

Site Name: Ballysadare Bay SAC

Site Code: 000622

Ballysadare Bay extends for about 10 km westwards from the town of Ballysadare, Co. Sligo, and is the most southerly of three inlets of the larger Sligo Bay. The estuarine channel of the Ballysadare River winds its way through the bay, finally reaching the open sea near the spit at Strandhill dunes. The bay is underlain by sedimentary rocks of limestones, sandstones and shales, which are exposed as low cliffs and small sections of bedrock shore at several locations. Knocknarea Mountain overlooks 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):

- [1130] Estuaries
- [1140] Tidal Mudflats and Sandflats
- [2110] Embryonic Shifting Dunes

[2120] Marram Dunes (White Dunes)

[2130] Fixed Dunes (Grey Dunes)*

[2190] Humid Dune Slacks

[1014] Narrow-mouthed Whorl Snail (Vertigo angustior)

[1365] Common (Harbour) Seal (*Phoca vitulina*)

Ballysadare Bay contains extensive intertidal sand and mudflats, approximately 1,500 ha in extent overall. The mud provides an abundance of food for wildfowl, in the form of colonising plants such as Eelgrass (*Zostera marina*) and Tasselweed (*Ruppia maritima*), as well as numerous species of invertebrates on which both wildfowl and waders feed. Well-developed salt marshes occur at several locations around the bay. Typical species of these areas are Sea Rush (*Juncus maritimus*), Saltmarsh Rush (*Juncus gerardi*), Creeping Bent (*Agrostis stolonifera*) and Parsley Water-dropwort (*Oenanthe lachenalii*). In hollows and ditches, Sea Arrowgrass (*Triglochin maritima*), Sea Club-rush (*Scirpus maritimus*), Sea Milkwort (*Glaux maritima*), Thrift (*Armeria maritima*), Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*) and Red Fescue (*Festuca rubra*) occur. Particularly interesting species found on the salt marshes are Flowering Rush (*Butomus umbellatus*), Slender Spike-rush (*Eleocharis uniglumis*) and Hard Grass (*Parapholis strigosa*).

There is a large sand dune system at Strandhill which has been relatively undisturbed by grazers. The dune system is highly dynamic, with the tip of the peninsula actively growing and displaying a good, though limited, example of embryonic shifting dunes. The characteristic species found in this habitat type include Sand Couch (*Elymus farctus*), Spear-leaved Orache (*Atriplex prostrata*) and Sea Rocket (*Cakile maritima*). Shifting marram dunes are fairly extensive in the area also, occurring along the entire seaward side of the spit, and they are especially active towards the tip. While Marram (*Ammophila arenaria*) is the dominant species, Colt'sfoot (*Tussilago farfara*), Red Goosefoot (*Chenopodium rubrum*) and Cat's-ear (*Hypochoeris radicata*) can also be found. The seaward dunes reach considerable heights (up to 20 m). They are very steep on the seaward edge, but to the east of this there is an undulating expanse of dune hills.

The largest proportion of the dune system is made up of fixed dunes, a priority habitat listed on Annex I of the E.U. Habitats Directive. Once one moves landward, in from the Marram dunes, there is a low-growing, closed sward which is particularly species-rich, with Field Wood-rush (*Luzula campestris*), Kidney Vetch (*Anthyllis vulneraria*), Bee Orchid (*Ophrys apifera*), Oxeye Daisy (*Leucanthemum vulgare*), Common Centuary (*Centaurium erythraea*), Wild Thyme (*Thymus praecox*), Harebell (*Campanula rotundifolia*), Burnet Rose (*Rosa pimpinellifolia*), Carline Thistle (*Carlina vulgaris*) and Fairy Flax (*Linum catharticum*). The fixed dune areas are also rich in bryophytes and lichens. Moss species include *Tortula ruraliformis*, *Homalothecium lutescens*, *Ditrichum flexicaule* and *Hypnum cupressiforme*, while lichens (*Peltigera* spp. and *Cladonia* spp.) are also present. Some humid dune slacks occur amongst the fixed dunes. Characteristic species include Creeping Willow (*Salix repens*), Carnation Sedge (*Carex panicea*), Jointed Rush (*Juncus articulatus*) and the relatively uncommon Marsh Helleborine (*Epipactis palustris*).

A range of habitats fringe the bay, adding diversity to the site as a whole. Some of these areas have particular features of interest, e.g. the old oyster farm at Tanrego is important for waterfowl, while the uncommon plant species Ivy Broomrape (*Orobanche hederae*) occurs in scrubland adjacent to the bay.

Two animals listed on Annex II of the E.U. Habitats Directive occur within the site: The Bay supports a colony of Common Seal (maximum count of 257 in the all-Ireland survey of 2003), and the rare snail, *Vertigo angustior*, occurs in dune slacks and hollows in the dunes at Strandhill.

Ballysadare Bay is important for a range of waterfowl species in autumn and winter and is part of the larger Sligo Bay complex. Brent Goose occur in internationally important numbers, while a further seven species have populations of national importance. These are as follows, with numbers referring to the average peaks over winters 1994/95 - 1997/98: Brent Goose (259), Red-breasted Merganser (48), Oystercatcher (796), Grey Plover (231), Dunlin (1129), Bar-tailed Godwit (431), Redshank (481) and Greenshank (24). The presence of Bar-tailed Godwit, and also smaller numbers of Golden Plover (66), is of particular note as these species are listed on Annex I of the E.U. Birds Directive.

The bay is little-used for fishing or boating, but marsh shooting is common in the upper reaches. Aquaculture is little-developed in this bay compared to nearby Sligo

and Drumcliff Bays. Dune systems are sensitive to developments which alter their structure. Grazing is also a critical factor; the correct level of grazing maintains an open, species-rich sward, but the presence of too many grazers causes damage to the vegetation and may exacerbate dune erosion. Agricultural improvement, and particularly the application of fertilisers, threatens dune vegetation, leading to the eventual loss of species diversity.

Ballysadare Bay is of high ecological value for its range of good quality coastal habitats. Actively developing dune systems are rare on the west coast and the sand dune system at Strandhill is of particular interest as a large and intact example of a habitat type which is under general threat from development. The rarity of intact dune systems is recognised in the listing of fixed dunes as a priority habitat on Annex I of the E.U. Habitats Directive. The salt marshes at Ballysadare Bay are relatively good examples for the west coast, and that at Abbeytown is unusual as it is forming on quarry waste. The presence of two Annex II species within the site adds further importance. Furthermore, the bay supports nationally important numbers of waterfowl.