

BAT REPORT SUMMARY

DixonBrosnan Environmental Consultants were commissioned by Maurice McCarthy of Organic Power Ltd to carry out an assessment of bat use within an area of proposed wind farm development. The site, 1.6 km north east of Enniskeane in Co. Cork, ranges from 110 to 195 m.a.s.l. in altitude and covers an area of just over 4 km north-south and just over 5 kilometres east-west, centred on National Grid Reference 58000, 136950.

Eight species of bat occur in Ireland, all of the order Chiroptera. All bat species in Ireland are protected under the Wildlife Act 1976, as amended 2000 and the Habitats Directive which was transposed into Irish law in the European Communities (Natural Habitats) Regulations (S.I. 94 of 1997), as amended. Irish bat species are exclusively nocturnal insect feeders.

It is not proposed that any potential bat roosting sites, such as old buildings or over-mature trees will be removed, and therefore the survey focused on determining general levels of bat activity within the locality. Consultation with the National Parks and Wildlife Service (NPWS) and Cork Bat Group revealed that no maternity roosts are known to occur within or near the area of the proposed development.

Three bat species were detected during surveys namely common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and leisler's (*Nyctalus leisleri*). As expected common pipistrelle was the most frequently detected .

The level of bat activity within the area suggests that bats are likely to encounter turbines during their foraging activities. However the relationship between local bat density and collision rate is poorly understood. Research from the United States suggests that tree roosting species (Johnson, 2004 and 2005) and migrating species are most at risk (Kunz, 2004). Most fatalities appear to occur during late summer and early autumn, coinciding with bat migration (Johnson, 2004; Kunz, 2004). This may mean that while local bats are likely to forage near the turbines, they are unlikely to be struck.

In the event that the development is approved for this location the following **mitigations measures should be implemented during the construction phase.**

A. The removal of hedgerows for turbine positioning or road construction should be minimised. Where tracks cut through existing hedgerow this should be done at right angles to reduce the amount of hedgerow lost.

B. Where possible, turbines should not be positioned adjacent to maternity or roosting sites.

C. Where turbines are to be placed near nursery colonies, construction should take place outside the period of mid-June to mid-August (when young are being reared).

D. Existing roads and tracks should be used or improved where possible to minimise unnecessary habitat damage.

In the event that the development is approved for this location the following **mitigations measures should be implemented during the operational phase** to reduce the likelihood of collision.

A. Avoid lighting turbine structures at night as these are likely to attract insect and subsequently foraging bats thus increasing the potential for collision.

B. Public visits to the turbines should be discouraged by restricting access to the development area.

C. Bat use and fatality rate at the site should be monitored with the use of bat surveys and cadaver collection. As part of this, unanticipated impacts can be identified and additional monitoring should be recommended if needed.
