

# Keep your wind farm ecologically sustainable

Many habitats and wildlife species are protected by law and hence special surveys are recommended when planning a wind farm. This poster highlights survey times, points for consideration and potential to enhance habitats for wildlife on wind farm sites over the long-term.

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## Habitats

Special habitats, eg. bogs and wetlands could be threatened by direct loss or changes to hydrology resulting from wind farm infrastructure.

### Approach

Survey sites early in the process, even during scoping stage.

### Survey Times

Summer months. Upland sites at end of summer months.

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## Freshwater Pearl Mussel

Freshwater pearl mussels are found in upper parts of river catchments. Highly susceptible to water quality change through release of sediments or pollutants upstream. Planning permission can be refused as a result.

### Approach

An early desktop survey to see whether freshwater pearl mussels occur downstream is important.

### Survey Times

Survey limited by river conditions rather than season. Professional advice needed to determine survey approach.

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## Bats

The presence of bats may require amending the layout of a windfarm.

### Approach

Commission a full survey to identify the importance of the site to bats and also how they use the site. This will help determine the placement of turbines.

### Survey Times

March to October. 1 transect survey per month. Use of static detectors is a cost efficient survey technique. Survey roost sites.

Roots and flight paths should be a minimum distance of 50m from blade tip to feeding or commuting areas.

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## Other Important Species

Species can be impacted by wind farms in a number of ways as a result of construction or operation of the wind farm.

### Approach

Species surveys within and around the wind farm area are important to determine the most appropriate layout for a wind farm and assessing the overall potential impact of an operating wind farm on important species.

### Survey Times

Professional advice needed to determine survey approach.

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## Salmon and other freshwater species

Many of our freshwater species, such as salmon, white-clawed crayfish and lampreys can be affected by wind farm proposals. Salmon in particular can be affected by water quality impacts.

### Approach

A survey is recommended to determine ecological impact.

### Survey Times

For salmon and lampreys consultation with local fisheries officers is the best option. Crayfish surveys limited to July – September inclusive.

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## Otters

Loss of riverbank habitat and disturbance are the main threat. New river crossings or modifying existing bridges have the potential to impact their habitat.

### Approach

Avoid works in the vicinity of otter holts. Maintain buffer distances to watercourses. Ensure any water crossings facilitate movement of otters.

### Survey Times

Can be surveyed at any time of year. Surveys look for signs of activity.

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## Marsh Fritillary Butterfly

Marsh Fritillary butterflies are Ireland's only protected insect. Can occur wherever their food plant, devil's-bit scabious, occurs.

### Approach

Avoid areas of suitable habitat. Ensuring there is no impact on these areas will help this species that relies on a patchwork of suitable habitat across the landscape.

### Survey Times

Optimal survey season is from mid-August to early October for larval web surveys.

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## Environmental Enhancement

As wind farm projects tend to also include large areas of semi-natural habitat, they provide great opportunities for enhancement through management changes.

### Approach

Something as simple as dams in drainage ditches in wetland areas and changes to grazing regimes can result in great wildlife benefits.

### Survey Times

Management proposals should be long term to be sure of the best wildlife benefit and should be written up in the form of a habitat management plan.

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## Birds

Wind farm construction and operation can have an impact birds. Species most at risk include raptors, wildfowl and waders. All nesting birds are also protected.

### Approach

Buffer zones are likely to be needed for some sensitive species. Avoid vegetation clearance during the breeding season. This will need to be taken account of in the scheduling of works.

### Survey Times

Full year surveys or specific seasons may be required. Breeding season (1 March to 31 August) surveys vary for different species. At risk species should have vantage point watches.

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## Planning for wildlife

Having got planning permission, mitigation and enhancement measures should be incorporated into a **Habitat Management and Enhancement Plan** as well as the **Construction Method Statement**.

Even if a Habitat Management Plan is not a condition of the planning consent, it is valuable for bringing together all the information from surveys and assessments and setting out a short and long term plan to benefit wildlife on the site.



### Environmental Consultants

If we can help you with your project please get in touch. Check out our website for information on the services we provide.

[www.woodrow.ie](http://www.woodrow.ie)