

OFFALY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Clara Bog
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Erry (Armstrong), Erry (Maryborough), Doory, Derries, Ballina, Bohernagrisha
NEAREST TOWN/VILLAGE	Clara
SIX INCH MAP NUMBER	8
ITM CO-ORDINATES	624890E 730400N (Boardwalk)
1:50,000 O.S. SHEET NUMBER	48
GSi BEDROCK 1:100,000 SHEET NO.	15

Outline Site Description

An expansive area of raised peat bog situated 2km south of Clara town.

Geological System/Age and Primary Rock Type

Following the end of the last Ice Age, the site now occupied by Clara Bog was a shallow depression in the landscape (Early Holocene, 11,500 years ago). The central part of this basin was occupied by a shallow lake.

Main Geological or Geomorphological Interest

The area is situated at an elevation of 60m-70m OD. The bog is bordered to the north by a large esker complex and by an undulating topography consisting of mainly glacial till to the east, south and west. The topographic depression in which the bog sits is floored by Carboniferous (Waulsortian) limestone, which is overlain by unconsolidated till (sand, gravel, boulders) subsoil, which is considered to be an aquifer and hosts the regional groundwater table. Overlying the till subsoil is a clay bed of glaciolacustrine origin (sediments deposited in a lake that come from glaciers). In central areas of the old lake basin, marl (lime-rich lake muds) overlie the clays, which are all succeeded by thick layers of peat. The peat varies in thickness from <1m to 10m deep.

The bog comprises hummocks and hollows, open pools and active *Sphagnum* and peat growth. The bog is recognised for its unique variety and development of natural soak systems, which are otherwise almost extinct due to large scale peat extraction in Ireland.

Site Importance – County Geological Site; recommended for Geological NHA

This site is recommended as a County Geological Site, but is of international importance. Clara Bog is regarded as the best remaining example of active midland raised bog in Western Europe, mainly owing to the significant area of uncut bog and the presence of unusual 'soak systems' throughout. Active raised bogs are now rare and vulnerable, and have been recognised by the EU as habitats of international importance. The Nature Reserve is protected as a designated National Nature Reserve, a Special Area of Conservation (000572), RAMSAR Wetland Site (415) and Natural Heritage Area.

Management/promotion issues

A 1km wooden loop boardwalk has interpretive panels that communicate the natural heritage of the bog. Clara Bog Nature Reserve and Visitor Centre (co-located within the town library in Clara) are managed by National Parks and Wildlife Service. Clara Bog Nature Reserve (464 Ha) is the largest of the four nature reserves in Co. Offaly. The bog is thought to have been at its maximum extent around AD 1800, prior to major human disturbance. The road between Clara and the village of Rahan bisects the bog. Marginal drainage along this road has resulted in bog subsidence of up to 6m in the last 200 years. (Today less than 50% of its original surface remains). Drainage associated with peat cutting has, and can further, permanently alter the hydrological flow patterns; however, Clara Bog is one of six bogs in Offaly to benefit from being part of the National Parks and Wildlife Service LIFE Active Raised Bog Restoration Project, so negative impacts associated with drainage should be minimised in the future.



View over Clara Bog from boardwalk towards Erry (Armstrong) esker.



Bog asphodel (yellow) and pools alongside boardwalk.



Information sign at entrance and parking area at Clara Bog



Information panel halfway along the boardwalk.



