

LAOIS - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Moyadd Stream
Other names used for site	
IGH THEME	IGH9 Upper Carboniferous and Permian
TOWNLAND(S)	Moyadd, Knockbaun
NEAREST TOWN/VILLAGE	Swan
SIX INCH MAP NUMBER	25, 31
ITM CO-ORDINATES	655120E 683460N
1:50,000 O.S. SHEET NUMBER	61
	GSi BEDROCK 1:100,000 SHEET NO. 15,16

Outline Site Description

A small river channel has exposed bedrock in the bed and banks for approximately 1km.

Geological System/Age and Primary Rock Type

The site is the type section for the Moyadd Coal Formation which spans the boundary between the Namurian and Westphalian (in traditional stratigraphical usage in western Europe).

Main Geological or Geomorphological Interest

This stream section has been logged in detail by Professor Ken Higgs in his work for the Geological Survey of Ireland and at University College Cork. The Moyadd Coal Formation is defined with this stream exposure defined as the type section. The lowest coal seams, No. 1 and No. 2 of the coalfield are found within the section separated by two marine bands. The marine bands are critical markers in the stratigraphy representing short lived inundations of the coal swamps with marine environments and their characteristic fossils. Goniatites (small coiled cephalopods) are the characteristic fossils of these marine bands.

Above the Moyadd Coal Formation, the succeeding younger Clay Gall Sandstone Formation and the Coolbaun Coal Formation are found in the stream, moving southwards. The section has provided samples for palynology (spores and pollen microfossils), but nearby boreholes and other sections have also been used for correlating and sampling other formations than just in the Moyadd Coal Formation.

Site Importance – County Geological Site; may be recommended for Geological NHA

The lack of exposure generally across the Leinster coalfield means that the extensive exposures in this stream section are an important County Geological Site, but may also be recommended for geological NHA status when reviewed in a national context.

Management/promotion issues

The site is on private farmland and is unsuitable for promotion. It is also very vegetated and difficult to access without having the strong motivation of a field geologist to map or sample the bedrock.



Panorama view of the Moyadd Stream site which runs along the edge of the forestry, flowing downstream to the left.



A typical example of the quality of exposure in the stream at Moyadd.

The stream bed and bank exposures are not extensive nor easy to access.



Disturbed ground, with many hollows and heaps, on the northern side in the middle of the site, may represent very old coal pits.

