

Site Name: Lough Eske and Ardnamona Wood SAC

Site Code: 000163

Lough Eske is a large lowland oligotrophic lake. It lies approximately 5 km northeast of Donegal town at the junction of Carboniferous rocks with more resistant Dalradian gneiss and granite. The site also includes the River Eske and short stretches of the Lowerymore, Clogher and Drummenny Rivers, as well as a number of smaller tributaries.

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):

[3110] Oligotrophic Waters containing very few minerals
[7220] Petrifying Springs*
[91A0] Old Oak Woodlands
[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)
[1106] Atlantic Salmon (*Salmo salar*)
[1421] Killarney Fern (*Trichomanes speciosum*)

The shore of Lough Eske has a diverse and interesting flora which reflects the contrasting geology within the site. It includes heath-covered peninsulas, rocky shores, small flushes, wet and dry woodland fringes, occasional reedbeds of *Phragmites australis*, small freshwater marshes and some interesting species-poor fen communities (particularly on the northern shore of the lake) which are typified by Star Sedge (*Carex echinata*). In addition there are also small, but relatively intact, very wet areas of blanket bog.

Ardnamona Wood, on the western side of the lake, is an old oak woodland. It is of great scientific interest for its size, naturalness and flora. It displays a habitat range from dry areas dominated by Pedunculate Oak (*Quercus robur*) to wet woodland with Alder (*Alnus glutinosa*). Ash (*Fraxinus excelsior*), Rowan (*Sorbus aucuparia*) and Downy Birch (*Betula pubescens*) also occur in the high canopy with Holly (*Ilex aquifolium*), Hazel (*Corylus avellana*) and Willow (*Salix spp.*) in the understorey. Oak and Birch woodland is also found along the valley of the Lowerymore River. The north side of this valley also has some petrifying springs, a priority Annex I habitat under the E.U. Habitats Directive. These all possess moss species which are diagnostic of the habitat, such as *Cratoneuron commutatum*, *C. filicinum* and *Eucladium verticillatum*).

The Killarney Fern (*Trichomanes speciosum*), a Red Data Book species listed in Annex II of the E.U. Habitats Directive and included under the Flora (Protection) Order, 1999, occurs in the site. Two other rare plants, Whorled Caraway (*Carum verticillatum*) and Six-stamened Waterwort (*Elatine hexandra*), are also present.

Important animals recorded from the site include good populations of Atlantic Salmon and Freshwater Pearl Mussel (*Margaritifera margaritifera*), both listed on Annex II of the E.U. Habitats Directive, and the Arctic Char (*Salvelinus alpinus*), a rare fish listed in the Red Data Book of Irish vertebrates. The Eske system is an important multi-sea-winter (spring salmon) stock, one of the few rivers nationally to hold 3-seawinter fish over 20 lb.

A number of exotic species, notably the invasive *Rhododendron ponticum*, have become established in Ardnamona Wood and represent a threat to the ecological value of the habitat. The lake and its flora and fauna are vulnerable to pollution from the surrounding agricultural land and also from an increase in domestic waster effluent.

This site contains three habitats listed in the E.U. Habitats Directive - lowland oligotrophic lake, petrifying springs and old oak woodland. Three species which are also included in the Habitats Directive - the Killarney Fern, the Atlantic Salmon and the Freshwater Pearl Mussel - are also present in the site.