

Site Name: Keel Machair/Menaun Cliffs SAC

Site Code: 001513

This site is located along the southern coast of Achill Island, Co. Mayo, and extends between the villages of Keel and Dooega. The northern part of the site consists of a low-lying, flat coastal grassland, or machair, which is backed by Keel Lough. Southeast of the machair, the ground rises steeply to 466 m, and the shoreline changes from a flat, sandy beach to impressive sea-cliffs. The site also extends inland, past Menaun Heights (403 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):

[1220] Perennial Vegetation of Stony Banks

[21A0] Machairs*

[4060] Alpine and Subalpine Heaths

[1395] Petalwort (Petalophyllum ralfsii)

A range of coastal habitats occur at Keel. Trawmore, an impressive, sandy beach, backs onto a shingle bar, behind which is a narrow band of sand dunes colonised by Marram (*Ammophila arenaria*). Behind the dunes is machair, or unenclosed coastal grassland, which lies on a sandy substrate and is generally flat, but with a very gently undulating series of hummocks and low-lying damp areas. The sward is close-cropped and contains Red Fescue (*Festuca rubra*), Daisy (*Bellis perennis*), Ribwort Plantain (*Plantago lanceolata*), Buck's-horn Plantain (*Plantago coronopus*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Lady's Bedstraw (*Galium verum*) and Common Mouse-ear (*Cerastium fontanum*).

Damp hollows in the dunes and machair support low-growing mats of mosses and liverworts, from which a number of rare and scarce species have been recorded These include *Bryum calophyllum* (this moss has its only recent Irish record here), *B. marratii*, *Catoscopium nigritum*, *Tortella inclinata* (known only from west Mayo and Co. Down), *Fossombronia fimbriata* (a liverwort known only from west Mayo and Co. Sligo), *F. pusilla* (known only from west Cork and west Mayo) and *F. incurva*. In addition, Petalwort (*Petalophyllum ralfsii*), a liverwort species listed on Annex II of the E.U. Habitats Directive, occurs in damp hollows associated with the dunes and machair at Keel.

Within the site, shingle beach is best developed along middle and south-eastern parts of Trawmore strand, where it fronts the main area of machair. The shingle bank can be quite tall, reaching a height of between 4-5 m in places. Vegetation along the

shingle bank is typically sparse, being restricted to a handful of hardy, salt-tolerant plant species such as Buck's-horn Plantain, Sand Couch (*Elymus farctus*), Ribwort Plantain, Sea-holly (*Eryngium maritimum*) and Curled Dock (*Rumex crispus*). The species-poor nature of the associated vegetation is due primarily to the exposed and highly mobile nature of the habitat.

The slopes of Menaun are covered by thin peat, eroded in places down to mineral soil and rock. Extensive areas of heath and some blanket bog occur here. The area around the summit of Menaun (i.e. above 350 m) supports heath vegetation corresponding to alpine and subalpine heath. This is dominated by Heather (*Calluna vulgaris*), Bell Heather (*Erica cinerea*) and the moss *Racomitrium lanuginosum*. Species particularly characteristic of alpine heath include Bearberry (*Arctostaphylos uva-ursi*), Crowberry (*Empetrum nigrum*), Juniper (*Juniperus communis* subsp. *nana*), Bilberry (*Vaccinium myrtillus*), Dwarf Willow (*Salix herbacea*) and Fir Clubmoss (*Huperzia selago*). The alpine heath merges with extensive areas of dry heath dominated by Heather at lower altitudes. Part of the heath vegetation on Menaun is unusual and noteworthy because of the presence of an uncommon community of mosses and liverworts, known as the Northern Atlantic Hepatic Mat community. This contains a number of species with oceanic/montane affinities. On Achill, this community descends to its lowest altitudinal level in Ireland.

On the sea-cliffs around Menaun, the damp rocks also support rich communities of mosses and liverworts, including *Cyclodictyon laetevirens* and *Philonotis rigida*. Two protected (Flora (Protection) Order, 1999) plant species, Sea Pea (*Lathyrus japonicus*) and Pennyroyal (*Mentha pulegium*) have been recorded within the site.

Behind the machair lies Keel Lough, which provides habitat for some wintering waterfowl, notably Whooper Swan, a species listed on Annex I of the E.U. Birds Directive. Numbers up to 70, and occasionally more, occur mainly in autumn and early winter. Another Annex I species, Chough, breeds on the cliffs and uses the low-lying machair areas for feeding; in 1992 six pairs were recorded within the site. A pair of Peregrine frequents the site and probably breeds within it. The sandy machair plain provides good habitat for breeding Ringed Plover, while an area of wet marsh at Sruhillbeg Lough attracts breeding Lapwing. Seabirds, mostly Fulmars, breed on the cliffs.

The site is extensively used for grazing cattle and sheep. The level of grazing and evenness of grazing pressure are critical factors in maintaining the character and species-richness of machair. Heath and blanket bog are also directly affected by high grazing pressure. The scenic qualities of this site, its proximity to Keel and ease of access make it attractive for amenity use. Uncontrolled access and development can damage coastal habitats.

This site has a good diversity of coastal and montane habitats including a small, though significant example of alpine heath. The machair is a good example of a habitat which is increasingly rare in Europe, and which receives priority status on Annex I of the E.U. Habitats Directive. A remarkable feature of the site is its rich

moss and liverwort flora, which is of international significance and includes an Annex II species. The ornithological importance of the site enhances the conservation value of this site.