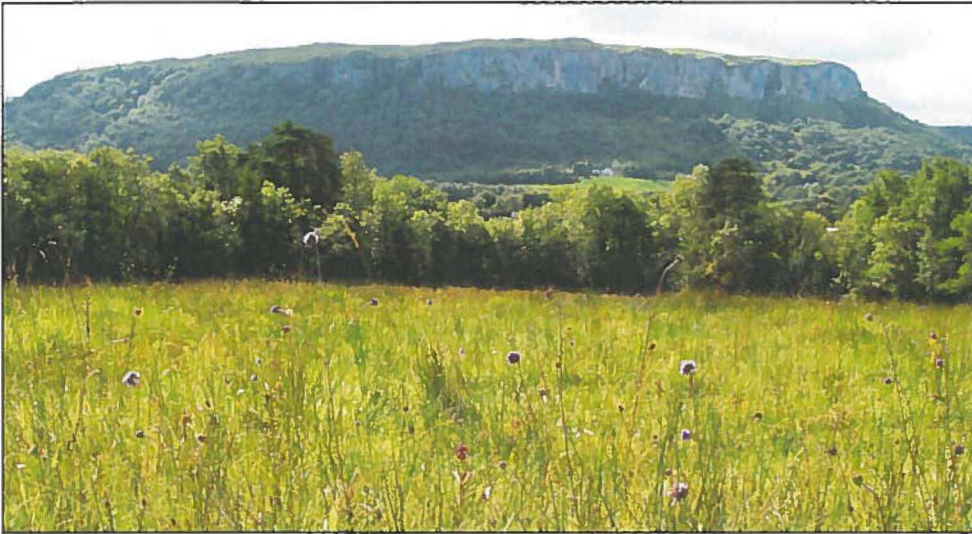


KEADEW

A SPECIAL PLACE...



Keadew

Keadew 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.

Keadew is situated close to the Screenagh River approximately 2km west of Derrygonnelly. Variations in soils and topography have resulted in subtle differences in grassland type, with species denoting both the wet and dry conditions occurring.



Devil's-bit Scabious with Bumblebee

A special type of species-rich wet grassland occurs at Keadew which is extremely localised in its distribution within Northern Ireland and is particularly associated with wet meadows in Fermanagh. The grassland at Keadew occurs on gentle slopes

where there is a steady hydrological influence flowing through the soil. This results in the occurrence of species adapted to both the water movement and wetter conditions.



Ragged Robin

Characteristic plants within the grassland include Sharp-flowered Rush, Meadow Thistle, Common Spotted-orchid, Ragged Robin, Lesser Spearwort, Water Mint, Devil's-bit Scabious and the mosses Pointed Spear-moss and Springy Turf-moss.

Where water rich in minerals from the underlying limestone geology reaches the surface some species of plant occur that thrive in these flushed wet conditions. These include grass-like wetland plants called sedges and include Star Sedge, Tawny Sedge, Flea Sedge and Long-bracted Yellow Sedge. A distinctive flower called Bog Pimpernel also occurs in these flushes.

Many of these plants are only found in grasslands where traditional forms of

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.

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.



Bog Pimpernel

Correct management is essential for special places like Keadew. If, for example, grazing or cutting 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 Keadew. Northern Ireland Environment Agency is keen to work closely with landowners to maintain and enhance Keadew ASSI.

DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT
KEADEW, 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 'Keadew 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 Keadew, are a particularly scarce resource in Northern Ireland.

Keadew is situated on a landscape of rolling hills just below the West Fermanagh Scarplands close to the Screenagh River and approximately 2km west of Derrygonnelly.

The area is underlain by Carboniferous age rocks, dominated by rocks belonging to the Benbulbin Shale Formation. Typically comprising calcareous mudstones and siltstones, these rocks formed in relatively shallow water and are base-rich, with a significant calcium carbonate content. The soils at Keadew are derived from the parent rock, and the resultant soils have very poor drainage characteristics and are known as surface water and groundwater gleys.

Due to a combination of factors such as slope, altitude and the westerly geographical position, these soils are kept consistently moist. The topography and soil hydrology at Keadew 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, and where slightly drier conditions exist, damp lowland meadow, with base-loving plants present throughout the area.

The species-rich grassland within Keadew is a mosaic of vegetation communities and supports a type of grassland that is uncommon within Northern Ireland. The vegetation is typically dominated by grasses and rushes with a wide range of associated herbs and sedges. The majority of the wet grassland has similarities to both Purple Moor-grass and rush pasture and drier lowland meadow, with Crested Dog's-tail *Cynosurus cristatus* and Sharp-flowered rush *Juncus acutiflorus* as constant components of the sward, along with Sweet Vernal-grass *Anthoxanthum odoratum*, Red Fescue *Festuca rubra*, Quaking-grass *Briza media* and Velvet Bent *Agrostis canina*. Sedges are also constant and include Carnation Sedge *Carex panicea* and Tawny Sedge *C. hostiana*.

Herbs typical of traditionally managed Fermanagh meadow grasslands are frequent throughout and include Devil's-bit Scabious *Succisa pratensis*, Ragged-Robin *Lychnis flos-cuculi*, Square-stalked St John's-wort *Hypericum tetrapterum*, Selfheal *Prunella vulgaris* and Meadow Buttercup *Ranunculus acris*. This type of wet 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 at Keadew have created ideal conditions for the development of this type of wet grassland.

Where the vegetation is flushed by base-rich waters derived from the underlying limestone rocks, a type of Purple Moor-grass and rush pasture called fen meadow occurs. Typical species present within the fen meadow include Meadow Thistle *Cirsium dissectum* and Sharp-flowered Rush *Juncus acutiflorus* as constants, with occasional Purple Moor-grass *Molinia caerulea*. Other distinctive species associated with fen meadow vegetation at Keadew include Devil's-bit Scabious *Succisa pratensis*, Bog Pimpernel *Anagallis tenella*, Water Mint *Mentha aquatica*, Lesser Spearwort *Ranunculus flammula*, Selfheal *Prunella vulgaris*, Carnation Sedge *Carex panicea*, Long-bracted Yellow Sedge *C. viridula* ssp. *brachyryncha* and Flea Sedge *C. pulicaris*.

Keadew is an area of semi-natural grassland managed in a traditional way. As such, it provides valuable feeding and roosting sites for a range of animals, including birds and invertebrates.

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.

KEADEW

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

A statement of the Department's views about the management of Keadew 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.

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.

A combination of cutting for hay and cattle grazing has provided effective management for the habitats at Keadew. Cutting for hay followed by light aftermath cattle grazing is the most effective way of controlling the growth of more vigorous species and helping to maintain a species-rich sward.

Where cutting is not possible grazing by cattle can also control 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.

Specific objectives include:

Low intensity management for hay has contributed to the conservation and enhancement of the grassland. The Department would encourage the continuation of this practice.

Low intensity grazing has also contributed to the conservation and enhancement of the features of interest. 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 hedgerows, scrub and heath through sensitive management. These adjoining habitats can often be very important for wildlife.

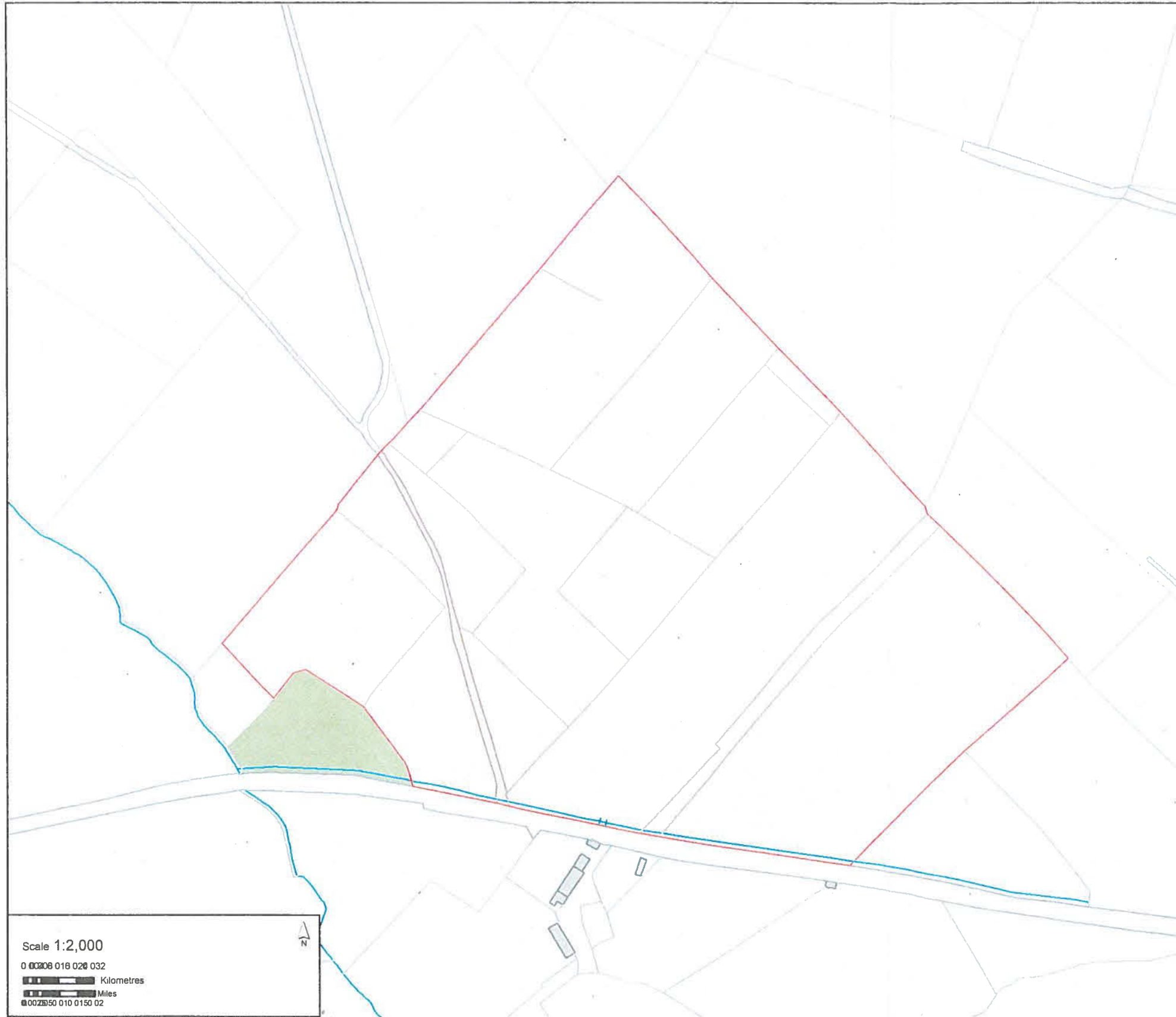
Sealed with the Official Seal of the
Department of the Environment
hereunto affixed is authenticated
by



G R Seymour
Senior Officer of the
Department of the Environment

Dated the 14th of SEPTEMBER 2009

KEADEW ASSI



Scale 1:2,000
 0 00008 018 028 032
 Kilometres
 Miles
 0002850 010 0150 02

KEADEW AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 14th SEPTEMBER 2009

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

AREA OF SITE: 6.53 hectares

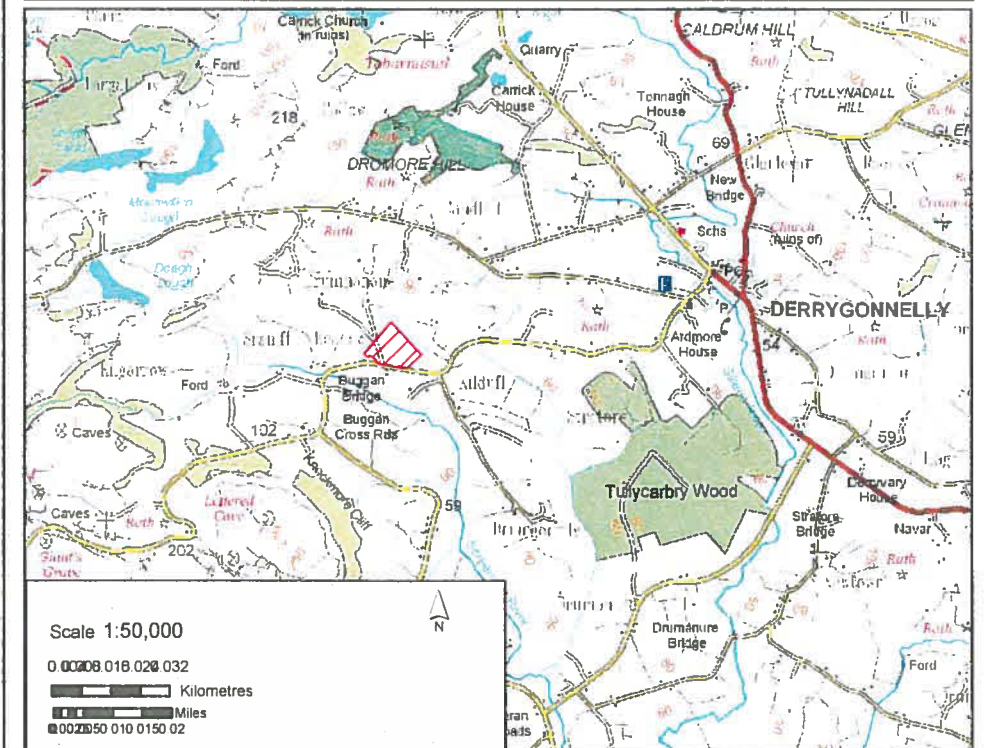
OS MAPS 1:50,000: Sheet No. 17
 1:10,000: Sheet Nos. 191

IRISH GRID REFERENCE: H096 516

COUNCIL AREA: FERMANAGH DISTRICT COUNCIL

COUNTY: FERMANAGH

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



Scale 1:50,000
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 Kilometres
 Miles
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