



**W**etlands are areas of land flooded with water, such as raised bogs and fens. Their vegetation has adapted for life under these wet soil conditions.



Bogs are wet wonderlands made up of dead plant material. This material is commonly referred to as peat. Areas where peat accumulates are called peatlands or bogs. Raised bogs are raised, dome-shaped masses of peat occupying former lakes in the midlands of Ireland. Their main source of water is rainwater. The surface of the bog is a mosaic of hummocks and hollows, pools and lakes. It is characterised by low-growing vegetation cushioned with clumps of different-coloured sphagnum mosses. All plants found growing on raised bogs are adapted to the waterlogged, acidic and exposed conditions of the habitat.

A fen is a wetland system with a permanently high water level that sits at or just below the surface. Its main source of nutrients is from surface or groundwater and the soil is an alkaline peat soil. Peaceful havens filled with wildlife, fens represent some of the oldest natural wonders in Ireland. Over 600 hundred species of mammals, insects and birds and 200 plant species have been recorded on Irish fens. Fens occur throughout the country, most commonly in the west and in the midlands. They can be divided into two major groups, topogenous fens and soligenous fens, depending on their topography and their hydrology. Having formed from shallow lakes, fens are the first stage of raised bog formation.

Ireland's wetlands are important refuges for a host of wildlife. As you walk across a wetland keep your eyes and ears open; each moment will be filled with wildlife and beautiful experiences for your senses. Watch for dragonflies darting past on the hunt for prey, or look for basking butterflies on a summers day. Listen for the cry of the curlew or the noisy chattering of the reed bunting. Feel the quaking ground beneath you as each footstep sinks and water surrounds your feet. Gently squeeze the sphagnum mosses to release the water that they store. Smell the flowers of heather and search for the bright yellow petals of bog asphodel or the red tips of the matchstick lichen. But for the sake of this precious habitat and its wildlife, always remember to stick to designated paths during your visit.

## THREATS TO THE HABITAT

During the last century, almost 92 per cent of Ireland's raised bog habitat was lost. Traditional hand cutting of turf over the past 400 years for domestic use has resulted in a 46 per cent loss in peatlands. Industrial development and the use of peat to generate electricity, as well as its use as a compost in our gardens, have also contributed to peatland habitat loss. Similarly, our fen habitats have decreased by 79 per cent, mainly through land reclamation for agriculture. On an ongoing basis, illegal dumping in rural areas causes nutrient enrichment of the water within wetlands, and spoils their scenic landscape value. The introduction of alien species of non-native plants such as the pitcher plant, rhododendron, giant rhubarb and lodgepole pine can lead to takeovers by invasive species, which destroy the habitat for native wildflowers and animals. These threats are faced by Ireland's wetlands every day. They are causing irreversible loss to our wetland habitats and their rich biodiversity of wildlife.

## WHAT CAN INDIVIDUALS DO TO PROTECT THE HABITAT?

It is important that each and every one of us takes action to halt the loss of biodiversity in Ireland, and to ensure that this country's wet wonderlands remain for future generations to enjoy. You can do this by getting involved either with a national organisation that strives to protect these areas (such as the Irish Peatland Conservation Council) or with a group in your locality working to protect a local site. Many of our wetland habitats have had drains opened on them, have been used as dumping grounds or have been invaded by alien species. Volunteer for work camps that block drains, clean up litter and remove alien species from affected sites. Visit a wetland to educate yourself, your friends and your families on the threats facing these precious areas. Become a watchdog for wetlands in your community, reporting illegal activities – such as the dumping of rubbish – to your local authority. We need to act now if we are to ensure the survival of Ireland's wetlands.

## FURTHER INFORMATION

- Irish Peatland Conservation Council: [www.ipcc.ie](http://www.ipcc.ie)
- National Parks & Wildlife Service: [www.npws.ie](http://www.npws.ie)
- Lough Boora Parklands: [www.loughbooraparklands.com](http://www.loughbooraparklands.com)
- Bogland Project: [www.ucd.ie/bogland](http://www.ucd.ie/bogland)
- Bord na Móna: [www.bnm.ie](http://www.bnm.ie)
- The Heritage Council: [www.heritagecouncil.ie](http://www.heritagecouncil.ie)
- Irish Bog Restoration Project: [www.irishbogrestorationproject.ie](http://www.irishbogrestorationproject.ie)