

BATS AND SINGLE WIND TURBINES

GUIDANCE NOTE FOR APPLICANTS

Bats are afforded the highest level of strict protection under The Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 (as amended) and as a result are a material consideration when assessing planning applications and their potential impact on local bat populations.

Most bats use significant linear features such as hedgerows, tree lines, woodland edge and watercourses as flight lines for navigation and foraging and are susceptible to impacts caused by turbines.

Recent research suggests that bats are particularly susceptible to, collisions with turbine blades, barotrauma, damage, disturbance or destruction of foraging and roosting habitats and commuting corridors and disorientation when in flight. These impacts will depend on the size and wattage of the turbine and become less likely as the distance between the turbine and the habitat features increase.

In order to minimise these potential negative effects NIEA, Natural Heritage takes a precautionary approach.

Advice from published guidelines (<http://www.snh.gov.uk/docs/C245244.pdf>) regarding bats and wind turbines is to maintain a 50m buffer between the tip of the turbine blade and existing habitat features on site. This is calculated as follows (see Fig 1.) and may result in the turbine hub (depending on its height) being more than 50 metres from these habitat features.

$$b = \sqrt{(50 + bh)^2 - (hh - fh)^2}$$

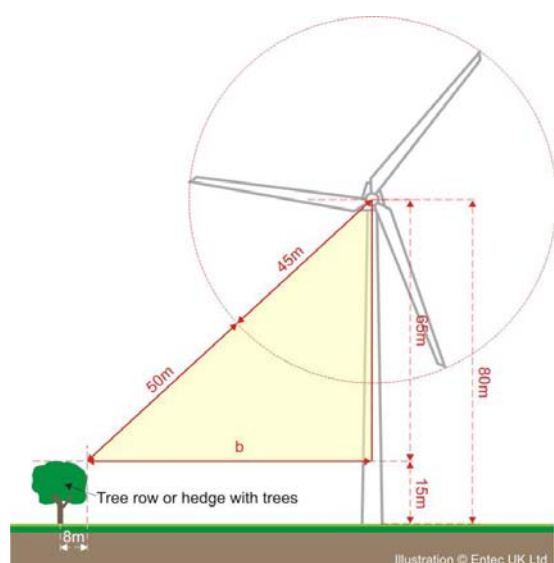


Fig 1. Taken from Natural England Technical Information Note TIN051

During our routine site survey (following a consultation from the Area Planning Office), we will measure the height of existing habitat features on site to allow us to carry out this calculation, which will then inform our response to the Area Planning Office. We will also consider proximity of the site to watercourses, buildings with roost potential and habitat which are important for foraging and roosting bats.

Should a proposed turbine be in close proximity to important habitat features we are likely to request an amended red line boundary, which will often result in a refusal or withdrawal of the planning application.

Applicants are welcome to submit a bat survey report to NIEA specifications ([Bat survey specifications](#)) to accompany their application, however we are likely to require

the same amendment if bats are found to be using the area.

In preparation for a single wind turbine application we recommend that applicants should site the proposed turbine according to this calculation and outside areas of protected/ priority habitats (see <http://www.doeni.gov.uk/niea/biodiversity/habitats-2.htm>). Turbines below 250Kw should be sited at least 50m from habitat features. Below is a list of habitat features which are likely to be used by bats.

HABITATS LIKELY TO BE USED BY BATS

- River
- Streams
- Wet ditches
- Ponds
- Lakes
- Woodland
- Scrub
- Peatlands
- Hedgerows
- Tree lines
- Woodland

Please see the following website and publication for more information;

Bat Conservation Trust

http://www.bats.org.uk/pages/uk_bats.html

Wind farms and wind turbines: a Position Statement from Bat Conservation Trust

http://www.bats.org.uk/pages/wind_turbines.html

Bats and Development – Northern Ireland Environment Agency (NIEA)

http://www.qpani.org/documents/niea_bats_and_development_final_version.pdf