



Site Name: Achill Head SAC

Site Code: 002268

Achill Head is the most westerly point of Achill Island in Co. Mayo. The site comprises the shallow waters extending from Doega Head north-westwards to Achill Head and north-eastwards to Gubnahinneora Point. Bedrock is metamorphic schist and gneiss alternating with metamorphic quartzite. High cliffs (650 m) on the north-west of Achill Island drop vertically into the sea forming steep sublittoral reefs. The site supports good examples of reef communities, including some characterised by Axinellid sponges and one which supports large numbers of the rare brachiopod, *Neocrania anomala*. Extensive areas of shallow bays and inlets, and the beaches and intertidal flats at Keem Bay and Tramore are also included in the site.

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 rocky shores of Achill Island are very exposed to wave action. Sparse cover of the alga *Pelvetia canaliculata* characterizes the upper shores. Lower down, Mussels (*Mytilus edulis*) and barnacles are dominant, with abundant *Corallina officinalis* and occasional *Nemalion helminthoides*, which is a characteristic red alga of this type of extremely exposed shore. A mosaic of the brown alga *Fucus vesiculosus* with barnacles is present in the mid shore, while pink coralline crusts are common under the alga *Himanthalia elongata* on the lower shore. Shallow pools in the mid shore contain the Purple Sea Urchin (*Paracentrotus lividus*) and the brown seaweed *Halidrys siliquosa* and mixed red algae are present in deep rock pools. These rocky shore populations of the Purple Sea Urchin are vulnerable to exploitation.

The shallow subtidal reef communities of Achill Head are composed of areas that are exposed or extremely exposed to wave action and may extend to a depth of 31 m. The subtidal fringe is dominated by the characteristic brown alga *Alaria esculenta*, Mussels and the starfish *Asterias rubens*. With increasing depth *A. esculenta* occurs within a forest of kelp in which anemones (*Metridium senile*, *Sagartia elegans* and *Corynactis viridis*) are frequent and Mussels are absent. Deeper kelp communities on bedrock are dominated by *Laminaria hyperborea* and characterized by coralline algae and a variety of foliose red algae. Characterizing faunal species are sponges (*Cliona celata*), Deadman's Fingers (*Alcyonium digitatum*), jewel anemones (*Corynactis viridis*),

the top shell *Calliostoma zizyphinum*, bryozoans (*Parasmittina trispinosa*) and the feather star *Antedon bifida*. Where kelp thins to a park, the brown foliose algae *Dictyota dichotoma* and *Dictyopteris membranacea* become more common. Reefs in shallow water composed of boulders and cobbles with sand are characterised by the opportunistic kelp *Saccorhiza polyschides*.

In areas very exposed to wave action and at depths of about 25 m or greater the reefs of rugged bedrock with weak to moderate tidal streams are characterised by animal dominated communities. Vertical rock faces have excellent examples of communities characterised by the jewel anemone *Corynactis viridis*, and in a number of places the anemones are mixed with the feather star *Antedon bifida*. The more low-lying rock is covered in pink coralline crusts with the cup coral *Caryophyllia smithii*. The sponge community characterised by *Axinella infundibuliformis* and *Phakellia ventilabrum* is present here also. The sea urchin *Echinus esculentus* is common in some areas and the sea cucumber *Holothuria forskali* occurs at most sites. Two rare sponges, *Halicnemis verticillata* and *Spongionella pulchella*, and the brachiopod *Neocrania anomala*, are all recorded in low-lying circalittoral bedrock south of Dysaghy Rocks, and *Aglaophenia kirchenpaueri* is present on the west side on Carrickakin.

Littoral sediment communities, examples of the E.U. Habitats Directive Annex I habitat intertidal mudflats and sandflats, are very exposed at Tramore Strand and moderately exposed at Keem Bay Strand, with typical communities for these levels of wave exposure in the upper and mid shore areas. At both sites the strandline sandhopper community is characterised by *Talitrus saltator*, *Talorchestia deshayesii* and *Orchestia gammarellus*, and the mid shore areas by typical communities of the burrowing amphipods *Pontocrates* spp. and *Bathyporia* spp. in clean sand. This community extends into the low shore at Tramore strand.

The sublittoral sediment around Achill Island is comprised mainly of extensive plains of rippled sand with the burrowing sea urchin *Echinocardium cordatum* and the bivalve molluscs *Maetra stultorum* and *Ensis siliqua*. In shallower water there is coarse mobile sand with *E. cordatum* and *Lutraria lutraria*.

Achill Head is of high conservation value owing to the presence of excellent examples of reef communities and good examples of shallow water bay communities and mudflats and sandflats not covered by seawater at low tide. These habitats are listed on Annex I of the E.U. Habitats Directive and support diverse communities of characteristic plants and animals, as well as some more unusual species.