2018. A broad range of Target Species were identified across the proposed windfarm site and surrounding survey areas, including; a variety of scarce raptors (e.g. golden and white-tailed eagle, hen harrier, osprey, goshawk, peregrine, merlin, hobby *Falco subbuteo*, barn owl and short-eared owl), red and black-throated diver, capercaillie, black grouse, breeding waders (e.g. golden plover, curlew, lapwing) and overwintering waterfowl (pink-footed and greylag geese). Of these aforementioned species, breeding within the proposed windfarm site and surrounding area was confirmed for hen harrier, goshawk, merlin, red-throated diver, barn owl, curlew, golden plover, lapwing and black grouse, but not capercaillie. Flight activity was highest for curlew, greylag goose, hen harrier, goshawk, osprey and lapwing, with moderate levels of flight activity by merlin, red-throated diver and pink-footed geese. All other species were recorded infrequently.
- 3.2.91 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys identified frequent flight activity by hen harrier over the moorland associated with Cairn Eney throughout the year, and by osprey over the small waterbodies associated with Auchlochan during the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded over the corresponding area during the winter, autumn and spring passage months. Goshawk were also occasionally recorded.
- 3.2.92 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill and Scottish crossbill occur in the 10 km grid square NH94 and crested tit within grid square NJ04, which the Dava Moorlands Focal Area covers. These aforementioned species are most likely affiliated with coniferous woodland.

Field Surveys – 2022 / 23

3.2.93 Surveys conducted in this Focal Area involved a 6-month programme of breeding season flight activity surveys from VPs 20 and 21, in addition to a programme of black grouse and scarce breeding bird surveys over the moorland habitats associated with Cairn Duhie and Cairn Eney.

Flight Activity Surveys

3.2.94 A total of eight Target Species, comprising 29 flights, were recorded during the 2023 breeding season at VP 20, as presented in **Table 3.15** and **Figure 9.1.4i**.

3.2.95 The most numerous flights recorded were those of red kite, curlew and greylag goose with 13, six and five flights respectively. Of the 29 flights, 15 were recorded at PRC. No interaction with the existing OHL was recorded for any flight. A summary of flights by species is provided below:

- Red kite – 13 flights were recorded, the majority of which were individuals with two records of a pair of birds in flight. Most flights were recorded flying north / south across the Proposed OHL Alignment with nine of these flights recorded at PRC. All flights recorded at PRC also crossed the existing OHL directly to the north of the Proposed OHL Alignment;
- Curlew – six flights were recorded, three of which were individuals and the remaining three comprising two to four individuals. The majority of these flights were recorded crossing the Proposed OHL Alignment, with four of the six flights recorded at PRC;
- Osprey – a single osprey flight was recorded at PRC flying south east over the Proposed OHL Alignment; and
- Greylag goose – five flights were recorded in March and July 2023, with flock sizes ranging between one and 12 birds. Flights were typically recorded flying north or south across the Proposed OHL Alignment. Two flights were recorded at PRC.

3.2.96 Other species were recorded infrequently and / or in low numbers. Wildfowl and waders include single flights of lapwing, pink-footed goose and snipe. Additionally, a single goshawk flight was recorded, comprising a pair of birds displaying over woodland to the north of the Proposed OHL Alignment in March 2023.

Table 3.15: Summary of Flight Activity Recorded from VP 20

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Red kite	13	15	9	11
Curlew	6	11	4	6
Greylag goose	5	23	2	4
Goshawk	1	2	0	0
Lapwing	1	2	1	2
Osprey	1	1	1	1
Pink-footed goose	1	50	0	0
Snipe	1	1	0	0

3.2.97 A total of four Target Species, comprising seven flights, were recorded during the 2023 breeding season at VP 21, as presented in **Table 3.16** and **Figure 9.1.4j**.

3.2.98 The most numerous flights recorded were those of hen harrier and pink-footed goose, with three and two flights respectively. Of the five flights recorded, one was recorded at PRC and no interaction with the existing OHL was recorded for any flight. A summary of flights by species is provided below:

- Hen harrier – three flights of individual hunting birds were recorded between June and August 2023, over moorland habitat south of the Proposed OHL Alignment. Two of the records were male birds and the other a female / juvenile; and

- Pink-footed goose – two flocks of 47 and 107 birds were recorded commuting over the Proposed OHL Alignment in March 2023. Neither flight was at PRC.

3.2.99 Additionally, single flights of red kite and greylag goose were recorded in August and March 2023 respectively. The greylag goose flight comprised five birds passing southwest across the Proposed OHL Alignment at PRC (the flight also crossed the existing OHL directly to the north).

Table 3.16: Summary of Flight Activity Recorded from VP 21

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Hen harrier	3	3	0	0
Pink-footed goose	2	154	0	0
Greylag goose	1	4	1	4
Red kite	1	1	0	0

Scarce Breeding Bird Surveys

3.2.100 A summary of scarce breeding bird records is provided below and within **Figure 9.1.5f** with full details of sensitive records provided in **Appendix 9.2: Confidential Ornithological Information**. A total of three scarce breeding bird territories from three species were identified within the Dava Moorlands Focal Area:

- Goshawk – confirmed nest site approximately 1.6 km from the Proposed Development;
- Hen harrier – confirmed nest site identified in moorland approximately 2 km from Proposed Development. An additional five observations of hen harrier were recorded in the Focal Area; and
- Merlin – possible nest site recorded approximately 550 m from the Proposed Development. An additional six records of hunting birds were recorded across moorland within the Focal Area.

3.2.101 Observations of Target Species where no breeding was indicated comprised the following:

- Barn owl – two barn owl roosts were identified in buildings, one at Woodside approximately 275 m north of the Proposed Development and another at Berryburn Wind Farm approximately 2.2 km southeast of the Proposed Development. An additional sighting was recorded in the vicinity of the Woodside roost;
- Golden eagle – a single sighting of an immature bird from June 2023 flying across moorland approximately 3 km southeast of the Proposed Development;
- Red kite – three sightings of individual birds between March and May 2023;
- Osprey – a flight of a single bird recorded south of Knock of Braemoray in April 2023;
- Peregrine falcon – a single sighting of an individual bird from March 2023 at the western end of the Focal Area; and
- Red-throated diver – two observations, one of a single bird and another of a pair, on lochans to the west of Knock of Braemoray approximately 3.6 km south of the Proposed Development.

3.2.102 A total of 33 breeding territories comprising four species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below and shown spatially in **Figure 9.1.6d**:

- Curlew – 16 territories were recorded scattered throughout moorland within the Focal Area. Seven territories were located within approximately 500 m of the Proposed Development;
- Snipe – nine territories were recorded with all but one recorded at the western end of the Focal Area. Five territories were recorded within approximately 500 m of the Proposed Development;
- Lapwing – seven territories were recorded, five of which were within approximately 500 m of the Proposed Development; and
- Golden plover – one territory located approximately 3 km south of the Proposed Development.

Black Grouse Surveys

3.2.103 Five discrete lek sites, all of single males, were recorded within / adjacent to the Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**. An additional five observations of non-lekking males plus one female, all individuals, were recorded during the surveys (**Figure 9.1.7c**).

Field Surveys – 2024

3.2.104 Field surveys in 2024 comprised follow up scarce breeding bird surveys and black grouse surveys, undertaken across a condensed survey area (in comparison to the 2023 surveys) (**Figure 9.1.2**).

Scarce Breeding Bird Surveys

3.2.105 A summary of scarce breeding bird records is provided below and within **Figure 9d**. A single barn owl breeding site was identified approximately 350 m north of the Proposed Development. Full details are provided in **Appendix 9.2: Confidential Ornithological Information**.

3.2.106 Observations of Target Species where no breeding was indicated comprised the following:

- Red kite – three flights of individual birds across open habitat in May and June 2024;
- Goshawk – one flight of an individual bird to the south of the Proposed Development in April 2024; and,
- Golden eagle – one flight of an individual bird to the south of the Proposed Development in May 2024.

3.2.107 A total of seven breeding territories, comprising three species, were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below and shown spatially in **Figure 9.1.10c**:

- Curlew – four territories were recorded scattered throughout moorland within the Focal Area, all of which were located within approximately 500 m of the Proposed Development;
- Golden plover – two territories were recorded, both of which were located within approximately 500 m of the Proposed Development; and
- Snipe – a single territory was recorded within 500 m of the Proposed Development.

Black Grouse Survey

3.2.108 No lekking black grouse or observations of non-lekking birds were recorded in 2024.

Bednawinny Moss Moorlands and Newtyle Forest and Associated Woodlands

3.2.109 This Focal Area covers the open moorland and extensive coniferous forest associated with Bednawinny Moss, as well as the woodlands associated with Newtyle Forest (**Figure 9.1.3h**). There are no existing Transmission OHLs present within the VP viewshed in this Focal Area.

Desk Study

3.2.110 **Table 3.17** below provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development where it passes through the Bednawinny Moss Moorlands and Newtyle Forest and Associated Woodlands Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.17: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Goshawk	Location and occupation / activity status of one breeding territory that was last confirmed active in 2019.	HRSG
Capercaillie	Records of sightings and field signs from two sites between 2013 and 2016.	RSPB Scotland

- 3.2.111 There is one existing and one proposed windfarm development, and one withdrawn OHL development located within or in close proximity to the Bednawinny Moss Moorlands and Newtyle Forest and Associated Woodlands Focal Area as follows:
- Hill Glaschyle Wind Farm is an existing windfarm located within the western part of this Focal Area on the Hill of Glaschyle and is located approximately 1 km to the west of the Proposed Development;
 - Clash Gour Wind Farm, the northern and eastern parts of which overlap with the southern parts of this Focal Area, where the Proposed Development passes through forestry associated with Hill of Tomechale and Moss of Bednawinny; and
 - LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which broadly traversed the same areas as the Bednawinny Moss Moorlands and Newtyle Forest and Associated Woodlands Focal Area and Proposed Development.
- 3.2.112 Surveys to inform the assessment for Hill of Glaschyle Wind Farm were undertaken between 2011 and 2012. These surveys identified limited activity by Target Species, with only a small number of flights by goshawk, hen harrier and overwintering geese recorded over and around the windfarm site. Notable passerine Target Species included crested tit and common crossbill, recorded within the woodland habitat of the site.
- 3.2.113 Surveys to inform the assessment for the corresponding parts of the proposed Clash Gour Wind Farm were undertaken between 2013 and 2016, with update surveys undertaken between January and August 2018. A broad range of Target Species were identified across the proposed windfarm site and surrounding survey areas, including; a variety of scarce raptors (e.g. golden and white-tailed eagle, hen harrier, osprey, goshawk, peregrine, merlin, hobby, barn owl and short-eared owl), red- and black-throated diver, capercaillie, black grouse, breeding waders (e.g. golden plover, curlew, lapwing) and overwintering waterfowl (pink-footed and greylag geese). Of these aforementioned species, breeding within the proposed windfarm site and surrounding area was confirmed for hen harrier, goshawk, merlin, red-throated diver, barn owl, curlew, golden plover, lapwing and black grouse, but not capercaillie. Flight activity was highest for curlew, greylag goose, hen harrier, goshawk, osprey and lapwing with moderate levels of flight activity by merlin, red-throated diver and pink-footed geese. All other species were recorded infrequently.
- 3.2.114 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded negligible flight activity by Target Species over the section which corresponds with this Focal Area.
- 3.2.115 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common and Scottish crossbill and crested tit occur in the 10 km grid squares NJ05 and NJ15, while the crossbill species also occur in grid square NJ14 which the Bednawinny Moss Moorlands and Newtyle Forest and Associated Woodlands Focal Area covers. These species are most likely affiliated with coniferous woodland habitats.

Field Surveys

- 3.2.116 Surveys conducted in this Focal Area involved a 6-month programme of breeding season flight activity surveys from VP 22 and a programme of black grouse and scarce breeding bird surveys over the moorland and forest edge habitats associated with Bednawinny Moss. In addition, a programme of capercaillie surveys was undertaken in the woodlands associated with Newtyle Forest.

Flight Activity Surveys

- 3.2.117 A single flight of an individual snipe was recorded in June 2023 to the east of Loch na Braan (**Table 3.18** and **Figure 9.1.4k**).

Table 3.18: Summary of Flight Activity Recorded from VP 22

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Snipe	1	1	0	0

Scarce Breeding Bird Surveys

3.2.118 No scarce breeding bird territories were identified within the Focal Area.

3.2.119 Observations of Target Species where no breeding was indicated comprised the following (**Figure 9.1.5g**):

- Red kite – an observation of a single bird approximately 1.9 km north of the Proposed Development; and
- Merlin – three sightings of an individual bird on single day in April 2023.

3.2.120 A total of six breeding territories comprising three species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below and shown on **Figure 9.1.6e**:

- Curlew – three territories were recorded scattered throughout moorland within the Focal Area, the closest of which was approximately 1.2 km north of the Proposed Development;
- Snipe – two territories were recorded at the eastern end of the Focal Area, the closest of which was approximately 900 m north of the Proposed Development; and
- Oystercatcher – one territory was recorded approximately 1.5 km north of the Proposed Development.

Capercaillie Surveys

3.2.121 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands associated with Newtyle Forest.

3.2.122 Notable incidental records of Target Species recorded during the capercaillie surveys comprised the following:

- Goshawk – four records with a cluster of sightings / calling birds recorded southwest of Romach Hill approximately 900 m north of the Proposed Development. These records were on the same day and assumed to be of the same bird.

Black Grouse Surveys

3.2.123 Two black grouse leks, each of a single male bird, were recorded in the Focal Area. The closest of which was approximately 250 m from the Proposed Development. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood

3.2.124 This Focal Area covers the open moorland habitats of Glen Latterach, including Glen Latterach Reservoir, as well as the woodlands associated with Hill of Mulundy and Wangie Wood (**Figure 9.1.3i**).

Desk Study

3.2.125 **Table 3.19** provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development where it passes through the Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.19: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Merlin	Locations and occupation / activity status of two breeding territories between 2018 and 2022.	HRSG
Capercaillie	Three records from a single site from 2013.	RSPB Scotland

- 3.2.126 There is one proposed windfarm and one withdrawn OHL development located within or in close proximity to the Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Area:
- Kellas Drum Wind Farm overlaps with the central part of this Focal Area with the southern part of the windfarm site also overlapping with the Proposed Development where it passes to the southwest of Glen Latterach Reservoir; and
 - LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which broadly traversed the same areas as the Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Area and Proposed Development.
- 3.2.127 Surveys to inform the assessment of the proposed Kellas Drum Wind Farm were undertaken between March 2021 and August 2022. A broad range of Target Species were identified across the proposed windfarm site and surrounding survey areas, including; a variety of scarce raptors (e.g. golden eagle, hen harrier, osprey, goshawk, peregrine, merlin and short-eared owl), breeding waders (e.g. golden plover, curlew, lapwing) and overwintering waterfowl (pink-footed and greylag geese). Of these aforementioned species, breeding within the proposed windfarm site and surrounding area was confirmed or considered likely for curlew, golden plover and oystercatcher. Flight activity was highest (albeit relatively modest), for curlew and pink-footed geese with lower, comparatively moderate levels of flight activity for osprey and greylag geese. All other species were recorded infrequently.
- 3.2.128 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded negligible flight activity by Target Species over the section which corresponds with this Focal Area.
- 3.2.129 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common and Scottish crossbill occur in the 10 km grid squares NJ14, NJ15 and NJ25, within which the Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Area sits. Crested tit occurs in grid square NJ15, where in addition to the aforementioned crossbill species, are most likely affiliated with coniferous woodland habitats.

Field Surveys – 2022 / 23

- 3.2.130 Surveys conducted in this Focal Area involved a programme of black grouse and scarce breeding bird surveys over the moorland habitats associated with Glen Latterach, as well as a programme of capercaillie surveys in the woodlands associated with Hill of Mulundy and Wangie Wood.

Scarce Breeding Bird Surveys

- 3.2.131 A probable merlin breeding site was identified in moorland approximately 1 km south of the Proposed Development with full details provided in **Appendix 9.2: Confidential Ornithological Information**. Merlin observations within the survey area comprised observations of male and female birds together and individual birds hunting. Observations of Target Species where no breeding was indicated comprised the following (**Figure 9.1.5h**):
- Golden eagle – a single sighting from May 2023 of a bird soaring high above the Proposed Development, south of Glen Latterach Reservoir;
 - Goshawk – a single observation from May 2023 of a bird in flight, across the Proposed Development, to the west of Glen Latterach Reservoir;
 - Red kite – a single observation in June 2023 of an individual bird <10 m from the Proposed Development;
 - Osprey – eight records of single birds recorded between April and July 2023. The majority of which were associated with fishing attempts at Glen Latterach Reservoir; and
 - Red-throated diver – one sighting of a single bird on Glen Latterach Reservoir in May 2023.

3.2.132 A total of 26 breeding territories comprising four species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below and shown spatially on **Figure 9.1.6f**.

- Curlew – 13 territories were recorded scattered throughout moorland within the Focal Area. Nine territories were recorded within approximately 500 m of the Proposed Development;
- Lapwing – six territories were recorded, with two territories recorded within approximately 500 m of the Proposed Development;
- Snipe – five territories were recorded, four of which were in the eastern half of the Focal Area. Three territories were recorded within approximately 500 m of the Proposed Development;
- Golden plover – two territories were recorded within 500 m of the Proposed Development; and
- Common gull – a colony of approximately six pairs was recorded to the north of Glen Latterach Reservoir, approximately 100 m from the Proposed Development.

Capercaillie Surveys

3.2.133 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands associated with Hill of Mulundy or Wangie Wood.

3.2.134 Notable incidental records of Target Species recorded during the capercaillie surveys comprised the following:

- Goshawk – a single record of a calling bird in March 2023 on the Hill of the Wangie, approximately 3.5 km northwest of the Proposed Development.

Black Grouse Surveys

3.2.135 No black grouse leks were recorded during the surveys. An observation of two male non-lekking black grouse was recorded during the scarce breeding bird surveys. The records were approximately 2.2 km south of the Proposed Development (**Figure 9.1.7d**).

Field Surveys – 2024

3.2.136 Field surveys in 2024 comprised follow up scarce breeding bird surveys. In comparison to the 2023 surveys, these were undertaken across a condensed survey area (**Figure 9.1.2**).

3.2.137 A probable merlin breeding site was identified in moorland approximately 1 km south of the Proposed Development, in a similar location to that identified in 2023 (see **Appendix 9.2: Confidential Ornithological Information**). Multiple observations of merlin were recorded in the area, including alarm calling birds.

3.2.138 Observations of Target Species where no breeding was indicated comprised the following (**Figure 9e**):

- Osprey – two observations of individual birds in flight, recorded in May and June 2024 in the vicinity of Glen Latterach Reservoir.

3.2.139 A total of three breeding territories comprising two species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below and shown spatially on **Figure 9.1.6f**.

- Curlew – two territories were recorded to the east within the Focal Area. Both territories were recorded within approximately 500 m of the Proposed Development; and
- Common gull – a colony of approximately ten pairs was recorded to the north of Glen Latterach Reservoir within 100 m from the Proposed Development.

Brown Muir

3.2.140 This Focal Area covers the open moorland habitats of Brown Muir (**Figure 9.1.3j**).

Desk Study

3.2.141 **Table 3.20** below provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development, where it passes through the Brown Muir Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.20: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Goshawk	Locations and occupation / activity status of two breeding territories between 2016 and 2023.	NERSG & FLS
Osprey	Locations of two nest sites from one breeding territory.	NERSG

3.2.142 There is one proposed windfarm and one withdrawn OHL development located within or in close proximity to the Brown Muir Focal Area:

- Teindland Wind Farm is located within the forestry immediately to the east of this Focal Area and within 1 km to the south of the Proposed Development, where it passes to the north of Teindland Wood; and
- LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which traversed slightly further south of the Brown Muir Focal Area and Proposed Development.

3.2.143 Surveys to inform the assessment of the proposed Teindland Wind Farm were undertaken between April 2021 and August 2022. At the time of writing however, the results of those surveys had only been summarised in the EIA Scoping Report and were therefore not available in detail. From the information available, a broad range of Target Species were identified across the entire proposed windfarm site and surrounding survey areas, including; a variety of scarce raptors (e.g. osprey, red kite, hen harrier, goshawk, peregrine, merlin and hobby), breeding waders (e.g. curlew, lapwing) and overwintering waterfowl (pink-footed and greylag geese). Of these aforementioned species, breeding within the proposed windfarm site and surrounding was identified for osprey and goshawk; however, details on the level of flight activity by each species were not provided.

3.2.144 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded negligible flight activity by Target Species over the section which corresponds with this Focal Area.

3.2.145 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies common and Scottish crossbill occurring in the 10 km grid square NJ25 within which the Brown Muir Focal Area sits, where they are most likely affiliated with coniferous woodland habitats.

Field Surveys

3.2.146 Surveys conducted in this Focal Area involved a programme of black grouse and scarce breeding bird surveys, undertaken over the moorland habitats of Brown Muir.

Scarce Breeding Bird Surveys

3.2.147 No breeding territories were identified. Observations of Target Species was limited to a sighting of a single white-tailed eagle to the south of the Proposed Alignment in May 2023 (**Figure 9.1.5i**).

3.2.148 A total of four breeding territories comprising two species were recorded during the moorland breeding bird surveys. A summary of each species recorded is provided below and shown spatially on **Figure 9.1.6g**:

- Curlew – two territories were recorded with the nearest located approximately 450 m south of the Proposed Development; and

- Snipe – two territories were recorded in proximity to each other, located approximately 2.3 km south of the Proposed Development.

Black Grouse Surveys

3.2.149 There were no sightings of black grouse or evidence of the species' presence at Brown Muir.

River Spey Corridor, Wood of Ordiequish

3.2.150 This Focal Area covers the agricultural habitats along the River Spey corridor and the adjacent extensive coniferous plantation forestry of Wood of Ordiequish (**Figure 9.1.3k**). There are existing Transmission OHLs within the VP Viewsheds in this Focal Area.

Desk Study

3.2.151 **Table 3.21** below provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development, where it passes through the River Spey Corridor and Wood of Ordiequish Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.21: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Osprey	Locations and occupation / activity status of three breeding territories between 2015 and 2020.	NERSG & FLS
Goshawk	Locations and occupation / activity status of three breeding territories from 2021 to 2023.	NERSG & FLS
Capercaillie	Numerous sightings and field evidence (droppings / footprints) recorded, as well as identification of roosting and two lek sites; including details of their activity status between 2014 and 2021. The identified lek sites were attended by a single displaying male, most recently in 2017.	RSPB Scotland

3.2.152 There is one withdrawn OHL development located within or in close proximity to the River Spey, Wood of Ordiequish and Fields North of Keith Focal Area:

- LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which traversed slightly further south of the River Spey and Wood of Ordiequish.

3.2.153 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded frequent flight activity by osprey and peregrine along the River Spey valley during the breeding season. High levels of flight activity by pink-footed geese and frequent activity by greylag geese were also recorded along the River Spey valley during the winter, autumn and spring passage months.

3.2.154 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and crested tit occur in the 10 km grid square NJ35, within which the River Spey and Wood of Ordiequish Focal Area sits. These aforementioned species are most likely affiliated with coniferous woodland habitats.

3.2.155 Surveys conducted in this Focal Area involved a 12-month programme of flight activity surveys from VP 11 overlooking the River Spey, and a programme of raptor-specific scarce breeding bird and capercaillie surveys covering Wood of Ordiequish.

Flight Activity Surveys

3.2.156 Flight activity records from the 12-month survey program at VP 11 were restricted to observations of pink-footed goose and whooper swan (**Table 3.22 below and Figure 9.1.4l**).

- Pink-footed goose – a total of 24 pink-footed goose flights were recorded between October 2022 and January 2023, with flocks ranging between 22 and 280 birds. The majority of flights were recorded flying

from west to east across the River Spey. Of the flights, one was recorded landing in a field (all others were continuous flights) and two flights were recorded at PRC; and

- Whooper swan – a single flight of eight whooper swan was recorded at PRC flying north adjacent to the River Spey.

Table 3.22: Summary of Flight Activity Recorded from VP 11

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Pink-footed goose	24	2518	2	98
Whooper swan	1	8	1	8

Scarce Breeding Bird Surveys

3.2.157 Scarce breeding bird surveys identified two osprey nest sites located approximately 530 m north and 1.3 km south of the Proposed Development.

3.2.158 There were no observations of any other scarce breeding birds during the surveys

Capercaillie Surveys

3.2.159 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands associated with Wood of Ordiequish.

River Isla Corridor

3.2.160 This Focal Area covers the agricultural the upper River Isla corridor and agricultural fields located to the north of Keith, following public consultation reports that large numbers of overwintering geese flew over this area during the non-breeding season (**Figure 9.1.31**). There are existing Transmission OHLs within the VP Viewshed in this Focal Area.

Desk Study

3.2.161 There is one withdrawn OHL development located within or in close proximity to the River Isla Corridor Focal Area:

- LT37 Beauly to Blackhillock OHL Reinforcement Project, the route corridor for which traversed slightly further south of the River Isla Corridor Focal Area and Proposed Development.

3.2.162 Ornithological data for the LT37 Beauly to Blackhillock OHL Reinforcement Project was collected between 2015 and 2017. Surveys recorded high levels of flight activity by pink-footed geese and frequent activity by greylag geese along the River Isla valley during the winter, autumn and spring passage months.

3.2.163 Data was also provided through surveys undertaken for other affiliated SSEN Transmission projects following the same methodology. These surveys recorded negligible numbers of raptors, waders, and wildfowl.

Field Surveys

3.2.164 Surveys conducted in this Focal Area involved a 3-month programme²¹ of flight activity surveys during the 2022 / 23 non-breeding season, undertaken from VP 16 overlooking the upper River Isla corridor and fields to the north of Keith.

²¹ 36 hours of survey effort undertaken between January 2023 and March 2023 inclusive.

Flight Activity Surveys

- 3.2.165 Pink-footed goose was the only species recorded from the non-breeding season surveys undertaken at VP 16 (**Table 3.23 and Figure 9.1.4m**). Nine flights were recorded between January and March 2023 and comprised both commuting and take off / landing flights within fields in and adjacent to the viewshed. Two flights of 100 and 176 birds, were recorded at PRC when crossing the Proposed OHL Alignment northwest of Keith.

Table 3.23: Summary of Flight Activity Recorded from VP 16

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Pink-footed goose	9	746	2	276

River Deveron Corridor

- 3.2.166 This Focal Area covers the agricultural fields and mixed woodlands associated with the River Deveron corridor, where the Proposed Development passes between Huntly and Aberchirder (**Figure 9.1.3m**).

Desk Study

- 3.2.167 No desk study information was available for this Focal Area.
- 3.2.168 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common and Scottish crossbill occur in the 10 km grid squares NJ54 and NJ64, within which the River Deveron Focal Area sits, where these species will be associated with coniferous woodland habitats. Additionally, corn bunting occurs in grid square NJ64, where this species will be associated with arable farmland habitats.

Field Surveys - 2023

- 3.2.169 Surveys conducted in this Focal Area included a programme of common crane surveys following the receipt of records from the RSPB Scotland, suggesting this species' potential presence.

Common Crane Surveys

- 3.2.170 No sightings or evidence of breeding common cranes were made during 2023 surveys of this Focal Area.

Field Surveys – 2024

- 3.2.171 Surveys conducted in this Focal Area included a programme of common crane surveys following the receipt of records from the RSPB Scotland, suggesting this species' potential presence.

Common Crane Surveys

- 3.2.172 No sightings or evidence of breeding of common cranes were made during the 2024 surveys of this Focal Area.

New Deer to Peterhead

- 3.2.173 This Focal Area covers the agricultural fields and pockets of woodland located between New Deer and Peterhead at the Proposed Development's eastern extent (**Figure 9.1.3n**). There is an existing Transmission OHL within the VP 23 Viewshed in this Focal Area.

Desk Study

- 3.2.174 **Table 3.24** below provides a summary of the Target Species records provided through the consultation exercise from within 2 km of the Proposed Development, where it passes through the New Deer to Peterhead Focal Area. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.24: Summary of Target Species Records Provided through Consultation Exercise

Species	Summary of Information Provided	Source
Common crane	Records of breeding pairs from two locations, recorded between 2015 and 2022.	RSPB Scotland

- 3.2.175 With regards to recognised passerine Target Species, Balmer *et al.* (2013⁸) identifies that common crossbill, Scottish crossbill and corn bunting occur in the 10 km grid squares NJ84, NJ94 and NK04 within which the New Deer to Peterhead Focal Area sits. These species will be associated with coniferous woodland (crossbills) and arable farmland (corn bunting) habitats respectively.
- 3.2.176 A local landowner within this Focal Area provided anecdotal information about the presence of corn bunting and short-eared owl on their land.

Field Surveys – 2022 / 23

- 3.2.177 Surveys conducted in this Focal Area involved a 6-month programme of flight activity surveys from VPs 23 and 24. In addition, goose field use surveys were undertaken over the 2023 / 24 non-breeding season and breeding common crane surveys following the receipt of records suggesting this species' presence from RSPB Scotland.

Flight Activity Surveys

- 3.2.178 A total of six Target Species, comprising 21 flights, were recorded at VP 23 as presented in
- 3.2.179 **Table 3.25** below and **Figure 9.1.4n**.
- 3.2.180 The most numerous flights recorded from VP 23 were those of pink-footed goose and goshawk, with 12 and four flights respectively. No interaction with the existing OHL was recorded for any flight. A summary of flights by species is provided below:
- Pink-footed goose – a total of 12 flights of flocks ranging in size from an individual to 300 birds. All flights comprised commuting birds (none recorded landing on or taking off from fields), with no dominant flight direction evident. Two flights, comprising 10 birds total, were recorded at PRC when passing east of the B9030; and
 - Goshawk – four flights of individual birds, three females and a male, were recorded north of the Proposed Development in the vicinity of woodland coppices around the Hill of Dens. Flights were recorded between September and December 2023.
- 3.2.181 Other species were recorded infrequently and / or in low numbers. These species comprised two flights of snipe (one individual and one of three birds), a flight of two greylag geese and single flights of individual peregrine falcon and whooper swan.

Table 3.25: Summary of Flight Activity Recorded from VP 23

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Pink-footed goose	12	549	2	10
Goshawk	4	4	0	0
Snipe	2	4	0	0
Greylag goose	1	2	0	0
Peregrine falcon	1	1	0	0
Whooper swan	1	1	0	0

3.2.182 A total of eight Target Species, comprising 17 flights, were recorded at VP 24 as presented in **Table 3.26** below and **Figure 9.1.4o**. The most numerous flights recorded were those of pink-footed goose, goshawk and short-eared owl with six, three and three flights respectively. No existing Transmission OHLs overlap with the VP viewshed. A summary of flights by species is provided below:

- Pink-footed goose – a total of six flights of flocks ranging in size from nine to 560 birds were recorded between September 2023 and January 2024. All flights comprised commuting birds (none recorded landing on or taking off from fields), with no dominant flight direction evident. All flights were recorded north and west of the Proposed OHL Alignment;
- Goshawk – three flights of individual birds (one confirmed female) in September and November 2023. Flights comprised hunting flights over fields and woodland blocks to the west of the Proposed OHL Alignment (in the vicinity of Clayhills); and
- Short-eared owl – three flights of individual hunting birds were recorded across grassland south of Clayhills in November 2023.

3.2.183 Other species were recorded infrequently and / or in low numbers. These flights comprised flights of individual barn owl, marsh harrier *Circus aeruginosus*, and snipe and single flights of five golden plover and whooper swan. Of these flights the marsh harrier, a juvenile, was recorded at PRC in September 2023 as it crossed the Proposed OHL Alignment southeast of Clayhills.

Table 3.26: Summary of Flight Activity Recorded from VP 24

Species	No. Of Flights	Constituent No. of Birds	No. Of 'At Risk' Flights	Constituent No. of 'At Risk' Birds
Pink-footed goose	6	952	0	0
Goshawk	3	3	0	0
Short-eared owl	3	3	0	0
Barn owl	1	1	0	0
Golden plover	1	5	0	0
Marsh harrier	1	1	1	1
Snipe	1	1	0	0
Whooper swan	1	5	0	0

Common Crane Surveys

3.2.184 No sightings or evidence of breeding of common cranes were made during the surveys of this Focal Area.

Goose Field Use Surveys

3.2.185 The only goose species recorded during surveys undertaken over the 2023 / 24 non-breeding season was pink-footed goose, with five records of foraging / loafing geese recorded throughout the survey period. All records were recorded within the western half of the survey area, within approximately 500 m of the Proposed Development. A peak count of 150 birds was recorded west of Maud in November 2023. The distribution of recorded observations is shown in **Figure 9.1.8**.

3.2.186 In addition to observations in fields, seven records of pink-footed geese in flight were made. The largest flock recorded was one of 1,500 birds in October 2023 near the eastern end of the Proposed Development, near the connection point into Netherton Hub substation.

Field Surveys – 2024

3.2.187 Surveys conducted in this Focal Area included a programme of common crane surveys following the receipt of records from the RSPB Scotland, suggesting this species' potential presence.

Common Crane Surveys

3.2.188 No sightings or evidence of breeding common cranes were made during the surveys of this Focal Area.

3.3 Non-Focal Areas

Desk Study

3.3.1 **Table 3.27** below provides a summary of the Target Species records gathered through the desk study and recorded as incidentals during field surveys undertaken from within 2 km of the Proposed Development, where it passes through non-Focal Areas. Further details of these records are provided in **Appendix 9.2: Confidential Ornithological Information**.

Table 3.27: – Target Species Records from non-Focal Areas

Species	Summary of Information Provided	Source
Goshawk	Long established breeding territory within woodland southeast of Keith.	NERSG
Osprey	Location of a nest site recorded between 2020 and 2023.	NERSG
	Two separate nest sites west of Ferness.	Principal Contractor Surveys
Barn Owl	Potential breeding site within dilapidated barn northeast of Huntly.	WSP Ecology Surveys



Annex A: Ornithological Survey Details

Table A1: Flight Activity Survey Effort (September 2022 – March 2024)

VP	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
5	19-09-2022	CT	14:30	17:30	03:00
11	20-09-2022	GR	13:45	16:45	03:00
1	21-09-2022	GR	10:10	13:10	03:00
1	21-09-2022	GR	13:50	16:50	03:00
5	22-09-2022	CT	13:45	16:45	03:00
8	22-09-2022	CT	14:30	17:30	03:00
3	27-09-2022	NR	14:05	17:05	03:00
3	28-09-2022	NR	11:55	14:55	03:00
4	29-09-2022	GR	14:40	17:40	03:00
1	07-10-2022	JM	09:40	12:40	03:00
1	07-10-2022	JM	13:10	16:10	03:00
11	15-10-2022	AD	12:00	15:00	03:00
4	25-10-2022	AD	09:30	12:30	03:00
4	25-10-2022	AD	13:00	16:00	03:00
11	27-10-2022	AD	08:30	11:30	03:00
3	27-10-2022	DS	11:00	14:00	03:00
3	28-10-2022	DS	09:00	12:00	03:00
8	28-10-2022	AD	09:30	12:30	03:00
8	28-10-2022	AD	13:00	16:00	03:00
5	29-10-2022	AD	08:45	11:45	03:00
5	29-10-2022	AD	12:15	15:15	03:00
2	31-10-2022	GR	09:05	12:05	03:00
8	31-10-2022	DS	09:50	12:50	03:00
3	01-11-2022	DS	10:30	13:30	03:00
2	01-11-2022	GR	13:50	16:50	03:00
3	01-11-2022	DS	14:00	17:00	03:00
8	03-11-2022	DS	07:30	10:30	03:00
8	03-11-2022	DS	11:00	14:00	03:00
4	04-11-2022	DS	07:40	10:40	03:00
1	04-11-2022	JM	08:50	11:50	03:00
1	04-11-2022	JM	12:20	15:20	03:00
2	09-11-2022	BJ	09:00	12:00	03:00
2	09-11-2022	BJ	12:30	15:30	03:00
2	10-11-2022	BJ	10:30	13:30	03:00
2	10-11-2022	BJ	14:00	17:00	03:00
11	14-11-2022	AD	08:30	11:30	03:00
11	14-11-2022	AD	12:00	15:00	03:00
5	21-11-2022	GR	08:05	11:05	03:00
5	21-11-2022	GR	11:35	14:35	03:00
4	23-11-2022	DS	09:00	12:00	03:00
4	23-11-2022	DS	12:30	15:30	03:00
11	29-11-2022	GR	09:10	12:10	03:00
8	02-12-2022	DS	09:15	12:15	03:00



VP	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
8	02-12-2022	DS	12:45	15:45	03:00
4	05-12-2022	DS	09:40	12:40	03:00
4	05-12-2022	DS	13:10	16:10	03:00
5	06-12-2022	DS	09:10	12:10	03:00
5	06-12-2022	DS	12:40	15:40	03:00
3	09-12-2022	DS	08:45	11:45	03:00
2	09-12-2022	BJ	09:00	12:00	03:00
3	09-12-2022	DS	12:15	15:15	03:00
2	09-12-2022	BJ	12:30	15:30	03:00
11	11-12-2022	AD	09:00	12:00	03:00
11	13-12-2022	AD	12:00	15:00	03:00
1	14-12-2022	JM	09:15	12:15	03:00
11	14-12-2022	AD	12:30	15:30	03:00
1	14-12-2022	JM	12:45	15:45	03:00
3	03-01-2023	BJ	09:00	12:00	03:00
3	03-01-2023	BJ	12:30	15:30	03:00
8	04-01-2023	DS	09:30	12:30	03:00
8	04-01-2023	DS	13:00	16:00	03:00
11	10-01-2023	AD	08:30	11:30	03:00
2	10-01-2023	BJ	09:05	12:05	03:00
2	10-01-2023	BJ	12:35	15:35	03:00
16	13-01-2023	GR	12:00	14:00	02:00
16	13-01-2023	GR	14:30	16:30	02:00
1	16-01-2023	JM	09:30	12:30	03:00
1	16-01-2023	JM	13:00	16:00	03:00
4	20-01-2023	BJ	10:15	12:15	02:00
4	20-01-2023	BJ	12:45	14:45	02:00
5	24-01-2023	PS	09:30	12:30	03:00
5	24-01-2023	PS	13:00	16:00	03:00
16	27-01-2023	AD	09:00	12:00	03:00
16	27-01-2023	AD	12:30	15:30	03:00
4	31-01-2023	BJ	08:30	10:30	02:00
16	31-01-2023	DS	10:20	13:20	03:00
16	31-01-2023	DS	13:50	16:50	03:00
11	01-02-2023	AD	11:45	14:45	03:00
2	02-02-2023	BJ	09:00	12:00	03:00
2	02-02-2023	BJ	12:30	15:30	03:00
5	03-02-2023	DS	08:35	11:35	03:00
5	03-02-2023	DS	12:05	15:05	03:00
8	04-02-2023	DS	08:10	11:10	03:00
3	04-02-2023	BJ	09:10	12:10	03:00
8	04-02-2023	DS	11:40	14:40	03:00
3	04-02-2023	BJ	12:40	15:40	03:00
16	20-02-2023	AD	08:30	11:30	03:00
16	23-02-2023	AD	08:30	11:30	03:00
16	23-02-2023	AD	12:00	15:00	03:00



VP	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
1	24-02-2023	JM	08:50	11:50	03:00
1	24-02-2023	JM	12:20	15:20	03:00
4	26-02-2023	DS	07:25	10:25	03:00
4	26-02-2023	DS	10:55	13:55	03:00
16	27-02-2023	AD	12:30	15:30	03:00
11	28-02-2023	AD	12:00	15:00	03:00
2	02-03-2023	DS	10:30	13:30	03:00
2	02-03-2023	DS	14:00	17:00	03:00
8	03-03-2023	DS	14:00	17:00	03:00
19	04-03-2023	DS	08:50	11:50	03:00
19	04-03-2023	DS	12:20	15:20	03:00
11	05-03-2023	AD	08:30	11:30	03:00
5	06-03-2023	DS	10:10	13:10	03:00
11	06-03-2023	AD	12:30	15:30	03:00
5	06-03-2023	DS	13:40	16:40	03:00
1	07-03-2023	JM	10:25	13:25	03:00
1	07-03-2023	JM	13:55	16:55	03:00
16	08-03-2023	AD	11:35	14:35	03:00
18	08-03-2023	DP	13:16	16:16	03:00
8	12-03-2023	DS	09:25	12:25	03:00
16	14-03-2023	AD	12:00	15:00	03:00
17	15-03-2023	DP	10:00	13:00	03:00
17	15-03-2023	DP	13:30	16:30	03:00
20	16-03-2023	DS	09:55	12:55	03:00
20	16-03-2023	DS	13:25	16:25	03:00
21	17-03-2023	DS	09:40	12:40	03:00
21	17-03-2023	DS	13:10	16:10	03:00
16	19-03-2023	AD	09:20	12:20	03:00
16	20-03-2023	AD	12:40	15:40	03:00
22	21-03-2023	AD	08:45	11:45	03:00
22	21-03-2023	AD	12:15	15:15	03:00
18	28-03-2023	DP	09:20	12:20	03:00
18	01-04-2023	DP	17:30	20:30	03:00
2	03-04-2023	AB	07:00	10:00	03:00
2	03-04-2023	AB	10:30	13:30	03:00
8	04-04-2023	AB	08:40	11:40	03:00
20	04-04-2023	KM	09:40	12:40	03:00
8	04-04-2023	AB	12:10	15:10	03:00
20	04-04-2023	KM	13:10	16:10	03:00
1	05-04-2023	JM	06:25	09:25	03:00
5	05-04-2023	AB	07:30	10:30	03:00
5	05-04-2023	AB	11:00	14:00	03:00
17	06-04-2023	AB	07:15	10:15	03:00
17	06-04-2023	AB	10:45	13:45	03:00
19	07-04-2023	AB	07:10	10:10	03:00
19	07-04-2023	AB	10:40	13:40	03:00



VP	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
1	12-04-2023	JM	16:25	19:25	03:00
18	13-04-2023	DP	08:00	11:00	03:00
11	15-04-2023	FN	09:05	12:05	03:00
11	15-04-2023	FN	12:35	15:35	03:00
21	17-04-2023	FN	10:55	13:55	03:00
21	18-04-2023	FN	14:25	17:25	03:00
22	20-04-2023	FN	09:45	12:45	03:00
22	20-04-2023	FN	13:15	16:15	03:00
18	02-05-2023	DP	10:10	13:10	03:00
20	02-05-2023	KM	11:30	14:30	03:00
20	02-05-2023	KM	15:00	18:00	03:00
1	05-05-2023	JM	10:10	13:10	03:00
1	05-05-2023	JM	13:40	16:40	03:00
18	05-05-2023	DP	15:00	18:00	03:00
5	09-05-2023	AB	08:45	11:45	03:00
5	09-05-2023	AB	11:45	14:45	03:00
17	10-05-2023	AB	05:45	08:45	03:00
17	10-05-2023	AB	08:45	11:45	03:00
2	10-05-2023	AB	12:45	15:45	03:00
2	11-05-2023	AB	05:30	08:30	03:00
19	11-05-2023	AB	10:00	13:00	03:00
19	11-05-2023	AB	13:00	16:00	03:00
8	12-05-2023	AB	06:00	09:00	03:00
8	12-05-2023	AB	09:00	12:00	03:00
11	15-05-2023	FN	10:00	13:00	03:00
11	15-05-2023	FN	13:30	16:30	03:00
21	18-05-2023	FN	10:45	13:45	03:00
21	18-05-2023	FN	14:15	17:15	03:00
22	26-05-2023	FN	10:15	13:15	03:00
22	26-05-2023	FN	13:45	16:45	03:00
11	01-06-2023	BJ	16:30	19:30	03:00
11	01-06-2023	BJ	20:00	23:00	03:00
8	02-06-2023	DS	06:55	09:55	03:00
8	02-06-2023	DS	10:25	13:25	03:00
21	02-06-2023	BJ	16:30	19:30	03:00
2	02-06-2023	EA	17:00	20:00	03:00
21	02-06-2023	BJ	20:00	23:00	03:00
18	06-06-2023	DP	12:00	15:00	03:00
18	06-06-2023	DP	15:30	18:30	03:00
1	12-06-2023	JM	04:50	07:50	03:00
1	12-06-2023	JM	08:20	11:20	03:00
22	14-06-2023	BJ	16:30	19:30	03:00
22	14-06-2023	BJ	20:00	23:00	03:00
2	17-06-2023	EA	19:25	22:25	03:00
20	24-06-2023	KM	08:30	11:30	03:00
20	24-06-2023	KM	12:00	15:00	03:00



VP	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
5	24-06-2023	DS	14:05	17:05	03:00
5	24-06-2023	DS	17:35	20:35	03:00
17	25-06-2023	DS	06:50	09:50	03:00
17	25-06-2023	DS	10:20	13:20	03:00
19	27-06-2023	DS	09:35	12:35	03:00
19	27-06-2023	DS	13:05	16:05	03:00
18	02-07-2023	DP	10:05	13:05	03:00
1	03-07-2023	JM	08:50	11:50	03:00
1	03-07-2023	JM	12:20	15:20	03:00
18	04-07-2023	DP	11:30	14:30	03:00
19	04-07-2023	DS	13:50	16:50	03:00
19	04-07-2023	DS	17:20	20:20	03:00
11	09-07-2023	BJ	04:00	07:00	03:00
11	09-07-2023	BJ	07:30	10:30	03:00
17	10-07-2023	JM	08:35	11:35	03:00
17	10-07-2023	JM	12:05	15:05	03:00
22	15-07-2023	BJ	06:00	09:00	03:00
22	15-07-2023	BJ	09:30	12:30	03:00
20	21-07-2023	KM	07:55	10:55	03:00
20	21-07-2023	KM	11:25	14:25	03:00
8	22-07-2023	KM	09:45	12:45	03:00
8	22-07-2023	KM	13:15	16:15	03:00
2	23-07-2023	EA	18:00	21:00	03:00
5	26-07-2023	BJ	06:00	09:00	03:00
21	26-07-2023	KM	07:10	10:10	03:00
5	26-07-2023	BJ	09:30	12:30	03:00
21	26-07-2023	KM	10:40	13:40	03:00
2	31-07-2023	EA	07:20	10:20	03:00
11	02-08-2023	KM	11:15	14:15	03:00
17	02-08-2023	DP	14:15	17:15	03:00
11	02-08-2023	KM	14:45	17:45	03:00
18	03-08-2023	DP	11:40	14:40	03:00
18	04-08-2023	DP	10:30	13:30	03:00
17	04-08-2023	DP	14:30	17:30	03:00
8	07-08-2023	KM	12:00	15:00	03:00
8	07-08-2023	KM	15:30	18:30	03:00
19	08-08-2023	KM	09:30	12:30	03:00
19	08-08-2023	KM	13:00	16:00	03:00
21	10-08-2023	KM	13:10	16:10	03:00
21	10-08-2023	KM	16:40	19:40	03:00
2	15-08-2023	PS	13:40	16:40	03:00
1	16-08-2023	JM	08:20	11:20	03:00
22	16-08-2023	KM	10:45	13:45	03:00
1	16-08-2023	JM	11:50	14:50	03:00
22	16-08-2023	KM	14:15	17:15	03:00
5	21-08-2023	PS	08:20	11:20	03:00



VP	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
5	21-08-2023	PS	11:50	14:50	03:00
20	25-08-2023	PS	10:45	13:45	03:00
20	25-08-2023	PS	14:15	17:15	03:00
2	29-08-2023	PS	14:45	17:45	03:00
24	26-09-2023	MLS	10:30	13:30	03:00
24	26-09-2023	MLS	14:00	17:00	03:00
24	27-09-2023	SMD	08:55	11:55	03:00
23	27-09-2023	MLS	09:50	12:50	03:00
24	27-09-2023	SMD	12:25	15:25	03:00
23	27-09-2023	MLS	13:20	16:20	03:00
23	28-09-2023	MLS	08:10	11:10	03:00
23	28-09-2023	MLS	11:40	14:40	03:00
24	04-10-2023	AJM	12:35	15:35	03:00
24	04-10-2023	AJM	16:05	19:05	03:00
23	11-10-2023	DB	12:00	15:00	03:00
23	11-10-2023	DB	15:30	18:30	03:00
23	12-10-2023	DB	07:30	10:30	03:00
23	12-10-2023	DB	11:00	14:00	03:00
24	02-11-2023	MLS	10:20	13:20	03:00
24	02-11-2023	MLS	13:50	16:50	03:00
23	07-11-2023	SMD	10:10	13:10	03:00
23	07-11-2023	SMD	13:40	16:40	03:00
24	08-11-2023	MLS	08:40	11:40	03:00
24	08-11-2023	MLS	12:10	15:10	03:00
24	09-11-2023	AR	08:10	11:10	03:00
24	09-11-2023	AR	11:40	14:40	03:00
23	17-11-2023	DB	07:26	10:26	03:00
23	17-11-2023	DB	10:56	13:56	03:00
23	06-12-2023	DB	09:00	12:00	03:00
23	06-12-2023	DB	12:30	15:30	03:00
24	07-12-2023	AR	09:00	12:00	03:00
24	07-12-2023	AR	12:30	15:30	03:00
23	12-01-2024	DB	08:15	11:15	03:00
24	16-01-2024	DB	09:45	12:45	03:00
24	02-02-2024	DB	09:30	12:30	03:00
23	14-02-2024	DB	10:10	13:10	03:00
24	11-03-2024	DB	12:00	15:00	03:00
24	11-03-2024	DB	15:30	18:30	03:00
23	13-03-2024	JM	07:45	10:45	03:00
23	13-03-2024	JM	11:15	14:15	03:00

Table A1: Scarce breeding Bird Survey Effort (March-July 2023 – and April-July 2024)

Focal Area	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
Beaully Corridor	15-03-2023	JM	08:40	14:40	06:00
Wood of Ordiequish	16-03-2023	JM	08:00	14:00	06:00
Wood of Ordiequish	17-03-2023	JM	07:55	13:55	06:00



Focal Area	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
Drum Mossie Muir	25-03-2023	PS	06:25	11:25	05:00
Bednawinny Moss Moorlands	25-03-2023	AD	09:30	12:30	03:00
Assich Forest / Strathdearn Foothills	26-03-2023	PS	07:20	12:20	05:00
Assich Forest / Strathdearn Foothills	27-03-2023	PS	07:20	12:20	05:00
The Aird	28-03-2023	SK	07:30	12:00	04:30
Drum Mossie Muir	28-03-2023	IG	07:30	12:00	04:30
Drum Mossie Muir	28-03-2023	MK	07:30	12:00	04:30
Assich Forest / Strathdearn Foothills	29-03-2023	AD	09:30	12:30	03:00
Dava Moorlands	31-03-2023	AD	09:30	12:30	03:00
Beaully Corridor	05-04-2023	JM	09:25	12:25	03:00
Assich Forest / Strathdearn Foothills	05-04-2023	KM	09:50	12:50	03:00
Drum Mossie Muir	07-04-2023	KEV	07:05	12:05	05:00
Assich Forest / Strathdearn Foothills	07-04-2023	KM	07:30	12:30	05:00
Wood of Ordiequish	11-04-2023	PS	12:15	18:15	06:00
Beaully Corridor	12-04-2023	JM	13:25	16:25	03:00
Wood of Ordiequish	18-04-2023	PS	09:20	15:20	06:00
Brown Muir	18-04-2023	IG	09:30	12:00	02:30
Brown Muir	19-04-2023	IG	09:30	12:45	03:15
Drum Mossie Muir	20-04-2023	EA	08:12	12:12	04:00
Glen Latterach	20-04-2023	IG	09:45	13:00	03:15
Glen Latterach	21-04-2023	IG	09:15	11:45	02:30
Bednawinny Moss Moorlands	22-04-2023	KM	09:00	15:00	06:00
Glen Latterach	26-04-2023	PS	09:45	15:45	06:00
Bednawinny Moss Moorlands	27-04-2023	TG	08:00	11:45	03:45
Glen Latterach	27-04-2023	KM	09:00	15:00	06:00
Dava Moorlands	28-04-2023	GR	06:30	11:30	05:00
Dava Moorlands	28-04-2023	HV	07:00	14:00	07:00
Dava Moorlands	29-04-2023	HV	06:45	13:45	07:00
Bednawinny Moss Moorlands	01-05-2023	BJ	08:00	14:00	06:00
Glen Latterach	01-05-2023	KM	08:50	14:50	06:00
Bednawinny Moss Moorlands	03-05-2023	KM	10:00	16:00	06:00
Assich Forest / Strathdearn Foothills	04-05-2023	DP	05:30	10:30	05:00
Glen Latterach	04-05-2023	KM	09:20	15:20	06:00
Dava Moorlands	05-05-2023	GR	05:45	10:45	05:00
Drum Mossie Muir	05-05-2023	PS	12:40	18:40	06:00
Dava Moorlands	10-05-2023	GR	05:35	14:00	08:25
Assich Forest / Strathdearn Foothills	11-05-2023	DP	05:13	10:13	05:00
Wood of Ordiequish	11-05-2023	EM	07:45	10:45	03:00
Glen Latterach	11-05-2023	HC	09:15	12:40	03:40
Wood of Ordiequish	12-05-2023	EM	09:45	13:10	03:25
Dava Moorlands	12-05-2023	GR	10:20	16:20	06:00
Aird	12-05-2023	PS	12:15	19:15	07:00
Glen Latterach	13-05-2023	LK	08:25	14:00	05:25
Glen Latterach	13-05-2023	HC	09:45	13:10	03:25
Brown Muir	14-05-2023	LK	07:00	13:45	06:45
Glen Latterach	15-05-2023	EM	05:00	11:00	06:00



Focal Area	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
Glen Latterach	15-05-2023	LK	07:45	14:15	06:25
Assich Forest / Strathdearn Foothills	17-05-2023	DP	05:25	10:25	05:00
Brown Muir	18-05-2023	EM	09:00	15:00	06:00
Beaully Corridor	22-05-2023	LW	15:00	18:00	03:00
Drum Mossie Muir	23-05-2023	LW	09:15	16:40	07:25
Beaully Corridor	24-05-2023	LW	08:50	12:00	03:10
Beaully Corridor	24-05-2023	LW	12:30	15:30	03:00
Dava Moorlands	25-05-2023	LW	09:00	18:00	09:00
Beaully Corridor	26-05-2023	LW	10:30	14:30	03:00
Assich Forest / Strathdearn Foothills	02-06-2023	DP	14:15	20:15	06:00
Dava Moorlands	03-06-2023	BJ	10:00	16:00	06:00
Dava Moorlands	06-06-2023	BJ	06:00	12:00	06:00
Bednawinny Moss Moorlands	07-06-2023	PS	10:10	16:10	06:00
Glen Latterach	07-06-2023	DP	12:20	18:20	06:00
Bednawinny Moss Moorlands	07-06-2023	PS	16:40	19:40	03:00
Beaully Corridor	08-06-2023	GR	09:10	15:10	06:00
Drum Mossie Muir	08-06-2023	EA	18:20	20:50	02:50
Assich Forest / Strathdearn Foothills	12-06-2023	GR	10:00	16:00	06:00
Drum Mossie Muir	12-06-2023	EA	10:10	16:10	06:00
Bednawinny Moss Moorlands	14-06-2023	PS	08:15	11:15	03:00
Glen Latterach	14-06-2023	PS	11:50	17:50	06:00
Aird	15-06-2023	PS	05:40	11:40	06:00
Glen Latterach	17-06-2023	PS	10:25	16:25	06:00
Wood of Ordiequish	23-06-2023	DS	07:05	13:05	06:00
Dava Moorlands	26-06-2023	DS	09:00	15:00	06:00
Drum Mossie Muir	27-06-2023	EA	09:00	12:00	03:00
Brown Muir	28-06-2023	KM	10:30	16:30	06:00
Assich Forest / Strathdearn Foothills	29-06-2023	PS	05:30	11:30	06:00
Dava Moorlands	01-07-2023	BJ	10:00	16:00	06:00
Drum Mossie Muir	03-07-2023	DP	12:15	15:15	03:00
Beaully Corridor	10-07-2023	JM	15:55	18:55	03:00
Brown Muir	12-07-2023	KM	10:00	16:00	06:00
Bednawinny Moss Moorlands	13-07-2023	PS	08:40	14:40	06:00
Bednawinny Moss Moorlands	13-07-2023	PS	15:25	18:25	03:00
Dava Moorlands	14-07-2023	BJ	08:30	13:30	05:00
Glen Latterach	14-07-2023	KM	12:30	18:30	06:00
Assich Forest / Strathdearn Foothills	20-07-2023	JM	09:05	15:05	06:00
Assich Forest / Strathdearn Foothills	21-07-2023	DS	08:05	13:05	05:00
Glen Latterach	21-07-2023	PS	08:20	14:20	06:00
Bednawinny Moss Moorlands	21-07-2023	PS	16:10	19:10	03:00
Aird	22-07-2023	PS	12:20	15:20	03:00
Drum Mossie Muir	22-07-2023	PS	16:40	19:40	03:00
Assich Forest / Strathdearn Foothills	25-07-2023	PS	07:40	13:40	06:00
Dava Moorlands	27-07-2023	DS	08:45	13:45	05:00
Glen Latterach	27-07-2023	JM	09:10	14:10	05:00
Beaully Corridor	02-04-2024	BJ	09:00	12:00	03:00

Focal Area	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
Dava Moorlands	04-04-2024	BJ	06:00	09:00	03:00
Dava Moorlands	04-04-2024	BJ	09:00	15:00	06:00
Beaully Corridor	06-04-2024	BJ	09:30	12:30	03:00
Drum Mossie Muir	10-04-2024	BJ	08:30	16:30	08:00
Dava Moorlands	12-04-2024	BJ	06:00	09:00	03:00
Hill of Mulundy and Wangie Wood	12-04-2024	BJ	10:00	16:00	06:00
Strathdearn	23-04-2024	BJ	09:15	15:15	06:00
Assich Forest / Strathdearn	25-04-2024	BJ	05:40	11:40	06:00
Dava Moorlands	06-05-2024	BJ	08:30	14:30	06:00
Drum Mossie Muir	08-05-2024	BJ	08:00	14:00	06:00
Beaully Corridor	14-05-2024	BJ	08:00	14:00	06:00
Hill of Mulundy and Wangie Wood	22-05-2024	BJ	08:00	14:00	06:00
Assich Forest/Strathdearn Foothills	25-05-2024	PB	09:15	15:15	06:00
Drum Mossie Muir	04-06-2024	BJ	10:00	16:00	06:00
Assich Forest / Strathdearn Foothills	07-06-2024	PB	08:30	14:30	06:00
Beaully Corridor	08-06-2024	PB	08:30	14:30	06:00
Hil of Mulundy and Wangie Wood	21-06-2024	BJ	10:00	16:00	06:00
Assich Forest / Strathdearn Foothills	25-06-2024	BJ	11:00	17:00	06:00
Dava Moorlands	28-06-2024	BJ	10:10	16:10	06:00
Beaully Corridor	03-07-2024	BJ	11:00	17:00	06:00
Assich Forest / Strathdearn Foothills	05-07-2024	BJ	09:00	15:00	06:00
Hill of Mulundy and Wangie Wood	06-07-2024	BJ	10:00	16:00	06:00
Dava Moorlands	15-07-2024	CS	10:00	16:00	06:00
Assich Forest / Strathdearn Foothills	18-07-2024	BJ	08:00	14:00	06:00
Drum Mossie Muir	21-07-2024	BJ	09:00	15:00	06:00

Table A2: Capercaillie Survey Effort (March - May 2023)

Area	Date	Surveyor	Sunrise	Start Time	End Time	Duration (hh:mm)
Dulsie Wood and assc. Woodlands	11-03-2023	DP	06:39	10:00	18:00	08:00
Dulsie Wood and assc. Woodlands	13-03-2023	DS	06:33	09:30	15:30	06:00
Dulsie Wood and assc. Woodlands	13-03-2023	DP	06:33	10:00	15:00	05:00
Dulsie Wood and assc. Woodlands	13-03-2023	BJ	06:33	10:00	15:00	05:00
Dulsie Wood and assc. Woodlands	13-03-2023	GR	06:33	10:00	15:30	05:30
Dulsie Wood and assc. Woodlands	14-03-2023	DP	06:30	09:55	15:30	05:25
Dulsie Wood and assc. Woodlands	14-03-2023	DS	06:30	10:00	15:00	05:00
Dulsie Wood and assc. Woodlands	14-03-2023	GR	06:30	10:00	15:30	05:30
Newtyle Wood and assc. Woodlands	14-03-2023	BJ	06:30	10:00	15:00	05:00
Dulsie Wood and assc. Woodlands	15-03-2023	DS	06:28	09:25	14:25	05:00
Newtyle Wood and assc. Woodlands	15-03-2023	BJ	06:28	09:45	15:45	06:00
Hill of Mulundy / Wangie Wood	25-03-2023	JM	06:00	08:45	14:45	06:00
Hill of Mulundy / Wangie Wood	26-03-2023	JM	05:57	09:15	15:15	06:00
Newtyle Wood and assc. Woodlands	28-03-2023	PS	05:51	08:45	14:45	06:00
Newtyle Wood and assc. Woodlands	28-03-2023	JM	05:51	08:45	14:45	06:00
Wood of Ordiequish	29-03-2023	IG	05:49	09:00	15:00	06:00
Wood of Ordiequish	29-03-2023	SK	05:49	09:00	15:00	06:00



Area	Date	Surveyor	Sunrise	Start Time	End Time	Duration (hh:mm)
Wood of Ordiequish	29-03-2023	MK	05:49	09:00	15:00	06:00
Hill of Mulundy / Wangie Wood	29-03-2023	JM	05:49	09:10	15:10	06:00
Dulsie Wood and assc. Woodlands	15-04-2023	KM	06:02	05:20	08:20	03:00
Newtyle Wood and assc. Woodlands	15-04-2023	EA	06:02	05:31	07:31	02:00
Dulsie Wood and assc. Woodlands	15-04-2023	BJ	06:02	06:00	09:00	03:00
Newtyle Wood and assc. Woodlands	16-04-2023	EA	05:59	06:00	08:00	02:00
Wood of Ordiequish	18-04-2023	IG	05:54	04:30	08:00	03:30
Wood of Ordiequish	19-04-2023	IG	05:51	05:15	08:00	02:45
Dulsie Wood and assc. Woodlands	20-04-2023	PS	05:49	05:15	08:15	03:00
Wood of Ordiequish	20-04-2023	IG	05:49	05:15	07:20	02:05
Hill of Mulundy / Wangie Wood	21-04-2023	IG	05:46	06:00	08:00	02:00
Dulsie Wood and assc. Woodlands	22-04-2023	KM	05:43	05:30	08:30	03:00
Dulsie Wood and assc. Woodlands	24-04-2023	PS	05:38	04:55	07:55	03:00
Dulsie Wood and assc. Woodlands	26-04-2023	BJ	05:33	06:00	09:00	03:00
Hill of Mulundy / Wangie Wood	27-04-2023	TG	05:31	04:30	07:20	02:50
Hill of Mulundy / Wangie Wood	28-04-2023	TG	05:28	04:40	07:40	03:00
Dulsie Wood and assc. Woodlands	01-05-2023	KM	05:21	05:30	08:20	02:50
Newtyle Wood and assc. Woodlands	03-05-2023	HC	05:16	04:00	07:30	03:50
Dulsie Wood and assc. Woodlands	04-05-2023	BJ	05:14	06:00	09:00	03:00
Dulsie Wood and assc. Woodlands	05-05-2023	BJ	05:11	06:00	09:00	03:00
Newtyle Wood and assc. Woodlands	11-05-2023	HC	04:58	04:00	07:10	03:10
Wood of Ordiequish	11-05-2023	GM	04:58	04:45	07:45	03:00
Wood of Ordiequish	12-05-2023	GM	04:56	04:45	07:45	03:00
Newtyle Wood and assc. Woodlands	13-05-2023	HC	04:54	04:00	07:15	03:15

Table A3: Black Grouse Survey Effort (March - May 2023 and 2024)

Area	Date	Surveyor	Sunrise	Start Time	End Time	Duration (hh:mm)
Drumossie Muir	25-03-2023	PS	06:00	05:25	07:25	02:00
Bednawinny Moss Moorlands	25-03-2023	AD	06:00	06:00	09:00	03:00
Assich Forest / Strathearn Foothills	26-03-2023	PS	05:57	06:20	08:20	02:00
Assich Forest / Strathearn Foothills	27-03-2023	PS	05:54	06:20	08:20	02:00
Drumossie Muir	28-03-2023	IG	05:51	06:00	07:30	01:30
The Aird	28-03-2023	SK	05:51	06:00	07:30	01:30
Drumossie Muir	28-03-2023	MK	05:51	06:00	07:30	01:30
Dava Moorlands	29-03-2023	AD	05:49	06:00	09:00	03:00
Dava Moorlands	31-03-2023	AD	06:43	06:05	09:05	03:00
Assich Forest / Strathearn Foothills	05-04-2023	KM	06:29	06:20	09:20	03:00
Drumossie Muir	07-04-2023	KEV	06:24	06:05	08:05	02:00
Assich Forest / Strathearn Foothills	07-04-2023	KM	06:24	06:30	08:30	02:00
The Aird	08-04-2023	PS	06:21	05:45	08:45	03:00
Drumossie Muir	10-04-2023	KB	06:15	06:10	12:10	06:00
The Aird	15-04-2023	PS	06:02	05:20	07:50	02:50
Drumossie Muir	20-04-2023	EA	05:45	07:12	09:12	02:00
Dava Moorlands	28-04-2023	HV	05:28	04:45	06:45	02:00
Dava Moorlands	28-04-2023	GR	05:28	05:30	07:30	02:00
Dava Moorlands	29-04-2023	HV	05:26	04:45	06:45	02:00

Area	Date	Surveyor	Sunrise	Start Time	End Time	Duration (hh:mm)
Bednawinny Moss Moorlands	01-05-2023	BJ	05:21	05:00	08:00	03:00
Assich Forest / Strathdearn Foothills	04-05-2023	DP	05:14	04:30	06:30	02:00
Dava Moorlands	05-05-2023	GR	05:11	04:45	06:45	02:00
Dava Moorlands	10-05-2023	GR	05:00	04:35	06:35	02:00
Assich Forest / Strathdearn Foothills	11-05-2023	DP	04:58	04:13	06:13	02:00
Dava Moorlands	12-05-2023	GR	04:56	05:00	08:00	03:00
Brown Muir	14-05-2023	LK	04:52	04:00	07:00	03:00
Assich Forest / Strathdearn Foothills	17-05-2023	DP	04:46	04:25	06:25	02:00
Dava Moorlands	04-04-2024	BJ	06:32	06:00	07:30	01:30
Assich Forest / Strathdearn	25-04-2024	BJ	05:36	05:40	06:36	00:56
Dava Moorlands	02-05-2024	BJ	05:19	04:30	07:30	03:00

Table A4: Common Crane Survey Effort (April - July 2023 and 2024)

Area	Date	Surveyor	Start Time	End Time	Duration (hh:mm)
New Deer to Peterhead	21-04-2023	AC	09:25	14:25	05:00
River Deveron Corridor	22-04-2023	AC	11:00	17:00	06:00
New Deer to Peterhead	28-04-2023	AC	Ad-hoc visit ²²		NA
New Deer to Peterhead	30-04-2023	AC	Ad-hoc visit ²²		NA
New Deer to Peterhead	02-05-2023	AC	09:50	14:50	05:00
New Deer to Peterhead	19-05-2023	AC	Ad-hoc visit ²²		NA
New Deer to Peterhead	20-05-2023	AC	07:05	12:30	05:25
River Deveron Corridor	27-05-2023	JS	09:55	15:55	06:00
River Deveron Corridor	28-05-2023	JS	13:10	19:10	06:00
New Deer to Peterhead	16-06-2023	AC	09:00	14:00	05:00
River Deveron Corridor	17-06-2023	CG	17:40	21:40	04:00
River Deveron Corridor	18-06-2023	CG	07:35	09:35	02:00
New Deer to Peterhead	03-07-2023	AC	Ad-hoc visit ²²		NA
New Deer to Peterhead	11-07-2023	AC	09:30	15:30	06:00
New Deer to Peterhead	19-07-2023	AC	Ad-hoc visit		NA
River Deveron Corridor	30-07-2023	AC	14:00	18:30	04:30
New Deer to Peterhead	31-07-2023	AC	Ad-hoc visit ²²		NA
New Deer to Peterhead	05-08-2023	AC	Ad-hoc visit ²²		NA
New Deer to Peterhead	06-08-2023	AC	Ad-hoc visit ²²		NA
Crombie Moss	15-05-2024	GD	05:20	10:20	05:00
Crombie Moss / Maud Stewartfield	28-05-2024	GD	13:00	19:00	06:00
Crombie Moss	04-06-2024	DP	14:45	20:45	06:00
Maud Stewartfield	21-06-2024	AS	11:00	16:00	05:00
Maud Stewartfield	17-07-2024	PC	14:25	17:25	03:00
Crombie Moss	20-07-2024	AS	14:30	19:00	04:30

²² Ad-hoc visits undertaken by local surveyor.

Table A5: Goose Field Use Survey Effort: New Deer to Peterhead Only (September 2023 – March 2024)

Date	Surveyor	Start Time	End Time	Duration (hh:mm)
21-09-2023	PC	12:25	14:50	02:25
22-09-2023	PC	12:55	15:25	02:30
25-09-2023	MLS	12:05	15:45	03:40
28-09-2023	SMD	07:25	10:25	03:00
13-10-2023	DB	08:40	11:40	03:00
03-11-2023	MLS	08:30	12:20	03:50
08-11-2023	SMD	09:05	13:05	04:00
30-11-2023	DB	09:00	13:00	04:00
06-12-2023	GD	09:30	12:30	03:00
20-12-2023	GD	09:00	13:00	04:00
17-01-2024	GD	10:00	14:00	04:00
25-01-2024	GD	11:30	14:30	03:00
02-02-2024	GD	09:15	12:15	03:00
14-02-2024	GD	10:00	13:00	03:00
26-03-2024	GD	07:15	11:45	04:30

Annex B: Ornithological Survey Results

Table B1: Flight Activity Survey Records

Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
21-09-2022	11:47	1	GR	Red kite	1	93
21-09-2022	14:04	1	GR	Red kite	1	210
22-09-2022	16:28	5	CT	Merlin	1	63
27-09-2022	15:17	3	NR	Red kite	2	282
27-09-2022	16:53	3	NR	Red kite	1	450
28-09-2022	12:50	3	NR	Pink-footed goose	100	240
28-09-2022	13:02	3	NR	Geese	110	210
28-09-2022	14:26	3	NR	Red kite	1	82
28-09-2022	14:37	3	NR	Red kite	1	94
28-09-2022	14:44	3	NR	Geese	150	135
07-10-2022	11:14	1	JM	Red kite	1	48
07-10-2022	12:05	1	JM	Greylag goose	8	45
07-10-2022	13:12	1	JM	Red kite	1	118
07-10-2022	13:30	1	JM	Whooper swan	14	315
07-10-2022	14:35	1	JM	Red kite	1	14
07-10-2022	15:04	1	JM	Red kite	1	25
25-10-2022	10:59	4	AD	Red kite	1	67
25-10-2022	11:08	4	AD	Red kite	1	61
27-10-2022	08:59	11	AD	Pink-footed goose	22	37
27-10-2022	09:15	11	AD	Pink-footed goose	41	72
27-10-2022	09:18	11	AD	Pink-footed goose	63	270
27-10-2022	09:33	11	AD	Pink-footed goose	64	67
27-10-2022	09:34	11	AD	Pink-footed goose	82	69
27-10-2022	09:37	11	AD	Pink-footed goose	225	59
27-10-2022	09:45	11	AD	Pink-footed goose	41	47
27-10-2022	09:50	11	AD	Pink-footed goose	280	267
27-10-2022	10:03	11	AD	Pink-footed goose	225	120
27-10-2022	10:19	11	AD	Pink-footed goose	175	95
27-10-2022	10:52	11	AD	Pink-footed goose	170	117
27-10-2022	11:38	3	DS	Greylag goose	2	43
27-10-2022	11:41	3	DS	Greylag goose	9	30
27-10-2022	12:45	3	DS	Red kite	1	353
27-10-2022	13:10	3	DS	Red kite	1	300
28-10-2022	10:25	3	DS	Red kite	1	210
28-10-2022	11:00	3	DS	Greylag goose	2	75
31-10-2022	10:40	2	GR	Red kite	1	190
31-10-2022	11:30	8	DS	Pink-footed goose	120	50
31-10-2022	12:35	8	DS	Pink-footed goose	350	270
01-11-2022	11:15	3	DS	Red kite	2	210
01-11-2022	11:28	3	DS	Pink-footed goose	320	94



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
01-11-2022	12:15	3	DS	Red kite	1	120
01-11-2022	12:35	3	DS	Red kite	2	1480
01-11-2022	14:35	3	DS	Red kite	1	353
01-11-2022	15:30	3	DS	Red kite	2	225
01-11-2022	15:44	3	DS	Red kite	3	330
01-11-2022	16:05	3	DS	Red kite	1	90
01-11-2022	16:28	3	DS	Whooper swan	19	205
03-11-2022	07:50	8	DS	Pink-footed goose	10	60
03-11-2022	08:30	8	DS	Whooper swan	6	60
03-11-2022	08:50	8	DS	Pink-footed goose	4	65
04-11-2022	08:14	4	DS	Pink-footed goose	64	60
04-11-2022	08:26	4	DS	Pink-footed goose	26	40
04-11-2022	08:32	4	DS	Pink-footed goose	360	150
04-11-2022	08:40	4	DS	Pink-footed goose	17	80
04-11-2022	09:07	4	DS	Pink-footed goose	57	60
04-11-2022	09:15	4	DS	Pink-footed goose	116	140
04-11-2022	09:35	4	DS	Red kite	1	40
04-11-2022	09:49	1	JM	Pink-footed goose	180	48
04-11-2022	09:50	4	DS	Pink-footed goose	49	135
04-11-2022	10:10	4	DS	Pink-footed goose	120	150
04-11-2022	10:35	4	DS	Red kite	2	60
04-11-2022	10:40	1	JM	Pink-footed goose	2	26
04-11-2022	13:33	1	JM	Red kite	1	39
04-11-2022	14:22	1	JM	Red kite	1	44
04-11-2022	14:22	1	JM	Red kite	1	38
09-11-2022	11:32	2	BJ	Red kite	1	130
10-11-2022	12:22	2	BJ	Red kite	1	118
10-11-2022	12:46	2	BJ	Red kite	1	117
10-11-2022	12:53	2	BJ	Red kite	2	63
10-11-2022	12:57	2	BJ	Red kite	2	57
10-11-2022	13:00	2	BJ	Red kite	1	17
10-11-2022	14:20	2	BJ	Red kite	2	393
10-11-2022	15:09	2	BJ	Red kite	1	52
10-11-2022	15:11	2	BJ	Red kite	1	68
10-11-2022	16:05	2	BJ	Red kite	2	423
14-11-2022	09:04	11	AD	Pink-footed goose	120	63
14-11-2022	09:21	11	AD	Pink-footed goose	70	33
14-11-2022	09:29	11	AD	Pink-footed goose	60	43
14-11-2022	09:31	11	AD	Pink-footed goose	80	41
14-11-2022	10:19	11	AD	Pink-footed goose	210	35
14-11-2022	10:26	11	AD	Pink-footed goose	200	87
14-11-2022	10:38	11	AD	Pink-footed goose	50	39



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
14-11-2022	14:06	11	AD	Pink-footed goose	75	47
21-11-2022	09:19	5	GR	Pink-footed goose	63	94
23-11-2022	09:15	4	DS	Red kite	1	325
29-11-2022	11:12	11	GR	Pink-footed goose	57	198
29-11-2022	11:12	11	GR	Pink-footed goose	48	135
05-12-2022	10:25	4	DS	Red kite	2	247
05-12-2022	11:40	4	DS	Red kite	2	485
05-12-2022	12:37	4	DS	Greylag goose	5	120
05-12-2022	13:14	4	DS	Red kite	1	94
05-12-2022	14:15	4	DS	Red kite	1	180
05-12-2022	14:19	4	DS	Red kite	1	180
06-12-2022	09:35	5	DS	Pink-footed goose	12	64
06-12-2022	11:05	5	DS	Red kite	1	153
06-12-2022	11:20	5	DS	Red kite	1	28
06-12-2022	13:05	5	DS	Red kite	1	150
06-12-2022	13:05	5	DS	Red kite	1	143
06-12-2022	13:25	5	DS	Red kite	2	345
06-12-2022	14:00	5	DS	Golden plover	36	82
06-12-2022	14:10	5	DS	Red kite	1	615
06-12-2022	14:40	5	DS	Pink-footed goose	7	120
09-12-2022	09:20	3	DS	Greylag goose	1	80
09-12-2022	10:30	3	DS	Red kite	2	120
09-12-2022	11:20	3	DS	Red kite	2	355
09-12-2022	12:16	3	DS	Red kite	3	250
11-12-2022	10:26	11	AD	Whooper swan	8	51
11-12-2022	11:00	11	AD	Pink-footed goose	65	19
14-12-2022	13:38	1	JM	Red kite	2	95
14-12-2022	13:44	11	AD	Pink-footed goose	60	51
14-12-2022	13:59	1	JM	Red kite	1	55
14-12-2022	14:00	1	JM	Red kite	2	30
03-01-2023	09:54	3	BJ	Red kite	1	104
03-01-2023	10:49	3	BJ	Red kite	1	233
04-01-2023	13:03	8	DS	White-tailed eagle	1	165
10-01-2023	10:14	11	AD	Pink-footed goose	35	70
10-01-2023	11:53	2	BJ	Red kite	1	123
10-01-2023	12:51	2	BJ	Red kite	2	219
10-01-2023	13:20	2	BJ	Pink-footed goose	50	23
10-01-2023	13:21	2	BJ	Pink-footed goose	100	73
10-01-2023	13:42	2	BJ	Pink-footed goose	20	18
16-01-2023	10:11	1	JM	Pink-footed goose	6	80
20-01-2023	10:35	4	BJ	Black grouse	1	11
31-01-2023	11:35	16	DS	Pink-footed goose	115	68



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
31-01-2023	11:55	16	DS	Pink-footed goose	176	210
02-02-2023	09:31	2	BJ	Red kite	1	50
02-02-2023	13:17	2	BJ	Red kite	1	67
04-02-2023	08:32	8	DS	Pink-footed goose	37	260
04-02-2023	08:47	8	DS	Pink-footed goose	120	159
04-02-2023	09:20	8	DS	Pink-footed goose	103	215
04-02-2023	09:50	8	DS	Pink-footed goose	52	165
04-02-2023	09:53	8	DS	Pink-footed goose	31	88
04-02-2023	10:16	3	BJ	Red kite	3	45
04-02-2023	10:31	3	BJ	Red kite	1	12
04-02-2023	10:40	3	BJ	Red kite	2	12
04-02-2023	11:01	3	BJ	Red kite	2	193
23-02-2023	09:22	16	AD	Pink-footed goose	30	189
23-02-2023	11:08	16	AD	Pink-footed goose	6	39
23-02-2023	12:28	16	AD	Pink-footed goose	70	27
23-02-2023	14:05	16	AD	Pink-footed goose	115	54
24-02-2023	09:14	1	JM	Pink-footed goose	19	63
24-02-2023	12:41	1	JM	Red kite	1	44
24-02-2023	12:41	1	JM	Red kite	1	235
26-02-2023	09:20	4	DS	Pink-footed goose	445	309
26-02-2023	10:16	4	DS	Goshawk	1	229
26-02-2023	11:10	4	DS	Goshawk	1	157
26-02-2023	13:02	4	DS	Red kite	1	285
02-03-2023	10:55	2	DS	Red kite	1	81
02-03-2023	11:11	2	DS	Red kite	1	54
02-03-2023	11:16	2	DS	Red kite	1	484
02-03-2023	12:08	2	DS	Pink-footed goose	36	100
02-03-2023	12:20	2	DS	Red kite	1	249
02-03-2023	14:20	2	DS	Red kite	1	457
02-03-2023	14:35	2	DS	Wigeon	135	110
02-03-2023	14:40	2	DS	Red kite	2	100
02-03-2023	15:20	2	DS	Greylag goose	10	75
02-03-2023	15:36	2	DS	Red kite	3	485
03-03-2023	14:05	8	DS	Greylag goose	1	160
03-03-2023	14:22	8	DS	Red kite	1	560
04-03-2023	11:41	19	DS	Red kite	1	192
08-03-2023	14:26	18	DP	Pink-footed goose	50	118
08-03-2023	14:47	18	DP	Pink-footed goose	72	213
08-03-2023	15:26	18	DP	Red kite	1	63
12-03-2023	09:36	8	DS	Pink-footed goose	4	156
12-03-2023	09:58	8	DS	Geese	1	67
12-03-2023	11:05	8	DS	Pink-footed goose	267	330



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
12-03-2023	11:58	8	DS	Geese	2	70
15-03-2023	14:14	17	DP	Red kite	1	12
15-03-2023	15:48	17	DP	Red kite	2	203
16-03-2023	12:40	20	DS	Greylag goose	3	48
16-03-2023	13:55	20	DS	Greylag goose	1	91
16-03-2023	14:20	20	DS	Curlew	2	325
16-03-2023	15:03	20	DS	Greylag goose	4	150
16-03-2023	15:48	20	DS	Goshawk	2	195
16-03-2023	16:14	20	DS	Red kite	1	270
17-03-2023	09:40	21	DS	Pink-footed goose	47	185
17-03-2023	10:24	21	DS	Pink-footed goose	107	218
17-03-2023	14:20	21	DS	Greylag goose	4	170
19-03-2023	11:28	16	AD	Pink-footed goose	72	10
19-03-2023	11:36	16	AD	Pink-footed goose	100	92
19-03-2023	11:41	16	AD	Pink-footed goose	62	37
28-03-2023	09:25	18	DP	Greylag goose	7	66
28-03-2023	10:06	18	DP	Red kite	1	NA
28-03-2023	10:20	18	DP	Red kite	1	297
28-03-2023	11:20	18	DP	Red kite	1	356
28-03-2023	11:41	18	DP	Red kite	1	321
01-04-2023	18:17	18	DP	Curlew	2	23
01-04-2023	18:36	18	DP	Curlew	2	74
01-04-2023	18:50	18	DP	Lapwing	1	3
01-04-2023	19:23	18	DP	Red kite	1	7
01-04-2023	19:46	18	DP	Curlew	1	17
03-04-2023	07:34	2	AB	Oystercatcher	2	53
03-04-2023	07:52	2	AB	Greylag goose	13	208
03-04-2023	09:15	2	AB	Red kite	1	111
03-04-2023	09:25	2	AB	Red kite	2	297
03-04-2023	09:41	2	AB	Oystercatcher	1	28
03-04-2023	10:38	2	AB	Pink-footed goose	26	187
03-04-2023	10:44	2	AB	Red kite	1	283
03-04-2023	10:55	2	AB	Pink-footed goose	97	157
03-04-2023	11:06	2	AB	Red kite	1	191
03-04-2023	11:14	2	AB	Red kite	1	101
03-04-2023	11:21	2	AB	Oystercatcher	2	32
03-04-2023	11:29	2	AB	Red kite	2	283
03-04-2023	11:46	2	AB	Pink-footed goose	107	397
03-04-2023	12:09	2	AB	Red kite	1	456
04-04-2023	09:46	8	AB	Red kite	1	212
04-04-2023	10:09	8	AB	Pink-footed goose	117	463
04-04-2023	10:23	8	AB	Pink-footed goose	47	327



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
04-04-2023	10:35	8	AB	Pink-footed goose	105	381
04-04-2023	10:41	20	KM	Red kite	1	180
04-04-2023	10:55	20	KM	Lapwing	2	35
04-04-2023	11:00	20	KM	Pink-footed goose	50	45
04-04-2023	11:40	20	KM	Curlew	4	57
04-04-2023	12:42	8	AB	Pink-footed goose	32	309
04-04-2023	13:11	8	AB	Red kite	1	43
04-04-2023	13:25	8	AB	Curlew	1	85
04-04-2023	13:37	8	AB	Osprey	1	94
04-04-2023	14:10	20	KM	Osprey	1	15
04-04-2023	15:34	20	KM	Red kite	1	60
05-04-2023	07:13	1	JM	Pink-footed goose	24	52
05-04-2023	07:48	1	JM	Curlew	1	48
05-04-2023	07:59	1	JM	Pink-footed goose	115	130
05-04-2023	08:04	1	JM	Greylag goose	5	81
05-04-2023	09:01	5	AB	Curlew	1	122
05-04-2023	09:25	5	AB	Greylag goose	1	283
05-04-2023	09:30	5	AB	Goosander	3	268
05-04-2023	09:47	5	AB	Goosander	2	151
05-04-2023	10:00	5	AB	Greylag goose	1	89
05-04-2023	11:04	5	AB	Goosander	3	67
05-04-2023	11:41	5	AB	Greylag goose	2	104
05-04-2023	11:50	5	AB	Greylag goose	2	126
05-04-2023	11:58	5	AB	Greylag goose	3	129
05-04-2023	12:36	5	AB	Goosander	2	136
05-04-2023	13:42	5	AB	Red kite	1	127
05-04-2023	13:51	5	AB	Red kite	1	141
07-04-2023	08:21	19	AB	Curlew	2	89
07-04-2023	08:46	19	AB	Greylag goose	2	32
07-04-2023	10:41	19	AB	Red kite	2	52
07-04-2023	11:09	19	AB	Red kite	1	294
07-04-2023	11:10	19	AB	Greylag goose	2	40
07-04-2023	11:12	19	AB	Pink-footed goose	75	84
07-04-2023	11:15	19	AB	Red kite	1	169
07-04-2023	11:23	19	AB	Golden eagle	2	606
07-04-2023	11:52	19	AB	Pink-footed goose	40	114
07-04-2023	12:04	19	AB	Curlew	1	NA
07-04-2023	12:21	19	AB	Red kite	1	327
07-04-2023	12:25	19	AB	Goshawk	2	143
07-04-2023	12:37	19	AB	Pink-footed goose	395	482
07-04-2023	12:59	19	AB	Red kite	1	624
07-04-2023	13:24	19	AB	White-tailed eagle	1	317



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
12-04-2023	18:31	1	JM	Red kite	1	131
13-04-2023	09:26	18	DP	Red kite	2	364
13-04-2023	10:09	18	DP	Red kite	4	423
02-05-2023	10:29	18	DP	Osprey	1	147
02-05-2023	11:06	18	DP	Osprey	2	334
02-05-2023	11:47	20	KM	Curlew	1	53
02-05-2023	12:11	18	DP	Red kite	1	407
02-05-2023	12:36	18	DP	Curlew	1	69
02-05-2023	12:54	18	DP	Snipe	1	6
02-05-2023	13:06	20	KM	Curlew	1	18
02-05-2023	17:20	20	KM	Red kite	1	135
02-05-2023	17:33	20	KM	Curlew	2	165
05-05-2023	15:21	18	DP	Curlew	1	14
05-05-2023	15:29	18	DP	Red kite	1	611
05-05-2023	16:19	18	DP	Red kite	1	13
05-05-2023	16:32	18	DP	Curlew	1	18
05-05-2023	16:39	18	DP	Red kite	1	56
05-05-2023	16:39	18	DP	Curlew	1	16
05-05-2023	16:51	18	DP	Red kite	2	52
05-05-2023	17:02	18	DP	Red kite	2	256
09-05-2023	08:52	5	AB	Curlew	1	89
09-05-2023	10:04	5	AB	Curlew	1	12
09-05-2023	10:37	5	AB	Curlew	2	33
09-05-2023	11:47	5	AB	Red kite	1	67
09-05-2023	13:46	5	AB	Curlew	1	28
10-05-2023	06:16	17	AB	Curlew	1	30
10-05-2023	09:04	17	AB	Curlew	1	30
10-05-2023	10:03	17	AB	Red kite	1	87
10-05-2023	10:49	17	AB	Red kite	1	206
10-05-2023	12:46	2	AB	Red kite	1	451
10-05-2023	13:09	2	AB	Goosander	1	47
10-05-2023	14:16	2	AB	Red kite	1	211
10-05-2023	15:26	2	AB	Goosander	2	31
11-05-2023	05:31	2	AB	Red kite	1	193
11-05-2023	10:04	19	AB	Red kite	1	87
11-05-2023	11:47	19	AB	Red kite	1	58
11-05-2023	12:41	19	AB	Curlew	1	NA
11-05-2023	14:29	19	AB	Curlew	1	NA
11-05-2023	14:52	19	AB	Curlew	1	NA
12-05-2023	06:33	8	AB	Oystercatcher	2	41
12-05-2023	09:49	8	AB	Whimbrel	1	58
02-06-2023	08:47	8	DS	Pink-footed goose	1	140



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
02-06-2023	09:07	8	DS	Greylag goose	2	83
02-06-2023	09:39	8	DS	Red kite	1	207
02-06-2023	11:16	8	DS	White-tailed eagle	1	102
02-06-2023	11:45	8	DS	Osprey	1	349
02-06-2023	11:51	8	DS	Osprey	1	10
02-06-2023	17:58	2	EA	Red kite	1	25
02-06-2023	17:59	2	EA	Red kite	1	99
02-06-2023	18:52	2	EA	Red kite	1	125
02-06-2023	18:52	21	BJ	Hen harrier	1	39
02-06-2023	19:56	2	EA	Red kite	1	170
06-06-2023	12:38	18	DP	Red kite	1	337
06-06-2023	13:09	18	DP	Red kite	2	73
06-06-2023	13:58	18	DP	Red kite	1	23
06-06-2023	14:04	18	DP	Red kite	2	386
06-06-2023	15:38	18	DP	Red kite	1	311
06-06-2023	16:09	18	DP	Osprey	1	83
06-06-2023	16:52	18	DP	Red kite	1	12
06-06-2023	16:55	18	DP	Red kite	1	378
06-06-2023	17:45	18	DP	Osprey	1	37
06-06-2023	17:54	18	DP	Osprey	1	89
12-06-2023	06:48	1	JM	Oystercatcher	2	17
12-06-2023	07:24	1	JM	Oystercatcher	2	28
14-06-2023	20:25	22	BJ	Snipe	1	13
17-06-2023	19:54	2	EA	Red kite	1	182
24-06-2023	09:10	20	KM	Snipe	1	79
24-06-2023	09:50	20	KM	Red kite	1	170
24-06-2023	10:42	20	KM	Red kite	1	255
24-06-2023	12:16	20	KM	Red kite	1	82
24-06-2023	13:05	20	KM	Red kite	2	105
24-06-2023	15:40	5	DS	Goshawk	1	97
25-06-2023	07:16	17	DS	Red kite	1	390
25-06-2023	08:03	17	DS	Curlew	1	58
25-06-2023	11:23	17	DS	Red kite	1	89
27-06-2023	09:40	19	DS	Red kite	1	83
27-06-2023	10:35	19	DS	Red kite	1	70
27-06-2023	11:20	19	DS	Red kite	1	19
02-07-2023	10:43	18	DP	Red kite	1	153
02-07-2023	10:54	18	DP	Red kite	1	3
02-07-2023	11:13	18	DP	Osprey	1	131
02-07-2023	11:33	18	DP	Red kite	1	5
02-07-2023	11:59	18	DP	Red kite	2	311
02-07-2023	12:28	18	DP	Red kite	1	77



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
02-07-2023	12:47	18	DP	Red kite	1	89
03-07-2023	11:19	1	JM	Red kite	1	83
04-07-2023	11:53	18	DP	Osprey	2	351
04-07-2023	11:59	18	DP	Red kite	1	68
04-07-2023	12:42	18	DP	Red kite	1	72
04-07-2023	12:53	18	DP	Osprey	1	181
04-07-2023	13:35	18	DP	Red kite	1	38
04-07-2023	13:44	18	DP	Red kite	1	29
04-07-2023	13:49	18	DP	Red kite	1	133
04-07-2023	13:58	18	DP	Red kite	2	502
04-07-2023	14:06	18	DP	Osprey	3	318
04-07-2023	15:32	19	DS	Red kite	1	365
04-07-2023	17:43	19	DS	Goshawk	1	260
10-07-2023	13:31	17	JM	Red kite	1	148
21-07-2023	07:55	20	KM	Greylag goose	3	33
21-07-2023	10:10	20	KM	Greylag goose	12	52
21-07-2023	10:18	20	KM	Red kite	1	105
21-07-2023	11:35	20	KM	Red kite	1	115
21-07-2023	13:05	20	KM	Red kite	2	270
22-07-2023	10:21	8	KM	Red kite	1	65
22-07-2023	11:26	8	KM	Goshawk	1	72
22-07-2023	14:06	8	KM	Osprey	1	60
31-07-2023	08:37	2	EA	Greylag goose	1	110
03-08-2023	11:43	18	DP	Red kite	2	52
03-08-2023	13:29	18	DP	Osprey	1	NA
04-08-2023	11:19	18	DP	Red kite	3	63
04-08-2023	11:41	18	DP	Osprey	1	47
04-08-2023	11:53	18	DP	Osprey	1	98
04-08-2023	11:54	18	DP	Red kite	1	22
04-08-2023	12:11	18	DP	Red kite	1	491
04-08-2023	12:44	18	DP	Osprey	2	217
07-08-2023	12:26	8	KM	Red kite	1	70
08-08-2023	10:37	19	KM	Red kite	1	24
08-08-2023	11:54	19	KM	Merlin	2	70
08-08-2023	15:00	19	KM	Red kite	1	15
10-08-2023	13:40	21	KM	Red kite	1	145
10-08-2023	18:04	21	KM	Hen harrier	1	15
10-08-2023	18:08	21	KM	Hen harrier	1	20
15-08-2023	15:02	2	PS	Red kite	1	63
21-08-2023	12:17	5	PS	Red kite	1	34
21-08-2023	13:21	5	PS	Red kite	1	53
25-08-2023	11:13	20	PS	Red kite	1	78



Date	Time	VP	Surveyor	Species	No. of Birds	Flight Duration (secs)
25-08-2023	11:37	20	PS	Red kite	1	18
29-08-2023	15:27	2	PS	Red kite	1	77
29-08-2023	15:33	2	PS	Red kite	1	19
26-09-2023	10:53	24	MLS	Marsh harrier	1	294
26-09-2023	11:31	24	MLS	Goshawk	1	27
27-09-2023	09:17	24	SMD	Pink-footed goose	130	178
27-09-2023	10:44	23	MLS	Goshawk	1	37
27-09-2023	13:14	24	SMD	Pink-footed goose	560	100
27-09-2023	14:02	23	MLS	Peregrine	1	58
28-09-2023	11:14	23	MLS	Pink-footed goose	30	169
28-09-2023	12:36	23	MLS	Goshawk	1	42
28-09-2023	12:55	23	MLS	Snipe	3	18
04-10-2023	13:51	24	AJM	Whooper swan	5	330
04-10-2023	17:03	24	AJM	Snipe	1	185
04-10-2023	18:26	24	AJM	Golden plover	5	140
11-10-2023	15:23	23	DB	Snipe	1	49
12-10-2023	07:32	23	DB	Whooper swan	1	73
02-11-2023	16:36	24	MLS	Barn owl	1	24
02-11-2023	16:46	24	MLS	Short-eared owl	1	192
07-11-2023	10:28	23	SMD	Pink-footed goose	300	214
07-11-2023	10:59	23	SMD	Greylag goose	2	178
08-11-2023	08:44	24	MLS	Pink-footed goose	29	206
08-11-2023	09:42	24	MLS	Pink-footed goose	9	131
08-11-2023	14:29	24	MLS	Short-eared owl	1	65
09-11-2023	10:22	24	AR	Goshawk	1	39
09-11-2023	10:39	24	AR	Goshawk	1	174
09-11-2023	12:13	24	AR	Pink-footed goose	137	110
09-11-2023	14:29	24	AR	Short-eared owl	1	54
17-11-2023	07:53	23	DB	Mute swan	2	48
17-11-2023	10:42	23	DB	Goshawk	1	59
06-12-2023	09:20	23	DB	Goshawk	1	30
06-12-2023	09:28	23	DB	Pink-footed goose	22	75
12-01-2024	09:45	23	DB	Pink-footed goose	31	60
16-01-2024	10:15	24	DB	Pink-footed goose	87	60
13-03-2024	07:47	23	JM	Pink-footed goose	35	180
13-03-2024	07:59	23	JM	Pink-footed goose	16	195
13-03-2024	08:21	23	JM	Pink-footed goose	41	240
13-03-2024	08:44	23	JM	Pink-footed goose	7	135
13-03-2024	08:48	23	JM	Pink-footed goose	3	135
13-03-2024	08:59	23	JM	Pink-footed goose	1	105
13-03-2024	09:37	23	JM	Pink-footed goose	60	60
13-03-2024	11:39	23	JM	Pink-footed goose	3	75

