MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Finny Bridlepath

Other names used for site Cummer

IGH THEME IGH2 Precambrian to Devonian Palaeontology, IGH4

Cambrian to Silurian

TOWNLAND(S) Cummer
NEAREST TOWN Clonbur
SIX INCH MAP NUMBER 120

ITM CO-ORDINATES 500420E 759640N

1:50,000 O.S. SHEET NO. 38 GSI BEDROCK 1:100,000 SHEET NOs. 10, 11

GIS MO056

Outline Site Description

Extraction pit on the east side of a roadway 340m uphill (north) from the R300 Finny road. This is a key site within the much larger 'Finny and Kilbride' Site.

Geological System/Age and Primary Rock Type

Early (oldest) Ordovician black slates (containing fossils) of the Knock Kilbride Formation belonging to the dominantly volcanic Lough Nafooey Group of rocks in this region.

Main Geological or Geomorphological Interest

Graptolite fossils, identified in the Ordovician (late-Tremadoc) brittle black slates in the extraction pit provide the only readily identifiable age for the Lough Nafooey Group succession of rocks in south Mayo. The slates are very important in helping to understand the wider story of the geological development of the 'South Mayo Trough'. The graptolite fossils are small and are not identifiable with the naked eye at the site. The fossils were first reported here in 1974, and are similar to fauna found at sites in North America, and provide evidence for the South Mayo region being associated with the Laurentian continent.

The extraction pit has a 'rim' of exposed glacially-deposited sand and gravel, in which large loose rocks (>0.3m) of granite, vesicular lava, and small clasts of jasper (red) and serpentinite (green) can be identified. Pillow lavas outcrop on the hillside surrounding the extraction pit. Easily accessible pillow lavas outcrop at two good locations further down (southward) on the 'bridlepath' roadway. One outcrop of pillow lavas is 70m from R300 Finny road, by the entrance to a dwelling. Another outcrop of pillow lavas (with borehole damage from palaeomagnetic analysis) is 50m north of the R300 Finny road.

Site Importance – County Geological Site; recommended for Geological NHA

The Arenig/Late Tremadoc graptolitic fauna provides the only identifiable date for the dominantly volcanic succession of Ordovician rocks in south Mayo. Owing to the occurrence of these fossils, this is nationally important site and a key site of interest within the larger 'Finny and Kilbride' area (IGH4). The site has been recommended as a geological NHA of national importance.

Management/promotion issues

Further extraction of sand and gravel (though discontinued for many years) should be discouraged. The site requires protection from infilling, waste dumping or storage of sand/aggregate. Only a limited exposure of the black slate is present – and requires protection to allow future research using the fossil graptolites. Though easily accessible, the site is not deemed to be a key site for promotion, as the important features (graptolites) are not easily identifiable to the casual observer. The site is on commonage owned by a number of farmers.



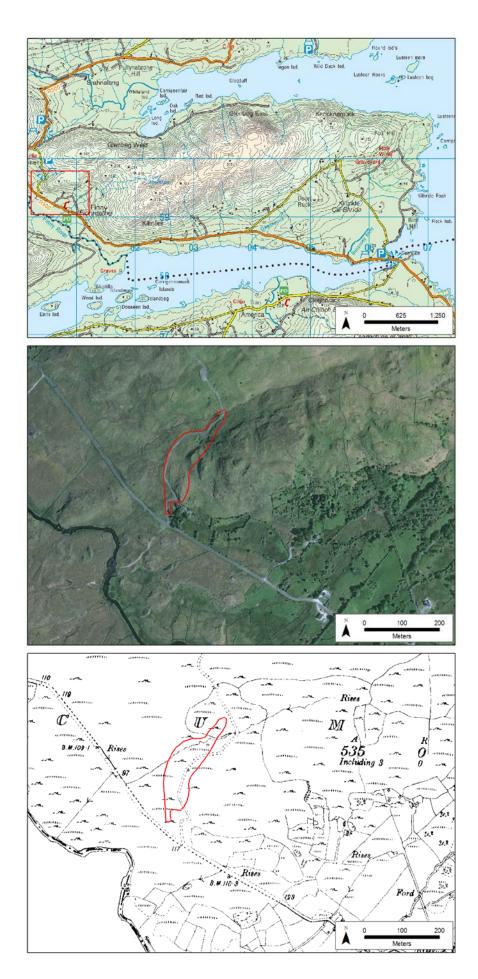
Extraction pit beside Finny Bridlepath. Looking west towards Lough Nafooey.



Outcrop of slates at southern end of extraction pit.



Eroded face of extraction pit.



Hennessy et al. 2014 (revised 2019). Geological Survey Ireland.