

NATURAL HERITAGE

(2009)

NH 005

Wetlands are areas of marsh, fen, peatland or water (both fresh and salt) where the depth of water does not exceed 6m. In Northern Ireland, this includes river, lakes, marshes, fens, bogs, estuaries and coastal shallows.

WHY ARE WETLANDS IMPORTANT?

- They are home to specialised plants and animals that are not found in any other habitat.
- They are vital to migrating birds as feeding and resting points.
- They regulate water supplies by maintaining ground water levels and storing winter floodwater.
- They provide water for domestic, agricultural and industrial users.
- They support commercial fisheries, fish farms, and angling.
- They are important for sport, recreation and tourism.
- Wetlands are wilderness areas of great beauty. They should be valued as an important part of Northern Ireland's heritage.

FLORA AND VEGETATION

At first sight, some wetlands may appear to be monotonous areas where only a few types of plant grow, e.g. reed beds on inland marshes. However, wetlands are home to many of our rare and threatened species: 29 out of the 55 plants protected under the Wildlife (NI) Order 1985 are found in wetlands.

The wet spongy surface of a **peat bog** is made up of a series of hummocks and hollows with occasional deep open pools and is dominated by different species of Sphagnum moss. Other plants grow among the mosses, e.g. bog rosemary, bog cotton, cranberry, bog asphodel and heather. Bogs are also the home of insect-eating plants like sundews, butterwort and bladderwort. Protected bog plants include the rare bog orchid, and marsh saxifrage.

Swamps and fens are found in poorly-drained hollows or around lakes. Aquatic plants such as pondweeds and waterlilies grow in open water. The shallows may support a fringe of club-rushes and sedges, or where the waters are nutrient-rich, dense beds of reeds and bulrushes may grow along with cowbane and hemlock, both of which are highly poisonous. Other watersides may have beds of reed-grass and colourful herbs such as meadowset, willowherbs, yellow and purple loosestrifes and valerian.

TYPICAL WETLAND



BULRUSHES



BOG COTTON

On the edge of the fen, willow, alder and guelder rose form a scrub habitat, where alder buckthorn, a rare and protected species, may grow.

Mudflats and saltmarshes support specialised plants such as glassworts and eelgrass which require submerision in salt water at each high tide. Sea spurreys and sea lavender are found on the waterlogged saltmarshes which border mudflats. The dwarf spike-rush which grows on estuarine mud is protected in Northern Ireland.

INVERTEBRATE ANIMALS

Wetlands are key habitats for the conservation of invertebrate animals. Invertebrates have an important role in decomposition and nutrient cycling within the wetland ecosystems.

Many insects depend on fresh water for their larval stages, (e.g. dragonflies, damselflies and irritating midges and mosquitoes). The wide variety of plants provides food for the caterpillars of different butterflies and moths.

Mudflats and saltmarshes are some of the most productive natural ecosystems due to the continuous supply of nutrients from rivers, the sea and sediments stirred up by the tides. Although the number of invertebrate species present is relatively low, populations are vast because of the abundant food supply. Mudflats can support higher concentrations of animal life per unit area than most other types of habitat.

Among invertebrates recognised internationally as under threat in Europe are various species found in Northern Ireland including the fresh water pearl mussel, the cray fish and the Irish damselfly.

MAMMALS

Wetland mammals are not easy to spot. Their resting places, tracks or droppings are often the only evidence of their presence.

The fox, badger and Irish hare occur on bogs while the otter can be found in most wetland areas. Common and grey seals often visit coastal wetlands to catch the abundant fish. Occasionally, our coasts are also visited by porpoises and whales.

BIRDS

The large flocks of birds which gather on our wetlands can be an impressive sight. Tidal mudflats support high numbers of wildfowl and waders because they are rich in food, while isolated upland bogs provide secluded areas for nesting and moulting. Our wetlands are also vital to many birds who use them as refuelling and resting points or as their winter feeding grounds.

WINTER WATERFOWL NUMBERS IN IRELAND

Loughs Neagh and Beg support more waterfowl than any other site in the British Isles with numbers over 100,000 in 1990/91. Other important Northern Ireland sites include Strangford Lough (60,000 wildfowl and waders) and Lough Foyle (44,000 wildfowl and waders).

THREATS TO WETLANDS

- Loss of peatland due to peat extraction and forestry: only 12% of Northern Ireland's peatland remains intact.
- Drainage and agricultural improvement.
- Development for ports, marinas and industry. In Belfast Lough, expansion of industry has eliminated 85% of the original mudflat.
- Pollution and enrichment of waters. This adversely affects the ecology of wetlands.
- Waste tipping. Many wetland areas have been used as rubbish dumps.

CONSERVATION OF WETLANDS

Wetlands are not only vital for wildlife, but they also provide us with many valuable resources, as well as space for relaxation and recreation. They are an important part of our heritage that should be managed and maintained for the benefit of future generations.



STRANGFORD EELGRASS



EELGRASS



OTTER

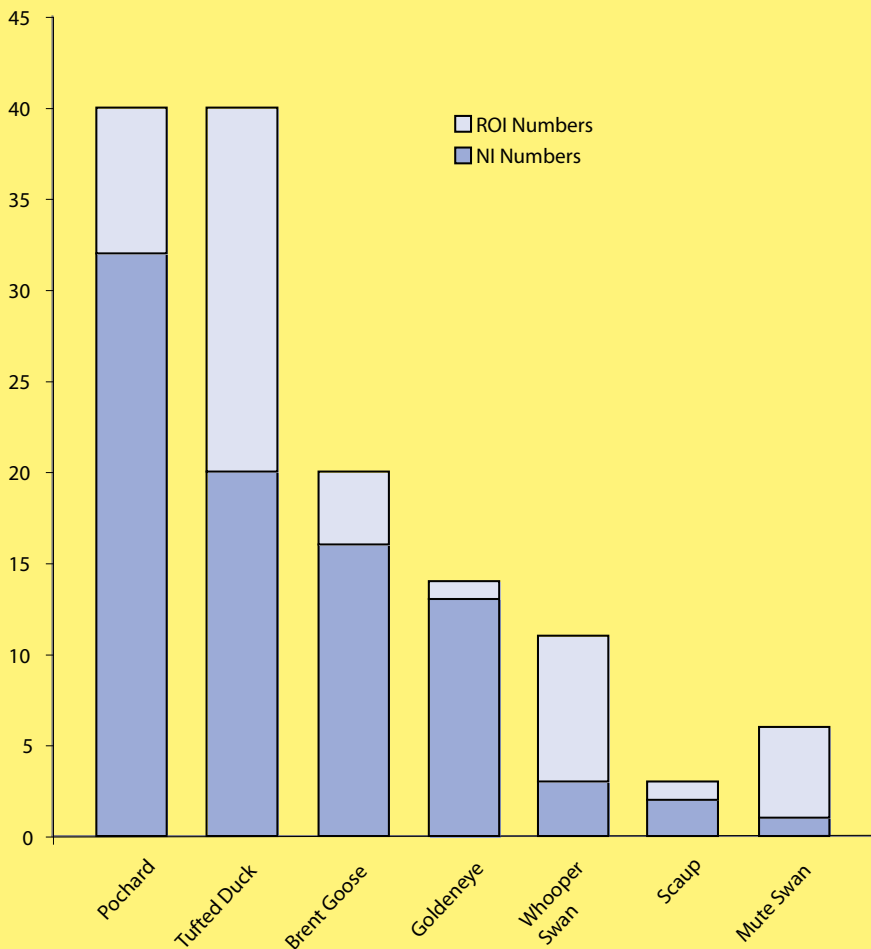


LAPWING

AREA OF PROTECTED WETLAND

The totals are not the sum of the figures given because, where a site has more than one designation, it is only included once in the total.

WINTER WATERFOWL NUMBERS (X1000) IN IRELAND



BRENT GOOSE



GOLDENEYE



MUTE SWAN

Designation	Number of sites	Areas (hectares)
ASSI	22	46,759.3
NNR	20	3,020.0
FNR	16	464.6
RSPB	3	1,592.0
UWT	6	282.5
NT	11	832.5
Ramsar	2	40,925.0
Total	77*	50,922.8*

WETLANDS

WETLANDS TO VISIT

Wetlands are very common in Northern Ireland but most are privately owned with no right of access to the public. However, you are free to visit the following wetland nature reserves:

Peatlands Park
33 Derryhubbert Road
Dungannon
Co Armagh
Tel: (028) 3885 1102

Quoile Pondage Nature Reserve
5 Quay Road
Downpatrick
Co Down
Tel: (028) 4461 5520

Oxford Island Nature Reserve
Lough Neagh Shore
North of Lurgan
Co Armagh
Tel: (028) 3832 2398

FURTHER READING

Wetlands – The Community's Wealth -
Braakhekke, WG and Marchard M. 1987.
The European Environment Bureau, Brussels.

Peatlands: Wastelands or Heritage? -
Cross, JR. 1989. Stationary Office, Dublin.
ISBN 0 7076 0079 0

Important Bird Areas in Europe -
Grimmett, RFA and Jones, TA. 1989.
International Council for Bird Preservation, Cambridge.
ISBN 0 946888 17 5

The Conservation of Peat Bogs -
Nature Conservancy Council. 1982.
Nature Conservancy Council, Peterborough.
ISBN 0 36139 193 4

The Conservation of Estuaries -
Nature Conservancy Council. 1983.
Nature Conservancy Council, Peterborough.
ISBN 0 86139 228 0

The Conservation of Fens and Marshes -
Nature Conservancy Council. 1983.
Nature Conservancy Council, Peterborough.
ISBN 0 86139 227 0

Estuary Birds of Britain and Ireland -
Prater, AJ. 1981. T and A/D Poyser, Staffordshire.
ISBN 0 85661 0291

Turning the Tide – A Future for Estuaries - *Rothwell, P and Housden, S.* 1990. Royal Society for the Protection of Birds, Bedfordshire.
ISBN 0 90313 840 9

Our aim is to protect, conserve and promote the natural and built environment for the benefit of present and future generations.

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