

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Reenydonagan Point		
Other names used for site	Reenadonagan, Reenadisert		
IGH THEME	IGH8 Lower Carboniferous, IGH3 Carboniferous - Pliocene Palaeontology		
TOWNLAND(S)	Reenydonagan, Laharan West		
NEAREST TOWN/VILLAGE	Bantry		
SIX INCH MAP NUMBER	105		
ITM CO-ORDINATES	499810E 552355N		
1:50,000 O.S. SHEET NUMBER	85	GS1 BEDROCK 1:100,000 SHEET NO.	24
GIS CODE	CK074		

Outline Site Description

Coastal section with rocky outcrops at the head of Bantry Bay between Reenydonagan Point and the mouth of the Ouvane River.

Geological System/Age and Primary Rock Type

Bedrock comprises Lower Carboniferous (Mississippian) calcareous mudstone, with minor dolomitised bioclastic carbonate and black pyrite-rich mudrock of the Reenydonagan Formation. Biostratigraphical studies assign a Tournaisian (c. 359 to 345 million years ago) to Viséan (c. 345 to 326 million years ago) age to the Reenydonagan Formation.

Main Geological or Geomorphological Interest

The Reenydonagan Formation represents a major change in depositional environment from the shallow marine environment of the underlying (older) mudstones and sandstones of the Kinsale Formation. The Reenydonagan Formation is divided into four members (Members 1, 2, 3 and 4) in the Bantry Bay area, consisting of bioclastic limestones interbedded with shale and siltstone (Member 1); black, pyrite-rich carbonaceous mudrock (Member 2); grey calcareous mudrock (Member 3) and black, siliceous mudrock with minor chert (Member 4). Fossil conodonts identified in the Reenydonagan Formation have been dated, revealing a Hastarian Stage age (c. 359 to 348 million years ago) for Member 1 and an Ivorian Stage age (c. 348 to 345 million years ago) to Viséan age (c. 345 to 326 million years ago) in Member 3. The lowest beds (Member 1) represent deposition in shallow, but deepening, current-swept marine conditions. The remainder of the formation (Members 1, 2, 3) represents a marine basin sequence, with some evidence of turbidite (deep-water fluid and sediment gravity-induced flows) deposition in Member 3. The muds that form the beds of Member 3 in the Bantry Bay area are understood to have been derived from the north.

Site Importance – County Geological Site; recommended for Geological NHA

This is an important site because it is the type-section locality for the Reenydonagan Formation and comprises all four members from within the formation. Age-dating of fossil fauna within the formation contributes to our understanding of the geological history of this part of southwest Ireland.

Management/promotion issues

The site is an exposed, coastal section on the north shore of Bantry Bay. Access to the section is best made by boat from the opposite shore at Eagle Point Camping. The site is not suitable for public promotion owing to access limitations, but it is of importance to the geoscience research community. The Reenydonagan Formation can be observed at more accessible coastal sections between Bantry and Ardnamanagh Point, such as at Snave and Eagle Point.



Member 3 beds, Reenydonagan Formation at Reenydonagan townland coast viewed looking south from Eagle Point Campsite.



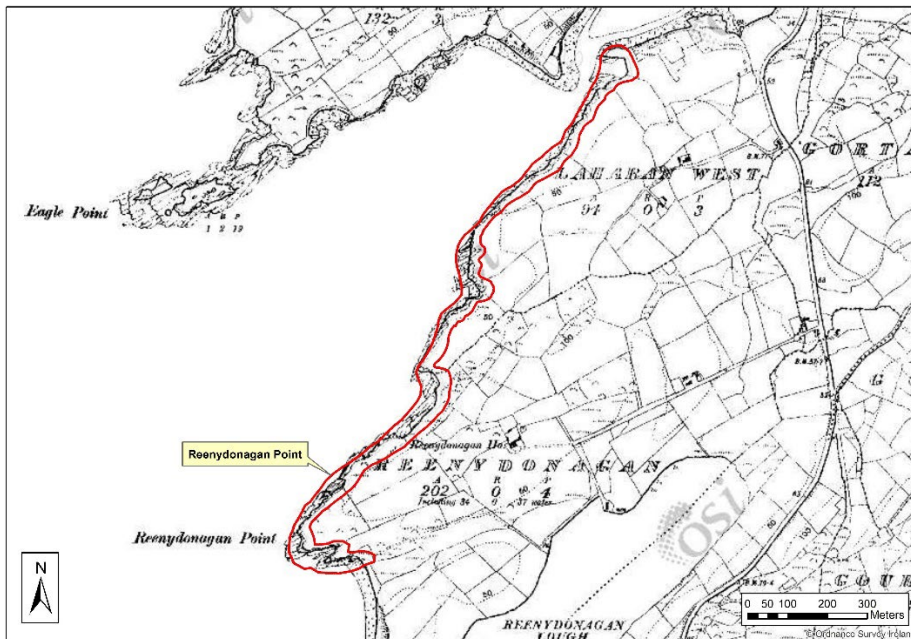
Upper beds of Member 2, Reenydonagan Formation Member.



Lower beds of Member 2, Reenydonagan Formation Member.



Member 1 beds, Reenydonagan Formation at Laharan West townland coast.



Hennessy et al., 2023. Geological Survey Ireland.