

MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Achill Island North Coast
Other names used for site	Achill Head, Saddle Head, Slievemore, Ridge Point, Croaghaun cliffs
IGH THEME	IGH13 Coastal Geomorphology
TOWNLAND(S)	Keel West, Slievemore, Doogort West, Doogort, Doogort East, Tonatanvally, Donniver
NEAREST TOWN/VILLAGE	Dooagh/Keel
SIX INCH MAP NUMBER	41, 42, 43, 53
ITM CO-ORDINATES	451582E 805010N (west end of feature) 470980E 810000N (east end of feature)
1:50,000 O.S. SHEET NOS. 22, 30	GIS BEDROCK 1:100,000 SHEET NO.6
GIS code MO001	

Outline Site Description

Mountain slopes, high cliffs, corries on the remote north coast of Achill Island.

Geological System/Age and Primary Rock Type

Neoproterozoic Dalradian age (Grampian, Argyll and Appin Group, 750 – 600 million years ago) metamorphic bedrock (psammite, schist, quartzite, marble and meta-conglomerate). Bedrock along the north coast is predominantly Croaghaun Formation, Slievemore Psammitic Formation, Ridge Point Psammitic Formation and Dooega Head Formation (west to east), with several other formations completing the coastal section.

Main Geological or Geomorphological Interest

The northern coast of Achill Island, facing Blacksod Bay, is dominated by schist. On the west coast, the flanks of Slievemore (672m) and Croaghaun (688m) slope down to the coast. The steep coastal cliff slopes of Croaghaun are recognised as the highest cliffs in Ireland. There is a clear contrast between the coastal landscape on the east and west side of Slievemore. To the east, the landscape levels out to an elevation of <15m above sea level (ASL). West of Slievemore, the sheer coastline rises steeply to heights exceeding 200m ASL. Achill Head, at the extreme west of the island, is a narrow peninsula of schist, with sheer cliffs rising over 300m ASL. The landscape exhibits classic glacial landforms with low-level corries and tarns (e.g. Lough Nakeeroge East, 18m ASL) on the coast between Saddle Head and Slievemore. Further west of Saddle Head, Bunnafreva Lough West, a corrie and tarn, sits at 318m ASL.

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

The site exhibits excellent coastal (cliffs) and glacial (corries and tarns) geomorphology (landforms). The 688m high sea cliffs of Croaghaun are the highest cliffs in Ireland (contrary to common misunderstandings about the Slieve League cliffs in Donegal, which are 601m high). The low-lying corrie and tarn of Lough Nakeeroge is of great significance. Dammed by a glacial moraine, and less than 20m above sea-level, this is the lowest glacial lake in Ireland. The site is located within both the Achill SAC (0002268) and the Croaghaun/Slievemore SAC (0001955). Owing to the unique significance of Ireland's highest cliffs and lowest corrie lake at this site, it is recommended that this site be designated as a geological NHA.

Management/promotion issues

The site is not deemed to be under any significant threat apart from natural processes of erosion along this Atlantic coast. Most features are macro-topographical in scale and only accessible by a hike across rough terrain. As such, the features are best observed from a distance, where public promotion of the natural features (e.g. Lough Nakeeroge East tarn) could be provided on a public information board near Keem Beach or at Dooagh.



Uplands along the north coast of Achill Island and Slievemore, viewed from Acorrymore, looking NE. Blacksod Bay in the distance (left).



Dogort (214m) and Slievemore (672m) looking west over Lough Nambrack. Inishkea Island in distance to NW.



North slopes of Slievemore reaching down to Blacksod Bay, looking NW from location west of deserted villages.

