

# BATS AND WIND TURBINES

## IMPLICATIONS FOR PLANNING

*Most wind energy developers will be aware that they need, during the design phase of a project, to consider potential effects on ecology. Many will also be aware that, if not considered in advance, the timing of ecological surveys can significantly impact on the project programme. This article examines a specific area of ecology – bats – and looks at ways of minimising risk of costs and delays to development.*

### WHY CONSIDER BATS?

The UK is home to 18 species of bat, 17 of which are known to be breeding ([www.bats.org.uk](http://www.bats.org.uk)). All species of bat present in the UK are protected under both UK and European legislation (Wildlife & Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010 respectively). In addition, seven species are listed in Section 41 of the NERC Act 2006 as species of principal importance in England (HMSO, 2006). This legislation requires planning authorities to consider the impacts of proposed developments on bats. If planners are unable to determine that a wind turbine application will not have a significant effect on bats, they are obliged to refuse planning consent. It is the developer's (or their agent's) responsibility to provide evidence to allow the planning authority to discharge their duties under the Habitat Regulations, to enable the grant of consent.



### HOW CAN BATS AFFECT WIND ENERGY PROJECTS?

Many readers will be aware of projects (perhaps some of your own) that have been affected by the presence of bats. The most common ways that the presence of bats can impinge on your wind energy project are to cause:

- delays due to seasonal bat survey requirements;
- added expense of detailed ecological studies;
- need for costly mitigation/compensation strategies;
- need to amend siting of turbine; and
- in some cases, abandonment of the project.

Fortunately, bats are not always an issue! As the potential impacts of wind turbines on bats are becoming more widely understood, a range of guidance documents have emerged and bat ecologists, experienced at assessing proposal for wind turbine development, can offer significant technical support to the application scheme.

At The Landmark Practice we have obtained planning consent for a range of turbines where bats were shown to be present. We have compiled five tips that we hope can help you to minimise the potential costs and delays of finding bats on your site.

# TIPS TO REDUCE THE IMPACTS OF BATS ON YOUR PROJECT

## 1. Employ your ecologist early on in the project programme

We're not just saying this because we're ecologists! Employing an ecologist at the start of your decision making process will allow them to identify the least risky site for the turbines. Avoiding potential impacts from the outset will significantly reduce your overall ecological risk.

## 2. Siting of turbines

The final siting of your turbine(s) will be influenced by a variety of factors, including ecology. Bats often use linear features such as hedgerows, streams and woodland edges to travel between their roosts and foraging habitat. Siting turbines close to these linear features will usually prompt the local planning authority to ask for extensive bat survey work to establish the risk of impacts on bats. Natural England recommends a standoff distance of 50 m between the nearest point of a turbine blade and any linear feature (Natural England, 2009). Avoiding such features makes good scientific and commercial sense.

## 3. Keep your ecologist informed of changes

As ecologists experienced in renewable energy projects, we are aware that the specification of turbines and their locations are likely to change throughout the design process. Keep your ecologist informed of these changes! Even minor, seemingly innocuous changes in dimensions or micro-siting could affect the results of the ecological assessment.

## 4. Anticipate the need for bat surveys

The latest guidance on assessing the impacts of wind turbines on bats (Bat Conservation Trust, 2011) recommends that, for some sites, surveying should take place from April until October inclusive. Schedule this into your project programme. It is possible that surveys can be completed more quickly, depending on the project design, but additional surveys may also prove an advantage if the project details change later in the design phase. It is always safer to assume that ecological surveys, due to their seasonal requirements, could take one year to complete. It is best to be prepared!

## 5. Choose your ecologist wisely

When commissioning an ecologist (or ecological consultancy) ensure that they have the relevant skills, experience and licenses, where required, to fulfil your requirements. If they intend to use sub-consultants to undertake all or elements of the work required, check that they too are also suitably qualified and licensed.

Remember, your project could succeed or fail on the basis of their work. Ask for case studies of similar work that they have undertaken in the past. Ask to see CVs of all staff who will be involved in the project – don't just settle for a token CV from their Managing Director. A good benchmark to measure their abilities can be found in the Institute of Ecology and Environmental Management's 'Competencies for Species Surveys' (<http://bit.ly/oimSMO>).

We hope that this article helps you realise your wind energy ambitions whilst considering the potential impacts your projects may have on bats. If you would like any further information, please do not hesitate to contact us at the details below.

## REFERENCES

- Bat Conservation Trust (2011). Bat Surveys – Good Practice Guidelines Second Edition. Surveying for onshore wind farms
- HMSO (2006) Natural Environment and Rural Communities Act 2006
- Natural England (2009) Technical Information Note TIN051: Bats and onshore wind turbines: Interim Guidance
- The Bat Conservation Trust [online]. UK Bats. Available at: [http://www.bats.org.uk/pages/uk\\_bats.html](http://www.bats.org.uk/pages/uk_bats.html)

## ABOUT THE AUTHOR

Pete Etheridge is a Senior Ecologist at The Landmark Practice based in Bristol. He has extensive experience of renewable energy projects including wind farms, hydro-electric and solar PV, and has previously worked on some of the largest renewable energy development projects in the country.

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