

Seamounts

EUNIS Code: A6.72

National Marine Habitat Classification for UK & Ireland code: Not defined

Seamounts are defined as undersea mountains, with a crest that rises more than 1,000 metres above the surrounding sea floor (Menard, 1964 in Rogers, 1994). Seamounts can be a variety of shapes, but are generally conical with a circular, elliptical or more elongate base. Seamounts are volcanic in origin, and are often associated with seafloor 'hot-spots' (thinner areas of the earth's crust where magma can escape). Seamounts, often with a slope inclination of up to 60°, provide a striking contrast to the surrounding 'flat' abyssal plain. Their relief has profound effects on the surrounding oceanic circulation, with the formation of trapped waves, jets, eddies and closed circulations known as Taylor columns (Taylor, 1917 in Rogers, 1994). Seamounts occur frequently within the OSPAR Maritime Area. Analysis of narrow beam bathymetric data by the US Naval Oceanographic office from 1967-1989 identified more than 810 seamounts within the North Atlantic. The majority occur along the Mid-Atlantic ridge between Iceland and the Hayes fracture zone (Gubbay, 2002).

The enhanced currents that occur around seamounts provide ideal conditions for suspension feeders. Gorgonian, scleratinian and antipatharian corals may be particularly abundant, and other suspension feeders such as sponges, hydroids and ascidians are also present. Concentrations of commercially important fish species, such as orange roughy, aggregate around seamounts and live in close association with the benthic communities (Gubbay, 2002).

See OSPAR Agreement 2008-07 for references