

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Oughterard Granite</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH11 Igneous</b>
<b>TOWNLAND(S)</b>	<b>Leic Amhréidh</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Teach Dóite (Maam Cross)</b>
<b>SIX INCH MAP NUMBER</b>	<b>38, 39</b>
<b>ITM CO-ORDINATES</b>	<b>497055E 749900N (Maam Valley)</b>
<b>1:50,000 O.S. SHEET No. 38, 45</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 10, 11</b>

### Outline Site Description

Granite outcrops on the lower slopes of blanket-bog mountainous terrain in the Maam Valley.

### Geological System/Age and Primary Rock Type

A medium to coarse grained, two-mica non-porphyritic granite. The Oughterard Granite has been dated to 463 Ma (Middle Ordovician). This age renders the granite body distinctly older than the late Caledonian Galway Granite Batholith and the satellite granitoid plutons in Connemara.

### Main Geological or Geomorphological Interest

The Oughterard Granite occurs mainly between Oughterard and the Maam Valley, spread out as three irregularly shaped granite masses. Smaller isolated plutons occur as far west as Clifden, and near Derry Bay on the northwest shore of Lough Corrib. The Oughterard Granite is temporally and spatially distinct from the intermediate intrusive rocks of the MetaGabbro and Orthogneiss Suite (occupying a central east-west band of bedrock across Connemara) and the main Galway Granite Batholith (occurring in south Connemara and Cois Fharraige).

Typically a two-mica granite, its colour is pale grey, and comprises almost uniform grain size (c. 1-2 mm), with no phenocrysts (crystals that are noticeably larger than the enclosing groundmass). The Oughterard Granite post-dates all Grampian deformation (e.g. folding) events in Connemara, and is therefore an important time constraint in the understanding of the Grampian orogeny (475-463 Ma) in Ireland.

### Site Importance – County Geological Site

This site in the Maam Valley is representative of a c. 15 km discontinuous expanse of Middle Ordovician acid igneous rocks that occur in east Connemara between Maam Cross and Oughterard. Part of the site is within the Maumturk Mountains SAC (Site code 002008). This is an important County Geological Site as it is representative of the entire granite body, the dating of which has demonstrated that the Grampian orogeny is synchronous with the Middle Ordovician Taconian orogeny of the north Appalachians, USA.

### Management/promotion issues

Outcrops of Oughterard Granite can be seen on much of the hilly ground to the northwest of Oughterard, and in the landscape surrounding Loch Bó Finne and on the forest trails of Derroua. The granite is also easily accessible on the western and southern slopes of Lackavrea Mountain, at the southern end of the Maam Valley. Blocks of Oughterard Granite are visible in the stone wall of the Quite Man Bridge. The inclusion of the Oughterard Granite 'chapter' in the development of the Connemara landscape and its geological heritage, is a key element of any future publication or public information panel erected in this area.



Pale-grey coloured Oughterard Granite.



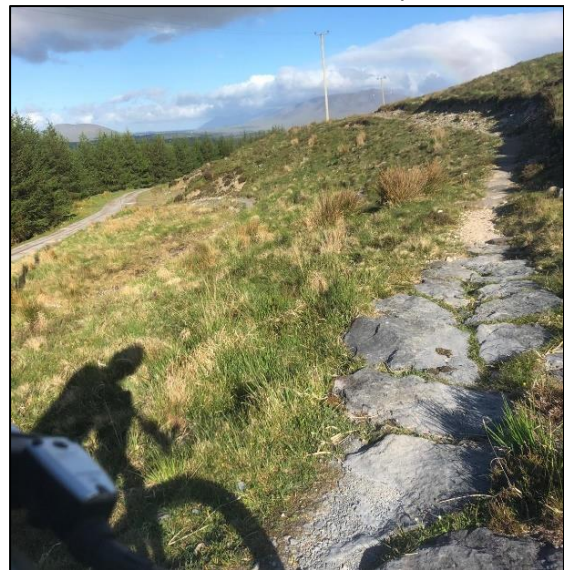
Oughterard Granite (and other local lithologies) in the Quiet Man Bridge. Maamturk Mountains and Lackavrea visible to the west.



Oughterard Granite outcrops on northwest foot of Lackavrea Mountain, Maam Valley.



Granite outcrop at Bunnakill, east of Loughaunierin. Lackavrea visible to the NW.



Granite exposures along track on Derroua Mountain Bike Trail.



