# **GALWAY - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET No. 37 Rusheenduff

IGH11 Igneous intrusions Rusheenduff Tully 9 467600E 763650N GSI BEDROCK 1:100,000 SHEET NO. 10

### **Outline Site Description**

Several large, separated outcrops in area of rough grassland close to small lake.

### Geological System/Age and Primary Rock Type

Sheared granitic pegmatite; age is uncertain but possibly Ordovician, similar to the 475 – 462 Ma Connemara Metagabbro and Orthogneiss Complex.

### Main Geological or Geomorphological Interest

The Rusheenduff sheared pegmatite is an isolated igneous intrusion with a mapped subcrop area of less than five hectares, half of which is within Rusheenduff Lough. It is one of a number of minor igneous intrusions in Connemara of uncertain age and origin.

The pegmatite is composed of quartz, plagioclase, K-feldpar, muscovite, chlorite and carbonate. Contacts with the surrounding metasediments of the possibly-Dalradian Ben Levy Grit Formation are mapped as being faulted on three sides but it has been suggested that some contacts are replacive in origin. The muscovites in the pegmatite show evidence of late D4 regional deformation whereas rafts or xenoliths of country rocks present within the pegmatite contain D3 folds cut by the pegmatite, apparently dating the intrusion to late D3.

## Site Importance – County Geological Site; may be recommended for Geological NHA

The site contains several large, readily accessible outcrops of granitic pegmatite, an unusual rock type in this part of Connemara. The pegmatite is of uncertain age but may be similar in age to other igneous intrusions in this part of Connemara.

## Management/promotion issues

The western end of the site, on the shore of the lake, is within the Rusheenduff Lough SAC (001311), designated for aquatic plant species. The shore of the lough is part of an amenity walk from the nearby hotel. The remainder of the site is an area of grass and rough vegetation enclosed by a minor road. This road leads off from the hotel's access road and passes several private houses before looping back around to the access road. Some excavations have taken place at the eastern end of the site, possibly for house development. But no construction was noted. The site is likely to be mainly of interest to geologists and students and does not require promotion.



Large outcrop of Rusheenduff granite/pegmatite on shore of Rusheenduff Lough.



Granite/pegmatite in contact with folded metasediments; zones of possibly granitized sediment to left of hammer handle.



Sharp contact between granite/pegmatite and country rock; zone of granitized country rock immediately left of hammer head.



View west over Rusheenduff Lough, with large granite/pegmatite outcrop (centre).

