

KERRY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Muckcross Section
Other names used for site	
IGH THEME	IGH10 Devonian, IGH8 Lower Carboniferous, IGH1 Karst
TOWNLAND(S)	Muckcross
NEAREST TOWN/VILLAGE	Killarney
SIX INCH MAP NUMBER	74
ITM CO-ORDINATES	494900E 586110N
1:50,000 O.S. SHEET NUMBER	78
GSi BEDROCK 1:100,000 SHEET NO.	21
GIS CODE	KY068

Outline Site Description

A rocky shoreline along a wooded peninsula separating two lakes.

Geological System/Age and Primary Rock Type

The bedrock on the Muckcross Peninsula ranges in age from Upper Devonian to Lower Carboniferous. The oldest unit exposed is the Devonian Ballinskelligs Sandstone Formation, including the Ardnagluggen Sandstone Member, which is succeeded, in turn, by the Carboniferous Camillan Sandstone Formation, the Lower Limestone Shale, the Ballymartin Formation, the Ballysteen Formation and its Victoria Point Member, the Waulsortian Limestone and the Rockfield Limestone Formation.

Main Geological or Geomorphological Interest

The Muckcross Peninsula extends for over 3 km westwards from Muckcross House, separating Lough Leane from the smaller Muckcross Lake to the south. The lakeshore and inland exposures from Brickeen Bridge in the west to Dundag Bay in the east, display a continuous stratigraphic sequence from the Upper Devonian to the Lower Carboniferous. Exposure along the northern shore of Muckcross Lake is largely continuous, if not everywhere easily accessible from land. Good exposures of some units occur inland while for some, notably the Ardnabruggen Sandstone Member, the best exposure is found on the northern side of the peninsula on the southern shore of Lough Leane.

Toward the eastern end of the peninsula, where the Waulsortian limestone exposures occur on the northern shore of Muckcross Lake, karst features are well expressed, especially around Kilbeg Bay. These features include small caves, just visible in the cliff faces above the lake surface, clint and gryke features typical of limestone pavements, and finer solution features such as karren.

Site Importance – County Geological Site

This is an important site where a continuous Upper Devonian to Lower Carboniferous stratigraphic sequence is exposed in lakeshore and inland outcrops. The site is one of the few locations in Kerry where the Upper Devonian to Lower Carboniferous transition can be mapped. In addition, well-exposed Waulsortian Limestone on the northern shore of Muckcross Lake displays abundant karst features.

Management/promotion issues

The Muckcross Peninsula is part of Killarney National Park and is a very popular amenity area, traversed by trails that are readily accessible on foot or by bicycle from Muckcross House. In addition to the stratigraphic sequence and karst features outlined above there is also an old mine (see Muckcross Mine CGS report). Numbered signage at several locations along the peninsula refer to a previous walking trail but no map is available for this. A geological trail, based on a downloadable map and site descriptions, would be a worthwhile addition. The site is entirely within the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC/pNHA (site code 000365), and the Killarney National Park SPA (site code 004038).



Red sandstone of the Ballinskelligs Sandstone Formation, east of Brickeen Bridge.



Green sandstone of the Ardnagluggen Sandstone Member on south shore of Lough Leane.



Thin-bedded sandstone of the Camillan Sandstone Formation on the north shore of Muckross Lake.



Bedded limestone of the Ballysteen Formation on the north shore of Muckross Lake.



Waulsortian Limestone cliffs around Kilbeg Bay. Vertical karren features are visible, as well as openings into caves that have developed through karstification.



Limestone pavement showing typical karst features (karren, clints and grykes) in Waulsortian Limestone on shore of Kilbeg Bay.

