

GIS CODE

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ballytrasna		
Other names used for site	Ballytrasna Beach		
IGH THEME	IGH10 Devonian		
TOWNLAND(S)	Ballytrasna, Ballygeany		
NEAREST TOWN/VILLAGE	Ballycotton		
SIX INCH MAP NUMBER	89		
ITM CO-ORDINATES	597870E 563080N (centre of site)		
1:50,000 O.S. SHEET NUMBER	81	GSI BEDROCK 1:100,000 SHEET NO.	25
GIS CODE	CK016		

Outline Site Description

Extensive rock outcrops on a public beach, and rock cliffs.

Geological System/Age and Primary Rock Type

The bedrock is purple and green siltstone and sandstone of the Upper Devonian Ballytrasna Formation.

Main Geological or Geomorphological Interest

This site at Ballytrasna Beach, c. 2 km southwest of Ballycotton, is the type locality for the Ballytrasna Formation, which represents the Old Red Sandstone in East Cork. It overlies the Gortanimill Formation, which comprises coarser sandstone units and represents sedimentation in a high-energy fluvial environment. In contrast, the finer sediment of the Ballytrasna Formation reflects deposition from suspension in a lower-energy, sinuous river system. It is dominated by red and purple siltstone and sandstone, with subordinate green beds. The Ballytrasna Formation is succeeded by grey, green and red sandstone of the Gyleen Formation, representing a transition to marine conditions in advance of the Carboniferous Period.

The extensive area of outcrop on the beach and in the cliffs backing onto it includes purple and green sandstone and siltstone. Beds generally dip steeply to the north as they are on the southern limb of a syncline. A near-vertical axial planar cleavage is a prominent feature, with the finer, generally thicker siltstone beds more intensively cleaved than the more competent sandstone beds. The north-dipping limb of the syncline is itself folded and prominent open folds are visible on the beach. The Ballytrasna Formation forms the bedrock that is visible in and below the cliffs along the path that leads to Ballycotton, passing upwards into the Gyleen Formation near the picnic area at the start of the cliff path.

Site Importance – County Geological Site

This site is the type locality for the Ballytrasna Formation, which comprises the Old Red Sandstone in East Cork. The exposure is extensive and includes examples of all bedrock types characteristic of this formation. The presence of large folds and well-developed cleavage add interest.

Management/promotion issues

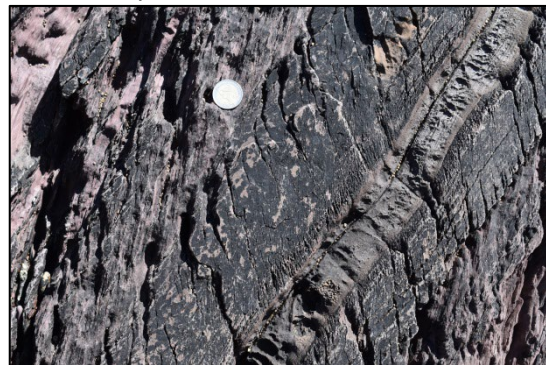
The site is readily accessible along the Ballycotton cliff walk and is popular with walkers and swimmers. It is best visited at low tide to ensure access to the various outcrops of interest. The beach is not part of any protected area but is not under any apparent threat. Promotion of the site as part of a geological heritage trail to include Ballycotton itself and perhaps other locations along the East Cork coast may be worth consideration.



Ballytrasna Beach, view westwards from Ballycotton cliff walk.



Steeply-dipping purple siltstone and sandstone displaying near-vertical axial planar cleavage.



Close-up of steeply-dipping siltstone and sandstone showing cleavage interaction with beds of varying competence.



Purple (right) and green (left) siltstone and sandstone of the Ballytrasna Formation, Ballytrasna Beach.



Large fold in thick sandstone beds of the Ballytrasna Formation on west side of Ballytrasna Beach.

