

Project Profile

Nightjar Monitoring at Pen y Cymoedd Wind Farm: no Evidence of Displacement of Breeding Birds

Overview

Monitoring of nightjar at Pen y Cymoedd wind farm found no evidence of displacement of territorial birds. Five nests were located, the closest of which was within 60 m of the base of a turbine. BSG Ecology designed, implemented and reported on the monitoring to time and budget.

Challenge

Pen y Cymoedd, the largest onshore wind farm in Wales (and England), became operational in 2017. It is located in upland plantation forestry in the county boroughs of Rhondda Cynon Taf and Neath Port Talbot, South Wales. Prior to construction, the site supported approximately 24 territorial male nightjars. Territories were located in clearfell and young plantation.

The challenge was to design, agree (with nature conservation stakeholders) and implement a post construction nightjar monitoring protocol. The protocol needed to address a planning condition that required the operator, Vattenfall, to identify whether nightjar territories / nests had been influenced by wind farm operation i.e. whether displacement or other impacts had occurred.

Solution

A review of available information (previous survey, aerial imagery and the forest felling plan) was completed to determine the baseline position. Driven transects with stopping points in suitable nightjar habitat were then used to map territorial birds, and it was proposed to capture and radio track nightjars back to nest sites.

A team of field ornithologists (including a number of bird ringers) was assembled in order to deliver the work, and the protocol agreed with nature conservation stakeholders.

Outcome

Driven transect work identified 24 territorial males, a consistent result with baseline pre-construction survey work. Mist netting resulted in sixteen nightjars (12 males and 4 females) being captured and radio tagged under licence. Tracking of these birds resulted in five nests being located.

The nearest nightjar nest to a wind turbine was 58 m from the base. Two young fledged from the nest. Four further nests were located within 400 m of turbine bases, two of which were successful.

These initial results indicate that nightjar do not appear to be displaced by the operational turbines. The protocol will form the basis of further monitoring at the site to determine if this trend continues throughout operation.

Construction phase work (completed by a different ecological contractor), which included monitoring of nightjar productivity in combination with on-site supervision by an ecological clerk of works, had previously demonstrated nightjars were resilient to disturbance. This suggests that nightjar issues at onshore wind farms should generally be manageable.

Client Feedback

"BSG Ecology designed and completed the work very professionally and delivered an excellent report. The protocol they implemented will form the basis for further nightjar monitoring at Pen y Cymoedd."

"We are also grateful to BSG for collaborating on our behalf with RSPB Cymru and facilitating a visit to site for Welsh Assembly member for the Cynon Valley, Vicky Howells. This is part of an RSPB initiative to increase the level of connection with biodiversity of Welsh Government members."

Alistair Hinton (Senior Commercial Manager, Vattenfall Wind Power Ltd)

