

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Killary Harbour
Other names used for site	<i>An Caoláire Rua</i>
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Inishbarna, Rosroe, Foher, Bunowen, Tullyconor, Derrynacleigh, Leenaun, Letterbrickaun, Glennagevlagh (all Galway) Letterass, Lettereeragh, Bunndorragha, Uggoon, Derreenanalbanagh, Derreenawinshin, Derry (all Mayo)
NEAREST TOWN/VILLAGE	Leenaun
SIX INCH MAP NUMBER	10, 11, 12
NATIONAL GRID REFERENCE	487250E 762450N (centre of fjord, near Leenaun)
1:50,000 O.S. SHEET No. 37	GSI Bedrock 1:100,000 Sheet No. 10

Outline Site Description

Killary Harbour is a deep, 15 km-long glacial fjord set between the Maumturk and Twelve Ben Mountains in Galway, and the Mweelrea Mountains in Mayo. The site extent also includes portions of a number of 'hanging' valleys (e.g. Glennagevlagh), particularly along the eastern end of the feature, which were formed by feeder glaciers into the main valley during the last Ice Age.

Geological System/Age and Primary Rock Type

The valley covers a large area underlain by Ordovician Metasediments. The valley itself and the glacial features adjacent to it date from the last Ice Age.

Main Geological or Geomorphological Interest

Killary Harbour is a spectacular example of a glaciated U-shaped valley, with oversteepened cliff sides and a flat floor. As the valley has been flooded by the Atlantic Ocean since the last Ice Age, the valley forms Ireland's only true fjord feature, which is a glacial valley drowned by the sea. Killary is crooked, as it bends half way along its extent, and is steep-sided, and rocky; just over 15 kilometres long, 700 m-900 m wide and up to 400 m deep.

There are a number of excellent components within the valley which are discrete examples of glacial erosion, including large scale features such as corries, arêtes and hanging valleys, as well as a small scale features such as roches moutonnees, whalebacks, chattermarks, rat-tails and striae.

The head of the valley and the area around Glennagevlagh and Aasleagh host a number of recessional moraines, as well as particularly fine lateral moraines along each side of the valley. Also, the entirety of the flanks of the valley area is strewn with large erratic boulders, some of which are of Precambrian rocks, proving that ice flow during glacial maximum over County Galway was offshore, generally from southeast to northwest.

Site Importance – County Geological Site; recommended for Geological NHA

The valley itself is a spectacular example of a drowned glacial valley containing fine examples of glacial features throughout. Being Ireland's only true fjord, the site merits consideration as an NHA.

Management/promotion issues

Much of the site is within the Mweelrea/Sheeffry Hills (Site code 001932), Twelve Bens/Garraun Complex (site code 002031) and Maumturk Mountains (Site code 002008) SAC and proposed NHAs, as well as in Connemara National Park. This is a popular driving route, with popular walks also. Despite being a significant landmark on the Wild Atlantic Way, few signboards have been erected and much more information could be provided to describe the host rock geology and to illustrate the glacial processes that led to formation of the valley.



Killary Harbour, viewed from Derrynacleigh.



Shellfish farming in the eastern end of Killary, with the Sheeffry Hills in the distance.

