

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Bun na gCeapán
Other names used for site	
IGH THEME	IGH11 Igneous Intrusions, IGH5 Precambrian
TOWNLAND(S)	Cluais Chéirín (Clooshgreen)
NEAREST TOWN/VILLAGE	Oughterard
SIX INCH MAP NUMBER	67
ITM CO-ORDINATES	510680E 738700N (east), 510040E 738520N (west)
1:50,000 O.S. SHEET No. 45	GSI BEDROCK 1:100,000 SHEET NO. 14

### Outline Site Description

Series of large outcrops on moorland hillside, overlooking minor road. The site comprises two separate areas, east and west, approximately 1 km apart.

### Geological System/Age and Primary Rock Type

Caledonian granite (400 Ma) intruding Dalradian metasediments; gneiss and metagabbro of the 475 – 462 Ma Connemara Metagabbro and Orthogneiss Complex.

### Main Geological or Geomorphological Interest

At Bun na gCeapan the porphyritic Marginal Galway Granite is well exposed. It is mapped as intruding Dalradian metasediments of the Cashel Schist Formation and quartz diorite gneiss of the Connemara Metagabbro and Orthogneiss Complex. Exposures on the hillside include quartz diorite gneiss containing lenses of brecciated and sheared metagabbro. The contact of the Marginal Galway Granite with the Dalradian metasediments is exposed in a large outcrop on a summit ridge some 300 m west of the small public road (Bóthar Sheanadh Phéistín). Here the country rock contact is marked by a series of granite veins, ranging up to 0.3 m in thickness, concordantly emplaced into the schist. Coarse K-feldspar granite occurs just south of these veins followed by the Marginal Galway Granite.

The Marginal Galway Granite passes westwards into the Megacrystic Granite, which can be seen in exposures beside the bridge, c. 1 km west along the road.

### Site Importance – County Geological Site

Bun na gCeapan is a readily accessible site with good exposures of specific Galway Granite lithologies at the margin of the batholith. The gradual nature of the contact is well seen, with thin granite veins marking the beginning of the contact zone followed by the Marginal Granite itself.

### Management/promotion issues

The site is not within any designated heritage or conservation area. It is on privately owned but unfenced land. However, it is in a relatively remote and undeveloped area. The main outcrop is near the top of a hill and the nearest dwelling is over 700 m away. Small-diameter boreholes in the rock face attest to previous sampling for research purposes, which, although emphasizing the significance of the site, have caused damage to the outcrop. Otherwise, there appears to be no threat to the site and no requirement for specific management. Promotion is not required as the site is likely to be of interest mainly to research scientists.



View westwards toward area with outcrops of granite contact zone.



Contact of Galway Granite (to left of hammer or south) and darker, foliated diorite gneiss country rock. Note damage caused by drill sampling.



Same outcrop, granite shown emplaced as a series of veins concordant with foliation of gneiss. Hammer is positioned over gneiss.



Exposure of megacrystic granite immediately north of bridge, at western end of site.



