

SLIGO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Scalpnacapaill
Other names used for site	Skalpnacapple
TOWNLAND(S)	Carrownageeragh
NEAREST TOWN	Ballysadare, Collooney, Coolaney
SIX INCH MAP NUMBER	20
NATIONAL GRID REFERENCE	164180 327740 = G 641 277
1:50,000 O.S. SHEET NUMBER	25 1/2 inch Sheet No. 7

Outline Site Description

Near vertical cliff face exposure.

Geological System/Age and Primary Rock Type

Precambrian metamorphic rocks.

Main Geological or Geomorphological Interest

Precambrian banded gneisses of the Sliswood Division are exposed on the near vertical cliff face at this locality (see Glen Site Report for Sliswood Division description). The cliff face here is divided into lozenge-shaped blocks. This 'shear zone' effect occurs when one block of rock is pushed past another at sufficient depths to behave in a ductile manner. A dark coloured igneous mass or 'pod' can be seen within the gneisses here and contains a variety of interesting minerals. One such mineral is hornblende, which contains the radioactive element argon. Analysis of the argon present can yield an age for the time of crystallisation of hornblende. This process is called radiometric dating. As the hornblende here is a metamorphic mineral (i.e. grew as the rock was being metamorphosed) radiometric analysis will yield an age of metamorphism. Small green-coloured veins are found within the gneisses and contain the green/blue, bladed mineral kyanite. The presence of kyanite is extremely important as it only crystallises under extremely high pressure and temperature conditions. Other interesting features of this locality include small orange/brown marble (metamorphosed limestone) bands and a small serpentinite body.

Site Importance

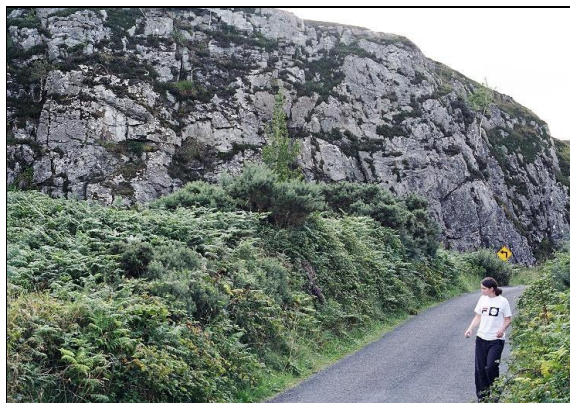
The site is of National importance and is to be proposed for NHA designation under the IGH5 Precambrian theme of the GSI's IGH Programme.

Management/promotion issues

The site is quite robust and only major roadworks are likely to impact greatly. Landowners unknown.



Lozenge-shaped shear zone (left). Photo: Claire McAteer



A general view of the cliff Photo: Matthew Parkes

Scalpnacapaill

