

NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	An Ardaidh Bheag
Other names used for site	Ardsbeg, Ards Point
IGH THEME	IGH5 Precambrian
TOWNLAND(S)	Ardsbeg Hill
NEAREST TOWN/VILLAGE	Gort an Choirce
SIX INCH MAP NUMBER	24
ITM CO-ORDINATES	590540E 931435N
1:50,000 O.S. SHEET NUMBER 1	GSI 1:100,000 Bedrock Sheet No. 1
GIS code ND050	

Outline Site Description

This is a coastal cliff section on the western side of the small Ardsbeg peninsula that cuts into the sand flats of Ballyness Bay.

Geological System/Age and Primary Rock Type

The rocks are part of the Precambrian Dalradian Appin Group. Pelites and limestones of the Lower Falcarragh Pelite Formation are thrust over quartzite of the Ards Quartzite Formation.

Main Geological or Geomorphological Interest

A series of five major ductile tectonic slides or thrust faults is a key feature of the Dalradian geology of north Donegal. The slides are part of the regional D2 deformation attributed to subduction on the margin of the Iapetus Ocean during the early-Ordovician Grampian orogeny. Thrusting in a northwestwards direction along these slides created a series of four thrust nappes, which are blocks of crust separated by thrust faults, stacked one upon another. The slide exposed at Ardsbeg is the Ardsbeg Slide. It strikes north-south and is considered to be part of the same slide, curved in plan view, exposed at Dunfanaghy (see Dunfanaghy site report).

The slide is very well exposed in the cliff-face on the western side of the peninsula. Dark, thinly-bedded pelites overlie white-cream-coloured quartzites along a plane that dips northeastwards. North of the contact a recumbent D2 fold (folded back on itself in the second phase of deformation) is well exposed in the pelites.

Site Importance – County Geological Site; maybe recommended for geological NHA

This is an exposure of one of the five principal slides along which thrusting has led to the development of a series of stacked thrust nappes in the Dalradian rocks of north Donegal. This is one of the best exposures of a slide in the region and is readily accessible.

Management/promotion issues

The site is a short distance north of an unpaved track that leads to the beach on the west side of the peninsula. The peninsula is given over to small farms and one-off housing development. The site would be best promoted in geological heritage literature of the region.



Pelites of Lower Falcarragh Pelite Formation (left) thrust over lighter-coloured Ards Quartzite Formation quartzite in cliff section at Ardsbeg. View to east.



Close-up of slide showing clean contact between dark-coloured pelites and quartzites. View to east.



Recumbent D2 fold in pelites north of slide exposure, Ardsbeg. View to east.

