

YSLUMOD A THWRBEINAU GWYNT - Y DYSTIOLAETH

Bats and wind turbines - the evidence

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(Swyddog mamoliaid gyda Cyngor Cefn Gwlad Cymru ond y nodyn isod yn anffurfiol)

From the evidence of research in other countries, it would be expected that some bats would be killed by wind turbines in this country, but as no research had been done in the UK, it has not been possible to determine if there is a problem and if so, what the scale of the problem may be.

The species at highest risk on other studies have been the higher flying aerial-hawking & tree roosting species. The same species, or species with similar characteristics are found in the UK - pipistrelles, noctules and leislers in particular. The highest casualty rates in studies on the Continent and in north America have been associated with migration periods, especially late summer. There isn't any real information on whether bats in this country migrate and the highest risk from those studies seem to be when bats are concentrated in larger numbers at certain locations e.g. wind farms sited in mountain passes that are migration routes.

There is more anecdotal information from European work that suggests that non-migrating bats are also at risk and that the presence of a wind turbine can attract some species of bats - again it may be the tree roosting species looking for roost sites or it may be that turbines accumulate insects that attract the bats.

CCW is contributing to two research projects on the issues. A project on bats and wind farms has completed its first year & has recorded small numbers of bat casualties. Dogs are being used to find the casualties and this project has measured how much more efficient they are at finding casualties. There have been too few sites to enable any analysis of risk factors. Although the wind industry is a partner to the project and is also funding the work, there has been a problem in getting the wind farm operating companies to allow access for monitoring & that is still the case. The preliminary results do support the analysis of the higher risk species. The other project is on bats and single medium-sized wind turbines. That hasn't started field work yet, but does have a reasonable number of sites signed up for monitoring.

Another study (not yet published) indicates that bats avoid hedgerows close to small scale turbines (this did not consider larger turbines) and the effects were most pronounced in higher wind conditions - the time when you would expect bats to use the shelter of the hedgerow. So even if there isn't a casualty risk from those, there may be avoidance impacts.

So, at the moment we still don't really understand the level or scale of risk. The slower and lower flying species, such as long-eareds and horseshoes seem to be less liable to risk as they are less likely to fly within the area of the rotor blade. We don't really know much about likely impacts for the species in between the low & high risk. The Statutory Nature Conservation Organisations have been involved in writing

interim guidance published by Natural England (TIN051 and TIN059) and by Scottish Natural Heritage (<http://www.snh.gov.uk/docs/B999258.pdf>), but we really need to get more data before we know whether the risks are likely to be significant at population levels.

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