SLIGO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Diarmuid and Gráinne's Cave

Other names used for site

TOWNLAND(S) Gleniff, Glencarbury

NEAREST TOWN Grange

SIX INCH MAP NUMBER

NATIONAL GRID REFERENCE 172454 347143 = G72454 47143

1:50,000 O.S. SHEET NUMBER 16 1/2 inch Sheet No. 7

Outline Site Description

Ancient cave system in dissected cliffs above steep valley.

Geological System/Age and Primary Rock Type

Carboniferous limestone displaying evidence of ancient pre-glacial karstification.

Main Geological or Geomorphological Interest

Situated on the Slievemore mud-mound the entrance to Diarmuid and Gráinne's Cave lies approximately 400m above the valley. The geology of Slievemore (reef limestone/mud-mound of the Dartry Formation overlying thinly bedded limestone and shale of the Glencar Formation) is ideal for the intense karstification that led to the development of solution cavities and caves in this area. Although it is difficult to ascertain the exact timing of karstification it is believed to have been an ancient event, predating glacial activity in the area. The cave itself is thought to be the highest located cave in Ireland and consists of a number of large chambers connected by narrower cave passages, which have developed on two distinct levels. The cave system originally formed below the water table (in the phreatic zone) by the dissolution of the limestone by groundwater.

The cave is on one wall of the horseshoe shaped, steep-walled valley or corrie. During the last glaciation snow that accumulated here was compacted into an ice-pocket and eventually flowed out as a local glacier. The corrie deepened into a U-shaped valley gradually as the flowing ice plucked limestone from the rear wall, dissecting the cave and leaving it open in the cliff face.

Site Importance

This site is expected to be part of a large multi-interest geological NHA comprising Benbulben and the Truskmore Plateau (including parts in Leitrim) once IGH programme work is completed and final recommendations are made.

Management/promotion issues

Access to parts of the valley are known to be problematic for walkers. No active geological promotion, other than of driving tour type, is advisable without some resolution of this issue.

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