

DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT KNOCKNASHANGAN, COUNTY FERMANAGH. ARTICLE 28 OF THE ENVIRONMENT (NORTHERN IRELAND) ORDER 2002.

The Department of the Environment (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 and fauna and accordingly needs to be specially protected, hereby declares the area to be an area of special scientific interest to be known as the 'Knocknashangan Area of Special Scientific Interest'.

This area is of special scientific interest because of its species-rich wet grassland. Species-rich grassland tends to occur only where land management is not intensive, in particular where traditional farming practices have been maintained. As a result, it is not a widespread habitat in Northern Ireland and is often fragmented, consisting of individual fields, parts of fields or banks. Species-rich grasslands, like those found at Knocknashangan, are a particularly scarce resource in Northern Ireland.

Knocknashangan is situated on a landscape of rolling hills approximately 4km south-east of Garrison. It lies on the edge of the uplands with an altitude of approximately 140m above sea level. The area covers part of Gorteen hill and slopes quite steeply in places.

The site is underlain by Carboniferous age rocks, dominated by limestones belonging to the Dartry Limestone Formation. These rocks formed in relatively shallow water and are base-rich having a significant calcium carbonate content. The soils at Knocknashangan are derived from the parent rock, and the resultant soils have poor drainage characteristics and are known as surface water gleys.

Due to a combination of factors such as slope, altitude and the westerly geographical position, these soils are kept consistently moist. This combination of underlying geology, topography and the related soil hydrology has resulted in a complex range of species-rich wet grasslands within a small area. These vary from species-rich rush pastures to fen meadow and wet heath, with base-loving plants present throughout the area.

The vegetation at Knocknashangan is dominated by wet grassland of the Purple Moor-grass and rush pastures type, with occasional pockets of flushed grassland and wet heath. Fen meadow is a particular type of Purple Moor-grass and rush pasture. It occurs on Knocknashangan where there is a steady hydrological influence in the soil and is typified by the occurrence of species adapted to both water movement and wetter conditions. Here, species such as Meadow Thistle *Cirsium dissectum* and Sharp-flowered Rush *Juncus acutiflorus* are constant. Other distinctive species associated with fen meadow vegetation at Knocknashangan include Purple Moor-grass *Molinia caerulea*, Tormentil *Potentilla erecta*, Devil's-bit Scabious *Succisa pratensis*, Heather *Calluna vulgaris*, Bog Pimpernel *Anagallis tenella*, Selfheal *Prunella vulgaris*, Carnation Sedge *Carex panicea*, Tawny Sedge *C. hostiana*, Flea Sedge *C. pulicaris* and



Glaucous Sedge *C. flacca*. The predominant moss within the grassland is Glittering Wood-moss *Hylocomium splendens* which is adapted to the unique conditions at Knocknashangan; other mosses present include Bog Groove-moss *Aulacomnium palustre* and Pointed Spear-moss *Calliergonella cuspidata*.

In addition to the grassland, Knocknashangan also has small areas of wet heath vegetation which occur in a mosaic with the fen meadow on the upper slopes. This wet heath vegetation has very similar vegetative characteristics to the grassland apart from a noticeably higher coverage of dwarf shrub species such as Heather *Calluna vulgaris* and Cross-leaved Heath *Erica tetralix*. The wet heath has similarly high species diversity to the surrounding grasslands due to both the traditional management practices and the influence of base-rich waters flushing through the soils.

The variation in topography and related soil hydrology, and the effects of past and present management have resulted in the presence of a wide range of plant species in a relatively small area. In addition to the vegetation communities described above the following species of note was recorded in proliferation - Lesser Butterfly-orchid *Platanthera bifolia*.

Knocknashangan is an area of semi-natural grassland managed in a traditional way. As such, it provides valuable feeding and roosting sites for a range of animals, including birds and invertebrates. The latter includes the Marsh Fritillary butterfly *Euphydryas aurinia* which is well adapted to the habitats present at Knocknashangan, in particular the abundance of its larval foodplant Devil's-bit Scabious *Succisa pratensis* and the area's southerly aspect.

SCHEDULE

The following operations and activities appear to the Department to be likely to damage the flora and fauna 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, 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 (or introduction), of rolling, mowing or cutting.
4. The 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 paragraph 5 above.

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 consent is not required under paragraph 3 above.
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 (include marsh, fen, bog, rivers, streams and open water), e.g.
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification of 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 wild animal except where such killing or taking is treated as an exception in Articles 5, 6, 11, 17, 20, 21 and 22 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.

FOOTNOTES

- (a) Please note that consent by the Department to any of the operations or activities listed in the Schedule 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.
- (b) Also note that many of the operations and activities listed in the Schedule 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.