

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Howe's Strand		
Other names used for site	Howe Strand, Howes Strand		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Garraneanasig, Glanavirane		
NEAREST TOWN/VILLAGE	Ballinspittle		
SIX INCH MAP NUMBER	137		
ITM CO-ORDINATES	555535E 543120N (centre of beach)		
1:50,000 O.S. SHEET NUMBER	87	GSI BEDROCK 1:100,000 SHEET NO.	25
GIS CODE	CK054		

Outline Site Description

Howe's Strand is a secluded, narrow beach in a well-defined, horseshoe-shaped sea inlet just over 4 km southwest of Ballinspittle, facing south into Courtmacsherry Bay.

Geological System/Age and Primary Rock Type

The main features of interest on the site are a rock platform overlain by raised beach sands and gravels, which are again overlain by diamicton. These are all Quaternary in age, formed during the last Ice Age. The bedrock cropping out on either side of the beach in the platform is flaser-bedded sandstone and mudstone of the Narrow Cove Member of the Kinsale Formation, which is of Lower Carboniferous (Mississippian) age (359-323 million years ago).

Main Geological or Geomorphological Interest

At Howe's Strand a narrow, modern sand beach stretches between two rocky headlands. Each of the headlands is made up of a rock-cut platform, which is approximately 2 m above mean sea level on either side of the beach. The platform itself is deeply furrowed by 'P-forms', plastically moulded forms that were etched by subglacial meltwater. The P-forms cut across the strike of the rock, and are overlain by magnificent examples of hummocky and swaley cross-stratified sand. The sand is of marine origin and contains wave-influenced bedforms deposited when ice vacated the site following deglaciation of the continental shelf. The sand is capped by chaotic diamicton, with overfolds related to local debris flows which occurred just after the glacial ice retreated the area.

The marine sand at Howe's Strand is part of a raised beach feature, which can be found intermittently around the southern coast of Ireland at numerous localities. In Irish glacial literature this feature is called the 'Courtmacsherry Raised Beach', and the sand units at Howe's Strand form one of the type-sites for this well-known and important raised beach feature.

Site Importance – County Geological Site

Howe's Strand is one of the best examples of a wave-cut platform around the Irish coast, and the fact that it has been moulded by ice (P-forms) and incised by subglacial meltwater makes it somewhat unique in a global sense also. The modern beach is a popular swimming spot and is a pleasant entrance gateway to the unusual Quaternary geology displayed on either side of it.

Management/promotion issues

The site is accessible via a long laneway, which ends at Howe's Strand beach. Walking on the rock platform is tricky in places and it contains some deep geos both west and east of the beach that are especially dangerous. Regardless of walking on the platform, the site should only be visited as tides permit. There is a signboard at the head of the laneway which commemorates the attacks in 1920 on the Coastguard Station overlooking the beach. A second signboard here describing the wave-cut platform and the importance of the site in the history of Irish glacial studies would be a worthwhile addition to this beautiful spot.



The rock cut platform at Howe's Stand, viewed from the west and looking east. The platform level in the rock can be traced across the sea inlet.



Deep subglacial meltwater furrow ('P-form') incised into the rock platform. Staff is 1 m long.



Several subglacial meltwater furrows ('P-forms') side by side on the platform.



The diamicton overlying the raised beach sands and gravels atop the rock platform along the western side of Howe's Strand. Staff here is 2 m long.

