Bat surveys undertaken for planning and Ecological Clerk of works role in connection with the repowering of St Breock Wind Farm

Introduction

Spalding Associates was instructed by Mr Jim Wood of REG Wind Power to carry out bat survey work at the site of an existing windfarm at St Breock Downs in mid Cornwall in 2011. The aim was to assess the potential impacts of repowering the wind farm on bats and to provide information to feed into the positioning of the proposed new turbines.

The proposal was to repower the existing wind farm, which had been in operation since 1993, taking down the existing 11 turbines and replacing them with 5 larger turbines, within the same site boundary.





Methodology

The whole area within the red line was to be assessed with the aim of identifying which species of bats make use of the site, the levels of use and identifying any areas of habitat or features of high value to bats.

The initial survey design was based on interim guidance from the Bat Conservation Trust (BCT) and the Institute of Ecology and Environmental Management but was extended in May 2011 when the interim guidance from the BCT was revised.

The survey effort was as follows:

- A pair of 3 hour activity transects walked once a month between April and October.
- A commuting route survey covering the potential commuting routes around the edges of the site and crossing into it, carried out once in spring, once in summer and once in autumn.
- A detailed inspection of the trees on the northern boundary of the site for features which could be used by roosting bats.
- A detailed inspection of the sub-station followed by a pair of emergence surveys.
- Remote detectors placed at each of the proposed turbine locations for three nights, once in the spring, once in the summer and once in the autumn (increasing to five nights at each of the proposed turbine locations in May, June and July 2011).



Results

The surveys showed that the site is regularly used by a number of species of bat for foraging. The main species making use of the site were Common Pipistrelles with Natterer's and Noctules making regular passes and occasional passes being made by Greater Horseshoe and Brown Long-eared bats.

This activity is concentrated around the edges of the site, with bats feeding along the boundary hedges, bands of woodland and scrub. Away from the hedges the levels of activity and the number of species reduces with only low levels of activity being recorded in the most open areas.

The sub-station on the northern boundary of the site was found to support a Common Pipistrelle maternity roost, of around 30 individuals. A monitoring visit carried out in April 2015 showed that the site is still being used by the same number of Common Pipistrelles.



Mitigation and Ecological Clerk of works

The proposal design took into account the presence of the bats, with a buffer of more than 50 metres being left between the tip of the turbine blades and any feature shown to be used by bats.

During the construction phase of the works care was taken to safeguard the roost by undertaking all work in the vicinity of the roost in the winter, when bats would be absent, and moving the proposed location of a new substation building to safeguard the roost.



Spalding Associates (Environmental) Ltd