

Common Tern (Photo: Dan Breen)



Wigeon (Photo: Dan Breen)



Black-headed Gull in non-breeding or winter plumage (Photo: Dan Breen)

A remarkable natural spectacle that can be seen in late autumn and winter evenings on Lough Derg are the flight displays of Starling murmurations. A murmuration is a gathering of Starlings. In late autumn and winter, many thousands of Starlings gather and put on amazing aerial flight displays before roosting communally for the night. Numbers of Starlings are boosted by visitors arriving from Europe in winter. Just before dusk is the best time to see Starlings perform their mesmerising aerial dance, which is something akin to a continuous Mexican wave. The reasons for these spectacular flight displays are not fully understood but the large gatherings probably offer safety in numbers. Predators such as Peregrine Falcons might find it hard to target one bird amidst a hypnotising flock of thousands. Starlings possibly gather to fine tune their flying skills and perhaps to keep warm at night. Starling murmurations can be seen over Lough Derg in from the lake or along the shore.



Starling murmuration at northern end of Lough Derg seen from the water (Photo: Edmund Burke)

Otters live in and around Lough Derg, also benefiting from the ample supply of fish. These secretive mammals are widespread in Ireland but very difficult to spot. In fact, Ireland is considered to be the European stronghold for Otters. The most common way of detecting the presence of Otters in an area is to look for their droppings known as spraints. Otters are highly territorial and they mark their territories by leaving spraints in prominent locations such as grass tussocks and boulders. Keep an eye out for Otters or signs of Otters when out walking.



Otter (Photo: Eamon Brennan

### Wetlands

Much of the shoreline of Lough Derg is fringed by a variety of wetlands including reed swamps, fens and callows. Wetlands are hugely important for maintaining the water quality of the lake as they act like filters intercepting nutrients and sediments in run-off from the surrounding landscapes, and releasing water slowly. These watery habitats are very beautiful with their rich variety of colour, texture and movement. You can listen to the soundscape of the wetlands with the gentle rattle of the reeds, hum of insects and constant birdsong. Wetlands provide great cover for waterbirds and spawning grounds for fish.

Reed swamp fringes much of the lake shore dominated by Common Reed or Common Club rush. Fens are a type of peatland often found near lake edges and there are some extensive areas of fen along the Lough Derg shore. These fens are dominated by a variety of sedges, rushes and grasses (e.g. Great Fen Sedge, Bottle Sedge, Black Bog Rush and Purple Moor Grass) and flowers (Meadow Sweet, Purple Loosestrife and Wild Angelica). Callows are another type of wetland found in Lough Derg, mainly along the River Shannon as it enters the lake in Portumna. Callows are a special type of grassland that occurs along the flood plains of rivers. They tend to be managed as meadows and can be particularly species-rich with a variety of flowers include Yellow Loosestrife, Sneezewort, Ragged Robin and sometimes the rare Marsh Pea.



Reed swamp dominated by Common Reed (Photo: Velma Mercer)



Reed swamp dominated by Common Club Rush in the foreground



Meadowsweet

Purple Loosestrife

Angelica

Banded Demosielle (Photo: Tom Cuffe) Black-tailed Skimmer (Photo: Tom Cuffe) Azure Blue Damselfly (Photo: Tom Cuffe)

Wetlands are teeming with insect life, particularly in spring and summer. Butterflies, Damselflies and Dragonflies are usually the easiest to spot as they dash about with great urgency looking for food and a mate. The abundant and varied wetlands around Lough Derg provide food and cover for a great variety of these beautiful insects. Important butterfly populations found at sites around Lough Derg include threatened species such as Wall, Dark Green and Marsh Fritillaries, Large and Small Heath. In late summer the many marshy ponds and bogs are home to dragonflies and damselflies including the rare Turlough Spreadwing and spectacular species such as Banded Demosielle, Azure Bluet, Blue Emperor and Black-tailed Skimmer.



Small heath (Photo: Tom Cuffe)

The abundant insect-life in wetlands provides a rich food source for the many birds that use wetlands for nesting and/or foraging. Curlew, Snipe, Redshank and Lapwing are familiar waders that can be seen at different times of the year. Curlews are beautiful birds often seen in and around wetlands. Their eerie call one of the most evocative sounds of the wetlands. Curlews, along with other breeding waders, are of high conservation concern because their numbers have declined in Ireland and the rest of Europe largely due to the loss of wetland habitats. Snipe nest on the ground in bogs and wetlands on grassy tussocks. Lapwing arrive in large numbers in winter but we also have a resident population in Ireland. They can be easily recognised with their distinctive black and white colouring, and wispy crest on their heads.



Snipe (Photo: Dan Breen)



Lapwing (Photo: Dan Breen)

The abundance of insects in and around Lough Derg also provides a rich source of food for Bats. Common and Soprano Pipistrelle species are common around the lake, along with the Brown Long-Eared Bat, Daubenton's Bat and Leisler's Bat (which is rare in Britain and the rest of Europe but relatively common in Ireland). Daubenton's Bat is often called the 'water bat' because it skims like a hovercraft low to the water in search of insects. Natterer's has also been recorded foraging along woodland tracks or near water.

#### Woodlands

A notable feature of Lough Derg is the considerable extent and variety of woodland around its shores. Native Oak woods occur in the Slieve Aughty mountains near Woodford and in Portumna Forest Park. Oak with an understorey of Holly occurs in the ancient oakwoods in Derrycrag, Woodford and other sites nearby. Stands of native woodland with Oak, Birch and Ash can be seen in Portumna Forest Park. Wet woodland with Willow and Alder fringes much of the lakeshore in a mosaic with other wetlands such as reed swamp and fens. There are extensive areas of conifer plantation around the lake and in the uplands. Many of these plantations include a considerable amount of broadleaves such as Beech, Birch, Ash and some Oak.



Oakwoods at Derrycrag



Wet woods and reed swamp

A particularly rare type of woodland, Yew woodland is found on limestone pavement (i.e. exposed limestone rock, boulders and rubble) on the north and northeastern edge of the lake, including in Portumna Forest Park. Yew is one of our few native conifers along with Juniper and arguably Scots Pine. Unusual stands of Juniper (another native conifer) also occur on the north and eastern shore of the lake in fens and speciesrich calcareous grassland. Juniper usually grows in a prostrate form close to the ground but at Portumna and the northern edge of Lough Derg stands of upright Juniper can be seen.



Upright Juniper at Portumna Forest Park



Yew

Woodlands, particularly native woods, tend to have a particularly high biodiversity because of their age and structure. Ireland was once completely covered with woodland and much of our native flora and fauna is adapted to live in and around woodlands. The woods around Lough Derg are alive with a huge variety of insects, birds and mammals. Red Squirrel numbers declined markedly in Ireland after the arrival of the non-native Grey Squirrel. The Red Squirrel population in the woods around Lough Derg is, however, in a relatively healthy state and Squirrel are often spotted by walkers. The enigmatic Pine Marten is also present but seldom seen. Other woodland mammals present include Deer, Fox, Stoat and Badger.



Whitegate (Photo: Allan Mee)

The variety of woodland types around the lake (upland and lowland, dry and wet woodland) provides a range of habitats for birds. Woodland birds include Tits (Long-tailed, Coal Tit, Blue Tit and Great Tit), Jay, Crossbill, Willow Warbler, Chiffchaff, Treecreeper, Blackcap and Sparrowhawk. Jays are commonly found in broadleaved woodlands. These striking birds are probably one of the most colourful and striking birds breeding in Ireland although not easy to see because they are shy and rarely leave woodlands. Chiffchaffs are so called because of their sing song call, "chiff chaff chiff chaff". Sparrowhawk are probably our most common bird of prey. They feed on small birds.



Jay (Photo: Colin Stanley)



Fox (Photo: Eamon Brennan)



Red Squirrel (Photo: Joe Kilroy)



Pine Marten (Photo: Colin Smith)



Stoat (Photo: Dan Breen)



Long-tailed Tit (Photo: Colin Stanley)



Coal Tit (Photo: Colin Stanley)

Butterflies tend to be seen along woodland paths and rides in summer. Keep an eye out for Wood White, Ringlet, Speckled Wood and Silver-washed Fritillary when walking through woods or along hedgerows. The rare Purple Hairstreak has been recorded in Oak woods around Lough Derg.



Silver-washed Fritillary (Photo: Tom Cuffe)

### **Raised bogs**

There are several small raised bogs around Lough Derg. Raised bogs are a type of peatland that started to form at the end of the last Ice Age, over ten thousand years ago. These bogs formed in depressions and lake basins that in-filled with vegetation over time. Peat, which is made up of dead plants, starts to build up when conditions are waterlogged and plant decomposition rates are slow. The rate of peat growth increases markedly once Bog Moss arrives and acidifies the environment. Raised bogs can have depth of peat of up to 12m!







Sundew, insect-eating plant

Bogs have a fascinating flora because only certain plants can survive in the waterlogged, nutrient-poor and acidic conditions. Heathers, Bog Cottons, Sedges and Bog Mosses dominate the bog flora forming a rich tapestry of colour, which changes through the seasons. Some plants have adopted extreme strategies to cope with the low nutrient content of the peat by eating insects! Sundews, Butterworts and Bladderworts all supplement their diet by munching on a few insects. Bogs have been an integral part of our cultural heritage and Irish identify for generations.

# Uplands

Lough Derg is framed by the Slieve Aughties and Slieve Bearnagh to the west and the Arra mountains to the east. These uplands provide great vistas of the lake and contain a wealth of upland habitats including blanket bog, heath and conifer plantation. The lucky walker might catch a glimpse of a Hen Harrier in summer in the Slieve Aughties, one of our rarest birds of prey, in the heather-rich heathy hillsides. Hen Harriers also use young conifer plantations for breeding. Merlin also breed in these uplands. Meadowpipit and Skylark are frequently encountered in the uplands, on bog or heath. Skylarks are a familiar sight and sound to anyone working on the bog in summer as their birdsong, a continuous stream of warbling notes, can be heard while they hover at a considerable height overhead.



Hen Harrier (Photo: Mike Brown)



View of Arra Mountain



Heathery hillside

# Farmland

Much of the rolling landscapes of the lowlands around Lough Derg are characterised by productive farmland. This farmland is dissected by many kilometres of hedgerows. Mature trees, mainly Ash but also Oak, Sycamore and Beech, are a common sight in fields and hedges greatly enhancing the countryside. Hedgerows provide networks for animals to move through the landscape and are particularly important for birds and bats.



Kestrel (Photo: Tom Cuffe)

#### Focus on alien invaders!

Invasive species are plants or animals that have been introduced to Ireland by people either accidentally or deliberately and have a negative impact on native species and habitats, and can alter how native ecosystems (such as lakes) work. Several alien invaders are causing problems in Lough Derg including the Zebra Mussel, Asian Clam and Mink. Others are present and may cause problems in the future, such as Curley Waterweed. We all have a responsibility to ensure these invaders aren't introduced to other lakes, particularly boat users and anglers. Precautions must be taken if moving your boat to another freshwater body. Never empty water from aquariums or small ponds into the lake (or any other lake) because you risk introducing invasive species.

For more information see www.fisheriesireland.ie/ Research/invasive-species.html



LOUGH DERG ON SHANNON NATURE TRAIL



Portumna, Co. Galway

Portumna is situated at the northern end of Lough Derg where the River Shannon flows into the lake. The Irish name for Portumna, Port Omna, means the 'landing place of the oak'. The town has a long and interesting history and heritage largely due to its strategic location at the meeting point of the Shannon and Lough Derg. Today Portumna is a popular centre for coarse fishing and boating on the Shannon and Lough Derg. It is an excellent place to access and enjoy the lake, and has a wonderful Forest Park that is highly popular with walkers.

Zebra Mussel shells (Photo: Velma Merver)

# Portumna Water Recreation Park, Co. Galway SAT NAV: 53.0835, -8.2108



Known locally as 'the swimming area' the Portumna Water Recreation Park is located just south of the town. The site has a quay and designated areas for swimming and fishing. This beautiful corner of the lake is an ideal place for birdwatching, fishing, walking or just enjoying the sights and sounds of the lake.

The Water Recreation Park is a particularly good location for bird-watching. Mallard, Teal and Tufted Duck are present on the lake all year round. In winter, Wigeon, Gadwall, Shoveler, Pochard and Goldeneye can also be seen. The graceful Common Tern is a regular sight during the breeding season in summer. White-tailed Sea Eagles have often been spotted in this area. Look out for a Kingfisher flashing by on a fishing trip. The remarkable flight patterns that huge flocks of Starlings perform in winter, known as 'murmurations', can regularly be seen near Portumna. The Starlings roost at night on the extensive reed swamp.

Wetlands fringe the lake on either side of the swimming area. The Common Club-rush is the main component of much of these wet lake margins in this area but Yellow Water Lily, Water Mint and Water Plantain are also present.



Stand of Common Club Rush



Common Tern (Photo: Tom Cuffe)



Kingfisher, a riverine bird (Photo: Tom Cuffe)