GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Moran's Cave

Other names used for site

IGH THEME IGH1 Karst
TOWNLAND(S) Cahercon
NEAREST TOWN/VILLAGE Gort, Kinvara

SIX INCH MAP NUMBER 113

ITM CO-ORDINATES 538835E 707700N

1:50,000 O.S. SHEET No. 52 GSI BEDROCK 1:100,000 SHEET NO. 14

Outline Site Description

A cave which intersects the underground drainage between Gort and Kinvara.

Geological System/Age and Primary Rock Type

The cave is in Carboniferous Limestone but is probably a largely post-glacial development, although it may have begun forming in pre-glacial or inter-glacial times.

Main Geological or Geomorphological Interest

Moran's Cave is a unique cave in Ireland, formed by the intersection of two karst groundwater flow systems. A diffuse, shallow flow system in the uppermost 1-3m of limestone (epikarst) descends a major east-west joint to enter the main cave conduit of the area, presumably draining to Kinvara springs. The main cave is an approximately circular, bedding cavern, 1-2 m high and on several levels. It terminates abruptly at the southern end at a major joint plane down which water enters. There is much calcite decoration present here. The main cave was formed by collapse of very large bedding slabs into the main river cave beneath. Some of the undersides of the bedding show fine anastamosing channels created by the diffuse flow of water in the bedding planes. The main river descends to some 15 m below the normal water level in the cave and has been explored by divers for several hundred metres to the east and west. The entrance to the cave is a narrow rift in the centre of a very shallow (2 m deep, 40 m diameter) saucer shaped doline in an area of limestone pavement. The doline may be due to down-sagging of the strata over the large area of unsupported roof in the cave beneath. Many other shallow dolines are present in the area.

Site Importance – County Geological Site; recommended for Geological NHA

This is one of numerous sites within the Gort-Kinvara lowlands which make up a complex of international importance. The site is recommended to NPWS for designation as a geological NHA, comprising one of 15 critical sites within the Gort-Kinvara lowland karst which is one of the best studied lowland karst areas of the World.

Management/promotion issues

Moran's Cave entrance is surrounded by a rough oval shaped wall, presumably placed here in the past to prevent cattle or any other livestock from roaming into the 2-3 m deep rift, which leads to the cave entrance. It is found within a barren area of karst limestone pavement with no evidence of recent agricultural land use. However, the fields to the west have been cleared of the old wall boundaries, which might disorientate someone looking for this cave while using the old 6" maps. The site is not suited to wider promotion to the general public. Caves are potentially dangerous and fragile environments that should only be visited in the company of experienced cavers. The site is on private farmland and permission should be sought from the landowner before attempting to visit.



The entrance to Moran's Cave, looking in. The entrance to Moran's Cave, looking out.



Moran's Cave entrance is in the wooded, walled feature.

