

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Barley Lake		
Other names used for site	<i>Loch na hEornan</i>		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Crossterry West, Derreenboy Upper, Coomarkane		
NEAREST TOWN/VILLAGE	Glengarriff		
SIX INCH MAP NUMBER	104		
ITM CO-ORDINATES	487660E 556600N		
1:50,000 O.S. SHEET NUMBER	85	GSI BEDROCK 1:100,000 SHEET NO.	24
GIS CODE	CK020		

Outline Site Description

Mountain corrie with a tarn (lake) in the Caha Mountains.

Geological System/Age and Primary Rock Type

Bedrock comprises Upper Devonian sandstone of the Caha Mountain Formation on the north side of the corrie and Upper Devonian sandstone of the Gun Point Formation on the corrie backwall and underlying the lake.

Main Geological or Geomorphological Interest

Barley Lake is perched on elevated terrain between Crossterry valley to the north and Coomarkane valley to the south. The lake is situated at an elevation of c. 235 m OD in the floor of an ENE-facing corrie, from which the Owenahincha Stream flows downhill into the Glengarriff River and the Glengarriff valley. The corrie formed during the Quaternary (Ice Age) whereby glacier ice scoured out a deep, bowl-shaped hollow in the mountainous terrain. The corrie was formed in the core of a syncline (U-shaped fold), and is fault bounded to the north (E-W fault) and east (N-S fault) of the lake. The corrie and Crossterry valley exhibit spectacular ice-scoured valley-side slopes, with inclined and near-vertical strata exposed in thick units. The corrie is best viewed from Crossterry Mountain (339 m), which is situated a short hike along a sheep track leading west from the car parking area. Along this route, thick beds of purple sandstone and siltstone dip steeply to the east, and the sloping bedding surfaces stand proud of the turf.

Abundant glacial features such as striae and *roches moutonnées* found throughout the Cork and Kerry mountains indicate that the Beara and Iveragh peninsulas were occupied by the Kerry-Cork Ice Cap, which was centred around the head of Kenmare River. The thickness of the Kerry-Cork Ice Cap to the north of the Caha Mountains during the Late Glacial Maximum (26,000 – 21,000 years ago) is estimated to have been between c. 825 m (based on trimlines) to c. 1200 m (based on ice-surface modelling), such that the ice sheet overtopped most, if not all, of the mountain summits in the Cork-Kerry region.

Site Importance – County Geological Site

This is an important County Geological Site because it is an excellent example of a glacial corrie with a tarn (lake) situated amid the glacially sculpted terrain of the Caha Mountains. Barley Lake is situated in the Caha Mountains SAC/pNHA (000093).

Management/promotion issues

Barley Lake is in a remote elevated setting and is an excellent location to visit to see a glacial corrie and tarn. Access by road leads to a parking area, from which a short trek brings the corrie and lake into view from an elevated vantage point. Popular as a trekking route, the loop around the lake is not marked, and therefore due consideration should be given to changeable weather conditions and precarious terrain along the route.



Barley Lake viewed looking southwest. Sugarloaf Mountain in distance.



View towards Glengarriff across Barley Lake from Crossterry Mountain.



Gun Point Formation strata exposed on backwall of corrie.



View looking west to Barley Lake (arrow) from N71 roadside lay-by at Skehill.

