

LEITRIM - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Leitrim Coast
Other names used for site	
IGH THEME	IGH8 Lower Carboniferous, IGH7 Quaternary
TOWNLAND(S)	Wardhouse
NEAREST TOWN/VILLAGE	Tullaghan
SIX INCH MAP NUMBER	1
ITM CO-ORDINATES	577100E 857850N (cove at centre of site)
1:50,000 O.S. SHEET NUMBER 16	GSI BEDROCK 1:100,000 SHEET NO. 7
GISCODE LM021	

Outline Site Description

Foreshore site on bedrock platform backed by low cliffs comprising bedrock and till.

Geological System/Age and Primary Rock Type

Mississippian (Lower Carboniferous) sandstones, siltstones and shales of the Mullaghmore Sandstone Formation (c. 330 Ma).

Main Geological or Geomorphological Interest

The central part of the four km-long Leitrim coastline, along with Mullaghmore Head itself, forms the type area for the Mullaghmore Sandstone Formation. This area northwest of the Ox Mountains was the last in Ireland to be inundated by the Carboniferous marine transgression. The early phase of limestone deposition was followed by a sudden influx of mud leading to development of a delta complex fed by rivers flowing from the north. The early mud deposition is represented by the Bundoran Shale Formation to the northeast of the site and this was followed by the Mullaghmore Sandstone Formation, comprising cyclic units of siltstones and shales topped by thick channel sandstones.

Much of the site comprises a platform cut by waves along the shallow-dipping strata, during the Quaternary period. Cliff exposures provide excellent examples of the cyclic sequences of interbedded sandstones, siltstone and shales. Fossils are abundant in places, particularly in the shale beds, but trace fossils, sedimentary structures left by animals, are more typical of this formation. Channel-fill structures can be observed in the sandstones while folding and disruption of bedding is notable in some siltstone beds.

Site Importance – County Geological Site

This site is considered to be part of the type area for the Mullaghmore Sandstone Formation and as such is a significant county site. The impressive wave-cut platform adds further interest.

Management/promotion issues

The site is accessible along on foot from Tullaghan, albeit the 1km-long walk along the stony beach is somewhat difficult underfoot. The small cove in the centre of the site is linked to the Tullaghan road by a public laneway but the descent to the cove is *via* a steep cliff section. The site should only be visited as tides permit.



Wave-cut platform in sandstone and shale beds of Mullaghmore Sandstone Formation; view southwards.



Cyclic sequence of sandstone / shale-siltstone in cliff-face.



Channel or basin structure in shale infilled by lobe of sandstone.



Cove in centre of site – view to south of southern part of site.

