



DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT KNOCKNINNY HILL, 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 described and delineated on the attached map (the area) is of special scientific interest by reason of the flora, fauna 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 'Knockninny Hill Area of Special Scientific Interest'.

The area is of special scientific interest because of its limestone (Karst) features and flora and fauna. Karst features consist of localised exposures of limestone pavement. Biological interest is related to the quality and diversity of the base-rich woodland and grassland, and the rich assemblage of invertebrates. Several rare species are present.

Knockninny Hill is a residual block of hard limestone from the Lower Carboniferous Age and includes the summit plateau and steep flanks of the hill, in addition to lower ground to the east. Limestone pavement occurs on the summit and northern flanks of the hill. This is a Karst feature that is rare in the British Isles generally, and in Northern Ireland is confined to County Fermanagh. It was formed by the scouring action of the ice during the last Ice Age, some 10,000 years ago. Water action then widened the cracks in the limestone to form a complex pattern of crevices known as grikes, between which are massive blocks of worn limestone called glints.

The summit and northern slopes support a rich, limestone grassland plant community. This is characterised by a short, grazed sward that includes such plants as Blue Moor-grass *Sesleria caerulea*, Glaucous Sedge *Carex flacca*, Mouse-ear-hawkweed *Pilosella officinarum*, Devil's-bit Scabious *Succisa pratensis*, Ribwort Plantain *Plantago lanceolata*, Lady's Bedstraw *Galium verum*, Eyebright *Euphrasia* spp. and Quaking-grass *Briza media*. Common mosses include *Ctenidium molluscum*, *Dicranum scoparium* and *Tortella tortuosa*. In addition to its species-richness, this grassland supports a number of notable plants including Mountain Everlasting *Antennaria dioica* and Mossy Saxifrage *Saxifraga hypnoides*, and a diverse orchid population with Small-white Orchid *Pseudorchis albida*, Fragrant Orchid *Gymnadenia conopsea*, Frog Orchid *Coeloglossum viride* and Pyramidal Orchid *Anacamptis pyramidalis*. Of particular note, Dense-flowered Orchid *Neotinea maculata* is present in only its second known Northern Ireland location.

The steep, rocky flanks of the hill are covered by well-developed woodland that is characteristic of shallow, limestone soils. The canopy is dominated by Ash *Fraxinus excelsior* and Hazel *Corylus avellana*. The ground flora is typically species-rich and contains such species as Wood-sorrel *Oxalis acetosella*, Bluebell *Hyacinthoides non-scripta*, Ivy *Hedera helix*, Barren Strawberry *Potentilla sterilis*, Primrose *Primula vulgaris*, Lords-and-Ladies *Arum maculatum*, Pignut *Conopodium majus* and Water Avens *Geum rivale*. Lower plants are also well-represented and include mosses such as *Cirriphyllum piliferum*, *Eurhynchium striatum*, *E. praelongum*, *Thamnobryum alopecurum* and *Plagiomnium undulatum*. The woodland supports a number of notable species such as Columbine *Aquilegia vulgaris* and Stone Bramble *Rubus saxatilis*, and includes the very rare Yellow Bird's-nest *Monotropa hypopitys*.

A series of old meadows occurs on the deeper, heavier clay soils around the lower slopes of the hill. Flushing by base-rich water from the upper slopes has produced a species-rich sward. Grasses such as Sweet Vernal Grass *Anthoxanthum odoratum*, Meadow Foxtail *Alopecurus pratensis*, Crested Dog's-tail *Cynosurus cristatus* and Yorkshire-fog *Holcus lanatus* are generally dominant. These are typically intermixed with sedges including Glaucous Sedge *Carex flacca*, Wood-sedge *C. sylvatica* and Oval Sedge *C. ovalis*, and herbs such as Common Knapweed *Centaurea nigra* and Lady's-mantle *Alchemilla glabra*. Greater Butterfly-orchid *Platanthera chlorantha* occasionally occurs. Where flushing is more pronounced, Sharp-flowered Rush *Juncus acutiflorus* becomes more frequent, in addition to sedges such as Carnation Sedge *Carex panicea* and Flea Sedge *C. pulicaris*, and wetland herbs such as Meadowsweet *Filipendula ulmaria*, Tormentil *Potentilla erecta* and Devil's-bit Scabious *Succisa pratensis*. The moss *Calliergon cuspidatum* forms an underlying mat.

Knockninny Hill is also important for *Lepidoptera* (butterflies and moths), with 15 species of butterflies believed to breed there. Grayling *Hipparchia semele* is of particular note, as this is the only known inland breeding site for this species. Other notable invertebrates include the Millipede *Brachyiulus pusillus* and the Woodlouse *Armadillidium pulchellum*, both of which are very locally distributed in Northern Ireland.

SCHEDULE

The following operations and activities appear to the Department to be likely to damage the flora, fauna and physiological 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 limestone, 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 (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 (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 and streams), e.g.
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification of the structure of any watercourse;
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, 12, 16, 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.

Sealed with the Official Seal of the
Department of the Environment for
Northern Ireland on 31 July 1997



ROBERT C MARTIN
Assistant Secretary

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. 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 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.