DEPARTMENT OF AGRICULTURE, ENVIRONMENT AND RURAL AFFAIRS

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT GORTNASOAL GLEBE AND MEENADOAN, COUNTIES TYRONE AND FERMANAGH. ARTICLE 28 OF THE ENVIRONMENT (NORTHERN IRELAND) ORDER 2002.

The Department of Agriculture, Environment and Rural Affairs (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 'Gortnasoal Glebe and Meenadoan Area of Special Scientific Interest'.

The area is of special scientific interest because of its physiographical features and peatland flora and associated fauna. Gortnasoal Glebe and Meenadoan ASSI is comprised of largely intact blanket bog within an upland area highly modified by afforestation, peat cutting and more recently by the development of wind farms. The area is characterised by undulating topography and the peatland complex consists of several raised bog units on deeper peat within a more extensive blanket bog complex. The underlying geology is composed of carboniferous sandstones, shales and limestones, being part of the carboniferous limestone series.

Gortnasoal Glebe and Meenadoan ASSI represents a relatively undisturbed area of blanket bog bounded by Lough Bradan Forest to the north and east of the area, and more recently, by Thornog Wind Farm which has been constructed on the rocky knoll of Thornog and on the shallower peats around the western, south-western and north-western perimeter of the deep peat complex. In addition, the Bradan Road dissects the northern portion of the bog and consequently the ASSI is comprised of two separate compartments, Gortnasoal Glebe to the south east of the road and Meenadoan to the north of it. Although the area of interest is restricted to the area of deep, largely intact peat, it sits within a much more extensive blanket bog landscape which although highly modified, still supports a mosaic of wet and dry heath, cutover bog and flushes.

Biological interest relates to the peatland communities and structural features, which are characteristic of these largely undisturbed upland habitats. They include flat bog plains; several well-developed hummock and lawn complexes on deep peat in addition to soak-ways and flushes. Associated habitats add diversity to the area and include a mosaic of wet and dry upland heaths where the peats are shallower, pockets of cutover bog which are now largely re-vegetated and a small, nutrient- poor lake.

The vegetation on the intact bog surface is characterised by Bog-mosses *Sphagnum* spp., ericoid dwarf-shrubs and associated species. The composition and abundance of these depends upon local environmental conditions, particularly the height of the water table and relief. Much of the bog plain is dominated by Heather *Calluna vulgaris*, with Cross-leaved Heath *Erica tetralix*, Hare's-tail Cottongrass *Eriophorum vaginatum*, Common Cottongrass *E. angustifolium* and Deergrass *Trichophorum cespitosum* growing over a mixed moss and liverwort mat.

Where the peat surface is wetter, it displays a well-developed microtopography, with prominent Red Bog-moss *Sphagnum capillifolium* and Papillose Bog-moss *S. papillosum* hummocks supporting Reindeer lichen *Cladonia portentosa*. Between these hummocks flat, waterlogged lawns are prevalent with locally abundant Bog Asphodel *Narthecium ossifragum*. Other species, characteristic of these wet bog plains, include Cranberry *Vaccinium oxycoccos*, Round-leaved Sundew *Drosera rotundifolia* and the liverwort Purple Spoonwort *Pleurozia purpurea*.

Gortnasoal Glebe and Meenadoan ASSI incorporates Meenadoan Nature Reserve, a classic example of an upland raised bog which has formed in a natural depression at an altitude of 210 – 220m. Meenadoan Nature Reserve lies to the north of the Bradan Road and is hydrologically distinct from the remainder of the ASSI. A stratigraphical survey of the raised bog shows the peat depth to be in excess of 6-8m. The surface is very wet and supports a well developed hummock and pool system. The pools contain aquatic Bog-mosses *Sphagnum* spp., particularly Feathery Bog-moss *S. cuspidatum* with occasional Cow-horn Bog-moss *S. denticulatum*. Bogbean *Menyanthes trifoliata* is also recorded in many of the larger pools. The vegetation surrounding the pools is comprised of a luxuriant mat of Bog-mosses *Sphagnum* spp., predominantly Papillose Bog-moss *S. papillosum* with occasional Magellanic Bog-moss *S. magellanicum*. Round-leaved Sundew *Drosera rotundifolia*, Great Sundew *D. anglica* and Oblong-leaved Sundew *D. intermedia* are all associated with the saturated mosses around the periphery of the pools. The hummocks within the pool complex are predominantly comprised of Red Bog-moss *Sphagnum capillifolium* with the more notable hummock forming species Rusty Bog-moss *S. fuscum* and Austin's Bog-moss *S. austinii* both recorded. Cranberry *Vaccinium oxycoccos* frequently grows over the larger hummocks.

On steeper slopes where the deep peats are drier, species commonly associated with the dominant Heather *Calluna vulgaris* include Bilberry *Vaccinium myrtillus* and the pleurocarpus mosses Heath Plait-moss *Hypnum jutlandicum* and Woolly Fringe-moss *Racomitrium lanuginosum*, the latter forming large hummocks. Where there is water movement through the surface of the peats, generally in association with natural water-courses, flushes and soaks, the vegetation is dominated by Purple Moor-grass *Molinia caerulea* with occasional Devil's-bit Scabious *Succisa pratensis*.

Lough a vigh, which lies in a natural depression in the centre of the deep peat deposits at Gortnasoal Glebe is just over 1.5 hectares in extent and is surrounded by gently sloping blanket bog. It is a typical species-poor, peat-stained lake at mid-altitude with low nutrient and base status and its presence adds further diversity to the area. The distinct aquatic flora of this upland lake includes Yellow Water-lily *Nuphar lutea* and White Water-lily *Nymphaea alba* with other submerged and floating-leaved plants such as Intermediate Water-starwort *Callitriche hamulata* and the Translucent Stonewort *Nitella translucens*. Gortnasoal Glebe and Meenadoan ASSI provides a large area of undisturbed upland habitat that is very valuable for associated invertebrates, birds and animals. Devil's-bit Scabious *Succisa pratensis*, the food plant of the Marsh Fritillary Butterfly *Euphydryas aurinia* occurs locally, while open pools and settlement ponds, constructed during the development of the wind farm, support the Scarce Blue-tailed Damselfly *Ischnura pumilio*. The bog also provides important habitat for upland birds such as Hen Harrier *Circus cyaneus*, Common Snipe *Gallinago gallinago* and Red Grouse *Lagopus lagopus*.

SCHEDULE

The following operations and activities appear to the Department to be likely to damage the flora and fauna and physiological features 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 rock, sand, gravel and peat.

2. Grazing practices should conform with DAERA agri-environment recommendations for Blanket Bog and there should be no supplementary feeding locations within the ASSI boundary.

3. Mowing or other methods of cutting vegetation.

4. The application of manure, slurry, artificial fertiliser or lime.

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 plants listed as noxious in the Noxious Weeds (Northern Ireland) Order 1977.

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 disturbance, 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 council or the Department of Infrastructure under Part 3 of the Planning Act (Northern Ireland) 2011. 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.

GORTNASOAL GLEBE AND MEENADOAN

Views About Management
The Environment (Northern Ireland) Order 2002 Article 28(2)

A statement of the Department's views about the management of Gortnasoal Glebe and Meenadoan Area of Special Scientific Interest ("the ASSI")

This statement represents the views of the Department 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. The Department 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 the Department 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). The Department 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

Blanket Bog

Blanket bog is a unique habitat for wildlife. The Department would encourage the maintenance and enhancement of the bog through the conservation of its associated native plants and animals.

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:

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

Ensure that the blanket bog is <u>not</u> burnt in order to prevent the loss of more specialised plants and animals, and to avoid damage to peat soils which could lead to erosion.

Where appropriate, encourage the blocking of drains to prevent wet heath and bog from drying out.

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

Where the surface is not too wet, blanket bogs can sustain very light levels of grazing by sheep. The Department would encourage a regime that avoids overgrazing or poaching.

Where the habitat has been subjected to heavy grazing, the Department would encourage a reduction in stocking density to allow the bog to recover. Maintain the diversity and quality of the habitats by ensuring there is no application of fertiliser, slurry, herbicide or fungicide to the site.

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

Maintain the diversity and quality of habitats associated with the bog such as, heath, grassland and lakes through sensitive management. These adjoining habitats are often very important for wildlife.

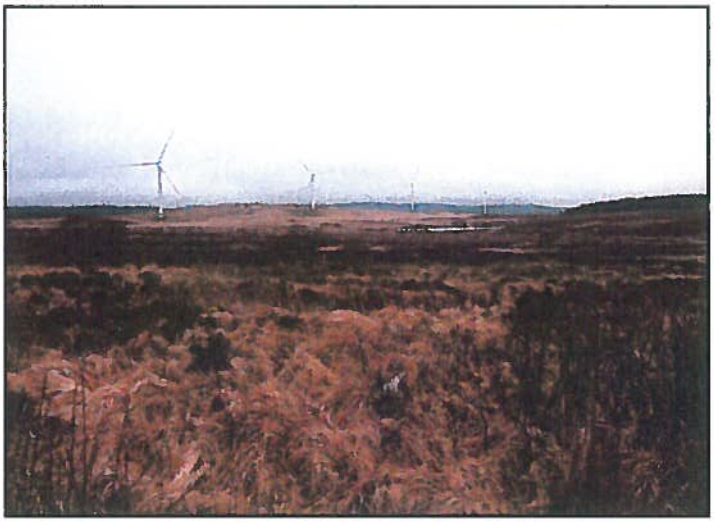
Sealed with the Official Seal of the
Department of Agriculture, Environment
and Rural Affairs hereunto affixed is
Authenticated by

[Signed by]
HELEN ANDERSON
Senior Officer of the
Department of Agriculture,
Environment and Rural Affairs

Dated the 10 of March 2017

GORTNASOAL GLEBE AND MEENADOAN

A SPECIAL PLACE...



View over Gortnasoal Glebe and Meenadoan

SITES OF BIOLOGICAL AND EARTH SCIENCE IMPORTANCE HAVE BEEN SURVEYED BY NORTHERN IRELAND ENVIRONMENT AGENCY 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

Gortnasoal Glebe and Meenadoan has been declared as an ASSI for its intact blanket bog which supports important plant and animal communities. Northern Ireland is particularly well suited to the formation of peat because the climate is cool and wet. It is estimated that there are over 142,000 hectares of blanket bog in Northern Ireland, although most of it has been significantly damaged by turf-cutting, agricultural intensification and afforestation, leaving only 15% intact.

Gortnasoal Glebe and Meenadoan is special because it represents a large expanse of mostly undisturbed upland blanket bog within a highly modified landscape. The vegetation is characterised by hummocks of Heather, Cross-leaved Heath and Hare's-tail Cottongrass growing over *Sphagnum* Bog-mosses.

Sphagnum Bog-mosses

On steeper slopes, where the peats are drier, species such as Heather, Bilberry, Heath Plait-moss and Woolly Fringe-moss are found.

Bog Asphodel

Flat, waterlogged lawns characterised by Bog Asphodel, Cranberry and the liverwort Purple Spoonwort extend between the Heather and Cottongrass. This provides the classic hummock and hollow micro-topography associated with bog vegetation on deep peats.

Gortnasoal Glebe and Meenadoan ASSI incorporates Meenadoan Nature Reserve which supports a well -developed pool system. The pools contain aquatic Bog-mosses, particularly Feathery Bog-moss with occasional Cow-horn Bog-moss. Bogbean is also recorded in many of the larger pools.

Bogbean

Round-leaved Sundew, Great Sundew and Oblong-leaved Sundew are all associated with the saturated aquatic Bog-mosses around the edge of the pools.

Great Sundew

Lough a vigh lies in a natural depression in the centre of the deep peat. It is a typical nutrient-poor lake with distinctive aquatic plants, including Yellow Water-lily, White Water-lily, Intermediate Water-starwort and Translucent Starwort.

Lough a vigh

Blanket bogs support unique plants and animals that are irreplaceable. These include notable birds such as Hen Harrier, Merlin and Red Grouse. It is therefore vitally important that the best remaining areas of blanket bog are protected from adverse activities. Northern Ireland Environment Agency is keen to work closely with landowners and land managers to maintain and enhance Gortnasoal Glebe and Meenadoan ASSI.

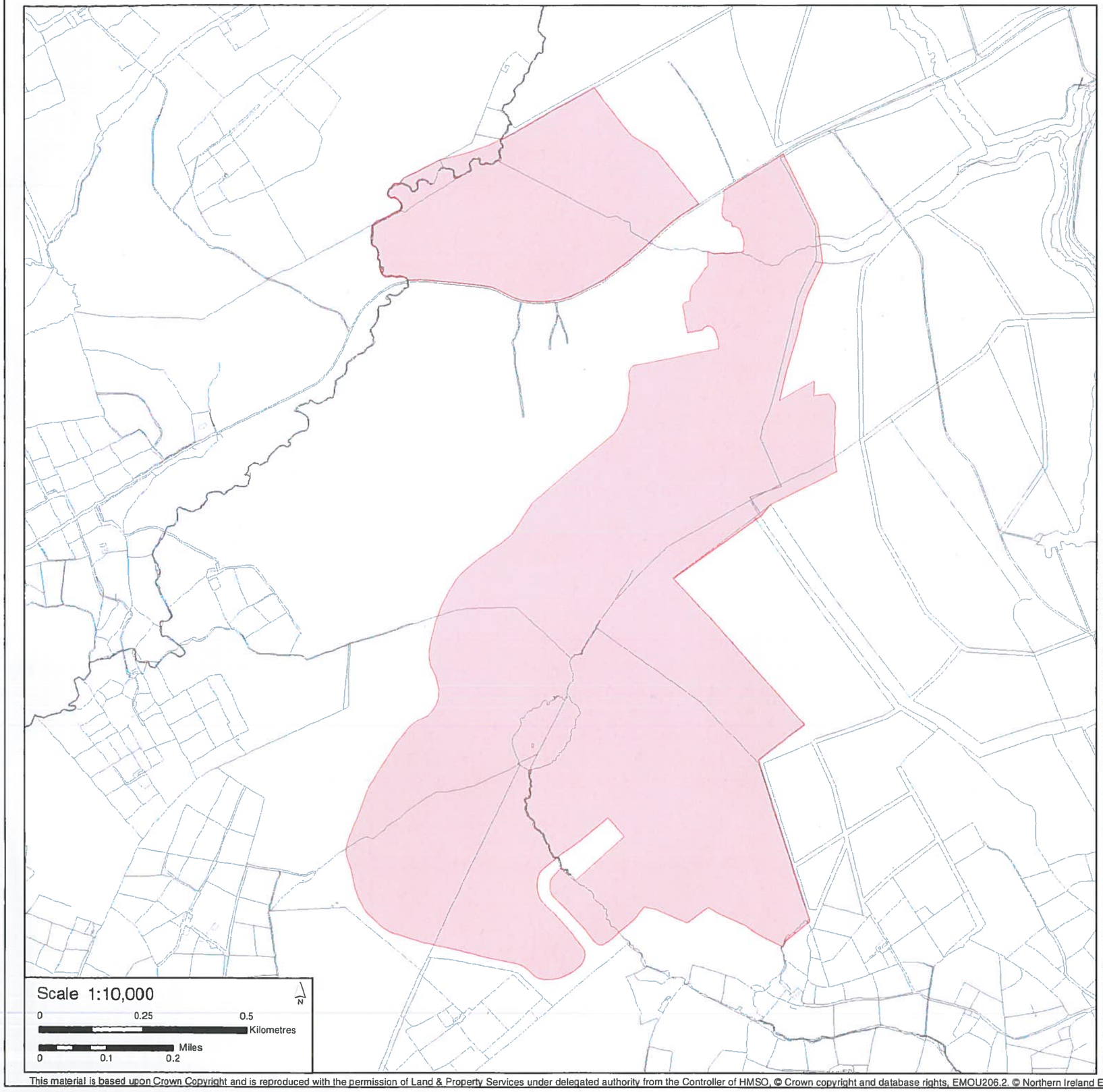
Red Grouse

NIEA Northern Ireland Environment Agency
www.daera-ni.gov.uk

An Agency within the Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

INVESTORS IN PEOPLE

GORTNASOAL GLEBE AND MEENADOAN ASSI



GORTNASOAL GLEBE AND MEENADOAN AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 10th MARCH 2017

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

AREA OF SITE: 139.42 hectares

OS MAPS 1:50,000: Sheet Nos. 12, 17, 18
1:10,000: Sheet No. 135

IRISH GRID REFERENCE: IH 243 717
IH 245 706

COUNCIL AREA: FERMANAGH & OMAGH DISTRICT COUNCIL

COUNTIES: TYRONE, FERMANAGH

Helen Anderson

HELEN ANDERSON
SENIOR OFFICER OF THE DEPARTMENT OF
AGRICULTURE, ENVIRONMENT AND RURAL AFFAIRS

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