GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Inishmacatreer Rohrenkarren
Other names used for site	Lough Corrib eggbox pitting
IGH THEME	IGH1 Karst, IGH14 Fluvial and Lacustrine
	Geomorphology
TOWNLAND(S)	Inishmacatreer
NEAREST TOWN/VILLAGE	Headford
SIX INCH MAP NUMBER	40, 41
ITM CO-ORDINATES	517365E 749930N (centre of outcrops)
1:50,000 O.S. SHEET Nos. 38, 45	GSI BEDROCK 1:100,000 SHEET NO. 11

Outline Site Description

This site comprises a belt of limestone bedrock outcrop along the shores of Lough Corrib, around the southern side of an island joined to the mainland by a causeway. The site is situated just inside County Galway, while the causeway and mainland to the east are in County Mayo.

Geological System/Age and Primary Rock Type

The features occur across the top of outcrop of dolomitic limestone of the Waterfall Member, which is Lower Carboniferous in age. The rohrenkarren features themselves have been formed in the present climate, since the last Ice Age, in the last 14,000 years or so.

Main Geological or Geomorphological Interest

The most widespread surface karst landforms are small solution pits, grooves and runnels, collectively called 'karren'.

Freshwater lake margins in areas of karstified limestone often display unusual solutional features, cavities and clefts. These various types of dissolutional pitting and notching on the flanks and upper surfaces of limestone outcrops and boulders can all be ascribed, in broad terms, to direct dissolving effects by lake and/or rain water.

An unusual and particular type of 'tubing' may occur by the dissolution of the bedrock in places, and has been documented from only a few sites worldwide. Here, the 'rohrenkarren' (also called 'tube karren') features comprise upward-tapering, tubular shapes beneath limestone boulders, which are assumed to have formed by the rock dissolving owing to seasonal fluctuations in lake levels. They may extend upwards into the base of boulders by several tens of centimetres.

Other, smaller (2 cm - 12 cm wide, and 1 cm - 10 cm deep) solution pits are also seen on the upper surfaces of both bedrock outcrop and boulders in this zone. These are simply termed 'lacustrine pittings'. These occur on virtually every upper surface of the rock, and give a characteristic 'pitted' appearance to the rocks, akin to that seen in eggboxes, hence the associated term 'eggbox pitting'.

Though these features (rohrenkarren and lacustrine pitting) are seen occasionally around Lough Corrib (as well as Lough Mask and Lough Carra) they are widespread at Inishmacatreer, and dominate the lakeshore.

Site Importance – County Geological Site; may be recommended for Geological NHA The site is almost unique in a National and even International context, with the features displayed noted from only a few localities worldwide.

Management/promotion issues

The site is openly accessible at the verge of a public road and the features are easily visible. Some of the boulders and rock slabs have been removed in the past for decorative purposes in gardens and at other amenities, and this should be discouraged. A signboard at the lakeshore highlighting the origin and significance of the features would prove worthwhile.



The southern shore of Inishmacatreer island, where the features are well displayed.



Lacustrine pitting at the lakeshore at Inishmacatreer.



Rohrenkarren 'growing up' into boulders from the lake water level at Inishmacatreer.



The removal of boulders pitted by pitting and rohrenkarren should be discouraged.

