



Site Name: North-west Porcupine Bank SAC

Site Code: 002330

The designated area is located on the north-western edge of the Porcupine Bank as it slopes into the south-eastern Rockall Trough, approximately 235 km west of Clare Island off the Co. Mayo coastline. In the north-east Atlantic, major sedimentary mound areas exist that are several million years old. These carbonate mounds form isolated or clustered seabed elevations that may measure up to 350 m high and, in Ireland, significant clusters have been documented fringing the upper slopes of the Rockall Trough and Porcupine Seabight. Almost all host coral reef patches.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

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| [1170] Reefs |
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The area has not been mapped in detail using seismic data; however, multibeam data collected by the Geological Survey of Ireland indicates the area to be of high relief and at least 35 carbonate mounds have been identified to date at depths of between 400 m and 1000 m. The mounds tend to be relatively discrete and occur where there is a strong current regime, either as isolated features or associated with scarps or other topographical highs. They range from 100 m to 300 m in width and may reach 200 m in height.

Research conducted to date has shown extensive areas of live coral, including *Lophelia pertusa* and *Madrepora oculata*, associated with, and adjacent to, high relief areas. As this site encompasses high relief areas, it is therefore likely to have coral reefs throughout. The site is approximately 57 km long and 15 km wide, and covers an area of 716 km². The Caracole Cruise of 2001 conducted two dives using the IFREMER Remotely Operated Vehicle 'Victor 600' and showed extensive areas of live coral at depths of between 662 m and 842 m. Deepwater fishes such as the False Boarfish (*Neocyttus helgae*) and Blue Ling (*Molva dypterygia*) were observed in the area. In addition, good densities of coral have been recorded from eleven cores retrieved from the east and west of the designated area.