HARE ISLAND

A SPECIAL PLACE...



SITES OF BIOLOGICAL AND EARTH SCIENCE IMPORTANCE HAVE BEEN SURVEYED BY ENVIRONMENT AND HERITAGE SERVICE TO ASSESS THEIR SCIENTIFIC INTEREST. THE BEST SITES ARE NOW BEING DECLARED AS AREAS OF SPECIAL SCIENTIFIC INTEREST (ASSIS). IN DOING SO, WE AIM TO SAFEGUARD THESE IMPORTANT SITES FOR THE BENEFIT OF PRESENT AND FUTURE GENERATIONS.

Hare Island

Hare Island has been declared as an ASSI because of its species-rich wet grassland and breeding wader assemblage. Species-rich grassland tends to occur only where traditional farming practices have been maintained. These species-rich grasslands are now a rare habitat in Northern Ireland.

Hare Island is a lightly grazed drumlin island in Lower Lough Erne dominated by species-rich wet grassland and associated areas of swamp, woodland and scrub. Variations in soils and topography have resulted in subtle differences in grassland type, with species reflecting the wet conditions occurring.



Over 60 pairs of waders are known to breed on Hare Island, including Redshank, Snipe, Lapwing and Curlew, making Hare Island one of the most important sites for breeding waders in Northern Ireland.

The majority of the island is dominated by a special type of wet grassland known as

Purple Moor-grass and rush pasture. It is dominated by Sharpflowered Rush with abundant grasses, sedges and herbs typical of traditionally managed rush pasture, including



Purple Moor-grass, Spearwort, Tawny Sedge and Flea Sedge. Where there is increased water movement on the slopes a particular type of rush pasture occurs, called fen meadow, characterised by the presence of Meadow Thistle.

Several notable plants were also recorded for the area, including Cowbane, Common Butterwort and Small Water-pepper.

Many of these birds and plants are only found in areas where traditional forms of land management are used. The use of artificial fertilisers, herbicides or the application of manure or slurry would cause a reduction in plant numbers on the site. When soils become more fertile, grasses tend to thrive, growing faster and

taller, reducing the availability of nest sites. Smaller plants such as orchids are not able to compete with the tougher grasses and as a result are lost.

Correct management is essential for special places like Hare Island. If, for example, grazing was to cease, the field

parcels would quickly become rank and scrub could invade. This would cause a reduction in the numbers of birds, grasses and wild flowers found here. Traditional agricultural practices will



ensure the survival of the rich range of plants at Hare Island. The Environment and Heritage Service is keen to work closely with landowners to maintain and enhance Hare Island ASSI.









DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT HARE ISLAND, COUNTY FERMANAGH. ARTICLE 28 OF THE ENVIRONMENT (NORTHERN IRELAND) ORDER 2002.

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 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 'Hare Island Area of Special Scientific Interest'.

This area is of special scientific interest because of its breeding waders and species-rich wet grassland. Species-rich grassland tends to occur only where land management is not intensive, in particular where traditional farming practices have been maintained. As a result, it is not a widespread habitat in Northern Ireland and is often fragmented, consisting of individual fields, parts of fields or banks. Species-rich wet grasslands, like those found at Hare Island, are a particularly scarce resource in Northern Ireland.

Hare Island is a lightly grazed drumlin island in Lower Lough Erne. The island has a central ridge sloping down to the lough shore. The combination of topography and the related soil hydrology has resulted in a range of species-rich wet grasslands on the island. These vary from rush pasture to fen meadow, with base-loving plants present throughout the area.

Over 60 pairs of breeding waders were recorded on the site in 2005 with an average of 48 pairs during the period 2000 – 2005. This includes 25 pairs of Redshank *Tringa tetanus* (2000 – 2005 mean 16 pairs), 15 pairs of Snipe *Gallinago gallinago* (mean 15 pairs), 13 pairs of Lapwing *Vanellus vanellus* (mean 8 pairs) and 11 pairs of Curlew *Numenius arquata* (mean 9 pairs). This makes the island one of the most important sites for breeding waders in Northern Ireland. The density of nests, at over 2 per hectare, is amongst the highest recorded in Northern Ireland.

The vegetation on the island is dominated by Sharp-flowered Rush *Juncus acutiflorus*, with a variety of grasses and sedges and in places is markedly species rich. This provides cover for nests and young birds. Other important factors for breeding birds are the heavy nature of the soils which remain wet even in summer and the adjoining lough shoreline, which provide an abundance of food for adults and young birds. The island is also relatively free from disturbance and predation.

Purple Moor-grass and rush pasture occurs over much of the island, with fen meadow present at the lower elevations to the west of the island. Fen meadow is a particular type of Purple Moor-grass and rush pasture. It occurs on Hare Island where there is a steady hydrological influence flowing through the soil which results in the occurrence of species adapted to both water movement and wetter conditions. Species characteristic of this community on Hare Island include Purple Moor-grass *Molinia*







caerulea, Meadow Thistle Cirsium dissectum, Meadowsweet Filipendula ulmaria, Lesser Spearwort Ranunculus flammula, Devil's-bit Scabious Succisa pratensis and Tormentil Potentilla erecta.

Sedges are often important components within the sward and include Tawny Sedge *Carex hostiana*, Carnation Sedge *C. panicea*, Yellow-sedge *C. viridula*, Flea Sedge *C. pulicaris* and Glaucous Sedge *C. flacca*. There is also some more pronounced base-rich flushing at the base of the slope with Black Bog-rush *Schoenus nigricans*.

On the central ridge of the island, the Purple Moor-grass and rush pasture tends to be less species-rich. Common species here include Sharp-flowered Rush *Juncus acutiflorus*, Yorkshire-fog *Holcus lanatus*, Creeping Buttercup *Ranunculus repens* and White Clover *Trifolium repens*. This poorer rush pasture is prevalent throughout the eastern end of the island, where it forms a mosaic with drier more improved short turf of Perennial Rye-grass *Lolium perenne* and Crested Dog's-tail *Cynosurus cristatus* pasture.

Fringing the island's shoreline are a variety of vegetation communities that add valuable diversity to the island's habitats. A small patch of Common Reed *Phragmites australis* swamp occurs to the east of the island growing over Water Horsetail *Equisetum* fluviatile. Exposed shore vegetation dominated by Knotgrass *Polygonum* spp. occurs around the whole island, with scattered Bottle Sedge *Carex rostrata* and Marsh Cinquefoil *Potentilla palustris* fen on the northern shore. Exposed sandier shoreline substrates to the north and the east have Common Spike-rush *Eleocharis palustris* and locally abundant Needle Spike-rush *Eleocharis acicularis*.

The variation in hydrology and related topography, and past and present management has resulted in a considerable range of species present in a relatively small area. In addition to the species already mentioned the following species of note were recorded – Cowbane *Cicuta virosa*, Common Butterwort *Pinguicula vulgaris*, Small Water-pepper *Polygonum minus*, Lesser Pondweed *Potamogeton pusillus* and Long-leaved Pondweed *Potamogeton x zizii*.

Woodland and scrub provides further diversity and adds to the conservation interest of the area. Tree and shrub species are mainly found as former field boundaries. Hawthorn Crataegus monogyna is the main species with occasional Downy Birch Betula pubescens and Grey Willow Salix cinerea to the east with Scots Pine Pinus sylvestris and Ash Fraxinus excelsior around the ruins on the top of the ridge. Alder Alnus glutinosa woodland is also present to the northwest of these ruins. Scattered Gorse Ulex europaeus scrub forms an integral mosaic with the grasslands, particularly on the southern slopes.

Hare Island is an area of semi-natural grassland and associated habitats that have been managed in a traditional way. As such, it provides valuable feeding and roosting sites for a range of animals, including invertebrates such as Ringlet *Aphantopus hyperantus*, Red Admiral *Vanessa atalanta*, Painted Lady *Cynthia cardui* and Meadow Brown *Maniola jurtina*.

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, 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. The 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 paragraph 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 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 (include marsh, fen, bog, rivers, streams and open water), e.g.
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification of the structure of any watercourse;
 - (iii) lowering of the water table, permanently or temporarily;
 - (iv) change in 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, 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.

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.
- (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.

HARE ISLAND

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 Hare Island 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 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

Areas with important concentrations of breeding waders have become scarce in Northern Ireland. Environment and Heritage Service would seek to ensure appropriate management of the area for breeding waders, taking into account vegetation structure, grazing levels, soil moisture and predators.

Species-rich grasslands are an important habitat for breeding waders and other wildlife. Environment and Heritage Service would encourage the maintenance and enhancement of the grassland, through the conservation of its associated native plants and animals.

Many of the more sensitive species can be quickly lost through intensive management treatments, such as fertiliser and herbicide application. However, grassland generally needs <u>some</u> management to retain its 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 can quickly take over and ultimately woody species may become dominant.

Grazing by cattle is the most effective way of controlling the growth of more vigorous species and helping to maintain open areas and a diverse sward structure. In the absence of grazing, cutting of the vegetation to create open areas and reduce the dominance of coarse grasses is desirable.

Specific objectives include:

Low intensity grazing has contributed to the conservation and enhancement of the features of interest. Environment and Heritage Service would encourage the continuation of this practice.

Prevent the loss of more sensitive grassland species through the control of scrub, bracken and rushes. In general, this can be achieved through the appropriate grazing regime. In some cases, other methods of control such as cutting may be required. Limited rush cover can help provide good habitat for breeding waders. However heavy infestations can mean shorter areas useful for feeding are lost. Thus, management is recommended if rush infestations cover more than one third of the area of the field.

Sward height is important in determining which species of wader will make use of the area with longer vegetation attracting snipe and short being suitable for lapwing. Use of fertilizer should be discouraged as this can increase early season grass growth, thus reducing the suitability of the site for waders e.g. lapwing which prefer shorter swards. It also means livestock can move onto the land early at high stocking rates which increases the risk of trampling.

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

Where appropriate, encourage the blocking of drains to prevent the grassland from drying out.

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

The breeding productivity of ground nesting waders can be reduced by the presence of tall hedges or mature trees in the immediate vicinity of the nest site as they provide lookouts and nest sites for predators e.g. Hooded Crow. Limited scrub and tree management may be required as appropriate.

Maintain the diversity and quality of habitats associated with the grassland, through sensitive management. These adjoining habitats can often be very important for wildlife.

Sealed with the Official Seal of the Department of the Environment hereunto affixed is authenticated by

Mr G. R Seymdyr

Senior Officer of the

Department of the Environment

Dated the 25 of JANUARY 2007

HARE ISLAND ASSI



HARE ISLAND AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 25 January 2004

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

solid coloured line.

AREA OF SITE: 28.19 hectares

OS MAPS 1:50,000: Sheet No. 17

1:10,000: Sheet No. 153

IRISH GRID REFERENCE: H 142 639

COUNCIL AREA: FERMANAGH DISTRICT COUNCIL

COUNTY: FERMANAGH

G. K. Seymon

MR G R SEYMOUR
SENIOR OFFICER OF THE
DEPARTMENT OF THE ENVIRONMENT







