

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Inish Granite
Other names used for site	Dunloughan, Doonloughan, Errismore
IGH THEME	IGH11 Igneous
TOWNLAND(S)	Pollrevagh, Doonloughan,
NEAREST TOWN/VILLAGE	Ballyconneely
SIX INCH MAP NUMBER	48
ITM CO-ORDINATES	454815E 745400N
1:50,000 O.S. SHEET No. 44	GSI BEDROCK 1:100,000 SHEET NO. 10

Outline Site Description

Low-lying, granite terrain on islands and coastal sections.

Geological System/Age and Primary Rock Type

Late-Caledonian Connemara granites emplaced c. 420 million years ago, at the onset of the Devonian.

Main Geological or Geomorphological Interest

The Inish Granite is one of a number of Connemara granite plutons that were emplaced 420 Ma to the north/northwest of the Skird Rocks Fault (an extension of the major east-west trending Southern Uplands Fault in western Ireland). These plutons preceded the emplacement of the main Galway Granite batholith that extends from Murvey/Errisbeg eastwards to Galway City. The Inish Granite was emplaced into Ordovician-age Metagabbro-Gneiss Suite rocks. Radiometric dating (Molybdenite Re-Os) has yielded geochronological age determinations for granite-related molybdenite mineralisation in other granite bodies occupying the western end of the batholith (Omev Granite, Roundstone Murvey Granite). These ages indicate episodic granite emplacement spanning a period of around 40 Ma, from c. 423 Ma in the NW Omev pluton to c. 380 Ma at Costelloe in the east.

Granite magmatism and mineralisation in Connemara is associated with the Appalachian-Caledonian orogeny (mountain-building events), and the magmatic event is similar to other sectors of the orogeny (Scotland, Donegal, Newfoundland, New England).

Inish Granite forms the islands west of Doonloughan Pier (including some coastal mainland locations). The granite also occurred on the islands WNW of Clifden Bay (Turbot Island, Inishturk and smaller islands).

Site Importance – County Geological Site

This site contains good and variably accessible exposures of igneous rocks on this promontory in western Connemara. The exposures around Doonloughan are within the Slyne Head Islands SAC (Site code 00328), whilst the island exposures west of Clifden Bay are located within the West Connacht Coast SAC (site code 002998).

Management/promotion issues

Accessible coastal outcrops are suitable for promotion to visiting research and student groups. The geological heritage of the satellite plutons and the main Galway Granite Batholith is a key topic of any guide or book on the local landscape and the geological landscape of Connemara.



Inish Granite exposures on shoreline. View looking north from beach-track at Glassillaun (GR 456928 745361) towards new harbour and Inishdugga.



Coarse-mineral texture showing large pink-coloured K-feldspar.



Banding visible on granite outcrops.



Low wall of granite boulders bordering the beach, looking west at beach track.



Pegmatite among Inish Granite exposures south of new harbour.

