

LOUTH - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Oriel Brook
Other names used for site	
IGH THEME	IGH2 Precambrian to Devonian Palaeontology
TOWNLAND(S)	Oriel
NEAREST TOWN/VILLAGE	Collon
SIX INCH MAP NUMBER	20
ITM CO-ORDINATES	700782E 784278N (centre of section)
1:50,000 O.S. SHEET NUMBER	36 GSI BEDROCK 1:100,000 SHEET NO. 13

Outline Site Description

This site is a stream section, with small exposures along the banks, within dense rhododendron plantations in the demesne of Mellifont Abbey.

Geological System/Age and Primary Rock Type

The stream cuts through Upper Ordovician rocks. They are very poorly exposed mudstones of the Oriel Brook Formation and shales of the Broomfield Formation.

Main Geological or Geomorphological Interest

The stream section has yielded a fossil assemblage of very small brachiopods and trilobites. The trilobites are classed as a cyclopygid fauna, and the brachiopods have been described as a *Foliomena* fauna. Both associations of small species indicate that the sediments were deposited in deep water outer shelf settings. They are also one of the youngest known faunas within the region, and are part of the Grangegeeth Terrane in the lapetus Suture Zone of Ireland.

Site Importance – County Geological Site

The site is of County Geological Site importance. Despite poor exposure and overgrown rhododendron vegetation, the site is recommended as a CGS as there is much potential geological heritage interest especially if vegetation was removed in clear felling of the demesne forest.

Management/promotion issues

The site is exceedingly overgrown with vegetation and almost no rock is visible in the darkness of rhododendron trees. However a diligent fossil collector could potentially add to the small known collections housed in the National Museum of Ireland, the Geological Survey of Ireland, the Natural History Museum in London and other institutions.



One of the main exposures.



The stream is heavily overgrown.



A better exposure in the main fossil locality, in daytime daylight, made very dark by dense rhododendron cover.



