

# SLIGO - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Glen</b>
Other names used for site	
<b>TOWNLAND(S)</b>	Glen
<b>NEAREST TOWN</b>	Coolaney
<b>SIX INCH MAP NUMBER</b>	20
<b>NATIONAL GRID REFERENCE</b>	164365 326815 = G 644 268
<b>1:50,000 O.S. SHEET NUMBER</b>	25
	<b>1/2 inch Sheet No.</b> 7

## Outline Site Description

Roadside rock exposure.

## Geological System/Age and Primary Rock Type

Precambrian metamorphic rocks.

## Main Geological or Geomorphological Interest

Glen plays host to hillside exposures of Precambrian metamorphic rocks collectively known as the Slishwood Division. These gneisses, are characterised by pink, white and grey bands of the minerals feldspar, quartz and mica (which are pink, glassy grey/white and silver respectively). These rocks originated as sedimentary rocks approximately 1500 million years ago. More than 600 million years ago a phase of mountain building pushed the sediments to depths of 47km beneath the Earth's surface. Under these increased pressures and temperatures the sedimentary rocks recrystallised to form the banded gneisses that we see today. A second continental collision approximately 460 million years ago resulted in the fracturing of the gneisses providing pathways for granitic magma to be injected into them. The rocks were pushed up over adjacent continental crust. Melting of the underlying slab generated granitic magma. Evidence for magma 'injection' can be seen at this locality where **pegmatite** veins crosscut the banded gneisses. Folding, a very obvious feature of the gneisses, developed slowly in response to the high pressure and temperature conditions and deformation associated with the various phases of mountain building. The younger pegmatite veins (as they display a crosscutting relationship to the gneisses) are also distorted. This suggests yet another phase of deformation. Small masses or 'pods' of dark green igneous rock are found within the gneisses at this locality. These pods represent igneous bodies that were intruded into the Slishwood division rocks prior to their metamorphism.

## Site Importance

The site is of National importance and is to be proposed for NHA designation under the IGH5 Precambrian theme of the GSI's IGH Programme.

## Management/promotion issues

Vegetation growth may need control; house building etc could damage site if permitted.



Slishwood gneisses exposed at Glen

**Glen**

