

Site Name: Killala Bay/Moy Estuary SAC

Site Code: 000458

North of Ballina town, the River Moy flows to the sea via a long, narrow estuarine channel. After approximately 8 km, the estuary widens to form a north-facing triangular bay, with the towns of Inishcrone (Co. Sligo) and Killala (Co. Mayo) situated on the eastern and western shores, respectively. The estuary itself forms the County boundary along its northern part. A long sandy island (Bartragh Island) separates the south-western side of the bay from the open water. Much of the inner part of the bay is intertidal. The northern part shelves to approximately -10 m.

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

[1210] Annual Vegetation of Drift Lines

[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts

[1310] Salicornia Mud

[1330] Atlantic Salt Meadows

[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)

[1095] Sea Lamprey (Petromyzon marinus)

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

Extensive sandflats and mudflats are exposed in the estuary and bay at low tide. For the most part, these flats are unvegetated, but mats of Eelgrass (*Zostera* spp.), Beaked Tasselweed (*Ruppia maritima*) and green algae (*Enteromorpha* spp.) occur which provide important feeding material for birds. The estuary is generally in a natural state and is considered to be one of the best examples of a largely unpolluted system in Ireland.

The dune systems at Bartragh Island, Inishcrone and Ross, to the north-west, are well-developed and constitute good examples of dunes with a rich and diverse flora. Dunes dominated by Marram (*Ammophila arenaria*) are located at all three sub-sites.

At Enniscrone they stretch the length of the strand and are particularly well-developed towards the western end. They are found along the northern stretch of Ross and also run the length of Bartragh Island. Other species found growing in this habitat include Cat's-ear (*Hypochoeris radicata*), Smooth Sow-thistle (*Sonchus oleraceus*) and Groundsel (*Senecio vulgaris*). Associated with the Marram dunes are embryonic foredunes and these are particularly well-represented at Enniscrone. The most commonly encountered species in the foredunes include Sand Couch (*Elymus farctus*), Sea Sandwort (*Honkenya peploides*), Sea Rocket (*Cakile maritima*) and Lyme Grass (*Leymus arenarius*).

Although much of the fixed dune area has been developed as golf course or improved for agriculture, the site still contains a relatively large area of intact fixed dunes, a priority habitat listed on Annex I of the E.U. Habitats Directive. Species recorded include Red Fescue (Festuca rubra), Lady's Bedstraw (Galium verum), Kidney Vetch (Anthyllis vulneraria), Common Centuary (Centaurium erythraea), Sand Sedge (Carex arenaria), Harebell (Campanula rotundifolia), Wild Thyme (Thymus praecox), Fairy Flax (Linum catharticum), Common Bird's-foot-trefoil (Lotus corniculatus) and Pyramidal Orchid (Anacamptis pyramidalis). Bryophyte communities are well represented, with such species as *Brachythecium rutabulum*, *Homalothecium lutescens* and Tortula ruraliformis. Lichens (Peltigera spp.) are also frequent. Humid dune slacks occur at Ross. Species present include Jointed Rush (Juncus articulatus), Common Spike Rush (Eleocharis palustris), Water Mint (Mentha aquatica), Meadowsweet (Filipendula ulmaria), Creeping Willow (Salix repens), Silverweed (Potentilla anserina), orchids (Dactylorhiza spp.), Common Twayblade (Listera ovata) and the moss Calliergon cuspidatum. A similar species complement is found in the wet hollows at Enniscrone and there also appears to be some large slack-like areas to the rear of Bartragh Island.

Saltmarshes are present in sheltered parts of the site, some of which occur in association with the dune systems. Species typical of Atlantic salt meadows commonly observed include Common Saltmarsh-grass (*Puccinellia maritima*), Thrift (*Armeria maritima*), Sea Aster (*Aster tripolium*) and Red Fescue. Occasionally Laxflowered Sea-lavender (*Limonium humile*) and Saltmarsh Flat-sedge (*Blysmus rufus*) are present, along with some stands of Sea Rush (*Juncus maritimus*). On the lower marshes, and extending out onto the most sheltered parts of the open mudflats, typical pioneering species such as glassworts (*Salicornia* spp.) and Annual Sea-blite (*Suaeda maritima*) occur.

Elsewhere along the coastline are sandy beaches, shingle beaches and some bedrock shores which are occasionally backed by clay sea-cliffs, such as at Moyne. Species such as Sea Rocket, Colt's-foot (*Tussilago farfara*) and Sea Mayweed (*Matricaria maritima*) are indicative of the habitat 'annual vegetation of drift lines'. South-east of Killala town, Lough Meelick adds habitat diversity to the site. It is significant for the presence of the Thin-lipped Mullet, a fish which is only occasionally found in the region.

A number of rare plants have been found in the site. Opposite-leaved Pondweed (*Groenlandia densa*), a species protected under the Flora (Protection) Order, 2015, has been recorded in the Moy Estuary, and Hoary Whitlowgrass (*Draba incana*), a Red Data Book species, has been recorded from sand dunes along the coast east of Killala town.

The site holds populations of three species listed on Annex II of the E.U. Habitats Directive: Common Seal (maximum count of 108 in the all-Ireland survey of 2003); Sea Lamprey and Narrow-mouthed Whorl Snail (*Vertigo angustior*). The rare snail has been known at this site for over 100 years. It occurs in an area of wet marsh and this site represents one of the few remaining examples of *Vertigo angustior* in its marsh "phase". This species has been declining throughout much of its range due to loss of habitat, and in particular, drainage of wetlands.

The site is very important for wintering waterfowl, with eight species having populations of national importance. These are as follows, with numbers referring to the average peaks over winters 1994/95 - 1997/98: Red-breasted Merganser (38), Ringed Plover (207), Grey Plover (200), Knot (429), Sanderling (135), Dunlin (1816), Bar-tailed Godwit (309) and Greenshank (19). Other notable populations include Golden Plover (1303) and Brent Goose (166). At times Brent Goose occur in numbers of international importance (>200). The presence of Golden Plover and Bar-tailed Godwit is of particular note as these species are listed on Annex I of the E.U. Birds Directive.

This composite site has an excellent range of good quality coastal habitats, including a number listed on Annex I of the E.U. Habitats Directive. In particular, the dune complex at Bartragh Island is relatively undisturbed and is considered to be one of the best in the country in terms of its naturalness and intact state. The presence of the Annex II snail, *Vertigo angustior*, and the importance of the area for wintering waterfowl, including two Annex I Birds Directive species, adds further significance to this area. The site is extremely scenic and is a significant regional amenity area for its beaches and for fishing.