

## WATERFORD - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	Ardoginna
Other names used for site	
<b>IGH THEME</b>	IGH 13 Coastal Geomorphology, IGH 10 Devonian
<b>TOWNLAND(S)</b>	Ardoginna
<b>NEAREST TOWN</b>	Ardmore
<b>SIX INCH MAP NUMBER</b>	Waterford 40
<b>NATIONAL GRID REFERENCE</b>	217434 76387 (at western edge of geo)
<b>1:50,000 O.S. SHEET NUMBER</b>	82                      1/2 inch Sheet No.    22

### Outline Site Description

Ardoginna is a coastal cliff and geo (long narrow inlet).

### Geological System/Age and Primary Rock Type

The rocks are of Devonian age (approximately 360 million years); the structural feature is of Variscan age (a period of large scale folding about 300 million years ago) and the erosion of the coastal cliffs to the present features is relatively recent, mostly since the last Ice Age.

### Main Geological or Geomorphological Interest

The coastal cliffs include three geos, or long narrow inlets in the coastal profile, typically with steep sides and small width compared to length. These landforms of coastal erosion can form in many different ways but usually exploit some structural weakness in the bedrock. This is most often a fault, where rocks have shifted along a single brittle fracture. The axis of folds can also be lines of weakness. It is not clear at Ardoginna what has caused the geos to form and it is difficult to map structures in dangerous cliffs.

The easternmost geo includes an excellent exposure of a monocline. Most structural deformation of rocks creates folds (anticlines or upfolds, and synclines, or downfolds) which have two limbs. Monoclines are a relatively rare feature of a one-sided or one-limbed fold. Seen in cross section or in any view, the feature most resembles a step. In this geo the rock beds are tilted to nearly vertical, and the monocline occupies nearly all the visible cliff section.

### Site Importance

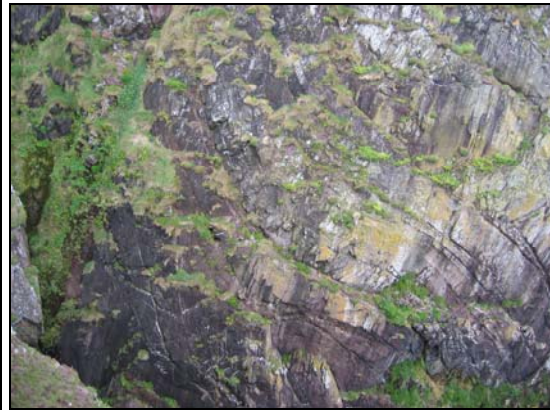
The site is of County Geological Site importance.

### Management/promotion issues

Ardoginna is completely unsuitable for any general public promotion, as there is no public cliff path access to view it. In order to access it for this report, a difficult approach across 500m of private farmland through Ardoginna House was made, but this is not easy and only one geo was visited due to dangerous cliffs and extensive vegetation on the cliff top. It may be worth investigating access and promotion within the sea kayaking community.



The monocline in the east wall of a geo.



The monocline, close up.



The main geo with the monocline in the left wall.



The geo to the west side of the site.

