

## TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	Clare Glens
Other names used for site	Clare Glen
<b>IGH THEME</b>	<b>IGH10 Devonian, IGH14 Fluvial and Lacustrine</b>
	<b>Geomorphology</b>
<b>TOWNLAND(S)</b>	<b>Rossarymore, Ashroe, Scraggeen, Puckane</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Newport, Moroe</b>
<b>SIX INCH MAP NUMBER</b>	<b>37</b>
<b>ITM CO-ORDINATES</b>	<b>573895E 659580N (centre of site)</b>
<b>1:50,000 O.S. SHEET NUMBER 65</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 18</b>

### Outline Site Description

Clare Glens is a deep river gorge over about 2.5 km long, with rock exposures in the bed and banks of the Clare River, which is the boundary between County Tipperary and County Limerick in this district.

### Geological System/Age and Primary Rock Type

The rocks exposed at the Clare Glens are all Devonian in age, described as the Keeper Hill Formation. They are mostly sandstones with some pebbly conglomerates. The river gorge is Holocene in age, but probably had a strong glacial meltwater origin.

### Main Geological or Geomorphological Interest

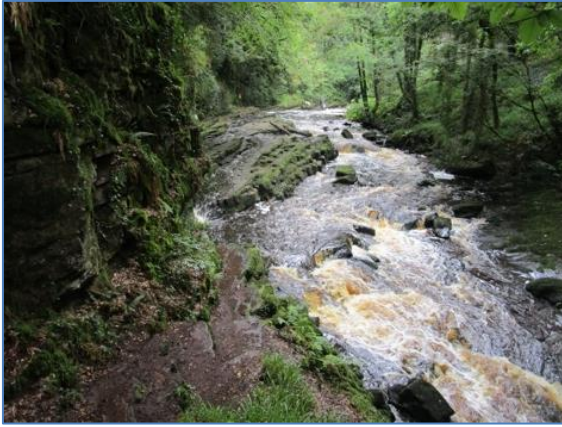
The main interest here is the extensive exposures of Devonian rocks, sometimes still referred to informally as 'Old Red Sandstone'. Mapped by Geological Survey Ireland as the Keeper Hill Formation these rocks are generally not well exposed so the Clare Glens section provides a good representative traverse through over 2 km of ground, though they are not continually accessible or exposed along the walking trails. The rocks are sandstones, both whiteish and red in colour, with occasional pebbly conglomerates. The pebbles are mostly white rounded pebbles of vein quartz, and are probably derived from erosion of much older rocks from northern parts of Ireland, rather than the local Slieve Felim hills, since they are rounded and size sorted pebbles. The wider path on the Limerick side is away from the river bed but does have accessible large boulders of conglomeratic sandstones along the route. The geological interest of Clare Glens is also in the geomorphology of the gorge itself. The gorge is a glacial meltwater channel where immense volumes of glacial meltwater carved a deep ravine. The Clare river has continued downcutting since the Ice Age ended around 10,000 years ago. The form of the river bed is heavily influenced by the geology. Waterfalls occur in many places along the river, and may be due to either the occurrence of particularly thick beds of sandstone or pebble rich beds which are more resistant to erosion than their adjacent beds.

### Site Importance – County Geological Site

The Clare Glens provide a good representative section of Devonian rocks that are otherwise not well exposed, and together with the geomorphological interest and educational potential, deserve recognition as a County Geological Site.

### Management/promotion issues

Clare Glens is an SAC [00930] and already protected for its biological interest of oak woodlands and associated plant species. It is the county boundary between County Tipperary and County Limerick and jointly managed as a public amenity and nature reserve. The site will also need to be defined and documented as a CGS when an audit of County Limerick is progressed. The paths are slippery and uneven in many places and must be treated with caution by visitors. The higher level path at the top of the gorge is generally easier, but more removed from the interesting geological exposures in the river bed. The public signboards do mention some geological elements but could be much expanded. Two public car parks are available at the western end of the site.



Rock exposure in the bed and bank.



Rock exposure in the bed and bank.



Occasional rippled sandstones are seen.



The main, most easterly waterfall.



Boulder exposures on the Limerick side show pebbly conglomerates.



Explanatory sign for visitors at entrance.



