Coille Beith Wind Farm

Technical Appendix 7.1: Ornithology

June 2025

Contents

1. Introduction

1.1 Overview

1.1.1 This Technical Appendix has been prepared to accompany **Chapter 7** (EIA Report Volume 2) and presents detailed methodologies and results of the ornithology desk study and field surveys to inform the design and assessment of the Proposed Development.

1.1.2 It should be read with reference to the following Figures, which are included within **Volume 3a** of the EIA Report:

- **Figure 7.1: Ornithological Statutory Designated Sites for Nature Conservation;**
- **Figure 7.2: Vantage Point Locations and Viewsheds;**
- **Figure 7.3: Breeding Bird Survey Plan;**
- **Figure 7.4a: Target Species Flight Activity (Raptors);**
- **Figure 7.4b: Target Species Flight Activity (Other Species);**
- **Figure 7.5: Moorland Breeding Bird Survey Results;**
- **Figure 7.9: GET Appraisal Score;** and
- **Figure 7.10: Scarce Breeding Bird Survey Results (Western Access Route).**

1.1.3 Only common bird species names are referred to within the main text of this Technical Appendix. **Annex 1** provides a summary of all bird species referred to within **Chapter 7** (EIA Report Volume 2), and all associated Technical Appendices in **Volume 4** and the Figures in **Volume 3a**. Both common and species names together with a summary of their conservation status as relevant is provided.

1.1.4 Collision mortality risk modelling analysis is provided separately in **Technical Appendix 7.2** (EIA Report Volume 4).

1.1.5 Information pertaining to the locations of sensitive breeding bird species and which are considered confidential is provided in **Confidential Technical Appendix 7.3** (EIA Report Volume 5).

1.1.6 The following confidential Figures are provided in EIA Report Volume 5.

- **Confidential Figure 7.6a: Desk Study Results Sensitive (RSPB);**
- **Confidential Figure 7.6b: Desk Study Results Sensitive (HRSG);**
- **Confidential Figure 7.7: Breeding Raptor and Owl Survey Results (Sensitive);** and
- **Confidential Figure 7.8: Breeding Black Grouse Survey Results (Sensitive).**

1.1.7 Such information will not be made publicly available but will be provided to The Highland Council (THC) and NatureScot, and any other relevant consultees.

1.2 Key Guidance

1.2.1 Ornithology survey methodologies and subsequent interpretation of results has made reference to the following key industry standard guidance:

- Brown, A.F. and Shepherd, K.B. (1993). A method for censusing upland breeding waders. Bird Study 40, 189-195.
- NatureScot (2025a). Recommended bird survey methods to inform impact assessment of onshore windfarms. Updated March 2025[1].
- Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. and Thompson, D. (2013). Raptors: a field guide to survey and monitoring. Third Edition. The Stationary Office, Edinburgh.
- Gilbert, G., Gibbons, D.W. and Evans, J. (1998). Bird monitoring methods. A manual of techniques for key UK species. RSPB, Sandy, Bedfordshire.
- Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and the Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747.

[1] Note this guidance was updated in March 2025, and surveys in 2021 followed the previous version, but survey protocols as carried out largely remain the same between the two versions.

- NatureScot (SNH, 2000). Windfarms and Birds – Calculating a theoretical collision risk assuming no avoiding action. SNH Guidance Note.
- NatureScot (2025b). Assessing the significance of impacts on bird populations from onshore wind farms that do not affect protected areas. Guidance Note. March 2025[1].
- NatureScot (SNH, 2016). Assessing connectivity with Special Protection Areas (SPAs). Guidance. Version 3 – June 2016.

1.3 Target Species

1.3.1 Target species for survey and recording were identified through desk study and consultation with NatureScot (see **Chapter 7**, EIA Report Volume 2), on the basis of their known or likely presence, their likely sensitivity to the Proposed Development and those which are afforded a higher level of legislative protection, which is in accordance with NatureScot guidance (2025a[2] and 2025b)[3].

1.3.2 Primarily, target species included:

- Those listed on Annex 1 of the EC Birds Directive (2009/147/EC);
- Those listed on Schedule 1 of the Wildlife and Countryside Act 1981 (Amendment) (Scotland) Regulations 2001;
- Black grouse; and
- Wetland birds, including geese, duck, waders and waterfowl (but excluding feral, and non-native species, grey heron and mallard).

1.3.3 This has ensured inclusion of qualifying interests of designated sites for nature conservation (**Table 3.1**) and target species that should be considered in the development of onshore wind farms in Scotland, as per NatureScot guidance (2025a[2] and 2025b)[3].

2. Methodology

2.1 Desk Study

2.1.1 In accordance with NatureScot guidance (2025a)[2], a desk study was undertaken to ascertain an overview of likely bird populations and designated sites in proximity to the Proposed Development, in order to identify possible target species to inform the requirements for survey.

2.1.2 The desk study comprised a review of sources summarised in **Table 2.1.**

2.1.3 Existing publicly available EIA documentation related to ornithology for wind farm developments close to the locality of the Site (within 5 km), comprising the consented Strath Oykel Wind Farm (ECU Ref: ECU00003246), consented Meall Buidhe Wind Farm (THC Ref: 20/02659/FUL) and, the at-scoping stage, Inveroykel Wind Farm (THC Ref: 24/04326/SCOP and ECU Ref: ECU00005210) were also reviewed to provide additional baseline ornithological information.

Table 2.1 – Desk Study Key Sources and Information Sought

Key Source	Information Sought	Search Area
Sitelink	Statutory designated sites for nature conservation with qualifying ornithological interests.	Within 10 km of the Site, extended to 20 km for internationally designated sites with migratory geese qualifying interests (see **Figure 7.1,** EIA Report Volume 3a).
Royal Society for Protection of Birds (RSPB) – *October 2020 and update in March 2025*	Existing ornithological records.	Within 6 km of the Site, extended to 10 km for eagles (see **Confidential Figure 7.6a,** EIA Report Volume 5).
Highland Raptor Study Group (HRSG) - *November 2020 and update in May 2025*	Existing records of scarce breeding and roosting raptors and owls.	Within 6 km of the Site (NH 42307 98575), extended to 10 km for eagles (see **Confidential Figure 7.6b,** EIA Report Volume 5).
Highland Biological Recording Group (HBRG) - *August 2021 and update in March 2025*	Non-statutory designated sites for nature conservation with qualifying ornithological interests, and existing ornithological records.	Within 2 km of the Site, extended to 6 km for Annex 1 and Schedule 1 raptors.

[2] NatureScot (2025a). Recommended bird survey methods to inform impact assessment of onshore windfarms. Updated March 2025.
[3] NatureScot (2025b). Assessing the significance of impacts on bird populations from onshore wind farm that do not affect protected areas. Guidance Note. March 2025.

2.2 Field Surveys

2.2.1 Field survey effort and methodologies were agreed with NatureScot prior to commencement (see **Table 7.1**, **Chapter 7,** EIA Report Volume 2), in order to assess the potential effects of the Proposed Development upon ornithological features. Furthermore, consultation with NatureScot on completion of Year 1 ornithology surveys confirmed that an appropriate level of ornithology baseline survey data had been collected, along with desk study information for the purpose of assessment.

2.2.2 Detailed knowledge of bird populations, distributions, and flight activity has been derived from field surveys undertaken between 2020 and 2021.

2.2.3 Field surveyor knowledge and experience of bird habitat associations at comparable sites has also informed and guided survey effort over the course of surveys.

Field Survey Personnel

2.2.4 All field surveys were completed by experienced and professional ornithologists named in **Annex 2**; all of whom are all fully conversant in recognised bird survey methodologies for wind turbine developments.

Field Methodologies

2.2.5 The following ornithology field surveys were completed:

- Vantage Point (VP) flight activity surveys (September 2020 to August 2021);
- Moorland breeding bird survey (MBBS) (2021);
- Breeding Annex 1 and Schedule 1 raptor and owl searches (2021);
- Breeding black grouse searches (2021);
- Breeding diver searches (2021); and
- Scarce breeding bird survey (2025).

VP Flight Activity Surveys

2.2.6 VP flight activity surveys were undertaken between September 2020 and August 2021, providing coverage of one consecutive non-breeding season (generically, September 2020 to February 2021) and one breeding season (generically, March 2021 to August 2021).

VP Locations and Viewsheds

2.2.7 Three VP locations were required to provide maximum coverage of the VP Study Area (defined as a 500 m buffer around the outermost Proposed Development turbines; in accordance with NatureScot guidance (2025a)[2]).

2.2.8 VP locations used during the survey period, along with ground-truthed modelled areas of visible coverage within the 2 km viewsheds of VPs are shown in **Figure 7.2** (EIA Report Volume 3a) and are presented within **Table 2.2**.

Table 2.2 – VP Locations

VP	Grid Reference	Orientation
1	NH 40397 99102	South southeast
2	NH 41328 96885	North northeast
3	NH 43288 97640	North northwest

VP Survey Effort

2.2.9 The total survey effort (hours) completed at each VP is summarised in **Table 2.3**. Full details of all survey times, field surveyors used, and weather conditions are presented in **Annex 2**.

2.2.10 The total VP survey effort completed at each VP was 108 hours. This comprised, at each VP, of 54 hours during the non-breeding bird season period (September 2020 to February 2021) and 54 hours during the breeding bird season period (March to August 2021). Survey effort during the breeding and non-breeding bird seasons, therefore, exceeded, the 36 hours recommended per VP (in accordance with current NatureScot guidance (2025a)[2]).

2.2.11 Survey times were dispersed throughout the day and were also completed in a range of weather conditions, but always conducive to survey and safe access.

2.2.12 VP flight activity surveys commenced after a short period of “settling in”, to ensure any potential disturbance to target species present within each viewshed had reasonably passed and surveyors were alert to survey following a traverse to each VP location.

2.2.13 In accordance with current NatureScot guidance (2025a)[2], flight lines were mapped for all target species passing through the VP Study Area. Details of species, number of birds, flight height in bands (at, below

or above collision risk height), duration and direction were noted on standardised recording forms and field plans.

2.2.14 Surveyors were stationary until the completion of watches at the VP locations and (when the VP surveys were carried out simultaneously) were in contact to ensure flight lines of target species where they were recorded, were not duplicated.

2.2.15 Height bands (HT) were used in the field to record target species activity at, below or above collision risk height for subsequent use in the calculation of collision mortality risks. Height bands used in the field were based on a preliminary proposed turbine height, with proposed turbine heights considered up to 180 m tip.

2.2.16 Based on the proposed turbine height, height band HT3, HT4 and HT5 incorporate the rotor sweep:

- HT1 <10 m;
- HT2 10-25 m;
- HT3 25-150 m;
- HT4 150-180 m; and
- HT5 >180 m.

Table 2.3 – VP Flight Activity Survey Effort Summary (Hours)

VP	2020				2021								Total
	Non-breeding Season						Breeding Season						
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
1	12	12	6	6	6	12	12	12	6	9	9	6	108
2	12	12	6	6	6	12	12	12	6	9	9	6	108
3	12	12	6	6	6	12	12	12	6	9	9	6	108

Secondary Species

2.2.17 Secondary species were also noted in approximately 5-minute summary intervals, with the number of birds present and general behaviour recorded to build an overall picture of their activity. The 5-minute periods were considered appropriate to ensure surveyors were fully alert to target species activity.

2.2.18 Secondary species are defined here as commoner raptors (e.g. buzzard, kestrel and sparrowhawk), all gulls, raven, feral species and mallard, along with any large concentrations of Schedule 1 or Birds of Conservation Concern (BoCC) Red-listed passerines as recorded during survey.

Moorland Breeding Bird Surveys

2.2.19 Moorland breeding bird surveys (MBBS) were undertaken in 2021.

2.2.20 The MBBS Study Area comprised coverage of open habitats within the Site, extended to include accessible areas of open habitats within 500 m of Site, as shown in **Figure 7.3** (EIA Report Volume 3a) and in accordance with current guidance (NatureScot, 2025a)[2].

2.2.21 The methodology employed followed the Brown and Shepherd (1993)[4] method for censusing upland breeding waders, based upon the recommendations set out in Calladine *et al*. (2009)[5] as per current guidance (NatureScot, 2025a)[2]. The methodology is suitable for moorland and open country species including, waders, skuas, gulls and some wildfowl species however, incidental observations of any raptors, owls or notable passerines (i.e. Schedule 1 and BoCC red-listed) are also recorded.

2.2.22 A series of four staggered visits were completed between April and July 2021.

2.2.23 During each survey visit a pre-determined route was walked through the MBBS Study Area, with all birds seen or heard, and their behaviours (e.g. displaying, carrying food etc.) mapped in the field.

2.2.24 All surveys were undertaken during daylight hours and in fine conditions conducive to survey. Survey effort is summarised in **Table 2.4**. Full details of all survey times, field surveyors used, and weather conditions are presented in **Annex 2.** Given the size of the MBBS Study Area, survey visits were undertaken by a small team of surveyors or over consecutive days.

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

[5] Calladine, J., Garner, G., Wernham, C. and Thiel, A. (2009). The influence of survey frequency on population estimates of moorland breeding birds. Bird Study, 56: 3, 381-388.

Table 2.4 – MBBS Effort

Visit	Date	Start Time (24 hrs)	Finish Time (24 hrs)
1	13/04/2021 15/04/2021	10:40 09:45	16:55 15:45
2	19/05/2021	08:15	15:05
3	17/06/2021	08:30	15:55
4	15/07/2021	08:30	15:10

Breeding Annex 1 and Schedule 1 Raptor and Owl Searches

2.2.25 Searches for Annex 1 and Schedule 1 breeding raptor and owls were undertaken during the breeding season between February and August 2021 with reference to species-specific methodologies outlined in Hardey *et al.* (2013)[6]. The searches commenced in February to capture particularly early in the breeding season eagle and goshawk activity.

2.2.26 Survey effort is summarised in **Table 2.5**. Full details of all survey times, field surveyors used, and weather conditions are presented in **Annex 2**. Given the size of the Breeding Raptor and Owl Study Area, survey visits were typically undertaken by a small team of surveyors and/or over consecutive days.

2.2.27 The Breeding Raptor and Owl Study Area comprised coverage of the Site and, where access allowed, areas out to 2 km, and as shown in **Figures 7.3** (EIA Report Volume 3a), in accordance with current NatureScot guidance (2025a)[2].

Table 2.5 – Breeding Raptor and Owl Search Effort

Date	Start Time (24 hrs)	Finish Time (24 hrs)
24/02/2021	08:15	11:15
25/02/2021	13:00	16:35
09/03/2021	10:25	16:25
19/03/2021	08:10	11:40
25/03/2021	08:15	11:15
14/04/2021	08:10	14:10
05/05/2021	11:00	17:00
28/05/2021	06:45	12:45
18/06/2021	08:00	14:00
28/06/2021	11:50	17:50
07/07/2021	11:05	17:05
19/07/2021	14:50	20:50
12/08/2021	11:10	17:10
26/08/2021	11:25	17:25

Breeding Black Grouse Searches

2.2.28 In accordance with current NatureScot guidance (2025a)[2], searches for lekking black grouse were undertaken in 2021, and consisted of surveys to search for lekking breeding black grouse, between mid-March and mid-April.

2.2.29 The Breeding Grouse Study Area comprised all suitable habitats (e.g. open moorland, woodland edges and tracks) within, and out to 1.5 km, of the Site where access allowed, and as shown in **Figure 7.3** (EIA Report Volume 3a)**,** in accordance with NatureScot guidance (2025a)[2].

2.2.30 Survey effort is summarised in **Table 2.6**. Full details of all survey times, field surveyors used, and weather conditions are presented in **Annex 2**. Given the size of the Breeding Grouse Study Area, survey visits were sometimes undertaken by a small team of surveyors.

[6] Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. and Thompson, D. (2013). Raptors: a field guide to survey and monitoring. Third Edition. The Stationary Office, Edinburgh.

Table 2.6 – Breeding Black Grouse Search Effort

Date	Start Time (24 hrs)	Finish Time (24 hrs)	Sunrise (24 hrs)
18/03/2021	05:25	08:25	06:24
25/03/2021	05:02	08:02	06:05
07/04/2021	05:30	08:30	06:28
14/04/2021	05:10	08:10	06:09

Breeding Diver Searches

2.2.31 In 2021, targeted searches for breeding divers were carried out, with survey visits undertaken in April and May in accordance with Gilbert *et al.* (1998)[7]. The Breeding Diver Study Area comprised all waterbodies on-site and out to 1 km from the Site, as shown in **Figure 7.3** (EIA Report Volume 3a).

2.2.32 Survey effort is summarised in **Table 2.7**. Full details of all survey times, field surveyors used, and weather conditions are presented in **Annex 2**. Note, waterbodies were also checked during the MBBS so any evidence of divers would also have been recorded during the MBBS.

Table 2.7 – Breeding Diver Search Effort

Date	Start Time (24 hrs)	Finish Time (24 hrs)
02/04/2021	09:25	15:00
20/05/2021	12:15	17:30

Scarce Breeding Bird Survey (Western Access Route)

2.2.33 Between early-May and June 2025 (inclusive, with a total of four surveys), a survey was undertaken of the western access route, and surrounding habitats (out to approximately 750 m, where accessible). Target species for the survey were Annex 1 and Schedule 1 raptors and owls, ground-nesting waders and black grouse. The surveys commenced around dawn (at least in early May) to capture the main black grouse lekking period. The Scarce Breeding Bird Study Area is shown in **Figure 7.10** (EIA Report Volume 3a).

2.2.34 Survey effort is summarised in **Table 2.8**. Full details of all survey times, field surveyors used, and weather conditions are presented in **Annex 2**.

Table 2.8 – Scarce Breeding Bird Search Effort

Date	Start Time (24 hrs)	Finish Time (24 hrs)	Sunrise (24 hrs)
02/05/2025	05:40	08:40	05:21
17/05/2025	08:30	14:30	04:47
25/05/2025	08:00	11:00	04:33
03/06/2025	07:00	10:00	04:21

Limitations

2.2.35 Habitats within the Site were accessible. The wider Study Areas used for the MBBS (500 m), breeding diver searches (1 km), Annex 1 and Schedule 1 breeding raptor and owl searches (2 km) and breeding black grouse searches (1.5 km) were surveyed from suitable locations within the Site or from public highways, scanning the Study Areas with the use of optics (telescope and binoculars). Given the good visibility across the Study Area this is not considered a limitation to the results obtained.

2.2.36 Much of the Scarce Breeding Bird Study Area was accessible, although access was not permitted to land on the periphery of the Study Area north of the A837. These habitats will not be affected, and are buffered from the Site by the A837 and thus the areas omission from surveys is not considered a substantive constraint.

2.2.37 Forestry within the Study Areas were surveyed by traversing tracks and clearings rather than walking directly through dense plantation habitat, due to logistical and health and safety considerations. The Study Area was appropriately covered from the accessible tracks and clearings, and this is not therefore considered a limitation to the results obtained.

2.2.38 Given the challenging topographical and large extent of forestry on-site not all the 500 m buffer around proposed turbines could be covered. However, all proposed turbines are appropriately covered by the VP viewsheds, and a relatively high proportion of the 500 m buffer around the proposed turbines. Such minor gaps in survey coverage are often unavoidable and are acceptable (see NatureScot, 2025a)[2]. Furthermore, given access outside the Site (for example to the south) was not granted at the commencement of the VP flight activity surveys, VP locations had to be located within the Site which meant VPs being within 500 m of the proposed turbines. However, surveyors were positioned to be as

[7] Gilbert, G., Gibbons, D.W. and Evans, J. (1998). Bird monitoring methods. A manual of techniques for key UK species. RSPB, Sandy, Bedfordshire.

inconspicuous as possible being located off the brow of any hill and wearing clothing appropriate for survey (not bright colours). There was no evidence that the surveyor presence influenced bird activity and behaviour.

2.2.39 The Study Areas used for field surveys, and search areas for the desk study, were based on previous iteration of the Site boundary. However, given the notable difference was the previous iteration included an extended area to the north the surveys and desk study will have appropriately covered the Site.

2.2.40 Overall, no limitations to the survey data (and desk study data) in establishing an accurate reflection of the levels of target species activity within adopted Study Areas, and particularly the Site, are identified.

3. Results

3.1 Desk Study

Statutory Designated Sites for Nature Conservation

3.1.1 This section should be read with reference to **Figure 7.1** (EIA Report Volume 3a).

3.1.2 The Site does not form part of any statutory designated site for nature conservation with qualifying ornithological interests.

3.1.3 **Table 3.1** summarises statutory designated sites with ornithological features of interest located within 10 km (extended to 20 km for those sites with qualifying migratory goose interest) of the Site.

3.1.4 Distances specified within **Table 3.1** are taken from the Site boundary to the designated site at its nearest point.

Table 3.1 – Designated Sites for Nature Conservation

Designated Site	Distance / Orientation	Ornithological Qualifying Interests
Caithness and Sutherland Peatlands Special Protection Area (SPA) and Ramsar	7.3 km, northeast	Breeding • Red-throated diver; • Black-throated diver; • Hen harrier; • Golden eagle; • Merlin; • Golden plover; • Wood sandpiper; • Short-eared owl; • Dunlin; • Common scoter; • Wigeon, and • Greenshank.
Grudie Peatlands Site of Special Scientific Interest (SSSI)	7.3 km, northeast	Breeding • Dunlin; • Golden plover; and • Greenshank.

Existing Ornithological Records

3.1.5 This section provides a summary of existing ornithological records identified through desk study sources. Only records of 'Priority Species for assessment when considering the development of onshore wind farms in Scotland' and 'Species with restricted ranges' as listed within Annex 1 of NatureScot guidance (2025b)[3] are considered in detail.

3.1.6 The consideration of existing records is also limited to those reported since (and including) 2010, to ensure that the most up to date (and thus relevant to the Proposed Development) records are considered.

3.1.7 Desk study records from the sources (not including designated sites) listed in **Table 2.1** are presented in **Confidential Figure 7.6a-b** (EIA Report Volume 5).

RSPB

3.1.8 Records of seven species were returned from the RSPB: white-tailed eagle, black grouse, osprey, golden plover, curlew, dunlin, and greenshank. These comprised of two black grouse records of 'confirmed breeding', with one record adult(s) with brood, 18 white-tailed eagle records (no confirmed breeding records), two golden plover records (no confirmed breeding), and one osprey, one curlew, one dunlin and one greenshank record (none of the records confirmed breeding). More detailed results are provided in **Confidential Ornithology Technical Appendix 7.3** (EIA Report Volume 5) and shown on **Confidential Figure 7.6a** (EIA Report Volume 5).

HRSG

3.1.9 Records of two species were returned from the HRSG: osprey and golden eagle. These comprised of records of two breeding osprey pairs and two breeding golden eagle pairs. More detailed results are provided in **Confidential Ornithology Technical Appendix 7.3** (EIA Report Volume 5) and shown on **Confidential Figure 7.6b** (EIA Report Volume 5).

HBRG

3.1.10 No ornithology records were returned from the HBRG.

3.1.11 The HBRG confirmed that there are no non-statutory sites for nature conservation within 2 km of the Site.

Nearby Wind Farm Proposals

3.1.12 The existing, publicly available key ornithological information gathered from field surveys which supported wind farm developments in close proximity to the Site is provided in **Table 3.2**.

3.1.13 Existing publicly available EIA documentation related to ornithology for wind farm developments close to the locality of the Site (within 5 km), comprising the consented Strath Oykel Wind Farm (ECU Ref: ECU00003246), consented Meall Buidhe Wind Farm (THC Ref: 20/02659/FUL) and, the at-scoping stage, Inveroykel Wind Farm (THC Ref: 24/04326/SCOP and ECU Ref: ECU00005210) were also reviewed to provide additional baseline ornithological information.

Table 3.2 – Existing Key Ornithological Data from Nearby Wind Farms

Wind Farm Scheme	Distance / Orientation	Key Ornithological Results
Strath Oykel Wind Farm (ECU Ref: ECU00003246) - *Consented*	2.26 km, east	• Surveys undertaken in 2018 - 2020. • Modest numbers of species recorded during VP flight activity surveys including greylag goose (eight flights), white-tailed eagle (eight flights), and hen harrier (four flights). • During breeding bird surveys, curlew (two territories), common snipe (one territory) and golden plover (two territories) were recorded. Also, potentially up to one breeding greenshank territory. • No evidence of breeding black grouse or breeding divers was identified. Although droppings (considered from black grouse) were recorded 500 m from the site. • Only breeding evidence of common raptors was recorded, although a (fledged) juvenile goshawk was recorded in late September south-west of the site, thus indicative of nearby breeding. • Note, the site is largely forested and no notable records relevant to the eastern access route for the Proposed Development were identified.
Meall Buidhe Wind Farm (THC Ref: 20/02659/FUL) - *Consented*	3.78 km, southeast	• Surveys undertaken in 2016 - 2019. • Relatively low numbers of species recorded during VP flight activity surveys including golden plover (35 flights), greenshank (12 flights) and golden eagle (nine flights), with single flights of other species. • During breeding bird surveys: dunlin, golden plover, greenshank, lapwing and snipe were noted as present (and considered potentially breeding). • Lekking black grouse were recorded in the west and northwest of the proposed turbine locations, and a single lekking

Wind Farm Scheme	Distance / Orientation	Key Ornithological Results
		male to the north of the proposed turbines. • No evidence of breeding divers was identified. • Multiple records of raptors were identified, including checks (with redacted information) on checks of schedule 1 raptor nest sites (including golden eagle), and activity of goshawk (considered possibly breeding).
Inveroykel Wind Farm (THC Ref: 24/04326/SCOP and ECU Ref: ECU00005210) - *Scoping*	4.07 km, east	• Surveys are ongoing, and given the wind farm scheme is at the scoping stage there is not much publicly available information at present. The scoping opinion noted greenshank, greylag goose, pink-footed goose, black grouse, red-throated diver, golden eagle, white-tailed eagle, hen harrier, osprey and red kite as being scoped-in for assessment, so it is considered that these are the target species which the surveys (and potentially desk study records) have identified as being present (or potentially present) at the site.

Golden Eagle Topographical (GET) Appraisal Score

3.1.14 A preliminary GET appraisal was undertaken of the Site and surrounding area (out to 10 km) to assess the suitability of the habitats present to support golden eagles. The appraisal was carried out using topographical online OS mapping to score habitats between '1' to '10' to every 50 m pixel, following the GET model approach (Fielding *et al.*, 2020)[8]. Habitat which is scored '6+' is a good indicator of potential golden eagle activity particularly where there are large contiguous blocks, and habitat with a score of '5' or less is considered likely to be used infrequently.

3.1.15 It is understood that golden eagles tend not to use land with a closed forestry cover, irrespective of the GET score which is derived from topographic data only (Fielding *et al.*, 2020)[8]. The Site is predominantly forested and thus considered largely suboptimal for supporting golden eagles. The preliminary GET appraisal (thus not considering the presence of suboptimal forestry on-site) revealed that the Site (excluding the access routes) comprises of 47.07 % GET 6+ habitat (497.24 ha), and 47.66 % (21,736.94 ha) of the surrounding habitat (out to 10 km, not including the Site) is GET 6+ habitat.

3.1.16 On-site, the GET 6+ habitat is predominantly in the north of the Site (spatially distant from the proposed turbines), and along the south-western Site boundary, with the central part of the Site (where the proposed turbines will be located) less suitable for golden eagles (typically scoring 5 or less). The GET appraisal score results are shown in **Figure 7.9** (EIA Report Volume 3a).

3.1.17 Note, the access routes offer very limited potential habitat for golden eagles with all of the eastern access route <GET6+ (and predominantly forested) and the majority of the western access route <GET6+ (as can be seen from **Figure 7.9**, EIA Report Volume 3a).

3.2 Field Surveys

VP Flight Activity Surveys

Target Species

3.2.1 Target Species flight activity recorded during the VP survey period (September 2020 to August 2021) from all VPs combined is summarised in **Table 3.3**.

3.2.2 The total number of all flights, total number of birds recorded, and the total time spent in each height band (HT) (in seconds), from all VP locations combined is presented. This includes some flights which were detected outside of the VP Study Area (500 m turbine buffer) and those which are not at-risk to

[8] Fielding, A.H., Haworth, P., Anderson, D., Benn, S., Dennis, R., Weston, E. and Whitfield, D.P. (2020). A simple topographical model to predict Golden Eagle Aquila chrysaetos space use during dispersal. Ibis 162, 400-415.

collision. Flights recorded within the 'at-risk' window (at collision heights HT3 - 5, and within 300 m of the turbines) are presented in **Table 3.4**.

3.2.3 Detailed flight records are presented in **Annex 3**, which also indicates the total flight time for each species at the different height bands. Flight lines for each species over the survey period are illustrated in **Figures 7.4a – 7.4b** (EIA Report Volume 3a).

Table 3.3 – Target Species Flight Activity Summary (all Flights)

Species	Total No. of Flights	Total No. of Birds	Total Flight Time (secs)
Pink-footed goose	7	369	375
Golden eagle	7	7	3,013
Golden plover	6	17	305
Greenshank	2	3	91
White-tailed eagle	1	2	357
Great skua	1	2	120
Red kite	1	1	501
Greylag goose	1	7	224
Hen harrier	1	1	220
Merlin	1	1	158
Marsh harrier	1	1	90
Goshawk	1	1	50

Table 3.4 – 'At-risk' Target Species Flight Activity Summary

Species	Total No. of Flights	Total No. of Birds	Total Flight Time (secs)
Pink-footed goose	5	238	315
Golden plover	4	12	269
Golden eagle	3	3	1,437
White-tailed eagle	1	2	357
Great skua	1	2	120
Red kite	1	1	501
Greenshank	1	1	71
Merlin	1	1	158
Marsh harrier	1	1	90
Goshawk	1	1	50

Secondary Species

3.2.4 Modest levels of activity of the following secondary species were also recorded:

- Raven;
- Buzzard;
- Sparrowhawk;
- Kestrel, and
- Common gull.

Collision Risk Mortality

Target Species

3.2.5 Where sufficient at-risk flight activity data has allowed, collision risk mortality modelling (CRM) as a result of birds colliding with rotor blades has been assessed for target species. The threshold used was ≥3 at-risk flights, or ≥ 10 birds. This meant that golden eagle and golden plover were subject to CRM analysis, using the SNH CRMs as detailed in Band *et al*. (2007)[9], Band (2024)[10] and NatureScot guidance (SNH, 2000)[11]. Note, no CRM analysis is undertaken on pink-footed goose given there are no international

[9] Band, W., Madders, M. and Whitfield, D.P. (2007). Developing field and analytical methods to assess avian collision risk at wind farms. In: Janss, G, de Lucas, M & Ferrer, M (eds.) Birds and Wind Farms. Quercus, Madrid. 259-275.

[10] Band, W. (2024). Using a collision risk model to assess bird collision risks for onshore wind farms. NatureScot Research Report 909.

[11] SNH (2000). Windfarms and Birds – Calculating a theoretical collision risk assuming no avoiding action. SNH Guidance Note.

designated sites with pink-footed goose as a qualifying species within 20 km of the Site and thus connectivity with such a SPA is precluded (NatureScot, 2024)[12].

3.2.6 Full details are provided in **Technical Appendix 7.2** (EIA Report Volume 4).

MBBS

3.2.7 Surveys in 2021 recorded a modest breeding bird assemblage within the MBBS Study Area as summarised in **Table 3.5** and illustrated in **Figure 7.5** (EIA Report Volume 3a). Many of the wading species were concentrated on habitats associated with the River Oykel north of the Site, and also (to a lesser extent) open habitats on-site (in the north), and south of the Site. The breeding gulls were recorded at Loch Mhic Mharsaill along the eastern access route, as well as breeding teal and little grebe.

Table 3.5 – MBBS Results

Species	No. Territories Within MBBS Study Area
Curlew	8
Oystercatcher	5
Golden plover	2
Common snipe	2
Common sandpiper	2
Little grebe	2
Common gull	2
Black-headed gull	1
Woodcock	1
Teal	1
Tufted duck	1
Greylag goose	1

Breeding Annex 1 and Schedule 1 Raptor and Owl Searches

3.2.8 A suspected barn owl nest (or roost) site was recorded within the Breeding Raptor and Owl Study Area west of the Site, in 2021, and given the sensitivity of the record this is presented in **Confidential Figure 7.7** (EIA Report Volume 5).

3.2.9 An active osprey nest was recorded west of the Site, in 2021, and given the sensitivity of the record this is presented in **Confidential Figure 7.7** (EIA Report Volume 5).

3.2.10 Activity of other raptors recorded in 2021 were red kite, white-tailed eagle, goshawk, hen harrier, golden eagle and hobby, although no evidence was identified of these species holding breeding territories. Anecdotal evidence suggests a white-tailed eagle nest site in the wider area (>10 km), northwest of the Site and thus outside the Study Area.

Breeding Black Grouse Searches

3.2.11 One lek comprising of 12 males was located, and a further two locations with solo males (one lekking male, and another male flushed from potentially suitable lekking habitat in mid-April) were recorded in 2021, in the Breeding Grouse Study Area. Given the sensitivity of the records these are presented in **Confidential Figure 7.8** (EIA Report Volume 5).

Breeding Diver Searches

3.2.12 No divers were recorded during surveys, in 2021, with no evidence of breeding within the Breeding Diver Study Area.

Scarce Breeding Bird Surveys of the Western Access Route

3.2.13 One breeding curlew pair, one golden plover pair, two breeding snipe pairs and one breeding red grouse pair were recorded in the Scarce Breeding Bird Study Area (see **Figure 7.10**, EIA Report Volume 3a).

3.2.14 One female black grouse was flushed within forestry in the west of the Scarce Breeding Bird Study Area, and one male black grouse was flushed from open habitat near the edge of forestry (at NH38566 99234) and flew into the forestry plantation. Neither black grouse record was indicative of lekking activity.

[12] NatureScot (2024). Wind farm impacts on birds. Careful siting and design of wind farm developments can avoid significant impacts on birds. Available at: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/onshore-wind-energy/wind-farm-impacts-birds

Annex 1 – Bird Species Summary

Table A1.1 provides a list of bird species referred to within **Chapter 7: Ornithology** (EIA Report Volume 2). Both common and species names are presented along with a summary of each species conservation status using the following abbreviations:

- 'Ann1' - species listed on Annex 1 of the Birds Directive (2009/147/EC);
- 'Sch1.1', 'Sch1A', 'SchA1' - species listed on Schedule 1 part 1, Schedule 1 part 1A or Schedule 1 part A1 of the Wildlife and Countryside Act (1981, as amended);
- 'Sch1.2' – species listed on Schedule 1 part 2 of the Wildlife and Countryside Act (1981, as amended), with protection during the 'close season';
- 'SBL' - species listed on the Scottish Biodiversity List;
- BoCC 'Red' and 'Amber' - BoCCs as listed by leading bird conservation organisations in the UK, including the RSPB and the British Trust for Ornithology (BTO). Conservation status (Red and Amber categories) is provided, given these are the species which have suffered the greatest declines, in accordance with Stanbury *et al.* (2021)[13], or Stanbury et al. (2024)[14] for those conservation statuses for seabirds with an asterisk* in Table A1-1;
- 'RBBP' – listed as one of the species that the UK Rare Breeding Bird Panel reports on; and
- 'LBAP' - species listed as a local priority species in the Local Biodiversity Plan for the Highlands.

Table A1.1 – Species Common and Scientific Names and Conservation Status

Common Name	Scientific Name	Conservation Status
Greylag goose	*Anser anser*	Amber; Sch1.2 (Outer Hebrides, Caithness, Sutherland and Wester Ross only)
Pink-footed goose	*Anser brachyrhynchus*	Amber; RBBP
Wigeon	*Mareca penelope*	Amber; RBBP
Mallard	*Anas platyrhynchos*	Amber
Teal	*Anas crecca*	Amber
Tufted duck	*Aythya fuligula*	-
Common scoter	*Melanitta nigra*	Red; Sch1.1; SBL; RBBP, LBAP
Black grouse	*Lyrurus tetrix*	Red; SBL, LBAP
Red grouse	*Lagopus scotica*	Amber, SBL
Little grebe	*Tachybaptus ruficollis*	-
Oystercatcher	*Haematopus ostralegus*	Amber, LBAP
Lapwing	*Vanellus vanellus*	Red; SBL, LBAP
Golden plover	*Pluvialis apricaria*	SBL; Ann1, LBAP
Curlew	*Numenius arquata*	Red; SBL, LBAP
Dunlin	*Calidris alpina*	Red; SBL, LBAP
Woodcock	*Scolopax rusticola*	Red; SBL
Common snipe	*Gallinago gallinago*	Amber, LBAP
Common sandpiper	*Actitis hypoleucos*	Amber
Wood sandpiper	*Tringa glareola*	Amber; Sch1.1; SBL; Ann1; RBBP, LBAP
Greenshank	*Tringa nebularia*	Amber; Sch1.1; RBBP, LBAP
Black-headed gull	*Chroicocephalus ridibundus*	Amber*; SBL
Common gull	*Larus canus*	Red*
Great skua	*Stercorarius skua*	Red*
Red-throated diver	*Gavia stellata*	Sch1.1; SBL; Ann1; RBBP, LBAP
Black-throated diver	*Gavia arctica*	Amber; Sch1.1; SBL; Ann1; RBBP, LBAP
Grey heron	*Ardea cinerea*	-

13 Stanbury, A., Eaton, M., Aebischer, N., Balmber, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and the Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747.
14 Stanbury, A., Burns, F., Aebischer, N., Baker, H., Balmer, D., Brown, A., Dunn, T., Lindley, P., Murphy, M., Noble, D., Owens, R., and Quinn L. (2024). The status of UK's breeding seabirds: an addendum to the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 117: 471-487.

Common Name	Scientific Name	Conservation Status
Osprey	*Pandion haliaetus*	Amber; Sch1.1; SBL; Ann1; RBBP
Golden eagle	*Aquila chrysaetos*	Sch1.1/1A/A1; SBL; Ann1; RBBP, LBAP
Sparrowhawk	*Accipiter nisus*	Amber
Goshawk	*Astur gentilis*	Sch1.1; RBBP, LBAP
Marsh harrier	*Circus aeruginosus*	Amber; Sch1.1; SBL; Ann1; RBBP
Hen harrier	*Circus cyaneus*	Red; Sch1.1 & 1A; SBL; Ann1; RBBP, LBAP
Red kite	*Milvus milvus*	Sch1.1 & 1A; SBL; Ann1, LBAP
White-tailed eagle	*Haliaeetus albicilla*	Amber; Sch1.1, 1A & A1; SBL; Ann1; RBBP, LBAP
Buzzard	*Buteo buteo*	-
Barn owl	*Tyto alba*	Sch1.1; SBL
Short-eared owl	*Asio flammeus*	Amber; SBL; Ann1; RBBP
Kestrel	*Falco tinnunculus*	Amber; SBL
Merlin	*Falco columbarius*	Red; Sch1.1; SBL; Ann1; RBBP, LBAP
Hobby	*Falco subbuteo*	Sch1.1; SBL; RBBP
Raven	*Corvus corax*	-

Annex 2 – Ornithology Field Survey Effort

The following codes are used to record weather conditions within **Tables A2-1** to **A2.6**.

Wind Speed		**Rain**		**Cloud Cover**	
Calm	0	None	0	Out of 8	
Light air	1	Drizzle/mist	1		
Light breeze	2	Light showers	2	**Frost**	
Gentle breeze	3	Heavy showers	3	None	0
Moderate breeze	4	Heavy rain	4	Ground	1
Fresh breeze	5			All day	2
Strong breeze	6	**Visibility**			
Moderate gale	7	Poor	0	**Snow**	
Fresh gale	8	<1 km	1	None	0
Strong gale	9	>1 km	2	On-site	1
Whole gale	10			High ground	2
Storm	11	**Cloud Height**			
		<150 m	0		
Wind Direction		150-500 m	1		
16-point compass		>500 m	2		

The following field surveyors carried out the suite of ornithology surveys: A. McNab (AJM), P. Carroll (PC), M. Wood (MW), G. Dunbar (GD), S. MacDonald (SM), N. Voaden (NV), J. Sykes (JS), A. Hutt (AH), A. Little (AL), M. Eade (ME), E. Richens (ER), and K. Little (KL).

Table A2.1 – VP Flight Activity Survey Effort (September 2020 to August 2021)

Date	VP	Surveyor	Start Time	Finish Time	VP Hours	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
03/09/2020	1	PC	11:30	14:30	3	4/4/4	SW/SW/SW	0/0/2	5/5/6	2/2/2	2/2/2	0/0/0	0/0/0
03/09/2020	1	PC	15:00	18:00	3	4/3/4	SW/WSW/WSW	2/2/0	7/6/4	2/2/2	2/2/2	0/0/0	0/0/0
08/09/2020	2	SM	10:30	13:30	3	3/4/3	W/WSW/WSW	0/0/0	6/8/8	2/2/2	2/2/2	0/0/0	0/0/0
08/09/2020	2	SM	14:00	17:00	3	4/3/3	SW/WSW/WNW	0/2/3	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
09/09/2020	3	SM	09:55	12:55	3	6/6/5	W/WNW/WNW	3/2/2	8/7/8	2/2/2	2/2/2	0/0/0	0/0/0
09/09/2020	3	SM	13:25	16:25	3	5/5/5	NW/WNW/WNW	0/2/0	7/7/6	2/2/2	2/2/2	0/0/0	0/0/0
23/09/2020	3	AL	09:30	12:30	3	1/2/2	WSW/WSW/W	0/0/0	4/4/3	2/2/2	2/2/2	0/0/0	0/0/0
23/09/2020	3	AL	13:00	16:00	3	0/0/0	0/0/0	0/0/3	4/6/6	2/2/2	2/2/2	0/0/0	0/0/0
29/09/2020	1	SM	09:35	12:35	3	1/1/2	SE/SE/SW	0/0/0	1/4/6	2/2/2	2/2/2	0/0/0	0/0/0
29/09/2020	1	SM	13:05	16:05	3	2/2/2	S/S/SSE	0/0/0	2/3/2	2/2/2	2/2/2	0/0/0	0/0/0
30/09/2020	2	SM	09:00	12:00	3	4/3/2	SSE/SSE/SSE	0/0/2	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
30/09/2020	2	SM	12:30	15:30	3	2/1/2	SSE/S/SSW	1/2/3	8/8/8	2/2/1	2/2/2	0/0/0	0/0/0
13/10/2020	3	SM	10:10	13:10	3	3/4/3	NE/NE/NE	0/2/0	8/8/7	2/2/2	2/2/2	0/0/0	0/0/0
13/10/2020	3	SM	13:40	16:40	3	4/4/3	N/NNE/NNE	2/3/0	7/7/7	2/2/2	2/2/2	0/0/0	0/0/0
14/10/2020	1	SM	07:20	10:20	3	1/2/2	ESE/SE/E	0/0/0	6/5/5	2/2/2	2/2/2	0/0/0	0/0/0
14/10/2020	1	SM	10:50	13:50	3	3/1/2	ESE/SSE/E	0/0/0	7/6/6	2/2/2	2/2/2	0/0/0	0/0/0
15/10/2020	2	SM	10:10	13:10	3	2/2/2	NE/E/ENE	0/0/0	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
15/10/2020	2	SM	13:40	16:40	3	2/1/2	E/SE/SE	0/2/0	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
28/10/2020	1	MW	10:40	13:30	3	0/0/0	/-/-/-/	0/0/0	5/4/4	2/2/2	2/2/2	0/0/0	0/0/0
28/10/2020	1	MW	14:10	17:10	3	0/0/1	/-/-/SW	0/0/0	4/5/5	2/2/2	2/2/2	0/0/0	0/0/0
29/10/2020	2	MW	08:50	11:50	3	1/1/2	S/S/S	0/0/0	2/3/4	2/2/2	2/2/2	0/0/0	0/0/0
29/10/2020	2	MW	12:20	15:20	3	2/2/3	SW/SW/SW	1/2/3	6/7/7	2/2/2	2/2/2	0/0/0	0/0/0
30/10/2020	3	MW	07:05	10:05	3	3/3/4	SW/SW/SW	1/2/0	5/3/3	2/2/2	2/2/2	0/0/0	0/0/0
30/10/2020	3	MW	10:35	13:35	3	4/4/4	SW/SW/SW	0/0/0	4/3/2	2/2/2	2/2/2	0/0/0	0/0/0
16/11/2020	3	SM	10:00	13:00	3	4/5/5	W/W/W	3/2/0	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
16/11/2020	3	SM	13:30	16:30	3	4/4/3	WSW/WSW/WSW	0/0/0	7/5/5	2/2/2	2/2/2	0/0/0	0/0/0
17/11/2020	2	SM	09:55	12:55	3	2/2/3	WNW/WNW/SW	0/2/0	8/8/7	1/1/2	2/2/2	0/0/0	0/0/0
17/11/2020	2	SM	13:25	16:25	3	2/2/2	W/WNW/WSW	0/0/0	7/8/8	2/2/2	2/2/2	0/0/0	0/0/0
18/11/2020	1	SM	09:25	12:25	3	2/3/3	WNW/WNW/WSW	3/2/0	8/8/7	1/1/2	2/2/2	0/0/0	0/0/0
18/11/2020	1	SM	12:55	15:55	3	3/4/3	WSW/WSW/WSW	0/3/2	7/8/8	2/2/2	2/2/2	0/0/0	0/0/0
02/12/2020	3	SM	08:10	11:10	3	4/4/4	WSW/WSW/SW	2/0/0	8/2/4	2/2/2	2/2/2	0/0/0	2/2/2
02/12/2020	3	SM	11:40	14:40	3	4/4/4	SW/SW/WSW	3/0/0	8/5/2	2/2/2	1/2/2	0/0/0	2/2/2
08/12/2020	1	SM	09:05	12:05	3	2/3/3	NW/NW/WNW	2/2/0	7/7/6	1/1/2	2/2/2	0/0/0	2/2/2
08/12/2020	1	SM	12:35	15:35	3	3/3/3	WNW/WNW/W	0/2/0	8/7/5	1/2/2	2/2/2	0/0/0	2/2/2
10/12/2020	2	SM	09:15	12:15	3	2/3/3	ESE/ESE/ESE	2/2/0	8/8/8	2/2/2	2/2/2	0/0/0	2/2/2

Date	VP	Surveyor	Start Time	Finish Time	VP Hours	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
10/12/2020	2	SM	12:45	15:45	3	3/3/4	ESE/ESE/ESE	0/0/0	8/8/7	2/2/2	2/2/2	0/0/0	2/2/2
11/01/2021	3	SM	13:25	16:25	3	2/3/3	WNW/WNW/WNW	3/0/0	8/8/7	1/2/2	2/2/2	0/0/0	1/1/1
13/01/2021	1	SM	09:20	12:20	3	2/2/3	ESE/ESE/ESE	0/0/0	8/8/8	2/2/2	2/2/2	1/1/0	1/1/1
13/01/2021	1	SM	12:50	15:50	3	3/3/3	ESE/ESE/ESE	0/0/0	8/8/8	2/2/2	2/2/2	0/0/0	1/1/1
14/01/2021	2	SM	09:10	12:10	3	2/2/2	SE/SE/SE	0/2/3	8/8/8	2/2/2	2/2/2	0/0/0	1/1/1
14/01/2021	2	SM	12:40	15:40	3	2/2/1	SE/SE/SSE	3/1/0	8/8/8	2/1/1	2/2/1	0/0/0	1/1/1
15/01/2021	3	SM	08:20	11:20	3	2/2/2	WSW/SW/SW	0/0/0	1/1/1	2/2/2	2/2/2	0/0/0	1/1/1
22/02/2021	1	MW	11:30	14:30	3	3/2/2	SW/SW/SW	0/0/0	1/1/2	2/2/2	2/2/2	1/1/0	1/1/1
22/02/2021	1	MW	15:00	18:00	3	1/0/0	SW/-/-	0/0/0	4/5/6	2/2/2	2/2/2	0/0/0	1/1/1
23/02/2021	3	MW	07:00	10:00	3	3/1/2	S/SSE/SSE	0/0/0	7/8/8	2/2/2	2/2/2	0/0/0	1/1/1
23/02/2021	3	MW	10:30	13:30	3	3/4/4	SSE/SSE/SSE	2/2/3	8/8/8	2/2/2	2/2/2	0/0/0	1/1/1
24/02/2021	2	MW	11:40	14:40	3	4/4/4	SW/SW/SW	0/0/0	2/1/1	2/2/2	2/2/2	0/0/0	2/2/2
24/02/2021	2	MW	15:10	18:10	3	4/4/4	SW/SW/SW	0/0/0	1/2/2	2/2/2	2/2/2	0/0/0	2/2/2
25/02/2021	1	MW	06:55	09:55	3	4/4/4	SW/SW/SW	0/2/2	7/7/7	2/2/2	2/2/2	0/0/0	2/2/2
25/02/2021	1	MW	10:25	13:25	3	4/4/4	SW/SW/SW	2/1/3	7/7/7	2/2/2	2/2/2	0/0/0	2/2/2
26/02/2021	3	MW	06:50	09:50	3	3/3/2	SW/SW/SW	0/0/0	4/3/3	2/2/2	2/2/2	0/0/0	2/2/2
26/02/2021	3	MW	10:20	13:20	3	2/2/2	SW/SW/SW	0/0/0	2/2/2	2/2/2	2/2/2	0/0/0	2/2/2
28/02/2021	2	AJM	10:55	13:55	3	2/2/2	SW/SW/SW	0/0/0	1/2/3	2/2/2	2/2/2	0/0/0	2/2/2
28/02/2021	2	AJM	14:25	17:25	3	2/3/3	SW/SW/SW	0/0/0	4/6/6	2/2/2	2/2/2	0/0/0	2/2/2
03/03/2021	2	SM	06:35	09:35	3	1/1/1	NW/NNW/N	1/1/0	8/8/8	1/1/2	1/1/2	1/1/0	2/2/2
03/03/2021	2	SM	10:05	13:05	3	1/1/1	NNE/NE/ENE	0/0/0	8/8/8	2/2/2	2/2/2	0/0/0	2/2/2
05/03/2021	1	SM	06:30	09:30	3	1/1/1	NE/NNW/ENE	0/0/0	1/2/5	2/2/2	2/2/2	1/1/1	2/2/2
05/03/2021	1	SM	10:00	13:00	3	1/1/1	WNW/WNW/WNW	0/0/0	8/8/8	2/2/2	2/2/2	0/0/0	2/2/2
11/03/2021	3	SM	08:55	11:55	3	4/4/5	WSW/W/W	2/0/2	8/7/8	2/2/2	2/2/2	0/0/0	2/2/2
11/03/2021	3	SM	12:25	15:25	3	5/5/5	W/W/W	2/2/0	7/8/7	2/2/2	2/2/2	0/0/0	2/2/2
18/03/2021	1	SM	08:45	11:45	3	2/3/3	W/W/WNW	1/1/0	8/8/8	1/1/1	1/1/2	0/0/0	2/2/2
18/03/2021	1	SM	12:15	15:15	3	3/3/3	WNW/WNW/WNW	0/0/0	8/8/8	1/1/2	2/2/2	0/0/0	2/2/2
23/03/2021	2	AL	11:30	14:30	3	4/4/4	SSW/SSW/SSW	0/0/0	6/4/6	2/2/2	2/2/2	0/0/0	0/0/0
23/03/2021	2	AL	15:00	18:00	3	5/4/4	SW/SSW/SSW	0/0/2	6/7/8	2/2/2	2/2/2	0/0/0	0/0/0
24/03/2021	3	KL	09:45	12:45	3	4/4/4	WSW/SW/SW	2/0/0	4/4/5	2/2/2	2/2/2	0/0/0	2/2/2
24/03/2021	3	KL	13:15	16:15	3	4/4/4	SW/SW/SSW	0/2/2	7/8/7	2/2/2	2/2/2	0/0/0	2/2/2
08/04/2021	1	SM	12:05	15:05	3	3/3/4	WNW/WNW/NW	1/3/0	8/8/8	2/2/2	2/2/2	0/0/0	2/2/2
08/04/2021	1	SM	15:35	18:35	3	4/5/4	W/W/W	0/3/0	7/8/7	2/2/2	2/2/2	0/0/0	2/2/2
20/04/2021	2	SM	09:30	12:30	3	2/3/3	WNW/NW/NW	0/0/0	7/7/6	2/2/2	2/2/2	0/0/0	0/0/0
20/04/2021	2	SM	13:00	16:00	3	3/4/4	WNW/NW/NW	0/0/0	6/7/7	2/2/2	2/2/2	0/0/0	0/0/0
21/04/2021	3	JS	10:05	13:05	3	1/2/1	NE/NE/NE	0/0/0	1/1/1	2/2/2	2/2/2	0/0/0	0/0/0

Date	VP	Surveyor	Start Time	Finish Time	VP Hours	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
21/04/2021	3	JS	13:35	16:35	3	2/2/1	NE/NNE/NNE	0/0/0	1/1/1	2/2/2	2/2/2	0/0/0	0/0/0
22/04/2021	3	AJM	06:05	09:05	3	2/2/2	NW/WNW/WNW	0/0/0	1/1/1	2/2/2	2/2/2	0/1/0	0/0/0
22/04/2021	3	AJM	09:35	12:35	3	2/2/3	WNW/WNW/WNW	0/0/0	1/3/6	2/2/2	2/2/2	0/0/0	0/0/0
26/04/2021	1	JS	17:00	20:00	3	2/1/2	WNW/NW/W	0/2/0	7/8/7	1/1/1	2/2/2	0/0/0	0/0/0
28/04/2021	1	AJM	05:55	08:55	3	1/1/2	W/WNW/N	0/0/0	1/2/4	2/2/2	2/2/2	1/0/0	0/0/0
27/04/2021	2	JS	09:15	12:15	3	4/4/5	ENE/NE/NE	0/2/3	8/8/8	1/1/1	2/2/2	0/0/0	0/0/0
27/04/2021	2	JS	12:45	15:45	3	5/5/4	NE/NE/NE	2/1/0	8/8/7	1/1/1	2/2/2	0/0/0	0/0/0
02/05/2021	1	JS	07:30	10:30	3	2/3/3	NW/NW/N	0/0/0	2/3/3	1/1/1	2/2/2	0/0/0	0/0/0
02/05/2021	1	JS	11:00	14:00	3	2/3/1	NE/NE/NE	2/0/2	7/8/5	2/2/2	2/2/2	0/0/0	0/0/0
04/05/2021	3	NV	11:25	14:25	3	4/4/4	NNE/NNE/NNE	0/0/0	4/5/5	2/2/2	2/2/2	0/0/0	0/0/0
04/05/2021	3	NV	14:55	17:55	3	3/4/3	NNE/NNE/NNE	0/0/2	6/7/6	2/2/2	2/2/2	0/0/0	0/0/0
14/05/2021	2	AL	09:30	12:30	3	3/2/3	NE/E/NE	2/0/0	8/8/8	1/2/2	2/2/2	0/0/0	0/0/0
14/05/2021	2	AL	13:00	16:00	3	2/3/2	E/NE/E	0/0/0	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
02/06/2021	3	MW	19:30	22:30	3	3/3/3	S/S/S	0/0/0	5/5/6	2/2/2	2/2/2	0/0/0	0/0/0
03/06/2021	2	MW	10:30	13:30	3	2/2/2	S/S/S	0/0/0	4/5/5	2/2/2	2/2/2	0/0/0	0/0/0
10/06/2021	1	NV	06:00	09:00	3	0/3/4	SSW/SSW/SSW	0/0/0	8/8/7	2/2/2	2/2/2	0/0/0	0/0/0
10/06/2021	1	NV	09:30	12:30	3	4/3/2	S/S/SSW	0/0/0	7/8/8	2/2/2	2/2/2	0/0/0	0/0/0
15/06/2021	3	SM	11:05	14:05	3	2/3/3	SSE/SE/SE	0/0/0	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
15/06/2021	3	SM	14:35	17:35	3	3/2/2	SE/SSE/SSE	2/3/2	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
19/06/2021	1	AH	16:45	19:45	3	3/3/3	E/E/E	0/0/1	7/6/8	2/2/2	2/2/2	0/0/0	0/0/0
21/06/2021	2	AH	08:15	11:15	3	3/3/3	NW/NW/NW	0/2/2	7/5/6	2/2/2	2/2/2	0/0/0	0/0/0
21/06/2021	2	AH	11:45	14:45	3	3/3/3	NW/NW/NW	0/2/0	8/8/6	2/2/2	2/2/2	0/0/0	0/0/0
12/07/2021	3	AJM	12:30	15:30	3	3/3/3	ENE/ENE/ENE	0/0/0	3/3/6	2/2/2	2/2/2	0/0/0	0/0/0
12/07/2021	3	AJM	16:00	19:00	3	3/3/3	ENE/E/ESE	0/0/2	6/3/7	2/2/2	2/2/2	0/0/0	0/0/0
14/07/2021	2	AJM	07:10	10:10	3	2/2/3	W/W/W	1/0/0	8/8/7	1/2/2	1/2/2	0/0/0	0/0/0
14/07/2021	1	NV	11:30	14:30	3	2/3/3	WSW/WSW/SW	0/0/0	6/5/6	2/2/2	2/2/2	0/0/0	0/0/0
14/07/2021	1	NV	15:00	18:00	3	3/3/4	SW/SW/SW	0/0/0	7/7/6	2/2/2	2/2/2	0/0/0	0/0/0
19/07/2021	2	JS	15:05	18:05	3	3/3/3	WNW/WNW/WNW	0/0/0	8/8/7	2/2/2	2/2/2	0/0/0	0/0/0
19/07/2021	2	JS	18:35	21:35	3	3/3/3	WNW/WNW/WNW	0/0/0	8/7/8	2/2/2	2/2/2	0/0/0	0/0/0
27/07/2021	3	NV	10:30	13:30	3	1/2/3	E/E/E	0/0/0	7/8/7	2/2/2	2/2/2	0/0/0	0/0/0
27/07/2021	1	NV	14:30	17:30	3	3/3/3	E/E/E	0/0/0	7/8/8	2/2/2	2/2/2	0/0/0	0/0/0
23/08/2021	1	SM	12:10	15:10	3	2/2/2	ESE/NNW/NW	0/0/0	6/5/5	2/2/2	2/2/2	0/0/0	0/0/0
23/08/2021	1	SM	15:40	18:40	3	2/3/3	NNW/NNW/NNW	0/0/0	5/7/8	2/2/2	2/2/2	0/0/0	0/0/0
24/08/2021	2	SM	10:55	13:55	3	3/3/3	WNW/WNW/NNW	0/0/0	0/0/0	-/-/-	2/2/2	0/0/0	0/0/0
24/08/2021	2	SM	14:25	17:25	3	3/3/3	NW/NW/WNW	0/0/0	0/0/0	-/-/-	2/2/2	0/0/0	0/0/0
27/08/2021	3	GD	07:00	10:00	3	0/0/2	-/-/E	0/0/0	8/8/0	2/2/2	2/2/2	0/0/0	0/0/0

Date	VP	Surveyor	Start Time	Finish Time	VP Hours	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
27/08/2021	3	GD	10:30	13:30	3	2/2/2	E/E/E	0/0/0	0/0/0	2/2/2	2/2/2	0/0/0	0/0/0

Table A2.2 – MBBS (2021)

Date	Surveyor	Start Time	Finish Time	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
13/04/2021	SM	10:40	16:55	1/1/2/1/1/2	NA/NA/NA/WSW/SW/SW	0/0/0/0/0/0	1/1/1/1/1/3	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	2/2/2/2/2/2
15/04/2021	SM	09:45	15:45	1/2/2/2/2/2	SE/WSW/W/WSW/WSW/WSW	0/0/0/0/0/0	1/1/1/1/3/2	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	2/2/2/2/2/2
19/05/2021	SM	08:15	14:15	1/1/1/2/2/2	NNW/N/NNE/ENE/ENE/ENE	1/1/2/0/0/0	8/8/8/8/8/7	1/1/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
19/05/2021	AJM	08:30	15:05	1/1/2/2/2/1	NNE/NNE/N/NNW/N/NNE	2/2/0/0/0/2	6/7/6/7/6/7	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
17/06/2021	NV	08:30	14:30	2/3/3/3/3/2	SW/SW/SW/WSW/W/W	0/0/0/0/0/0	6/7/7/6/7/8	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
17/06/2021	SM	08:50	15:55	4/3/3/3/3/3/3	SW/WSW/WSW/WSW/WSW/W/W	0/0/0/0/0/0/0	7/8/8/8/8/6/5	2/2/2/2/2/2/2	2/2/2/2/2/2/2	0/0/0/0/0/0/0	0/0/0/0/0/0//0
15/07/2021	AJM	08:30	15:10	3/3/3/3/2/2	WNW/WNW/WNW/W/W/W	0/0/0/0/0/0	5/3/2/2/4/5	2/2/2/2/2/2/2	2/2/2/2/2/2/2	0/0/0/0/0/0/0	0/0/0/0/0/0//0
15/07/2021	NV	08:30	14:30	4/3/3/3/3/4	W/W/W/W/WSW/WSW	0/0/0/0/0/0	5/3/2/1/2/3	2/2/2/2/2/2/2	2/2/2/2/2/2/2	0/0/0/0/0/0/0	0/0/0/0/0/0//0

Table A2.3 – Breeding Annex 1 and Schedule 1 Raptor and Owl Search Effort (2021)

Date	Surveyor	Start Time	Finish Time	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
24/02/2021	MW	08:15	11:15	2/2/3	SW/SW/SW	0/0/0	4/3/2	2/2/2	2/2/2	0/0/0	2/2/2
25/02/2021	SM	13:00	16:00	5/4/3	W/W/W	3/2/0	8/8/7	2/2/2	2/2/2	0/0/0	0/0/0
25/02/2021	MW	13:35	16:35	4/3/2	SW/SW/SW	1/0/0	6/5/5	2/2/2	2/2/2	0/0/0	0/0/0
09/03/2021	PC & GD	10:25	16:25	3/3/3/4/3/3	S/SSE/SSE/SSE/S/S	0/0/0/0/0/0	7/8/8/8/8/8	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
19/03/2021	SM	08:10	11:40	3/3/2/2	NW/NW/NW/NW	0/0/0/1	7/6/6/8	2/2/2/2	2/2/2/2	0/0/0/0	2/2/2/2
25/03/2021	AL & KL	08:15	11:15	1/2/2	WNW/SW/WNW	0/0/0	7/6/6	2/2/2	2/2/2	0/0/0	0/0/0
14/04/2021	SM	08:10	14:10	2/2/1/1/2/2	WNW/WNW/WNW/NW/NW/NNE	0/0/0/0/0/0	8/8/8/8/8/8	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
05/05/2021	PC	11:00	17:00	3/3/3/3/3/3	NW/NW/NW/NW/NW/NW	2/2/2/2/3	5/4/4/5/5/5	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
28/05/2021	NV	06:45	12:45	2/3/2/3/3/4	SE/ESE/ESE/ESE/ESE/ESE	0/0/0/0/0/0	8/8/7/3/1/0	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
18/06/2021	SM	08:00	14:00	3/2/3/3/3	WNW/WNW/WNW/W/W	2/2/0/0/0	7/7/7/6/5	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
28/06/2021	NV	11:50	17:50	4/4/3/4/3/4	NW/NW/NW/NW/NW/NW	0/0/0/0/0/0	0/0/0/0/1/2	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0

07/07/2021	MW	11:05	17:05	2/2/3/2/2/1	NW/NW/NW/NW/NW/NW	0/0/0/1/0/0	8/8/8/8/8/7	1/1/1/1/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
19/07/2021	PC	14:50	20:50	3/3/3/3/3/3	WNW/WNW/WNW/WNW/WNW/WNW	0/0/0/0/0/0	7/7/7/6/7/7	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
12/08/2021	AJM	11:10	17:10	3/2/2/3/4/4	SW/SSW/S/S/S/S	0/0/0/0/0/0	7/8/8/7/7/7	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
26/08/2021	SM	11:25	17:25	1/2/3/3/2/3	SE/SE/S/ENE/NE/ESE	0/0/0/0/0/0	8/0/0/0/0/0	1/-/-/-/-/-	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0

Table A2.4 – Breeding Black Grouse Search Effort (2021)

Date	Surveyor	Start Time	Finish Time	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
18/03/2021	SM	05:25	08:25	2/3/2	NW/WNW/W	0/0/1	8/8/8	1/1/1	2/2/2	0/0/0	0/0/0
25/03/2021	AL & KL	05:02	08:02	1/1/1	NE/SSE/S	0/0/0	8/7/6	2/2/2	2/2/2	0/0/0	0/0/0
07/04/2021	SM	05:30	08:30	2/1/1	WNW/NW/NW	2/0/2	8/8/7	1/2/2	2/2/2	1/1/0	1/1/1
14/04/2021	SM	05:10	08:10	1/1/1	WNW/WNW/NW	0/0/0	1/5/8	2/2/2	2/2/2	1/1/0	2/2/2

Table A2.5 – Breeding Diver Search Effort (2021)

Date	Surveyor	Start Time	Finish Time	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
02/04/2021	AJM	09:25	15:00	3/3/3/4/4/4	NNE/NNE/NNE/NE/NE/NE	0/0/0/0/0/0	5/5/5/6/5/5	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
20/05/2021	SM	12:15	17:30	3/3/3/4/4	E/E/E/E/E	2/0/0/0/2	8/8/8/8/8	1/2/2/2/1	2/2/2/2/2	0/0/0/0/0	0/0/0/0/0

Table A2.6 – Scarce Breeding Bird Search Effort (2025)

Date	Surveyor	Start Time	Finish Time	Wind Speed	Wind Direction	Rain	Cloud Cover	Cloud Height	Visibility	Frost	Snow
02/05/2025	ME	05:40	08:40	4/4/4	W/W/W	2/0/2	8/8/7	2/2/2	2/2/2	0/0/0	0/0/0
02/05/2025	ER	05:40	08:40	4/4/4	W/W/W	2/0/2	8/7/8	2/2/2	2/2/2	0/0/0	0/0/0
17/05/2025	ME	08:30	14:30	0/1/3/3/3/3	E/ENE/ENE/E/E/E	0/0/0/0/0/0	1/0/0/0/0/0	2/2/2/2/2/2	2/2/2/2/2/2	0/0/0/0/0/0	0/0/0/0/0/0
25/05/2025	ME	08:00	11:00	5/5/5	SW/SW/SW	0/3/0	8/8/8	2/2/2	2/2/2	0/0/0	0/0/0
03/06/2025	ME	07:00	10:00	5/5/5	W/W/W	1/0/1	7/7/6	2/2/2	2/2/2	0/0/0	0/0/0
03/06/2025	ER	07:00	10:00	5/5/5	W/W/W	1/0/1	8/7/7	2/2/2	2/2/2	0/0/0	0/0/0

Annex 3 – VP Flight Actvity Surveys: Target Species Flights

Table A3-1 presents details of target species flight lines recorded during VP flight activity surveys between September 2020 and August 2021. The species, number of birds, flight duration and duration spent at each height band (HT) is presented. Note that the flights in **Table A3-1** refer to all target species flights recorded, and not just those flights included in the CRM analysis. HT3 to HT5 are considered as at-risk, with HT1 and HT2 under at-risk height.

Table A3.1 – Target Species Flights (September 2020 to August 2021)

Date	VP	Species	No. of Birds	Start Time (24hrs)	Duration (s)	HT1 (s)	HT2 (s)	HT3 (s)	HT4 (s)	HT5 (s)	Notes
23/09/2020	3	Pink-footed goose	24	09:36	30	0	0	0	30	0	-
23/09/2020	3	Pink-footed goose	35	11:06	45	0	0	0	0	45	-
23/09/2020	3	Pink-footed goose	90	11:28	60	0	0	0	0	60	-
23/09/2020	3	Pink-footed goose	9	15:09	30	0	0	0	0	30	-
18/11/2020	1	Golden eagle	1	11:58	111	0	6	105	0	0	Hunting over hill, lost over hill, could not age.
08/12/2020	1	Golden eagle	1	11:52	81	0	0	81	0	0	Un-aged. Hunting, likely adult, appeared dark.
24/02/2021	2	Golden plover	5	12:24	84	30	15	39	0	0	-
24/02/2021	2	Golden plover	1	14:03	11	11	0	0	0	0	-
25/02/2021	1	Golden plover	1	12:25	38	0	8	30	0	0	-
24/03/2021	3	Golden plover	2	11:16	45	0	0	30	15	0	-
20/04/2021	2	Golden plover	4	12:08	25	25	0	0	0	0	Low flight, landed.
20/04/2021	2	Golden plover	4	12:10	102	42	30	30	0	0	Same as flight above. Landed.
20/04/2021	2	Golden eagle	1	13:07	684	0	45	435	75	129	Adult. Did three short displays went very high and off to east.
20/04/2021	2	Red kite	1	13:29	501	0	0	360	60	81	Away high to north-east.
20/04/2021	2	White-tailed eagle	2	15:16	357	0	282	75	0	0	Immature birds. Close together throughout. Flights descended.
20/04/2021	2	Goshawk	1	15:19	50	0	5	45	0	0	Appeared in field of view when watching eagles in flight above. Dropped low and flew down ride.
21/04/2021	3	Pink-footed goose	107	10:21	30	0	0	0	0	30	Flying high to north.
21/04/2021	3	Pink-footed goose	43	12:24	30	0	0	0	0	30	-
22/04/2021	3	Pink-footed goose	61	09:02	150	0	0	0	0	120	-
27/04/2021	2	Golden eagle	1	10:50	90	15	60	15	0	0	Sub-adult, possibly female. Hunting over forestry ride.
27/04/2021	2	Greenshank	2	13:10	20	5	15	0	0	0	Landed to east, copulation.
27/04/2021	2	Great skua	2	15:41	120	0	0	0	30	90	Presumed pair migrating north.
10/06/2021	1	Greylag goose	7	10:46	224	15	209	0	0	0	-
21/06/2021	2	Greenshank	1	10:54	71	0	0	71	0	0	Flew northeast calling.
19/07/2021	2	Marsh harrier	1	20:51	90	0	15	75	0	0	-
23/08/2021	1	Golden eagle	1	16:51	278	0	188	90	0	0	Adult, hunting.

Date	VP	Species	No. of Birds	Start Time (24hrs)	Duration (s)	HT1 (s)	HT2 (s)	HT3 (s)	HT4 (s)	HT5 (s)	Notes
24/08/2021	1	Merlin	1	11:56	158	0	30	128	0	0	Came up and mobbed a buzzard and off south. Lost against hill.
24/08/2021	1	Hen harrier	1	13:41	220	0	30	105	45	40	Ringtail, soared up and high of southwest.
24/08/2021	2	Golden eagle	1	14:31	1,069	19	135	690	60	165	Immature bird.
24/08/2021	2	Golden eagle	1	14:54	700	0	30	565	105	0	Adult.