

Conserving Peatland

in Northern Ireland



A Statement Of Policy



CONSERVING PEATLAND IN NORTHERN IRELAND

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1. INTRODUCTION

- 1.1 This document sets out the Government's policies for protecting and conserving peatland in Northern Ireland. The measures which are already in place or which are proposed for early implementation will ensure that representative areas of raised and blanket bogs and other peatland habitats are protected for the benefit of this and future generations. Furthermore, Government in Northern Ireland undertakes to play its part in achieving a reduction in the dependency on peat in horticulture.
- 1.2 In formulating its policies on peatland, Government has been guided by the Peatland Strategy produced by the Council for Nature Conservation and the Countryside (CNCC) in October 1992. The Council, through producing this Strategy, has prompted a constructive and helpful debate on the value of peatland in Northern Ireland and the degree to which peat can continue to be exploited. It raises the issues in site and species protection, the concern at damaging operations and the need for further measures in raising public awareness.
- 1.3 Government welcomes the Peatland Strategy and hopes that this statement of policy will be interpreted by all those involved in conserving peatland or using peat as a positive and forward-looking response.
- 1.4 Peatland covers 12% of the land area of Northern Ireland, about twice the area that is under woodland and forest. It is a resource which is of enormous importance to the stability and general well being of our environment, creating distinctive upland and lowland landscapes, conserving biodiversity, and affecting river catchment hydrology. Peatland is also valuable as an archival record of climatic and vegetational history and archaeological remains. Globally, peatland acts as a massive carbon store with implications for the "greenhouse effect".
- 1.5 There should be no doubt that peatland should be conserved; the crucial questions are how much and at what cost to those who use or exploit peat, either as fuel or in horticulture. Government, through its policies on peatland, aims to achieve a balance which recognises the long-established rights of turbarry, the continuing demand for horticultural peat while alternatives are under trial, and the need to provide adequate protection to bogs and other peatland sites for their intrinsic value.

2. SITE PROTECTION

- 2.1 The protection of peatland, particularly in the form of raised and blanket bogs, is regarded as one of the top objectives for nature conservations in Northern Ireland. The unique environmental conditions of bogs enable colonization by highly specialised plants and animals that are not found in other habitats. The rarest of these species are largely confined to bogs which are undamaged by turbarry and which have been little modified through drainage.

- 2.2 Peatland habitats are of high international importance. Active raised and blanket bogs are listed as priority habitats in the EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (the “Habitats Directive”). The Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat, to which the United Kingdom Government is a signatory, requires governments to ‘list’ wetlands of international importance. The broad definition of wetlands adopted by this Convention includes peatland. The Ramsar Convention also requires governments to follow the principles of wise or sustainable use in their actions towards all wetlands whether listed or not. The Department of the Environment for Northern Ireland has endorsed this principle in its policy document, Nature Conservation and Planning (1990).
- 2.3 In United Kingdom terms, Northern Ireland has a rich resource of lowland raised bog sites (see table below) with over a quarter of the total United Kingdom area for this category. However, of the 25,196 hectares of lowland bog in the Province, the surface of no more than 2,270 hectares (about 90%) is intact, in that it is neither cut nor drained. This intact area includes many small fragments but it is amongst the larger areas where sites of most value to nature conservation are found.

Table: Areas of Peatland in the UK (hectares)

	N Ireland	England	Wales	Scotland	Total
Blanket and Intermediate Bog	142,384	213,782	158,810	1,058,662	1,573,638
Lowland Bog	25,196	38,018	4,018	25,022	92,254
TOTAL BOG PEAT	167,580	251,800	162,828	1,083,684	1,665,892

- 2.4 The cornerstone of Government policy towards protecting peatland sites of recognised nature conservation value in Northern Ireland is, and will remain, the declaration by the Department of Areas of Special Scientific Interest (ASSIs). To date the Department has declared 7 peatland ASSIs (see Appendix I), most lowland raised bogs, covering a total of 1,016 hectares.
- 2.5 **It is the Department’s intention to declare all remaining areas of intact lowland raised bog as ASSI where they meet the minimum scientific criteria; the two sites known to meet the current criteria will be declared by 1995.**
- 2.6 The criteria for assessing the scientific importance of bogs are being reviewed for the whole of the United Kingdom by the Joint Nature Conservation Committee. When this review has been undertaken, the Department will seek the advice of the Council for Nature Conservation and the Countryside on the interpretation of the criteria in Northern Ireland.
- 2.7 CNCC has also highlighted in its Peatland Strategy the need for protection for blanket bog in Northern Ireland. The Department of the Environment has recently completed a survey of the major areas of blanket bog in the Province and has evaluated individual sites. **As a result of this work the Department can confirm the importance of four extensive areas on Garron Plateau, Pettigoe Plateau, Cuilcagh and Slieve Beagh and these will be declared as ASSI within two years.**

- 2.8 Fens on peatland can be important sites for nature conservation as well, with those in Counties Down and Armagh of particular significance. The Department has commissioned a substantial survey of fens in these two Counties, for completion by 1995, with a view to identifying suitable sites for declaration as ASSI.
- 2.9 Both raised and blanket bogs declared as ASSI will be considered for possible inclusion in the United Kingdom's national list of sites to be submitted to the EC Commission under the Habitats Directive. In some cases this may lead to selection of sites of Community importance and ultimately to designation as Special Areas of Conservation. The Department also notes the specific requirement under Article 11 of the Habitats Directive to undertake surveillance of the conservation status of the natural habitats and species of Community interest.

3. MANAGEMENT FOR NATURE CONSERVATION

- 3.1 The Department of the Environment protects and manages a number of important bogs amongst its nature reserves (see Appendix II). Ownership by the Department, or management agreement with another body, enables bogs to be managed to enhance their wildlife value and, in some cases, facilities for access and interpretation can be provided. **The Department proposes to extend its management influence by establishing by the end of 1994 conservation regimes at Garry Bog, near Ballymoney (with the Department of Agriculture) and on one blanket bog site.**
- 3.2 The Department's Environment Service has embarked upon a programme of management plan preparation for its reserves, following the computerised and now widely used format of Countryside Management System. Peatland nature reserves have been given top priority and management plans have been completed for all existing sites.
- 3.3 The Department will also assist the purchase of important peatland sites by voluntary conservation bodies, provided that such sites meet the Department's own selection criteria for reserves. In particular the Department will want to be satisfied that there are no outstanding rights (eg turbary or grazing) which would be potentially damaging or inhibiting to conservation management.
- 3.4 The Department of Agriculture, through its Forest Service, also protects important peatland sites which are located within its forests. A number of Forest Nature Reserves include either raised or blanket bog and the management of other unplanted areas is kept under review through the Forest District Conservation Committees.

4. PEAT EXTRACTION

- 4.1 The extraction of peat which is cut for sale requires consent under planning legislation. Such applications which are processed by the Department of the Environment's Planning Service are considered in the context of mineral policies set out in a Regional Planning Strategy for Northern Ireland to be published later this year.
- 4.2 Since 1979 permission has been granted to extract peat from sites totalling 1,050 hectares in areas mostly for the horticultural market.

- 4.3 Government recognises that extraction of peat for horticulture is a well-established industry in Northern Ireland providing employment in rural areas. It is, however, not indefinitely sustainable and results in the loss of peatland with ensuing environmental consequences. Extraction from areas with existing high quality vegetation causes loss of important wildlife habitat, even if sensitive rehabilitation occurs.
- 4.4 **The Department will oppose peat extraction from sites which have been declared ASSI, or which are likely to be ASSI on the basis of current knowledge. It will also oppose peat extraction from areas in close proximity to such sites where their essential character would be prejudiced by the extraction. Away from ASSIs permission for the extraction of peat will only be granted where there is little nature conservation value and where the amenity of the area, particularly in Areas of Outstanding Natural Beauty, is not prejudiced by the operations.**
- 4.5 Where peat extraction is likely to have a significant effect on the environment the Department may require an Environmental Statement to be submitted with the planning application. **Consents to extract peat will include conditions intended to safeguard environmental interests including water quality during operation and rehabilitation on cessation of extraction.**
- 4.6 It is Government's intention to ensure that worked sites are rehabilitated to a satisfactory standard. Where there is sufficient ecological and landscape justification the Department will request a reinstatement of semi-natural vegetation. Although a rehabilitated bog can only be regarded as a poor comparison to a natural and intact site, current research in this field is pointing the way towards recreating conditions suitable for re-establishing the bog mosses *Sphagnum spp* and consequently in the very long term towards redeveloping the bog. The Department of Environment (London) has commissioned research to provide guidelines for rehabilitation of damaged bogs, and the Department of Environment for Northern Ireland will take account of the results of this work, which should be completed later in 1993.
- 4.7 The winning of turf for domestic fuel is a centuries-old tradition in Ireland steeped in its folk-lore. The annual and colourful scenes of families gathering to cut and stack turf on the mountains and "mosses" have become part of our cultural heritage. Small scale hand-cutting done carefully and systematically enables vegetation to recolonise cut-over areas with minimal damage to the natural habitat.
- 4.8 In recent years there has been a trend towards mechanisation of turf-cutting with the tractor-mounted extrusion method most evident. Lines of peat "sausages" lying out to dry on mountainsides have become a common sight in part of the Province. There seems little doubt that compaction from the use of tractors coupled with the effects of extrusion impede surface drainage to such an extent that abandonment of cut areas is commonplace during wet seasons.
- 4.9 Where such operations are of a commercial nature planning consent will be required. However, in cases where machine cutting is done to supply domestic needs only, then the onus rests with the landowner and the turf-cutter to ensure that damage to the bog habitat is minimised. **Government proposes to pursue this matter with the bodies representing peat cutters and will urge the promotion of and adherence to a code of good practice.**

- 4.10 **The Department will not normally look favourably upon applications for consent to dispose of waste in any peatland site, whether it is intact or cut-over.** The total destruction of the habitat in this manner is not consistent with its wise use as defined in the Ramsar Convention.

5. FORESTRY AND AGRICULTURE

- 5.1 Post-war forestry effort has been largely directed towards agriculturally poor and mostly upland soils. The passage of time has demonstrated that forest yields on peat are generally low, even with sustained fertilising. Changes in agricultural policy together with increased financial incentives have improved the opportunities for planting on lower and more fertile ground. Thus in Northern Ireland today forestry has largely moved away from acquiring new peatland sites for planting and is instead seeking better quality mineral soils.
- 5.2 **The Department of Agriculture's Forest Service is currently preparing an environmental policy statement on afforestation and this will reaffirm its commitment away from deep and poorly-drained peat, both in its own operations and through its grant aid to the private sector.**
- 5.3 If there is any doubt about the implementation of this policy in practice then Forest Service may choose to use the process of Environmental Assessment to accurately assess the impact of afforestation on the natural environment.
- 5.4 Environmental Assessment may also be used in the context of drainage operations which are deemed to have an adverse impact on the environment. Any such works in the vicinity of a lowland raised bog or other peatland area would be closely scrutinised and the ensuing Environmental Statement prepared by the Department of Agriculture would be forwarded to all relevant interests and statutory consultees.
- 5.5 Many peatland areas, following drainage and cultivation, are now in agricultural use although since the withdrawal of improvement grants in 1985 agricultural advance into peatland has been minimal. In the current climate of food surpluses and the need to cut back on the production of several farm commodities any further 'improvement' of peatland is unlikely and will not receive grant aid assistance from the Department of Agriculture.
- 5.6 Government is committed to extending Environmentally Sensitive Areas in Northern Ireland to include, for the first time, areas of moorland as well as introducing a Moorland Scheme at the earliest opportunity. The objectives of these schemes, as far as moorland is concerned, will be to reduce grazing pressure and to encourage the re-establishment of heather through careful and sensitive management.

6. USE OF PEAT IN HORTICULTURE

- 6.1 The blend of qualities of peat that make it both a moisture-retentive and well-aerated medium gives it a variety of uses in modern horticulture. It is used extensively by both professional and amateur alike as a soil conditioner, a mulch and as an ingredient of growing media. It is estimated that the horticultural industry in Northern Ireland uses in the region of 40,000 cubic metres of peat. In recent years various alternatives to peat have appeared on the market with coir (coconut fibre) and chopped or composted bark perhaps the best known. These products have so far made only a minimal impression with the professional sector which accounts for about 45% of the market.
- 6.2 Current guidelines for the use of peat, especially in the professional sector, for the production of top quality plants in peat composts are the result of extensive research over many years. Results from research so far by both governments and other agencies and commercially funded work into the growing of horticultural plants in alternative materials have been variable, with no one product matching peat in its suitability as a compost substrate for a wide variety of uses. The horticultural industry would want any alternative products to perform as reliably as peat. Research into alternatives is therefore looking into how they can be developed and used to produce acceptably good and predictable results for the professional grower.
- 6.3 In Northern Ireland a major user of peat and probably the most exacting in its requirements is the mushroom industry. The nursery stock trade is another major user, preferring peat to coir and similar products because of its better moisture retaining qualities. The production of glasshouse crops is a relatively small industry in Northern Ireland but composts made from peat alternatives and used in short production cycles may give acceptable results.
- 6.4 In the open ground peat has been used both as a mulch and as a soil conditioner – perhaps as much as one third of total UK use. It is in this sector that alternatives are most readily available and with acceptable results. The use of peat to assist the establishment of trees and shrubs in gardens and landscaping schemes is declining and may be both wasteful and unnecessary. **Government in Northern Ireland will cease to use peat in these open ground situations in the management of its estate and will specifically exclude such use of peat in all contracts. It will also encourage other public bodies to follow this example.**
- 6.5 One practical way in which the use of peat can be reduced is through composting of household and other organic waste. Government has led several initiatives aimed at reducing the wasteful use of natural resources, for example “Waste Not, Want Not”, promoting recycling and composting, and its recent Green Housekeeping policy statement under which the use of slow-renewables such as peat is expressly discouraged.

- 6.6 It is the Government's view that a shift away from using peat in horticulture will not be dramatic while doubts remain about the reliability of alternatives. Research in this field will undoubtedly lead to new and improved products available for professional and amateur use. Having regard to research undertaken elsewhere, Northern Ireland Government Departments will continue to carry out or commission appropriate research to meet local needs. Current research projects being undertaken by the Department of Agriculture include the use of finely ground spruce bark as a compost and using spent mushroom compost as a soil conditioner.
- 6.7 The horticultural industry, like any other, must be prepared to take on board the environmental concerns of its buying public. **The Department of Agriculture will assist producers in NI by making available up-to-date technical information on the use of peat-free products.** Horticultural students at Greenmount College receive tuition on peat alternatives ensuring that new entrants to the industry are aware of this important issue.

7. EDUCATION AND AWARENESS

- 7.1 In formulating its policies for conserving peatland sites the Department of Environment has commissioned several important pieces of research on the extent of the peatland resource in Northern Ireland and the environmental effects of its exploitation (see Appendix III). It is recognised that the information gathered and recorded would be of use to others, notably students, research workers and voluntary conservation bodies. The Department therefore proposes to publish by 1994 a composite volume on recent studies on peatland.
- 7.2 Government considers that raising public awareness of the loss and damage done to peatland by peat extraction, landfill and other activities and that the current use of peat cannot carry on forever, is a vital step in its campaign to protect this fragile ecosystem in Northern Ireland. A wider appreciation that peat is a finite resource will lend support to other measures proposed by Government to protect our peatland ecosystems and heritage and to discourage wasteful and non-essential applications of peat in horticulture.
- 7.3 The Department of the Environment has been leading the way throughout the British Isles in tackling the issue of peatland awareness through its creation of Peatlands Park near Dungannon. Covering an area of 250 hectares it is a mosaic of cutaway bogland interspersed with small areas of bog, low wooded hills and small lakes. The purpose of the Park is unashamedly to combine education with enjoyment of the bogs, their unique flora and fauna, their traditional exploitation and their value as wilderness in an increasingly developed and managed countryside.
- 7.4 With an increased emphasis on environmental education in the Northern Ireland curriculum, many schools have recognised the value of the Park for teaching purposes. In 1992 the Park Wardens assisted visits by 128 school parties and a further 129 other groups amongst a total visitor number of 120,000.

- 7.5 The Department is committed to improving its facilities at Peatlands Park to widen public interest in what the Park has to offer and to enable visiting schoolchildren and students to further their studies in peatland ecology. **The Department will this year begin the construction of an additional building at the centre to accommodate a fully-equipped classroom.**
- 7.6 For those schools in the Province that are unable to travel to Peatlands Park to enjoy and benefit from the experience first hand, the Department has commissioned a video to give a snapshot of the major issues in peatland ecology, its exploitation and its conservation. The video, which will be accompanied by an educational pack, is targeted at schools at secondary level and will be available from September 1993.
- 7.7 Interest in interpreting bogland is not confined to Peatlands Park. One of the early flagship rural development projects of the Department of Agriculture is that of Mid-Ulster Enterprises (Creggan) Ltd; who intend to provide an exhibition on the ecology and use of bogs in the vicinity of Creggan, Co Tyrone.

SUMMARY OF MAIN ACTION POINTS

- **All remaining areas of intact lowland raised bog will be declared ASSI where they meet the minimum scientific criteria; the two sites known to meet the current criteria will be declared by 1995.**
- **Four extensive areas of blanket bog will be declared ASSI within two years.**
- **Conservation management regimes will be established at Garry Bog and on one blanket bog site by the end of 1994.**
- **Peat extraction will be opposed from sites which have been declared ASSI, or which are likely to be ASSI on the basis of current knowledge.**
- **Away from ASSIs permission for the extraction of peat will only be granted where there is little nature conservation value and where the amenity of the area is not prejudiced by the operations.**
- **Government reaffirms its commitment away from further afforestation on deep peat.**
- **Government will cease to use peat in open ground situations in the management of its estate and will exclude such use of peat in contracts.**
- **Construction of a classroom for environmental studies at Peatlands Park will begin this year.**

APPENDIX I (1993): AREAS OF SPECIAL SCIENTIFIC INTEREST ON PEATLAND

Site	Area (Hectares)
Dunloy Bog	108
Garry Bog	121
Black Bog	194
Moninea Bog	45
Fairy Water Bogs	230
Moneygal Bog	122
Teal Lough and Slaghtfreeden Bog	196

APPENDIX II (1993): STATUTORY NATURE RESERVES ON PEATLAND

Name	Area (Ha)	Description
Killeter Forest Nature Reserve	22	Two small plots of ombrogenous peat bog
Lough Naman Nature Reserve	40	An ombrogenous peat bog in a large tract of blanket bog
Meenadoan Nature Reserve	19	A small ombrogenous peat bog
Mullenakill and Annagarriff	99	Parts of Peatland Park illustrating aspects of bog development
Slieveanorra Nature Reserve	57	Four plots illustrating aspects of peat development and erosion including bog pool complexes

APPENDIX III (1993): RESEARCH COMMISSIONED BY DOE CONNECTED WITH PEATLAND

Title	Contractor
Northern Ireland Peatland Survey	Queen's University
Effects of Afforestation on Peat Ecology	Queen's University
Effects of Peat Extraction on Blanket Bog	Queen's University
Ecology of Cut-over Raised Bogs	University of Ulster
Environmental Effects of Cutting Blanket Bog	Queen's University/ Natural Environment Research Council
Hydrological Effects of Peat Extraction	University of Huddersfield