

Gannow Biodiversity

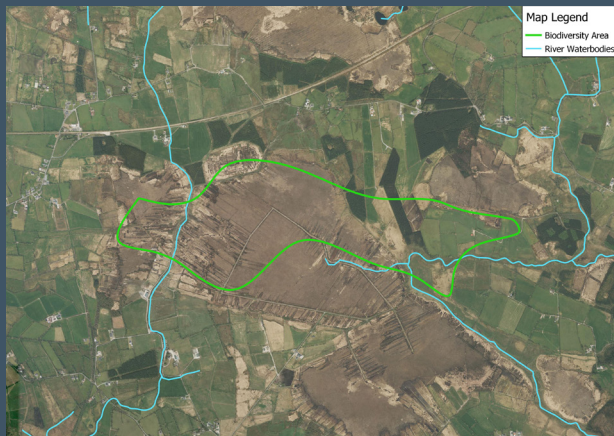
Gannow is situated within a landscape of regenerating cutover bog, agricultural and wet grasslands encompassing hedgerows and treelines with rivers, floodplains, and small patches of plantation forestry. This leaflet provides an overview of the main habitats and species recorded during ecological surveys of the area.

What is Biodiversity?

Biodiversity is a term used for the variety of life on earth, biodiversity includes all species and habitats found within a given area known as an ecosystem. A wide variety of specialist ecological surveys have been undertaken at Gannow by MKO, with the project designed to avoid sensitive ecological receptors.

These surveys have targeted a wide variety of species and habitats with the aim of determining their distribution in the area. Species recorded in the study area to date include everything from biodiverse plants to insects, birds, mammals and amphibians.

This leaflet provides a brief overview of a variety of habitats and species of interest with potential to occur within the biodiversity study area as well as some interesting facts for the reader.



Map 1 The biodiversity study area and local rivers

Habitats

Map 1 shows the biodiversity study area which covers the environs of the wind energy developable area. The following habitat types, which may be of interest to the local community, are found within the study area.

Watercourses

A number of small watercourses and tributaries flow in southerly directions within the Gannow biodiversity study area. The Raford River and its tributaries flow southwest off the biodiversity study area and into Galway Bay over 20km away. The Raford River is known to host protected White-clawed crayfish, while further downstream where it meets the Kilcolgan River Otters have been recorded on several occasions. Fish species including Salmon and Lamprey have also been present in the vicinity of the biodiversity study area. Aquatic invertebrates such as mayfly and aquatic plants found in the rivers and drains throughout the biodiversity study area play an important role in the food chain for a wide array of faunal species, including fish and amphibians such as frogs, which have been found throughout the biodiversity study area.



Plate 1 The Raford River flowing through the west of the biodiversity study area

Regenerating Raised Bog

Cutover bog and small areas of regenerating cutover bog are present within the biodiversity study area. Bogs are wetlands made of peat, plants and water combined together. Bogs develop on poorly drained soils where the weather is very wet.

Peat is the result of the accumulation of partially decayed plants over thousands of years. This makes peatlands such as these incredibly important carbon sinks, storing 53% of all soil carbon in the island of Ireland on just 16% of the land area. Bogs support a number of protected plant and animal species including Irish Hare, Badger and Sphagnum moss species.



Plate 2 Area of regenerating raised bog

Wet Grasslands

Wet grasslands are an abundant habitat throughout Gannow due to the wet, often waterlogged nature of the local soils. These fields are often dominated by rushes, but in some areas are highly diverse with Purple moor grass, Sweet vernal grass, Devil's-bit scabious, Tormentil, Bog asphodel, Milkwort, and orchids. These areas provide important areas of shelter for ground nesting and foraging birds including Snipe and Meadow pipits, as well as mammals such as Foxes, the trails and traces of which were abundant in this habitat in Gannow.



Plate 3 Wet grassland

Agricultural Grasslands

Agricultural grassland is the most abundant habitat in the east of the biodiversity study area and is currently being grazed by livestock such as sheep and cattle. Although agricultural grasslands are often of relatively low biodiversity value compared to wet grasslands, they do provide some supporting habitat for pollinator species such as butterflies and bumblebees, as well as foraging fauna and birds including Blue tits, Chaffinches, Wrens, Blackbirds, and the friendly Robin. The treelines and hedgerows in agricultural areas are particularly important for providing 'connectivity' between different habitats, in addition to yielding food and creating shelter for birds and mammals, particularly bats which depend on these features for commuting, foraging and roosting.



Plate 4 Agricultural grasslands with treelines and hedgerows

Conifer Forestry

In the eastern part of the biodiversity study area there is a small area of conifer plantation forestry. This habitat is often relatively low in biodiversity value due to the density of trees planted and the monocultural nature of the species composition. Nevertheless, a variety of species are often found utilising its shelter including Pine marten, Red squirrel, Badgers and a variety of bird species such as Buzzards and Ravens.

Mammals

A number of mammals including Badger, Irish Hare, Otter, Red Squirrel, Rabbit and Pine Marten have been recorded in the area in the past. Badgers live in social groups with family members and can live within complex tunnelling systems known as setts.

Irish Hare is a subspecies of the Mountain Hare which is endemic to Ireland and is therefore a particular conservation interest. There are nine bat species in Ireland, and a seven of these species have been recorded foraging within the areas around Gannow, including Common Pipistrelle, Soprano Pipistrelle, Myotis species, Brown Long-eared Bat and Leisler's bat. Ireland's smallest bat is the Soprano Pipistrelle which weighs as little as a €1 coin. Each bat can eat over 3000 midges in one night!

Marsh Fritillary Butterflies

The Marsh Fritillary butterfly is an elusive butterfly in Ireland, with its mottled brown, orange and white colouring and small size it camouflages itself well within meadows and marshes. This butterfly is the only insect in Ireland that is designated under Annex II of the EU Habitats Directive, giving it important protection for its conservation. Dedicated surveys were carried out for this species in Gannow, and caterpillars were found in the eastern section of the biodiversity study area. The butterflies lay their eggs within silky webs only on the leaves of the Devil's-bit scabious plant which has a vibrant purple flower in the late summer months. These caterpillars then stay together in colonies until March when they cocoon to emerge as beautiful adults early in the summer.



Plate 5 A web of Marsh fritillary butterfly caterpillars



If you would like further information please contact info@mkoireland.ie

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Ecological Brochure