

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Lough Corrib
Other names used for site	<i>Loch Coirib</i>
IGH THEME	IGH14 Fluvial and Lacustrine Geomorphology, IGH1 Karst, IGH7 Quaternary
TOWNLAND(S)	Numerous
NEAREST TOWN/VILLAGE	Moycullen, Oughterard, Corr na Móna, Conga, Headford
SIX INCH MAP NUMBER	26, 27, 39, 40, 41, 54, 55, 56, 68, 69, 81, 82
ITM CO-ORDINATES	523565E 741910N (Knockferry Pier)
1:50,000 O.S. SHEET Nos. 38,39,45,46	GSI Bedrock 1:100,000 SHEET NOs. 11, 14

Outline Site Description

A large lake situated between County Galway's western acidic uplands and the limestone lowlands to the east.

Geological System/Age and Primary Rock Type

Lough Corrib in its current shape formed in the Holocene (<11,650 years). The lakeshore karst assemblages formed after deglaciation and the retreat of the last ice sheets around 14,000 years ago. The southern half of the lake occupies a shallow basin (mean depth <4 m) overlying Carboniferous limestone. The northwestern part of the lake occupies a deeper basin floored by Neoproterozoic Dalradian metasediments, Ordovician Oughterard Granite, and Silurian South Mayo Trough sedimentary rocks.

Main Geological or Geomorphological Interest

Lough Corrib is the second largest lake on the island of Ireland, and has a maximum depth of 42 m. The lake covers an area of c. 18,200 ha, and is approximately 16 km from north to south, and 6 km at its widest point. Limestone pavement and karst features (springs, tube karren, egg-box pitting, kamenitza) are present around the lake's limestone shore. The lake water has a high alkalinity (>100 mg/CaCO₃). The Lough Corrib basin formed as a result of contributory factors including acidic waters draining from the quartzite, schists, granite and sandstone uplands in Connemara and Joyce Country (which contributed to the dissolution of lowland limestone), and glacial erosion which furthered the development of the depression. The entire region was covered by thick ice during the last ice age. Numerous drumlin islands (NE-SW orientation) occupy the northern part of the lake. The main rivers feeding into the lake include the Clare, Black, Cregg rivers on the east shore, the Owenriff and Drimneen rivers on the west, and the Failmore/Bealnabrack, Dooghta and Cong rivers in the north. The Cong Canal (seasonally dry) links Lough Mask (via the Cong River) to Lough Corrib. However, most of the water flowing from Lough Mask to Lough Corrib does so via subterranean channels. Lough Corrib drains to Galway Bay via the River Corrib, exiting the lake via two channels: the 'Friar's Cut' and the 'Old River'. These two channels merge near Menlo and continue south to the city.

Site Importance – County Geological Site; recommended for Geological NHA

Lough Corrib is of international conservation importance, particularly for its lakeshore karst assemblages and its hard-water lake habitat. A significantly important County Geological Site, the site is also a designated SAC (Lough Corrib SAC site code 000297) and SPA (Lough SPA site code 004042).

Management/promotion issues

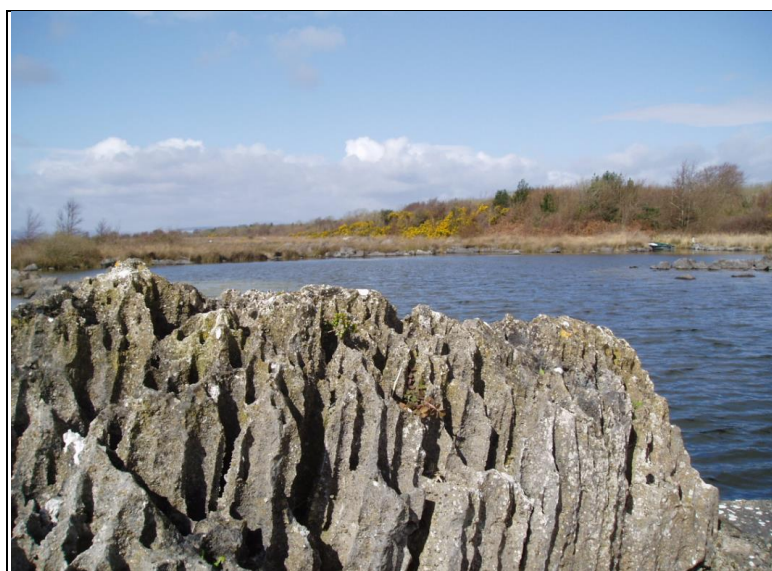
Lough Corrib is an important public water source for the population of the region and of Galway City. The removal of lakeshore karst ('water-worn' or 'holey') limestone for any reason (ornamental or otherwise) should be prohibited. Limestone pavement is a priority habitat (EU Habitats Directive, 8240), and it is protected under EU law. The inclusion of visitor information panels at strategic lakeshore sites and piers could help communicate aspects of the hydrogeological and geological heritage of the feature, as well as share the importance of protecting and conserving water quality and the Corrib's unique lacustrine karst assemblages.



Lough Corrib outflow to the Friar's Cut channel. View northeast. Knockmaa Hill (Tuam) visible in background.



View across Lough Corrib towards Lackavrea Mountain, at dusk.



Karstified bedrock at Kilbeg Quay, Lough Corrib.

