GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Cloonnacartan

Other names used for site Lissoughter Hill garnets

IGH THEME IGH6 Mineralogy TOWNLAND(S) Cloonnacartan

NEAREST TOWN/VILLAGE Recess
SIX INCH MAP NUMBER 37

ITM CO-ORDINATES 484395E 749195N

1:50,000 O.S. SHEET No. 44 GSI BEDROCK 1:100,000 SHEET NO. 10

Outline Site Description

A small roadside excavation with some low rock faces.

Geological System/Age and Primary Rock Type

The very unusual mineral occurrences here occur within banded schists of the Barnanoraun Schist Formation of the Dalradian sequence. These are Precambrian aged rocks that were metamorphosed over an extended mountain building (orogenic) event during the late Cambrian and early Ordovician Period. Immediately overlying the Barnanoraun Schist Formation is the Lissoughter Dolomitic Marble Formation.

Main Geological or Geomorphological Interest

The small rock faces show some very unusual garnet minerals. They are very large in two dimensions, greater than 10cm across) but very thin in the third dimension. They are only a few mm and limited to the thickness of the host pelite band. In addition to their unusual size they show distinct growth zones and twinning, with six distinct 60° sectors. No detailed study of their mineralogy has been undertaken, but their twinning suggests a grossular-andradite garnet composition.

Site Importance - County Geological Site

The unusual nature of the minerals here make this small site worthy of County Geological Site status.

Management/promotion issues

The minerals, though very rare in this habit, are only seen through a degree of weathering picking out the shapes. They are not collectable and are vulnerable to ill-judged attempts to remove them and therefore the site needs no promotion. It is beside a scenic road and if there was any attempt to widen the road it could be at risk and there would have to be dialogue about the options in such a scenario.



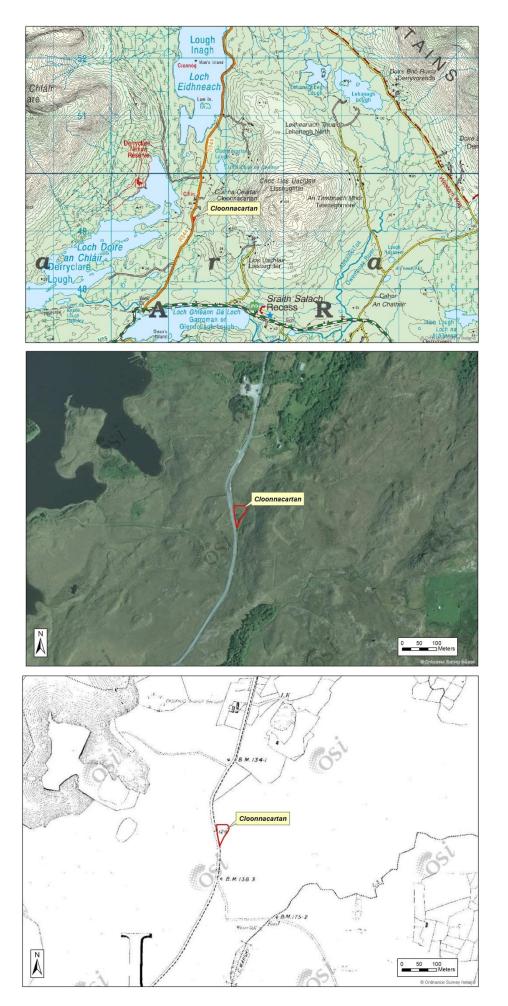
The roadside excavation at Cloonnacartan.



The main slab cleared of gorse and heather roots, with one large garnet crystal on right.



Image from c. 2000 with Martin Feely at the site.



Meehan et al. 2019. Geological Survey Ireland.