

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ringaskiddy		
Other names used for site	Golden Rock		
IGH THEME	IGH8 Lower Carboniferous, IGH7 Quaternary		
TOWNLAND(S)	Ringaskiddy		
NEAREST TOWN/VILLAGE	Ringaskiddy		
SIX INCH MAP NUMBER	87		
ITM CO-ORDINATES	579392E 564106N (Golden Rock)		
1:50,000 O.S. SHEET NUMBER	73	GSI BEDROCK 1:100,000 SHEET NO.	21
GIS CODE	CK077		

Outline Site Description

This site comprises a coastal exposure along a beach, and includes a prominent boulder, cliffs and outcrops at beach level.

Geological System/Age and Primary Rock Type

The bedrock comprises Lower Carboniferous (Mississippian) 359-323 Ma) sandstone and mudstone of the Cuskinny Member, which forms part of the Tournaisian Kinsale Formation, part of the 'Cork Group'. The Cork Group consists exclusively of marine clastic rocks deposited in the South Munster Basin in latest Devonian to early Carboniferous times. The ridge has been shaped and moulded during the Quaternary Period (Ice Age) by glacier ice abrading the ridge top and flanks.

Main Geological or Geomorphological Interest

At Ringaskiddy a succession of marine sedimentary rocks of Carboniferous age crops out. Here, a beach flanks the eastern side of the headland, backed by a 12 m high cliff into glacial till, which are sediments of Quaternary age, deposited during the Ice Age.

The bedrock succession at Ringaskiddy comprises four formations. Adjacent to Golden Rock after the entrance to the beach from the car park, you stand in the core of the Ringaskiddy Anticline. The Kinsale Formation, represented by the Cuskinny Member, is the oldest formation and consists of a thick succession of grey or brown sandstones with mudstones and heterolithic beds. Flaser-bedded sandstones and linsen-bedded mudstones of this Cuskinny Member can be seen at the northern end of the foreshore. Past Golden Rock, where the beach turns westwards, grey calcareous siltstones with occasional bioclastic levels of bryozoans and brachiopods comprise the thin Courtmacsherry Formation. On the south side of the beach, the calcareous siltstones are succeeded by the Ballysteen Formation, a thick succession of interbedded bioclastic limestones and thin mudstones that weather locally to a brown colour. This is followed by poorly bedded, massive Waulsortian Limestones, which are pale grey micrites or lime mudstones containing abundant crinoid stems, ossicles and stromacactis cavities.

The foreshore area contains an abundant collection of well rounded limestone erratic boulders, which have been derived from the weathering of the till in the cliff face. Golden Rock is the largest of these boulders.

Site Importance – County Geological Site; recommended for Geological NHA

This County Geological Site is an important representative site exhibiting an excellent exposure through the core of an anticline of part of the Carboniferous succession, with fresh and extensive exposures of a variety of limestone beds that contain evidence of dramatic changes in relative sea level during the Early Carboniferous.

Management/promotion issues

The site is on a popular public beach and access is generally along the beach from the north or south at low tide. It is popular as a geology field trip destination, with regular visits from Irish and overseas universities. Designation of the site and erection of some signage to discourage hammering of the rocks should be considered.



Golden Rock, with the cliffs and beach at the right of the photograph.



The exposure into Ice Age till in the cliff at Ringaskiddy.



Fault between Courtmacsherry Formation and Ballysteen Formation limestones.



Sandstones and mudstones of the Cuskinny Member at the northern end of the platform.

