

NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Trawbreaga Bay
Other names used for site	Trawbreaga Lough
IGH THEME	IGH13 Coastal Geomorphology
TOWNLAND(S)	(Numerous townlands border the site)
NEAREST TOWN/VILLAGE	Carndonagh
SIX INCH MAP NUMBER	3
ITM CO-ORDINATES	643000E 951450N (channel mouth of the bay)
1:50,000 O.S. SHEET Nos. 3,4,11	GS1 BEDROCK 1:100,000 SHEET NO. 1
GIS Code ND029	

Outline Site Description

A broad shallow estuary, with a narrow steep-sided tidal mouth opening NW, on the Inishowen peninsula south of Malin Head.

Geological System/Age and Primary Rock Type

Trawbreaga Bay is a broad shallow estuary formed by Holocene submergence of a lowland area. An estimated 80% of the inner bay area is exposed at low tide, exposing mudflats, sandbanks and stony/rocky substrate. In the inner reaches of the bay, the substrate consists of muddy sand and coarse sediments. Some areas of saltmarsh fringe the bay.

Main Geological or Geomorphological Interest

Trawbreaga Bay comprises both an inner and outer bay area. The inner bay, sometimes called Trawbreaga Lough is a very sheltered sea bay with a narrow steep-sided tidal channel that opens seaward to 'outer' Trawbreaga Bay at the northwest end. The inner bay is fed by a number of small rivers or streams.

Marine muds at Corvish, near the head of Trawbreaga Bay, record deglaciation of Trawbreaga Bay before 17,000 years ago. Ice readvanced into the bay between 15,000 and 14,000 years ago, when ice flowed WNW into the depression between Trawbreaga Bay and Culdaff Bay. Much of this depression is filled with raised marine terraces recording high relative sea levels. Final deglaciation of Trawbreaga Bay occurred after 14,000 years ago.

Studies of relative sea-level suggest that Trawbreaga Bay (inner) was still cut off from the open sea during the earliest stages of Mesolithic (c. 7,500 years ago) human colonisation of the north coast of Ireland.

The shallow tidal estuary of Trawbreaga Bay, as it is today, formed by submergence of a lowland area (possibly a lowstand river valley), whereby the rate of sediment accumulation has outpaced the rate of sea-level rise since the end of the last major glaciation.

Site Importance – County Geological Site; may be recommended for Geological NHA

This is an excellent site in terms of Quaternary glacial geomorphology and in understanding environmental, climatic and sea-level change along the north coast of Ireland in the past 20,000 years.

Management/promotion issues

The coastal landscape around Trawbreaga Bay is an important recreational area for locals and visitors, considering the fine beaches at Lagacurry and Five Finger Strand, and the scenic views of the bay itself afforded from the surrounding landscape. Information boards at Malin Bridge are worthy additions to the site, and provide information about habitats, flora and fauna, and cultural history. The geological and glacial heritage could be highlighted in future on literature and signage produced on the bay and the Inishowen peninsula.



View of Trawbreaga Bay (inner) from Ballycramsey looking southeast.



Mouth of Trawbreaga Bay, looking south to Doagh Isle from Soldiers Hill. Five Finger Strand on left.



Head of Trawbreaga Bay at Malin village. Ballyboe River enters bay under Malin Bridge. Information boards at southern end of Malin Bridge.

