

Site Name: Valencia Harbour/Portmagee Channel SAC

Site Code: 002262

Valencia Harbour and Portmagee Channel, at the tip of the Iveragh peninsula in Co. Kerry, separate Valencia Island from the mainland. The channel, which is approximately 1 km wide, and Valencia Harbour and Doulus Bay to the east of the island, contain important examples of three habitats in particular reefs, large shallow inlets and tidal mudflats.

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):

[1140] Tidal Mudflats and Sandflats[1160] Large Shallow Inlets and Bays[1170] Reefs

The reefs at this site range from high water to 34 m in depth. They support an excellent range of communities from those that are typical of areas very exposed to wave action to those typical of areas sheltered from wave action but with some tidal stream present. A number of uncommon shallow subtidal communities occur here. The area also has an excellent range of sediment communities present including beds of free living red calcareous algae, generally called maerl beds (also known as 'coral'), with the uncommon anemone *Halcampa chrysanthellum*. Areas of soft mud or muddy sand are characterised by the sea pen *Virgularia mirabilis* and a range of burrowing anemones, including the very rare species *Edwardsia delapiae*, which has not been recorded since it was originally found and described from this area in 1928. Also present is *Scolanthus callimorphus*, only known from Kilkieran Bay, Co. Galway and one site in England. The phoronid *Phoronis psammophila* occurs in this community and has not been recorded elsewhere in Ireland or Britain.

The littoral reefs of Valencia Island are composed of areas that are exposed to, or very sheltered from, wave action. At exposed sites there is a typical zonation for this habitat: an upper shore with a narrow band of the brown alga *Pelvetia canaliculata*; a mid shore covered by barnacles, limpets and mussels, with rock pools containing the Purple Sea Urchin *Paracentrotus lividus* and coralline algal crusts; and a low shore dominated by mussels and barnacles with *Porphyra* sp., followed by mixed kelp species (*Laminaria digitata, Laminaria saccharina* and *Saccorhiza polyschides*). On mixed substrate in sheltered areas there is a typical zonation of bands of *Ascophyllum nodosum* and *Fucus vesiculosus* in the mid shore, with *Fucus serratus* in the low shore. The subtidal fringe has mixed kelp species with an understorey of red algae. On the north-east shore of Portmagee Channel, the very low shore has Eelgrass (*Zostera*)

marina) beds and a variety of bivalve species. Burrowing anemones, in particular *Cereus pedunculatus*, occur in gravel and mud in very sheltered areas. Boulders in the sublittoral fringe have a kelp community on top, and on the undersides a community of bryozoans and sea squirts (*Polyclinum aurantium* and *Morchellium argus*).

The shallow water reefs in areas very exposed to wave action have kelp park communities of *Laminaria hyperborea*, with dense foliose algae, the jewel anemone *Corynactis viridis* and the sea squirt *Pycnoclavella aurilucens*. Reefs moderately exposed to wave action with moderate current display good examples of *L. hyperborea* forest with a cushion fauna of sponges and ascidians which is considered uncommon. Another unusual community characterised by the keel worm *Pomatoceros triqueter* and occasional kelp occurs on areas of scoured cobbles. Vertical rock supports a range of hydroids, red algae, the sea urchin *Echinus esculentus*, with only occasional kelp plants. In sheltered areas either a species rich community of mixed kelps with sand scour tolerant fauna may be present, or a forest of *L. hyperborea* and *L. saccharina* may occur. This latter community is considered uncommon. Isolated silty bedrock outcrops support sponges, hydroids, anemones and occasional red and brown algae.

In deeper water at the western entrance to Portmagee Channel the reefs are very exposed or moderately exposed to wave action. Very steep bedrock is characterised by sponges, the jewel anemone *Corynactis viridis* and the cup coral *Caryophyllia smithi*. More gently sloping and upward facing circalittoral bedrock is characterised by pink coralline crusts, encrusting bryozoans, *Caryophyllia smithi*, *Echinus esculentus* and the sponges *Haliclona viscosa* and *Mycale rotalis*. These communities are typical of these habitats.

The very sheltered beach on the shores of the Valencia River estuary has a gradually sloping shingle beach, with a narrow band of *Fucus vesiculosus, Ascophyllum nodosum* and *Enteromorpha* sp., amphipods (e.g. *Echinogammarus marina*) and winkles (e.g. *Littorina littorea*) are frequent under the algae. Seaward of the shingle in muddy sand the polychaete *Scoloplos armiger* and the lug-worm *Arenicola marina* are common. The tide-swept low shore is characterised by the polychaete *Lanice conchilega*. The bivalve *Scrobicularia plana* is common in the upper mid shore, while *Angulus tenuis* is more prevalent in the mid and low shore.

The site has a good range of sediment communities which vary from gravel and pebbles to maerl, sand and mud. The moderately exposed sediments consist of areas of medium sand with the burrowing sea urchin *Spatangus purpureus* and the bivalve *Dosinia exoleta*. Areas with mixed sediments with different combinations of pebbles, gravel and mud are generally characterised by a variety of hydroids, anemones, bivalves and red algae. Soft mud or muddy sand is characterised by burrowing anemones, in particular *Sagartiogeton undata* and *Edwardsia claparedii*, the sea pen *Virgularia mirabilis*, the molluscs *Philine aperta* and *Haminoae navicula*, and bivalves. *H. navicula* is common in these communities but rare elsewhere in Ireland. A number of other uncommon marine species are found within the site including the rare pharonid *Phoronis psammophila* which occurs at a number of locations within the site, and two rare burrowing anemones *Edwardsia delapiae* and *Scolathus callimorphus*.

This site is of particular interest and importance because it contains good examples of three habitats listed on Annex I of the E.U. Habitats Directive – tidal mudflats and sandflats, large shallow inlets and bays, and reefs.