

Site Name: West of Ardara/Maas Road SAC

Site Code: 000197

This extensive site occupies the area of coast immediately north of Ardara in south-west Co. Donegal. From Ardara, it continues northwards around the coast, and then up the Gweebarra River to Doocharry. From the centre of the site an expanse of blanket bog extends south-east almost to Glenties. Lough Beg Bay and Slieve Tooley Mountain are adjacent, and to the south-west of the site. The Owenea system and some of its tributaries, including the Stracashel and Owengarve Rivers, are included. Most of the coastal parts of the site are underlain by metamorphic rocks, in particular Loughros Group and Upper Falcarragh Pelites, and Falcarragh limestone. More recent blown sand occurs over much of these coastal rocks, however. The majority of the inland part of the site is underlain by intrusive igneous Granodiorites.

The site is of great ecological interest, containing a large number of habitats and species which are listed in the E.U. Habitats Directive (specifically, six priority habitats, 20 non-priority habitats and eight species). The site exhibits a highly diverse range of both coastal and terrestrial habitats, this feature itself being of high scientific value.

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
- [1160] Large Shallow Inlets and Bays
- [1210] Annual Vegetation of Drift Lines
- [1330] Atlantic Salt Meadows
- [1410] Mediterranean Salt Meadows
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)*
- [2140] Decalcified *Empetrum* Dunes*
- [2150] Decalcified Dune Heath*
- [2170] Dunes with Creeping Willow
- [2190] Humid Dune Slacks
- [21A0] Machairs*
- [3110] Oligotrophic Waters containing very few minerals
- [3130] Oligotrophic to Mesotrophic Standing Waters

- [4010] Wet Heath
- [4030] Dry Heath
- [4060] Alpine and Subalpine Heaths
- [5130] Juniper Scrub
- [6210] Orchid-rich Calcareous Grassland*
- [6410] *Molinia* Meadows
- [6510] Lowland Hay Meadows
- [7130] Blanket Bogs (Active)*
- [7150] Rhynchosporion Vegetation
- [7230] Alkaline Fens

- [1013] Geyer's Whorl Snail (*Vertigo geyeri*)
- [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)
- [1065] Marsh Fritillary (*Euphydryas aurinia*)
- [1106] Atlantic Salmon (*Salmo salar*)
- [1355] Otter (*Lutra lutra*)
- [1365] Common (Harbour) Seal (*Phoca vitulina*)
- [1395] Petalwort (*Petalophyllum ralfsii*)
- [1833] Slender Naiad (*Najas flexilis*)

The estuaries of the Gweebarra, Owentocker and Owenea Rivers form the most extensive habitats in the site. These have large expanses of intertidal sandflats which support a typical diversity of macro-invertebrate and algae species. The sandflats are fringed in places by saltmarsh vegetation. Taken as a whole the saltmarsh at the site is structurally diverse, occurring as a narrow fringe or in isolated pockets or as extensive flat salt meadows. It also varies in relation to the substrate on which it is formed (sand, silt, peat, cut-over bog, gravel and shingle are all found). Wintering waterfowl frequent the estuaries, though in relatively small numbers, and there is a resident population of Common Seal. The estuarine habitat merges with shallow marine waters.

Onshore, sand dunes and machair have formed in a number of locations. Driftline vegetation is quite extensively developed in the more sheltered bays. Embryonic shifting dunes are found in two areas of Sheskinmore: Ballireavy Strand and Trawmore Strand. The greatest expanse of this habitat occurs at Trawmore Strand, a wide and naturally flat beach. Further inland there are previously eroded dunes. It is likely that this area of freshly accreting sands has been transported from the eroding dunes at Ballinreavy Strand. The typical species Sand Couch (*Elymus farctus*) dominates the embryonic dunes, with hummocks of Marram (*Ammophila arenaria*). Embryonic dunes are also found along the three beaches at Clooney.

There are approximately 40 ha of Marram, or white, dunes, and some areas are badly damaged through overuse (though the majority is in good condition). Here, by far

the most abundant plant species is Marram, although a range of herbs occurs, including Yarrow (*Achillea millefolium*) and Violets (*Viola* spp.). Fixed, or grey, dunes make up approximately 260 ha at the site, and particularly fine examples are found at Sheskinmore, where old, high, fixed dunes support a high diversity of plant species and vegetation communities. Quarrying, overuse for recreation and over-grazing are common issues on fixed dunes in the area. Juniper (*Juniperus communis*) and Crowberry (*Empetrum nigrum*) are found in decalcified and heathy areas of the dunes, constituting important examples of these scarce dune habitat types. Dune slacks are best developed at Sheskinmore, and areas corresponding to both 'humid dune slacks' and 'dunes with creeping willow' occur.

The areas of machair in this site are noted for their species richness and for the interesting vegetation transitions with wetter habitats which are present in a number of areas. The most common species on the machair are Red Fescue (*Festuca rubra*), Ribwort Plantain (*Plantago lanceolata*) and White Clover (*Trifolium repens*). Orchids are especially evident, and species include Fragrant Orchid (*Gymnadenia conopsea*), Frog Orchid (*Coeloglossum viride*) and Marsh Helleborine (*Epipactis palustris*).

An area of alkaline fen, associated with calcareous sand blown from nearby sand dunes, is found adjacent to Sheskinmore Lough. Base-rich water emanating from the sand dunes feeds the fen. A large area is dominated by Black Bog-rush (*Schoenus nigricans*), and Meadow Thistle (*Cirsium dissectum*), Bog-myrtle (*Myrica gale*) and Purple Moor-grass (*Molinia caerulea*) also occur. The fen grades into other habitats and vegetation types in a number of areas.

Lakes and associated wetlands in the site provide further habitat diversity. Of particular ecological interest is Sheskinmore, where there exists a partially sand-filled waterbody. This is generally of a calcareous nature, but receives an input of acidic water from the local igneous rocks, resulting in an unusual vegetation community. This area is of international importance for its bryophytes and also contains a high number of Stoneworts (*Chara* spp.), the latter reflecting the base-richness of the lake.

The blanket bog in the east of the site is one of the most extensive lowland and coastal bogs remaining in Donegal. The large number of lakes found there is a remarkable feature. Some of the lakes which are oligotrophic in character are colonised by aquatic plants - Pipewort (*Eriocaulon aquaticum*) and Quillwort (*Isoetes lacustris*) being of particular note. Other species typical of this habitat type and found in lakes at this site include Water Lobelia (*Lobelia dortmanna*) and Shoreweed (*Littorella uniflora*). Much of the bog consists of gently undulating land vegetated mostly by Black Bog-rush, Bog-myrtle, Purple Moor-grass, Heather (*Calluna vulgaris*), and Cottongrasses (*Eriophorum* spp.). Inter-connecting pool systems on deep, quaking peat occur locally in the bogs. These very wet areas contain typical Rhynchosporion vegetation. Bog mosses, especially *Sphagnum cuspidatum* and *S. auriculatum* but also the rare *S. pulchrum*, are abundant in this vegetation, along with common plant species such as Bogbean (*Menyanthes trifoliata*), Common Cottongrass (*E. angustifolium*), White-beaked Sedge (*Rhynchospora alba*) and Oblong-leaved Sundew (*Drosera intermedia*).

Three types of heath listed in the E.U. Habitats Directive are found at this site: wet heath, dry heath and 'alpine and subalpine heath'. The former is the most extensive, with an estimated 500 ha, though this is scattered throughout the site, and often found in mosaic with other habitats. Dry heath is also common, and found where soils are thin and rock outcrops. Heather and Bell Heather (*Erica cinerea*) are typical dominants, though considerable variety exists at the site. The site also contains areas of low-growing heather/crowberry heath, which includes Bearberry (*Arctostaphylos uva-ursi*) and occasional Juniper.

Juniper scrub is also recorded from this site, though delineating this habitat from others in which Juniper is found (e.g. dry heath, alpine heath, decalcified fixed dunes, acid grassland, calcareous grassland, rocky ground and blanket bog) can be difficult.

Scrub and woodland also occur in parts of the sites. Of these, the deciduous woodland in the Maas-Lettermacaward area is particularly noteworthy. Sessile Oak (*Quercus petraea*), Hazel (*Corylus avellana*) and Downy Birch (*Betula pubescens*) are the dominant trees and the ground flora is well developed where undisturbed.

The habitat 'Molinia meadows' is found at the site, and supports species such as rushes (*Juncus acutiflorus* and *J. effusus*), Cuckooflower (*Cardamine pratensis*), Creeping Bent (*Agrostis stolonifera*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Marsh-marigold (*Caltha palustris*), Meadowsweet (*Filipendula ulmaria*) and Meadow Buttercup (*Ranunculus acris*). Additionally, a small number of generally species-rich meadows which are cut for hay occur at the site.

A number of rare plants have been recorded from this site. The rare aquatic plant, Slender Naiad (*Najas flexilis*), a species which is protected under the Flora (Protection) Order, 2015, and which is listed on Annex II of the E.U. Habitats Directive, has been recorded from Sheskinmore Lough. Close by, the Hoary Whitlow Grass (*Draba incana*), which is listed in the Irish Red Data Book, and is generally only found in the north-west, occurs. Dense-flowered Orchid (*Neotinea maculata*) has its only Irish record north of Connaught at this site, and where it occurs at the site, the habitat is considered to be referable to 'orchid-rich calcareous grassland'. The rare and protected Heath Cudweed (*Omalotheca sylvatica*), listed under the Flora (Protection) Order, 2015, has been recorded here also.

Two populations of the rare bryophyte Petalwort (*Petalophyllum ralfsii*) are known from the site.

The site supports populations of Common Seal (maximum count of 59 in the all-Ireland survey of 2003), Freshwater Pearl Mussel, Salmon, Otter, the rare mollusc *Vertigo geyeri* and the butterfly, Marsh Fritillary, all species listed on Annex II of the E.U. Habitats Directive.

The site is also of importance to birdlife. In the past, Sheskinmore supported an internationally important flock of Barnacle Goose but nowadays the geese appear more or less confined to offshore islands, especially Roaninish and Inishkeel. In spring 2003 a total of 465 was recorded from these islands. Similarly, numbers of Greenland White-fronted Goose at Sheskinmore have declined in recent years (seldom more than 50 birds), despite the continued presence of good habitat. The site is important for breeding Merlin (estimated 5 pairs), and also Peregrine (1 pair), while in winter Hen Harrier is a regular visitor (1-2 individuals). While Common Terns and/or Arctic Terns, as well as Sandwich Terns, have bred here in the past, no breeding by terns is known within the site since the mid 1990s. All of the above birds are listed on Annex I of the E.U. Birds Directive – other species listed on the Directive that may occur include Whooper Swan, Red-throated Diver, Corncrake and Chough. A nationally important Eider flock of some 500 birds winters around Inishkeel (22 counts, five seasons to 1987/88).

Land use is varied across the site, but the coastal portions are little used. Agricultural improvement and over-grazing threaten the terrestrial habitat, especially the dunes, machair and bog. Turf cutting is quite active in the boglands. Part of the Sheskinmore area is a BirdWatch Ireland reserve, while another section is owned by the National Parks and Wildlife Service. The whole Sheskinmore Lough area is a Wildfowl Sanctuary. Part of the area is protected by a management agreement.

This site is of considerable conservation value on account of the high level of habitat diversity. There are 26 habitats present which are listed under Annex I of the E.U. Habitats Directive, six which have priority status. The presence of important populations of rare and threatened habitats, plants and animals, along with breeding and wintering birds, makes this a site of very high conservation value.