# LONGFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Glen Lodge Stream		
Other names used for site	The Glen		
IGH THEME	IGH2 Precambrian to Devonian Palaeontology,		
	IGH4 Cambrian-Silurian		
TOWNLAND(S)	Kiltyclogh, Aghaward Granard		
NEAREST TOWN/VILLAGE			
SIX INCH MAP NUMBER	9		
NATIONAL GRID REFERENCE	622940E 782310N		
1:50,000 O.S. SHEET NUMBER	34	GSI BEDROCK 1:100,000 Sheet No.	12

Outline Site Description

Streambank exposures in a deep glen or gorge.

## Geological System/Age and Primary Rock Type

The rocks are classified as the Glen Lodge Formation, within the Gowna Group and are of Ordovician age. They are mostly black-grey slaty rocks with some greywacke (a mixed type of sandstone with rock fragments and clay). There are also some volcanic lava and pillow lava breccia rock types. Of special interest is a small exposure of an unusual rock type which has yielded microfossils indicating that it is of Silurian (Ludlow) age.

### Main Geological or Geomorphological Interest

This site is unique in Ireland as it is the sole exposure of late Silurian age sedimentary rocks in the Longford-Down zone of rocks. A fault bound section of rocks in the stream section bounding Kiltyclogh Townland has yielded an assemblage of microfossils which provides definite evidence of some of the youngest Silurian rocks in Ireland and certainly the youngest known in the Longford-Down succession. These rocks represent slivers of the ocean floor stacked together in fault bound blocks, exposed from Longford through County Down and through the Southern Uplands of Scotland. They tell part of the story of the closure of the lapetus Ocean in the Ordovician and Silurian Periods and the amalgamation of two 'halves' of Ireland. The microfossils were of several different types but the spores were diagnostic of age, being comparable to Ludlow age ones from Wales.

#### Site Importance – County Geological Site; recommended for Geological NHA

This site has already been recommended to NPWS for designation as a geological NHA. The boundary drawn here is a revised, slightly smaller version to that defined in a 2005 survey by GSI.

## Management/promotion issues

The landowner is very proud of the Glen and would like to see the biological interest of the wooded gorge and its geological importance preserved through SAC or NHA designation. It is not under any threat from a change in land use. Access to rock exposures where fallen trees block the stream is not a significant problem, but could be incorporated into any management plan. Whilst it is of scientific interest and important, it is private woodland, and is also not suitable for general promotion due to the wild and adventurous nature of the gorge.



The gorge is variable in steepness of the sides and the amount of rock exposed in the streambed and cliffs, and some parts are much less accessible than in this image.



The exposure of Ludlow age rocks is only a few metres long, exposed in the lower section of the gorge in the site.

