CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Ringabella Bay

Other names used for site Ringabella Beach, Ringabella Point, Fountainstown Creek to

Ringabella Beach

IGH THEME IGH8 Lower Carboniferous, IGH3 Carboniferous to Pliocene

Palaeontology, IGH7 Quaternary

TOWNLAND(S) Ringabella NEAREST TOWN/VILLAGE Myrtleville

SIX INCH MAP NUMBER 99

ITM CO-ORDINATES 578050E 557450N (jetty at western end of section)

1:50,000 O.S. SHEET NUMBER 87 GSI BEDROCK 1:100,000 SHEET NO. 25

GIS CODE CK076

Outline Site Description

The Ringabella Bay site comprises a foreshore rock platform backed by low cliffs, extending around the southern side of Ringabella Creek and around Ringabella Point headland.

Geological System/Age and Primary Rock Type

The rocks exposed along this coastal section are calcareous mudstone and limestone of the Courtmacsherry Formation, which is of Lower Carboniferous (Mississippian) age (359-323 million years ago).

Main Geological or Geomorphological Interest

Along the southern side of Ringabella Creek and extending eastwards around Ringabella Point and as far as Ringabella Bay, mudstone and limestone beds of the Courtmacsherry Formation are well exposed in a series of low cliffs and along a rock platform.

These rocks have been mapped in considerable detail. Most of the exposure comprises dark-grey, fossiliferous, crinoidal, biomicritic limestone. Many of the conodant fossils found within them are reworked elements of *Siphonodella* Zone, meaning they are Tournasian (early Carboniferous) age. Thin tuff horizons provide another feature of interest, and they are well seen in the cliffs above the beach below Ringabella House.

The oldest rocks on the south side of the creek are assigned to the Fountainstown Member. The upper few metres of these dark mudstone beds have yielded pyritized goniatites. They are overlain by the Ringabella Limestone Member, the base of which is taken to be a conspicuous horizon of 'golf ball' phosphatic nodules which is overlain immediately by limestone at Ringabella Point.

Above the bedrock in the cove south of Ringabella Point, diamicton of Quaternary age rests on a wave-cut platform in the bedrock.

Site Importance - County Geological Site

This site contains exposure of bedrock that yields several fossil species that are important in dating the beds in a complex stratigraphical area. The tuff horizons within the bedrock sequence are also well exposed, and the Quaternary rock cut platform and Ice Age sediments also add to the interest at the site.

Management/promotion issues

The northern end of the site is located at a public beach and is readily accessible via road, but caution is required when entering here as the creek becomes fully submerged at high tide. Walking across the rock platform here is also quite hazardous, and the rocks are slippery. The small cove south of Ringabella Point is best accessed via Ringabella House, but permission should be sought from the home- and land-owners.



Dark grey calcareous mudstones at the western end of the section along the southern side of Ringabella Creek, near the entrance jetty.



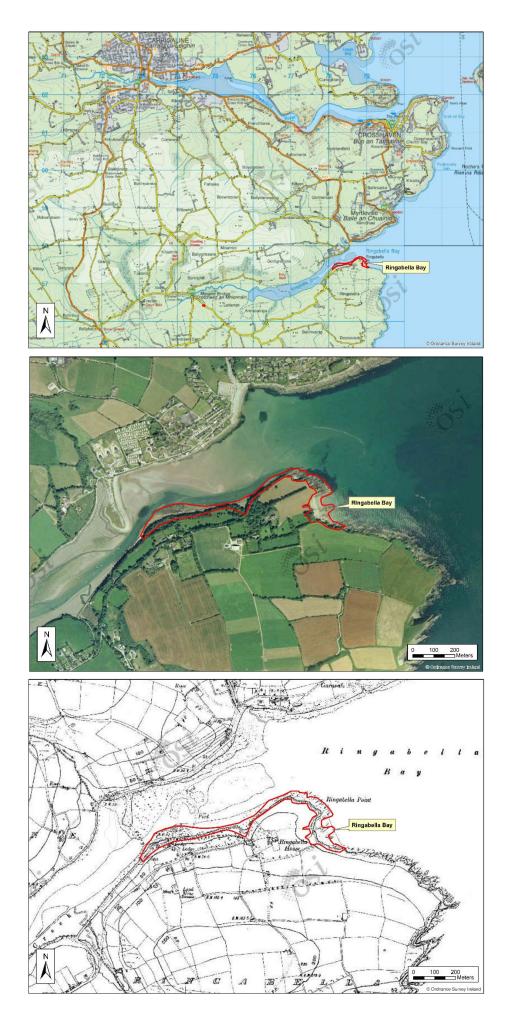
Tectonically deformed pyritics in the mudstone of the Fountainstown Member.



Quaternary age diamicton overlying the bedrock at the beach south of Ringabella Point.



Volcanic tuff (black unit) among non-calcareous, phosphatic mudstone at Ringabella Point. The level of the wave-cut rock platform can also be seen here.



Hennessy et al., 2023. Geological Survey Ireland.