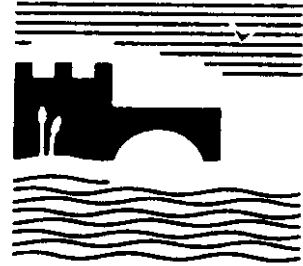




Department of the Environment
for Northern Ireland



**ENVIRONMENT
AND HERITAGE
SERVICE**

DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT LARGALINNY, COUNTY FERMANAGH. ARTICLE 24 OF THE NATURE CONSERVATION AND AMENITY LANDS (NORTHERN IRELAND) ORDER 1985.

The Department of the Environment for Northern Ireland (the Department), having consulted the Council for Nature Conservation and the Countryside and being satisfied that the area delineated and described on the attached map (the area) is of special scientific interest by reason of the flora, fauna, geological and physiographical features and accordingly needs to be specially protected, hereby declares the area to be an area of special scientific interest to be known as the 'Largalunny area of special scientific interest'.

Largalunny is of special scientific interest because of its geological and physiographical features in addition to its flora and fauna. Geological interest is centred on the silicified fossil fauna from the Glencar Limestone Formations at Carrick Lough, which are of international importance. The scarp and dip slope topography displayed by the Glenade Sandstones are of physiographical interest and incorporate a number of habitat types. As a result, the biological interest is varied. One of the main features is the relict deciduous woodland and the diversity of flora associated with it. The trees also host notable bryophytes and lichens. Heathland on the gentler dip slopes support additional plant and animal communities, and two small waterbodies add further diversity to the site. These rich and variable habitats give rise to notable populations of both dragonflies (Odonata) and butterflies and moths (Lepidoptera).

The site offers good sections through the Glenade Sandstone Formation of Carboniferous - Upper Visean - age, some 335 million years old. This exhibits scarp and dip control of slope, most notable in the south-western upland block of the site. The slightly older Glencar Limestone Formation is represented at the eastern end of Carrick Lough. These limestones contain an exceptionally well preserved, diverse and abundant silicified fossil assemblage. It is particularly rich in lampshells, brachiopods with some 35 species present, and moss animals, bryozoans with some 47 species recorded. In addition, numbers of corals, trilobites and gastropod and bivalve molluscs are also present. The site is the type locality for many new species and genera of Visean invertebrates, particularly of brachiopods and bryozoans. The abundance of brachiopods is such that the site was the first to permit studies of the variability and growth development of individual species. Evidence of brachiopod predation is also discernible. The fauna overall is indicative of a tropical, well-illuminated and oxygenated, shallow water marine environment with minimal disturbance of the sea floor.

The mixed deciduous woodland forms three arms along the steep, north-facing scarps and valleys. The most northerly of these forms a deep, wooded valley to the Sillees River, which widens out as the river flows eastwards to Carrick Lough. The mature wood on the scarp slopes is typically calcifugous (acid tolerant) with Sessile Oak Quercus petraea and Downy Birch Betula pubescens forming the canopy. The species-rich shrub layer is dominated by Hazel Corylus avellana, with scattered Hawthorn Crataegus monogyna, Rowan Sorbus aucuparia and Holly Ilex aquifolium. A field layer of Bilberry Vaccinium myrtillus, Heather Calluna vulgaris, Great Wood-rush Luzula sylvatica and ferns over a calcifuge bryophyte carpet clearly reflects the acidity of the soil. Frequent flushes occur along these steep wooded slopes and wet acid hollows are common along their base. Vegetational changes are marked by grasses such as Purple Moor-grass Molinia caerulea and Bents Agrostis spp., sedges including the notable Smooth-stalked Sedge C. laevigata, and herbs such as Marsh Violet Viola palustris and Opposite-leaved Golden-saxifrage Chrysosplenium oppositifolium forming prominent components of the ground flora.

In contrast, base-rich soils on the gentler south-facing slopes and along the narrow valley floor support damp Ash Fraxinus excelsior woodland. Ground-cover plants are more diverse here, with vernal species like Bluebell Hyacinthoides non-scripta and Wood Anemone Anemone

nemorosa prominent over a calcicolous (lime loving) bryophyte mat. Where soils have become waterlogged, Alder Alnus glutinosa and Willow Salix spp., form the tree canopy over a sparse ground flora characterised by Creeping Buttercup Ranunculus repens, Water Mint Mentha aquatica and Bugle Ajuga reptans.

In addition to the variation displayed by the higher plant communities, the northerly aspect and damp, oceanic climate have encouraged a rich bryophyte and lichen growth within the woodland. Western Atlantic bryophytes are well represented, with liverworts such as Scapania gracilis and moss species such as Hylocomium brevirostre abundant on the rocks and tree trunks. Where calcareous flushing of rock faces occurs, the mosses Trichostomum crispulum and Amphidium mougeotii are present, together with the small liverwort Cololejeunea calcarea. Although the shade and moisture throughout much of the site gives competitive advantage to the bryophytes, where the woodland has a more open and diverse canopy a rich lichen flora has developed on the trunks, branches and twigs, with 132 species recorded. Many of these lichens reflect the high degree of naturalness and purity of the site, particularly the rich assemblage of rare foliose members of the Lobarion.

The woodland flora includes a number of rare and unusual species, including Bird's-nest Orchid Neottia nidus-avis, Common Wintergreen Pyrola minor, Serrated Wintergreen Orthilia secunda, Rough Horsetail Equisetum hyemale, Tunbridge Filmy-fern Hymenophyllum tunbrigense, Wood Club-rush Scirpus sylvaticus and Wood Fescue Festuca altissima. The gametophyte form of the rare Killarney Fern Trichomanes speciosum has also been recorded in Largalinn. Notable bryophytes include the oceanic liverworts Plagiochila punctata, Lepidozia cupressina, in addition to Leptoscyphus cuneifolius, which occurs here at its only known site in Northern Ireland. Rare lichens include the western species Lobaria scrobiculata, Sticta fuliginosa and Pannaria rubiginosa, as well as Gyalideopsis muscicola, which has its only known Irish location here. The structure, plant community diversity and rich flora collectively make Largalinn one of the most important woodlands in Northern Ireland.

Extensive areas of wet heath mantle the sandstone hills to the south-west of the site and on the gentle dip slopes within the wood itself. The vegetation is dominated by rank Heather Calluna vulgaris and Cross-leaved Heath Erica tetralix, with Bell Heather E. cinerea, Bilberry Vaccinium

myrtillus and occasional Cowberry V. vitis-idaea occurring in the drier areas. A thick calcifugous moss carpet, dominated by Sphagnum and hypnoid species, exists beneath these dense shrubs with a scattering of herbs such as Tormentil Potentilla erecta and Heath Milkwort Polygala serpyllifolia. Weak surface water movement is identified by the occurrence of frequent Bog-myrtle Myrica gale and Purple Moor-grass Molinia caerulea. Strong localised flushing is characterised by a sedge-rich sward including Yellow-sedge Carex viridula ssp. oedocarpa, along with herbs such as Lousewort Pedicularis sylvatica. Occasionally the peat mantle is deep and wet enough to support pockets of blanket bog, which are indicated by the prominence of species like Bog Asphodel Narthecium ossifragum and Common Cottongrass Eriophorum angustifolium.

Largalunny Lough is a small oligotrophic lake with an aquatic plant community which includes Lesser Bladderwort Utricularia minor and White Water-lily Nymphaea alba. Marginal vegetation is dominated by stands of Great Fen-sedge Cladium mariscus and Bottle Sedge Carex rostrata extending back into a mixed sedge sward, including Bog-sedge Carex limosa, Slender Sedge C. lasiocarpa and Dioecious Sedge C. dioica. Carrick Lough, a large mesotrophic lake to the west of the area, supports a diverse aquatic plant community including five species of Pondweed Potamogeton spp., beds of submerged Stoneworts Chara spp. and the aquatic moss Fontinalis antipyretica. Marginal vegetation consists of a broad swamp fronted by Common Club-rush Schoenoplectus lacustris and Common Reed Phragmites australis with extensive stands of the Greater Pond-sedge Carex riparia and Tufted-sedge C. elata. A surrounding belt of carr woodland and pockets of base-rich fen add further diversity to the site.

The area is noted for its insect fauna, especially in the woodland and wetland habitats. Fourteen species of dragonfly (Odonata) have been recorded, making the area one of the richest sites in Ireland for this group. Most of the species are found in the Largalunny Valley, including the Scarce Blue-tailed Damselfly Ischnura pumilio and the Hairy Dragonfly Brachytron pratense. Largalunny is notable for its woodland insect fauna with a good range of species typical of western oakwoods. These include two protected butterflies, the Holly Blue Celastrina argiolus which exists here in its only extant colony in Northern Ireland outside County Down, and the Purple Hairstreak Quercusia quercus which is confined in Northern Ireland to this and one other Fermanagh site. The Largalunny area is also the only known site in Northern Ireland for the Pale

Eggar moth Trichiura crataegi. The heathland fauna is little known, but there is a record for the rare microlepidopteran Biselachista serricornis, a small micro-moth, which is known from one other site in Ireland.

The site supports a good association of mammals and birds, with Pine Marten Martes martes, Badger Meles meles and Red Squirrel Sciurus vulgaris in the wood and Otter Lutra lutra along the Sillees River. Birds include most of the common passerines, in addition to the scarce Wood Warbler Phylloscopus sibilatrix. Raptors are also frequently seen hunting over the heath, including Peregrine Falcon Falco peregrinus and Hen Harrier Circus cyaneus, which is known to have bred in the Largalunny Valley.

SCHEDULE

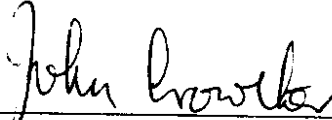
The following operations and activities appear to the Department to be likely to damage the flora, fauna, geological and physiographical features of the area:

1. Any activity or operation which involves the damage or disturbance by any means of the surface and subsurface of the land, including ploughing, rotovating, harrowing, reclamation and extraction of minerals, including sand, shingle, shell, gravel and peat.
2. Any change in the present annual pattern and intensity of grazing, including any change in the type of livestock used or in supplementary feeding practice.
3. Any change in the established method or frequency of rolling, mowing or cutting.
4. Any change in the annual pattern of application of manure, slurry or artificial fertiliser.
5. The application of herbicides, fungicides or other chemicals deployed to kill any form of wild plant, other than plants listed as being noxious in the Noxious Weeds (Northern Ireland) Order 1977.

6. The storage or dumping, spreading or discharge of any material not specified under paragraphs 4 or 5.
7. The destruction, displacement, removal or cutting of any plant, seed or plant remains, other than for
 - (i) plants listed as noxious in the Noxious Weeds (Northern Ireland) Order 1977;
 - (ii) normal cutting or mowing regimes for which a consent is not required under paragraph 3.
8. The release into the area of any animal (other than in connection with normal grazing practice) or plant. 'Animal' includes birds, mammals, fish, reptiles, amphibians and invertebrates; 'Plant' includes seed, fruit or spore.
9. Burning.
10. Changes in tree or woodland management, including afforestation, planting, clearing, selective felling and coppicing.
11. Construction, removal or disturbance of any permanent or temporary structure including building, engineering or other operations.
12. Alteration of natural or man-made features, the clearance of boulders or large stones and grading of rock faces.
13. Operations or activities which would affect wetlands (including marsh, fen, rivers, streams and open water), e.g.
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification to the structure of any watercourse;
 - (iii) lowering of the water-table, permanently or temporarily;

- (iv) change in the management of bank-side vegetation.
14. The killing or taking of any animal in a manner likely to affect the continued existence of the species within the area except as provided for under the terms of the Wildlife (Northern Ireland) Order 1985.
15. The following activities undertaken in a manner likely to damage or disturb the wildlife of the area:
- (i) educational activities;
 - (ii) research activities;
 - (iii) recreational activities;
 - (iv) exercising of animals.
16. Changes in game, waterfowl or fisheries management or fishing or hunting practices.
17. Use of vehicles or craft likely to damage or disturb the wildlife of the area.

Sealed with the Official Seal of the
Department of the Environment for
Northern Ireland on *14 JUNE 1996*



J Crowther
Assistant Secretary

H. Spratt
CIVIL SERVANT
BOTH CLARENCE COURT
BELFAST

FOOTNOTES

- (a) Please note that consent by the Department to any of the above operations or activities does not constitute planning permission. Where required, planning permission must be applied for in the usual manner to the Department under Part IV of the Planning (Northern Ireland) Order 1991. Operations or activities covered by planning permission are not normally covered in the list of Notifiable Operations.

- (b) Also note that many of the operations and activities listed above are capable of being carried out either on a large scale or in a very small way. While it is impossible to define exactly what is "large" and what is "small", the Department would intend to approach each case in a common sense and practical way. It is very unlikely that small scale operations would give rise for concern and if this was the case the Department would normally give consent, particularly if there is a long history of the operation being undertaken in that precise location.