

NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Poll na Long
Other names used for site	Pollnalong
IGH THEME	IGH5 Precambrian
TOWNLAND(S)	Derrycassan
NEAREST TOWN/VILLAGE	Na Dúnaibh (Downies)
SIX INCH MAP NUMBER	16
ITM CO-ORDINATES	608216E 940213N
1:50,000 O.S. SHEET NUMBER 2	GSI 1:100,000 Bedrock Sheet No. 1
GIS Code ND035	

Outline Site Description

This site consists of the cliff faces around a deep inlet and further cliff exposures on the low promontory that extends southwards from the inlet.

Geological System/Age and Primary Rock Type

The rocks are part of the Sessiagh-Clonmass Formation and overlying Lower Falcarragh Pelite Formation, both part of the Precambrian Dalradian Appin Group. A metadolerite sill exposed in the cliff is apparently of Dalradian age also.

Main Geological or Geomorphological Interest

The site contains a near 300m-thick succession through the upper part of the Sessiagh-Clonmass Formation to the base of the overlying Lower Falcarragh Pelite Formation. The cliffs to the west of the inlet comprise quartzites of the Sessiagh Quartzite Member overlying dolomites of the Clonmass Limestone Member. The quartzites contain abundant way-up evidence, including cross-lamination and ripples. Distinctive grey dolomitic marbles of the Port Limestone Formation are exposed in the cliffs south of the inlet and pass upwards into pelites of the Lower Falcarragh Pelite Formation. In the west-facing cliff-face on the eastern side of the inlet, a 20m-thick metadolerite sill lies between thin-bedded quartzites and a mixed quartzite-pelite sequence, both considered to be part of the Sessiagh-Clonmass Formation.

This site is considered to be of particular significance because the interpretation of a continuous succession through the Sessiagh-Clonmass and Lower Falcarragh Pelite Formations challenges an alternative, older interpretation that envisages the sequence in the eastern cliff face to be cut by two tectonic slides, with mylonitized quartzites of the older Ards Quartzite Formation exposed below the metadolerite sill.

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

The site provides an excellent, continuous exposure of the upper part of the Sessiagh-Clonmass Formation and base of the overlying Lower Falcarragh Pelite Formation.

Management/promotion issues

There is no threat to the site itself but access from the Na Dúnaibh (Downies) road to the site, across almost 1 km of pasture and moorland, may be affected in future by house building. The site is likely to be of interest mainly to geologists and researchers and requires no further promotion.



Eastern side of Pollnalong inlet showing thin-bedded quartzites below metadolerite sill (base of photo) with interbedded quartzites and pelites above.



Quartzite and thinly bedded pelites of Sessiagh-Clonmass Formation, Pollnalong inlet.



Exposure of Port Liestone Member of Sessiagh-Clonmass Formation, south of Pollnalong inlet. Above are pelites of the Lower Falcarragh Pelite Formation.

