

Nant y Moch wind farm Information Sheet

Ecological Assessment

June 2010

Ecological Assessment

Surveys and Assessment

ADAS UK Ltd and Ecology Matters have carried out extensive ecological surveys on the proposed Nant y Moch site. These have focused on protected species, such as badgers, otters, water voles, dormice and great crested newts for example, over a period of approximately 2 years. In all cases, species have been surveyed and assessed using standard and recognised methodologies. Both breeding bird and Vantage Point surveys have been carried out for birds, again to standard methodologies. Bat surveys have also been conducted following the latest guidance.



Badger



Otter



Water Vole



Dormouse

Habitat surveys to a National Vegetation Classification (NVC) level have been conducted across the site. Close attention has also been paid to species and habitats covered by other legislation such as Section 42 of the Natural Environment and Rural Communities Act 2006. These include such species as bog orchid and specialist species associated with the local historic metal mines, such as metallophyte lichens.

Survey Results

The proposed development site comprises a mix of acid and more improved grassland, coniferous upland rotational forestry (managed by Forestry Commission Wales) and purple-moor-grass-dominated mire. Interspersed with these are areas of blanket bog, acid flushes, dry and wet heath. Much of the area is grazed, and consequently a number of habitats are in a modified condition.

Pockets and occasional wider areas of high quality habitat are present. In particular, species-rich flushes are found in the west of the proposed site and small areas of bog pools juxtaposed with relatively unmodified blanket bog are found scattered throughout. Unimproved acid grassland and dry heath are a particular feature in the east of the proposed site.

Many of the waterbodies and watercourses have been found to support water vole and otter populations. The site represents sub-optimal foraging habitat for bat species, and no records have been made to date of great crested newts and dormouse. A low number of bird species and few Schedule 1 species (Wildlife and Countryside Act) were recorded with peregrine and red kite being the main exceptions.

In addition, another important habitat is that provided by the local historic metal mines which not only support a number of lichen species with highly restricted distributions, but also represent the only sites in the county for several species of fern.



Red Kite

Potential Effects

The potential unmitigated effects of the development identified are listed below:

- Collision risk potential for birds and bats during the wind farm's operation;
- Potential unmitigated disturbance effects on protected species such as water vole and otter;
- The associated land-take effects on higher quality habitat;
- The hydrological effects on flushes, blanket bog and other peat bodies on site; and
- Indirect effects potentially include a change in air quality which could affect the lichen species due to construction vehicle movements in close proximity to the metal mines.

Mitigation

From the project's inception in 2008 ecological survey data has been incorporated into site design. Statutory distances with regard to badger setts are adhered to; adequate buffer distances are maintained between watercourses and any infrastructure in order to prevent disturbance effects on water vole and otter.

Turbine siting has taken into consideration the location and use of the site by bird species and foraging bats. Consideration has been given to the location of proposed turbines where the greatest raptor activity is identified. This is to minimise the likelihood for collision.

Another key consideration has been both direct and indirect potential impacts on high quality habitat. Areas of high quality habitat have been avoided, and hydrological effects on blanket bog and other peat bodies have been assessed through extensive peat probing. Extensive areas of deep peat have been avoided.

A comprehensive Habitat Management Plan is being prepared for the proposed site and this, together with any potential residual effects from the development will be monitored carefully.

