

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ballinglanna Cove
Other names used for site	Ballinglanna
IGH THEME	IGH8 Lower Carboniferous, IGH9 Upper Carboniferous and Permian
TOWNLAND(S)	Rocksavage, Ballinglanna, Ardgehane, Donaghmore
NEAREST TOWN/VILLAGE	Timoleague
SIX INCH MAP NUMBER	136
ITM CO-ORDINATES	544110E 538390N (centre of small beach)
1:50,000 O.S. SHEET NUMBER	89 GSI BEDROCK 1:100,000 SHEET NO. 25
GIS CODE	CK002

Outline Site Description

Ballinglanna is a small, rocky cove with two small, discrete beaches, along the northeastern side of Clonakilty Bay.

Geological System/Age and Primary Rock Type

The bedrock cropping out at Ballinglanna is a very condensed sequence of mudstone of the Kinsale, Courtmacsherry and Lispatrick Formations, which are all of Lower Carboniferous (Mississippian) age (359-323 million years ago), and sandstone and interbedded pyritic mudstone of the White Strand Formation, which is also of Lower Carboniferous (Mississippian) age (359-323 million years ago) but spans the Lower to Upper Carboniferous transition.

Main Geological or Geomorphological Interest

At Ballinglanna two narrow sand and pebble gravel beaches lie in a narrow embayment etched into flanking, low bedrock cliffs, from which a series of wave-cut rock platforms juts out into the cove.

On the foreshore between the two beaches, cleaved dark grey mudstone beds of the Pig's Cove Member of the Kinsale Formation are exposed. Overlying these beds is the 17 m-thick Ballinglanna Member of the Courtmacsherry Formation, comprising silty mudstone with thin linsen laminae of fine sand and silt. The base of this unit is characterized by siliceous and pyritic nodules, also called bullions.

The Lispatrick Formation, which is approximately 33 m thick at this locality, consists of dark grey and sooty black mudstone that weathers pale grey to yellow. The uppermost beds contain dolomitic siltstone and ferroan dolomite.

The Namurian White Strand Formation is separated from the Lispatrick Formation by a fault marked by a 3 m-wide gouge zone at the southeastern end of the widest of the two beaches at Ballinglanna. To the south of this fault, the succession dips to the south towards the core of the South Courtmacsherry anticline. The formation itself consists of grey mudstone interbedded with grey sandstone, often with slump balls. Load casting, ripple laminae, parallel lamination, pyrite and sooty black mudstone can all be seen.

Site Importance – County Geological Site

Ballinglanna is an important site as it displays a continuous sequence of Lower Carboniferous formations that ends with excellent exposure of the Namurian White Strand Formation, the youngest strata in the south Cork region.

Management/promotion issues

The site is accessible via a third class road which skirts the western end of the site, and a long, cul-de-sac laneway, which ends at the southeastern end of the larger beach. Viewing the rocks is straightforward and they are easily accessible, but the site should only be visited as tides permit. Care should be taken when walking on the rocks as they are uneven in places, and slippery when wet.



Ballinglanna Cove, viewed from the southeast.



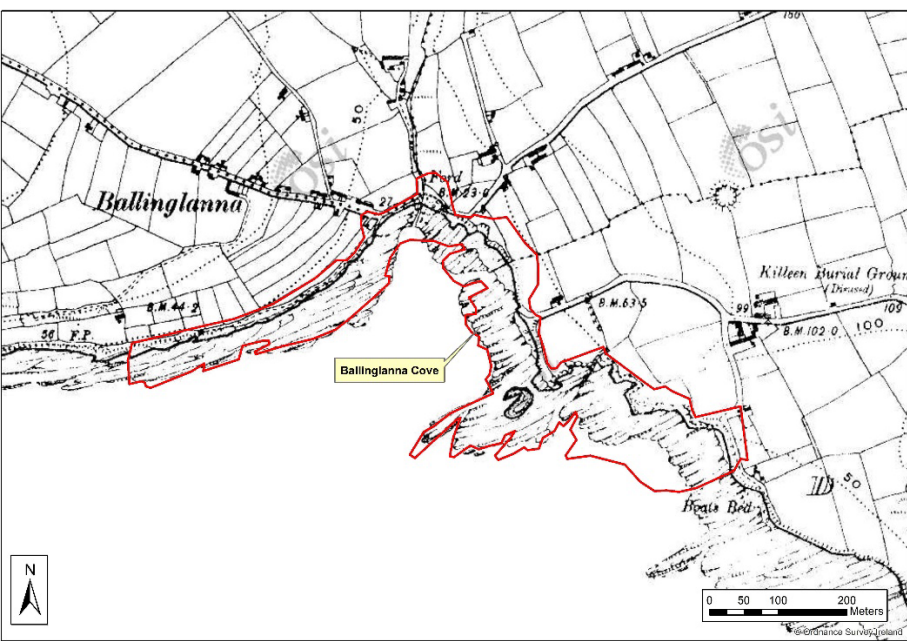
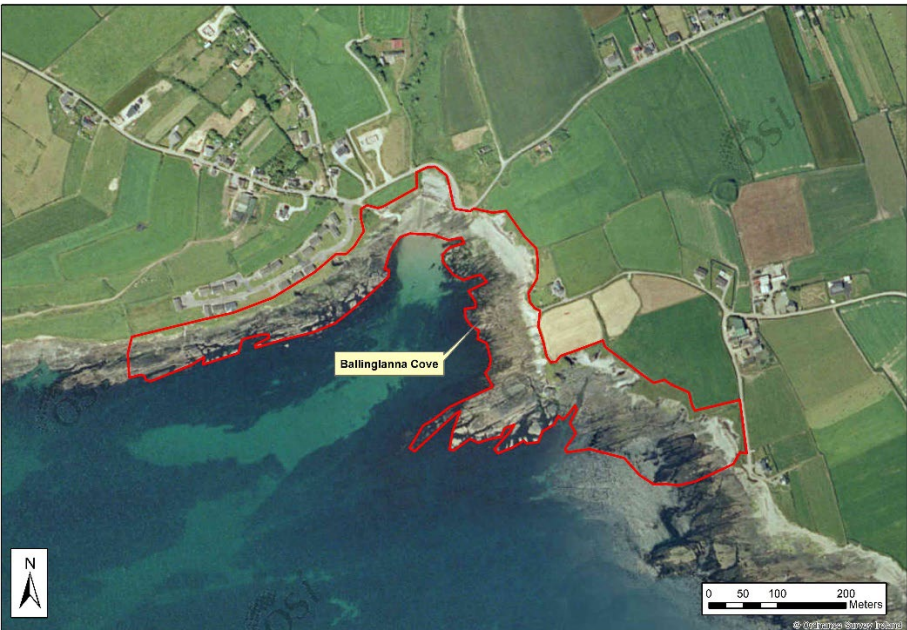
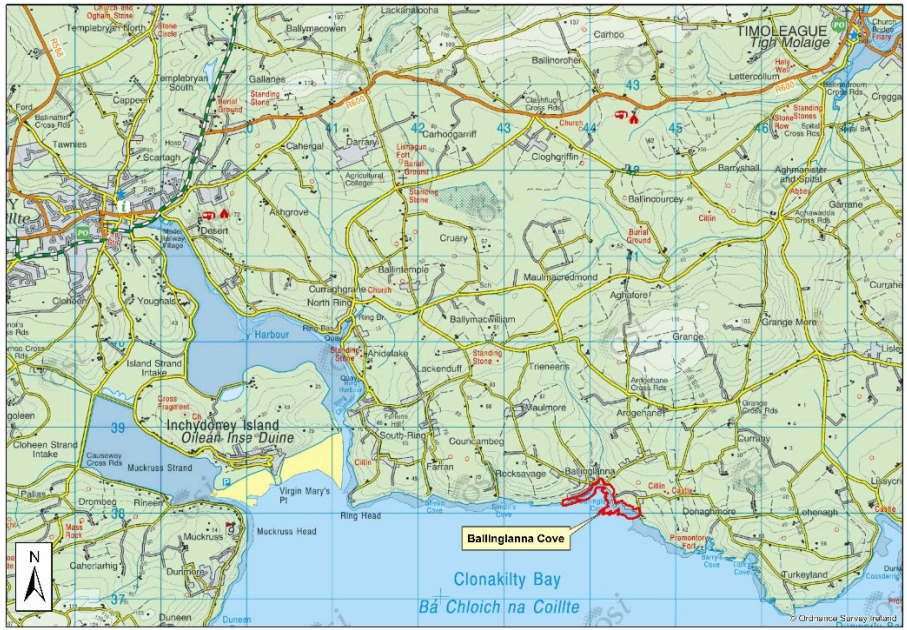
Dark grey mudstones of the Pig's Cove Member at the western end of the smaller beach.



Silty mudstone with thin linsen laminae of fine sand and silt of the Ballinglanna Member.



Weathered mudstones of the Lispatrick Formation at the end of the cul-de-sac lane at the east of the section at Ballinglanna Cove.



Hennessy et al., 2023. Geological Survey Ireland.