

Appendix 8I

Ornithology Report



PENNANT WALTERS

FOEL TRAWSNANT GRID CONNECTION

Baseline Ornithology Interim Report: Breeding
Season 2025





PENNANT WALTERS

FOEL TRAWSNANT GRID CONNECTION

Baseline Ornithology Interim Report: Breeding Season 2025

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. UK0037904.7662

OUR REF. NO. ORNITHOLOGY_V1

DATE: JULY 2025

WSP

1 Capital Quarter

Tyndall Street

Cardiff

CF10 4BZ

Phone: +44 2920 769 200

WSP.com

QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Interim Report			
Date	July 2025			
Prepared by	Martin Flores			
Signature				
Checked by	Ian Ellis			
Signature				
Authorised by	Gabrielle Horup			
Signature				
Project number	UK0037904.7662			
Report number	Ornithology_V1			
File reference	UK0037904.7662 - Foel Trawsnant Connection\03 WIP\EC Ecology\05 Reports\Phase 2\Reports\Ornithology			

CONTENTS

1	INTRODUCTION	1
1.1	ABOUT THIS DOCUMENT	1
1.2	SITE DESCRIPTION	1
1.3	BACKGROUND AND SCOPE	2
1.4	DESK STUDY	2
1.5	TARGET SPECIES	3
2	SURVEY METHODS	4
2.1	SURVEYORS	4
2.2	WINTERING AND BREEDING SEASON VANTAGE POINT SURVEYS	4
2.3	DISTRIBUTION AND ABUNDANCE SURVEYS	5
	MOORLAND BIRD SURVEY (MBS)	5
	BREEDING RAPTOR WALKOVER SURVEY	5
	NIGHTJAR SURVEY	6
2.4	INCIDENTAL RECORDS	6
2.5	LIMITATIONS	6
3	SURVEY RESULTS	7
3.1	WINTERING SEASON VP SURVEYS	7
3.2	BREEDING SEASON VP SURVEYS	7
3.3	DISTRIBUTION AND ABUNDANCE SURVEYS	9
	MOORLAND BIRD SURVEY	9
	NIGHTJAR SURVEY	9
	BREEDING RAPTOR SURVEY	9
3.4	INCIDENTAL RECORDS	9
4	TARGET SPECIES SUMMARY	10

VANTAGE POINT SURVEYS	10
RED KITE	10
BREEDING WADER ASSEMBLAGE	10
NIGHTJAR	10
BREEDING RAPTORS	10

5	REFERENCES	11
----------	-------------------	-----------

TABLES

Table 3-1 – Summary of target species flight activity	8
Table 3-2 – Summary of MBS results	9

APPENDICES

APPENDIX A – SURVEY CONDITIONS
APPENDIX B – SURVEY RESULTS
APPENDIX C – SPECIES LIST

EXECUTIVE SUMMARY

This report documents the methods and results of a range of ornithological surveys undertaken thus far between February and June 2025 inclusive at the Site of the proposed Foel Trawsnant Grid Connection project located within Bridgend County Borough Council (CBC) and Neath Port Talbot CBC in South Wales (hereafter referred to as 'The Site').

Survey work during the 2025 wintering and breeding season completed thus far comprised of vantage point (VP) surveys from two locations, with 24 hours of observation completed from each; three moorland bird survey (MBS) visits to the Site plus 500 metre (m) buffer (where access was available); one nightjar survey of suitable habitat in the Site plus 500m buffer (where access was available); and three breeding raptor walkover survey visits to the Site plus 2km buffer (where access was available).

During the winter VP surveys, only one target species was recorded with a single flight recorded of goshawk. Four target species were recorded during the breeding season VP surveys: goshawk, red kite, kestrel and merlin. One target species could be considered to be regularly recorded during the VP surveys: red kite (14 flights, totalling 14 individual flights).

Breeding waders recorded during the MBS comprised of a single snipe territory.

During the nightjar survey, nightjar were recorded near to both the northern and southern Sites during the first survey in mid-June. Three males were recorded churring and displaying >100m south from the northern Site, with a fourth and fifth male recorded churring >500m south from the northern Site. These observations were all recorded within the Afan Forest Southeast Circular in particular areas of cleared/felled plantation woodland. Two males were recorded churring >400m southwest of the southern Site in the Upper Craig Yr Aber Woods, with an additional male churring distantly to the west.

No Annex I species listed on the EU Birds Directive / Schedule 1 Wildlife and Countryside Act 1981 (as amended) target species were recorded during the three breeding raptor surveys completed as of June 13th 2025.

There were incidental records of two target species, comprising: goshawk and kestrel were recorded during the moorland breeding bird surveys.

Contact name Martin Flores

Contact details [REDACTED] | [REDACTED]

1 INTRODUCTION

1.1 ABOUT THIS DOCUMENT

- 1.1.1. WSP UK Ltd (“WSP”) was commissioned by Pennant Walters to support a Development of National Significance (DNS) application for the proposed Foel Trawsnant Wind Farm electricity network infrastructure connection. The proposals are located between Bridgend and Neath Port Talbot Counties, near Maesteg, South Wales. To support this application, WSP was commissioned to undertake a suite of ornithological surveys.
- 1.1.2. This interim report describes the methods and results of the surveys completed thus far up to the 13th June 2025; once the remaining surveys are completed this report will be updated. The final report will provide a complete suite of baseline data; the conclusions and mitigations recommended within the EIA Report are expected to remain the same.
- 1.1.3. The proposals, comprise 66 kilovolt (kV) overhead lines (OHL) and underground cables (UGC), which will provide a connection between the Foel Trawsnant Wind Farm and the wider national grid. The existing OHL (approximately 2km south-west of the settlement of Llangynwyd (British National Grid: SS841874)) will serve as the connection point for the proposals. The connection will consist of approximately 5.1km of UGC and approximately 4.6km of OHL. Whilst the requirement for a DNS application is triggered by the OHL section, the whole of the connection will require DNS consent. This report focuses on the OHL sections. This is because of the collision and/or electrocution risk to birds associated with the installation of OHL and supporting masts (NatureScot, 2025).

1.2 SITE DESCRIPTION

- 1.2.1. The Proposed Development will be located less than 1km to the west of Maesteg, in South Wales. The Proposed Development is hereafter referred to as the ‘Site’ and is illustrated in **Figure 8I.1** and is split into northern and southern sections.
- 1.2.2. In September and October 2024, a Preliminary Ecological Appraisal (PEA) was carried out by WSP of the Site. An additional buffer area of 50m around the Site was also surveyed and is hereafter referred to as the ‘PEA Survey Area’. This supplemented a CSA Environmental PEA report which was produced in October 2024 (CSA Environmental, 2024).
- 1.2.3. The PEA found that the Proposed Development largely comprises agricultural habitat. In the northern section of the Site habitats are open and comprise a mosaic of acid, marshy and improved/semi-improved grazed grasslands. Priority Habitats present in the northern section included ‘lowland dry acid grassland’, ‘lowland fen’, ‘purple moor-grass and rush pasture’, ‘upland oakwoods’ and ‘rivers’. In the southern section of the Site, habitats were dissected with field boundaries including hedgerows and tree lines and there was more evidence of grazing, particularly by sheep. Priority Habitats in this section included ‘wet woodland’, ‘lowland mixed deciduous woodland’, ‘purple moor-grass and rush pasture’, ‘hedgerows’, ‘rivers’, as well as a parcel of ancient semi-natural woodland (ASNW).
- 1.2.4. The habitats within the PEA Survey Area were considered suitable for common and widespread breeding birds. It was also considered that some species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (WCA), such as red kite and honey buzzard, may nest in the habitats in the southern section of the Site.

- 1.2.5. Seven bird species were seen or heard within the PEA Survey Area. These species were dipper, red kite (listed on Schedule 1 of the WCA), swift (listed on the Birds of Conservation Concern 4 Wales (BoCC4W) – Red List (BoCC, 2022)), house martin (BoCC4W – Amber List), skylark (Priority Species, BoCC4W – Amber List), northern wheatear (BoCC4W – Amber List) and meadow pipit (BoCC4W – Red List).

1.3 BACKGROUND AND SCOPE

- 1.3.1. The key issues relating to birds and OHL are as follows:

- The effects of direct habitat loss due to land take by OHL mast bases and other associated structures, including access and compound areas during construction periods;
- The effects of disturbance and displacement of birds from the proximity of the OHL. Such disturbance may occur as a consequence of construction work, or due to the presence of the OHL close to nest Sites or feeding areas or on habitual flight routes; and
- The effects of collision/electrocution with OHL (i.e. killing or injury of birds), which is of particular relevance for Sites located in areas with high raptor activity or which support large concentrations of waterfowl.

- 1.3.2. With regards to the first issue, measures have been built into the Proposed Development design/construction plan early in the design process to minimise the loss of habitat required. All opportunities for habitat retention have been taken into consideration. This will be achieved through 'micro-siting' or precise placement of OHL masts. Furthermore, where required, clearance of habitat will be temporary wherever possible with turf translocation utilised to maintain the species diversity of the temporarily removed habitats. Permanent removal vegetation is proposed for one section of trees to facilitate the UGC works. Therefore, the permanent loss of nesting and foraging habitat for birds will be small and will generally have little effect on bird populations. In the case of the Proposed Development, it is the latter two issues, collision/electrocution risk and displacement, which may potentially be more significant.

- 1.3.3. NatureScot (2025) provides guidance relating to the assessment and mitigation of impacts of power lines on birds.

- 1.3.4. NatureScot (2025) guidance recommends that one year of relevant bird survey work is typically appropriate for proposed OHL developments, however, further detailed assessments may be required after these, depending on results. Species most susceptible to OHL impacts include waterfowl, waders, raptors and game birds. For this reason, field surveys should be focused on 'target species', which will generally be limited to those which are afforded a higher level of legislative protection. Additional species may also be considered where their behaviour makes them more likely to be impacted by the Proposed Development. Target species, detailed within **Section 1.5**, were identified prior to surveys commencing (in winter 2025) from a desk-based review of available literature, as well as local knowledge of species distribution. This list was also updated where additional species were identified during the survey period(s).

- 1.3.5. For the purposes of this report, nomenclature follows that of the British Ornithologists' Union (BOU, 2022). Scientific names for all species mentioned in the text and tables are included in **Appendix C**.

1.4 DESK STUDY

- 1.4.1. As part of the PEA carried out by WSP, a desk study was carried out which identified 906 records of 53 protected and/or notable bird species within 2km of the Site within the last 10 years. A total of 22

of these species were listed on Schedule 1 of the WCA. Of these, 21 bird species were listed on Part 1 (protected at all times) of Schedule 1, for example, barn owl, marsh harrier, and merlin. One bird species was listed on Part 2 (protected during the close season) of Schedule 1. This comprised a single pintail record.

- 1.4.2. The honey buzzard, also listed on Schedule 1 – Part 1, was not listed in the desk study but identified in the PEA as being known to be present within the wider area. Similarly, nightjar, listed on Annex I of the EU Birds Directive (Annex 1), was also identified in the PEA as being present in the wider area around the Site, foraging in open areas adjacent to woodlands.
- 1.4.3. A total of 31 bird species (of the 53 species returned from the desk study) were listed as Priority Species in accordance with Section 7 of the Environment (Wales) Act 2016. These included curlew, lapwing, and yellowhammer.

1.5 TARGET SPECIES

- 1.5.1. The following key species of conservation concern (i.e. ‘target species’) were identified:
 - All geese, swans and ducks (except mute swan, Canada goose and mallard);
 - All Schedule 1 of the WCA and Annex I raptors and owls (including honey buzzard, osprey, red kite, goshawk, hen harrier, peregrine, merlin, barn owl and short-eared owl);
 - All Schedule 1 and Annex I wader species (including golden plover, dotterel and dunlin); and
 - All Environment (Wales) Act 2016 Section 7 raptors.
- 1.5.2. Additionally, the following secondary species were identified: common wildfowl e.g., mallard and mute swan; common raptors/owls such as buzzard, sparrowhawk and tawny owl; non-Annex I/Schedule 1 of the WCA waders e.g., curlew, lapwing, snipe, common sandpiper and redshank; all gull species; and raven; as well as Environment (Wales) Act 2016, Section 7 passerines, gulls, waders and waterfowl.

2 SURVEY METHODS

2.1 SURVEYORS

- 2.1.1. All surveys were undertaken by WSP ornithologists, all of whom have extensive field experience in relevant habitats, a detailed understanding of the key methodologies recommended within NatureScot guidance and experience of monitoring bird activity and distribution at proposed OHL Sites.
- 2.1.2. Methodologies followed have been based on best practice methods for wind farm developments (NatureScot, 2017) this is due to the very closely associated risks that both wind farms and OHL pose to birds.

2.2 WINTERING AND BREEDING SEASON VANTAGE POINT SURVEYS

- 2.2.1. VP (vantage point) watches were conducted in accordance with NatureScot (2017) guidance and undertaken throughout the survey period. This method focuses on identifying flightpaths of target species and allows any regularly used flight lines to be identified, allowing OHL masts to be micro-Sited where necessary to reduce collision risk to birds. The data generated can also be used to estimate the theoretical risk of collision with OHL and associated infrastructure by incorporation into a suitable model.
- 2.2.2. The NatureScot guidance is that VPs should be chosen parsimoniously to achieve maximum visibility from the minimum number of locations such that all parts of the survey area are within 2km of a VP. Two VPs were selected (VP locations and view-sheds are shown in **Figure 8I.2**) as being sufficient to survey the Site, the locations of which were:
 - VP1 – SS 83909 93761 or What3words¹ ///glorified.toads.decorator, view bearing 225°; and
 - VP2 – SS 83836 87636 or What3words ///beefed.searches.elect, view bearing 225°.
- 2.2.3. It is considered that these two VPs provided an appropriate coverage of the Site and surrounding suitable habitats and would allow a robust impact assessment to be carried out. Flights were classified using the following three height bands:
 - Band A: 0 – 10m;
 - Band B: 10m – 200m; and
 - Band C: >200m.
- 2.2.4. A total of 12 hours of VP observation has been undertaken between February and March 2025 to cover the wintering season (6 hours per VP) and 36 hours of VP observation has been undertaken between April and June 2025 to cover the breeding season (18 hours from each VP). With the remaining 18 hours per VP during the breeding season to be completed. The approach to minimise observer disturbance was to allow ten minutes before starting each watch and to remain as inconspicuous as possible (a bivvy bag and camouflaged clothing was used). A 180° arc was scanned alternately by eye and with binoculars until a target species was detected. Flight times of a

¹ <https://what3words.com/>

target species were then recorded with a stopwatch with an audible timer. VP surveys were spread across the full range of daylight. Only flights within the 2km view-shed were recorded, with all other target species flights out-with that zone noted as incidental records.

- 2.2.5. NatureScot (2017) guidance advises that VP surveys should be undertaken in good visibility and can be carried out on showery days providing the showers are not too frequent or prolonged. The cloud base should be high enough to allow observation of the collision risk height. Ideally observations should be undertaken in a range of wind conditions. Watches should be aimed to target heightened activity periods for the target species likely to be present, and the survey programme adhered to this, with surveys planned for periods of suitable weather. The dates, times and weather conditions of the VP watches are provided in **Appendix A, Table A.1**.

2.3 DISTRIBUTION AND ABUNDANCE SURVEYS

- 2.3.1. The distribution and abundance survey areas are illustrated in **Figure 8I.3**.

MOORLAND BIRD SURVEY (MBS)

- 2.3.2. The moorland bird assemblage was surveyed using the adapted version of the Brown and Shepherd (1993) method outlined in Gilbert *et al* (1998). The Calladine *et al* (2009) adaptation of the method is referenced in NatureScot (2017) guidance and recommends four visits during the breeding season rather than the Brown and Shepherd (1993) three-visit approach.
- 2.3.3. NatureScot (2017) recommends that the four visits are undertaken at least seven days apart, covering the whole breeding season, each completed between 08:30 and 18:00. Surveys covered the Site plus a 500m buffer where access was available between mid-April and early June. As of June 13th 2025, three visits have been completed.
- 2.3.4. Surveys were undertaken in wind speeds of less than Beaufort force 4, avoiding periods of persistent rain. The method involved a search effort of approximately 20-25 minutes within each 500x500m quadrat of open land. Habitats within the survey area were assessed for their suitability to host breeding moorland waders and areas with unsuitable land use for them were scoped out. Stops were made at regular intervals to scan and listen for birds and the identities and activities of birds were recorded using standard British Trust for Ornithology (BTO) notation. The focus of the surveys was breeding waders, but all other target and secondary species were also mapped.
- 2.3.5. Dates, times and weather conditions during the MBS visits are provided in **Appendix A, Table A.2**.

BREEDING RAPTOR WALKOVER SURVEY

- 2.3.6. Three out of four breeding raptor survey visits have been completed as of June 13th 2025. The surveys have been undertaken between April and July 2025 and followed guidance detailed within Hardey *et al* (2013), focusing on those Schedule 1 of the WCA and/or Annex I species potentially present, particularly ground-nesting raptors such as hen harrier, short-eared owl and merlin, as well as peregrine and forest nesting raptors including honey buzzard and goshawk.
- 2.3.7. Surveys extended to 2km from the Site (1 km for goshawk), and 500 m from the OHL route, where access is available, as shown in **Figure 8I.3**.
- 2.3.8. Surveys initially looked for birds displaying in the survey area before refining the search based on any such observations (including from other survey types), any other flights detected (e.g., birds carrying prey or territorial activity) and habitat suitability (e.g., areas of rank vegetation for short-

eared owl, hen harrier and merlin; or crags/steep slopes for ground-nesting peregrine). Thereafter, surveys would focus on looking for nest locations and subsequently monitoring breeding success for any nests found.

- 2.3.9. Dates, times and weather conditions during the raptor surveys are provided in **Appendix A, Table A.3.**

NIGHTJAR SURVEY

- 2.3.10. One out of two nightjar surveys were conducted as of June 13th 2025 which followed the methods described in Bird Monitoring Methods (Gilbert et al, 1998). This visit was carried out at dusk in June. The survey commenced at sunset and continued until the completion of the walkover, avoiding cold, wet and windy conditions. The survey was carried out on suitable areas of habitat within the Site and up to 500m outside the Site boundary and involved recording sightings and nests using standard BTO codes on field maps for each survey. If singing ('churring') or calls were heard, surveyors immediately followed up to locate the bird.
- 2.3.11. Dates, times and weather conditions during the nightjar surveys are provided in **Appendix A, Table A.4.**

2.4 INCIDENTAL RECORDS

- 2.4.1. Target species seen outside of formal survey periods were also recorded (i.e. those observed during walks to and from VP locations, during other breaks in survey work and target species recorded during species-specific surveys). Detailed notes of activity of protected or other target species were made, and all flights mapped.

2.5 LIMITATIONS

- Some bird species are more difficult to detect due to their shy or secretive nature and therefore may have gone undetected by these surveys. As a constraint applicable to all bird surveys, this is not considered to be a significant limitation of this study.

3 SURVEY RESULTS

3.1 WINTERING SEASON VP SURVEYS

- 3.1.1. Only one target species was recorded during the wintering season VP surveys: goshawk. Details of target species flights are provided in **Appendix B**, with **Table B.1** and **Table 3.1** presenting a summary of flight activity, including reference to the duration of flight time between 10-200m height.
- 3.1.2. The flight lines are illustrated in within the **Confidential Appendix** for goshawk.
- 3.1.3. A total of 12 secondary species were recorded during the VP watches, comprising: crossbill, skylark, song thrush, starling, herring gull, lesser black-backed gull, raven, buzzard and tawny owl.

3.2 BREEDING SEASON VP SURVEYS

- 3.2.1. Four target species were recorded during the breeding season VP surveys: goshawk, red kite, kestrel and merlin. Details of target species flights are provided in **Appendix B**, with **Table B.1** and **Table 3.1** presenting a summary of flight activity, including reference to the duration of flight time between 10-200m height.
- 3.2.2. The flight lines are illustrated in **Figure 8I.4** and within the **Confidential Appendix** for goshawk and merlin.
- 3.2.3. A total of 13 secondary species were recorded during the VP watches, comprising: cuckoo, grasshopper warbler, reed bunting, skylark, song thrush, herring gull, lesser black-backed gull, raven and buzzard.

Table 3-1 – Summary of VP (wintering and breeding) target species flight activity

Species	Status	Population	Number of observations	Month(s) of observation	Total flight duration at 10-150m height (secs)*
Red kite	Annex I, Schedule 1 WCA, and BoCC5 Green-listed	UK breeding: 4,400 pairs (Woodward <i>et al.</i> , 2020)	14	April, May, and June	1215
Goshawk	Schedule 1 WCA and BoCC5 Green-listed	UK breeding: 954 pairs (740 - 1,252) (Eaton <i>et al.</i> , 2024)	5	February and May	765
Merlin	Annex I, Schedule 1 WCA, BoCC5 Red-listed	UK breeding: 1,160 pairs (248 – 358) (Eaton <i>et al.</i> , 2024)	1	May	150
Kestrel	Welsh EA Schedule 7, and BoCC5 Amber listed	UK breeding: 31,000 pairs (Woodward <i>et al.</i> , 2020)	2	May	175

* Summed for each individual.

3.3 DISTRIBUTION AND ABUNDANCE SURVEYS

MOORLAND BIRD SURVEY

- 3.3.1. A single snipe was recorded within the southern Site and its 500m buffer,
- 3.3.2. Full details of the MBS results are provided in **Appendix B, Table B.2** and are summarised within **Table 3.2** below. The results are illustrated within **Figure 8I.5**.

Table 3-2 – Summary of MBS results

Species	Status	Population	No. of territories within Site	Total no. of territories within Site and 500m buffer	Notes
Snipe	BoCC5 Amber-listed	UK breeding: 64,500 pairs (Woodward <i>et al.</i> , 2020)	0	0	One flushed from wet ditch by surveyor

NIGHTJAR SURVEY

- 3.3.3. Nightjar were recorded near to both the northern and southern Sites during the first survey in mid-June. Three males were recorded churring and displaying >100m south from the northern Site, with a fourth and fifth male recorded churring >500m south from the northern Site. These observations were all recorded within the Afan Forest Southeast Circular in particular areas of cleared/felled plantation woodland. Two males were recorded churring >400m south west of the southern Site in the Upper Craig Yr Aber Woods, with an additional male churring distantly to the west. The results are illustrated withing **Figure 8I.6**.

BREEDING RAPTOR SURVEY

- 3.3.4. No Annex I / Schedule 1 species were recorded during the three breeding raptor surveys completed as of June 13th 2025. Future details of all confidential information pertaining to breeding Schedule 1 raptors and owls will be provided within the **Confidential Appendix**.
- 3.3.5. Secondary raptor/owl species recorded comprised buzzard only. Raven was also recorded during the raptor surveys. No secondary raptor/owl species or raven nest Sites were found, although it is considered that buzzard were breeding within the raptor survey area as birds were seen carrying food to possible nest Sites in the Upper Craig Yr Aber Woods.

3.4 INCIDENTAL RECORDS

- 3.4.1. There were incidental records of two target species, comprising goshawk and kestrel. All incidental records are presented in **Appendix B, Table B.3** and illustrated in **Figure 8I.7**. Confidential incidental records will be presented within the **Confidential Appendix**.

4 TARGET SPECIES SUMMARY

- 4.1.1. A summary of target species activity² from the surveys completed so far and a review of their status is presented, though all results considered to be confidential will be detailed within the **Confidential Appendix**.

VANTAGE POINT SURVEYS

- 4.1.2. As of June 13th 2025 only one target species has had more than 10 flights recorded.

RED KITE

- 4.1.3. There were 14 flights of red kite recorded (totalling 14 individual flights). Flight activity was widely distributed around the areas of plantation woodland south of both the northern Site (Afan Forest Southeast Circular) and southern Site (Upper Craig Yr Aber Woods), mainly to the south and southeast of the proposed northern and southern OHL routes but crossing both Sites on occasion. Flight activity was concentrated in the months of May, which coincides with the core breeding period where adults are focused on feeding their young. These flights are illustrated in **Figure 8I.4**.
- 4.1.4. There was one incidental record of a red kite foraging in a sheep grazed field during the MBS in mid-May.

BREEDING WADER ASSEMBLAGE

- 4.1.5. The breeding wader assemblage as of June 13th 2025 comprised solely of a single snipe.
- 4.1.6. A single snipe was recorded in a wet ditch <10m from the redline boundary, bordering a sheep grazed field on the southern section of the Site. With no repeat records of this individual snipe and no breeding or territorial behaviour observed, it is considered that this snipe is not holding territory.

NIGHTJAR

- 4.1.7. As of June 13th 2025 nightjars were recorded >100m south from the northern Site within the Afan Forest Southeast Circular and >400m south west from the southern Site in the Upper Craig Yr Aber Woods. No nightjars have to date been recorded within or immediately adjacent to either the northern or southern Sites.

BREEDING RAPTORS

- 4.1.8. No Annex I / Schedule 1 of the WCA species were recorded during the three breeding raptor surveys completed as of June 13th 2025.
- 4.1.9. Secondary raptor/owl species recorded comprised buzzard only. Raven was also recorded during the raptor surveys. No secondary raptor/owl species or raven nest Sites were found, although it is considered that buzzard were breeding within the raptor survey area as birds were seen carrying food to possible nest Sites in the Upper Craig Yr Aber Woods.

² Records of any target species where activity was considered to be minor (e.g., restricted to incidental records or less than ten flights recorded during VP surveys) are not considered within this Section.

5 REFERENCES

- British Ornithologists' Union. 2022. The British List: A Checklist of Birds of Britain (10th edition). *Ibis* 164: 860–910. Available from: <https://bou.org.uk/british-list/> accessed on 05 October 2023.
- Brown, A. F. & Shepherd, K. B. 1993. A method for censusing upland breeding waders. *Bird Study*, 40, 189-195.
- Calladine, J., Garner, G., Wernham, C. & Thiel, A. 2009. The influence of survey frequency on population estimates of moorland breeding birds. *Bird Study*, 56:3, 381-388.
- CSA Environmental. 2024. *Foel Trawsnant Wind Farm: Preliminary Ecological Appraisal*.
- Eaton, M. & the Rare Breeding Birds Panel. 2024. Rare breeding birds in the UK in 2022. *British Birds* 117, pp Pages 591–656.
- Gilbert, G., Gibbons, D.W. & Evans, J. 1998. *Bird Monitoring Methods: A Manual of Techniques for UK Key Species*. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.
- Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. 2013. *Raptors: A field guide to survey and monitoring*. SNH, Battleby.
- NatureScot (previously Scottish Natural Heritage). 2017. *Recommended bird survey methods to inform impact assessment of onshore wind farms*. SNH, Battleby.
- NatureScot. 2018. *Assessing significance of impacts from onshore wind farms on birds outwith designated areas*. SNH, Battleby.
- NatureScot (2025). Guidance - Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds. Available at: <https://www.nature.scot/doc/guidance-assessment-and-mitigation-impacts-power-lines-and-guyed-meteorological-masts-birds> [Accessed: June 2025]
- Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., & Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114, pp 723-747.
- WSP. 2024. *Foel Trawsnant Grid Connection Preliminary Ecological Appraisal*
- Woodward, I., Aebischer, N., Burnell, D., Eaton, M., Frost, T., Hall, C., Stroud, D. & Noble, D. 2020. Population estimates of birds in Great Britain and the United Kingdom. *British Birds* 113, pp 69-104.

APPENDIX A – SURVEY CONDITIONS

Table A-1 – Dates, times and weather conditions during VP surveys

Date	Start	Finish	Duration (hr:min)	Weather conditions
VP1				
24/02/25	15:00	18:00	3	Dry, Wind SSW F4, Cloud Cover 8/8, Visibility 1-3 km (patchy across viewshed), Temp 7c
11/03/25	15:20	18:20	3	Dry, Wind NNE F3 reducing to F2, Cloud Cover 5/8, Visibility >3km (Excellent), Temp 7C
16/04/25	12:30	15:30	3	Dry, Wind WSW F4, Cloud Cover 7/8, Visibility >3km, Temp 7C
16/04/25	16:00	19:00	3	Dry, Wind WSW F4, Cloud Cover 6/8, Visibility >3km, Temp 8C
13/05/25	08:30	11:30	3	Occasional brief showers, Wind E F3, Cloud Cover 7/8 at start reducing to 1/8 by final hour, Visibility >3km, Temp 12C increasing to 16C
13/05/25	12:00	15:00	3	Dry, Wind ESE F3, Cloud Cover 1/8 at start increasing to 6/8 at end, Visibility >3km, Temp 18C
11/06/25	11:40	14:40	3	Dry, Wind SE F3, Cloud Cover 1/8 at start increasing to 4/8 at end, Visibility >3km, Temp 18C
11/06/25	15:10	18:10	3	Dry, Wind SE F3, Cloud Cover 4/8, Visibility >3km, Temp 20C
VP2				
25/02/25	15:00	18:00	3	Dry, Wind W F3, Cloud Cover 2/8, Visibility >3 km (excellent), Temp 8C
12/03/25	15:20	18:20	3	Dry, Wind F4 N, Cloud Cover 6/8 reducing to 3/8 in 2nd hr and 1/8 in 3rd hr, Visibility >3 km (excellent), Temp 7C



Date	Start	Finish	Duration (hr:min)	Weather conditions
15/04/25	06:30	09:30	3	Dry, Wind NNE F2, Cloud Cover 8/8, Visibility >3km, Temp 7C
15/04/25	10:00	12:00	2	Dry until heavy rain in final hour, Wind E F2, Cloud Cover 8/8, Visibility >3km, Temp 8C
17/04/25	10:50	11:50	1	Dry, Wind ESE F2, Cloud Cover 7/8, Visibility >3km, Temp 8C
14/05/25	08:45	11:45	3	Dry, Wind ENE F3, Cloud Cover 0/8, Visibility >3km, Temp 13C to 18C
14/05/25	12:15	15:15	3	Dry, Wind E F3, Cloud Cover 0/8, Visibility >3km, Temp 18C
10/06/25	09:50	12:50	3	Dry, Wind WNW F3, Cloud Cover 8/8, Visibility >3km, Temp 13C to 15C
10/06/25	13:20	16:20	3	Dry, Wind WNW F2, Cloud Cover 8/8, Visibility >3km, Temp 15C

Table A-2 – Dates, times and weather conditions during MBS

Visit No.	Date	Start	Finish	Weather conditions
<i>Northern</i>				
1	15/04/25	08:00	11:00	Light Drizzle, Wind ENE F2, Cloud Cover 8/8, Visibility 1-3km, Temp 8C to 11C
2	15/05/25	08:30	11:30	Dry, Wind ENE F1, Cloud Cover 0/8, Visibility >3km, Temp 11C to 17C
3	10/06/25	08:20	11:30	Dry, Wind W F2, Cloud Cover 8/8, Visibility 1km, Temp 14C to 16C
<i>Southern</i>				
1	16/04/25	10:37	13:28	Dry, Wind W F5, Cloud Cover 6/8, Visibility 1-3km, Temp 10C to 11C
2	13/05/25	08:30	12:00	Dry, Wind E F2, Cloud Cover 3/8, Visibility >3km, Temp 10C to 16C



Visit No.	Date	Start	Finish	Weather conditions
3	11/06/25	09:24	11:00	Dry, Wind SE F1, Cloud Cover 2/8, Visibility >3km, Temp 15C to 17C

Table A-3 – Dates, times and weather conditions during nightjar surveys

Visit No.	Transect No.	Date	Start	Finish	Weather conditions
1	Northern	10/06/25	21:30	22:32	Dry, Wind NW F1, Cloud Cover 0/8, Visibility 1-3km, Temp 16C to 13C
1	Southern	10/06/25	21:12	22:48	Dry, Wind NW F1, Cloud Cover 0/8, Visibility 1-3km, Temp 16C to 13C

Table A-4 – Dates, times and weather conditions during breeding raptor walkover surveys

Visit No.	Date	Start	Finish	Weather conditions
<i>Northern</i>				
1	17/04/25	07:41	10:04	Dry, Wind ESE F2, Cloud Cover 4/8, Visibility >3km, Temp 6C to 11C
2	14/05/25	8:45	12:00	Dry, Wind ENE F2, Cloud Cover 0/8, Visibility >3km, Temp 13C to 20C
3	13/06/25	09:00	11:55	Dry, Wind SW F2, Cloud Cover 4/8, Visibility >3km, Temp 15C to 19C
<i>Southern</i>				
1	17/04/25	07:30	10:45	Dry, Wind ESE F2, Cloud Cover 4/8, Visibility >3km, Temp 6C to 11C
2	15/05/25	08:00	11:00	Dry, Wind NE F1, Cloud Cover 0/8, Visibility >3km, Temp 8C to 16C
3	11/06/25	11:00	13:00	Dry, Wind SE F1, Cloud Cover 2/8, Visibility >3km, Temp 15C to 17C

APPENDIX B – SURVEY RESULTS

Table B-1 – VP survey results

VP Ref	Date	Time	VP	No. of birds	Height band	Flight time (secs)	Total flight time (secs)*	Notes
<i>Red Kite</i>								
VP2	17/04/25	11:04	2	1	A-B	120	120	Around VP
VP1	13/05/25	09:50	1	1	B	150	150	To SE and SSE of VP
VP1	13/05/25	10:03	1	1	B	35	35	NW and WNW of VP
VP1	13/05/25	12:32	1	1	B	210	210	Flying through viewshed to SW of VP
VP1	13/05/25	12:35	1	1	B	120	120	SW and S of VP
VP1	13/05/25	12:42	1	1	B	30	30	SSE and SE of VP
VP1	13/05/25	13:29	1	1	B	210	210	SW to NW of VP
VP2	14/05/25	11:02	2	1	B	120	120	Flying from WSW to NW

VP Ref	Date	Time	VP	No. of birds	Height band	Flight time (secs)	Total flight time (secs)*	Notes
VP2	10/06/25	09:59	2	1	B	40	40	N/A
VP2	10/06/25	10:11	2	1	B+A	60	60	N/A
VP2	10/06/25	10:25	2	1	A+B	210	210	N/A
VP2	10/06/25	10:27	2	1	B	100	100	N/A
VP2	10/06/25	10:54	2	1	B	120	120	N/A
VP1	11/06/25	13:24	1	1	A+B	35	35	N/A
Kestrel								
VP2	14/05/25	10:59	2	1	B	45	45	To SE of VP
VP2	14/05/25	12:58	2	1	B	130	130	Male flying through viewshed with prey

* Where the observed flight was by more than one bird, flight time is the sum of all individuals (i.e. recorded flight time multiplied by the number of birds).

Table B-2 – MBS results

Site	Date	Time	No. of birds	Visit No.	Count	Activity	Notes
Snipe							
Southern	16/04/25	10:50	1	1	1	Took flight	Flushed by the surveyor



Table B-3 – Nightjar survey results

Site	Date	Time	Survey	Count	Activity	Notes
<i>Nightjar</i>						
Northern	10/06/25	21:51	1	1	Calling	Churring in pines
Northern	10/06/25	21:57	1	1	Flight	Continuous flight oversight, flight calls
Northern	10/06/25	22:01	1	1	Calling	Churring
Northern	10/06/25	22:05	1	2	Dispute	Pair wing clapping then settled, and both churring
Northern	10/06/25	22:12	1	1	Calling	Churring
Southern	10/06/25	21:52	1	1	Singing	N/A
Southern	10/06/25	22:06	1	1	Singing	N/A

Table B-4 – Breeding Raptor Walkover Survey results

Site	Date	Survey	Count	Activity	Notes
<i>N/A</i>					
N/A	N/A	N/A	N/A	N/A	N/A



Table B-5 – Incidental records

Site	Date	Time	Survey	Count	Activity	Notes
<i>Red Kite</i>						
Southern	13/05/25	10:23	MBS 2	1	Foraging	Flying over west grassy fields
<i>Kestrel</i>						
Southern	13/05/25	08:49	MBS 2	1	Foraging	N/A
Southern	13/05/25	10:17	MBS 2	1	Foraging	N/A
Southern	13/05/25	11:33	MBS 2	1	Foraging	N/A

APPENDIX C – SPECIES LIST

Table C-1 – Species names

British Name	Scientific name	British Name	Scientific name
Barn owl	<i>Tyto alba</i>	Nightjar	<i>Caprimulgus europaeus</i>
Buzzard	<i>Buteo buteo</i>	Osprey	<i>Pandion halieatus</i>
Canada goose	<i>Branta canadensis</i>	Peregrine	<i>Falco peregrinus</i>
Common sandpiper	<i>Actitis hypoleucos</i>	Pintail	<i>Anas acuta</i>
Crossbill	<i>Loxia curvirostra</i>	Raven	<i>Corvus corax</i>
Cuckoo	<i>Cuculus canorus</i>	Reed Bunting	<i>Emberiza schoeniclus</i>
Curlew	<i>Numenius arquata</i>	Red kite	<i>Milvus milvus</i>
Dipper	<i>Cinclus cinclus</i>	Redshank	<i>Tringa totanus</i>
Dotterel	<i>Charadrius morinellus</i>	Short-eared owl	<i>Asio flammeus</i>
Dunlin	<i>Calidris alpina</i>	Skylark	<i>Alauda arvensis</i>
Golden plover	<i>Pluvialis apricaria</i>	Snipe	<i>Gallinago gallinago</i>
Goshawk	<i>Accipiter gentilis</i>	Sparrowhawk	<i>Accipiter nisus</i>
Grasshopper Warbler	<i>Locustella naevia</i>	Starling	<i>Sturnus vulgaris</i>
Hen harrier	<i>Circus cyaneus</i>	Swift	<i>Apus apus</i>
Herring gull	<i>Larus argentatus</i>	Tawny Owl	<i>Strix aluco</i>
Honey-buzzard	<i>Pernis apivorus</i>		
House Martin	<i>Delichon urbicum</i>		
Kestrel	<i>Falco tinnunculus</i>		
Lapwing	<i>Vanellus vanellus</i>		
Lesser black-backed gull	<i>Larus fuscus</i>		
Mallard	<i>Anas platyrhynchos</i>		
Marsh harrier	<i>Circus aeruginosus</i>		
Merlin	<i>Falco columbarius</i>		
Mute Swan	<i>Cygnus olor</i>		



1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

wsp.com

PUBLIC