



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 BOHO, 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 'Boho Area of Special Scientific Interest'.

Boho Cave is the only example of a joint controlled maze cave in Northern Ireland. The estimated 1.5km of explored passage has developed horizontally over an area of some 4000m² within the Cherty Facies of the Dartry Limestone. It is the seventh longest cave system in Northern Ireland. The system has an active flooded or phreatic zone, a series of episodic passages occasionally carrying water and areas of abandoned passage which host good speleothem deposits. The area also contains a remarkable array of surface karst features including episodic surface rivers and an episodic waterfall, a limestone gorge and river bed with a series of bank risings.

In normal conditions, water sinks in the river bed upstream of the cave entrance. Downstream of the Boho Ravine are four river bank risings, two of which have been traced from Pollnagollum Cave. In wet conditions, large flood pulses are directed to Boho caves, a small block of limestone in comparison to its large catchment. The phreatic, or permanently flooded, zone of the karst unit is unable to accommodate this increased flow and the episodic passages become active. The dry river bed leading from the Quarry Entrance, including the normally dry waterfall, becomes active in these conditions.

The routes taken by the water through the episodic passages are often interrupted by debris which intermittently blocks some passages and redirects erosion. Remnants of false calcite floors and canopies are evidence of reworked sediments.

From the episodic sink there are a series of fossil chambers which contain excellent calcite speleothems including straws, stalactites, stalagmites, soft calcite, flowstone, curtains, gour pools and canopies which are developed on the roof, walls and floor. Some flowstone canopies have sandstone pebbles cemented into exposed undersides, further evidence of former floor levels.

Organic debris gathers within some of the chambers and fine sediment banks are also present in which charcoal layers are seen. Such sediment deposits are an important source of information on the system's environmental history.

Pollnagollum Cave is a large relict cave passage 100m long which has been re-invaded by a small stream. Many speleological features can be seen in this cave. The small stream drops over the south edge of a collapsed doline and enters the cave. There are a number of areas of straw stalactites on the cave roof and small areas of calcite gours and pools on the sediment floor. There are also remnants of a calcite false floor on the passage walls, evidence of reworked sediments.

Boho caves display a number of unique lithological and structural controls on the development of underground passage. The surface karst features contribute further to the significance of this unique site.

Mixed base rich woodland is present over part of the site. Notable species present include Toothwort *Lathraea squamaria*, Wood Fescue *Festuca altissima*, Bird's-nest Orchid *Neottia nidus-avis* and Thin-spiked Wood Sedge *Carex strigosa*.

A population of Daubenton's or Water Bat *Myotis daubentoni* roost within the main Boho site. Extensive collections of invertebrates have been made in Boho caves and Pollnagollum which included the cave dwelling Collembolan *Schaefferia emucronata*. Sections of the cave support a large population of the common cave spider *Meta menardi* which thrives on species blown into the caves by strong draughts. The only modern Irish record of the cave dwelling water beetle *Agabus biguttatus* is from Boho.

SCHEDULE

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

1. Any change of 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 rock, 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 of rolling, mowing or cutting.
4. Any change in the annual pattern of application of manure, slurry or artificial fertiliser.
5. Any change in 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. Any change in 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 being 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;
 - iii) normal gardening practices.
8. The release into the area of any animal or plant (other than in connection with normal grazing practice, normal gardening practices or domestic animals). '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 stones and grading of rock faces.
13. Operations or activities which would affect wetlands (including 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;
 - v) changes in field drainage or boundary field drainage.
14. The disturbance, killing or taking of any wild animal except where such killing or taking is treated as an exception in Articles 5, 11, 17, 20, 21 and 22 of the Wildlife (Northern Ireland) Order 1985.

15. The following activities undertaken in a manner likely to damage the interest 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. Sampling of rocks, minerals, fossils or any other material forming a part of the site, undertaken in a manner likely to damage the scientific interest.
18. Use of vehicles or craft likely to damage the wildlife or geological features of the area, excluding traffic using the public highway.

Sealed with the Official Seal of the
Department of the Environment for
Northern Ireland on 10 AUGUST 1998



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.