

MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Accormore Cirque Moraines
Other names used for site	Keel West Moraines; Lough Accormore Moraines
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Keel West
NEAREST TOWN/VILLAGE	Dooagh/Keel
SIX INCH MAP NUMBER	41; 53
ITM CO-ORDINATES	457980E 806010N (centre of feature)
1:50,000 O.S. SHEET NOS. 22, 30	GS1 BEDROCK 1:100,000 SHEET NO. 6
GIS Code MO002	

Outline Site Description

The site comprises a series of hummocky moraine ridges at the eastern flank of Accormore corrie, the floor of which is occupied by a tarn: Lough Accormore. The moraines have well-defined arc-shaped ridge-fronts, and are surrounded to varying degrees by blanket peat.

Geological System/Age and Primary Rock Type

Cosmogenic (^{10}Be) dating of the moraine surfaces has yielded post-Late Glacial Maximum ages of 15,000 to 11,700 years ago (indicating that the cirque glacier formed well after the Last Glacial Maximum). The corrie and moraines occupy a region of Dalradian (Appin Group) psammite and schist bedrock of the Croaghnaun Formation.

Main Geological or Geomorphological Interest

The site comprises a set of large corrie moraine ridges that occupy the eastern front of Accormore corrie (cirque). Lough Accormore (tarn) occupies the floor of this glacially-sculpted corrie, on the eastern flank of Croaghnaun Mountain (688m). The ridges are surrounded by blanket peat to the east and bedrock outcrop to the west, mainly on mountain slopes. These are excellent examples of ridges of well drained till deposited at the margin of a corrie glacier. Aesthetically the ridges form a large, hummocky crescent shaped 'lip' surrounding the lake (tarn), which provides an excellent contrast with the surrounding ice sculptured rock corrie. The ridges have not been overtopped by the peat owing to their size (up to 30m at their highest point). Many fine examples of ice-pushed blocks and other erratic features stand proud of the moraine surfaces, and moraine deposits are exposed wherever erosion of the thin surface vegetation has occurred. Cosmogenic (^{10}Be) dating of the moraine surfaces (samples from roches moutonnées and large boulders on the inner and outer moraine sections) has yielded ages of 15,000 to 11,700 years ago, indicating that the corrie glacier at this site formed well after the Last Glacial Maximum (around 22,000 years ago).

Site Importance - County Geological Site; recommended for Geological NHA

The site is situated within the Croaghnaun/Slievemore SAC (001955). This County Geological Site is of national importance and is recommended for geological NHA designation. The moraines are of great interest to researchers in terms of understanding past glacial episodes in this very western part of Mayo and Ireland. It is also accessible for school groups.

Management/promotion issues

This is one of the most accessible corries in Ireland, owing to the roadway and extensive parking facilities beside Lough Accormore dam. The tarn and staircase corrie forms to the west are easily observed from the car park, and ridge moraines are easily accessible. Promotion of this site's geomorphological heritage would be ideally served via an information panel at the car park area. The site is not under any immediate threat, and any working/extraction of the moraine deposits should be discouraged.



Looking south over the Accormore moraines, Lough Accormore to the left (west). Clare Island in the distance.



Clare Island (right) and Dooega Head (left) visible from moraines (looking SE). Large erratic sitting proud of moraine surface visible in centre.



Corrie above (west of) Lough Accormore, viewed looking west from moraine ridge.



Moraine flanking the north shore of Lough Accormore. Metamorphic boulders in foreground up to 3m high.



Lough Accormore dam with walkway and outflow to Achill Water Treatment works to the left (east). Parking on distant left.

