

# GLEN EAST

## A SPECIAL PLACE...



*Glen East ASSI*

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.

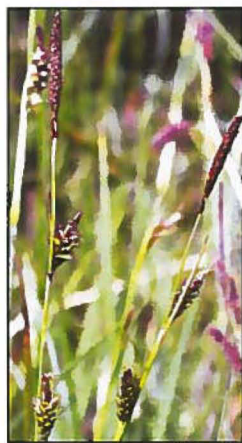
Glen East has been declared as an ASSI because of its species-rich wet grassland. Species-rich grassland tends to occur only where traditional farming practices have been maintained. Such species-rich grassland is now a rare habitat in Northern Ireland.

The diverse topography and soil hydrology at Glen East have enabled a range of species-rich wet grasslands to develop. These include species-rich rush pasture, fen meadow, wet heath and where drier conditions exist, wet lowland meadow.

Glen East is situated to the west of the West Fermanagh Scarplands within a landscape of rolling hills near the village of Garrison. Glen East is on the edge of the uplands with an altitude of approximately 150m above sea level. The site covers the southern slopes of Derrynacarbit hill, sloping quite steeply in places.



*Meadow Thistle*



*Tawny Sedge*

Species such as Meadow Thistle and Sharp-flowered Rush are constant in the fen meadows. Other distinctive species associated with fen meadow vegetation at Glen East include Purple

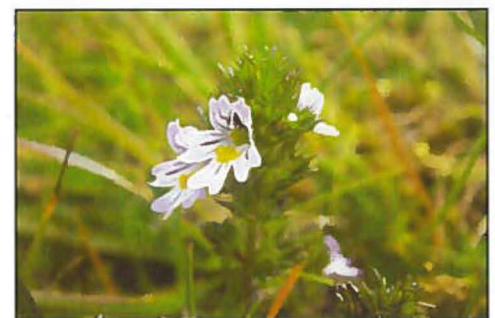
Moor-grass, Tormentil, Devil's-bit Scabious, Heather, Lesser Spearwort, Selfheal, Carnation Sedge, Tawny Sedge and Glaucous Sedge.

Pockets of very species-rich vegetation occur where the mineral soils and shallow peats are flushed



*Heather*

and kept wet by calcareous, nutrient-poor waters. Characteristic additional species here include Bog Pimpernel, Eyebright, Common Butterwort and Mat-grass.



*Eyebright*



Areas of drier neutral grassland at the base of the slope are situated beside a tributary of the Glen River. The vegetation is typically grass-dominated with a wide range of associated herbs, sedges and rushes. This type of grassland has Crested Dog's-tail as a constant component of the sward, along with Sweet Vernal-grass and Creeping Bent. Sedges and rushes including Carnation Sedge, Common Sedge and Sharp-flowered Rush are also constant.



*Ragged Robin*

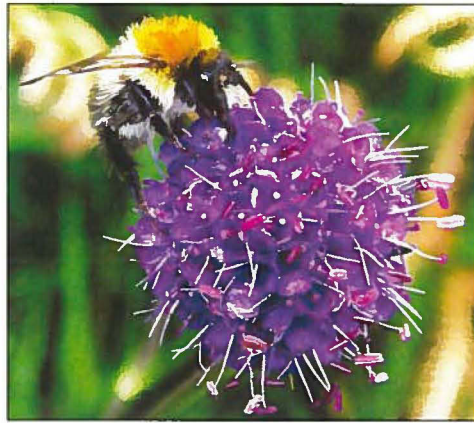
Herbs typical of traditionally managed Fermanagh meadow grasslands are frequent throughout and include Devil's-bit Scabious, Ragged-Robin, Marsh Ragwort, Meadow Buttercup and Lesser Spearwort. This type of grassland is localised in its distribution within Northern Ireland and is particularly associated with wet hay meadows in Fermanagh.



*Hare's-tail Cottongrass*

The area also includes a transition from intact blanket bog and wet heath at the top of the slope on Glen East that grades down into a fen meadow, and then into wet lowland meadow grassland at the base of the slope. Much of the peatland is intact with Heather, Cross-leaved Heath, Deergrass, Common Cottongrass and

Hare's-tail Cottongrass, with a high cover of Bog-mosses and abundant Glittering Wood-moss.



*Devil's-bit Scabious*

Glen East is also an important site for the Marsh Fritillary butterfly. The very rich grasslands and wet heaths on the south facing hillside support large quantities of Devil's-bit Scabious, which is the larval foodplant for the Marsh Fritillary. Population estimates from recent Marsh Fritillary survey suggest that Glen East is a significant area in Northern Ireland for breeding colonies of this butterfly.



*Marsh Fritillary caterpillars feeding on Devil's-bit Scabious*



*Marsh Fritillary*

Many of these plants are only found in grasslands 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. 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 Glen East. If, for example, grazing was to cease, the field parcels would quickly become rank and scrub would invade. This would cause a reduction in the numbers of grasses and wildflowers found here. Traditional agricultural practices will ensure the survival of the rich range of plants at Glen East.

Northern Ireland Environment Agency is keen to work closely with landowners to maintain and enhance Glen East ASSI.

## DEPARTMENT OF THE ENVIRONMENT

## DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT GLEN EAST, 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 'Glen East Area of Special Scientific Interest'.

This area is of special scientific interest because of its 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 grasslands, like those found at Glen East, are a particularly scarce resource in Northern Ireland.

Glen East is situated within a landscape of rolling hills near Garrison. Glen East is on the edge of the uplands with an altitude of approximately 150m above sea level. The area covers half of Derrynacarbit hill and slopes quite steeply in places.

The site is underlain by Carboniferous age rocks, dominated by sandstones belonging to the Quarry Sandstone Member of the Meenymore Formation. The Meenymore Formation shales occupy the southern section of the site. The sandstones define the high ground, especially to the north of the site. These are overlain by peat. The remaining soils at Glen East are derived from the parent rock typically showing poor drainage characteristics and are known as surface water gleys.

Due to a combination of factors such as slope, altitude and the westerly geographical position, these soils are kept consistently moist. The diverse topography and soil hydrology at Glen East have enabled a complex range of species-rich wet grasslands to develop. Often these differences in type are evident over quite small areas and locally form mosaics of semi-natural grassland types, including species-rich rush pasture, fen meadow, wet heath and where drier conditions exist, wet lowland meadow, with base-loving plants present throughout the area.

The vegetation at Glen East is dominated by wet grassland of the Purple Moor-grass and rush pastures type. Fen meadow is a particular type of Purple Moor-grass and rush pasture that develops on base-rich, peaty soils. Species such as Meadow Thistle *Cirsium dissectum* and Sharp-flowered Rush *Juncus acutiflorus* are constant. Other distinctive species associated with fen meadow vegetation at Glen East include Purple Moor-grass *Molinia caerulea*, Tormentil *Potentilla erecta*, Devil's-bit Scabious *Succisa pratensis*, Heather *Calluna vulgaris*, Lesser Spearwort *Ranunculus flammula*, Selfheal *Prunella vulgaris*, Carnation Sedge *Carex panicea*, Tawny Sedge *C. hostiana* and Glaucous Sedge *C. flacca*. The predominant moss within the grassland is Pointed Spear-moss *Calliergonella cuspidatum*.





Pockets of very species-rich vegetation occur where the mineral soils and shallow peats are flushed and kept wet by base-rich or calcareous, nutrient-poor waters.

Characteristic additional species here include Bog Pimpernel *Anagallis tenella*, Eyebright *Euphrasia officinalis* agg., Common Butterwort *Pinguicula vulgaris* and Mat-grass *Nardus stricta*. The dominant mosses within these flushes are Golden-head Moss *Breutelia chrysocoma* and Pointed Spear-moss *Calliergonella cuspidatum*.

Areas of wet lowland meadow at the base of the slope are situated beside a tributary of the Glen River. The vegetation is typically grass-dominated with a wide range of associated herbs, sedges and rushes. This type of grassland has Crested Dog's-tail *Cynosurus cristatus* as a constant component of the sward, along with Sweet Vernal-grass *Anthoxanthum odoratum* and Creeping Bent *Agrostis stolonifera*. Sedges and rushes are also constant and include Carnation Sedge *Carex panicea*, Common Sedge *C. nigra* and Sharp-flowered Rush *Juncus acutiflorus*. Herbs typical of traditionally managed Fermanagh meadow grasslands are frequent throughout and include Devil's-bit Scabious *Succisa pratensis*, Ragged-Robin *Lychnis flos-cuculi*, Marsh Ragwort *Senecio aquaticus*, Selfheal *Prunella vulgaris*, Meadow Buttercup *Ranunculus acris* and Lesser Spearwort *Ranunculus flammula*. This type of grassland is localised in its distribution within Northern Ireland and is particularly associated with wet hay meadows in Fermanagh. The underlying geology, topographic conditions and management have created an ideal niche for this type of wet grassland.

The area also includes a transition from intact blanket bog and wet heath at the top of the slope on Glen East that grades down into a fen meadow and wet heath mosaic, and then into wet lowland meadow grassland at the base of the slope. Much of the peatland is intact with Heather *Calluna vulgaris*, Cross-leaved Heath *Erica tetralix*, Deergrass *Trichophorum cespitosum*, Common Cottongrass *Eriophorum angustifolium* and Hare's-tail Cottongrass *E. vaginatum*, with a high cover of Bog-mosses *Sphagnum* spp. and abundant Glittering Wood-moss *Hylocomium splendens*.

Glen East is an area with a wide range of semi-natural habitats that have been managed in a traditional way. As such, it provides valuable feeding and roosting sites for a range of animals, including birds and invertebrates such as the Marsh Fritillary butterfly *Euphydryas aurinia*. The very rich grasslands and wet heaths on the south facing hillside support large quantities of Devil's-bit Scabious *Succisa pratensis*, which is the larval foodplant for the Marsh Fritillary *E. aurinia*. Population estimates from recent Marsh Fritillary *E. aurinia* survey suggest that Glen East is a significant area in Northern Ireland for breeding colonies of this butterfly.

## 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 (or introduction), 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.

## GLEN EAST

### Views About Management

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

#### A statement of The Department's views about the management of Glen East 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 2 - 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

Species-rich grasslands are an important habitat for wildlife. The Department would encourage the maintenance and enhancement of the grassland, through the conservation of its associated native plants and animals. These include important invertebrates such as the Marsh Fritillary butterfly

Many of the more sensitive species can be quickly lost through intensive management treatments, such as fertiliser and herbicide application. However, grassland generally needs some 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, although overgrazing should be avoided as the wet soils are particularly susceptible to poaching. In the absence of grazing, cutting of the vegetation to create open areas and reduce the dominance of coarse grasses is desirable.

Where cutting for hay followed by light aftermath cattle grazing has been traditionally practised, this is also an effective way of controlling the growth of more vigorous species and helping to maintain a species-rich sward.

Specific objectives include:

Low intensity grazing has contributed to the conservation and enhancement of the features of interest. The Department would encourage the continuation of this practice.

Where cutting for hay followed by light aftermath cattle grazing has traditionally been practised, The Department 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.

Maintain the diversity and quality of the species-rich grassland by ensuring there is no application of fertiliser, slurry or herbicide to the site.

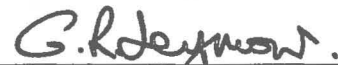
Where appropriate, encourage the blocking of drains to prevent the grassland from drying out.

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

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 grassland, such as bog, scrub and heath 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

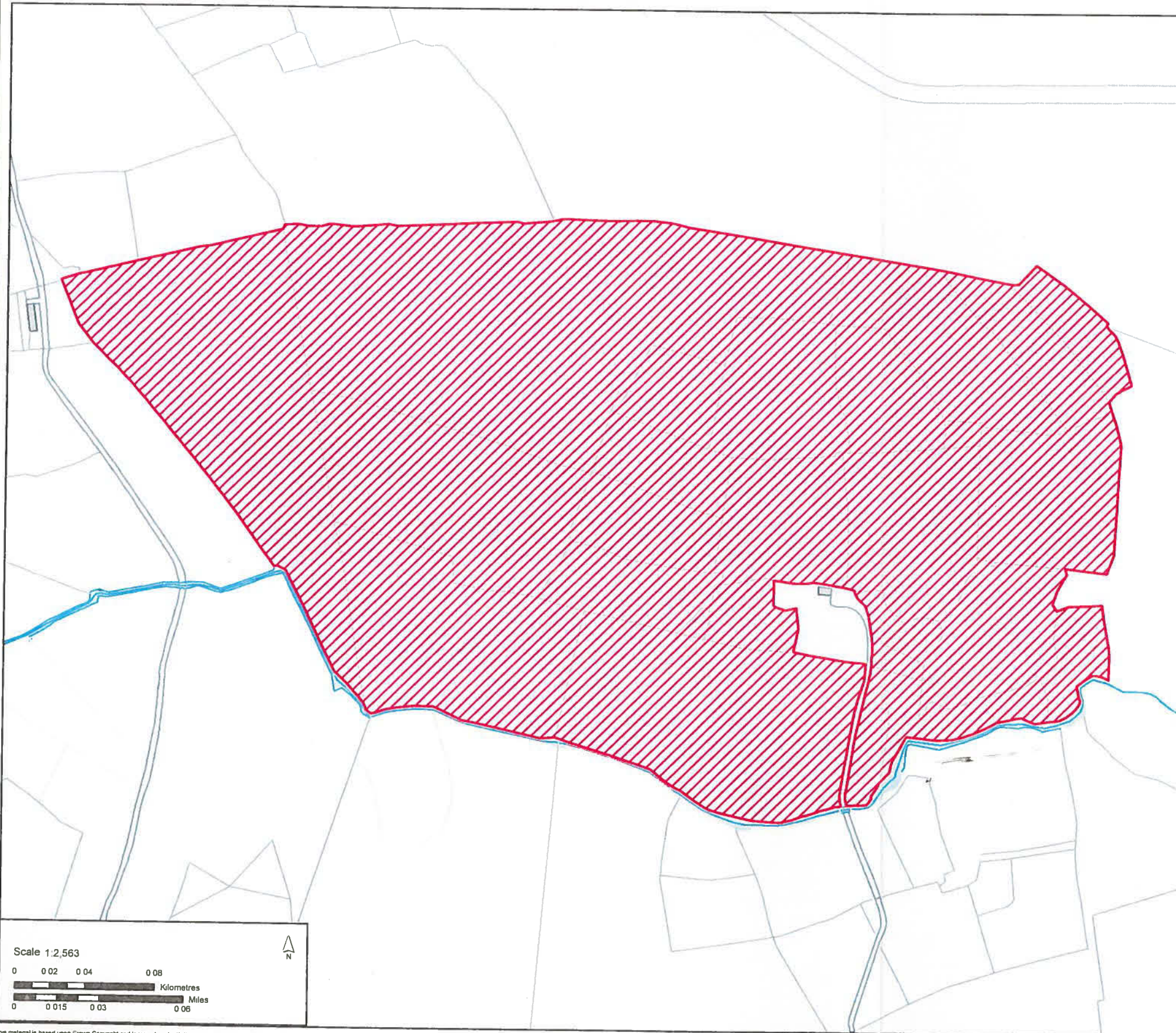


G R Seymour  
Senior Officer of the  
Department of the Environment

Dated the 22<sup>nd</sup> of February 2010



# GLEN EAST ASSI



## GLEN EAST AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 22nd February 2010

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

AREA OF SITE: 14.65 hectares

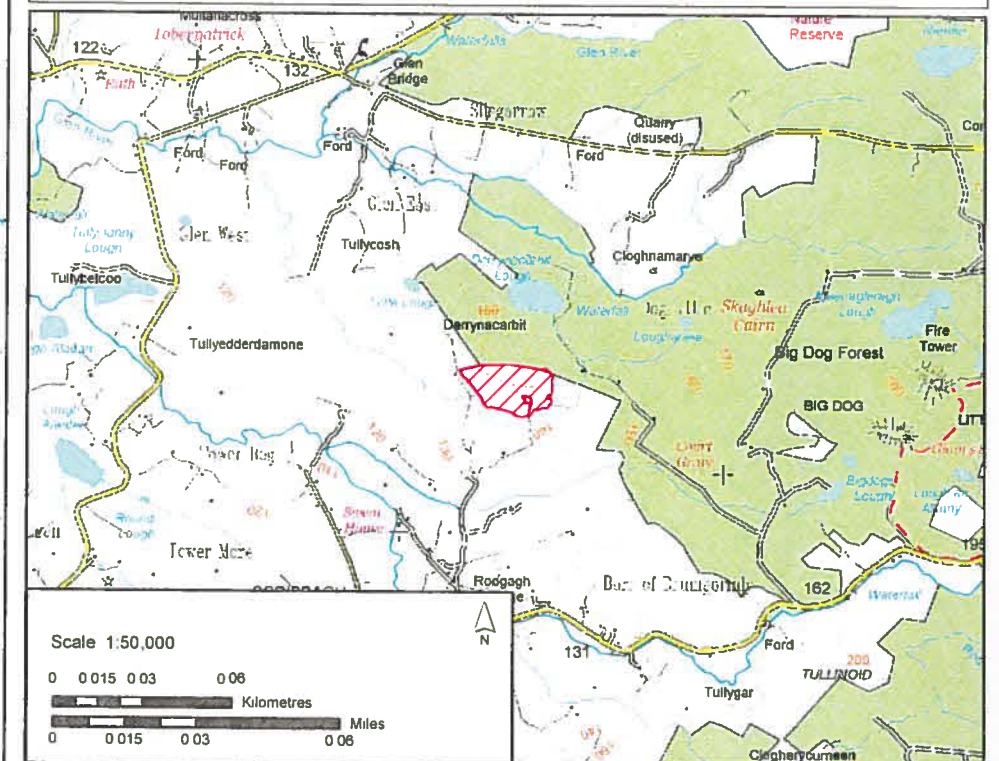
OS MAPS 1:50,000: Sheet No. 17  
1:10,000: Sheet Nos. 190

IRISH GRID REFERENCE: H003 500

COUNCIL AREA: FERMANAGH DISTRICT COUNCIL

COUNTY: FERMANAGH

*G. R. Seymour*  
G R SEYMOUR  
SENIOR OFFICER OF THE  
DEPARTMENT OF THE ENVIRONMENT



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