

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Derryclare Marble Quarry
Other names used for site	Cloonnacartan Marble Quarry
IGH THEME	IGH6 Mineralogy, IGH5 Precambrian
TOWNLAND(S)	Cúil na Ceártan (Cloonnacartan)
NEAREST TOWN/VILLAGE	Sraith Salach (Recess)
SIX INCH MAP NUMBER	37
ITM CO-ORDINATES	483840E 749205N (centre of feature)
1:50,000 O.S. SHEET No. 37	GSI BEDROCK 1:100,000 SHEET NOS. 10, 11

Outline Site Description

A disused marble quarry site on the northeast shore of Derryclare Lough, in the Inagh Valley.

Geological System/Age and Primary Rock Type

Green serpentine marbles interbedded with white diopsidic and dolomitic marbles. Bedrock is Connemara Marble Formation (Appin Group), the second oldest formation in the Connemara Dalradian; Neoproterozoic in age. The marble lithologies crop out in narrow bands within Barnanoraun Formation schists.

Main Geological or Geomorphological Interest

The highly-patterned green marble is a metamorphosed impure dolomitised limestone interbedded with schist and quartzite. Large tremolite crystals and jade green pods of serpentine can be seen on outcrops at the northwest end of workings by the lakeshore. The marble belt traverses the site in a NE-SW direction. The characteristic green-yellow-fawn-white colouration seen in the marble developed late in the Grampian mountain building episode of the Caledonian orogeny about 580-475 million years ago. The dolomitic limestone was then de-dolomitised and the high metamorphic grade olivine became hydrated, known as serpentinisation, resulting in highly coloured magnesium silicate minerals. The marble is quite fractured and jointed.

The site hosted a quarry in the 1920s (Connacht Tribune 08/12/1928), with further works being undertaken in the early 1960s. Connemara Marble is suitable for interior ornamental use, and the marbles in the Museum Building of Trinity College, Dublin and the National Museum of Ireland have held their colour and polish for over 160 years. Connemara Marble is not suitable for exterior use as it decolours and stains in a short period of time.

Site Importance – County Geological Site

This is an important County Geological Site. Marbles of economic importance occur in one stratigraphic horizon, the Connemara Marble Formation (which also contains calcareous schist, mica schist and quartzite). This site represents one of almost a dozen Connemara Marble Formation localities in central Connemara. The site is located in the Twelve Bens/Garraun Complex SAC (002031).

Management/promotion issues

The site occupies a 0.5km length of lakeshore, otherwise surrounded by bogland. There are many easily accessible marble exposures, although outcrop and quarry faces are weathered, and deep flooded pits remain in places. While in operation the quarry was accessed via a 0.6km track leading from the R344 Recess - Kylemore road. Sections of the track near the road are now overgrown with dense gorse thickets and impassable. The site is on private land, and permission to access should be appropriately sought.



Flooded pit and abandoned crane at quarry, looking north over Derryclare Lough to Letterbreckaun (Maamturks).



Large pods of serpentine in marble.



Large tremolite crystals in marble.



Folded marble layers at quarry.



Flooded quarry, Lissoughter Hill in background.

