

## DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

## DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT CUILCAGH MOUNTAIN, 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 'Cuilcagh Mountain area of special scientific interest'.

The area is of special scientific interest because of its geology, physiography and peatland flora and fauna. Geological interest is comprised of the complete representation of the Carboniferous Leitrim Group, including richly fossiliferous sequences, while physiographical interest relates to various active processes, notably slope weathering and peat pseudo-karst features. Biological interest relates to the size, quality and diversity of the habitats within the area, in addition to the presence of particular plant and animal species of note. Cuilcagh Mountain is the second largest expanse of intact blanket bog in Northern Ireland. The summit ridge contains a fine example of Racomitrium moss heath, a scarce feature in Northern Ireland, in addition to a well-developed oceanic montane bryophyte flora. Heath and grassland communities are also well represented, producing a varied and diverse mosaic of habitats. A considerable number of rare plants are associated with these various habitats, while the area supports an important upland bird community, including a significant breeding population of Golden Plover Pluvialis apricaria.

The spectacular summit Gritstone edge and pavement, consisting of the Lackagh Sandstone Formation (also known as the Millstone Grit), is unique in Northern Ireland. The underlying sequences, principally of sandstone, shales and mudstones, can be richly fossiliferous, notably the Dergvone Shale Formation with its Killooman Shale Member and the Carraun Shale Formations. These strata are of P<sub>1</sub> - P<sub>2</sub> (Upper Visean) and E<sub>1</sub> - E<sub>2</sub> (Lower Namurian) goniatite stage ages, some 320 million years old. Fossil remains include an outstanding range of goniatites and also brachiopods, together with other fauna.

The total sequence on the Upper Cuilcagh area provides an excellent section through approximately 580 metres of the Leitrim Group of Carboniferous rocks. On the lower ground, particularly on east Cuilcagh, a series of potholes or shakeholes (dry vertical shafts) and sinks (shafts and surface water plunges) have developed on limestone. Some of these shafts have limited underground passages associated with them. Several caves are also present, with examples of dripstone and flowstone formations. Other karst features include the sizeable blind valley at Legacurragh. The limestones represented are the Dartry Limestone Formation.

Landforms due to past and present processes are also notable on Cuilcagh Mountain, and include periglacial rock shattering and associated blockfields at the Gritstone edge, rock slides and bog flows. Development of pseudo-karst features on the peat are notable with collapsed dolines, sinks, pipes, collapsed pipes, peat caves and blind valleys all represented.

The extensive blanket bog which mantles the mountain slopes exhibits a wide range of characteristic vegetation and structural features, with well developed pool, hummock and lawn complexes, acid flushes and bog bursts. The bog vegetation is characterised by Sphagnum and hypnoid mosses, ericoid dwarf-shrubs and other associated species, with the composition and abundance of these components dependent on local edaphic conditions.

Flat, water-logged ground is characterised by the presence of such species as Cross-leaved Heath Erica tetralix, Bog Asphodel Narthecium ossifragum and Common Cotton-grass Eriophorum angustifolium over a Sphagnum moss mat of predominantly S. capillifolium and S. papillosum. On more freely draining slopes, Heather Calluna vulgaris, Bilberry V. myrtillus, and Hare's-tail Cottongrass E. vaginatum are more typical over a mixed bryophyte mat. The presence of weak flushing of acidic water through the surface peat layer is indicated by the occurrence of scattered Purple Moor-grass Molinia caerulea or Sharp-flowered Rush Juncus acutiflorus. Where flushing is concentrated over a thinner peat or a peaty gley soil the vegetation is characterised by a small sedge community where Yellow-sedge Carex viridula, Carnation Sedge C. panicea and Star Sedge C. echinata predominate, while more mesotrophic waters are indicated by the presence of Tawny Sedge C. hostiana, Dioecious Sedge C. dioica and Flea Sedge C. pulicaris.

Mountain summit Racomitrium heath, a scarce vegetation type in Northern Ireland, grows as a short, tight carpet among the exposed rock and scattered boulders on the summit ridge. On the lower slopes at Aghatirourke, limestone grassland, dominated by Blue Moor-grass Sesleria caerulea, provides additional habitat diversity.

A number of rare and notable plants have been recorded for the area, mainly from the steep, north facing scarp slope and boulderfield below the summit. These rare plants are predominantly bryophytes, and include the mosses Dicranodontium asperulum and Dicranum scottianum and the liverworts Herbertus aduncus ssp. hutchinsiae, Bazzania tricrenata, Anastrepta orcadensis, Marsupella sphacelata and Gymnomitrium crenulatum. Higher plants include Dwarf Willow Salix herbacea, Starry Saxifrage Saxifraga stellaris, Stiff Sedge Carex bigelowii, Green Spleenwort Asplenium viride, Tunbridge Filmy Fern Hymenophyllum tunbridgense, Alpine Clubmoss Diphasiastrum alpinum and Stagshorn Clubmoss Lycopodium clavatum.

This mountainous area is the most important upland breeding site for Golden Plover Pluvialis apricaria in Northern Ireland. Peregrine Falcons Falco peregrinus regularly breed along the cliff faces while Merlin F. columbarius are frequently seen. The bog is occasionally used as a feeding and roosting site by Greenland White-fronted Geese Anser albifrons flavirostris. Ring Ouzel Turdus torquatus have been recorded for the area.

The invertebrate interest is known to include some notable species of aquatic insect. Of particular note are several alpine species, including the water beetle Dytiscus lapponicus and the water boatman Glaenocoris propinqua, both of which are found in Lough Atona. The bog pools also support some of these species, in addition to the rare whirligig beetle Gyrinus natator.

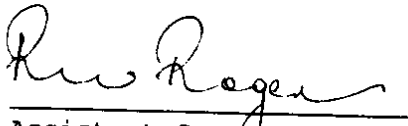
#### SCHEDULE

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. Cultivation, including ploughing, rotovating or re-seeding.
2. Increase in grazing intensity or change either in the type of livestock used or in feeding practices.

3. Introduction of mowing or other methods of cutting vegetation.
4. Application of manure, slurry, fertiliser or lime.
5. Application of pesticides, herbicides, fungicides or other chemicals deployed to kill, selectively or non-selectively, any form of animal, plant or other living organism.
6. Dumping, spreading or discharge of any matter.
7. Burning.
8. The release into the area of any wild, feral or domestic animal, plant or seed. "Animal" includes any mammal, reptile, amphibian, bird, fish or invertebrate, but excludes livestock and animals used in controlling livestock.
9. The destruction, displacement, removal or cutting of any plant, seed or plant remains, or the disturbance, killing or removal of any wild 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.
10. The introduction of tree or woodland management, including afforestation or planting.
11. Drainage, including peat drainage or the use of mole, tile, tunnel or other artificial drains.
12. Modification of the structure of water courses, including their banks and beds as by realignment, regrading or dredging.
13. Management of aquatic and bank vegetation.
14. The alteration of water levels or water tables or the utilisation of water including storage or extraction, but excluding water used for domestic requirements.
15. Infilling of ditches, drains, ponds, pools, marshes or lakes.
16. Reclamation of land from bog, marsh, river or lake.
17. Extraction of minerals including peat, sand, gravel, topsoil or subsoil.
18. Construction, removal or destruction of roads, tracks, walls, fences, hard-standings, banks, ditches and other earth works or the laying or removal of pipelines or cables, above or below ground.
19. Storage of materials.
20. Use of craft or vehicles likely to damage the vegetation.
21. Erection of permanent or temporary structures or the undertaking of building, engineering or other operations, including drilling.
22. Recreational, educational or research activities likely to damage the vegetation.
23. Changes in game management.

Sealed with the Official Seal of the  
Department of the Environment for  
Northern Ireland on 28 September 1994

  
Assistant Secretary

M. Cunningham  
CIVIL SERVANT OF 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 give consent, particularly if there is a long history of the operation being undertaken in that precise location.