

Site Name: Lough Lene SAC

Site Code: 002121

This lake is situated 4 km north-east of Castlepollard in Co. Westmeath. It is a deep (20 m maximum depth), clear, hard-water lake with marl deposition (especially noticeable on the margins).

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):

[3140] Hard Water Lakes

[1092] White-clawed Crayfish (*Austropotamobius pallipes*)

Lough Lene supports a range of pondweeds (including *Potamogeton perfoliatus* and *P. lucens*), Canadian Pondweed (*Elodea canadensis*) and a variety of stoneworts (*Chara* spp.), such as *C. pedunculata* and *C. curta* which are marl or hard water lake indicators. A stony shore fringes much of the lake. Here species such as spike-rush (*Eleocharis* sp.), Jointed Rush (*Juncus articulatus*), Shoreweed (*Littorella uniflora*), Redshank (*Polygonum persicaria*), Marsh Pennywort (*Hydrocotyle vulgaris*) and sedges (*Carex* spp.) are found. A narrow fringe of emergent plant species dominated by Common Reed (*Phragmites australis*) and Common Club-rush (*Scirpus lacustris* subsp. *lacustris*) occurs along some areas of the lakeshore.

Patches of wet woodland colonise former areas of cut-away bog and other low-lying areas close to the lake, and are dominated by willows (*Salix* spp.), birch (*Betula* sp.) and Alder (*Alnus glutinosa*), with patches of Common Reed also occurring. These areas support a rich ground flora. The ground flora of the wood at the north-western end of the site supports a range of bog mosses (*Sphagnum* spp.), Bilberry (*Vaccinium myrtillus*) and Heather (*Calluna vulgaris*). Alder carr occurs on the spur of land jutting into the lake at its north-western end.

Freshwater marsh/fen vegetation, with such species as Purple Moor-grass (*Molinea caerulea*), Bottle Sedge (*Carex rostrata*), Black Bog-rush (*Schoenus nigricans*) and Marsh Cinquefoil (*Potentilla palustris*) occurs in some areas by the lake. One such area supports a population of the rare Round-leaved Wintergreen (*Pyrola rotundifolia* subsp. *rotundifolia*).

Lough Lene had a notable population of White-clawed Crayfish, a species that is listed on Annex II of the E.U. Habitats Directive, but this species disappeared from the site in 1987 following what is considered to have been an outbreak of crayfish fungus plague (*Aphanomyces astaci*). The species was re-introduced to the site and

breeding was recorded in 1995 but this also was unsuccessful. The National Parks and Wildlife Service has a desire to see the White-clawed Crayfish population re-established in Lough Lene should habitat conditions be assessed as suitable.

Bird species using the site include Mute Swan, Teal, Pochard, Great-crested Grebe, Little Grebe, Tufted Duck, Grey Heron, Water Rail, Mallard, Golden Eye, Cormorant and Wigeon. The surrounding lands are used by Snipe, Lapwing and Curlew. Of particular significance is the Pochard population which, in the winters 1995/96 and 1996/97, was of national importance (average max. 515 individuals).

Much of the lakeshore is accessible to grazing cattle and the surrounding fields have been heavily improved. The stoneworts may become gradually displaced as the principal primary producers by phytoplankton or vascular plants if the lake becomes artificially enriched with nutrients.

Unpolluted hard-water lakes such as Lough Lene are becoming increasingly rare in Ireland and in Europe, and are of a type that is listed on Annex I of the E.U. Habitats Directive. This site is thus of conservation importance.