

Project Profile

Wandylaw Wind Farm: Ornithology & Ecology Survey & Impact Assessment

Background

In 2013 Blue Energy finished constructing a wind farm at Wandylaw Farm, Northumberland. The development consists of 10 Repower MM92 wind turbines, each turbine being 125m high to the tip of the blade. When fully operational the development will generate 20.5MW of electricity.

The wind farm has been constructed on pasture farmland, but some turbines are on heather moorland and close to areas of plantation woodland. These habitats, and the site's proximity to the protected Northumberland coast, presented certain ecological and ornithological challenges during the project planning and impact assessment stages.

The original planning application for the project was submitted by Ridgewind in August 2006, but was subsequently refused. It then went to appeal and in February 2009 planning permission was granted for the wind farm following public inquiry. Development started in 2012 and in February 2013 Ridgewind was acquired by Blue Energy.

BSG Ecology's role in the project

BSG Ecology was appointed by Ridgewind to scope and deliver the baseline ornithological and ecological surveys for the proposed development, and to prepare an Ecological Impact Assessment for the site. Baseline assessment work carried out in 2005 and 2006 involved mapping the habitats present, particularly those habitats that were considered to have high conservation importance. The results of the surveys were used as part of the constraints mapping process, and a series of mitigation and compensation measures were agreed to minimise the identified impacts. The baseline information was presented in a series of technical reports, which then provided the basis for the ecology and ornithology chapters in the Environmental Statement.

Ecological Constraints

Extensive survey work carried out at the site revealed that most of the development footprint consisted of grassland habitats that were considered to be of low value. However, on the western side of the site there was an extensive area of heather moorland and smaller areas of marshy grassland, which are both habitats of ecological importance. To overcome concerns about the loss of these habitats, which are identified as priority habitats in the local Biodiversity Action Plan, BSG Ecology worked with the design team to develop a solution that would be acceptable to consultees. This involved avoiding sensitive habitats where possible, mitigating impacts through the refinement of construction methods, and the recreation of heather moorland elsewhere within the site using seeds collected from plants affected by the development.

Protected Species

Survey work revealed that the site did not support badger, otter, water vole, reptiles and great crested newts, and that the plantation woodlands did not support significant numbers of red squirrels. However, brown hare, which is a species of 'principal importance for the purpose of conserving biodiversity'¹, was recorded within the site. In addition, surveys identified a range of bat species feeding within the site: species recorded were soprano pipistrelle, common pipistrelle, a Myotis species and noctule. The survey work demonstrated that feeding and commuting bats were present, particularly along the edges of the plantation woodland blocks. As bats are fully protected under UK legislation, it was important that appropriate mitigation was provided that would ensure that the development does not have a negative impact on bats. Adopted measures include relocating wind turbines away from the edges of plantations and habitat enhancement at appropriate locations.

Ornithological Sensitivities

Whilst the site is approximately 8km from the Lindisfarne SPA to the east and 12km from Holburn Lake and Moss SPA to the north, the area is known to be used by migrating and commuting geese. This was a key constraint that had been identified by some consultees, and therefore it was important to demonstrate a thorough understanding of how these species use the area, and to assess whether they were likely to be affected by the turbines.

Breeding bird, vantage point and walkover surveys identified the presence of a number of species that are considered to be of particular conservation interest, including goshawk, hen harrier, hobby, peregrine, curlew and greylag goose. All of these species potentially represent a significant constraint to development, but the surveys that were undertaken indicated that these species only occasionally fly over the site. The one exception was goshawk, which was found to be nesting in the area, but careful design of the turbine layout ensured that impacts on this species were unlikely.

Addressing Ecological and Ornithological Constraints

Following the completion of the impact assessment BSG Ecology worked closely with the design team to ensure that ecological and ornithological constraints were dealt with and impacts mitigated to an appropriate level. This included advising on turbine locations to minimise impacts on bats and birds, together with the identification of measures to ensure that there is no net loss of important habitats.

Although the planning application was originally refused (against the advice of planning officers), ecology and ornithology were not cited as reasons for refusal. The comprehensive work carried out by BSG Ecology has meant that ecology and ornithology were not identified as significant issues at any point during the life of the project.