

KERRY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Rossdohan
Other names used for site	
IGH THEME	IGH2 Precambrian to Devonian Palaeontology, IGH10 Devonian
TOWNLAND(S)	Rossdohan
NEAREST TOWN/VILLAGE	Sneem
SIX INCH MAP NUMBER	100
ITM CO-ORDINATES	471650E 563850N
1:50,000 O.S. SHEET NUMBER	84
GSi BEDROCK 1:100,000 SHEET NO.	24
GIS CODE	KY072

Outline Site Description

Coastal section in small bay comprising low rocky cliffs and rock platforms.

Geological System/Age and Primary Rock Type

The bedrock comprises purple and green sandstones and siltstones of the Upper Devonian Toe Head Formation (c. 360 million years old).

Main Geological or Geomorphological Interest

The general paucity of fossils in the predominantly terrestrial Devonian rocks of the Iveragh Peninsula has for many years hindered correlation of the various rock units and understanding of the geological evolution of the region. However, during the 1980s, examination of miospores in several Devonian formations, including at Rossdohan, helped elucidate their ages. The rocks at the Rossdohan site were originally mapped as part of the so-called "Transition Series" (now called the Toe Head Formation), marking the beginning of the change from terrestrial to marine conditions towards the end of the Devonian Period. The Old Head Sandstone Formation, which overlies the Toe Head Formation, was deposited under shallow marine conditions.

The outcrop at Rossdohan comprises gently folded, interbedded, massive and cross-bedded sandstone and siltstone beds. A brown lag deposit bed comprising coarse sand and limestone pisolites is a prominent marker horizon and marks a brief marine incursion. Above it a green siltstone bed contains visible fossil plant fragments. Spores collected from this siltstone have been recognized as uppermost Devonian in age.

Site Importance – County Geological Site

This site is a readily accessible example of Devonian strata in the Iveragh Peninsula that have been dated using microfloras (spores). At Rossdohan, the identified spore assemblage places the top of the Toe Head Formation in the uppermost Devonian, providing a 360 million year old date for the end of terrestrial sedimentation on Iveragh prior to the marine transgression that led to deposition of the overlying Old Head Sandstone Formation.

Management/promotion issues

The site is within the Kenmare River SAC (site code 002158) but just outside the Rossdohan Island proposed NHA (site code 001375). The site outline could usefully be included within the latter for which the proposed designation relates only to fauna. The site is best approached along the foreshore from the harbour and should only be attempted at low or falling tide. It is likely to be of interest mainly to researchers and no further promotion is recommended.



General view, towards north, of outcrop of Toe Head Formation on coast north of Rossdohan Harbour.



General view of outcrop of Toe Head Formation on coast north of Rossdohan Harbour, showing gentle folding of beds.



Lag deposit between sandstone beds of Toe Head Formation on coast north of Rossdohan Harbour.



Bedding plane of grey-green siltstone bed above lag deposit in outcrop of Toe Head Formation on coast north of Rossdohan Harbour.



Fragments of plant fossils in grey- grey-green siltstone bed in outcrop of Toe Head Formation on coast north of Rossdohan Harbour.

