



Site Name: Castlesampson Esker SAC

Site Code: 001625

Castlesampson Esker is a complex site with esker, turlough and raised bog all found. The esker is the most westerly of an important group of eskers centred on Adrnacloon Hill in south-east Co. Roscommon, 9 km west of Athlone. It forms a steep-sided, crescent-shaped hill composed of glacial gravels, situated on the south side of a metalled road. Although gravel is being quarried all around the esker and gravel pits occur within the site, the esker ridge itself is largely intact and fairly undisturbed. Lying to the east of the esker is a raised bog, whilst to its west is a turlough.

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):

[3180] Turloughs*

[6210] Orchid-rich Calcareous Grassland*

The vegetation of most of the esker consists of dry grassland, with small amounts of scrub scattered throughout. Some improved grassland is found at the base of the esker. The dry grassland on the site is quite species-rich and the following are commonly found: Mountain Everlasting (*Antennaria dioica*), Wild Thyme (*Thymus praecox*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Carline Thistle (*Carlina vulgaris*), St. John's-wort species (*Hypericum pulchrum* and *H. perforatum*), Fairy Flax (*Linum catharticum*), Kidney Vetch (*Anthyllis vulneraria*), Crested Hair-grass (*Koeleria cristata*), Glaucous Sedge (*Carex flacca*), Sheep's-fescue (*Festuca ovina*), Hairy Oat-grass (*Avenula pubescens*) and Spring Sedge (*Carex caryophyllea*). The esker grassland supports several species not often seen on eskers, e.g. Goldenrod (*Solidago virgaurea*) and Sea Plantain (*Plantago maritima*), as well as some regional rarities, e.g. Hedge Bedstraw (*Galium mollugo*). The grassland is also notable for the variety of orchids it supports, e.g. Early-purple Orchid (*Orchis mascula*), Pyramidal Orchid (*Anacamptis pyramidalis*), Common Spotted-orchid (*Dactylorhiza fuchsii*) and Fragrant Orchid (*Gymnadenia conopsea*).

Three gravel pits are included within the site. One of these contains a number of fen species, including Black Bog-rush (*Schoenus nigricans*) and Grass-of-parnassus (*Parnassia palustris*). All of the pits contain Blue Fleabane (*Erigeron acer*), a species listed in the Red Data Book, while one pit contains the protected (Flora (Protection) Order, 1999) species Basil Thyme (*Acinos arvensis*).

The raised bog adjacent and to the east of the esker is fairly intact and has a good cover of bog mosses (*Sphagnum* spp). It includes areas of pools and flats with such species as Bogbean (*Menyanthes trifoliata*), Bog Pondweed (*Potamogeton polygonifolius*), Great Sundew (*Drosera anglica*), Carnation Sedge (*Carex panicea*), Bog Asphodel (*Narthecium ossifragum*), Brown Beak-sedge (*Rhynchospora fusca*) and White Beak-sedge (*R. alba*), while hummocks support Bog-rosemary (*Andromeda polifolia*), Hare's-tail Cottongrass (*Eriophorum vaginatum*) and the moss *Racomitrium lanuginosum*. The eastern edge of the bog is notable for supporting a population of the grass Wood Small-reed (*Calamagrostis epigejos*), its only known Co. Roscommon site. This is a rare species in Ireland and is protected under the Flora (Protection) Order, 1999.

The western section of the site comprises an undulating area of glacially-derived mounds and seasonally flooded basins, Corraree turlough. The main turlough basin extends southwards into two arms that are separated by higher ground of glacial sediments. It includes areas dominated by Black Bog-rush and by Purple Moor-grass (*Molinia caerulea*), areas of wet grassland that hold a typical suite of turlough species and areas of marsh and fen. Certain sections of the turlough flood more frequently than others. Flooding appears to emanate largely from a few swallow holes in the south, which fill when the underlying karst limestone aquifer is full from river flooding. However, at least one swallow hole is known in the northern part of the turlough also. A few small areas not connected to the main turlough basin also flood. The areas liable to flooding are surrounded by low mounds covered in dry grassland, which have been improved to a greater or lesser extent.

The Castlesampson Esker site is of high conservation for the proximity and juxtaposition of esker, raised bog and turlough. The esker itself is of high importance for its almost intact structure (something which is very rare in Irish eskers), its relatively undisturbed state and for the presence of good quality, species-rich dry calcareous grassland, a habitat that is listed with priority status on Annex I of the E.U. Habitats Directive. It is also notable for the good variety of rare or unusual vascular plant species that it supports. The transitional area between esker and raised bog vegetation is of interest, and notable for supporting a population of a protected vascular plant species. The raised bog itself is fairly intact and includes areas of active raised bog, degraded raised bog and Rhynchosporion vegetation, all habitats that are listed on Annex I of the E.U. Habitats Directive. The turlough section of the site contains a wide range of grassland and turlough habitats and includes some areas of excellent quality. Its floristic diversity is high and it is of particular interest for the remarkable contrast shown by the vegetation of grazed and ungrazed areas. The pattern of flooding is also unusual, appearing to come mostly from a few swallow holes in the south. Turlough is a habitat listed with priority status on Annex I of the E.U. Habitats Directive.