



DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT BREEN WOOD, COUNTY ANTRIM. 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 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 'Breen Wood Area of Special Scientific Interest'.

The area is of special scientific interest because of its woodland flora and fauna. It is one of the best examples in Northern Ireland of an acid woodland, which supports very rich plant and associated animal communities.

Breen Wood extends for just over one and a half kilometres along the slopes of Bohilbreaga and includes both semi-natural woodland and an adjacent area of wet heath. The terrain in the western half is relatively uniform, with wet heath on the gentle slopes of the hill merging into a steeper, wooded ridge below. By contrast, the eastern half of the wood occurs in a very undulating area, traversed by glacial outflow channels. This has created a series of dry, low ridges interspersed by damp, narrow valleys. The soils are largely undisturbed and have been leached by rainwater over a long period of time, developing humus-iron podsol profiles.

The species composition of the woodland is related primarily to edaphic conditions, while the structure reflects its past management. The character of the wood ranges from mature stands with a well-developed structure on the ridges to low, scrubby stands in the wet valley bottoms. The former is the most prominent woodland type and covers the freely-draining and leached slopes. The wood here is strongly calcifugous (acidic) in nature, with a high canopy typically derived from a combination of Downy Birch *Betula pubescens* and Oak *Quercus* spp., each of which vary in cover and size. The shrub layer throughout is composed of Rowan *Sorbus aucuparia* with some Holly *Ilex aquifolium*. The main component of the field layer here is Bilberry *Vaccinium myrtillus*, which is generally accompanied by some Bramble *Rubus fruticosus* agg., Honeysuckle *Lonicera periclymenum* and ferns, typically Bracken *Pteridium aquilinum*. The herb layer is overwhelmingly dominated by extensive carpets of Great Wood-rush *Luzula sylvatica*. The only other species which occur to any significant extent are Hard fern *Blechnum spicant* and Wood-sorrel *Oxalis acetosella*.

The bryophyte (moss) layer is frequently rather sparse as a result of heavy shading. *Thuidium tamariscinum* is often the dominant moss, with typically calcifugous species such as *Dicranum majus* and *Sphagnum quinquefarium*. On the lower slopes of the ridges the soils are less freely-draining and wetter. Leaching is not so pronounced here. This results in an increase in species diversity in both the herb and bryophyte layers, with such species as Hairy Wood-rush *Luzula pilosa*, Bluebell *Hyacinthoides non-scripta*, Sweet Vernal Grass *Anthoxanthum odoratum*, Velvet Bent *Agrostis canina* and the moss *Rhytidiadelphus triquetrus* of common occurrence.

The wet scrub woodland which occurs on the intervening waterlogged valley floors is also strongly acidic in character. The low canopy is dominated by Downy Birch *Betula pubescens*, occasionally accompanied by Grey Willow *Salix cinerea*. Below the canopy the wood has a rather simple structure, with tussocks of Purple-moor Grass *Molinia caerulea* and more localised Soft Rush *Juncus effusus* growing over a carpet of *Sphagnum recurvum* and *S. palustre*.

Occasionally, the lower slopes of the main valley floor are flushed by base-rich waters. The woodland here is of a different type, and is characterised by a canopy of Ash *Fraxinus excelsior* and Hazel *Corylus avellana*. The ground flora supports a characteristic range of associated calcicolous (base-rich) species, including Wood Anemone *Anemone nemorosa*, Lesser Celandine *Ranunculus ficaria*, Yellow Pimpernel *Lysimachia nemorum*, Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolium* and Marsh Hawk's-beard *Crepis paludosa*. The valley floor is water-logged in places and supports a wet Alder *Alnus glutinosa* and Goat Willow *S. caprea* woodland. The marshy ground flora is dominated by rushes and sedges with some herbs, such as Yellow Iris *Iris pseudacorus* and Marsh-marigold *Caltha palustris*.

The wet heath vegetation is dominated by a tall dwarf-shrub cover composed of Heather *Calluna vulgaris*, Cross-leaved Heath *Erica tetralix* and Bilberry *Vaccinium myrtillus*, interspersed with Wavy Hair-grass *Deschampsia flexuosa* and Hare's-tail Cottongrass *Eriophorum vaginatum* growing over a pleurocarpous moss carpet. The transition from heath to woodland along the top of the ridge is unbroken and shows a successional series from colonising scrub to young woodland.

Of particular note is the presence of *Hylocomium umbratum*, a characteristic moss of northern woodlands. Breen Wood is its only known location in Northern Ireland.

In addition to its botanical interest, Breen Wood provides an important habitat for birds and other animals. Due to its age and undisturbed nature the woodland supports an exceptionally rich invertebrate community, which includes a number of notable species of the Ichneumonidae, a family of parasitic insects, and Cynipidae (Gall Wasps). The breeding bird population regularly includes Wood Warbler *Phylloscopus sibilatrix*, as well as a rich mixture of other passerines and raptors, including Buzzard *Buteo buteo* and occasional Pied Flycatcher *Ficedula hypoleuca*. Mammals in the woodland include Red Squirrel *Sciurus vulgaris*, while both Smooth Newt *Triturus vulgaris* and Otter *Lutra lutra* occur in freshwater areas.

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, shingle, shell, gravel and peat.
2. Any increase 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 increase 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) 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 a 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 (including marsh, fen, rivers, streams and open water), eg
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification in the structure of any watercourse;
 - (iii) lowering of the water-table, permanently or temporarily;
 - (iv) change to 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, 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 13 February 1997

*R. Macdonald
Civil Servant in Charge
BELFAST*



ROBERT C MARTIN
Chief Executive

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.