

SITE SYNOPSIS

SITE NAME: BROADHAVEN BAY

SITE CODE: 000472

Broadhaven Bay is a large, north facing bay situated on the north-west Mayo coast. The site extends from the innermost part of the bay at Belmullet to the outer marine area between Erris Head and Benwee Head. At its outermost part, the site is 10 km wide. Exposure to prevailing winds and wave action diminishes from the mouth toward the head of the bay. Subsidiary inlets along the length of the bay provide further areas of additional shelter.

Broadhaven Bay encompasses a range of marine and coastal habitats from extremely exposed bedrock at Benwee Head to sheltered sediments in the inner bay. There are good examples of wave-surged cave communities in shallow water with the anemone *Phellia gausapata* typically found in areas very exposed to wave action. A cave in deeper water supports colonies of the rare anemone *Parazoanthus anguicomus* and the soft coral *Alcyonium glomeratum*. The subtidal reef communities in the outer part of the bay are good examples of the zonation from kelp forest in shallow water to kelp park with an understudy of foliose brown algae and to the sponge communities in deeper water. Species richness can be high (up to 72 species) and the widely distributed but uncommon crab *Pirimela denticulata*, and hydroid *Tamarisca tamarisca* were both found at one site. In deeper water the reef communities are characterised by the Axinellid sponge community, communities tolerant of sand scour and communities typical of vertical or steeply sloping bedrock. A range of sublittoral sediments occurs within the site with sediment in the outer part of the bay characterised by bivalves or the burrowing urchin *Echinocardium cordatum*. Seagrass (*Zostera marina*) occurs in more sheltered areas and the oyster *Ostrea edulis* may be present. The inner part of the bay has extensive areas of intertidal mud characterised by polychaete communities or muddy sand which support communities of polychaetes and bivalves, typical for these substrates.

Salt marshes occur in the very sheltered areas at Tallagh and Barnatra. These are fringe marshes on peat and typical of the Atlantic salt meadow type. Species present include Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*), Sea Plantain (*Plantago maritima*), Common Salt-marsh Grass (*Puccinellia maritima*), and the rushes *Juncus gerardii* and *Juncus maritimus*. Turf fucoids occur.

Inishderry, a small island in the inner bay, supports important numbers of breeding terns, with Sandwich Tern (81 pairs in 1995) and Common and Arctic Terns (42 pairs in 1995). The rare Little Tern has bred in the past. The island also has breeding Black-headed Gulls (100 individuals in 1995).

Broadhaven Bay is an important area for wintering waterfowl, being part of a large complex that includes the Mullet and Blacksod Bay. Based on average peak counts over the five winters 1994/95 to 1998/99 the following species have nationally

important populations: Red-breasted Merganser (38), Ringed Plover (484), Grey Plover (52), Sanderling (74), Dunlin (2,108) and Bar-tailed Godwit (484). In some winters Brent Goose numbers exceed the threshold of 200 for national and international importance. Regionally important numbers of a number of other species occur: Oystercatcher, Golden Plover, Lapwing, Knot, Curlew, Redshank and Turnstone.

This site is of high conservation importance owing to the presence of several habitats that are listed on Annex I of the EU Habitats Directive: large shallow bays; intertidal sand flats, reefs, marine caves and salt marshes. In addition it has ornithological importance for breeding and wintering birds.