



Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Appendix 6A: Outline Curlew Management and Monitoring Plan





Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Appendix 6A: Outline Curlew Management and Monitoring Plan

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 62282400

OUR REF. NO. 62282400_APP6A_001

DATE: JULY 2026

WSP

1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

Phone: +44 2920 769 200

WSP.com

Parc Ynni Calon y Gwynt

Outline Curlew Management and
Monitoring Plan

BLANK PAGE

Issuing office

Merlin House | No 1 Langstone Business Park | Newport | NP18 2HJ
T: 01633 509000 | W: www.bsg-ecology.com | E: info@bsg-ecology.com

Client	Wind 2
Project	Calon y Gwynt: Outline Curlew Management and Monitoring Plan
Version	FINAL
Project number	P25-558 - Calon y Gwynt Ornithological support package Document2

	Name	Position	Date
Originated	Daniel Watson	Senior Ecologist	13 April 2026
	Megan Nicklin	Ecologist	12 May 2026
Reviewed	Owain Gabb	Director	30 June 2026
Approved for issue to client			Click here to enter a date.
Issued to client	Daniel Watson	Senior Ecologist	31 July 2026

Disclaimer

This report is issued to the client for their sole use and for the intended purpose as stated in the agreement between the client and BSG Ecology under which this work was completed, or else as set out within this report. This report may not be relied upon by any other party without the express written agreement of BSG Ecology. The use of this report by unauthorised third parties is at their own risk and BSG Ecology accepts no duty of care to any such third party.

BSG Ecology has exercised due care in preparing this report. It has not, unless specifically stated, independently verified information provided by others. BSG Ecology is not responsible for any failure to deliver or implement any biodiversity measures set out in this report. No other warranty, express or implied, is made in relation to the content of this report and BSG Ecology assumes no liability for any loss resulting from errors, omissions or misrepresentation made by others.

Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that BSG Ecology performed the work. The content of this report has been provided in accordance with the provisions of the CIEEM Code of Professional Conduct. BSG Ecology works where appropriate to the scope of our brief, to the principles and requirements of British Standard BS42020.

Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be secured. Observations relating to the state of built structures or trees have been made from an ecological point of view and, unless stated otherwise, do not constitute structural or arboricultural advice.

Contents

1	Introduction	2
2	Recommended Actions	5
3	Monitoring	8

1 Introduction

- 1.1 This Outline Curlew Management and Monitoring Plan (OCMMP) has been prepared by BSG Ecology on behalf of WSP for the proposed development at Calon y Gwynt.
- 1.2 This OCMMP builds on measures identified in **Chapter 5: Ecology** and **Chapter 6: Ornithology** and should be read in conjunction with these chapters and their appendices.

Project Background

- 1.3 A planning application is being submitted for Parc Ynni Calon y Gwynt, located approximately 11 km to the north-west of Newtown, Powys (central Ordnance Survey Grid Reference (OSGR) SO 00013 98640), and hereafter referred to as 'the Site'.
- 1.4 The application is supported by an Environmental Statement (ES) which describes the development proposals in detail and assesses the predicted environmental impacts of the Proposed Development. The Proposed Development is described in detail in **ES Chapter 4: Description of the Proposed Development**, but in brief, constitutes a total of 11 turbines, substation, BESS compound, ancillary equipment and associated infrastructure.
- 1.5 The Site is located within Important Curlew Area 9 (Montgomeryshire and North Radnorshire) (ICA 9), one of twelve areas of national importance for the Welsh curlew population¹. The ICA was considered to support approximately 40 pairs representing between 12 – 14 % of the total Welsh population at the time it was established².
- 1.6 Ornithological survey has been completed at the Site between September 2022 and March 2024, with breeding wader surveys undertaken in 2022 and 2023 (March – August inclusive). Surveys were based on an adapted methodology for wader survey of unenclosed land (Brown & Shepherd, 1993³) and involved walkover surveys of the entire Site extending to approximately 800 m beyond the developable area.
- 1.7 The follow summarises the findings of the breeding wader surveys with regards to curlew;
 - In **2022**, two birds were recorded in flight and calling at Esgair Cwmowen, approximately 300 m north-east of the Site boundary during April and May; additionally, two birds were recorded on open ground north of Llyn y Tarw, approximately 1 km east of the Site boundary in April. There were no subsequent records during breeding wader surveys in June and July, suggesting that any breeding attempt that may have taken place had failed.
 - In **2023**, a curlew was seen undertaking song-flights and alarm calling in April and May to the south of the Site boundary, but there were no subsequent behaviours to suggest a breeding attempt had taken place.
 - Winter walkover surveys on 30 March **2024** (at the end of the second year of survey effort at the Site) found a pair of curlew at the same location as in 2023 to the south of the Site boundary. Both birds were recorded displaying and undertaking song flights.
- 1.8 The overall utilisation of the Site by curlew can be summarised as follows: the Site is used occasionally for provisioning during the breeding season, with the airspace above the Site occasionally used by commuting individuals. Land to the north, south and east of the Proposed development area is used during courtship, and low numbers (1 pair) of unproductive curlew during

¹ DataMap Wales (2026): Important Curlew Areas (ICAs) in Wales. Available at: [Important Curlew Areas \(ICAs\) in Wales Map | DataMapWales](#) [Accessed 17 April 2026]

² Gylfinir Cymru / Curlew Wales (2021). *A Wales Action Plan for the Recovery of Curlew*. Curlew Wales. Available at <http://www.curlewwales.org/>.

³ Brown, A. F. and Shepherd, K. B. (1993) *A method for censusing upland breeding waders*. Bird Study, 40, pp. 189-195.

the breeding season. Curlew have not been recorded foraging, roosting or exhibiting behaviours within the Site.

Scope of this Document

- 1.9 This OCMMP describes outline management objectives for land within the Site. This management plan is required to deliver enhancement, in accordance with the step-wise approach. Negative effects to breeding curlew have been minimised and largely avoided during the design process, and opportunities for positive management to enhance the Site for curlew are considered as part of the Net Benefit for Biodiversity proposals. The OCMMP will support the Development of National Significance (DNS) application and provides a framework for the management and enhancement of the Site for curlew. The OCMMP is intended as a precursor to a more detailed Curlew Management and Monitoring Plan (CMMP), which will be controlled via a DNS Condition. The CMMP will be developed in consultation with stakeholders and implemented following agreement.
- 1.10 The Applicant will be responsible for meeting the commitments made in the (detailed) CMMP, which will be based on the objectives and principles set out in the document.
- 1.11 It is intended to implement the measures outlined in this OCMMP for the entire duration of the operation of the Proposed Development (although some will commence during the construction period). The operational life of the Proposed Development is to be 40 years, following which the Proposed Development will be decommissioned.
- 1.12 Two enhancement areas have been identified on Site; one in the south-east of the Site centred at approximately OSGR SO 01657 97959, and one in the south-west of the Site centred at approximately OSGR SO 00609 97506. Pearce-Higgins (2012)⁴ suggested that curlew do not breed within 620 m of turbine arrays, whilst Goodship and Furness (2022)⁵ suggest a 300 m buffer during breeding. The territory recorded was approximately 350 m from an existing turbine on a neighbouring development (Mynydd Clogau), therefore areas within 300 m of turbines were considered appropriate for enhancement, in line with Goodship and Furness.
- 1.13 The enhancement areas are shown in **Figure 5P.2** of the Outline Habitat Management Plan (OHMP).
- 1.14 The on-going management of the enhancement land⁶ which incorporates the measures detailed in this document will be in conjunction with areas detailed in the OHMP which will be a condition to the DNS consent.

Consultation

- 1.15 During the application process, BSG Ecology approached Gylfinir Cymru / Curlew Wales to request a meeting to discuss enhancements and input into habitat management/creation plan, and with regards to providing funding for on-going conservation efforts for the species, particularly within ICA 9. No response has been received at the time of writing.
- 1.16 NRW were approached during scoping, and did not agree that significant effects on curlew were unlikely; the primary concern was that potential displacement could occur as a result of the Proposed Development. It was agreed that the production of a management and monitoring plan would be required to provide detail on how significant effects would be avoided.
- 1.17 Additional discussions with experienced field ornithologists involved in comparable enhancement works (such as Curlew Country) have also been undertaken informally; input received related to potential opportunities, and what actions have proven successful at other locations.

⁴ Available online at [Greater impacts of wind farms on bird populations during construction than subsequent operation: results of a multi-site and multi-species analysis - Pearce-Higgins - 2012 - Journal of Applied Ecology - Wiley Online Library](#) [date accessed 29/07/2026]

⁵ Available online at <https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird-species-naturescot-guidance> [date accessed 18/06/2026]

⁶ Some of which is partially to be utilized for enhancement/compensation for ecological features.

Aims of the OCMMP

1.18 This OCMMP identifies a range of opportunities for enhancing the habitats within the Site to support local curlew populations.

1.19 The main objectives of the OCMMP are:

- Objective 1: To increase suitable habitat for breeding curlew within the proposed enhancement areas.
 - Objective 2: To implement and manage wet features for foraging curlew in the proposed enhancement area.
 - Objective 3: To control scrub, bracken and tree succession to maintain open landscapes for breeding and foraging curlew within the proposed enhancement area.
 - Objective 4: To minimise disturbance to nesting curlew⁷ within the proposed enhancement area during the breeding season

1.20 The following actions are identified to achieve the above objectives:

- Actions to achieve Objective 1:
- Establish appropriate grazing and cutting regimes within the two enhancement areas to improve and maintain the condition of marshy grassland⁸ within the enhancement area.
- Manage rush cover through grazing to maintain variation in sward height.
- Actions to achieve Objective 2:
 - Retention and/or creation of damp areas, scrapes and/or ponds in suitable areas within the enhancement area.
 - Undertake desilting and vegetation management of ponds and scrapes to maintain wetter areas for foraging curlew.
- Actions to achieve Objective 3:
 - Identify all areas of bracken, scrub and young trees that can potentially be controlled by mechanical means.
- Identify all areas where limited livestock management can be utilised as a habitat management technique.
 - Implement a long-term programme of bracken and scrub monitoring and management within the enhancement area⁹.
- Actions to achieve Objective 4:
- Restrict activities such as grazing and vegetation clearance during the curlew breeding season within the enhancement areas.
- Establish exclusion zones and predator fencing around active nests within the wind farm red line area.

⁷ Goodship, N.M. and Furness, R.W. (2022) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

⁸ Department for Environment, Food and Rural Affairs (DEFRA) and Rural Payments Agency. (2025). *CGS20: Manage Wet Grassland for Breeding Waders*. Available at: <https://www.gov.uk/find-funding-for-land-or-farms/cgs20-manage-wet-grassland-for-breeding-waders>. (Accessed: 14 May 2026).

⁹ Chemical treatment of bracken is now more complicated as the herbicide that has been most effective in controlling it (Azulox) has been banned. The use of a knapsack sprayer to control bracken is very labour intensive. Mechanical control through cutting and bruising bracken is most feasible on relatively gently-sloping ground.

2 Recommended Actions

Roles and Responsibilities

- 2.1 The Applicant will be responsible for meeting the commitments made in the (detailed) HMP, which will be based on the objectives and principles set out in this OCMMP. At this stage it is envisaged that these activities will be managed by contractors employed by the Applicant.
- 2.2 It is envisaged that the implementation of the detailed CMMP will be a condition of the planning consent for the Proposed Development, following agreement of the (detailed) CMMP post-consent by the local authority in consultation with appropriate consultees, notably NRW and Curlew Wales.
- 2.3 Management actions and monitoring results will be reviewed annually by a CMMP Stakeholder Group. The precise remit and structure of the Stakeholder Group will be agreed post-consent but at this stage it is considered that, as a minimum, the following organisations are likely to be represented:
 - The Applicant
 - NRW
 - Curlew Wales
 - Consultants (to be confirmed but assumed to be WSP and/or BSG Ecology)
 - Any landowner within which OCMMP options will be adopted.
- 2.4 Monitoring results will be reported to the CMMP Stakeholder Group on a frequency to be agreed. Reporting of monitoring results and the review of management prescriptions will be undertaken by suitably qualified and experienced ecologists. The CMMP Stakeholder Group will be responsible for reviewing the results of the monitoring and agreeing amended management prescriptions if necessary.

Management measures

- 2.5 This OCMMP has been prepared with reference to a range of relevant documents and guidance in order to define the objectives and prescriptions which are applicable to the Site. These have been informed by best available practice with regards to land management for curlew including Curlew Life (2019)¹⁰, Gylfinir Cymru / Curlew Wales (2021) and Thompson et al (2026)¹¹.
- 2.6 The locations of the enhancement areas are shown in **Figure 5P.2** of the OHMP. These areas are indicative, and the location(s) of the measures set out below will be confirmed within the CMMP. It is anticipated that the enhancement work will not extend into the SSSI, with this area shown within the figure due to its inclusion within the Site.
- 2.7 Proposed management measures are set out in **Table 1** for each of the objectives identified in Section 1.17.

¹⁰ Curlew Life. (2019). *Advice for Farmers*. Available at: <https://curlewlife.org/farming/>. [Accessed: 14 May 2026].

¹¹ Thompson, D., Locke, S., Newton, I., Stroud, D., Colwell, M. and Burrell, R. (2026). A UK Action Plan for the Eurasian Curlew. An Advice and Option Paper for Government and agencies to consider, Curlew LIFE Project, RSPB, Sandy and Curlew Life. Available at: <https://www.curlewaaction.org/wp-content/uploads/A-UK-Action-Plan-for-the-Eurasian-Curlew.pdf>

Table 1: Proposed management measures

Objective	Management Proposals
Objective 1: To increase suitable habitat for breeding curlew in the proposed enhancement area	
Maintain and enhance marshy grassland and open grazing pasture within the proposed enhancement area.	Proposed grazing areas should be appropriately fenced for the livestock used. Cattle are preferable over other livestock (such as sheep) and should be used to maintain a varied sward height, with some taller patches of rush <i>Juncus sp.</i> for nesting curlew. Stocking density should be kept low during the breeding season (April – mid July inclusive), at around 1 livestock unit per hectare) to reduce the risk of trampling and overgrazing. Stocking density can be increased after the breeding season to maintain the target vegetation height. If grazing does not achieve the target sward height, rushes may be cut or topped on a rotational basis outside the breeding season, particularly in heavily vegetated areas. Habitat within the enhancement area should be monitored for changes in composition, cover, diversity and sward height at a frequency to be agreed.
Objective 2: To implement and manage wet features within the proposed enhancement area for foraging curlew	
Restore and maintain appropriate hydrological conditions for foraging curlew through the implementation and management of wet features such as scrapes and flushes.	Implement a shallow depression within the enhancement land through reprofiling to create an area of wetter soil, areas of shallow standing water, and denser vegetation. The depression should be shallow, with uneven edges, and gently graded side. Depths should vary across the depression, with the deepest point reaching a maximum of 25–30 cm. This variation in depth will help retain some shallow water during drier periods and accommodate seasonal fluctuations in water levels. Reprofiling should be undertaken outside of breeding season (March – August inclusive) as a one-off operation. Maintain wet ground conditions through the management of drainage and surface water where appropriate. Identify long-term management actions to prevent scrub incursion and keep the water features open.

Objective 3: To control bracken, invasive (feral) trees and semi-natural scrub within the proposed enhancement area.	
Prevent loss of open grassland habitats to scrub and woodland succession.	Undertake a pre-management baseline survey to map the extent of bracken within the management area. Remove scrub and trees manually or mechanically where necessary to maintain open habitat. Confirm the extent of bracken that can controlled mechanically (based on terrain / angle of slope) in discussion with the landowners. Control should be targeted at areas of dense bracken. More open stands may be retained where they provide structural diversity and cover for chicks. Monitor changes in habitat type as per Aim 1.
Objective 4: To minimise disturbance to nesting curlew within the proposed enhancement area.	
Reduce disturbance to breeding birds within the enhancement area to improve breeding success.	Restrict non-essential access to sensitive areas during courtship and breeding seasons (mid-February – July inclusive). Implementation of a minimum exclusion zone of 300 m around any suspected/confirmed occupied nests. Fencing should only be installed around nests by experienced personnel and where nests are susceptible to predation or trampling. A single-strand electric fence should be used to allow incubating adult birds to leave the nest easily, whilst also reducing the risk of predation by terrestrial mammals. Install signage to indicate the presence of nesting curlews where appropriate.

3 Monitoring

- 3.1 The CMMP is based on a five-year rolling strategy so that it will be possible to periodically review and update it. Thus, every five years it is proposed to review the CMMP and address any major issues, aims that are not being met or changes at the Site, in consultation with the LPA as necessary. The requirement for more frequent interim reviews would be dictated by the success / progress of management and the need for more regular alteration to management prescriptions in accordance with changing conditions of the Site.
- 3.2 On-going monitoring will be undertaken to determine the effectiveness of the management and assess the need to alter management prescriptions¹². It will inform decisions such as the frequency of scrub removal, frequency and intensity of livestock grazing, and whether remedial measures or a contingency plan is required. In order to increase the overall suitability of the Site for curlew, it is recommended that monitoring is undertaken in collaboration with existing nearby schemes such as Tirgwynt and Mynydd Clogau wind farms where practicable.
- 3.3 Vegetation monitoring will be undertaken on a frequency to be agreed. This will be achieved through a mixture of remote techniques (to capture aerial imagery) and field survey. The extent of cut heather moorland and bracken will be mapped, and the degree of regeneration noted. Newly established trees and areas of scrub will be identified, and scrapes will be inspected to ensure they are being managed appropriately and providing resource across the year.
- 3.4 Surveys for breeding curlew within the wind farm development area will be carried out annually for the first three years of operation, with monitoring to switch to every five years from the fifth year of operation, continuing at 5-year intervals thereafter throughout the operational lifespan of the project. Monitoring will be reviewed after a 20-year period (mid-point of the operational lifespan) to ensure the correct level of data collection is undertaken. Survey work will be carried out March to mid-July (inclusive) and based on standard industry guidance (Brown *et al.* 1993). The detail of the survey programme will be developed in liaison with Curlew Wales staff.
- 3.5 The results of annual monitoring will be reported back to the CMMP stakeholder group at a frequency to be agreed, via a video conference and / or report.

¹² Franks, S.E., Douglas, D.J.T., Gillings, S., and Pearce-Higgins, J.W. (2017). Environmental correlates of breeding abundance and population change of Eurasian Curlew (*Numenius Arquata*) in Britain. *Bird Study* 64(3), pp. 289-301. <https://doi.org/10.1080/00063657.2017.1359233>