

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Reafadda Quarry
Other names used for site	Reaghfadda
IGH THEME	IGH2 Precambrian to Devonian Palaeontology, IGH4 Cambrian-Silurian
TOWNLAND(S)	Reafadda
NEAREST TOWN/VILLAGE	Thurles
SIX INCH MAP NUMBER	45
ITM CO-ORDINATES	593390E 656290N (centre of quarry)
1:50,000 O.S. SHEET NUMBER 66	GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

A small, disused quarry alongside the Anglesey Road, just north of Hollyford village.

Geological System/Age and Primary Rock Type

The fossiliferous rocks here are finely laminated brownish flags or siltstones within a sequence of greywackes, mudstones and siltstones. All of the rocks are of Silurian age, from a period of time classified as the Wenlock Series. Within this, stratigraphers narrow it down further to a time period when a particular assemblage of graptolite fossils existed, classified as the *Cyrtograptus lundgreni* Biozone.

Main Geological or Geomorphological Interest

The old quarry at Reafadda, alongside the Anglesey Road, has yielded important records of Silurian invertebrate fossil to Geological Survey of Ireland mappers of the 19th Century. Reafadda has yielded a relatively diverse and interesting assemblage of fossils from the mid-Silurian. These include graptolites, orthoconic nautiloids, a possible scyphocrinoid and possibly the earliest known hippocardiid mollusc.

The orthoconic nautiloids include figured specimens but are mostly indeterminate genera. However, the site is important as the type locality of *Actinocrinus wynnei*, a possible scyphocrinoid, which probably had a pelagic lifestyle attached to a 'float' rather than the normal mode of life attached to the sea floor. In addition, a rostroconch mollusc, *Hippocardia calcis* was described from Reafadda. This may be the earliest known representative of the rostroconch family Hippocardiidae.

The site is a good representative section for the Slieve Felim inlier (an inlier is an area of older rocks surrounded entirely by younger rocks) as a whole, but has significant taxonomic and palaeoecological interest. The thin laminated siltstones in a sequence of turbidites (rocks deposited in deep basins from shallow water by turbidity currents) represent the Hollyford Formation – the rocks seen across the Slieve Felim area.

Site Importance – County Geological Site; recommended for Geological NHA

Reafadda has previously been recommended to NPWS as a nationally important palaeontological site that should be designated as a geological NHA.

Management/promotion issues

The site, although not yet designated as an NHA, lies entirely within the Anglesey Road SAC 2125. This provides a degree of protection but it is unlikely to be managed for its geological interest. The growth of tree saplings and heather and other vegetation is rapidly obscuring the rock exposure in the quarry. Some clearance or control would be beneficial to maintaining access for fossil collecting and research.



A view of the Reafadda Quarry from across the valley to the east.



A view into the Reafadda Quarry from the adjacent stream.

