

## Appendix 7.2

## Meeting Summary: Llanbrynmair and Carnedd Wen Wind Farms Ecology and Ornithology

**Location:** Microsoft Teams

**Date:** 20/06/2022. **Duration:** 14:00 – 15:20

**Present:** Rachel Probert (Planning and Highways Ecologist, Powys County Council); Chris Jackson (Senior Development Project Manager), Elliot Smith (Development Project Manager) [both RES]; Jennifer Pearson (Development Project Manager) RWE Renewables; Owain Gabb (Director), Joanne Conway (Consultant Ecologist) [both BSG Ecology].

**Apologies for Absence:** N/A.

ITEM	ITEM	ACTION
1	<b>Introductions</b>	
2	<p><b>Purpose of meeting</b>            OG set out the purpose of the meeting as being to discuss the scope, and ideally get some consensus on the ornithological and ecological work needed to inform planning applications for the respective Llanbrynmair and Carnedd Wen wind farm sites.            BSG Ecology has been instructed to collect baseline data with regard to both sites.            There are various benefits to this:</p> <ul style="list-style-type: none"> <li>- survey work can be co-ordinated centrally and planned out so that e.g. there is no potential for surveyors for one site to be in the viewsheds of the other</li> <li>- survey to establish whether known sites for Schedule 1 birds and other potentially disturbance-sensitive species are occupied can be rationalised</li> <li>- emerging results of both survey and consultation can be used to inform changes to approaches for both sites</li> <li>- data will be held in the same format (on a GIS database), which will be useful for cumulative Collision Risk Analysis and EclA</li> <li>- it makes early consultation more streamlined</li> </ul> <p>OG noted that the two schemes are distinct entities, however, and will be assessed and submitted to planning separately.</p>	
3	<p><b>Proposed Development</b>  <b>Llanbrynmair</b>            CJ provided an overview:</p> <ul style="list-style-type: none"> <li>• Planning consent was achieved for a wind farm of 30 turbines (up to tip height of 126.5 m) on 17 December 2021.</li> <li>• RES are now looking to submit a new application for larger but fewer turbines due to changes in technology since submission (in 2008).</li> </ul>	

- The preliminary layout is 21 turbines with a maximum tip height of 230 m.
- The locations of the turbines are similar to those of the consented scheme.
- The original access option was from Llanerfyl (to the NE of the site). This was the preferred route during the application, but during the Public Inquiry it was evident that this route was not supported, so RES are now looking to gain access to the north through Carnedd Wen using existing forest tracks and creating any new track sections they need. A haulage route to the SW of the Site using an existing minor road will also be included. It is likely that this route will need to be widened in two areas.
- RP asked whether the access route to the north is dependent on Carnedd Wen getting planning permission? CJ answered that the access route would be included in the new application for Llanbrynmair Wind Farm, so that it is not dependent on Carnedd Wen getting planning permission.
- RES is looking to submit the new application within the next 2 years.

**Carnedd Wen**

JP introduced the scheme:

- The scheme was withdrawn from consideration by DBEIS in 2020 as the layout needed to be revised to accommodate larger turbines. The original planning submission was in 2008.
- The new scheme will have a similar red line boundary to the previous application. The current layout is similar overall – a northern cluster with a ‘tail’ to the south.
- RWE is currently looking at 30 turbines (but are early on in scheme design so this may be adjusted) with a maximum tip height between 180-220 m. Tip height has therefore increased but there has been a reduction in the overall number of turbines (the previous application was for 50 turbines). There is potential for different tip heights across the site.
- The proposal in the original application was to clear-fell the whole site. A key-holed approach with felling in the immediate area of turbines and access tracks is now being considered.
- The overall capacity is likely to be the same as the previous application if not higher.
- Access will continue to be from the north.
- Peat and other considerations will inform layout. Peat probing surveys are currently underway.
- Scoping is imminent. The scoping report for the Site is in preparation.

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**Scope of work: Ornithology**

A report covering ornithology work undertaken on the sites in 2016 and 2017 (BSG Ecology, 2018) had been provided in advance of the meeting.

OG noted he would not differentiate between the two sites as he discussed the scope of ornithological (or wider ecological) work unless there was particular reason to do so (i.e. an element of the work related far more to one site than the other or there were differences in timing or approach to work).

Desk Study

- OG stated that the most useful desk study data is likely to be that summarised into the 2018 report (mainly consultancy surveys and RSPB Cymru data on black grouse). There has been considerable work completed over a sustained period at both sites, and this has demonstrated gradual change in the populations of some species.
- For Carnedd Wen, ornithological surveys were completed between 2005 and 2012 (2005-08, 2012) in connection with the wind farm, and a full baseline update was completed in 2016/17.
- For Llanbrynmair surveys were completed in 2005-06 and 2011-13, and fully updated in 2016/17.
- Useful complementary work was completed by RSPB Cymru on black grouse that overlapped and preceded the work at the sites; results are summarised in BSG's 2017 report.
- OG stated that BSG have also updated elements of the desk study. These are:
  - BIS (Biodiversity Information Service) data request
  - RSPB Cymru black grouse data.
  - Data for the Berwyn SPA. Following discussion with NRW, BSG Ecology have requested and received considerable information from Keith Offord concerning the distribution of nesting raptors within the Berwyn SPA. This has been supplemented by further data from RSPB. This represents a near complete data set for suitable habitat in the Berwyn extending over 10 km from the proposed development area.

OG asked whether RP had any other data sources in mind. RP stated that she didn't – although in the NRW meeting minutes Mick Green was discussed as a potential source of data. OG informed that Mick Green has been ill so has not been involved as originally planned. Mick will be approached for curlew data at a later date.

Vantage Point (VP) survey

- OG indicated that following changes to the design of the wind farms, 14 VP locations are now sufficient to cover the potential development area and an appropriate perimeter. A figure was shown indicating VP locations and indicative viewsheds in

OG / JC

relation to indicative turbine co-ordinates for the respective schemes.

- OG noted that the area, particularly Carnedd Wen, is constrained by available viewpoints due to plantation growth, but that recent felling has opened up some options for VPs that were not available in 2016.
- BSG Ecology are in the process of completing the (standard) 36 hours per VP in both the breeding season and winter periods. BSG Ecology have defined the respective survey periods as late September to March inclusive (winter) and April to July / early August (breeding) respectively, and are supplementing the data collection with further watches in August and September. This is to ensure that data on dispersing / post-breeding / juvenile birds associated with the Berwyn SPA (such as hen harrier) is captured.
- VP survey started in late September 2021. The surveys recorded what would have been expected based on previous winter data and the (broadly) consistent baseline conditions: occasional whooper swan flights (of up to 6 birds), more regular red kite, kestrel, goshawk and hen harrier, and infrequent flights of peregrine, merlin and golden plover. The kestrel, red kite and golden plover were more associated with open ground (Llanbrynmair) and the goshawk with plantation areas (Carnedd Wen).
- OG noted that in combination with the winter VP work regular counts of waterfowl using Llyn Gwyddior and Llyn Coch Hwyad had been completed. Few waterfowl had been noted – occasional small numbers of whooper swan, tufted duck, little grebe, mallard, lesser black-backed gull and great black-backed gull among them.
- During the breeding season to date the species observed have been similar to previous years. Red kite is the most common with regular goshawk flights and more occasional flights of other species such as hen harrier and peregrine. Osprey and hobby have been recorded, these latter two species are continuing to increase in abundance and range in Wales.

#### Raptor Survey

- BSG Ecology initially planned the following breeding raptor surveys:
  - 8 additional days of goshawk work commencing February week 2/3.
  - 14 days of additional breeding raptor survey in April to July inclusive.
- Previous work has detected (most recently) 3 goshawk territories within the plantation habitats. Considerable larch (a species favoured by goshawk for nesting) has been recently removed (our approach has taken into account felling plans / coupe age). One nest has been identified to date this year, but we will have a clearer view of numbers by early Aug.

- There are four peregrine eyries in the area which are being checked for occupancy in 2022 (a figure was shown indicating the locations of these). At least one is occupied this year (over 1 km from the Site [REDACTED]). Two were occupied in 2016. One was known to be productive in 2017. The eyrie [REDACTED]  
[REDACTED]  
[REDACTED]
- Red kite are likely to breed in the 2 km perimeter area. Apparent territories were recorded in 2016 and the data indicate territories again this year. However, the areas they are present in are not accessible to surveyors, so pinning down nest sites / proving breeding is not possible.
- A range of other species have bred historically (pre-canopy closure), including hen harrier and merlin, but there has been no evidence of this in recent years, and the habitat is now relatively poor for them.
- Following consultation with NRW in January (who were particularly interested in functional linkage), BSG Ecology identified a discrete area of the Berwyn SPA that was not subject to annual survey for raptors by either Keith Offord or RSPB. Keith is now covering this on our behalf.

#### Wader Survey

- OG stated that wader survey of all suitable habitat within 800 m of proposed turbines is being completed using an adapted (4 visit) Brown & Shepherd (1993) survey protocol. In places (such as in areas of tall Molinia or when there has been curlew activity suggesting a territory), the approach has been varied to include local VPs (as in 2016). These are useful in collecting behavioural information that can be used to help interpret sightings. VP data has also been useful in informing the work.
- The most recent survey in 2016 recorded curlew around Nant yr Eira, to the east south-east of the site, albeit there was no clear evidence of breeding, with foraging pairs noted, and all records being from the 'spring'.
- Some curlew activity has been recorded in this general area again this year, but there is no clear evidence of breeding. Snipe are present locally, and have been recorded drumming.
- OG indicated that over time the survey work to inform the Llanbrynmair application has tracked the curlew population in this area from 10-11 pairs in 2005/06, down to 2 pairs in 2012, 1 pair in 2013, and no clear evidence of breeding in 2016. Habitat quality and impacts of predation on breeding success

are likely to be the drivers of population decline locally and regionally.

#### Black Grouse Survey

- OG gave a brief account of what black grouse survey at the sites had shown since the mid-2000s: this indicated that birds were historically present in nationally important numbers (based on lek counts) around Cannon Farm (in response to land management), and also occurred in the vicinity of Llyn Coch Hwyad prior to canopy closure.
- Survey indicated the species had become locally extinct by 2013, with various potential reasons postulated in the reports reviewed to inform the 2017 report.
- Work completed by BSG Ecology in 2016 recorded a calling male offsite to the west, but returned no other sightings or signs of black grouse presence.
- OG stated that the work completed in 2016 had been replicated in 2022, with no grouse recorded.

#### Nightjar survey

- OG stated that nightjar had never been previously recorded at either site. Surveys were completed in 2005, 2006 and 2016 (with the former two years focussed on Carnedd Wen and the work in 2016 covering all suitable habitat across the two sites).
- However, there has been lots of recent felling, and the habitat for them is now more extensive.
- BSG are in the process of completing a programme of works including a reconnaissance visit plus 10 nights of survey (5 in June and 5 in July).
- The technique is driven transects with stopping points.
- The June visits have recorded two churring males. The first records for the area. The records are from the [REDACTED].

#### Barn owl

- Barn owl surveys are being completed of buildings potentially close to access routes onto the Llanbrynmair site.

#### Ornithological Questions

- OG asked if there was anything omitted from the scope of works that RP would see as being essential? RP stated that the scope of works was in line with guidance and what the LPA would expect. There is a substantial amount of data available from previous applications and BSG Ecology have evidence to demonstrate declines in the populations of certain species e.g. curlew and increases in others e.g. nightjar. It is unusual to

	<p>have so much background information. From RP's perspective, BSG seem to be addressing NRW's advice on considering functional linkage of the site to the Berwyn SPA and surveying for barn owl so she had nothing more to add.</p> <ul style="list-style-type: none"> <li>• OG asked whether, given the amount BSG Ecology know about the sites and how bird communities have changed, and the limited likelihood of unpredictable changes in the baseline, whether 1 year of baseline survey ahead of an OIA would be acceptable? RP noted that the last surveys were completed in 2016 (so we are now 6 years on since those surveys). SNH guidance recommends that surveys should be completed if three years have passed. RP asked OG what NRW's position on the matter was. OG stated that NRW would take a view at the end of the 2022 breeding season (once data were presented to them). OG suggested reconvening in the autumn to open up the conversation again. RP stated she would be happy to do so. RP also noted that as these are DNS applications, the LPA would likely refer to NRW on SPA bird / HRA issues so if NRW agreed to 1 year of bird survey data, the LPA would be unlikely to object.</li> </ul>	
5.	<p><b>Habitats and species</b></p> <p>A report (BSG Ecology 2018) covering protected species work undertaken on the sites between 2016 and 2017 had been provided in advance of the meeting for consideration by RP.</p> <p><u>Habitats</u></p> <ul style="list-style-type: none"> <li>• OG stated that no updated habitat survey had been completed to inform the determination of either site by DBEIS.</li> <li>• Habitat data is therefore relatively historical for both sites.</li> <li>• An experienced botanical surveyor will resurvey the sites this summer. More detailed habitat data (including species lists) will be collected than is necessarily typical during a Phase 1, and all habitats will be assigned to an NVC category in the field based on the experience of the surveyor.</li> <li>• In addition to habitat mapping, figures showing priority habitats (Annex 1 and Section 7) will be provided.</li> </ul> <p>RP highlighted NRW's UK Hab query (from the meeting minutes earlier in the year that had been issued to her) and asked whether it is BSG's intention to use Phase 1 or UK Hab (as UK Hab is a little unfamiliar to the LPA). OG confirmed that the Phase 1 habitat survey method will be used.</p> <p><u>Protected Species: Bats</u></p>	



- OG summarised bat data collected in 2016 and 2017. Bats occurred at greater frequency in proximity to waterbodies and woodland edge than in open moorland. Summer encounter rates were considerably higher than spring or autumn in terms of overall bat activity. Conversely, noctule activity was higher in spring than summer, with lower activity in autumn. However, total bat activity levels were not particularly notable in any season, and noctule activity was low (in comparison to various other Welsh wind farms). The timing of some of the noctule encounters in relation to dawn suggested there could have been opportunistic roosting in the plantation at Carnedd Wen in spring; something that has been noted at other afforested sites. There was no evidence to suggest on site / very local roosting of other species (based on encounter times in relation to known emergence times in the species); historical work to inform the initial (2008) Carnedd Wen application recorded evidence of roosting pipistrelles in various buildings within 2 km of the site boundary at that time, a result that is not unexpected in an area with a low density of buildings.
- The approach to bat survey in 2023 will be based on industry standard guidance (SNH *et al.*, 2021)
- OG stated the intention to deploy 15 static detectors at Llanbrynmair and a further 17 at Carnedd Wen on a seasonal basis for 10 nights (spring, summer, autumn) in 2023. This will result in up to 960 nights of data collection (although some level of failure is inevitable). SM4 detectors will be used. Weather stations will be deployed if it is not possible to get site-specific weather data. Data will be analysed using Kaleidoscope Pro, then manually checked.
- OG also commented on the intention to incorporate some survey of trees as part of the Phase 1. However, he noted that in dense (largely un-thinned) conifer plantation where roosting potential is likely to be generally very limited, this is extremely challenging in practice.

OG asked whether RP had any comments about the approach to bat survey. RP stated that the approach is in line with guidance and what the LPA would expect. Presumably, there has been ongoing felling so there may be some change in distribution.

RP asked whether there was any intention to complete any other supplementary bat surveys? OG replied that only static surveys would be completed unless anything is identified that needs to be investigated further E.g. if lots of early noctule passes are recorded in a

specific area then follow-up VP surveys may be completed. Professional judgement will be used.

Protected Species: great crested newt (GCN)

- OG summarised GCN data collected in 2016: In 2016 BSG looked at 12 ponds within the survey area, ten of which were in the Carnedd Wen site. These were shown on a figure. Most were borrow pits within the plantation. A number of the ponds (including two at Llanbrynmair) were in more open areas. In 2016 the results of eDNA were negative for 10 of the ponds; Pond 10 was positive and Pond 12 couldn't be tested, as it had low water levels. Both Ponds 10 and 12 are outside the plantation on farmland / moorland edge. Conventional presence / absence survey (4 visits) of 13 ponds at Carnedd Wen was also completed in 2006. This returned entirely negative results.
- Following discussion with NRW, who have concerns about reliance on eDNA survey alone for determining GCN presence / likely absence, BSG Ecology are likely to propose a hybrid approach involving eDNA and some traditional methods. For ponds where presence is detected, six visits, and for those where eDNA indicates absence, some further data collection. When BSG ecology have decided on the proposed approach, they will put this in writing to NRW.

OG noted that it would be useful to get RP's opinion on the use of eDNA. RP stated that she has had experience of what appear to be false positives and negatives, so the technique clearly has some limitations. She also has some concerns about the timing of when samples are taken; eDNA sampling early in the season can potentially fail to record GCN in cold springs, but the tendency is to try and get a result early in order to inform necessary further work (which otherwise becomes difficult to schedule in). From a planning perspective, however, unless NRW officially state that eDNA shouldn't be used as a standalone survey technique then Powys are not in a position to refuse an application based on reliance on eDNA survey data alone unless there were reasonable concerns about timing or accuracy. RP would therefore advise that surveyors use eDNA in combination with historic data, site context, wider records etc and apply professional judgement to determine whether conventional surveys are required.

OG stated that BSG will be going back to NRW with a proposed approach to include HSI, eDNA and at least one conventional survey. It doesn't feel proportionate to complete four conventional surveys in addition to a negative eDNA result. RP noted she is aware that other

	<p>consultants have adopted this approach and that it is a reasonable compromise from her perspective.</p> <p><u>Other Protected Species</u></p> <p>Dormouse:</p> <ul style="list-style-type: none"> <li>• Not previously surveyed. There is some connectivity of Carnedd Wen to the west via the hedgerow network, but the site is poorly linked in other directions due to presence of open farmland and / or moorland. There is a recent dormouse record to the north-west of Carnedd Wen in linked woodland habitat (Ref. 9/9/2020, Braich Llwyd).</li> <li>• BSG Ecology are putting out dormouse boxes on Site in summer this year. Data will be collected during late 2022 and in 2023. BSG Ecology will bias sampling towards the areas linked to semi-natural valley woodland, as well as areas close to proposed turbines.</li> </ul> <p>RP asked whether the use of boxes would limit the survey to certain habitats and omit others. If only boxes are used during the survey then will need to justify why that hasn't constrained the survey in terms of habitats sampled.</p> <p>OG said that BSG will consider use of dormouse tubes as well as boxes and will return to her with an approach.</p> <p>Water vole / otter:</p> <ul style="list-style-type: none"> <li>• Otter use the waterbodies and are likely to use the more substantial streams in the area (BSG recorded an animal on Llyn Coch Hwyad in 2016), and may periodically visit small ponds if there are breeding frogs / toads.</li> <li>• Surveys were last completed of both sites in 2006.</li> <li>• OG stated that the intention is to complete otter / water vole surveys ahead of submission at both sites (subject to design freezes).</li> <li>• BSG Ecology intend to survey at least 200 m around proposed infrastructure.</li> </ul> <p>OG asked RP whether the survey approach was appropriate. RP answered yes, that was standard although in addition to infrastructure, construction compounds need to be considered. OG noted that additional survey may be required at later dates if / when compounds are added.</p> <p>Badger and reptiles:</p> <ul style="list-style-type: none"> <li>• BSG will update through Phase 1. One badger sett to east of site detected in 2013. Common lizard known to be present.</li> </ul>	<p>OG / JC</p>
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	<ul style="list-style-type: none"> <li>• The 7th Quinquennial Review of the Wildlife and Countryside Act 1981 has proposed full protection for adder. BSG Ecology are therefore instructing a national expert to survey suitable habitat on site to determine presence / likely absence and to inform the approach to considering impacts on the species.</li> <li>• Common lizard is known to be present. Impacts on that species (and other common reptiles) will be considered in a working method statement.</li> </ul> <p>OG asked if RP was happy with the overall scope of protected species work. RP said that she was generally happy with the approach, that all species seem to be covered and the methods are consistent with what would be expected.</p> <p>RP noted that habitats / species in relation to access routes are sometimes not considered but she assumed this will be considered within the applications. RP asked whether there are likely to be off-site road improvements?</p> <p>CJ answered that there would be one passing point on a minor road to the south-east of Llanbrynmair (for haulage). This route will be considered within the assessment. Following detailed survey work, there are likely to be other sections of highway where works will be required for AIL deliveries and these sections will also be surveyed and assessed.</p>	
6.	<p><b>Other Matters</b></p> <p>OG stated that it would be useful to have a meeting in late 2022 to discuss progress, results and scope going forward. <b>Hopefully around mid-November.</b></p> <p>OG asked whether it would be better to approach RP directly or to contact planning? RP replied that it would be best to approach her directly.</p>	OG / JC / RP / CJ / JP

Meeting Ends: 15:20