

PEATLANDS PARK - A SPECIAL PLACE



An old peat cutting, which is now being re-colonised by bog vegetation.

Northern Ireland has a rich natural heritage with a wide range of habitat types and associated wildlife, as well as interesting geology. Much of Northern Ireland has been surveyed by Environment and Heritage Service and has been assessed for its scientific interest. The best sites are now being declared as Areas of Special Scientific Interest (ASSIs). In doing so, we aim to safeguard Northern Ireland's rich natural heritage and protect the range of habitats and geological features for the use and enjoyment of future generations.

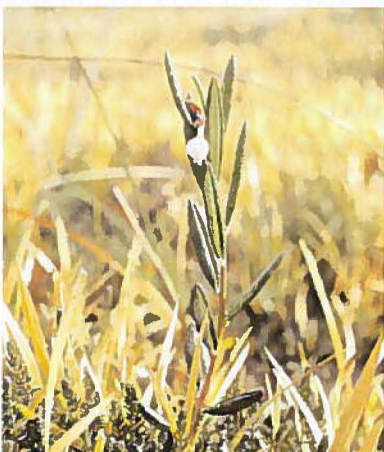
Peatlands Park is one of these special places. The interest relates to its peatland, wetland and woodland flora and fauna. Several rare species are present.

A number of low, wooded drumlins are interspersed by a series of broad, flat plains, with Derryadd Lough to the south-east of the area. The peatland occurs in the flat plains and consists of a large area of remnant lowland raised bog. Peatlands, and lowland bogs in particular, are an increasingly threatened habitat and are home to many of our most unusual and interesting plants, insects and birds. The peat here has been forming for about 10,000 years.



A Yellow Water-lily - just before opening its flower

Extensive drainage and cutting for turf in the early 20th century has resulted in a mosaic of peat cuttings and remnant intact bog. Where the bog surface is still actively growing, it is covered by typical bog vegetation with Heather, Bog-myrtle and Cottongrass, over a carpet of *Sphagnum* bog mosses. Associated with Derryadd Lake are Reed and Bulrush swamp, Alder carr and fen vegetation, where Cowbane, a rare plant, occurs. Yellow Water-lily dominates the aquatic vegetation and can be seen at its best in mid-to late summer, when the large yellow flowers appear just above the water surface.



Bog Rosemary - a rare plant which occurs in old cuttings.



Cottongrass

Woodlands are an important habitat and natural resource. They have a limited distribution in Northern Ireland which is one of the least wooded countries in Europe. At Peatlands Park there are two different types of woodland present, which together represent one of our largest blocks of semi-natural woodland.



Drumlin woodland with a large Wood Ant colony in the foreground.

Some of the wooded drumlins were farmed during the 18th and 19th centuries; hence the woodlands there are still relatively young. Only Annagariff Wood has been continuously covered by woodland, although it was managed for timber production in the past.



Sphagnum bog mosses cover the floor in the wet woodlands

These drumlin woods have a canopy dominated by Birch and Oak, with an understorey of Holly and Rowan. The wet woodlands now cover what used to be Annagariff Lake. Here, Birch and Willow are the dominant trees and the woodland floor is soft and spongy with a thick moss carpet.

Amongst the rare plants present on the site are Oblong-leaved Sundew, an insect-eating bog plant, Alder Buckthorn, which occurs in the wet woods and Marsh Clubmoss, for which Peatlands Park is the only known locality in Northern Ireland. Rare butterflies such as Marsh Fritillary, Large Heath and Green Hairstreak have also been recorded from the area. The Wood Ant is another species that occurs at Peatlands Park and nowhere else in Northern Ireland.



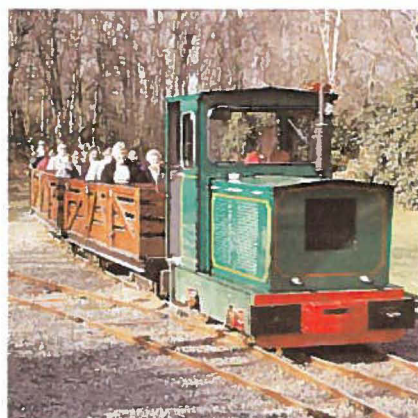
Marsh Fritillary - one of the rare butterflies found in Peatlands Park

With its indoor and outdoor facilities and miles of paths and boardwalks, Peatlands Park provides an ideal place for quiet recreation and gives an insight into the culture and natural history of our peatlands.



A network of paths and board walks makes the park accessible to the public

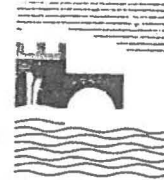
The narrow gauge railway, associated with the original turbary operation, has been reconstructed and opened up to the public in summer. A variety of environmental education programmes is also available.



The narrow gauge railway, once used for peat extraction, is now an attraction for visitors.

All of the plants and animals that make this place special, depend upon the ASSI being kept in good condition. We therefore need to protect it from certain activities which have been identified as potentially damaging to the site. Environment and Heritage Service is keen to liaise closely with all landowners/occupiers to maintain and enhance Peatlands Park ASSI.





ENVIRONMENT
AND HERITAGE
SERVICE

DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT PEATLANDS PARK, COUNTY ARMAGH. ARTICLE 24 OF THE NATURE CONSERVATION AND AMENITY LANDS (NORTHERN IRELAND) ORDER 1985.

The Department of the Environment (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 "Peatlands Park Area of Special Scientific Interest".

The area is of special scientific interest because of its woodland, peatland and wetland flora and fauna. Peatlands Park consists of a number of low, wooded drumlins, interspersed with a series of broad, flat plains covered by acid fen and peatland, and the open waters of Derryadd Lough. The drumlins are composed of glacial drift overlying Lough Neagh Clays. The peatland consists of an extensive lowland raised bog. Although most of this has been cut over, relict areas of intact bog with deep peat still occur. This range of habitats supports a rich flora and fauna, including a number of rare species.

The area represents one of the largest blocks of semi-natural woodland in Northern Ireland. Most of the woods on the mineral soils of the drumlins are of comparatively recent origins, with the land having been farmed at intervals during the 18th and 19th centuries. Only Annagarriff Wood has been continuously covered by trees, although it was managed for timber production in the past. The drumlin woodlands are mildly acidic in type, with a canopy dominated by Downy Birch *Betula pubescens* and occasional Oak *Quercus* spp. The understorey consists of Holly *Ilex aquifolium* and Rowan *Sorbus aucuparia*, with occasional Hawthorn *Crataegus monogyna* and Hazel *Corylus avellana*. In the less mature woodland, the field layer is dominated by dense Bramble *Rubus fruticosus* agg. and Honeysuckle *Lonicera periclymenum*, with occasional ferns. These occur over an extensive bryophyte mat, dominated by *Thuidium tamariscinum* and *Rhytidiadelphus triquetrus*, with only a few, scattered higher plants. The mature woodland at Annagarriff Wood has a more diverse field and ground cover. Again, thickets of Bramble *R. fruticosus* agg. occur, but there are also carpets of Wood-rush *Luzula sylvatica*, interspersed with a variety of herbs and bryophytes.

Wet, acid woodlands add to the diversity of the area. They are comparatively young in age, having spread out from the margins of the drumlins to cover Annagarraff Lake and other inter-drumlin hollows. Downy Birch *Betula pubescens* is dominant, with Grey Willow *Salix cinerea* one of the main associates. Bramble *Rubus fruticosus* agg. is again locally abundant in the ground cover. However, most of the woodland floor is soft and spongy, with occasional quaking areas, dominated by acid fen communities. These are composed of a thick bryophyte carpet of *Polytrichum* spp., *Pseudoscleropodium purum* and a variety of *Sphagnum* species, through which grow a scattering of grasses, sedges and herbs.

In the early 20th century, the peatland was extensively drained and cut for turf, resulting in a mosaic of peat cuttings and remnant intact bog. The largest expanse of intact surface occurs at Mullenakill at the western margin of the area. The bog here is actively growing and is covered by typical raised bog vegetation, dominated by Heather *Calluna vulgaris* and Cross-leaved Heath *Erica tetralix* with Bog-myrtle *Myrica gale* locally frequent, growing through a mixed *Sphagnum* moss carpet. Other species include Common Cottongrass *Eriophorum angustifolium*, Hare's-tail Cottongrass *E. vaginatum* and occasional Cranberry *Vaccinium oxycoccus*. These stands are frequently interspersed with lawns of White Beak-sedge *Rhynchospora alba* and Bog Asphodel *Narthecium ossifragum*, the former being quite extensive in places. Along the edge of the intact bog where the peat surface has dried, the vegetation becomes ranker and less diverse, with a sward of tall, leggy Heather *Calluna vulgaris* and Purple Moor-grass *Molinia caerulea*.

The cutover bog displays considerable variability, with the vegetation reflecting the degree of wetness. Deep, flooded cuttings support extensive beds of the aquatic moss *Sphagnum cuspidatum*. Where the water table is at, or close to the surface, the vegetation is similar to that of the intact bog and has an actively growing carpet of *Sphagnum* bog-mosses. As the peat surface gradually dries out with elevation above the present water table, the vegetation becomes progressively impoverished, rank and dominated by Heather *Calluna vulgaris*. Current management has raised the water table in some of these drier cutover areas, with the aim of re-establishing an actively growing bog surface.

Derryadd Lake lies in a depression to the south-east of the area. The waters are eutrophic (i.e. enriched by nutrients), and the aquatic vegetation is characterised by Yellow Water-lily *Nuphar lutea* and Canadian Pondweed *Elodea canadensis*. The outer swamp margin is dominated by Common Reed *Phragmites australis*, with an inner band of Bulrush *Typha latifolia*. Behind this, there are localised stands of more diverse tall-herb fen. This community gradually becomes more acidic in character along the western margin, where there is an adjacent area of cut-over bog with a peaty substrate. To the north and east where the lake is bounded by drumlin slopes, the tall-herb fen merges into an area of mesotrophic marshy grassland. In places, the swamp extends back into carr woodland dominated by Alder *Alnus glutinosa*.

The wide range of habitats at Peatlands Park supports a rich variety of rare and notable plants and animals. Bog Rosemary *Andromeda polifolia* is occasional within the old

cuttings, Alder Buckthorn *Frangula alnus* occurs locally in the wet woodland. Oblong-leaved Sundew *Drosera intermedia* is present in parts of the intact bog, and Cowbane *Cicuta virosa* is common in the tall-herb fen around Derryadd Lake. Marsh Clubmoss *Lycopodiella inundata* occurs here at its only known location in Northern Ireland. Notable invertebrates present include the Wood Ant *Formica aquilonia*, and the Large Heath *Coenonympha tullia*, Marsh Fritillary *Eurodryas aurinia* and Green Hairstreak *Callophrys rubi* Butterflies.

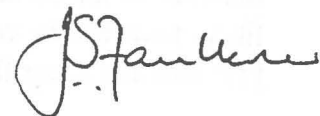
SCHEDULE

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

1. Cultivation, including ploughing, rotovating or re-seeding.
2. Introduction of grazing.
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 on 28 SEPTEMBER 2000



DR J S FAULKNER
Senior Officer of the Department
of the Environment

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 normally give consent, particularly if there is a long history of the operation being undertaken in that precise location.

PEATLANDS PARK

Views About Management

The Environment (Northern Ireland) Order 2002 Article 28(2)

A statement of Environment and Heritage Service's views about the management of Peatlands Park Area of Special Scientific Interest ("the ASSI")

This statement represents the views of Environment and Heritage Service about the management of the ASSI for nature conservation. This statement sets out, in principle, our views on how the area's special conservation interest can be conserved and enhanced. Environment and Heritage Service has a duty to notify the owners and occupiers of the ASSI of its views about the management of the land.

Not all of the management principles will be equally appropriate to all parts of the ASSI and there may be other management activities, additional to our current views, which can be beneficial to the conservation and enhancement of the features of interest. It is also very important to recognise that management may need to change with time.

The management views set out below do not constitute consent for any operation or activity. The written consent of Environment and Heritage Service is still required before carrying out any operation or activity likely to damage the features of special interest (see the schedule on pages 3 and 4 of the attached Document B for a list of these operations and activities). Environment and Heritage Service welcomes consultation with owners, occupiers and users of the ASSI to ensure that the management of this area maintains and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

MANAGEMENT PRINCIPLES

Woodland

Peatlands Park incorporates both Oakwood and Wet Woodland which are important habitats for wildlife. They provide food and shelter for a wide variety of mammals, birds and invertebrates.

Environment and Heritage Service would encourage the maintenance and enhancement of the woodland through the development of its structure and the conservation of its associated native plants and animals. The latter includes important invertebrate communities.

Specific objectives include:

Encourage the woodland to become more "mature" by avoiding disturbance.
The structure of the wood will gradually become more diverse, with



well-developed canopy, shrub and ground layers, and an abundance of species like Ivy, mosses, liverworts and lichens that live on the trees themselves.

Encourage the retention of dead wood both on the woodland floor and still standing in the canopy. Dead wood is a very important habitat for some of the less conspicuous woodland species such as fungi and invertebrates.

Encourage regeneration of woodland and discourage damage to trees and shrubs through the control of grazing. In general, natural regeneration is preferable to planting.

Lowland Raised Bog

Lowland raised bog is a unique habitat for wildlife. Environment and Heritage Service would encourage the maintenance and enhancement of the bog through the conservation of its associated native plants and animals. The former includes plants of limited distribution within Northern Ireland and the latter includes important invertebrate communities.

Bogs depend on rainwater and maintaining a high water table is vital to the "health" of the bog. In addition, the peat soils and many of the species that grow there are very sensitive to physical disturbance.

Specific objectives include:

Where appropriate, prevent the loss of light-demanding peatland species through the control of scrub and trees.

Fen

Fens are an important habitat for wildlife. Environment and Heritage Service would encourage the maintenance and enhancement of the fen through the conservation of its associated native plants and animals. The latter includes important invertebrate communities.

Fen vegetation requires water levels to be at, or just below, the surface all year round. In addition, increases in the nutrient status of the water and underlying peat soils can lead to the dominance of species, such as Bulrush, at the expense of other valuable plant communities.

Fen communities are susceptible to successional change and generally need some management to retain their interest. Although occasional small patches of scrub can be valuable in providing additional habitat niches for birds and invertebrates in the absence of management, coarse grasses such as Common Reed can quickly take over and ultimately woody species may become dominant. Over a period of time these species may shade out valuable plant communities and cause the fen to dry out.

Low intensity summer grazing by cattle (or ponies) that are more adaptable to wet conditions is the most effective way of controlling the growth of more vigorous species and helping to maintain species-rich fen vegetation and a diverse sward

structure. In the absence of grazing, cutting and removal of the vegetation to create open areas and reduce the dominance of coarse grasses is desirable.

Specific objectives include:

Where feasible, Environment and Heritage Service would encourage the grazing of fen although overgrazing should be avoided as the wet soils are particularly susceptible to poaching. Where grazing is not possible, other management practices, such as cutting, may be used.

In general, the control of scrub within fen communities can be achieved through the appropriate grazing regime. In some cases, additional scrub control may be required.

Management principles applicable to all habitats throughout the site


Where appropriate, Environment and Heritage Service would encourage the blocking of drains to prevent the wet woodland, bog and fen from drying out.

Environment and Heritage Service would encourage the maintenance of good water quality through the control of pollution and artificial enrichment.

Maintain the diversity and quality of habitats associated with the woodland, bog and fen, such as open water, swamp and scrub, through sensitive management. These adjoining habitats can often be very important for wildlife, especially invertebrates.

Discourage non-native species, especially those that tend to spread at the expense of native wildlife, such as Rhododendron.

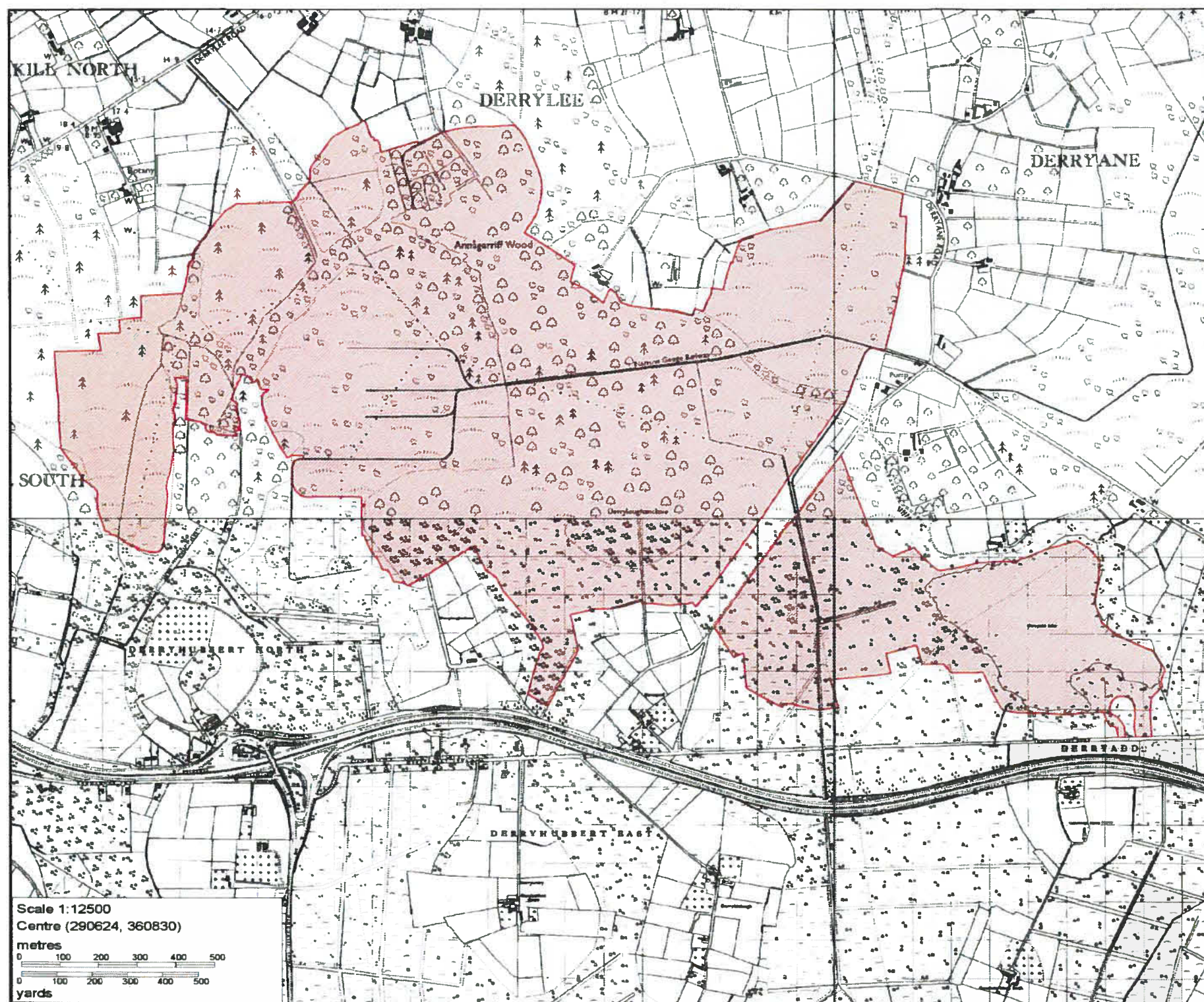
Ensure that disturbance to the site and its wildlife is minimised.


E Diane Stevenson
Authorised Officer

Dated the 23RD of JANUARY 2008



PEATLANDS PARK ASSI



Scale 1:12500
Centre (290624, 360830)
metres
0 100 200 300 400 500
yards
0 100 200 300 400 500

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DEPARTMENT OF THE ENVIRONMENT

PEATLANDS PARK AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 28 SEPTEMBER 2000

SITE BOUNDARY: The Area of Special Scientific Interest (ASSI) includes all the lands highlighted within the solid coloured lines.

AREA OF SITE: 207.30 hectares

OS MAPS 1:50,000: Sheet No. 19
1:10,000: Sheet Nos. 161, 180

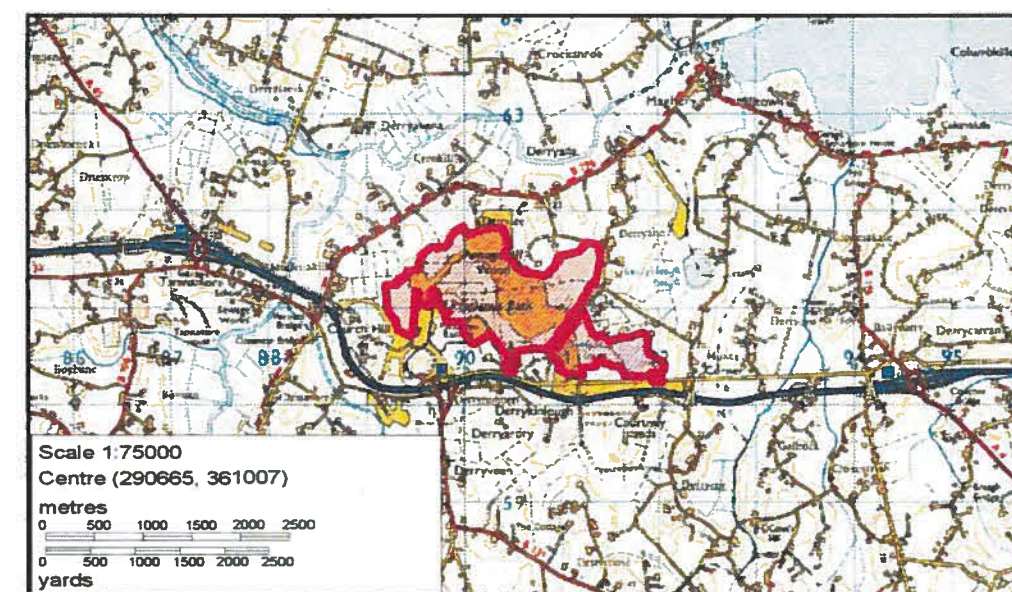
IRISH GRID REFERENCE: H 904610

COUNCIL AREA: DUNGANNON AND SOUTH TYRONE BOROUGH COUNCIL

COUNTY: ARMAGH

J. Faulkner

DR J. S. FAULKNER
SENIOR OFFICER OF THE
DEPARTMENT OF THE ENVIRONMENT



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