

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ram's Head to Weaver's Point		
Other names used for site	Myrtleville to Ram's Head, Church Bay – Grab-all Bay		
IGH THEME	IGH10 Devonian		
TOWNLAND(S)	Crosshavenhill		
NEAREST TOWN/VILLAGE	Crosshaven		
SIX INCH MAP NUMBER	99		
ITM CO-ORDINATES	581000E 561800N (Rams Head)		
1:50,000 O.S. SHEET NUMBER	81	GSI BEDROCK 1:100,000 SHEET NO.	25
GIS CODE	CK072		

Outline Site Description

The site comprises a foreshore rock platform backed by low cliffs.

Geological System/Age and Primary Rock Type

The rocks exposed along this coastal section are sandstone, mudstone and siltstone of the Gyleen Formation, as well as green sandstone, siltstone and mudstone of the Toe Head Formation, both of which are of Upper Devonian age (c. 382-359 million years old).

Main Geological or Geomorphological Interest

Towards the end of the Devonian Period, sea levels began to rise and the sea advanced northwards. The uppermost Devonian rocks in south and east County Cork comprise grey, green and red sandstone and siltstone of the Gyleen Formation that were deposited on the coastal plain bordering the sea. At Weaver's Point thick, massive beds of grey-green marine sandstone of the Gyleen Formation crop out on the foreshore. The beds generally dip towards the north but there are several localities along this stretch where the beds dip towards the south owing to minor folding. Some low-angle faults are also visible, as are small-scale ripples, tight folds and thrust faults.

Towards the northern end of the site at Grab-all Bay the Toe Head Formation is characterised by a thick, pale greenish grey succession of alternating sandstone and mudstone. Several minor anticlines (\cap -shaped fold) and synclines (U-shaped fold) plunge to the east. The rocks are interpreted to have accumulated in a distal alluvial plain in which the water table was very high, resulting in permanently inundated floodplains.

Site Importance – County Geological Site

The rocks of the Toe Head Formation at this site contain evidence of dramatic changes in alluvial style during the Upper Devonian Period in the Munster Basin. The evidence suggests that the drainage direction was the opposite to that of the adjacent Gyleen Formation rocks. Thus, this site highlights a marine invasion from the east, and when combined with evidence from other sites in the region, is an important site in terms of deciphering the regional stratigraphy of the Devonian rocks of southern Ireland.

Management/promotion issues

The southern end of the site is located at a public beach and is readily accessible via road, but caution is required when entering on to the rock platform that comprises most of the site as it is partly submerged at high tide and is otherwise exposed to rough seas. Ram's Head to Weaver's Point is one of a series of sites on the west side of Cork Harbour that illustrate the Devonian–Carboniferous geology of the region. It merits promotion, potentially as part of a Cork Harbour geological heritage trail.



View north across Grab-all Bay towards Ram's Head, across rocks of the Toe Head Formation.



Small-scale ripples in the Gyleen Formation.



Mudstone and siltstone of the Gyleen Formation at Weaver's Point.



Green mudstone containing thin sandstone sheets of the Toe Head Formation at Grab-all Bay.

