

MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Corvock
Other names used for site	
IGH THEME	IGH11 Igneous Intrusions
TOWNLAND(S)	Cregganbaun; Loughanamucka
NEAREST TOWN/VILLAGE	Louisburgh
SIX INCH MAP NUMBER	5
ITM CO-ORDINATES	712920E 814010N
1:50,000 O.S. SHEET NO. 37	GS1 BEDROCK 1:100,000 SHEET NO. 11
GIS Code MO034	

Outline Site Description

Situated to the southwest of Croagh Patrick, this is mainly a low-lying granitic landscape with a surface cover of peat, forestry and farmland.

Geological System/Age and Primary Rock Type

Geochronological studies carried out on the granite indicate an intrusion age of c. 387 million years ago, in the Lower-Middle Devonian period. The rock is mainly a biotite granodiorite. The contact aureole comprises biotite-hornfels pelitic (metamorphic) rocks.

Main Geological or Geomorphological Interest

The Caledonian Corvock Granite intrudes the Ordovician and Silurian rocks of South Mayo. It is regarded as a small (area of 25 km²) body of igneous rock (pluton) with a surrounding area of metamorphic rocks that were originally sedimentary rocks. The sedimentary rocks were cooked and thermally metamorphosed when they were injected by, and came into contact with, the hot igneous rocks (a process called contact-metamorphism). This surrounding area is called a granite (*biotite-hornfels*) aureole. The thermal metamorphic aureole around the granite contains minerals such as andalusite, cordierite-biotite, anthophyllite, diopside, and grossularite. Geophysical studies carried out in the 1970s indicated that the granite body has a thickness of only 1km and has a sheet-like form. It is suggested that this sheet was intruded upwards from the south along two sets of crustal cracks.

Site Importance - County Geological Site

The site represents an excellent example of a Caledonian granite and aureole and is an important County Geological Site. Approximately half of the entire granite body is located with the Mweelrea\Sheeffry\Erriff Complex SAC (001932), with most areas outside of the SAC overlain by forestry, turf-production and farm land.

Management/promotion issues

Granite outcrops are easily accessible from the roadside (R335) at Cregganbaun, to the east of the old schoolhouse. Although the outcrops are not necessarily remarkable, they could be of interest to geological enthusiasts and student groups. The main threats to the integrity of the site would be an increase in the area covered by forestry, or extraction of the bedrock owing to its proximity to a main route.



Corvock Granite outcrop and low-lying granite landscape expanse, looking NE towards Croagh Patrick.



Roadside Quarry near Cregganbaun schoolhouse.



Hornfels exposed in roadside quarry.



Granite cutting through sedimentary layers near school house.



Granite cutting through conglomerates, to the east of the schoolhouse.

