Great Crested Grebe (D. Gibson)

Sedge Warbler (D. Gibson)

Lough Neagh Environmental Designations

Lough Neagh is home to both nationally and internationally recognised species of flora and fauna and is considered an important wetland site in the UK and Ireland. In order to protect the habitats and wildlife, a number of environmental designations have been placed on Lough Neagh and the surrounding areas.

- **Ramsar Site**. Designated by the UK Government under the 'Convention on Wetlands of International Importance for waterfowl'. Signed at Ramsar in Iran in 1971, Lough Neagh was the first Ramsar Site declared in Northern Ireland in 1976.
- **Area of Special Scientific Interest (ASSI)** Protected area that represents the best of our wildlife sites and which make a significant contribution to the conservation of our most valuable natural places.
- **Special Protection Area (SPA)**. Designated under the European Commission Directive on the Conservation of Wild Birds. All European Community member States are required to identify internationally important areas for breeding, over-wintering and migrating birds and designate them as Special Protection Areas.
- **Special Area of Conservation (SAC)**. Sites that have been adopted by the European Commission and formally designated by the government of each country. These are designated due to the presence of rare or threatened habitats or species. It is a strict requirement under the Habitats Directive that these sites are managed appropriately to protect the species and habitats.
- **National Nature Reserves (NNRs)** are chosen from among the very best examples of our wildlife, habitats and geology and their designation is a public recognition by the Government of their importance. Around Lough Neagh the following areas have been declared NNRs. Lough Beg, Randalstown Forest, Rea's Wood and Farr's Bay, Oxford Island, Mullenakill and Annagarriff Woods (Peatlands Park), and Lough Neagh Islands.

Tufted Duck (S. Foster)

Useful sources of information:

- The Geology of Northern Ireland 2004 Ian Mitchell
- Ireland 1999 David Cabot
- By the Shores of Lough Neagh 2008 Brian Cassells

- Discover Lough Neagh. Lough Neagh Landscape Partnership www.loughneaghlp.com

- The Geology of Co Antrim | Culture Northern Ireland www.culturenorthernireland.org › features › heritage

Conservation Service, Lough Neagh Discovery Centre
Oxford Island NNR, Craigavon, BT66 6NJ

Tel: 028 3832 2205 **Web:** www.oxfordisland.com
Facebook: www.facebook.com/oxfordislandnaturereserve

Armagh City Banbridge & Craigavon Borough Council

Lough Neagh

Facts and Figures

- Surface area - 383km²
- Length (North-South) - 25km
- Width (East-West) - 15km
- Length of shoreline - Approx. 125km
- Present height above sea level - 12.5m
- Average depth - 9m
- Maximum depth - 29m
- Capacity - 800 billion gallons
  3.5 million million litres

The name of 'Lough Neagh' is derived from the ancient Irish name of Eochy or Echaidh. It is told that after fleeing from his father on a magical horse he set up camp in Ulster with his followers. Within the camp a spring appeared and provided water for the community, however, against advice, the spring was left unattended and rose up and flooded the lands around them drowning Echaidh and all of his followers. The waters became known as Loch nEchach, Lough Neagh.

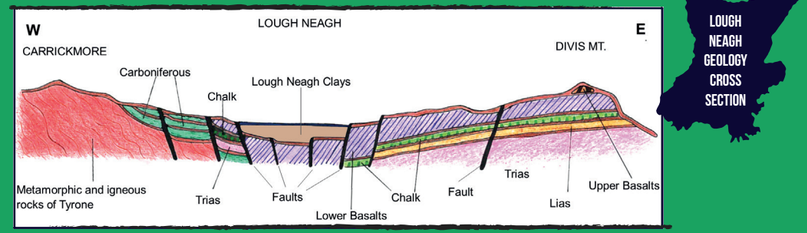
Lough Neagh

Facts and Figures

The geology of Ireland is complex and contains many different types of rock which scientists tell us were formed millions of years ago. Much of the land which now makes up Northern Ireland was covered by a shallow sea (145 to 66 million years ago) and accumulations of mud, marine algae and the remains of other sea creatures developed into chalk.

Two major volcanic eruptions (59 and 55 million years ago) deposited an extensive area of basalt on top of the soft chalk. The creation of these new rocks caused stresses within the earth's crust and major faults occurred. Around 35 million years ago downward warping and subsidence lead to the formation of a large lake stretching from Ballymoney to Portadown – an early Lough Neagh. This area, roughly twice the size of the lough today sank to a depth of 350 metres below sea level.

Mud, sand and debris were carried into this lake where they settled, bringing the bottom of Lough Neagh close to what it is today. These accumulations resulted in the formation of the Lough Neagh Clays which extend over 500Km² to the south and west of the Lough.



Two million years ago the climate of Ireland changed to one which was much colder and vast ice sheets periodically covered much of the country. This cold era ended 10,000 years ago.

As the ice sheets retreated, they left behind a deep layer of glacial drift on the lower lying areas around the Lough. Sand deposits accumulated on the Lough bed, washed down from the surrounding land by glacial meltwaters and rivers.

Today Lough Neagh covers an area of 383Km² but prior to the 1840s it covered a much larger area and at this time the surrounding lowlands were susceptible to winter flooding. In order to prevent this, four separate schemes were undertaken to lower the water level of the Lough between 1846 and 1959. In total, the water level has been lowered by 2.5 metres and is now controlled by sluice gates on the Lower Bann as the water leaves Lough Neagh.

Following the lowering of the water level many small islands emerged in Lough Neagh.

- Lough Neagh is bordered by 5 of the 6 counties in Northern Ireland.
- In total, 42% of Northern Ireland's surface area drains into Lough Neagh.
- There are six major rivers flowing into Lough Neagh.
- There is only one river taking water from Lough Neagh to the sea. This is the Lower River Bann.
- Water flowing into Lough Neagh remains there for an average of sixteen months.
- Lough Neagh is a shallow lake with an average depth of 9 metres. This makes it a very attractive habitat for wildlife.
- The deepest part of the lough is found near Toome where it reaches a depth of 29 metres. It is known as "the Hole".
- Beneath the surface of the water is a rich and varied food supply supporting aquatic insects, fish and birds.
- It is estimated that 100,000 bloodworms (larvae of the Lough Neagh Fly) inhabit every square metre of the Lough's bed. These are eaten by many species of predatory insect, fish and diving duck.
- Lough Neagh is home to many species of native and non-native fish. Native species include, Pollan, Brown Trout and the European Eel. Non-native or introduced species include Perch and Roach.
- Lough Neagh has been recognised as a wetland of international importance as it regularly supports over 20,000 waterfowl.
- The two largest islands on Lough Neagh are Coney Island in the south west and Ram's Island, which lies off the eastern shore.
- Lough Neagh provides drinking water for 40% of Northern Ireland's population, approximately 750,000 people.
- Lough Neagh has the largest commercial eel fishery in Europe, exporting approximately 400 tonnes of eels annually to outlets in England and Europe.
- 1.7 million tonnes of sand is extracted commercially from the Lough each year. This is used in the production of glass, tiles, cement products and used in the construction industry.

Industries associated with Lough Neagh and the surrounding lands

Lough Neagh and the surrounding area contains a wealth of resources which have been exploited over the centuries. The extraction of peat, coal and clay and the production of willow baskets were important industries in the past. Today the main activities are fishing, agriculture, sand extraction, the provision of water supply and, tourism and recreation.

Lough Neagh played a central role in the transportation network of Northern Ireland from the 1700s to the 1930s with the development of the canal system. It was linked to the west and south by the Ulster Canal, to Belfast by the Lagan Canal and to the Irish Sea by the Newry Canal.