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**The National
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Waterloo Road
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CONSERVATION AND AMENITY
ADVISORY SERVICE

A PRELIMINARY REPORT ON
AREAS OF SCIENTIFIC INTEREST
IN COUNTY MONAGHAN

L. Farrell,
Research Assistant.

August, 1972.

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FOREWORD

This report is based on data abstracted from the files of the Conservation and Amenity Section, Planning Division, An Foras Forbartha, from the published literature and from several periods of field work during August 1971 and 1972. It is a preliminary survey upon which it is hoped further research will be based.

The maps which appear in this report are reproduced from the Ordnance Survey by permission of the Government. (Licence No. 121/72).

The help of Mr. Frank Keelaghan and other officers of Monaghan County Council is gratefully acknowledged.

SECTION A.

Preface

The abundance of open countryside in Ireland is immediately apparent to anyone visiting the island. Although much of the land is artificially fertilized, a large percentage is used as pasture, and even though the natural composition of the grassland has been modified, it has not been ploughed and destroyed. Vast areas of upland blanket bog and the red raised bogs of the Midlands still exist and many miles of hedgerows border the small fields.

One habitat which has been decimated over the centuries is woodland. Many of the original deciduous woods have been felled and not replaced. Planting of coniferous species on marginal land has compensated for the loss in numbers, but not in ecological interest.

Ireland is rich in archaeological and geological sites also, and it is this environmental and aesthetic diversity which is our national heritage - a heritage which requires and demands the full attention of our intellect if we are to continue to exist in harmony with it and to ensure its survival.

This particular report is concerned with county planning in relation to sites of scientific interest. Often these areas are of educational importance and of recreational value. What we are concerned with at the present time is the integration of these various interests with the actual physical nature of the countryside.

At the moment the Conservation and Amenity Advisory Service is attempting to visit, describe and record areas of natural and semi-natural habitats throughout the country. Localities of specific importance i.e. noted for the occurrence of a rare species or rare natural phenomenon, are also listed. Once representative examples have been delimited, the development of the area of interest and that of the surroundings has to be considered as a whole unit. For example, if an area of marshland is considered to be of particular

scientific interest, then a drainage scheme in the neighbourhood could destroy the habitat.

Having previously stated that Ireland has a wealth of natural phenomena, is it possible to define the value in concrete terms? The key to the situation is that of diversity. The intricate network of grassland, mountains, lakes and woods provides an ever-changing vista for us to enjoy. Because of the diversity too, of human nature, there are many different ways in which we enjoy the countryside. In order to rationalize the situation, four categories may be distinguished - one particular area may be important for amenity, recreational, scientific or educational reasons, or a combination of all four. The present problem is how to combine all these interests in that area, and it is at this stage that the work of the local authorities becomes important. Robert Boote summarizes this importance in a statement issued at the 7th session of the European Conference of Local Authorities -

'Local authorities hold the key to the success of conservation in Europe. They carry out a wide range of functions which have a direct impact upon the physical environment. Planning and education - two of the most formative aspects of modern society - are of prime importance here. Local authorities can also develop and manage considerable areas of land and water and most have powers to create new amenities and landscapes. In these and numerous other ways, they are well equipped to conserve and enhance those qualities of the environment that contribute so much to the life and heritage of European man'.

(Reference : Conservation - The Human Environment

Published by An Foras Forbartha, December 1971)

SECTION B

VULNERABILITY OF HABITATS

Areas of scientific interest can be damaged in many ways. They can be completely destroyed by scrub or tree clearance, by turf cutting or by arterial drainage, or they can suffer insidiously through pollution, fertilisation, grazing or overuse for recreation.

In the past Monaghan was probably well wooded. At the beginning of the nineteenth century the uplands were described as 'till lately wooded' and stunted undergrowth was found at the foot of the hills. The Ordnance Survey recorded that within memory the hills were covered with thorn, hazel, birch and alder scrub of great size and value, but it was cut on the expiration of leases and used for domestic fuel. There were also woods on the northern borders of the county on the eastern side of Slieve Beagh.

Today very little woodland exists in the county. It is mainly within the estates that remnants are found, and quite often the natural deciduous woodland has now been underplanted with conifers.

In the limestone areas, patches of developing scrubland can be seen. The problem of maintaining areas of open grassland and examples of scrubland is encountered here. Some areas need to be managed in order to conserve the grassland species and others left to evolve naturally. Research into forms of management is at present in progress, but in order to study the problem it is necessary to have experimental areas and control plots which are left to evolve naturally. If sufficient areas cease to exist then it is impossible to find a solution to managing the few relict patches.

Another habitat which has been drastically reduced is that of the peatland. E. P. Shirley in his 'History of County Monaghan' published in 1879 states:

'It would appear by ancient surveys that the morasses and bogs in this county were at one time very considerable; they have of late years so greatly decreased (being cut out and turned into meadows), that the want of fuel is being very seriously felt.'

Very few areas of peatland remain. The only extensive area is above 1,000 feet on Slieve Beagh. Below this, the mountain is afforested or is sown grassland. Although it is unlikely that the whole hillside will be planted, owing to the adverse climatic conditions for tree survival, as much as possible of the present blanket peat should be left intact, to serve as an ecological example of this type of habitat.

The threat of drainage in Monaghan is a remote problem because of the numerous small loughs and the interposing drumlins. But recently the effect of effluents from farms, factories and houses has been brought to our attention by the algal blooms manifested as a thick green scum on the water surface, the decrease in the oxygen content of the water, and hence the death of many fish. Lough Naglack and Lough Egish are two such examples. The need for better sewerage systems, control of fertilizer run-off and discharge of industrial waste is very apparent. Algal blooms do not result from one large discharge of effluent into a water system, it is the gradual enrichment of the water over a number of years which finally causes the scum to form and the water to become deoxygenated. The result of ignoring sources of pollution has now been thrust back to us by the environment and it is now that action must be taken before the situation becomes irreversible.

Continual pressure from grazing or trampling can result in soil erosion, particularly on the shallow limestone soils. Short grassland swards which are popular as picnic areas, especially around lake margins, soon show signs of wear if the same pathways are followed each time. Over-grazing has a similar effect and the additional effect of selecting out the less robust plant species, so that a few coarse resistant species are all that remain. This type of grassland is known as 'species-poor' and is of little value as grazing land or as a botanical example.

The few areas of natural woodland which are still to be found, the blanket peat of Slieve Beagh and the restricted areas of limestone grasslands, are the most vulnerable habitats in Monaghan at the present time and it is with these areas that we should be primarily concerned.

SECTION C

GENERAL INTRODUCTION

County Monaghan has a total acreage of 319,849 of which 6,617 acres are water. Lough Muckno near Castleblaney is the largest sheet of water; Lough Egish near Shantonagh, the Dromore loughs between Cootehill and Ballybay and the Bawn lake system also near Shantonagh are the other extensive areas of water. The rest of the 6,617 acres is composed of hundreds of small lakes in the hollows between the drumlins.

Many of the loughs in the limestone regions have a narrow shelf around the perimeter which is colonised by a lime-loving species, Chara (stonewort). Further in, the loughs shelve steeply. The acidic loughs are usually surrounded by Common Reed and do not have such an interesting flora.

The Ulster Canal runs right across the northern part of the county, from the border near Middletown in the east to Clones in the west. For much of its length it is filled with vegetation and has not been navigable for many years.

Geologically, Monaghan consists of several rock types which are reflected in the different topographical and vegetation patterns. At the far north and south, the upper limestone outcrops forming small knolls, many of which have been quarried. The remaining areas support patches of rich grassland or developing thorn scrub, both of which are of great ecological interest.

In the north-western corner, the sandstones, shales and grits of the Yoredale Series form the hillside of Slieve Beagh. This is the highest point in Monaghan, rising to 1,200 feet.

The central part of the county consists entirely of Silurian rocks, the land lying mainly between the 300 and 500 ft. contour. This region is less interesting ecologically, the main items of note being the reeded lough systems.

Another feature connected with the basic geology, is the series of caves to the west of Carrickmacross, in the soft limestones. Twelve caves have been described and two of them mapped in detail. Descriptions of all the caves are included in the site reports.

During the fieldwork for the preparation of this report, many new records for plant species were discovered. This is due mainly to the lack of previous botanical work in the county. Monaghan has always been considered an uninteresting botanical district, but this view originates from lack of knowledge and research rather than being based on facts. Only a short period of time in the field produced ten new county records, two of these being rare species, indicating that further searching would probably yield many more items of interest.

In the estates of Lough Fea and Glaslough are two herds of Fallow Deer, both containing a population of approximately 60 animals. They were originally imported from England and continue to breed successfully. Badger, fox, hedgehog, woodmouse, pine marten, rabbit, red squirrel and hare are other mammals which have been recorded from the county.

Very little ornithological data has been accumulated. The areas worth noting in this context are the Bawn loughs, Lough Egish and Lough Fea demesne. An atlas of Irish birds showing distribution, is in progress, but detailed studies of particular areas are needed.

Literature on items of scientific interest in County Monaghan is sparse but it is hoped that this report will provide a reasonable basis from which can be taken guidelines to further research.

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SECTION D

RATING OF AREAS OF SCIENTIFIC IMPORTANCE

This is a measure of the relative importance of areas of scientific importance.

The importance of each area is indicated in terms of the following categories:

International Importance

1. Only area of its type in Europe.
2. One of the few such localities in Europe.
3. One of a natural series in Europe.
4. Recognised international importance.
5. Specialised educational importance.

National Importance

1. Only area of its type in Ireland.
2. One of a few such localities in Ireland.
3. One of a natural series in Ireland.
4. Recognised national importance.
5. General or specialised educational importance.

Regional Importance

1. Only area of its type in province.
2. One of a few localities in Ireland.
3. One of a natural series in region.
4. Fine example of its kind.
5. General or specialised educational importance.

Local Importance

1. Only area of its type in county.
2. One of a few localities in province.
3. Fine example of its kind.
4. General educational importance.

PRIORITY OF AREAS OF SCIENTIFIC INTEREST

This is a measure of the relative urgency necessary for protection of the areas of scientific importance.

Each site is given a priority rating of A, B or C.

The rating of any area is based on a combination of the following criteria:-

- a) the importance of the area
- b) the vulnerability of the area
- c) the nature and imminence of any threats to the area.

Area	Map No. <i>P. 15</i>	Grid Reference	Rating	Priority	Scientific Interest
1. Lough Fea Demesne and environs	1 <i>P. 15</i>	H. 837.021	Regional	A	Ecological, Botanical, Geological, Ornithological. Rich limestone grassland, cave, marsh, mixed woodland.
2. Lough Naglack	2 <i>P. 21</i>	H. 856.028	Regional	B	Ecological, Botanical, Ornithological, Zoological. Habitat diversity.
3. Carrickmacross Gypsum Mine	3 <i>P. 25</i>	H. 811.052	Regional	B	Ecological, Botanical, Geomorphological. Limestone grassland, several caves.
4. Scrubland near Carrickashedoge Church	4 <i>P. 29</i>	H. 832.990	Regional	B	Ecological, Botanical. Developing scrubland.
5. Slieve Beagh	5 <i>P. 32</i>	H. 550.430	Regional	C	Ecological. Blanket peat.
6. Carrickmacross Caves	6 <i>P. 34</i>	H. 820.048	Regional	C	Geomorphological, Ecological.
7. Castleblaney Drumlin area	7 <i>P. 40</i>	H. 850.190	Regional	B	Geomorphological, Ecological. Good example of the Drumlin Belt.
8. Drumreaske Lough	8 <i>P. 42</i>	H. 643.350	Local	B	Ecological, Botanical. Limestone lough and woodland.

Area	Map No. ^{Page} wz	Grid Reference	Rating	Priority	Scientific Interest
9. Bawn Loughs	9 P. 43	H. 702.110	Local	B	Ecological, Ornithological, Botanical. Reeded loughs.
10. Creevy Lough	10 P. 48	H. 830.070	Local	B	Ecological, Botanical. Several interesting plant species.
11. Wright's Wood	11 P. 52	H. 652.323	Local	C	Ecological, Botanical. Example of ash woods near Monaghan.
12. Black Lough	12 P. 54	H. 700.117	Local	C	Ornithological, Botanical. Reeded lough.
13. Monalty Lough	13 P. 56	H. 868.028	Local	C	Ecological, Ornithological. Reeded limestone lough.
14. Spring Loughs	14 P. 59	H. 867.043	Local	C	Ecological, Botanical. Limestone lough with small peat area.
15. Rossmore Castle, Priestfield Lough	15 P. 61	H. 652.308	Local	B	Ecological, Botanical, Ornithological. Mixture of introduced and natural vegetation.
16. Quarry near Smithborough	16 P. 65	H. 627.294	Local	C	Ecological, Botanical, Geological. Silurian quarry.
17. Ulster Canal	17 18, 19 P. 68	H. 586.299 H. 642.327 to H. 629.325	Local	C	Ecological, Botanical. Refuge area.

Area	Map No.	Grid Reference	Rating	Priority	Scientific Interest
18. Tassan Lough	20 P. 75	H. 797.261	Local	C	Ecological, Botanical. Small lough surrounded by acid marsh.
19. Drumgole Lough and Quarry	21 P. 77	H. 591.193	Local	C	Ecological, Botanical.
20. Gibson's Lough	22 P. 79	H. 686.123	Local	C	Ecological, Botanical. 'Floating Marsh'.
21. Ballyhoe Lough	23 & 24 P. 81 083	H. 850.958	Local	C	Ecological, Botanical.
22. Quiglough Reservoir	25 P. 85	H. 633.355	Local	C	Ecological, Botanical, Zoological. Limestone lough.
23. Lough Ross	26 P. 87	H. 897.159	Local	C	Ecological, Botanical. Floating marsh.
24. Lough Smiley	27 P. 89	H. 817.214	Local	C	Ecological, Botanical. An example of successional development.
25. Cordoo Lough	28 P. 91	H. 732.238	Local	C	Botanical.
26. Small Lough near Dromore	29 P. 93	H. 368.188	Local	C	Ecological, Botanical. Floating marsh.

Page no.

Area	Map No.	Grid Reference	Rating	Priority	Scientific Interest
27. Glaslough	30 P.95	H. 725.415	Regional	B	Ecological, Botanical, Ornithological, Zoological. Magnificent conifers: sheltered lakes.
28. Lough Egish	31 P.98	H. 790.135	Local	B	Ornithological.

SECTION F

<u>Name of Area</u>	LOUGH FEA DEMESNE AND ENVIRONS
<u>Acreage</u>	98
<u>Grid Reference</u>	H. 837, 021
<u>Scientific Interest</u>	Botanical, Geological, Geomorphological, Ornithological
<u>Rating</u>	Regional
<u>Priority</u>	A

Description of Site.

About two miles south of Carrickmacross to the west of a road junction, are two small fields of limestone grassland which are extremely rich in varieties and numbers of orchids. Several rock outcrops provide another habitat in which uncommon species grow. A small marsh in the hollow also adds to the ecological diversity and the woodlands within the demesne itself yield several interesting species. J.C. Coleman mentions a cave - 'entrance about 2 ft. square and inside there is a sloping passage 30 ft. in length. It terminates in a chamber about 7 Ft. high with a short ascending fissure to the right.' - Kilmactrashna Cave.

The limestone areas in the county are restricted to small outcrops in the south and in the N.W., and so good examples of a limestone flora and fauna are relatively restricted. This area near Lough Fea Demesne is of outstanding botanical interest even though it is small in extent. Such is the abundance of species, that it is worthy of conservation.

On the rock outcrops Bromus erectus (upright Brome) is found on the East-facing slopes. This is a rare species in Ireland and this siting represents a new county record. Herbaceous species in flower include -

<u>Chrysanthemum leucanthemum</u>	(Ox-eye Daisy)
<u>Hieracium pilosella</u>	(Mouse-ear Hawkweed)
<u>Hypericum pulchrum</u>	(Beautiful St. John's Wort)
<u>Lotus corniculatus</u>	(Bird's-foot Trefoil)
<u>Pimpinella saxifraga</u>	(Burnet Saxifrage)

Small bushes of Rosa canina (Dog Rose) and Crataegus monogyna (Hawthorn) are scattered on the hillocks.

The surrounding grassland is dominated by Briza media (Quaking Grass), Sieglingia decumbers (Heath Grass), and Carex flacca (Glaucous Sedge). Flowering herbaceous species include:-

<u>Anthyllis vulneraria</u>	(Kidney Vetch)
<u>Antennaria dioica</u>	(Pearly Everlasting)
<u>Euphrasia nemorosa</u>	(Eyebright)
<u>Linum catharticum</u>	(Fairy Flax)
<u>Prunella vulgaris</u>	(Self Heal)

Throughout the grassland are hundreds of Fragrant and Common Spotted Orchids. Five species of orchid were recorded altogether.

The wet hollow shows vegetational zonation. Three zones can be distinguished -

- a) Outer area dominated by Filipendula ulmaria (Meadowsweet)
- b) Middle zone with Potentilla anserina (Silverweed) as the dominant species.
- c) Central zone, essentially a sedge community with Carex nigra and Carex vesicaria.

In the very wet areas grow Baldellia ranunculoides (Lesser Water Plantain) and Potamogeton natans (Common Pondweed) and Oenanthe aquatica, (Fine-leaved Water Dropwort).

The Lough Fea woods consist mainly of magnificent beech trees, about 120 feet in height, together with some Ash, Scots Pine, Larch, Sycamore and Oak. The ground flora along the eastern boundary is a complete sward of Mercurialis perennis (Dog's Mercury) which is rare in Ireland. It is introduced in most of the localities as it is here, and native in very few areas. Further into the demesne Birch trees and conifers replace the beech.

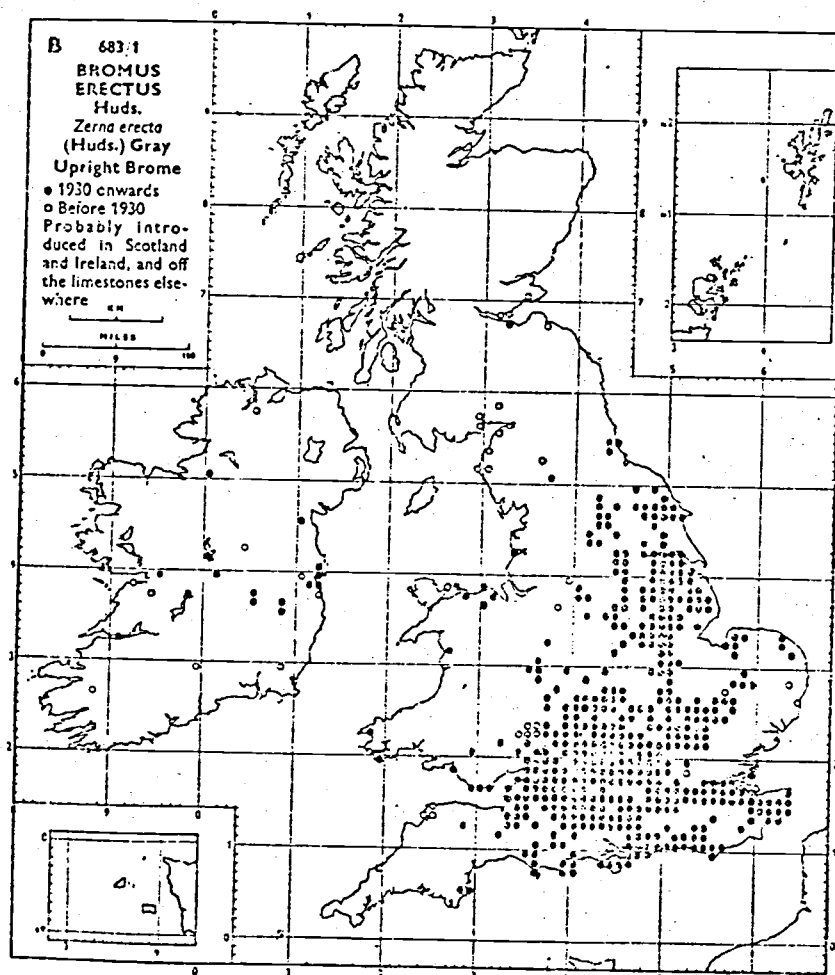
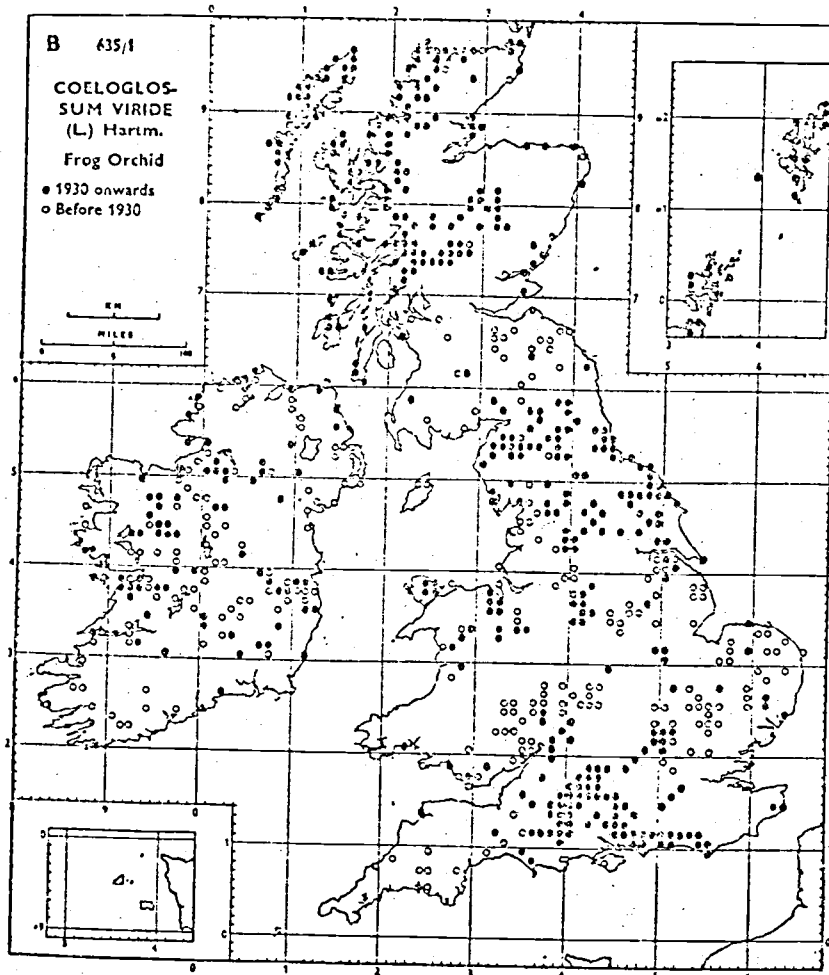
Among the more uncommon breeding birds are Blackcaps and Jays, but the area in general holds most of the common species.

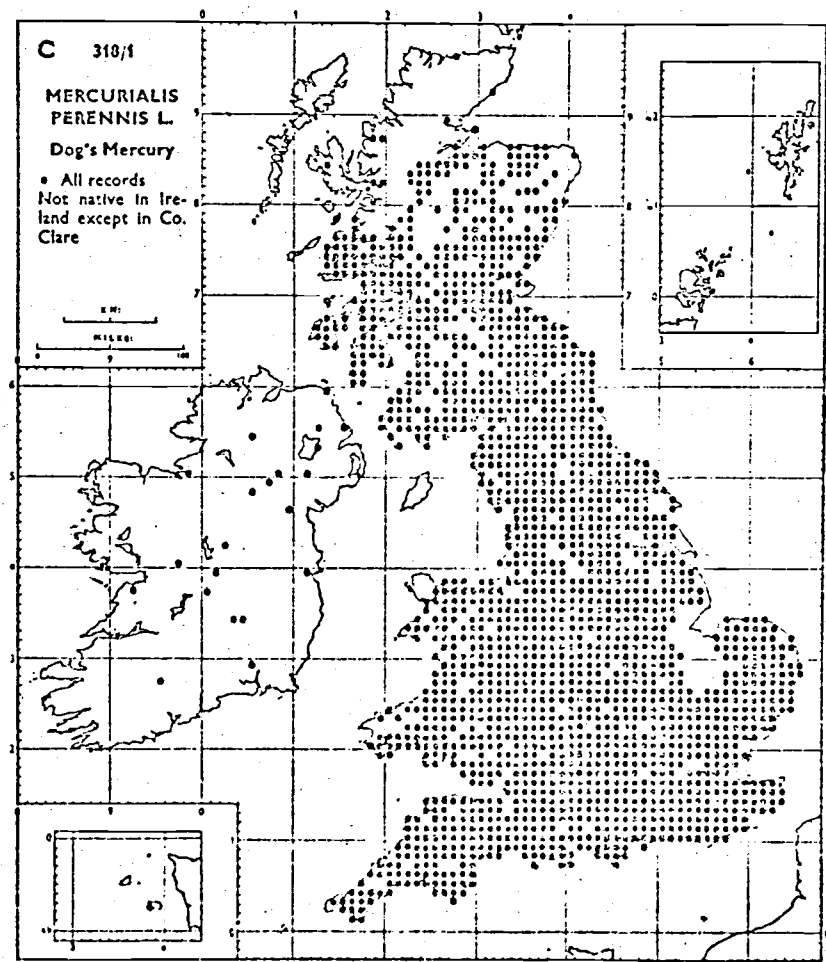
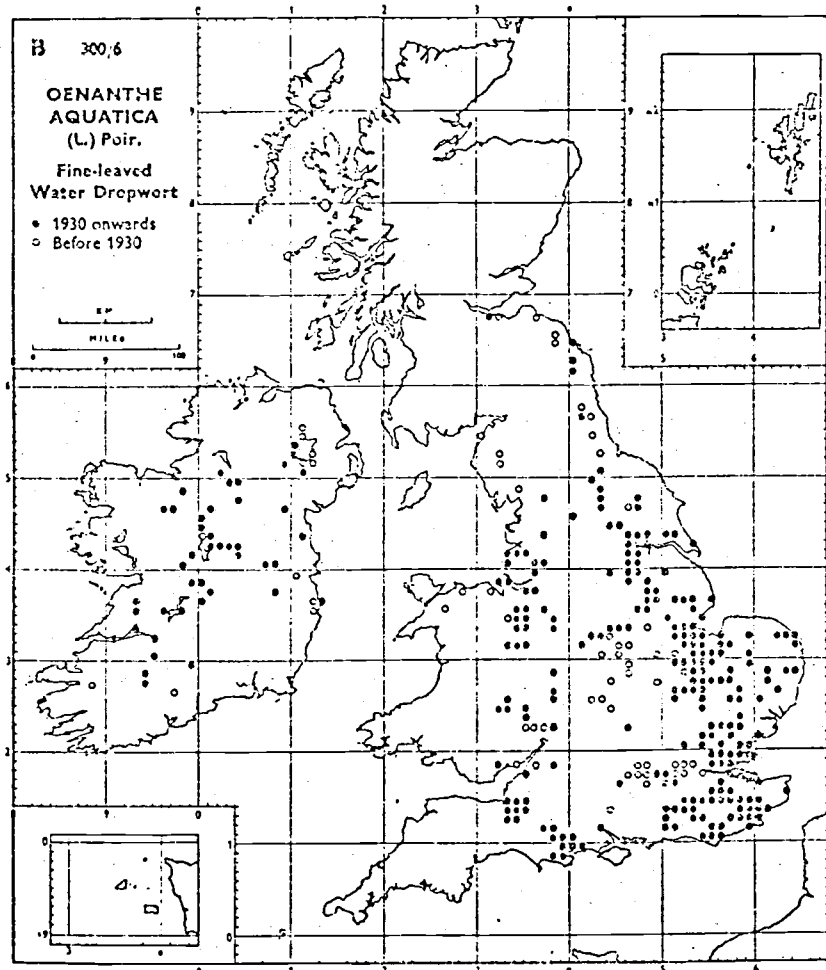
Threats to the Area

New bungalows are being built nearby the grassland area and several caravans are sited along the roadside. The Lough Fea demesne itself is unlikely to be threatened.

Recommendations

Because of the richness of the grassland and its limited extent within the county, a Conservation Order for the area is recommended.





<u>Name of Area</u>	LOUGH NAGLACK
<u>Acreage</u>	62
<u>Grid Reference</u>	H 856,028
<u>Scientific Interest</u>	Ecological, Botanical, Ornithological and Zoological
<u>Rating</u>	Regional
<u>Priority</u>	B

Description of Site

The most interesting part of the area is at the North-eastern end where a marsh and small limestone slope are enclosed by two areas of woodland. Most of the lough is fringed by trees and to the south-east is the Hotel Nuremore in front of which is a golf course stretching down to the lake-shore. One small, wooded island, situated in the centre of the lough provides a nesting site for a family of herons.

The woodlands of the north and east sides are planted. They are mainly beech with some sycamore, conifers and laurel.

Although the limestone grassland is very restricted, the plant community is very rich, being a fairly open sward with Briza media (Quaking Grass) the dominant grass. A wild species of flax found there during this visit represents a new inland station and its most northerly situation in Ireland.

Nearby this patch of grassland is a marsh with numerous inflorescences of the Common Spotted Orchid (Dactylorhiza fuchsii) and the sedges Carex disticha, Carex hirta and Carex rostrata.

Previous records of aquatic species from the lough include several

Characeae or stoneworts:-

Chara aspera var. desmacantha

Chara contraria

Chara fragilis var. capillacea

Chara hispida

Chara hispida var. rudis

Chara polycantha

This family of algae are usually found in limestone lakes such as Lough Naglack. Zanichella palustris (Horned Pondweed), a rare species in Ireland, has also been recorded from the North-eastern part.

Several bones of the Irish Giant Deer (Cervus giganteus) have been found in the mud of the lough.

The lough would make a good educational area, having several different ecological habitats and being within easy reach of Carrickmacross and Castleblaney.

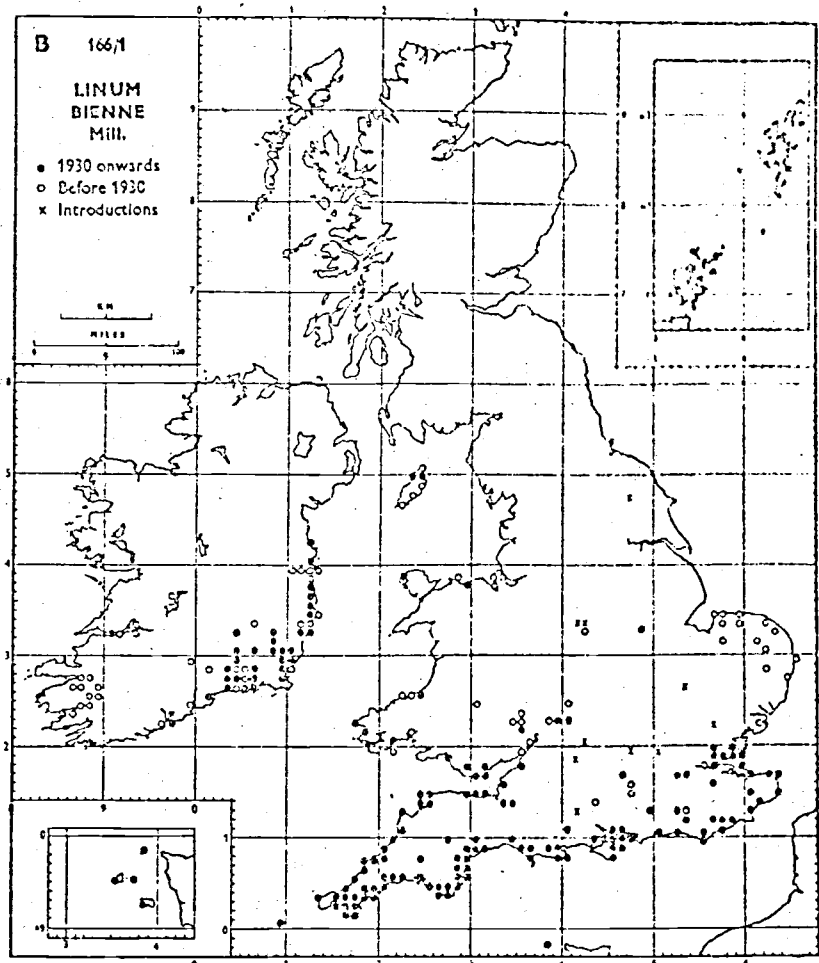
Threats to the area

The lough is bordered by secondary roads to the north, south and east. The Hotel Nuremore grounds and a golf course are to the west. Although further development may take place the woodland and shoreline vegetation of the lough should remain as they add to the amenity value of the area.

Pollution of the lough in recent years has resulted from organic enrichment and the fauna of the lough has been seriously affected.

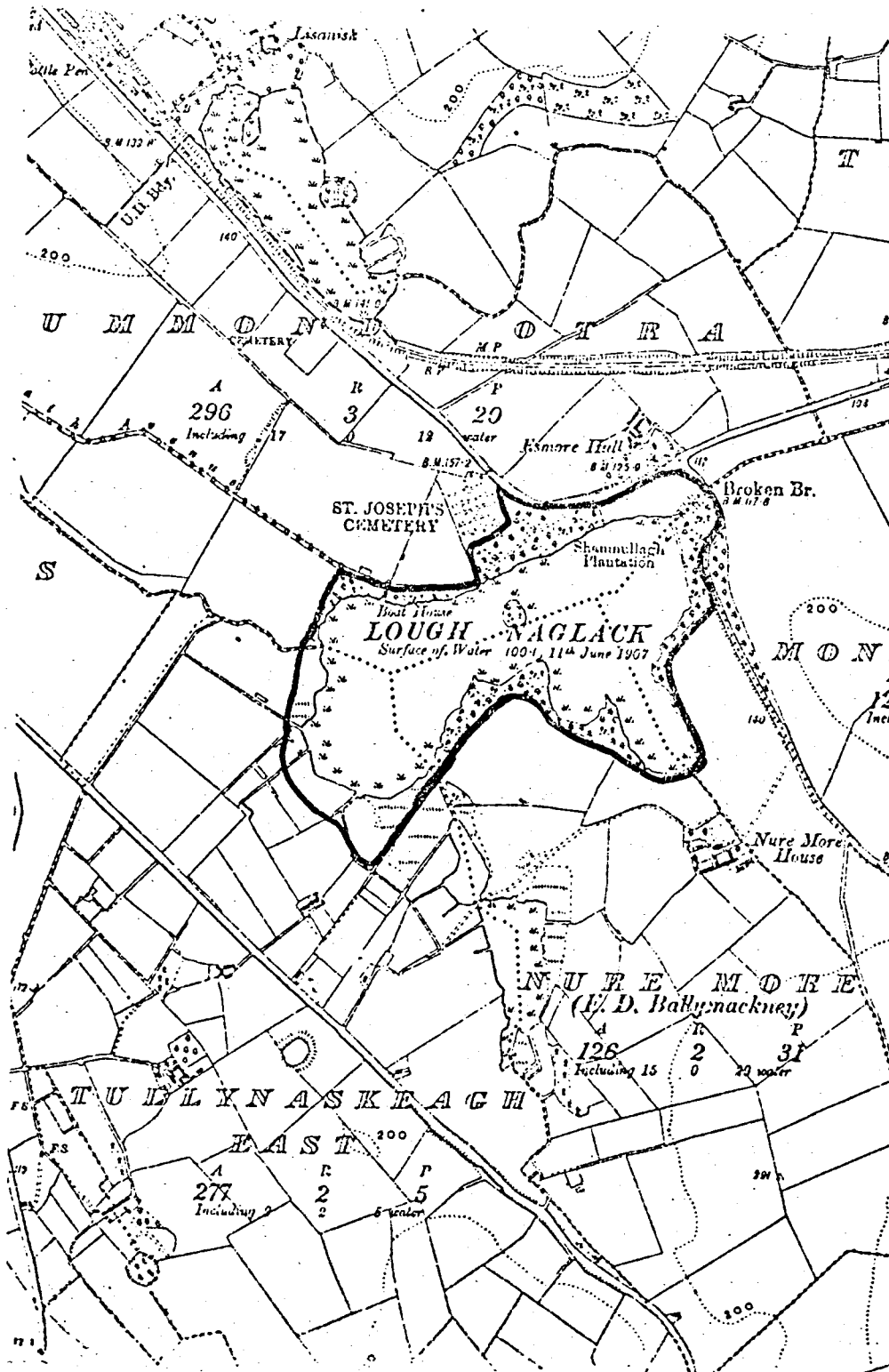
Recommendations

General planning control for the area is needed and an investigation of the sources of pollution. Control of effluent in the district is obviously necessary.



MAP SHOWING AREA OF SCIENTIFIC INTEREST — 2

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	CARRICKMACROSS GYPSUM MINE
<u>Grid Reference</u>	H. 311, 052
<u>Acreage</u>	19
<u>Scientific Interest</u>	Geomorphological, Botanical, Ecological
<u>Rating</u>	Regional
<u>Priority</u>	B

Description of Site

The mine is now disused and the entrances are blocked up. The rock outcrops and the surrounding grassland are of botanical interest.

The grassland is dominated by Briza media (Quaking Grass) and has several uncommon species growing in it.

<u>Orobanche minor</u>	(Lesser Broomrape)
<u>Gentianella amarella</u>	(Autumn Felwort)
<u>Geranium columbinum</u>	(Dove's-foot CranesBill)

There are two caves in this small area. Both are described by J.C. Coleman in 'Caves of Ireland'.

1. Puthewarntagh is a steep drop surrounded by a circle of scrub in the grassland to the south of the quarry.

Coleman describes it as - 'a large conical hollow above 30 feet deep and the stream from Lugadadorris flows into it through an opening 7 feet wide and 3-4 feet high.

The stream divides and one branch flows across the pit into fissured limestone. The other branch cascades into a light, boulder-filled passage which can be followed for 75 feet to a chamber, where the stream slides off rapidly through a horizontal slot.

2. Lugadadorris is a large irregular hollow with two entrances or 'doorways' leading down to a stream passage. A pool below is used as a well by the

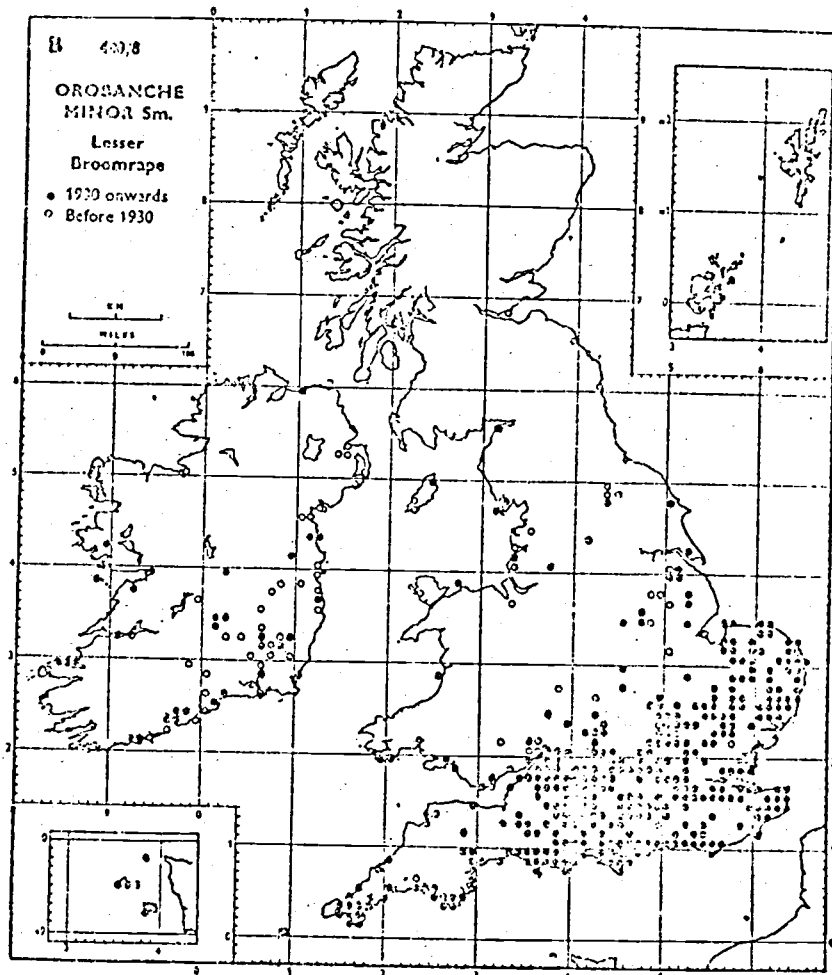
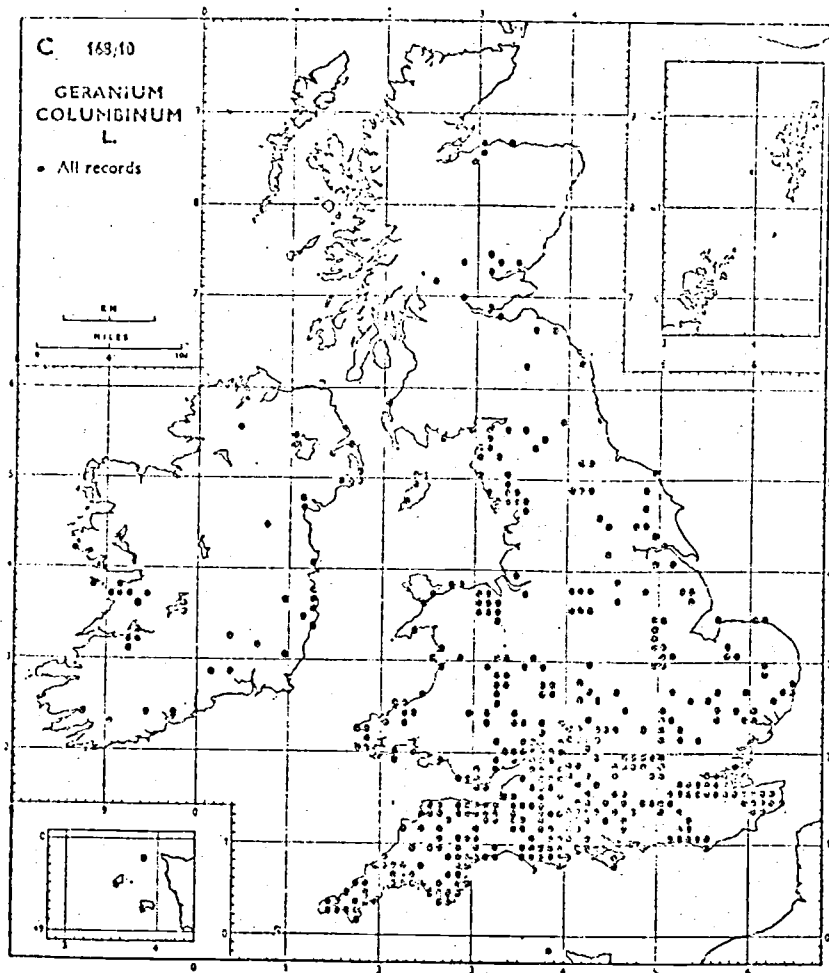
farmhouse immediately north of the cave. Upstream the cave can be explored for 188 feet to a point where a rock is a 'skylight' and an upward climb of 20 feet leads out into the vegetable garden of the farmhouse. The downstream passage from Lugadadorris is a fine gallery 4-7 feet high through which the stream meanders. There is extensive scalloping in the same direction as a waterflow and some dripstone is displayed. Towards the end, the passage becomes a 2 ft-high bedding cave, and at a point 370 feet from Lugadadorris, emerges into the open pit called Putherwarntagh.

Threats to the Area

None apparent.

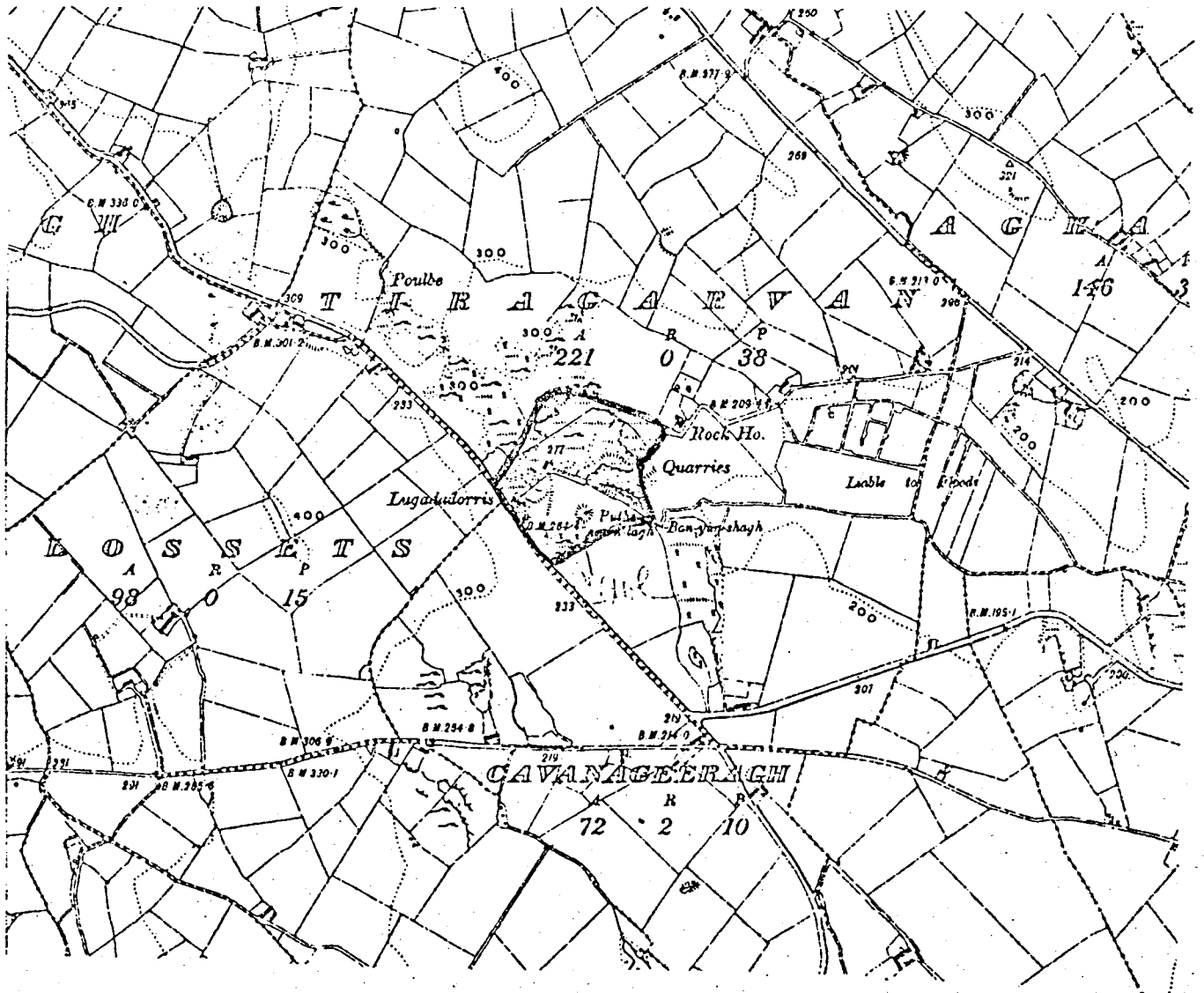
Recommendations

General planning control for the area should be considered.



MAP SHOWING AREA OF SCIENTIFIC INTEREST — 3

Scale: 6 inches to 1 Mile



<u>Name of Area</u>	SCRUBLAND NEAR CARRICKASHEDOGE CHURCH
<u>Grid Reference</u>	N. 832. 990.
<u>Acreage</u>	29
<u>Scientific Interest</u>	Botanical, Ecological
<u>Rating</u>	Regional
<u>Priority</u>	B

Description of Site

Many small limestone outcrops are to be found around the church. Parts are still open grassland, but bushes of hawthorn and blackthorn have invaded much of the area. Later stages of scrub colonization can be seen to the north of the church, where ash and hazel are the main species. Several small quarries are still being worked to the north-west.

The grassland itself is fairly species rich with 10 grasses and 25 herbaceous species. Those worthy of note are: -

Thymus drucei (Wild Thyme) which is uncommon inland and certainly rare in Co. Monaghan.

Anthyllis vulneraria (Kidney Vetch) again uncommon in Monaghan.

Gentianella amarella (Autumn Felwort) uncommon.

Platanthera chloranthera (Butterfly Orchid) a local species, i.e. restricted in its distribution within areas.

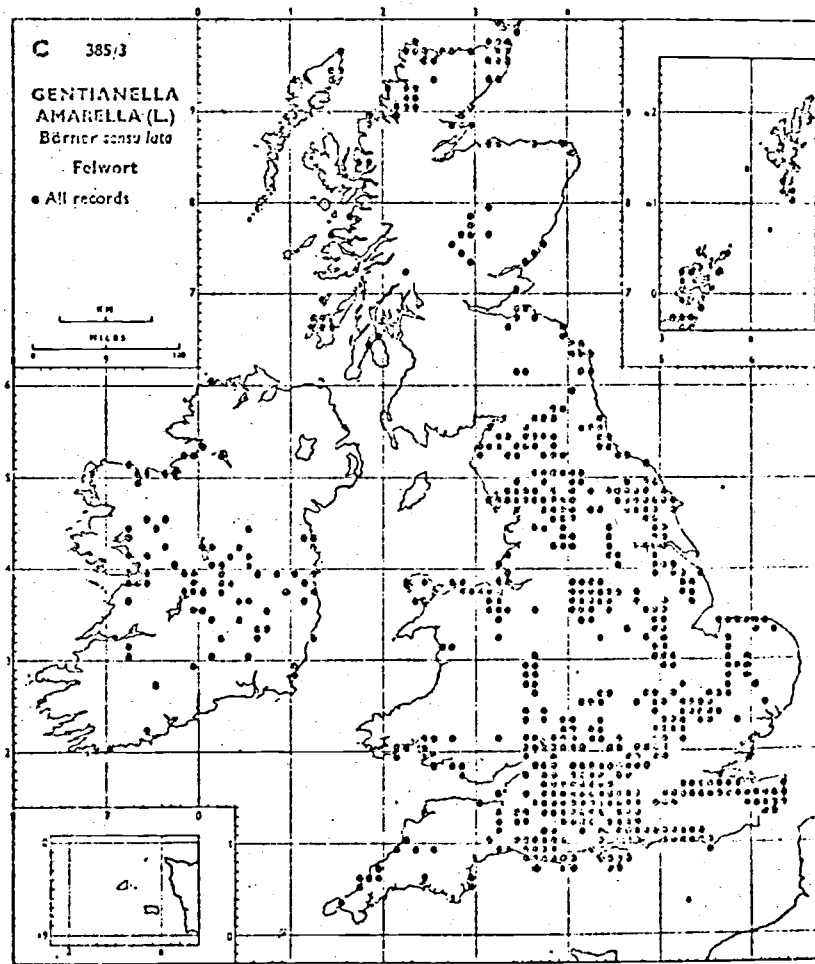
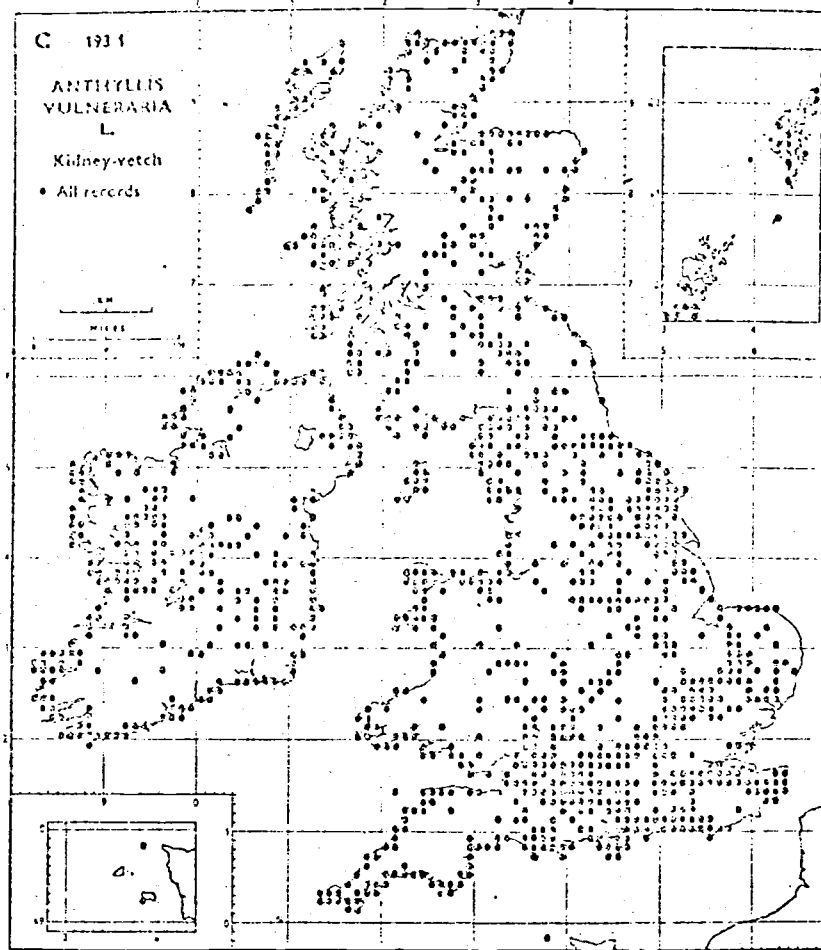
There are relatively few areas of limestone grassland within the county and very few examples of developing scrubland. As such, this is a good example.

Threats to the Area

Quarrying in the area would destroy the existing vegetation, but it seems unlikely to be extensive. A new bungalow is being build on one area of grassland by the roadside - the construction of more houses to the south would destroy most of the developing scrubland.

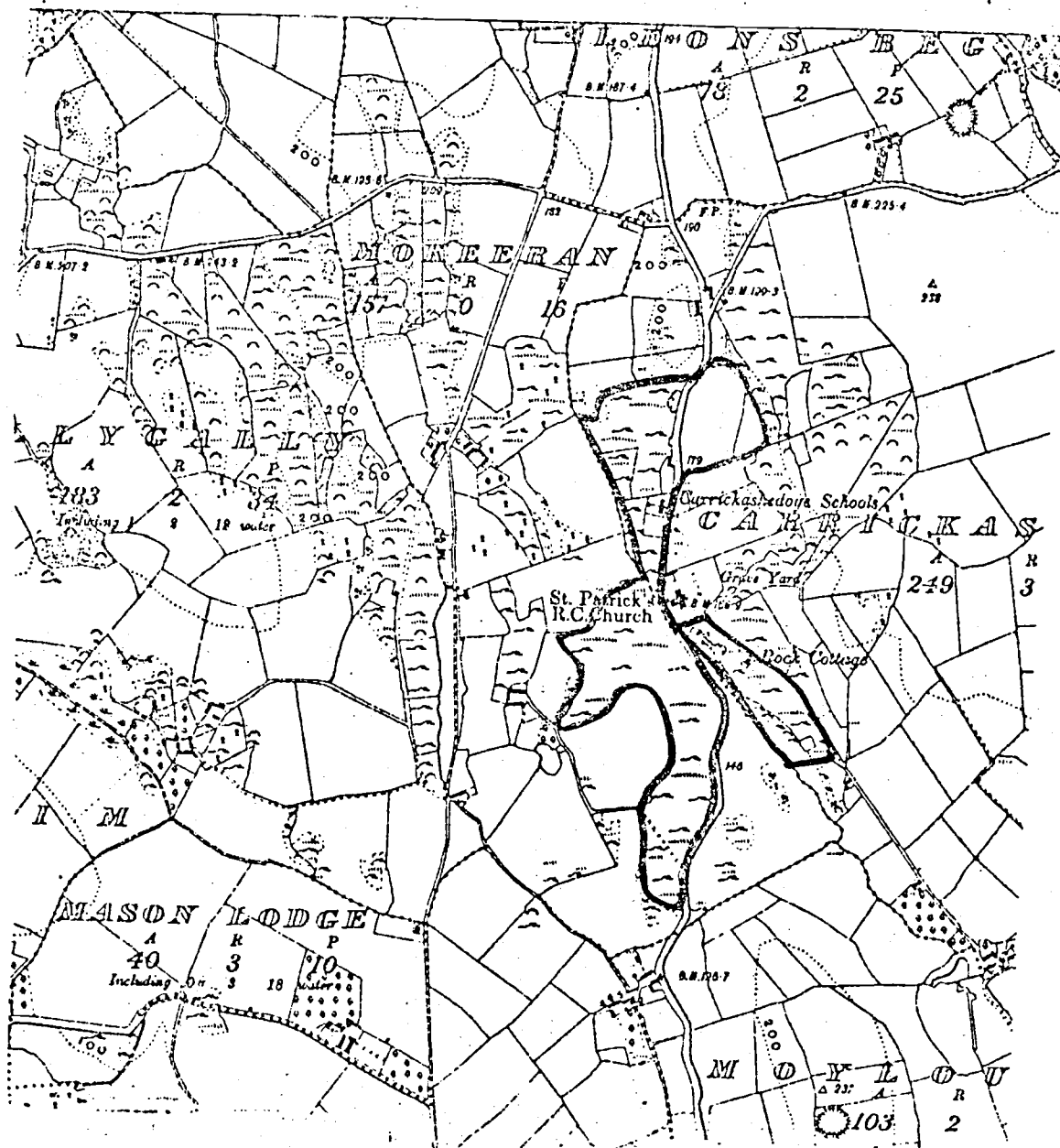
Recommendations

General planning control is necessary for the area.



MAP SHOWING AREA OF SCIENTIFIC INTEREST — 4

Scale: 6 inches to 1 mile



<u>Name of Area</u>	SLIEVE BEAGH
<u>Grid Reference</u>	H. 55O. 43O.
<u>Acreage</u>	
<u>Scientific Interest</u>	Ecological
<u>Rating</u>	Regional
<u>Priority</u>	C

Description of Site

For the most part the upland is planted with conifers but above the 1,000 ft. contour line blanket peat bog exists. Areas of bog are uncommon in the county so this area is of particular interest.

Two of the many small upland loughs were investigated. Lough Meenish at 600 feet, is an elliptical lough with a narrow fringe of Phragmites communis (Common Reed) backed by Willow and Alder bushes. Surrounding the lough is rough pasture with tufts of Juncus (Rush) scattered throughout. Calluna vulgaris (Ling), Anthoxanthum odoratum (Sweet Vernal Grass), and Molinia caerulea (Purple Moor Grass) are the main species in the grassland community.

Lough More on the boundary of counties Fermanagh and Monaghan, at 601 feet, is a typical acid upland lough with no fringing vegetation and surrounded by poor grass and containing much Juncus effusus (Soft Rush). Some fields had been sown and cut for hay.

Threats to the Area

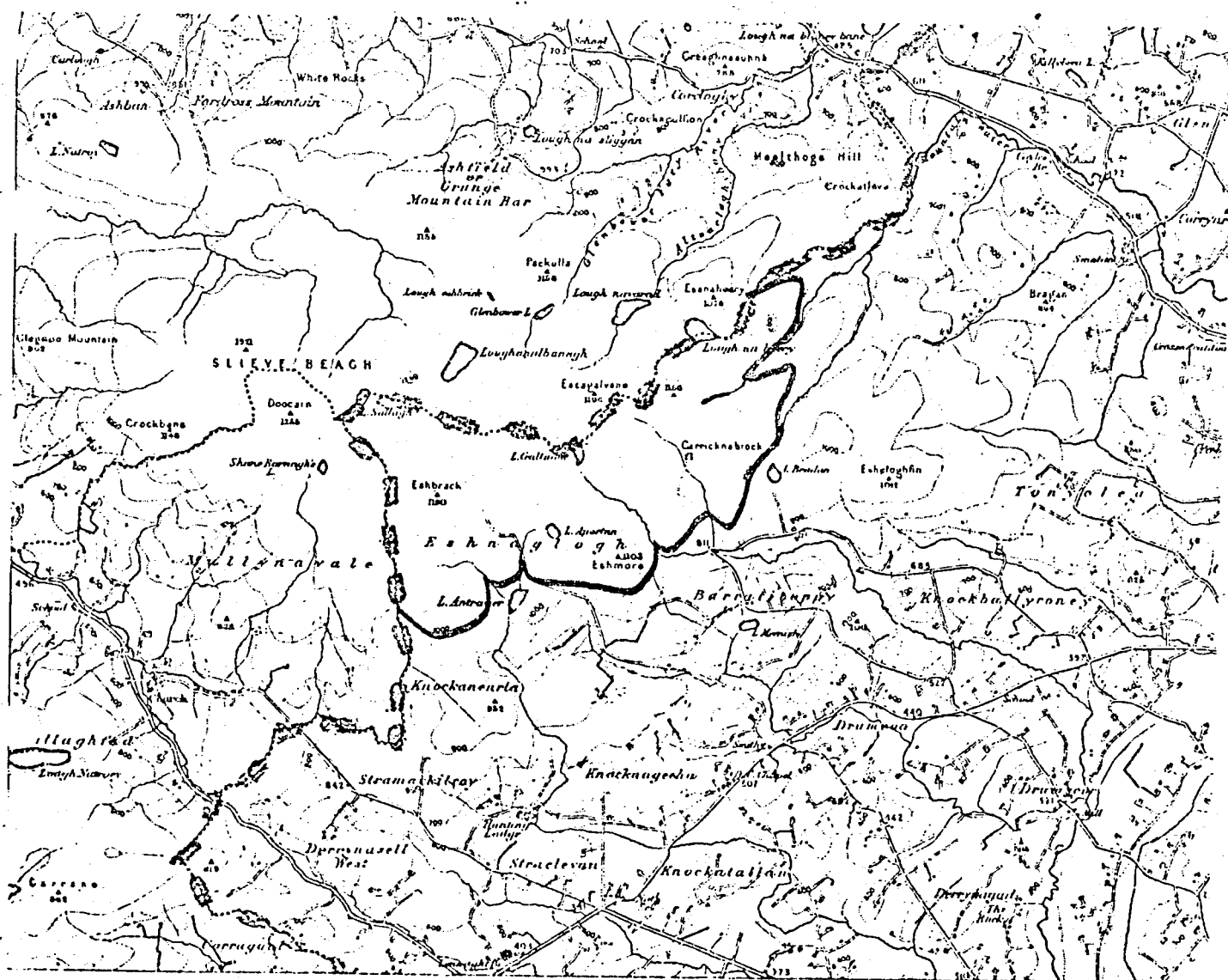
Although much of the area is afforested, the land above 1000 feet is probably too exposed for the establishment of plantations, so that the area of blanket peat is likely to remain in its present state.

Recommendations

No action needed.

Scale: 1 Inch to 1 Mile

Scale: 1 Inch to 1 Mile



<u>Name of Area</u>	CARRICKMACROSS CAVES
<u>Grid Reference</u>	Various
<u>Acreage</u>	—
<u>Scientific Interest</u>	Geomorphological, Ecological
<u>Rating</u>	Regional
<u>Priority</u>	C

Description of Site (From J. C. Coleman's 'Caves of Ireland').

The area around Carrickmacross is of Carboniferous limestone covered with drumlins. In places, knolls of rock and small escarpments show through the boulder clay, and it is probable that some of the drumlins have rock cores. The drainage is indefinite and small lakes are numerous, some of which must have subterranean discharge channels.

Twelve caves are described. Three of these are included in site descriptions already in this report and so are listed in name only.

The other 9 are:-

1. FIN McCOOL'S CAVE (Aphuca Caves) (See Map)
6 inch (Monaghan) 31. N. 0.7; W 10.2; OD 160.

This is at the base of a limestone knoll on the north side of the road to Ballybay, $1\frac{1}{2}$ miles from Carrickmacross. On top of the knoll is the site of 'Fin McCool's Table'. A small stream from lough Aphuca to the SW flows into the cave, through an opening 8 ft. wide and 5 ft. high. To the right of this is another entrance, through which the stream can be reached in the cave. The water spreads out into a wide pool inside the entrance, and then continues eastwards along a fine gallery about 7ft. wide and 10ft. high. The water was about 18 inches deep at the time of our visit (1951) and the passage was explored for about 150 ft. until the mud and water became too deep.

In 1960 and 1961 Mr. J. J. H. Miller and other pushed the exploration of this cave further. He had kindly supplied me with his unpublished survey and notes.

Miller proposes the name of Aphuca Cave for the site to include my Fin McCool's Cave and the Priest's Cave. The latter is part of Fin McCool's Cave and is a low network of dry passages to the west of the stream entrance.

Miller surveyed Fin McCool's Cave for nearly 1,500 ft. A boat was used to explore beyond my 1951 point and a number of upper level oxbows were surveyed. The passage eventually becomes too low for exploration. The cave is remarkable for the soft mud of unknown depth under the water. In a higher level mud passage a stalagmite floor covers mud and itself is covered by a thin layer of mud showing that the cave has been subjected to flooding.

2. QUARRY RISING

6 inch (Monaghan) 31. N 0.4; W11.2; OD 100.

Not possible to enter, probably the resurgence of the Fin McCool's Cave water. Between the rising and a point where the stream crosses the road to Castleblaney, this stream sinks and rises several times.

3. CREEVY CAVE

6 inch (Monaghan) 31. N 0.4; W12.3;

Miller found this cave, a system of small "hands and knees" passages extending for about 120 ft.

4. CAVE - Tiragarvan

6 inch (Monaghan) 31. N 2.2; ² 3.7; OD 300

This is a clay-cut passage about 20 ft. long, 5 ft. wide and 4 ft. high, floored with water. At the back of this passage is an opening about 1 ft. square with more water beyond. The entrance is built up with a stone doorway and is used as a well by the local farm.

The Tiragarvan Cave (See Map)

A small stream flowing from the NW beside the Shercock Road has an interesting underground course of over $\frac{1}{4}$ mile in Tiragarvan townland. There are many old quarries in the vicinity of Rock House in this townland which were examined for caves with negative results.

5. STREAM SINK

6 inch (Monaghan) 31. N 4.3; W 2.0; OD 280

The Tiragarvan stream sinks in a clay and reed-filled hollow near the road.

6. POULBE

6 inch (Monaghan) 31. N 4.0; W 2.2; OD 300

A small stream (a small drain from a reed-filled Lough) enters a clay hollow and disappears under some limestone blocks. No entry possible.

7. STREAM RISING

6 inch (Monaghan) 31. N 5.3; W 3.8; OD 210.

A stream rising 500 ft. east of Puthewarntagh, the water emerging beneath a low escarpment of limestone. From the rising the stream flows through a flood plain for approximately $1\frac{1}{4}$ miles and, before continuing to Carrickmacross, flows through the Dry Bridge.

8. DRY BRIDGE

6 inch (Monaghan) 31. N 8.0; W 10.1; OD 150

The stream enters and emerges through fissures in a limestone knoll across the valley (the distance between entry and resurgence being approximately 50 ft.). The site is a $\frac{1}{2}$ mile from Carrickmacross and the Shercock Road and a secondary road cross on the Dry Bridge.

Caves already described:-

1. KILMACTRASNA CAVE (Lough Fea Demesne)

6 inch (Monaghan) 31. S 9.9; W 11.6; OD 200.

About $\frac{2}{3}$ of a mile SSW of Carrickmacross town near the wall of Lough Fea Demesne in an old quarry. The cave entrance is about 2 ft. square and inside there is a sloping passage (running west) 30 ft. in length. It terminates in a chamber about 7 ft. high with a short ascending fissure to the right.

2. LUGADADORRIS (Carrickmacross Gypsum Mine)

6 inch (Monaghan) 31. N 5.3; W 3.0; OD 250

This is a large irregular hollow with two entrances or "doorways" leading down to a stream passage. A pool below is used as a well by the farmhouse immediately north of the cave. Upstream, the cave can be explored for 188 ft. to a point where a rock fall blocks the passage. Above this rockfall is a "skylight" and an upward climb of 20 ft. leads out into the vegetable garden of the farmhouse. The downstream passage from Lugadadorris is a fine gallery 4 to 7 ft. high through which the stream meanders. There is extensive scalloping in the same direction as the waterflow and some dripstone is displayed.

Towards the end the passage becomes a 2 ft. high bedding cave, and at a point 370 ft. from Lugadadorris, emerges in the open pit called Puthewarntagh.

3. PUTHEWARNTAGH (Carrickmacross Gypsum Mine)

6 inch (Monaghan) 31. N 5.3; W 3.4; OD 250

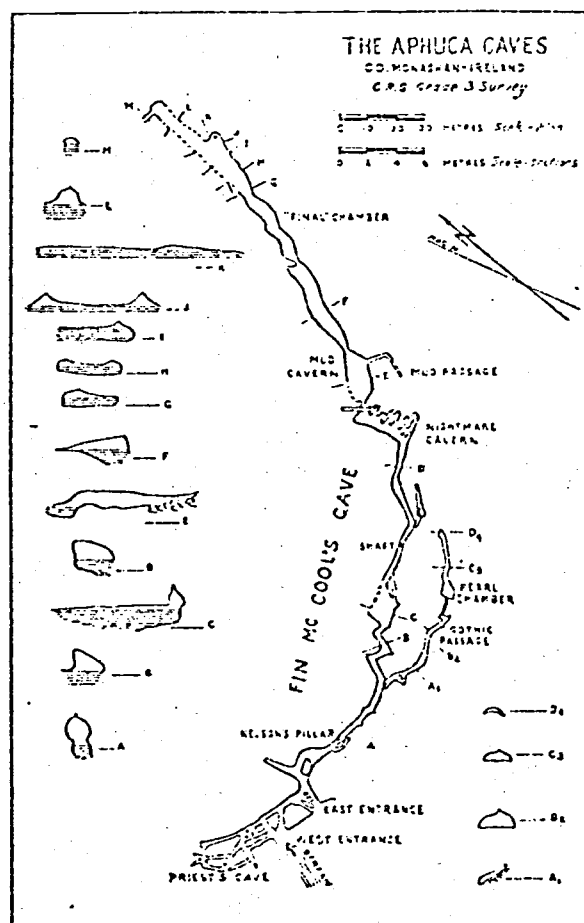
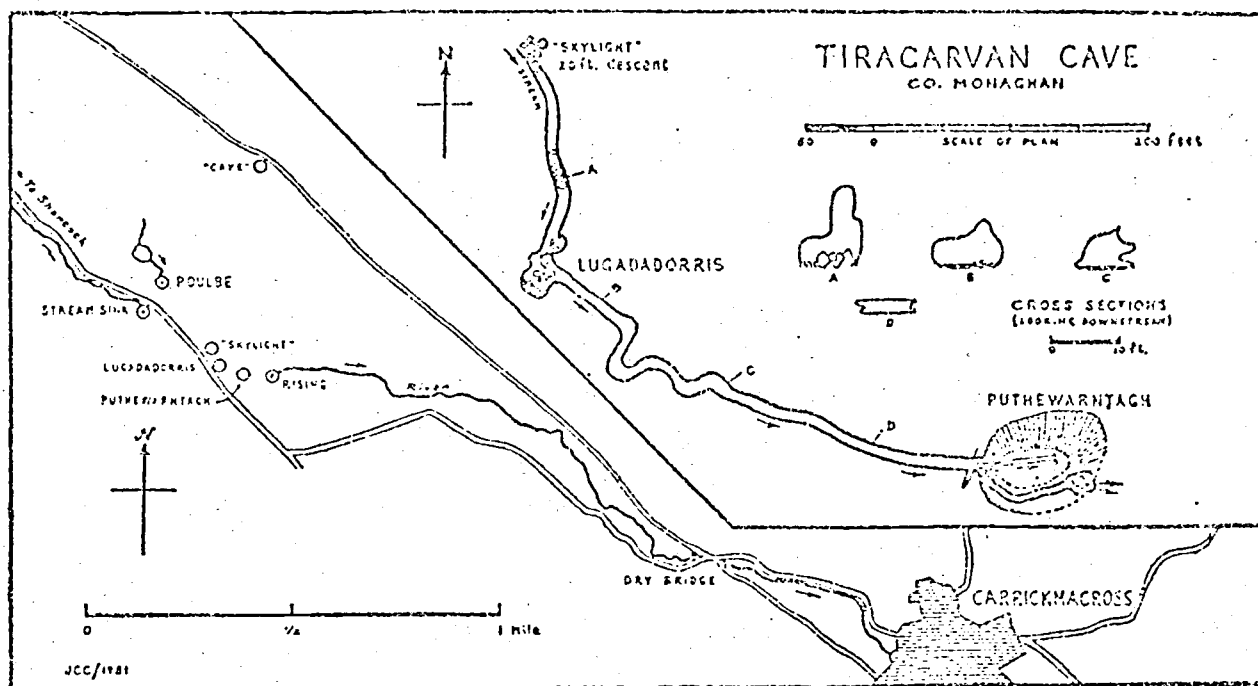
This is a large conical hollow about 30 ft. deep and the stream from Lugadadorris flows into it through an opening 7 ft. wide and 3 to 4 ft. high. The stream divides and one branch flows across the pit into fissured limestone. The other branch cascades into a tight boulder-filled passage which can be followed for 75 ft. to a chamber, where the stream slides off rapidly through a horizontal slot.

Threats to the Areas

It is unlikely that the cave areas would be disturbed except by quarrying.

Recommendations

No action needed for the caves themselves, but specific recommendations are given for several of the surrounding areas of grassland. (See separate reports included).



Sketch maps of Tiragarvan and Aphuca Caves from J. C. Coleman's 'Caves of Ireland'.

<u>Name of Area</u>	CASTLEBLANEY DRUMLIN AREA
<u>Grid Reference</u>	H. 850, 190
<u>Acreage</u>	-
<u>Scientific Interest</u>	Geomorphological, Ecological
<u>Rating</u>	Regional
<u>Priority</u>	B

Description of Site

Although most of County Monaghan comes within the Drumlin Belt the area around Lough Muckno has been chosen as a regional example. T. W. Freeman in the 'Geography of Ireland' describes the area. It is chosen not only because of its geomorphological importance but also for its scenic value.

Threats to the Area

Amenity developments around the lough are unlikely to affect the geological structure unless excavations are made.

Recommendations

General planning control is necessary for the area. The Geological Survey Office should be informed of any proposed developments.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 7

Scale: 6 Inches to 1 Mile

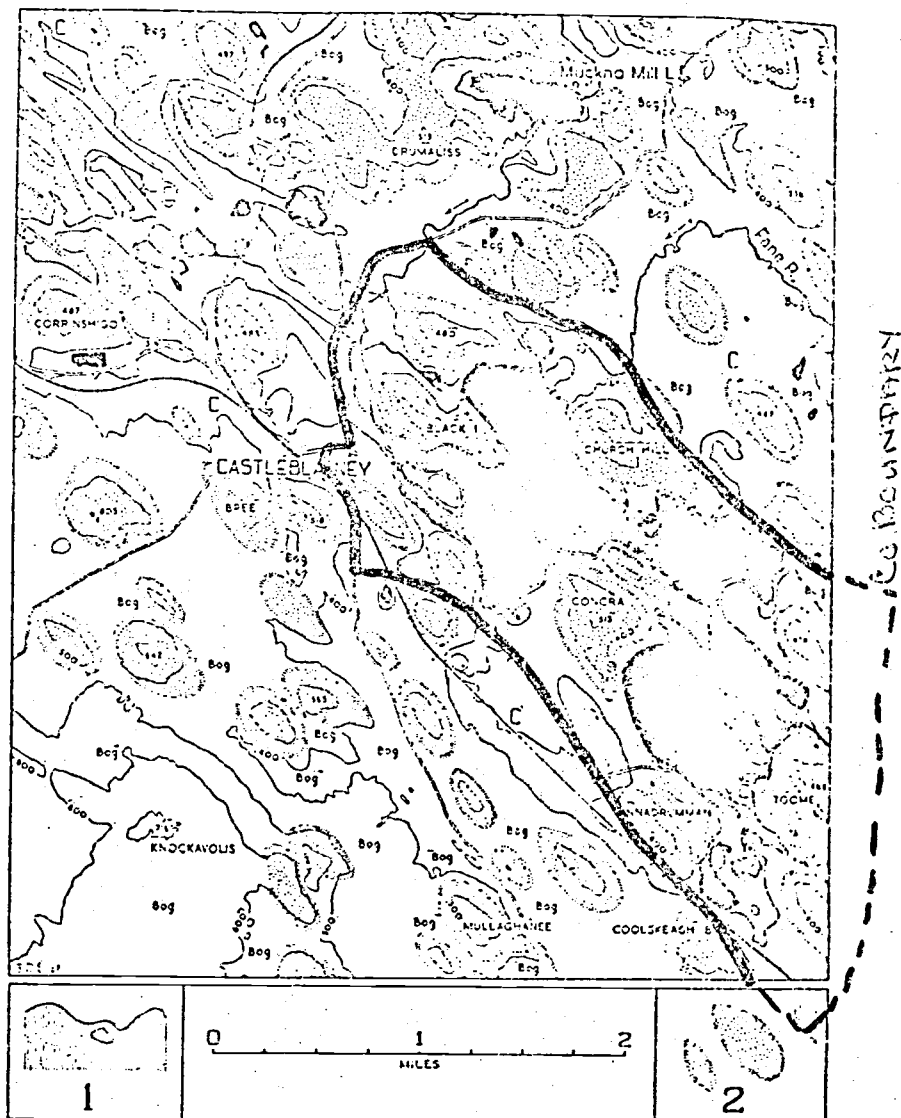


FIG. 82. THE CASTLEBLAYNEY AREA, CO. MONAGHAN

1, Area of former lake bed; 2, Drumlins; 3, Crag and tail formation.

Like many other lakes in the drumlin-drift belt, lake Muckno has been substantially reduced by sedimentation: the area of the former lake bed was 3 square miles but it is now merely 1.4 square miles. The drumlins are aligned from northwest to southeast: in some cases a number are joined to form an impacted series.

Map drawn by F.M. Syge, and originally published in 'Irish Geogr.', vol. 1, No. 4, 1917, p. 107

<u>Name of area</u>	DRUMREASKE LOUGH
<u>Acreage</u>	28
<u>Grid reference</u>	H. 643, 350
<u>Scientific interest</u>	Ecological, Botanical
<u>Rating</u>	Local
<u>Priority</u>	B

Description of site

Although a relatively small area, the lough, surrounding pockets of marshland and mixed woodland form an interesting ecological area.

The lough itself is calcareous, as can be seen from the lime-encrusted Chara or stonewort species forming a narrow shelf all around the lough edge. The presence of the Saw Sedge, (Cladium mariscus), which is a calcicole i.e. lime-loving species, also indicates the alkaline nature of the water.

Surrounding the lough are pockets of wet, marshy ground, which are colonized mainly by the Wayfaring tree (Viburnum lantana), which is presumably planted. In between these pockets are open areas dominated by sedges with the main flowering species being

<u>Angelica sylvestris</u>	(Wild Angelica)
<u>Menyanthes trifoliata</u>	(Bog Bean)
<u>Pedicularis palustris</u>	(Red Rattle)
<u>Dactylorhiza fuchsii</u>	(Common Spotted Orchid)
<u>Ranunculus lingua</u>	(Greater Spearwort)

The woodland is mixed with both conifers, deciduous trees and ornamental introductions such as Berberis vulgaris (Barberry), Rhododendron ponticum (Rhododendron) and Symphoricarpos rivalis (Snowberry).

Although many of the more unusual species here are planted, the natural loughshore vegetation is also of interest, and indeed it is the combination of the planted and natural species which add to the botanical value.

Threats to the area

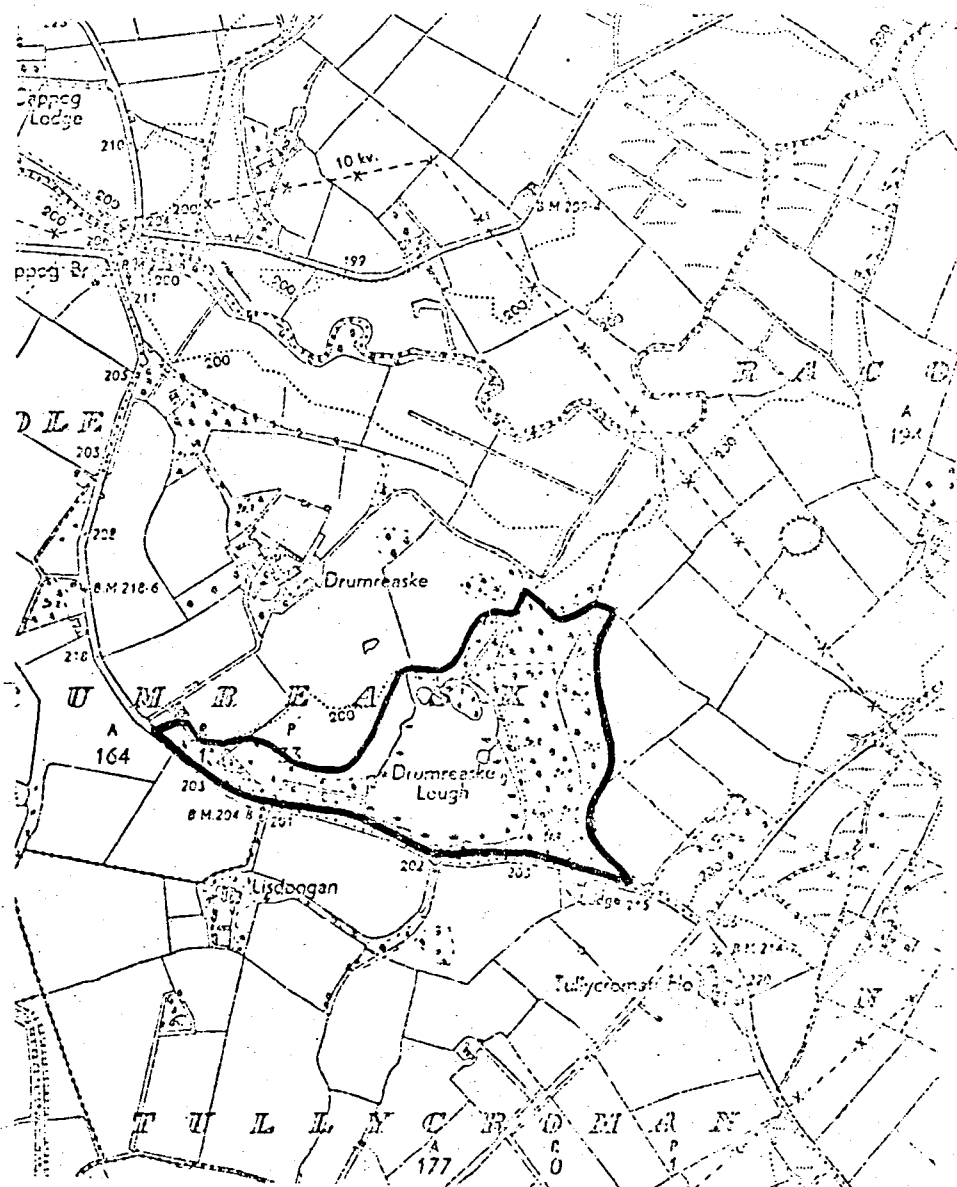
Several fishing stands are to be found around the shoreline. Anglers would appear to be the main visitors and it seems unlikely that disturbance would come from any other quarter.

Recommendations

General planning control for the area should be considered.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 8

Scale: 6 Inches to 1 Mile



<u>Name of area</u>	BAWN LOUGHS
<u>Acreage</u>	227
<u>Grid reference</u>	H. 715, 113
<u>Scientific interest</u>	Ecological, Botanical, Ornithological
<u>Rating</u>	Local
<u>Priority</u>	B

Description of site

The lake system around Shantonagh village consists of Black Lough, Lough Bawn and Lisnakillewbane Lough. Mixed woodland is scattered around Black Lough and Lough Bawn. An area of deciduous woodland, mainly Beech trees approx. 120 feet in height, but with some Oak and Sycamore, is to be found on a hillside to the east of Lough Bawn.

Lough Bawn is surrounded by a fringe of Phragmites communis (Common Reed) and has Nymphaea alba (White Water-lily) in the water. Alder and willow bushes grow round the perimeter.

The area is very sheltered and secluded with the result that numerous wildfowl are to be found there. A count on 1st March 1968 gives the following figures:-

Mallard	40
Teal	20
Tufted Duck	50
Pochard	2
Goldeneye	2
Goosander	1
Mute Swan	6
Whooper Swan	15
Great Crested Grebe	6

Few wildfowl were seen during the visit made on 3rd August 1972, but it

is mainly in the winter months that the duck congregate in such areas.
The list of wetlands of importance in Ireland grades the Bawn Loughs as B.

Threats to the area

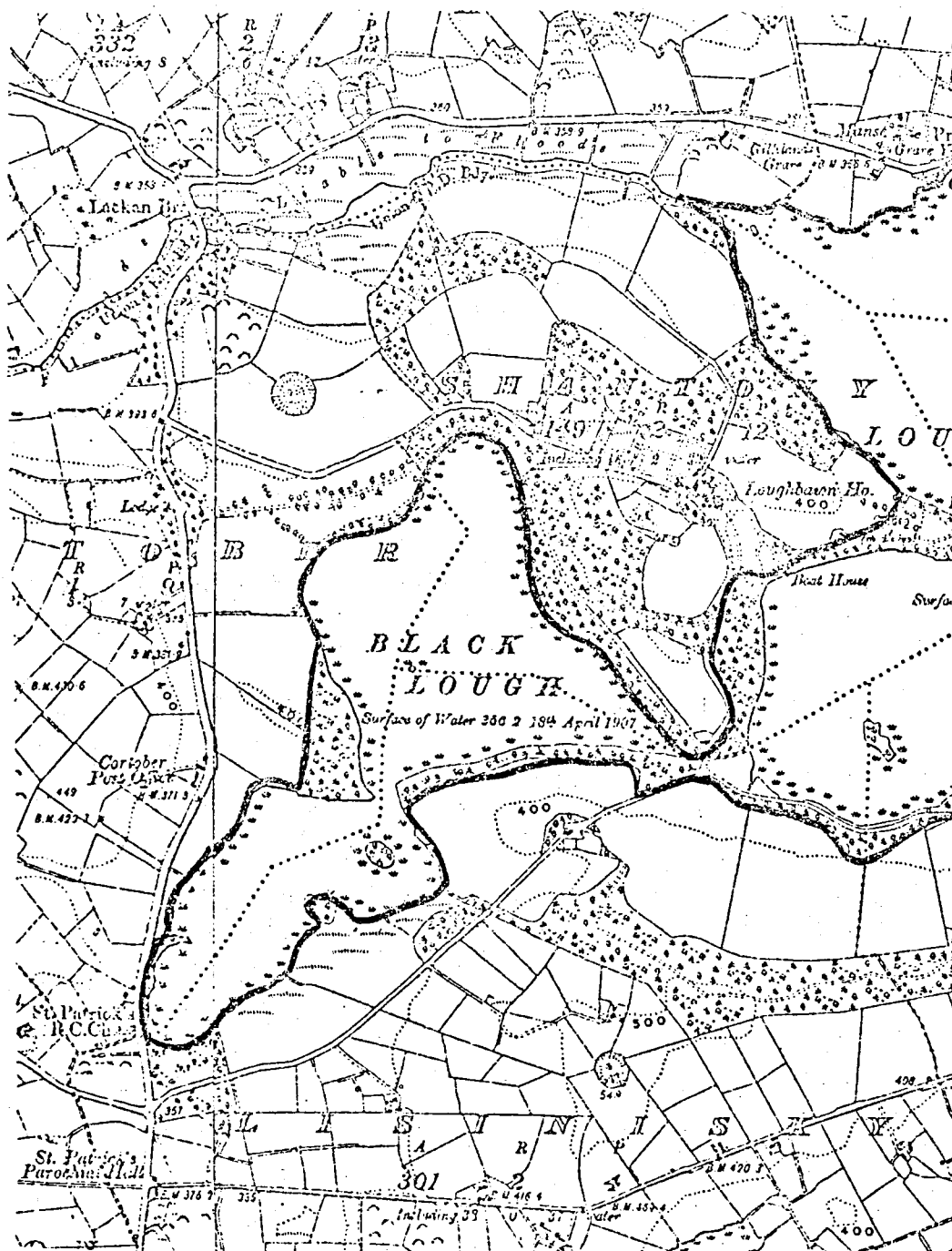
A local gun club have the shooting rights to the area and frequent shooting may disturb the wildfowl population.

Recommendations

General planning control for the whole lake system and surrounding woodlands is needed. The ecological interest of the area is derived from its undisturbed nature and in order to conserve this, it is suggested that the shooting be kept to a minimum.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 9

Scale: 6 Inches to 1 Mile



<u>Name of area</u>	CREEVY LOUGH
<u>Acreage</u>	29
<u>Grid Reference</u>	H. 830, 070
<u>Scientific interest</u>	Botanical, ecological
<u>Rating</u>	Local
<u>Priority</u>	B

Description of site

This lake is popular with anglers and picnics. The shoreline is very open and is not fringed with reed as are many of the other lakes in this area. Eleocharis palustris (Common Spike-rush) and the sedges Carex vesicaria and Carex rostrata grow in clumps around the perimeter. The floor of the lough is colonized by Littorella uniflora (Shore-weed) and two rare aquatic plant species were found in shallow water - Elatine hexandra (Waterwort) and Ceratophyllum demersum (Hornwort).

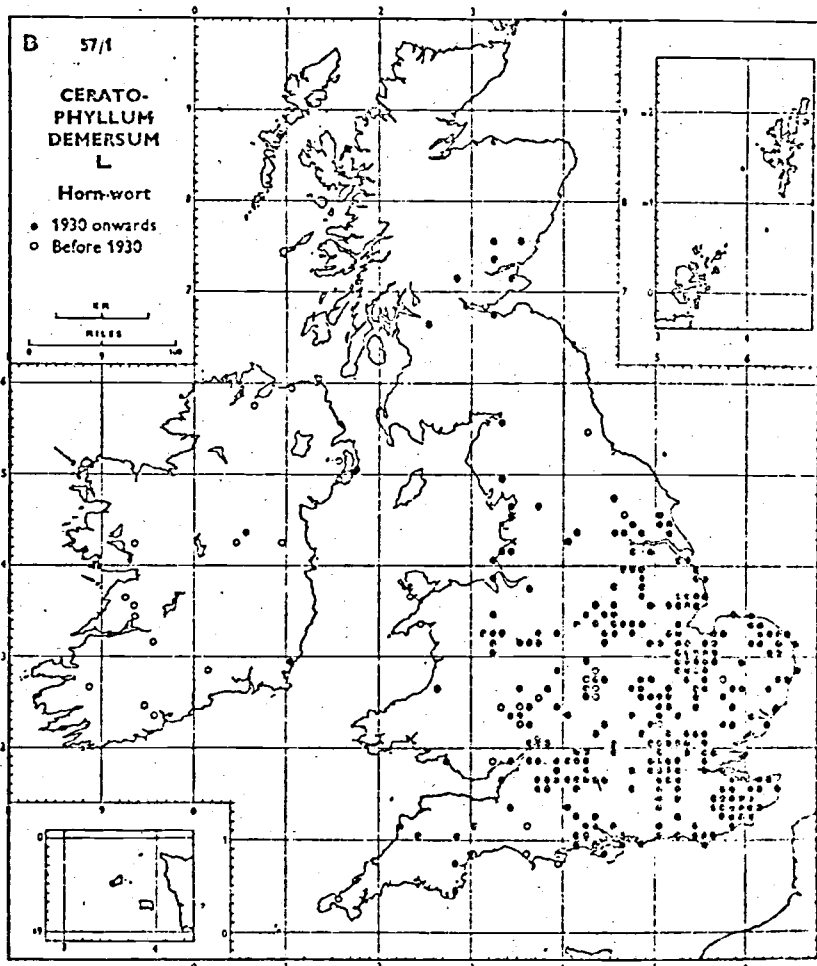
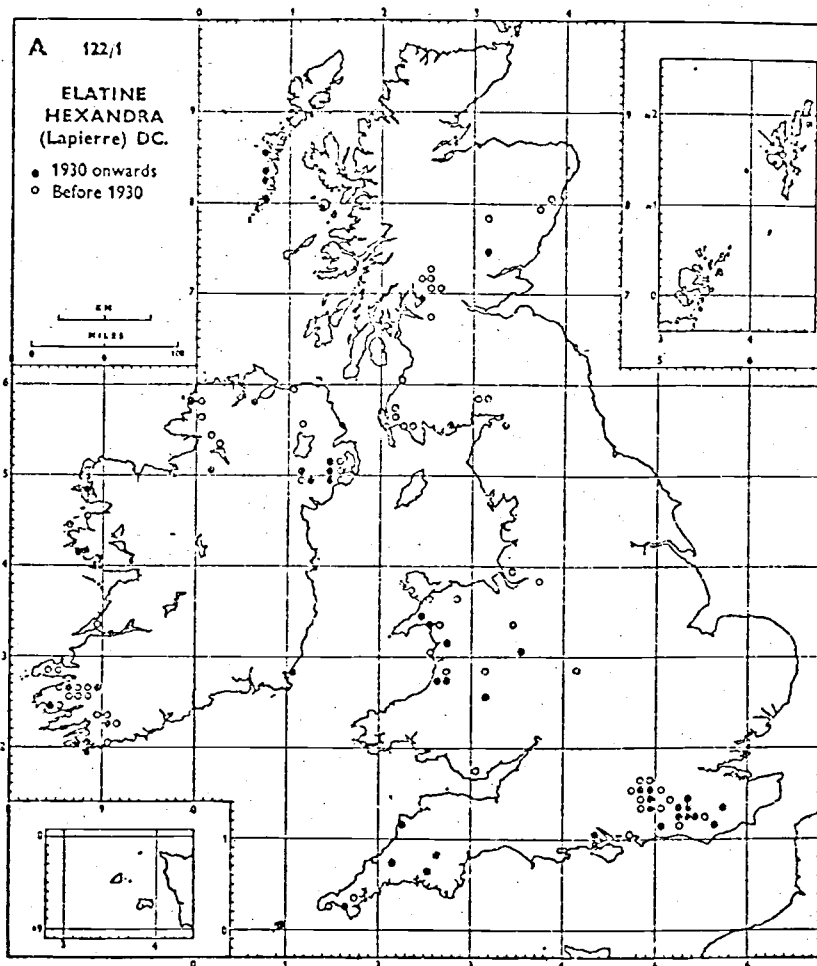
This lough is interesting because it exhibits different communities from the other lakes in the region.

Threats to the area

The lake is visited by many anglers and picnics. In some areas the vegetation has been trampled on excessively and destroyed. But access is restricted to the eastern shore and there is probably not a serious danger of the rest of the shoreline being invaded.

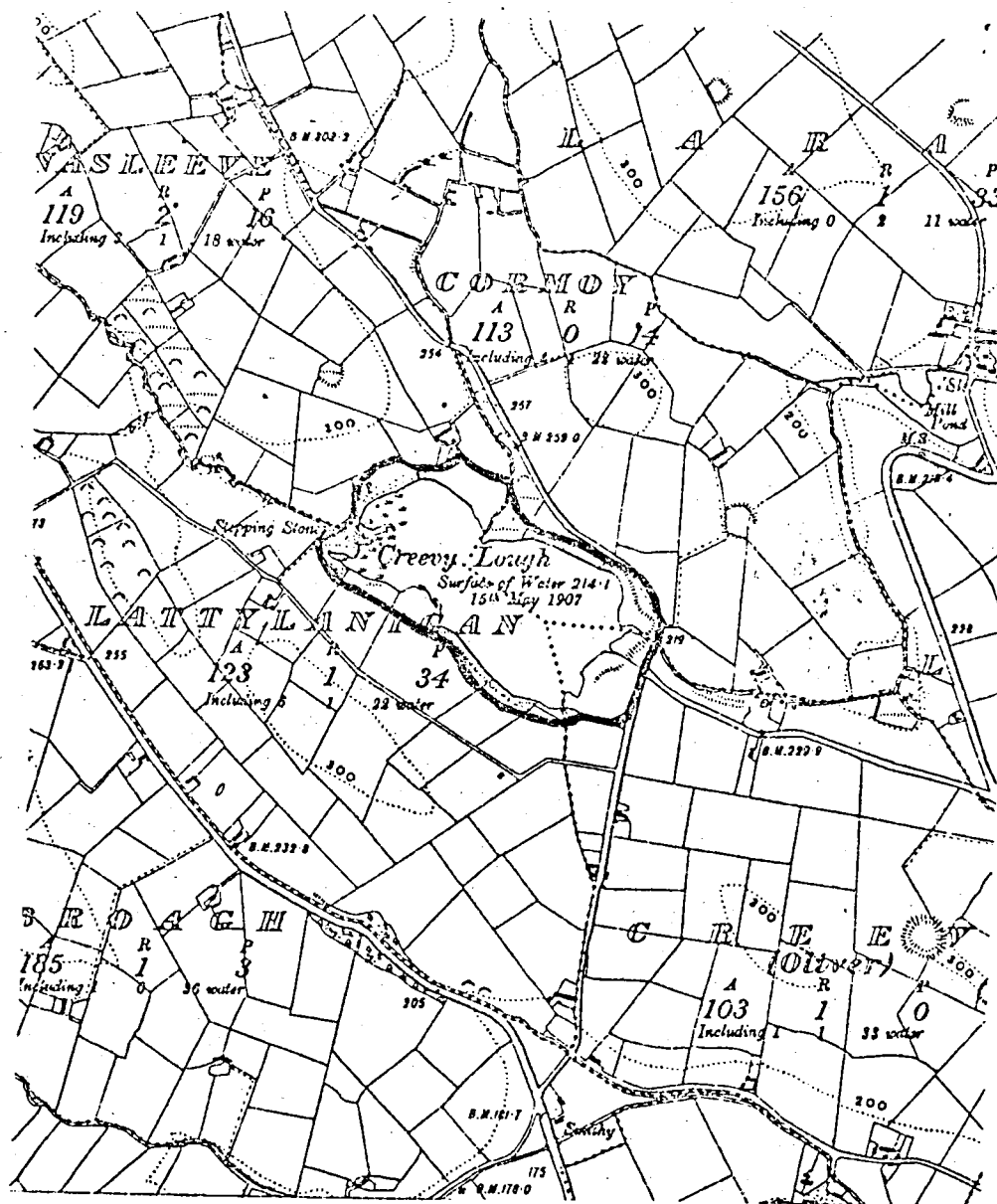
Recommendations

General planning control should be considered.



MAP SHOWING AREA OF SCIENTIFIC INTEREST — 10

Scale: 6 Inches to 1 Mile



<u>Name of area</u>	WRIGHT'S WOOD
<u>Acreage</u>	26
<u>Grid reference</u>	H. 652, 323
<u>Scientific interest</u>	Ecological, Botanical
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

To the south-west of Monaghan town are many small woodlands, usually crowning hillocks. Wright's Wood and part of Smith's Wood to the north, are an interesting mixture of very old Great Sallow trees (Salix caprea) and young Ash trees which are coppiced. The woodland is of a fairly open nature, thus enabling a reasonable ground flora to establish itself. Mosses cover the ground completely and grow on many of the older trees together with lichens. The main herbaceous species in the ground flora include

<u>Circea lutetiana</u>	(Enchanter's Nightshade)
<u>Geranium robertianum</u>	(Herb Robert)
<u>Geum urbanum</u>	(Wood Avens)
<u>Veronica chamaedrys</u>	(Germander Speedwell)

There are wire-mesh enclosures in which the coppiced ash stakes are held. Whether the ash was originally planted or is of natural origin is not known. However, the different species of trees within the woodland provide an example of different stages of colonization and as such are interesting from ecological and botanical points of view,

Threats to the area

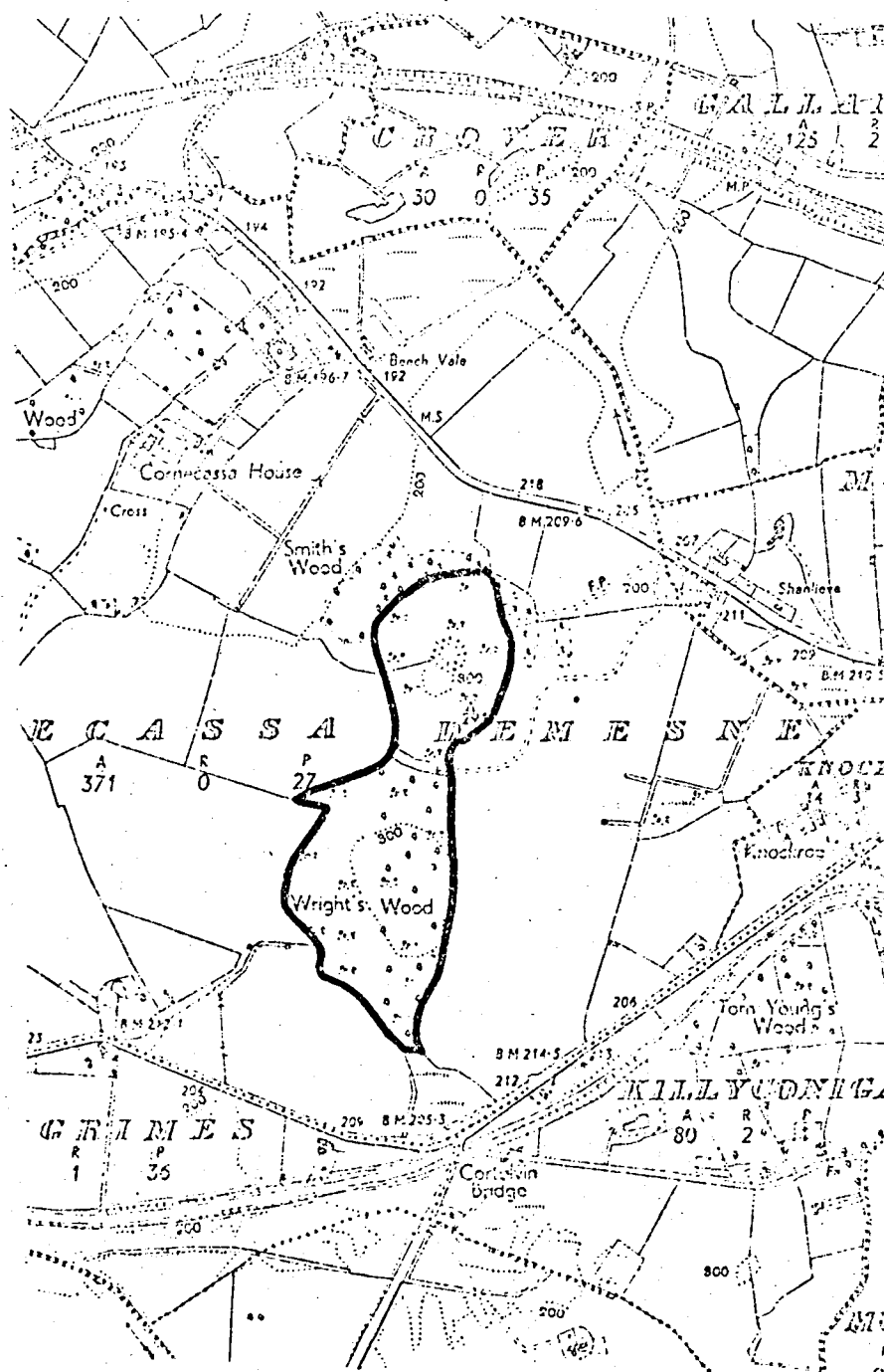
The ash trees are evidently under management, but unless all the trees are removed it is unlikely to detract from the value of the woodland as a whole.

Recommendations

No action needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 11

Scale: 6 inches to 1 Mile



<u>Name of Area</u>	BLACK LOUGH
<u>Grid Reference</u>	H. 700, 117
<u>Acreage</u>	69
<u>Scientific Interest</u>	Ornithological, Botanical
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

Black and Derrygoony Loughs are both ecologically similar. These are surrounded by reeds and willow trees which provide roosting places for the wildfowl. Black Lough has a small area of floating marsh at its northern end, bounded by the road. In the marsh Potentilla palustris, (Marsh Quinquefoil) is abundant, together with Typha angustifolia, (Bulrush) and Angelica sylvestris (Wild Angelica). The ground layer is a mixture of:-

<u>Holcus lanatus</u>	(Yorkshire Fog)
<u>Anthoxanthum odoratum</u>	(Sweet Vernal Grass)
<u>Carex rostrata</u>	(Bottle Sedge)
<u>Equisetum fluviatile</u>	(Water Horsetail)
<u>Menyanthes trifoliata</u>	(Bog Bean)

The shooting and fishing rights are preserved.

Threats to the Area

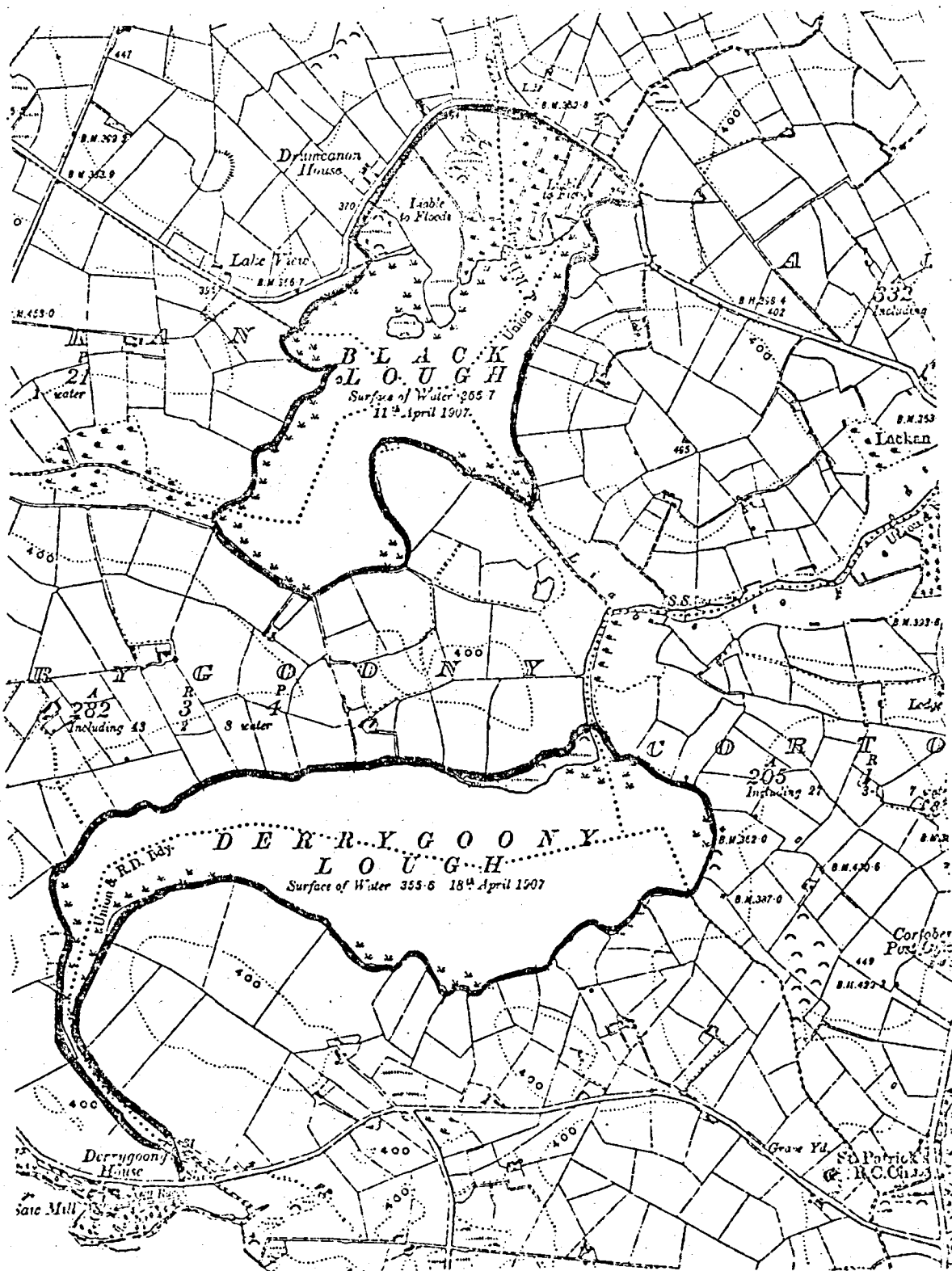
Frequent shooting would disturb the wildfowl, particularly in the breeding season.

Recommendations

General planning control is needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 12

Scale: 6 inches to 1 Mile



<u>Name of area</u>	MONALTY LOUGH
<u>Acreage</u>	80
<u>Grid Reference</u>	H. 868, 028
<u>Scientific interest</u>	Ornithological, ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

This lake is fringed with Phragmites communis (Common Reed) and with Phalaris arundinacea (Reed Canary Grass) at the open banks. Scattered willow bushes grow round the perimeter. This provides an ideal habitat for nesting wildfowl.

38 Mute Swans
2 Great Crested Grebes.
10 Coot

were counted during the visit. Although this is not a large selection of species, the number of swans alone indicate that during the winter months, this is probably an important wildfowl area. It is designated as a Bird Sanctuary.

Several uncommon aquatic plant species have previously been recorded:-

<u>Chara hispida</u>	} Stoneworts
<u>C. hispida</u> var. <u>rudis</u>	
<u>C. vulgaris</u> var. <u>longibracteata</u>	
<u>Nitella mucronata</u>	
<u>N. opaca</u>	

Threats to the area

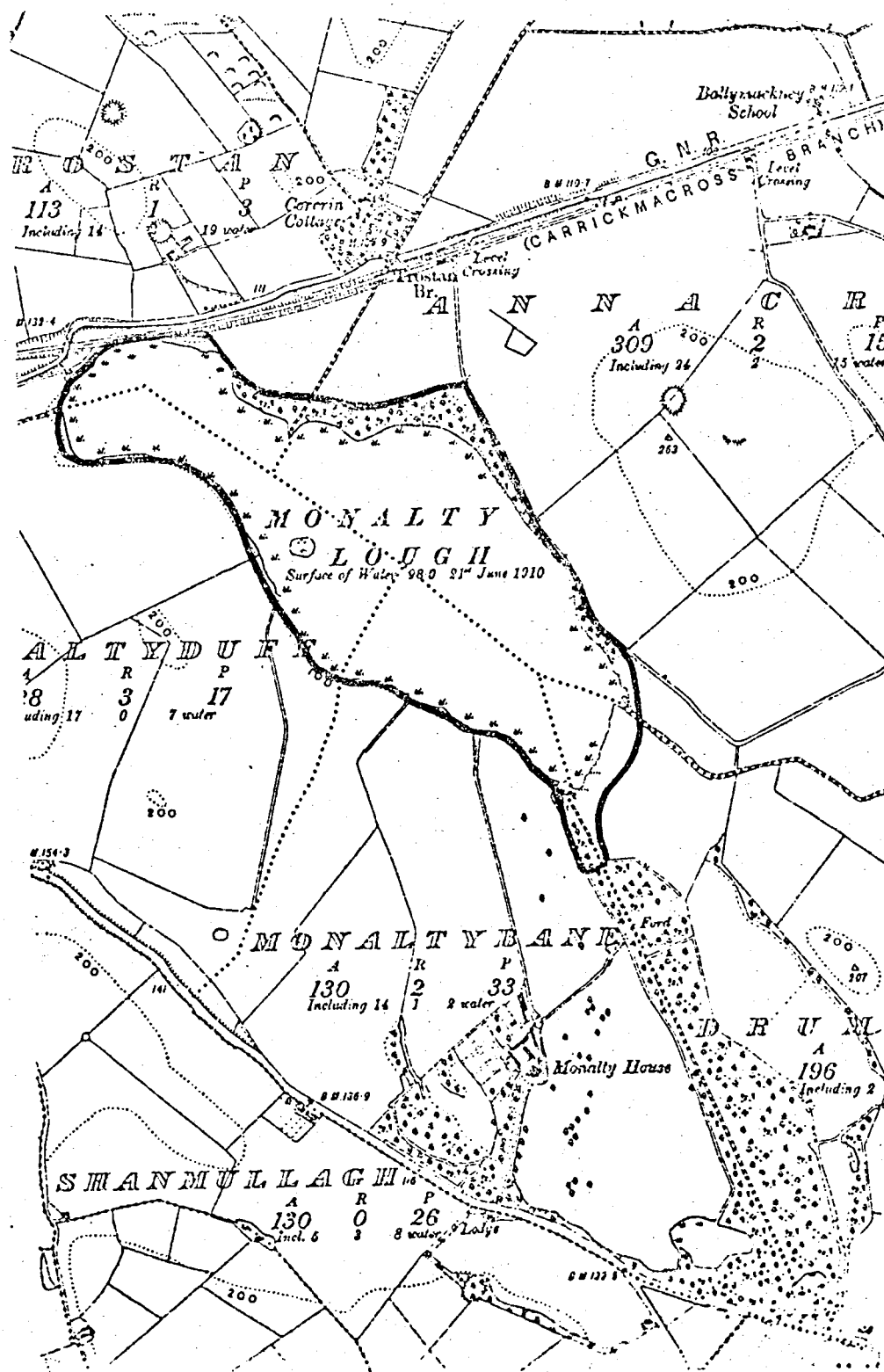
There is a 'No Shooting' order on the lough. The surrounding land is cut for hay or grazed by cattle and no threat is presented by these forms of management.

Recommendations

General planning control would be sufficient protection for this site, since the wildfowl already have a degree of protection.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 13

Scale: 6 Inches to 1 Mile



<u>Name of area</u>	SPRING LOUGHS
<u>Acreage</u>	52.5
<u>Grid reference</u>	H. 867, 043
<u>Scientific interest</u>	Botanical, ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

Only the smaller of these two loughs was visited (Corvrin Lough). There is an acidic grassland community between the two. Both loughs have similar botanical structures with a ring a Nymphaea alba (White Water lily) inside a fringe of Phragmites communis (Common Reed). There is a narrow shelf of calcareous mud around the edge upon which grows a species of Chara (stone-wort); then the lake floor drops steeply into the deeper central area. Wet grassland and marshy patches are round the shoreline.

This area is typical of the many smaller lakes in the region.

Threats to the area

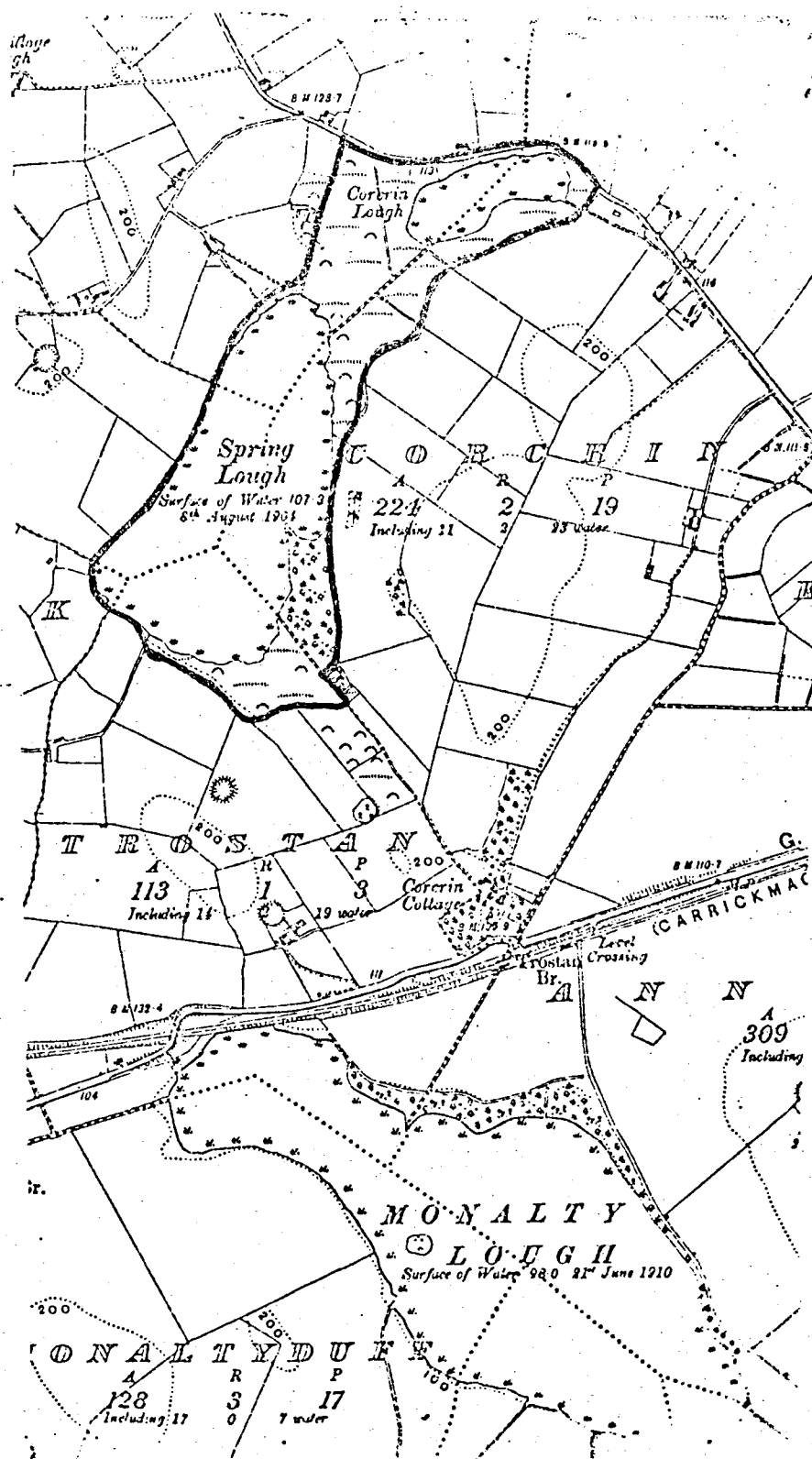
None apparent

Recommendations

No action needed

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 14

Scale: 6 inches to 1 mile



<u>Name of Area</u>	PRIESTFIELD LOUGH, ROSSMORE CASTLE.
<u>Acreage</u>	76
<u>Grid Reference</u>	H 652,308
<u>Scientific Interest</u>	Botanical, ornithological, ecological
<u>Rating</u>	Local
<u>Priority</u>	B

Description of Site

Rossmore Castle is owned by the Department of Lands, Forestry Division and they are at present in the process of planning the area as a recreational place.

All the woods include some conifers but several are 70% coniferous, 30% deciduous trees. The only group of remaining deciduous trees are to the North of Priestfield Lough in which a pair of herons were nesting.

All the loughs are artificial and were considerably lower than normal owing to the very dry spell of weather previous to the visit at the end of July. This enabled a closer examination of the semi-aquatic and aquatic vegetation. Priestfield Lough has been drained but it is hoped to reflood it shortly, after the creation of artificial islands.

Willows and Common Reed encircle and lough and the Narrow-leaved Reedmace (Typha angustifolia), which is a rare species in Ireland, is fairly common.

The area of lake shore normally under shallow water yielded an interesting flora. Sparganium emersum (Unbranched Bur-reed) is abundant, whilst

<u>Juncus articulatus</u>	(Jointed Rush)
<u>Gnaphalium uliginosum</u>	(Marsh Cudweed)
<u>Senecio sylvaticus</u>	(Wood Groundsel)
<u>Nymphaea alba</u>	(White Water Lily)
<u>Apium inundatum</u>	(Floating Marsh-Wort)
<u>Epilobium nerterioides</u>	(Willow Herb)
<u>Ranunculus lingua</u>	(Greater Spearwort)
<u>Cicuta virosa</u>	(Cowbane)

are among the more interesting species growing on the exposed mud.

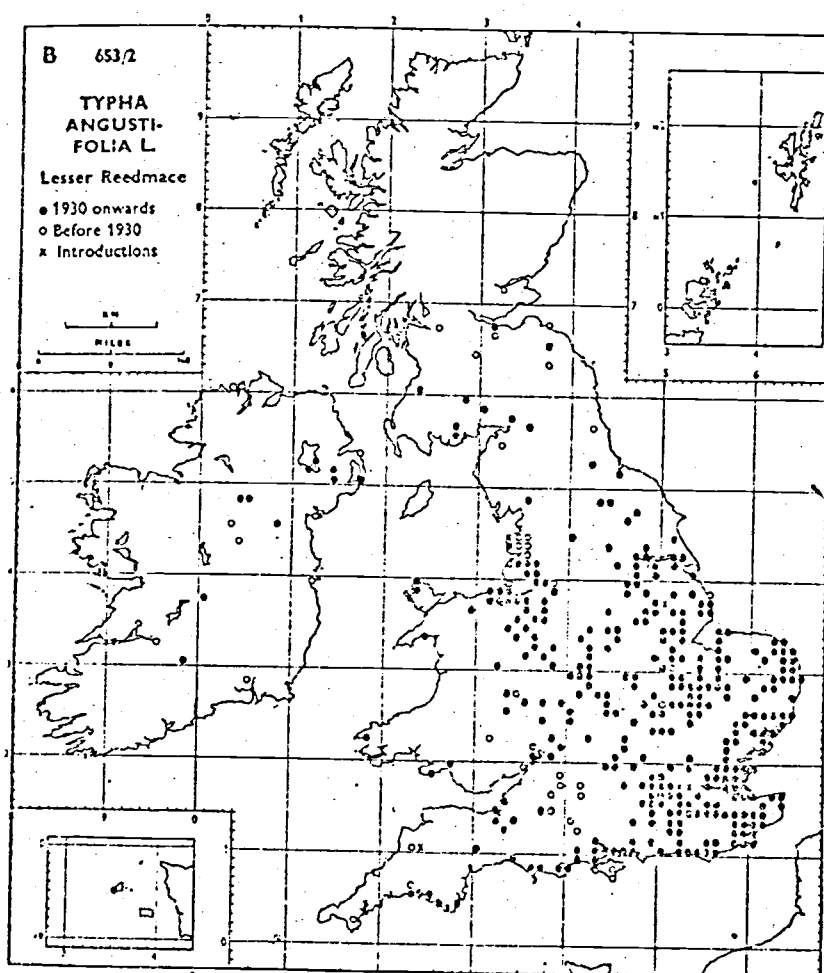
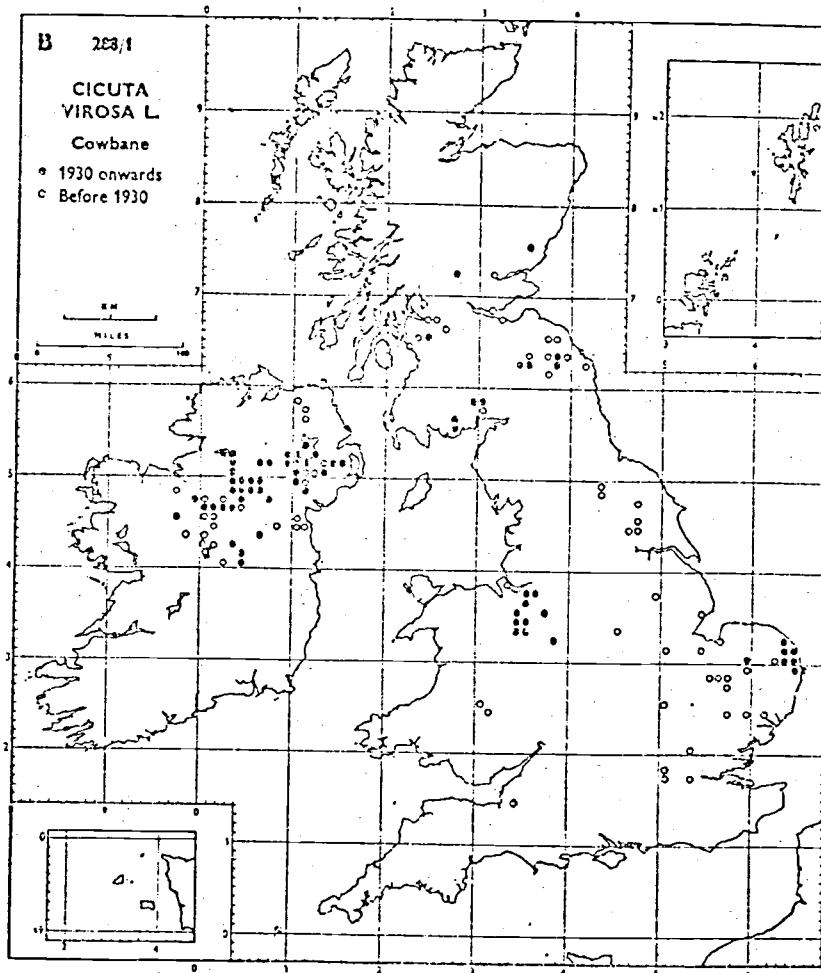
Along the overgrown verges by the trackways several uncommon species are found:-

<u>Cichorium intybus</u>	(Chicory)
<u>Chamaenerion angustifolium</u>	(Rose-bay Willow Herb)
<u>Polygonum polystachyum</u>	(Naturalised)

Although the woodlands are not of ecological interest, the several small lakes in the Castle grounds provide something of botanical interest. Although Priestfield Lough has been drained to a low level recently, it is to be refilled later in the year. The other lakes are to remain at their present level.

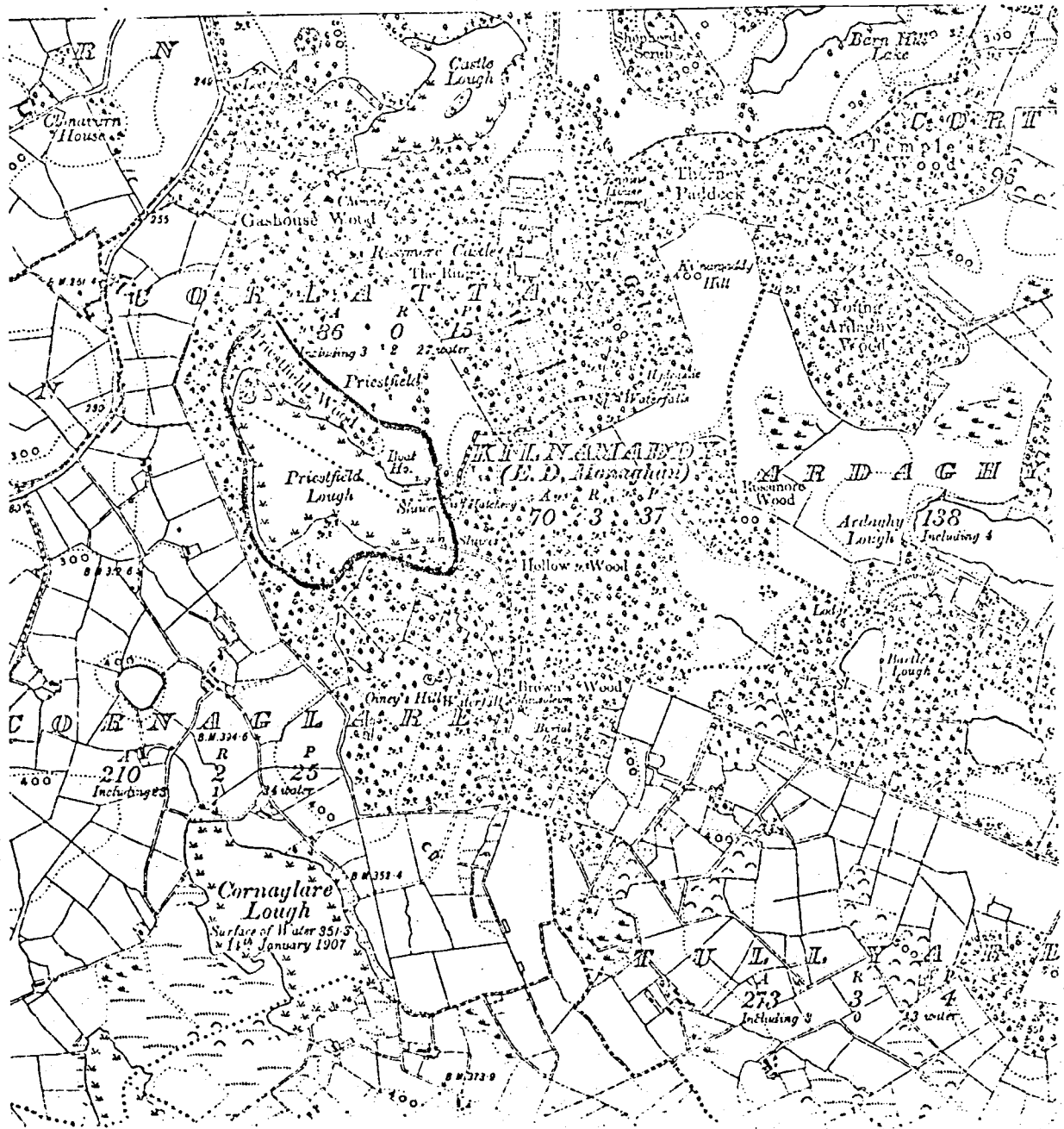
Recommendations

If possible the vegetation of Priestfield Lough should not be interfered with. The other three smaller lakes are less interesting from an ecological point of view. Perhaps development could be restricted to these areas.



MAP SHOWING AREA OF SCIENTIFIC INTEREST — 15

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	SMALL QUARRY NEAR 3-MILE HOUSE, SMITHBOROUGH
<u>Acreage</u>	19.5
<u>Grid Reference</u>	H 627,294
<u>Scientific Interest</u>	Botanical, geological, ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

Approximately one mile south of 3-mile house, near Smithborough, is a small quarry in the Silurian rocks by the roadside. A stream runs through the quarry, exposing the slates.

A South-west-facing slope is colonised by a fairly open grassland with the grass species Anthoxanthum odoratum (Sweet Vernal Grass), Holcus lanatus (Yorkshire Fog) and Agrostis stolonifera (Creeping Bent) being the most abundant. Flowering herbaceous species include -

<u>Chrysanthemum leucanthemum</u>	(Ox-eye Daisy)
<u>Hypochoeris radicata</u>	(Common Cat's-ear)
<u>Lotus corniculatus</u>	(Bird's-foot Trefoil)
<u>Plantago lanceolata</u>	(Ribwort Plantain)
<u>Prunella vulgaris</u>	(Self-heal)
<u>Dactylorchis fuchsii</u>	(Common Spotted Orchid)

One large flowering specimen of the Greater Butterfly Orchid (Platanthera bifolia), not a common species was found.

At the bottom of the quarry is a wet floor with many shallow pools surrounding the stream. Numerous small fish, probably Sticklebacks, were swimming in the pools.

The main plant species in and around the pools are:

<u>Carex lepidocarpa</u>	(Long-stalked Yellow Sedge)
<u>Carex ovalis</u>	(Oval Sedge)
<u>Juncus effusus</u>	(Soft Rush)
<u>Galium palustre</u>	(Marsh Bedstraw)
<u>Myosotis sp.</u>	(Forget-me-not)
<u>Acrocladium cuspidatum</u>	(Moss)

Around the stream grow beds of Nasturtium officinale (Water Cress) with Mentha aquatica (Water Mint) and Filipendula ulmaria (Meadowsweet).

Although this is a very small area the different habitats and communities make it a good area for use in ecological education.

Threats to the Area

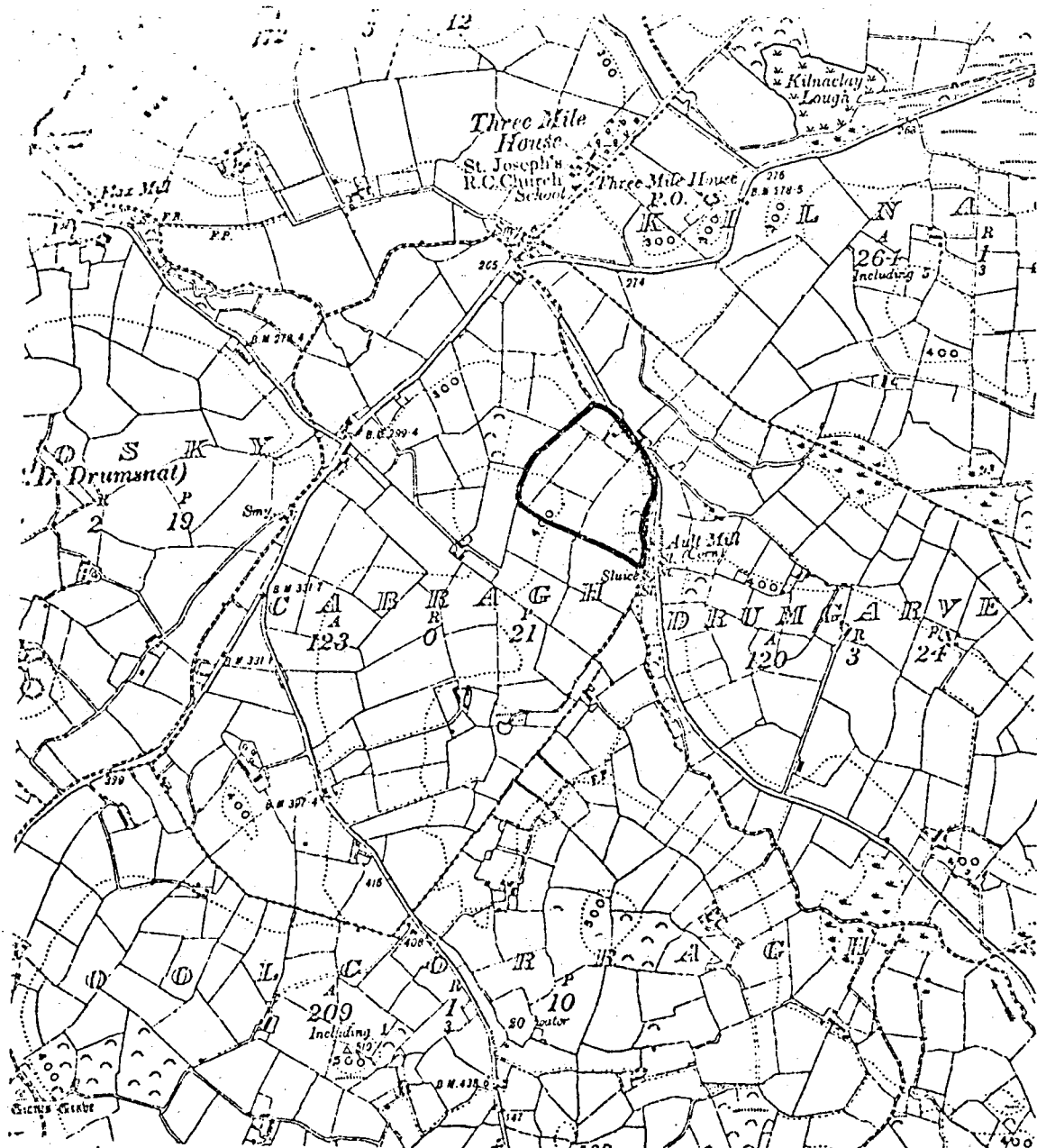
The quarry is not worked at present and is unlikely to be reopened. It is now grazed by cattle.

Recommendations:

The quarry should not be filled in. No other action necessary.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 16

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	ULSTER CANAL AT MAGHERARNY CROSSROADS
<u>Grid Reference</u>	H. 580. 299.
<u>Acreage</u>	-
<u>Scientific Interest</u>	Ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

For the greater part of its length in Co. Monaghan, the Ulster Canal is overgrown with vegetation with bushes lining the banks. At Magherarny Crossroads, the main species colonizing the canal are:-

<u>Agrostis stolonifera</u>	(Creeping Bent)
<u>Clyceria fluitans</u>	(Floating sweet-grass)
<u>Angelica sylvestris</u>	(Wild Angelica)
<u>Urtica dioica</u>	(Nettle)

Because of this overgrown nature, the canal acts as a 'refuge' area for many species of birds and animals, as well as providing several interesting plant species. It remains relatively unaltered whilst many of the surrounding areas are influenced by man, and if left unaltered will continue to provide an example of ecological evolution.

Threats to area

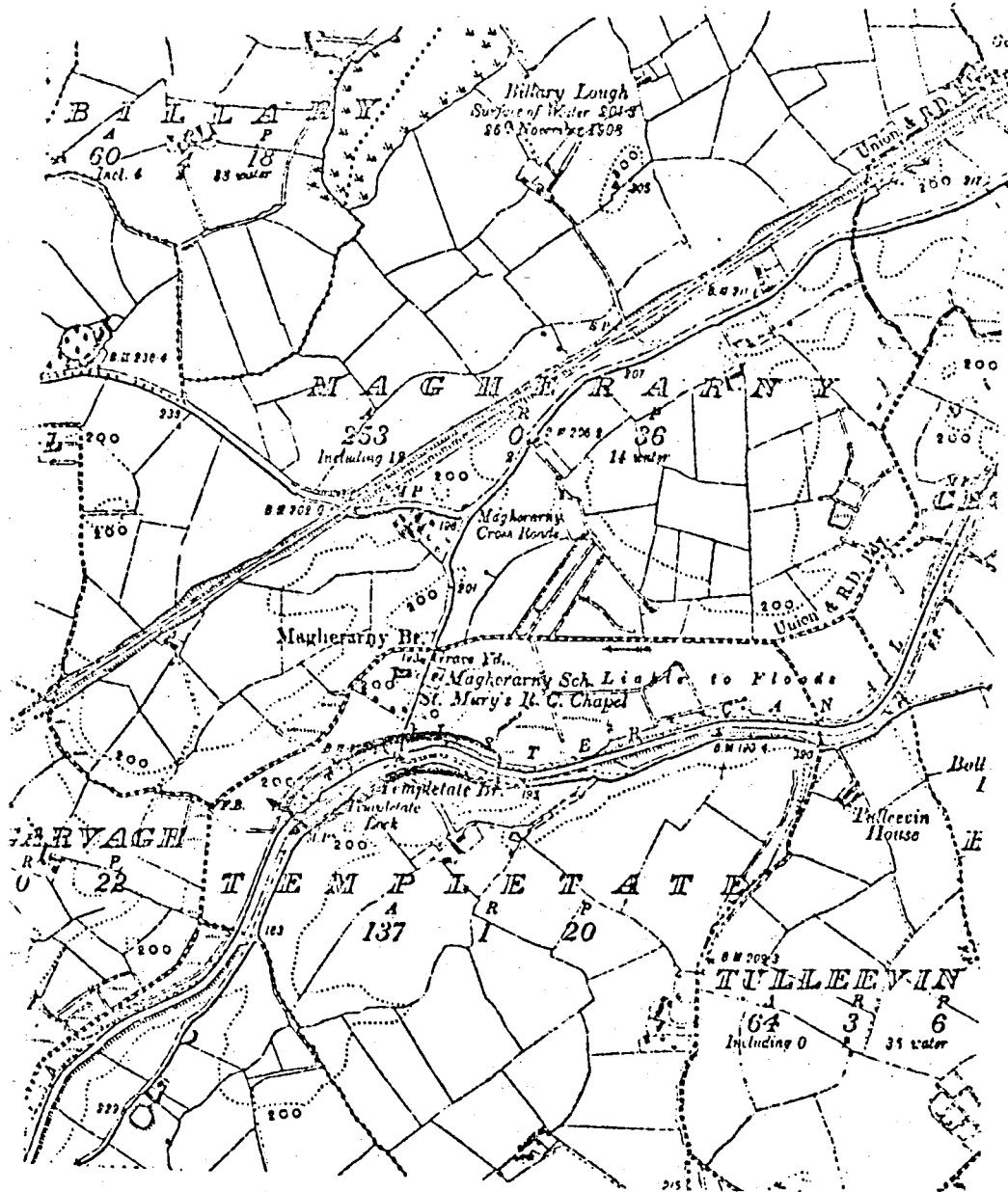
Dumping of rubbish was seen in certain places along the canal.

Recommendations

Dumping should be prevented, otherwise no action is required as it is the natural state of the canal which forms the scientific interest.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 17

Scale: 6 inches to 1 Mile



<u>Name of area</u>	ULSTER CANAL BETWEEN WHITE'S BRIDGE AND CARSON'S BRIDGE.
<u>Acreage</u>	18.5
<u>Grid reference</u>	H. 642. 327 to H: 629. 325
<u>Scientific interest</u>	Ecological, Botanical.
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

Between White's Bridge and Carson's Bridge the Conawaly River runs parallel to the Ulster Canal, the two stretches being separated only by a few yards of grassy bank. The canal is very dry at the point and is almost entirely colonized by grasses with some Iris beds and Meadowsweet (Filipendula ulmaria). The Conawaly River is almost choked with Mimulus guttatus (Monkey Flower) along much of this stretch. In the more open water areas the Flowering Rush (Butomus umbellatus) a rare species in Ireland and chiefly a northern species, grows in clumps and is locally abundant.

To the south of the waterways is a small area of beech wood with some ash. The sedge, Carex remota, is plentiful in the wetter ground here, and Sweet Woodruff (Galium odoratum) is also to be found.

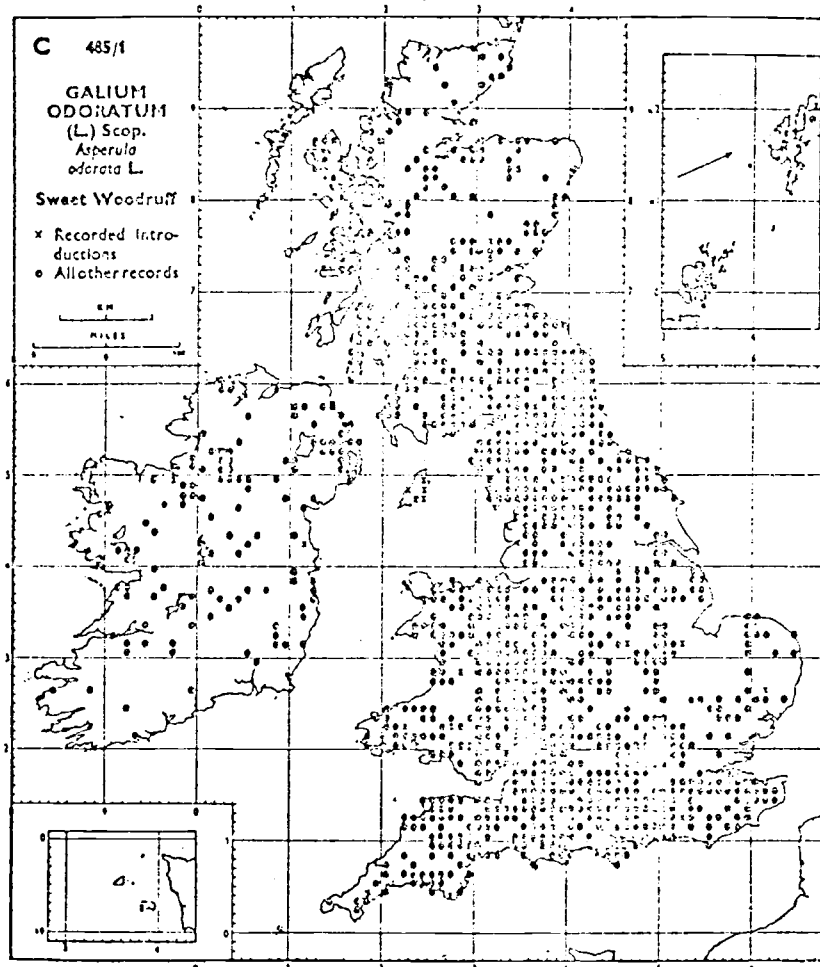
Only a relatively small stretch of these two waterways was investigated and although they had not a very rich flora, several uncommon species of note were found to be relatively abundant here.

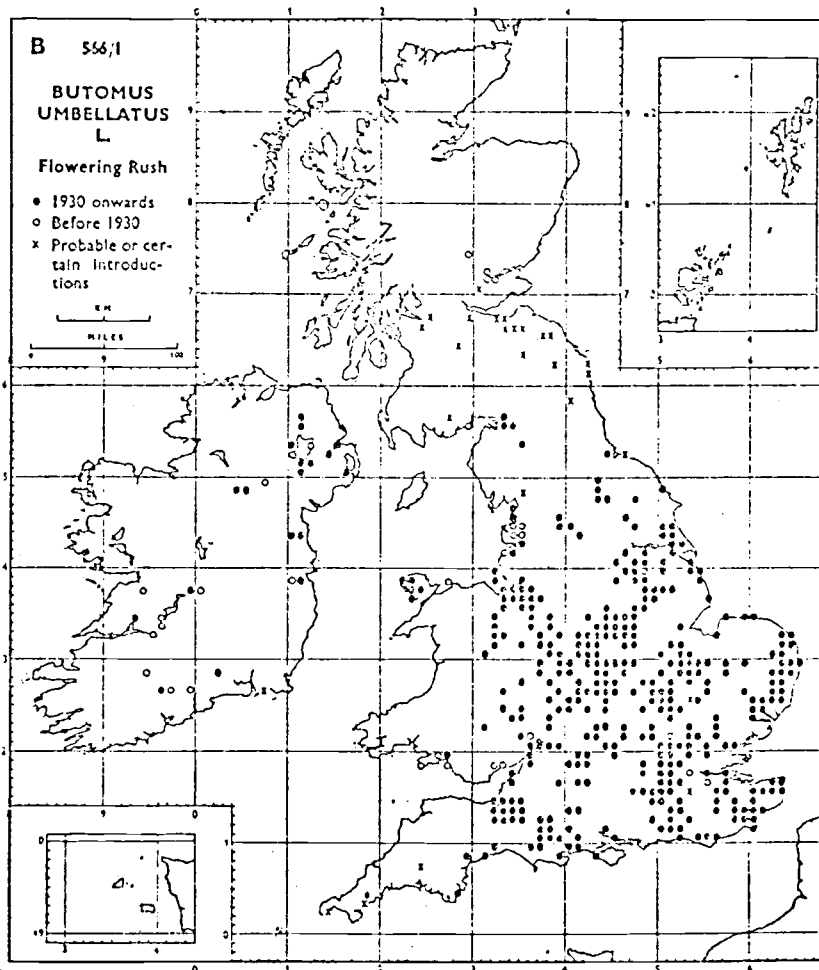
Threats to the area

The area is grazed by cattle, but there is no threat of the habitat being damaged by them. A group of itinerants is living at White's Bridge and dumping rubbish in the canal and river nearby.

Recommendations.

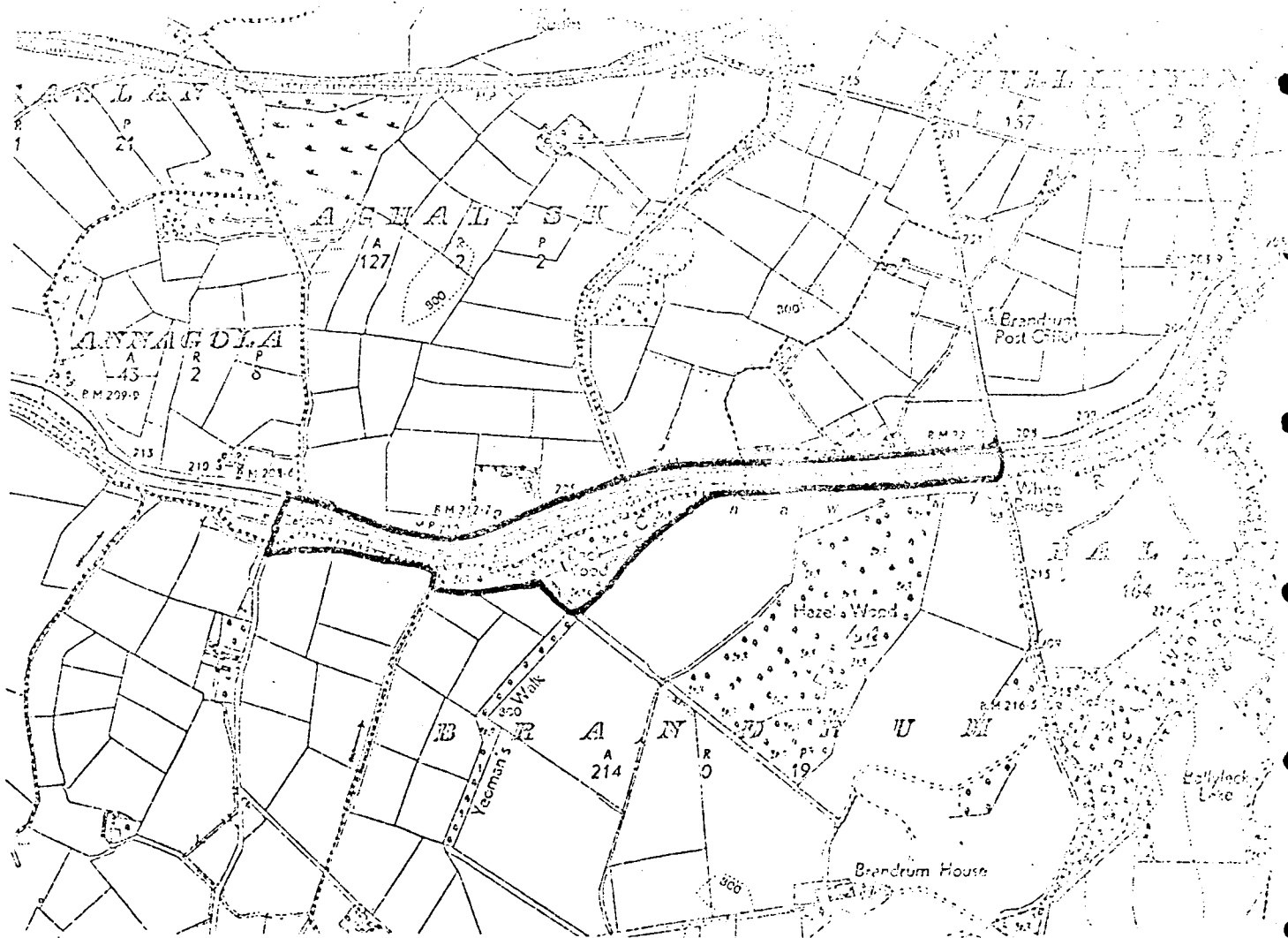
Dumping in the waterways should be prevented and general planning control considered for the area.





MAP SHOWING AREA OF SCIENTIFIC INTEREST — 19

Scale: 6 inches to 1 Mile



<u>Name of area</u>	TASSAN LOUGH
<u>Acreage</u>	27
<u>Grid reference</u>	H. 797, 261
<u>Scientific interest</u>	Ecological, Botanical
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

This is a small lough bounded by Silurian outcrops on the south side with grassland around the other aspects. Very few species colonize the outcrops - Sieglingia decumbens is the main grass, Erica tetralix (Cross-leaved Heath) and Calluna vulgaris (Ling) the two dominant herbs, with a lichen species, (Cladonia) in abundance.

The lough is fringed with Phragmites communis (Common Reed) with a ring of Potamogeton natans (Common Pondweed) inside the reed.

Between the shoreline and the rock outcrops is an area of wet grassland with patches dominated by Sphagnum moss. Molinia caerulea (Purple Moor Grass) and Agrostis canina (Velvet Bent) are the two dominant grasses, with the herbaceous species being:

<u>Potentilla palustris</u>	(Marsh Cinquefoil)
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<u>Menyanthes trifoliata</u>	(Bog Bean)
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<u>Narthecium ossifragum</u>	(Bog Asphodel)
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Drosera rotundifolia, the Round-leaved Sundew, is abundant on small hummocks.

The area is ecologically interesting not because of rare species, but as an example of the type of community to be found in Silurian areas.

Threats to the area:

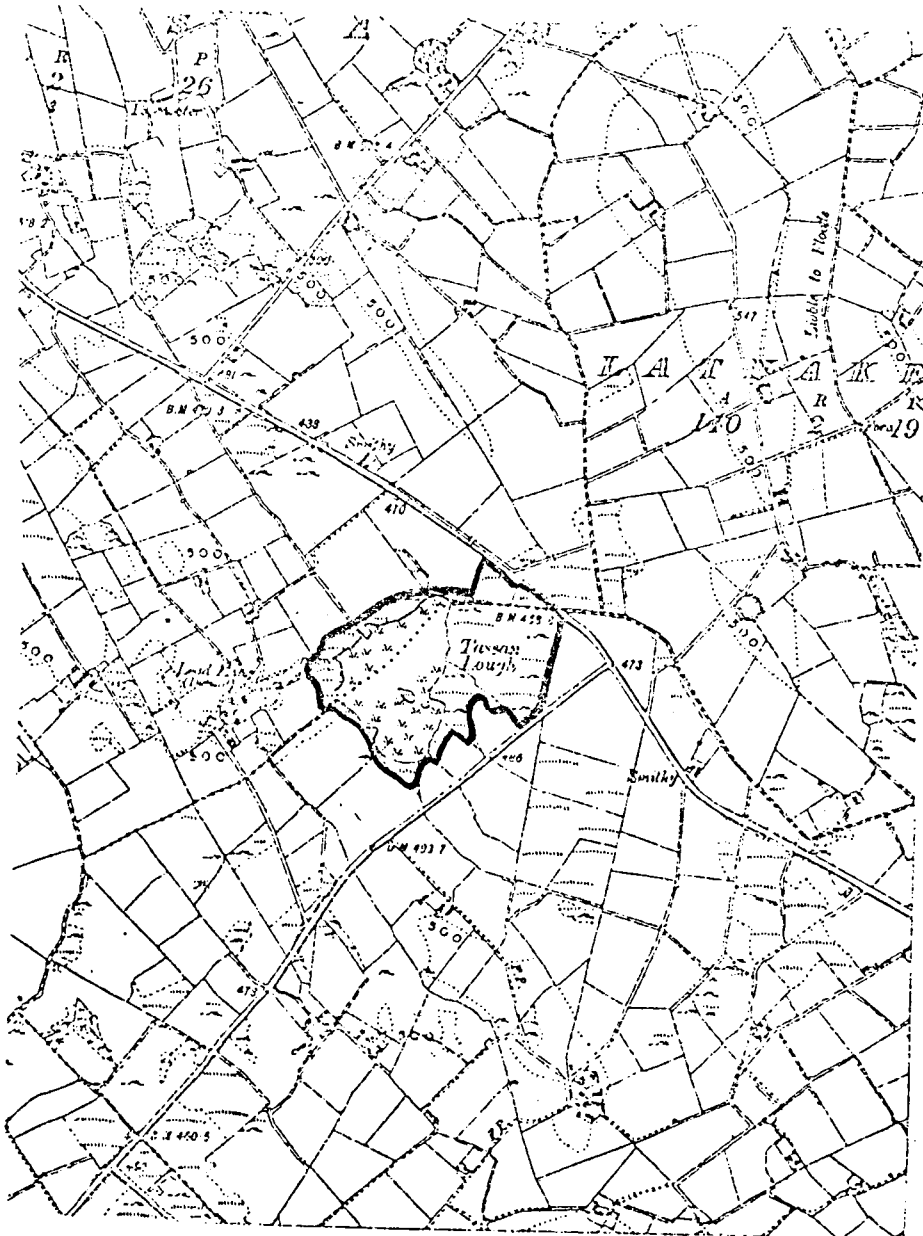
None apparent.

Recommendations

No action needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 20

Scale: 6 inches to 1 Mile



<u>Name of area</u>	DRUMGOLE LOUGH AND QUARRY
<u>Acreage</u>	26
<u>Grid reference</u>	H. 591, 193
<u>Scientific interest</u>	Botanical, Ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

The lough itself is surrounded by grassland and rock outcrops and the western shoreline vegetation is dominated by Phragmites communis (Common Reed) and Filipendula ulmaria (Meadowsweet).

An old slate quarry a few hundred yards to the south of the lough has several large shallow pools around the worked rock face. These were filled with a Chara species (stonewort) which had a bright red colouration, probably due to a fresh water algal growth. Utricularia minor (Bladderwort) and Potamogeton filiformis (Slender-leaved Pondweed) also grow in the pools. Water Boatmen are numerous and several young Common Frogs were seen during the visit.

The area is not of outstanding ecological interest, but several of the species found there are uncommon and the pools are a noteworthy habitat.

Threats to the area

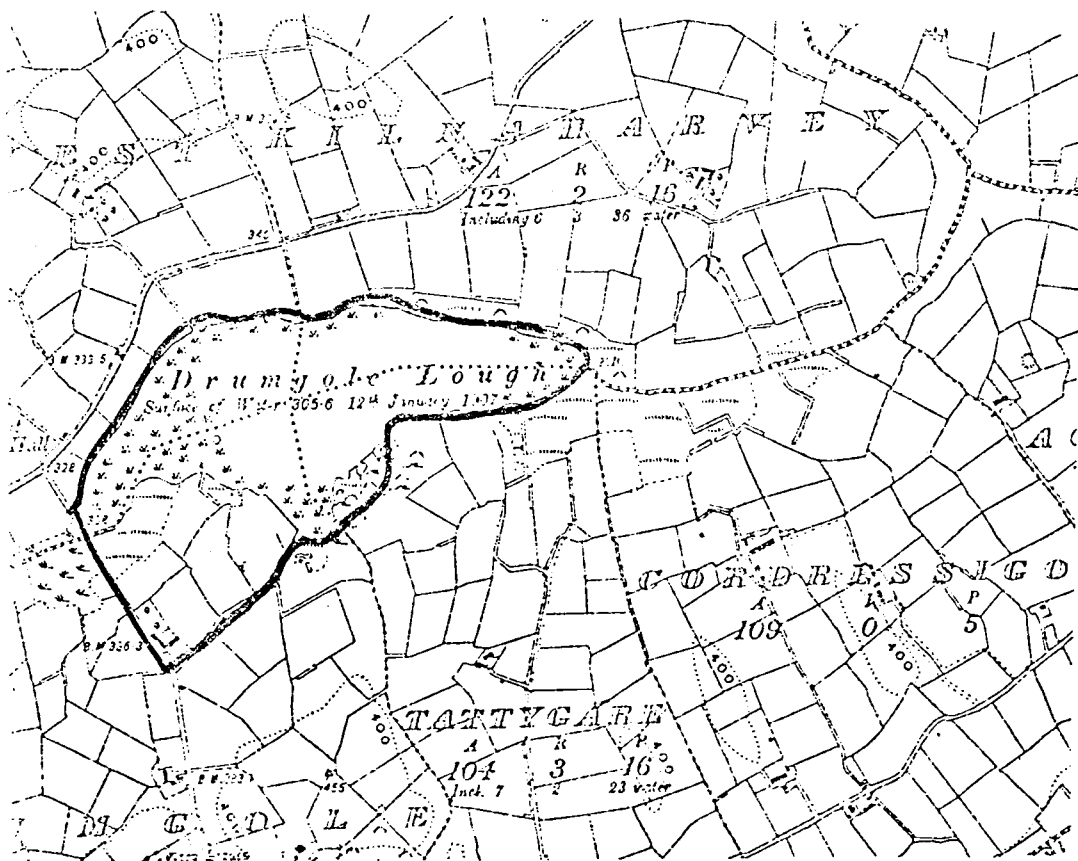
The quarry floor may be used as a dumping site by the local farmer but unless the area is filled in completely it is unlikely to lose its value.

Recommendations

General planning control should be considered.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 21

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	'GIBSON'S' LOUGH
<u>Grid Reference</u>	H. 686, 123
<u>Acreage</u>	
<u>Scientific Interest</u>	Botanical, Ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

Some of the loughs in the county are surrounded by floating marshes. They are often the smaller loughs which are gradually being invaded by the vegetation. 'Gibson's Lough,' as it is known locally, is one such example.

Often the broad belt of marsh contains pockets of different plant communities, varying with the degree of waterlogging. This is of particular ecological value as the different communities can be studied in the one area.

Around the shoreline grow Carex rostrata (Bottle sedge) with Typha latifolia (Bulrush) and the umbellifer, Cicuta virosa (Cowbane). Behind is a community dominated by Eriophorum angustifolium (Cotton Grass) with Equisetum fluviatile (Water Horsetail) and the sedges Carex curta and C. rostrata. Further back is a wet grassland with hummocks of Sphagnum moss and the grass Holcus lanatus (Yorkshire fog).

Threats to the Area

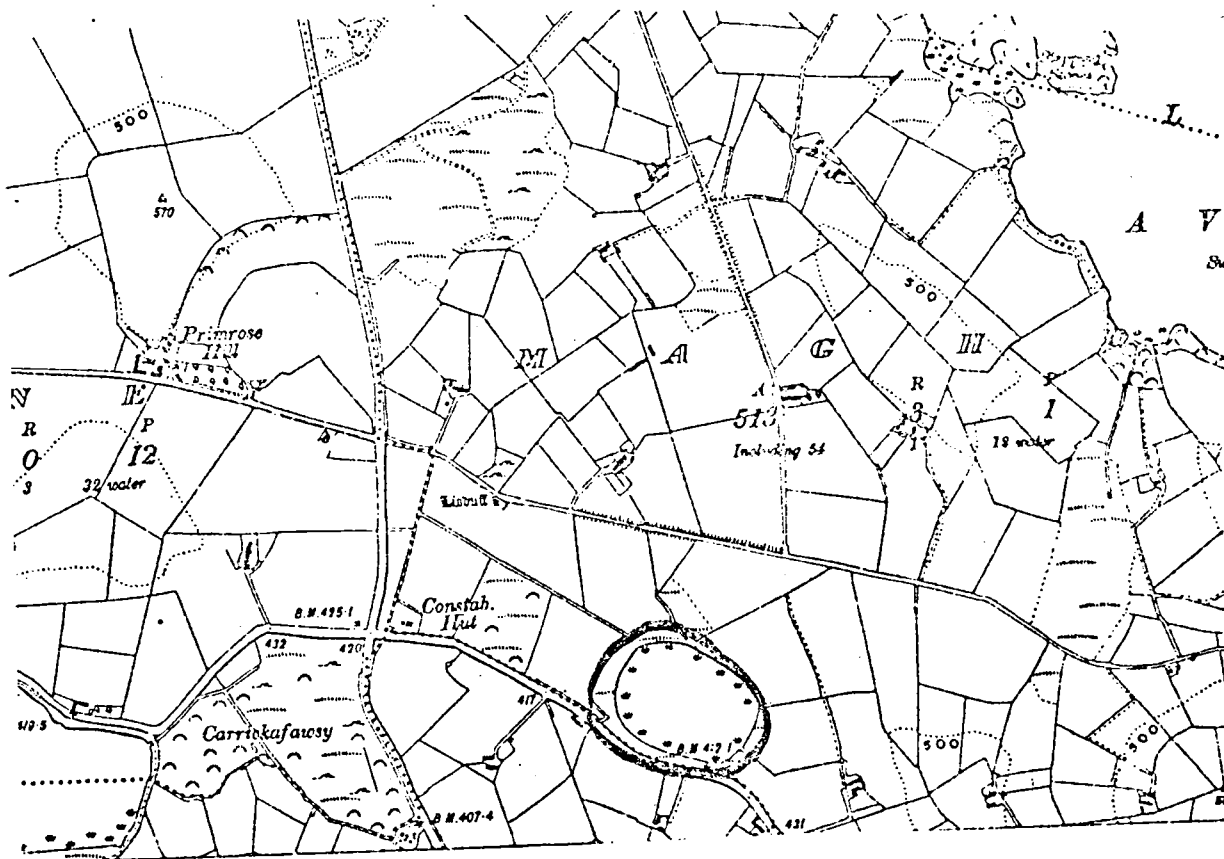
None apparent.

Recommendations

No action needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST -- 22

Scale: 1/8 inches to 1 mile



<u>Name of Area</u>	BALLYHOE LOUGH
<u>Grid Reference</u>	N. 85O. 958.
<u>Acreage</u>	36 (Co. Monaghan)
<u>Scientific Interest</u>	Ecological, Botanical.
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

Most of the lough is within the Co. Meath boundary but it must be considered as a whole unit to assess its scientific value.

The lough is now divided into two by a narrow strip of land covered by Willow trees, Common Reed and Alders. Around the edge is a fringe of Phragmites communis (Common Reed) with some Scirpus lacustris (Club-rush) and Nymphaea alba (White Water-lily).

Bones, mainly skulls and antlers, of the Irish Giant Deer (Cervus giganteus) have been found in and around the lough. The majority of the finds were located in the narrow neck of land dividing the loughs. It is thought that the deer used to cross at this point in the valley to the hills towards the south-west.

The more interesting botanical areas are within the Co. Meath boundary. A description of the Co. Meath part, taken from the Meath report on areas of scientific interest, is included.

Threats to the Area

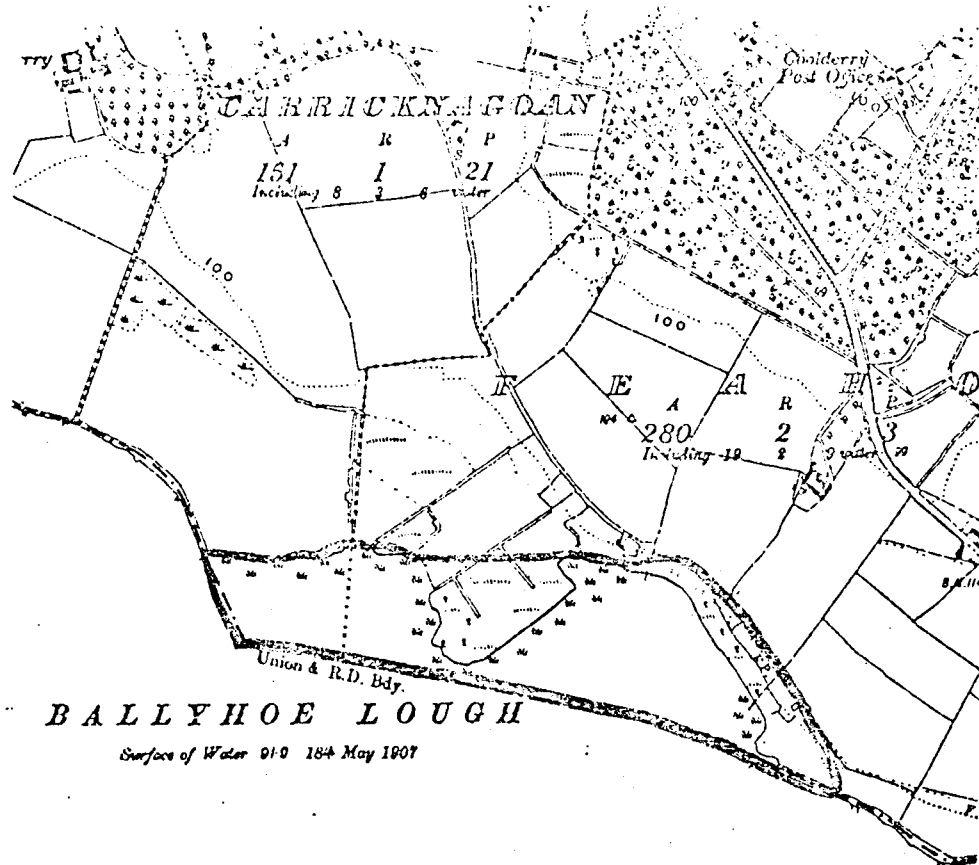
None apparent. The lough is used by local fishermen and seems unlikely to be affected by any other form of usage.

Recommendations

General planning control should be considered.

MAP SHOWING AREA OF SCIENTIFIC INTEREST -- 23

Scale: 6 inches to 1 mile



T H

<u>Name of Area</u>	BALLYHOE LOUGH
<u>Acreage</u>	c. 130 acres (in County Meath)
<u>Grid Reference</u>	N. 845, 953
<u>Scientific Interest</u>	Ecological, botanical, zoological
<u>Rating</u>	Local Importance
<u>Priority</u>	C

Description of Area

The area of interest is shown on Map 43.

This is a fairly acid, peaty lough, contrasting markedly to most of the loughs in County Meath, which are calcareous.

The islands in the lough are covered with trees and shrubs and, like the lakeshore fringed with reed, Phragmites communis. They are believed to be crannogs.

In the south-west corner is a well-developed carr, i.e. a wet woodland dominated by willows, etc.

Evaluation

The lough is of local importance mainly because it is acid and peaty, in contrast to most loughs in County Meath.

Threats to the Area

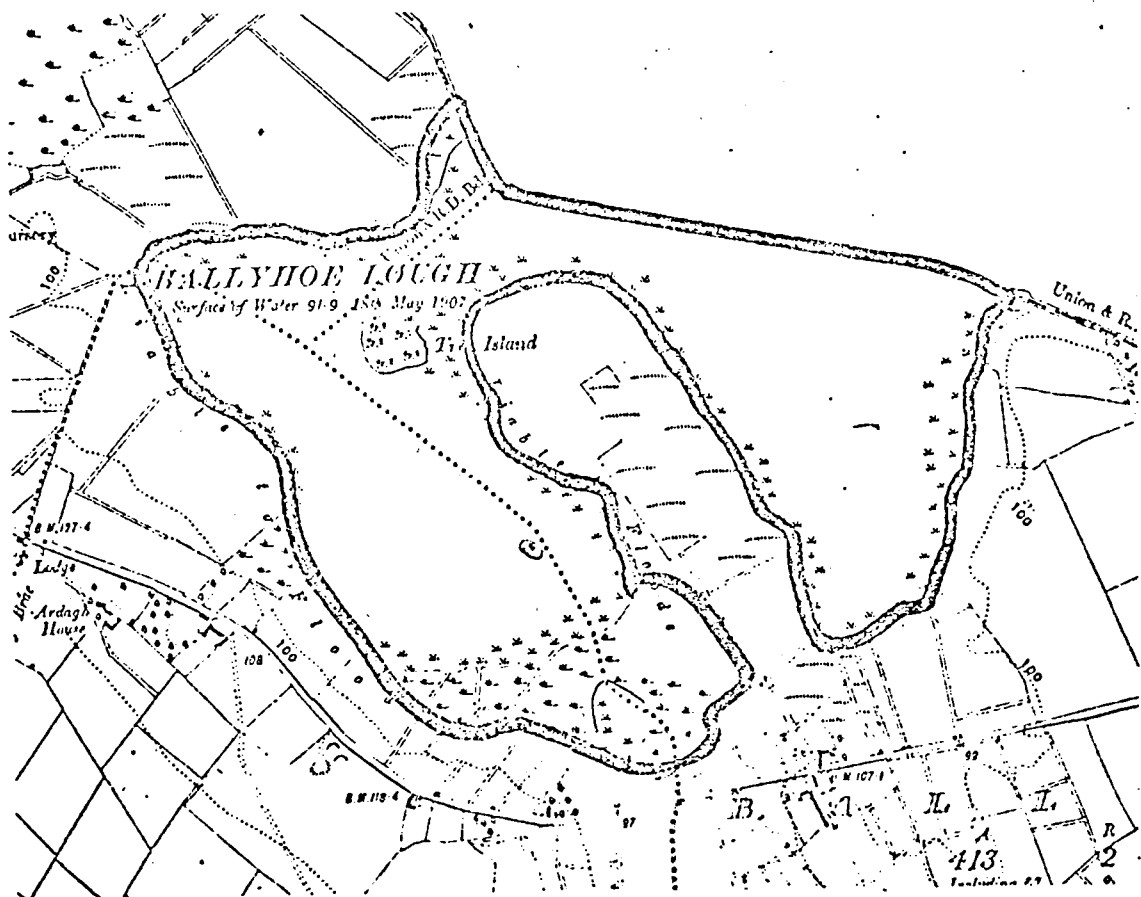
None known of.

Recommendation

Any development plans affecting this area should take into account its scientific interest.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 24

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	QUIGLOUGH RESERVOIR
<u>Grid Reference</u>	H. 633. 355.
<u>Acreage</u>	34
<u>Scientific Interest</u>	Botanical, Ecological, Zoological.
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

Quiglough is a limestone lake with Scirpus lacustris (Club Rush) in the shallow water and beds of the sedge Carex rostrata on the margin. In the water is a species of stonewort (Chara). Unlike most of the limestone loughs in the county, this one does not shelve steeply. A narrow belt of limestone grassland surrounds the shore.

To the north of the main lough is a smaller area of water which is almost completely colonized by vegetation - mainly Bulrush (Typha latifolia).

Huge fresh-water mussels were scattered along the shoreline and the fresh-water Crayfish is known to occur.

Threats to the Area

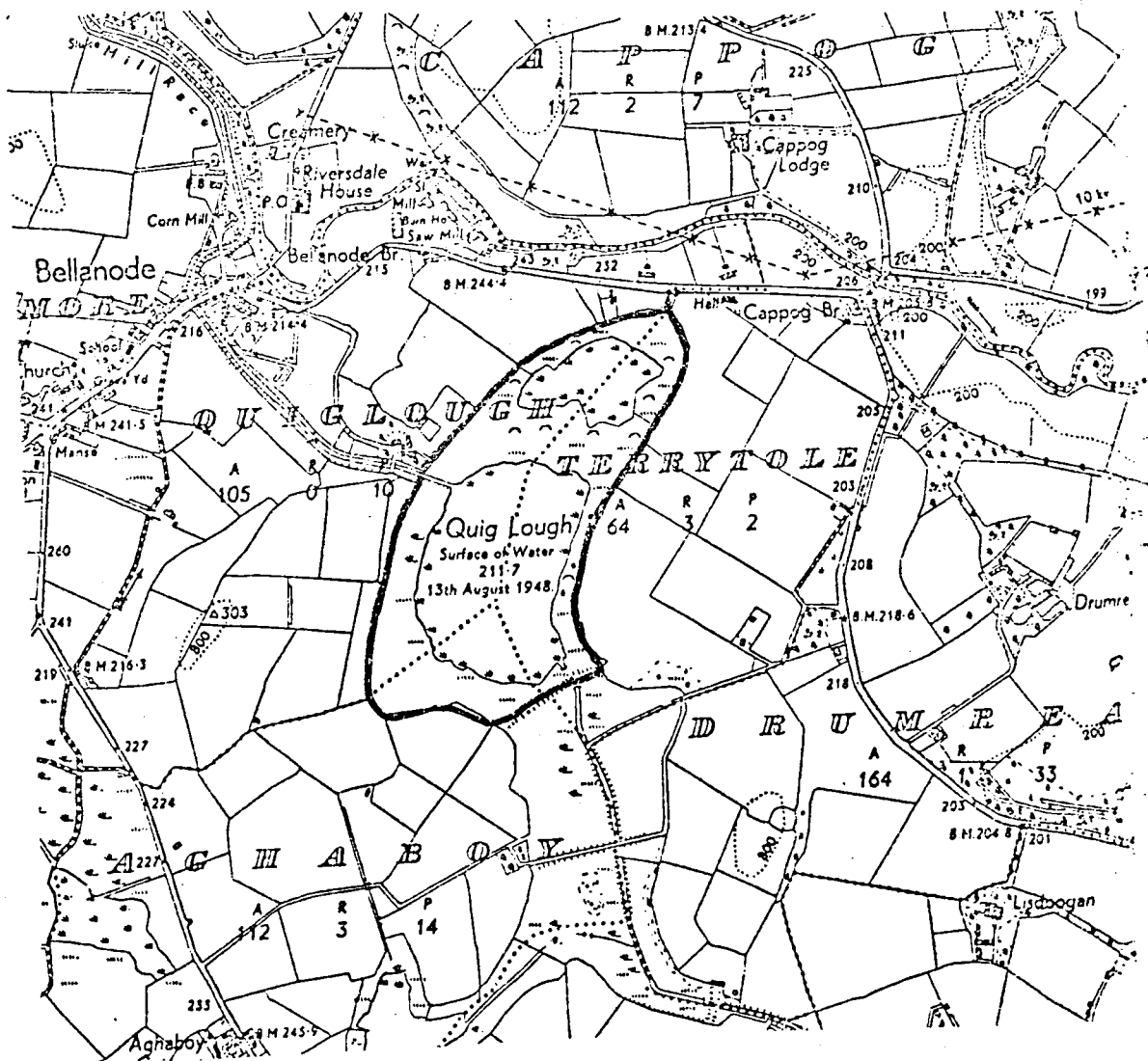
Clearing of ground to the south is being carried out, presumably for more building sites. But the main area of interest is the lough itself and although the water levels must fluctuate as it is a reservoir, these changes are unlikely to adversely affect the flora and fauna.

Recommendations

General planning control for the area should be considered.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 25

Scale: 6 inches to 1 Mile



<u>Name of Area</u>	LOUGH ROSS
<u>Grid Reference</u>	H. 897, 159
<u>Acreage</u>	32
<u>Scientific Interest</u>	Botanical, Ecological, Zoological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

The majority of Lough Ross is in County Armagh. The area visited was just to the east of the Clarebane River, which is in fact in Armagh. It is felt that the lough is of sufficient ecological interest to be mentioned in this report, even though the area in Monaghan is not extensive.

An extensive floating marsh lies to the east of the Clarebane River and around the shores are various transition stages from aquatic vegetation to meadowland, providing a very good example of successional development.

Threats to the Area

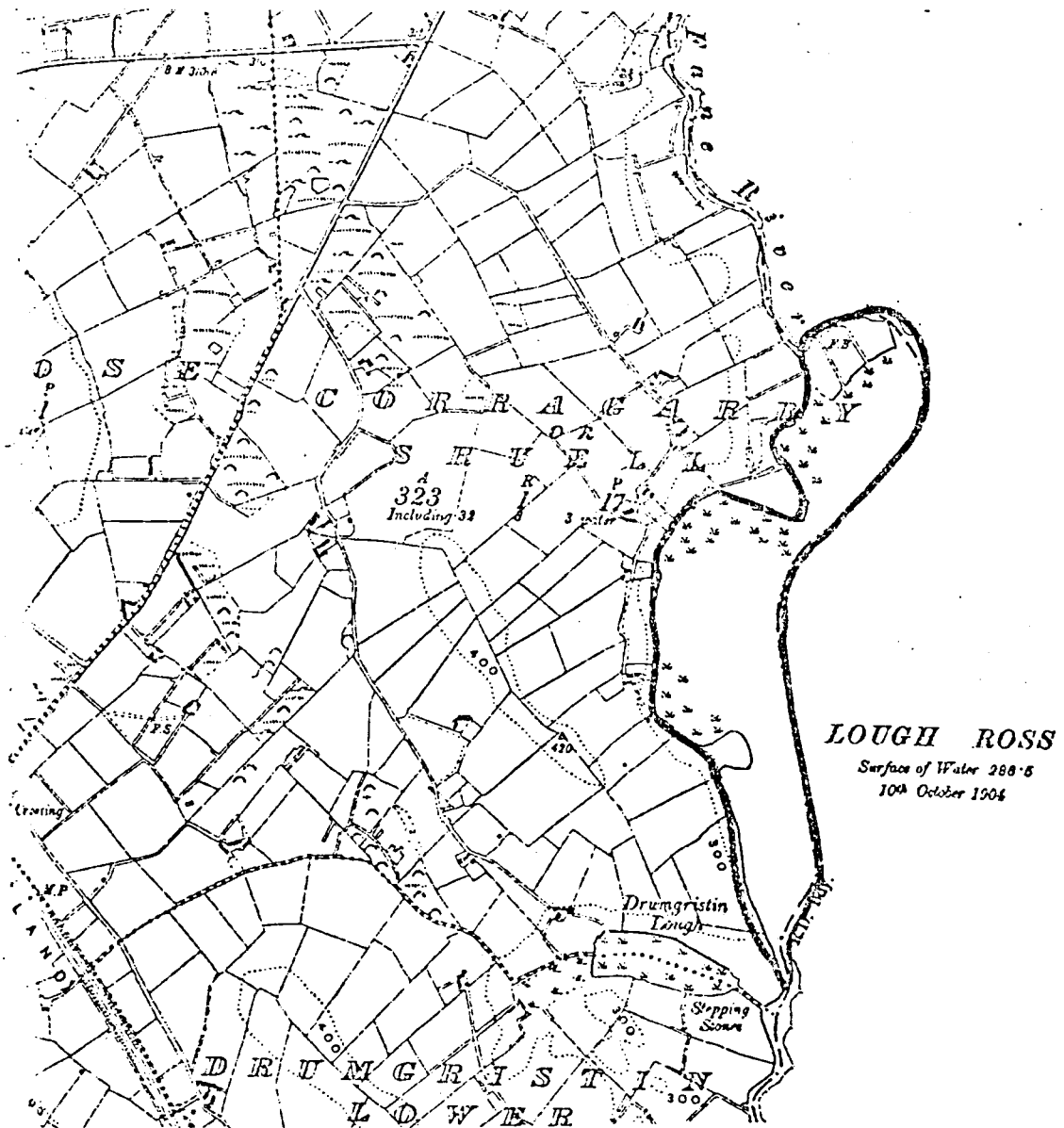
None apparent.

Recommendations

No action needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 26

Scale: 6 inches to 1 mile



<u>Name of Area</u>	LOUGH SMILEY
<u>Grid Reference</u>	H. 817, 214
<u>Acreage</u>	40
<u>Scientific Interest</u>	Botanical, Ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

This is similar to the lough near Dromore in botanical composition. The area of floating marsh is not so extensive, and as the conditions are slightly drier, the vegetation was more typical of a carr (Sallow trees and reeds) with pockets of raised bog scattered around the perimeter. It is also a good example of ecological succession.

Threats to the Area

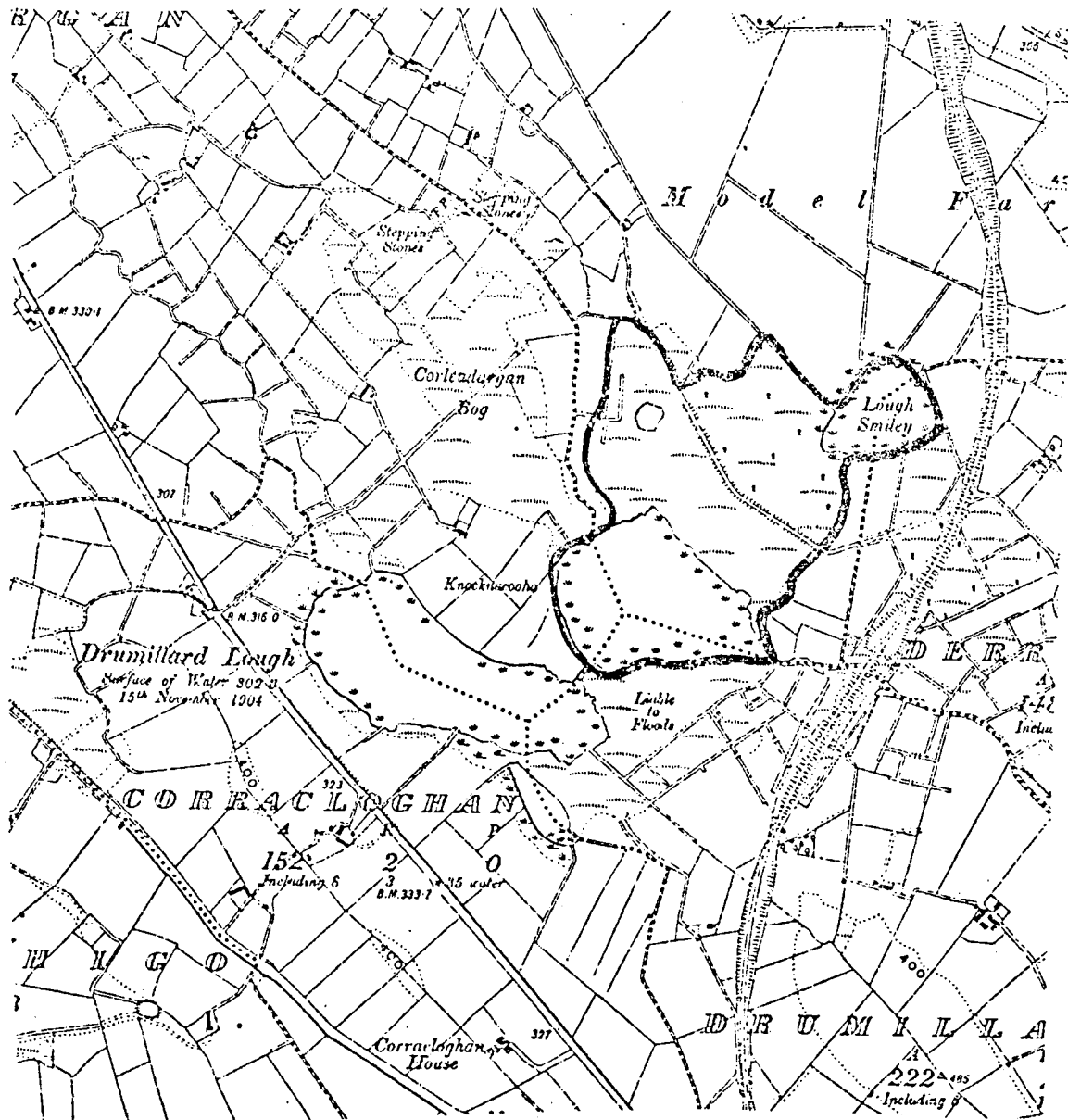
Dumping is apparent along the roadside.

Recommendations

Dumping should be prevented. No other action needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST-- 27

Scale: 6 inches to 1 mile



<u>Name of area</u>	CORDOO LOUGH
<u>Acreage</u>	56
<u>Grid reference</u>	H. 732, 238
<u>Scientific interest</u>	Botanical
<u>Rating</u>	Local
<u>Priority</u>	C

Description of site

There are 2 small loughs close to each other - Cordoo and Corfin. Cordoo Lough was visited and taken as being indicative of the conditions at Corfin also.

It is surrounded by a broad fringe of Phragmites communis (Common Reed), merging into a meadow community where Filipendula ulmaria (Meadowsweet), Iunus effusus (Soft Rush) and Agrostis stolonifera (Creeping Bent) are the dominant species.

In the lake itself, extensive clumps of Potamogeton lucens (Shining Pondweed) and Nuphar lutea (Yellow Water Lily) can be seen.

A stream leading from the lough at the S.W. corner is full of Lemna trisulca (Ivy Duckweed) and a Callitriche species (Starwort).

There are no rare species at this site but it is a good example of this type of habitat.

Threats to the area

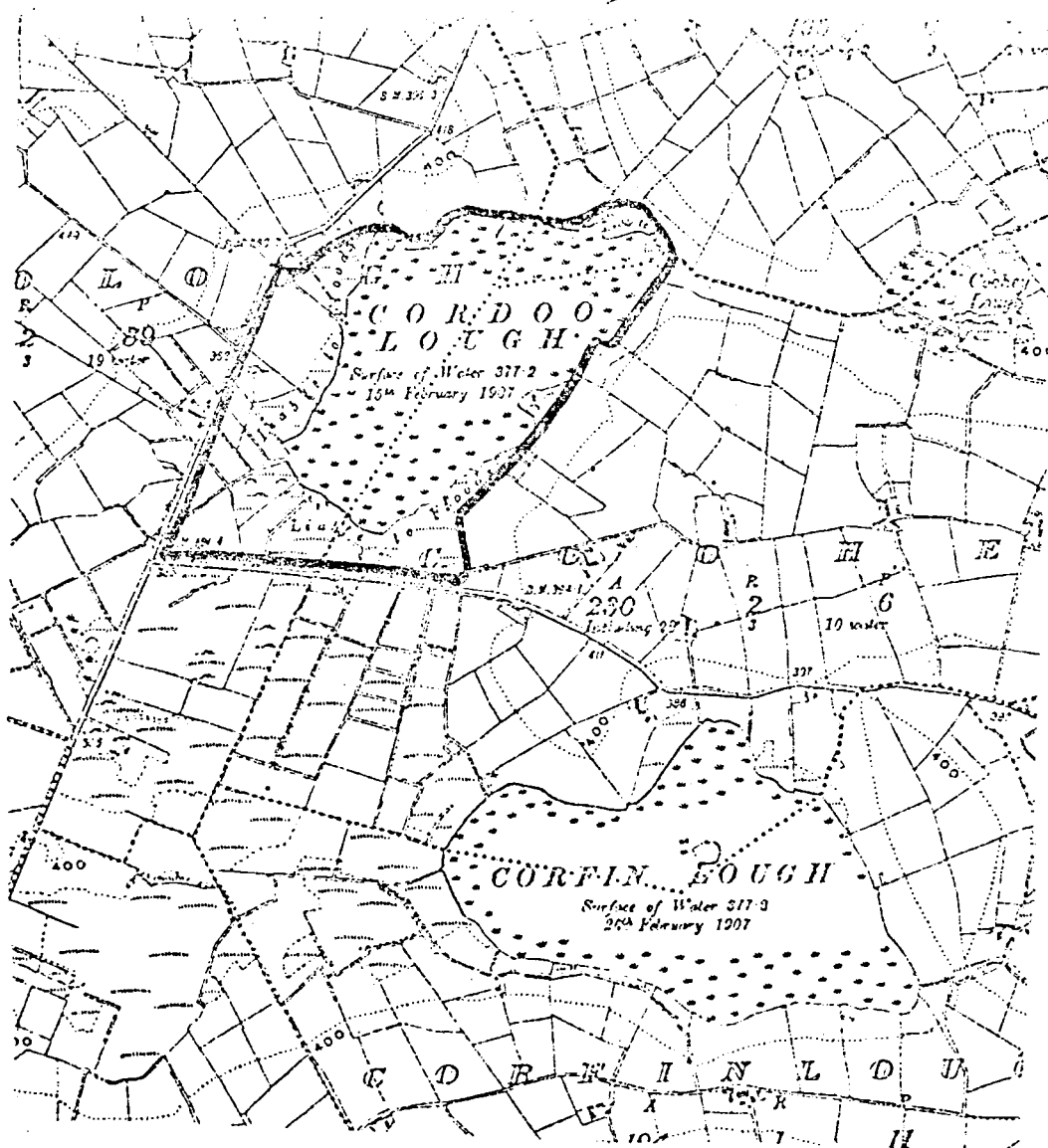
None apparent

Recommendations

No action needed

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 28

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	SMALL LOUGH NEAR DROMORE
<u>Grid Reference</u>	H. 868, 188
<u>Acreage</u>	15
<u>Scientific Interest</u>	Botanical, Ecological
<u>Rating</u>	Local
<u>Priority</u>	C

Description of Site

Although this is a very small lough the surrounding vegetation is interesting. It shows stages in ecological succession from aquatic conditions to meadowland. Much of the marshland is floating and dangerous to walk upon. The flora is rich - 9 grasses, 9 sedges, 2 rushes, 32 herbs and 5 mosses were recorded during the visit.

Threats to the Area

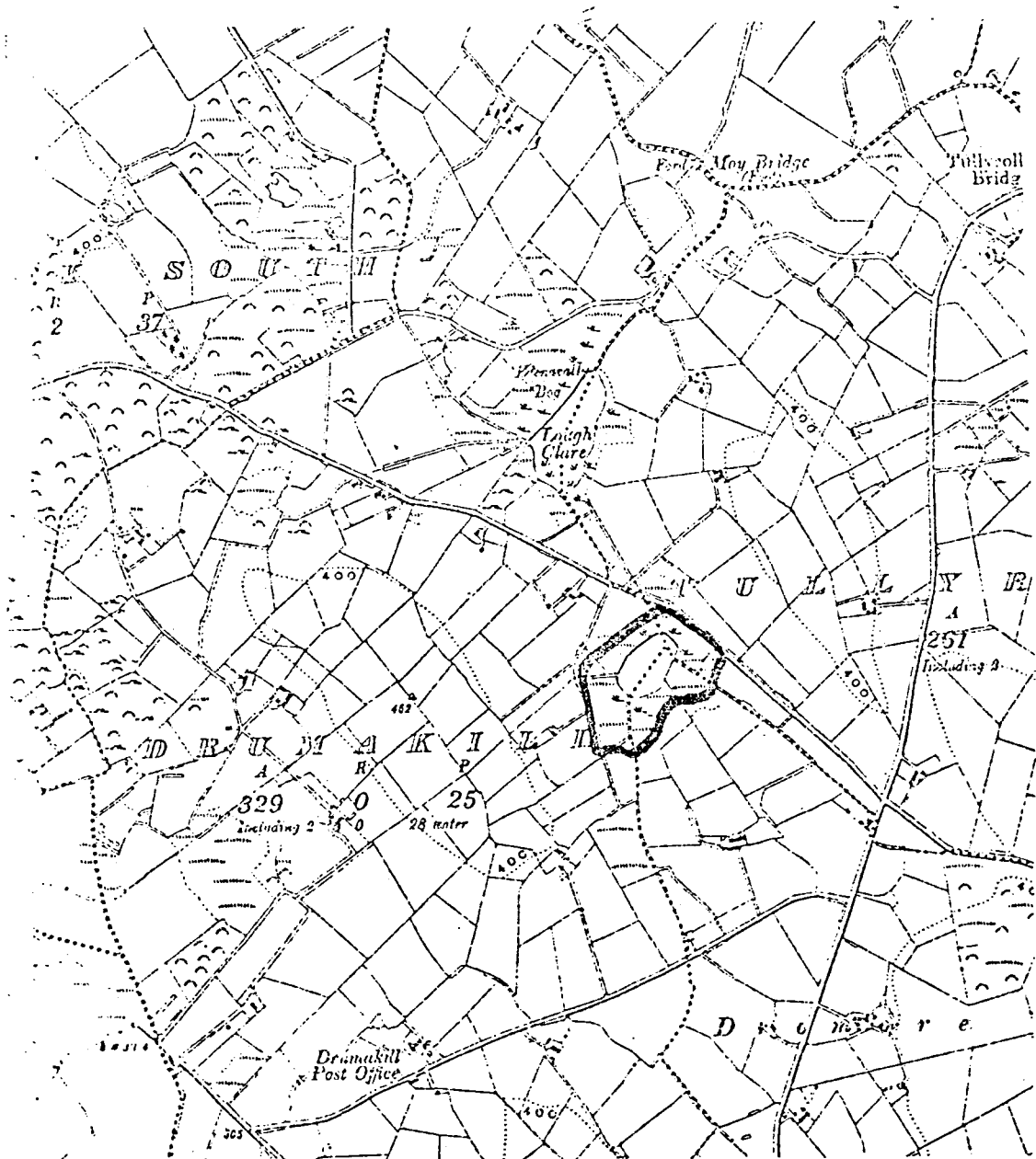
None apparent.

Recommendations

No action needed.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 29

Scale: 6 Inches to 1 Mile



<u>Name of Area</u>	GLASLOUGH
<u>Grid Reference</u>	H. 725.415
<u>Acreage</u>	1600
<u>Scientific Interest</u>	Ecological, Botanical, Ornithological, Zoological
<u>Rating</u>	Regional
<u>Priority</u>	B

Description of Site

The main interest lies in and around the lough itself. The lough is a calcareous one and has Canadian Pondweed (Elodea canadensis) and a stonewort species (Chara) in the shallow water. While Waterlily, (Nymphaea alba) and Common Reed (Phragmites communis) fringe the shoreline of most of the upper lough, Glaslough itself.

The southern end of Glaslough Lake has several wooded islands and together with a deep border of Phragmites, these form an ideal wildfowl sanctuary. There is a heronry on the wooded isthmus.

Much of the woodland is mixed with young planted conifers and natural deciduous trees. A small area of deciduous woodland is located opposite on the eastern side of the lake at the northern end. Numerous magnificent specimens of Douglas Fir, Silver Fir and Sequoias are to be found around the walled garden and to the NW of the house. Most of these are well over 100 years old and reach heights of 150 ft.

A herd of fallow deer, approximately 60 animals, are usually located in the southern part of the demesne where there are young plantations and open areas of grassland.

Although there is no one particular area of special merit, it is the inclusion of each of the facets in a whole demesne which gives Glaslough its ecological rating.

Threats to the Area

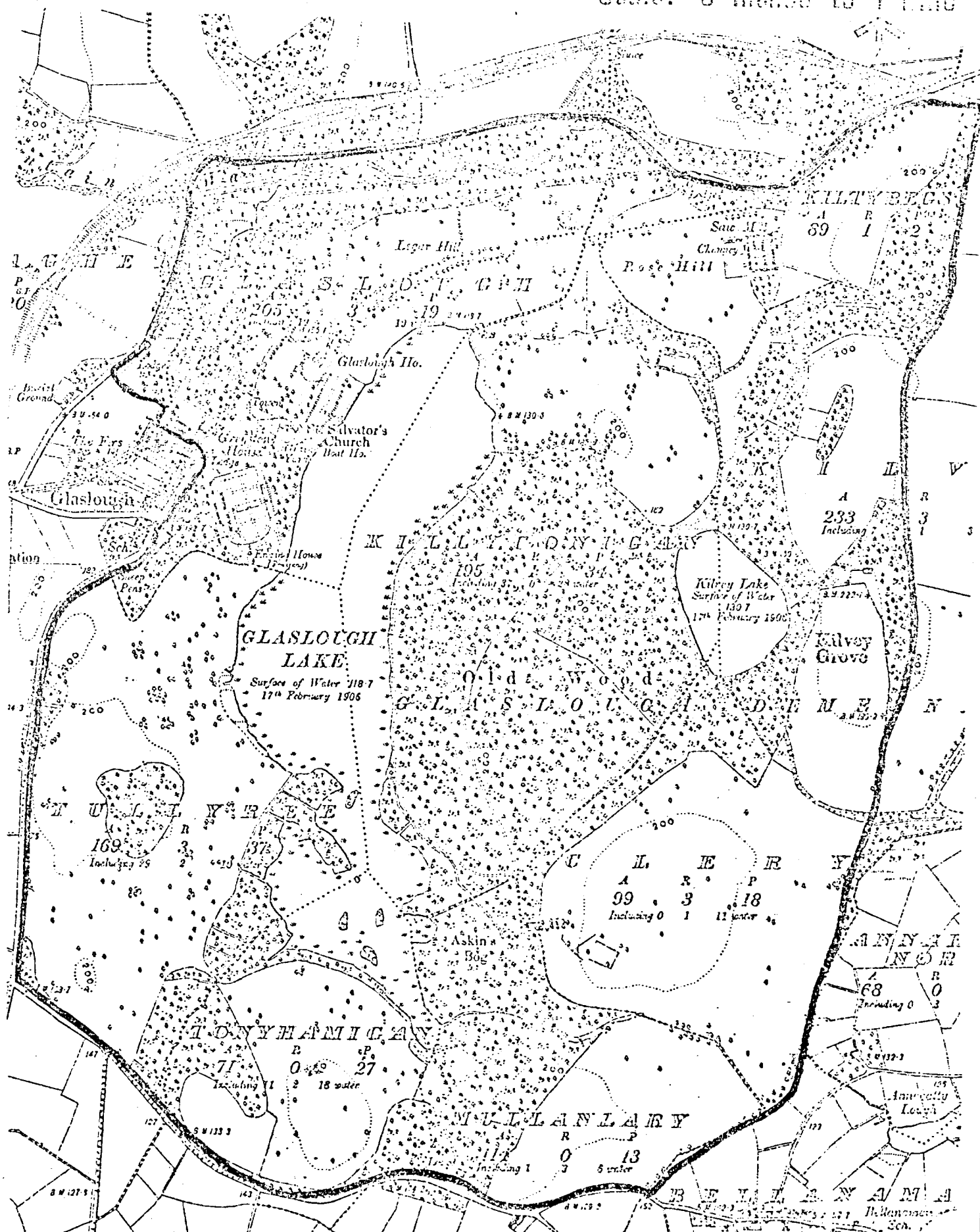
The estate is owned by Mr. Desmond Leslie. He has plans to develop it as a centre for ecological study. The area needs careful planning and management if this is to be achieved successfully.

Recommendations

Careful planning control is needed for the whole area.

MAP SHOWING AREA OF SCIENTIFIC INTEREST — 30

Scale: 6 inches to 1 Mile



<u>Name of Area</u>	LOUGH EGISH
<u>Grid Reference</u>	H. 790.135
<u>Acreage</u>	330
<u>Scientific Interest</u>	Ornithological
<u>Rating</u>	Local
<u>Priority</u>	B

Description of Site

The lough itself is very bleak, surrounded by rough grassland with very few trees. However, it is a good over-wintering area for Whooper and Bewick Swans and Goldeneye.

Black-headed Gull)	
Common Sandpiper)	
Lapwing)	
Coot)	Breeding Birds
Great Crested Grebe)	
Little Grebe)	
Tufted Duck)	
Pochard)	

Threats to the Area

The nearby Lough Egish dairy produce factory discharges its effluent into the lough. There have been recent reports that this is causing pollution of the water. The wildfowl population could be indirectly affected by this.

Recommendations

The state of pollution and its possible affects need to be studied. General planning control is required.

Table Summarising the Priority of the Sites and Recommendations for their Protection

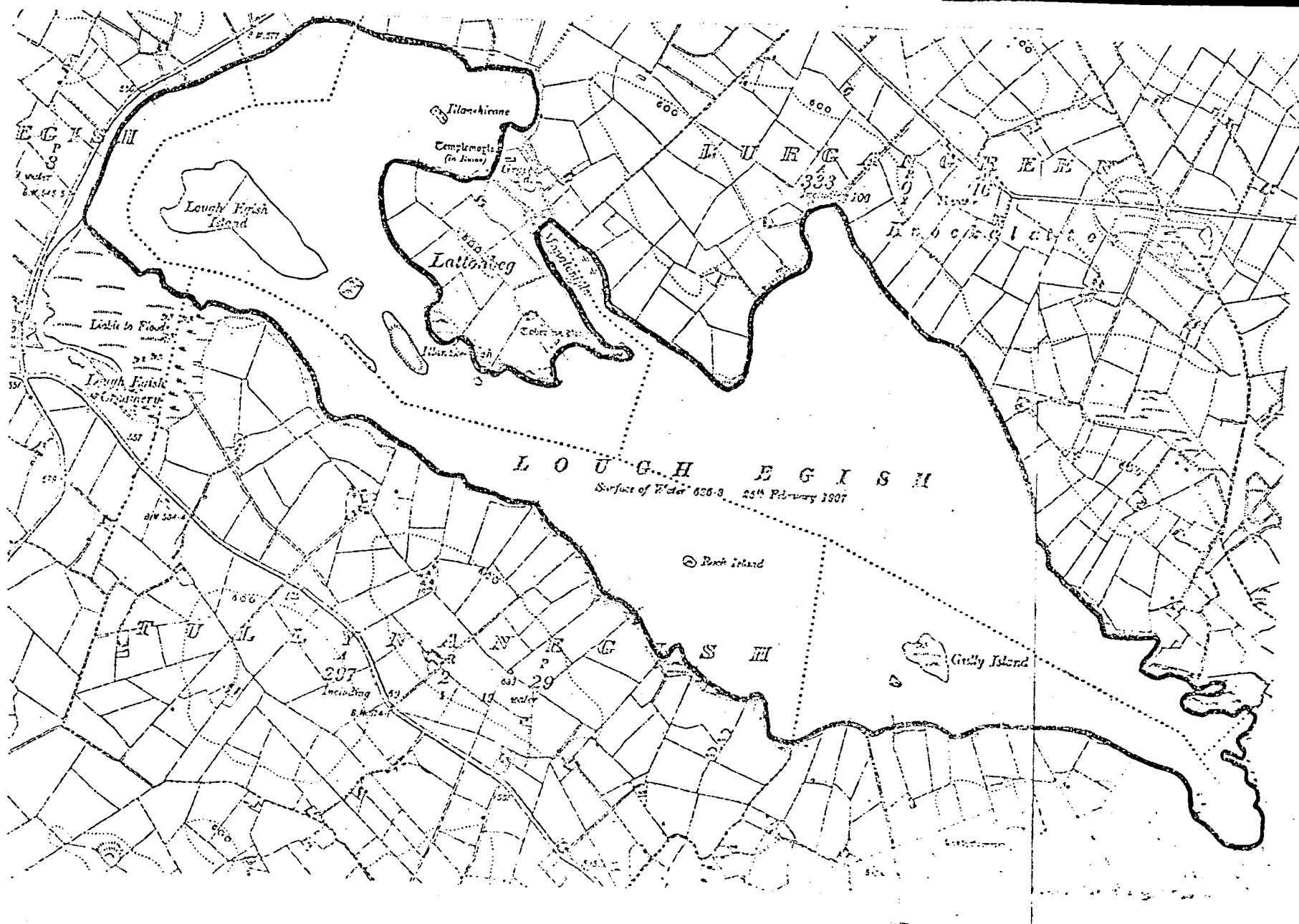
Site	No Protection Necessary	General Planning Control	Special Amenity Order	Conservation Order	Tree Preservation Order
Lough Fea Demesne and Environs			*		
Lough Naglack					
Carrickmacross Gypsum Mine		*			
Scrubland near Carrickashedoge Church		*			
Blieve Beagh	*				
Carrickmacross Caves					
Castleblaney Drumlin Area		*			
Drumreaske Lough		*			
Bawn Loughs		*			
Creivy Lough		*			
Wright's Wood	*				
Black Lough		*			

Site	No Protection Necessary	General Planning Control	Special Amenity Order	Conservation Order	Tree Preservation Order
Monalty Lough		*			
Spring Loughs	*				
Priestfield Lough, Rossmore Castle		*			
Quarry near Smithborough	*				
Ulster Canal		*			
Tassan Lough	*				
Drumgole Lough and Quarry		*			
Gibson's Lough	*				
Ballyhoe Lough		*			
Quiglough Reservoir		*			
Lough Ross	*				
Lough Smiley	*				
Cordoo Lough	*				

Site	No Protection Necessary	General Planning Control	Special Amenity Order	Conservation Order	Tree Preservation Order
Small Lough near Dromore	*				
Glaslough		*			
Lough Egish		*			

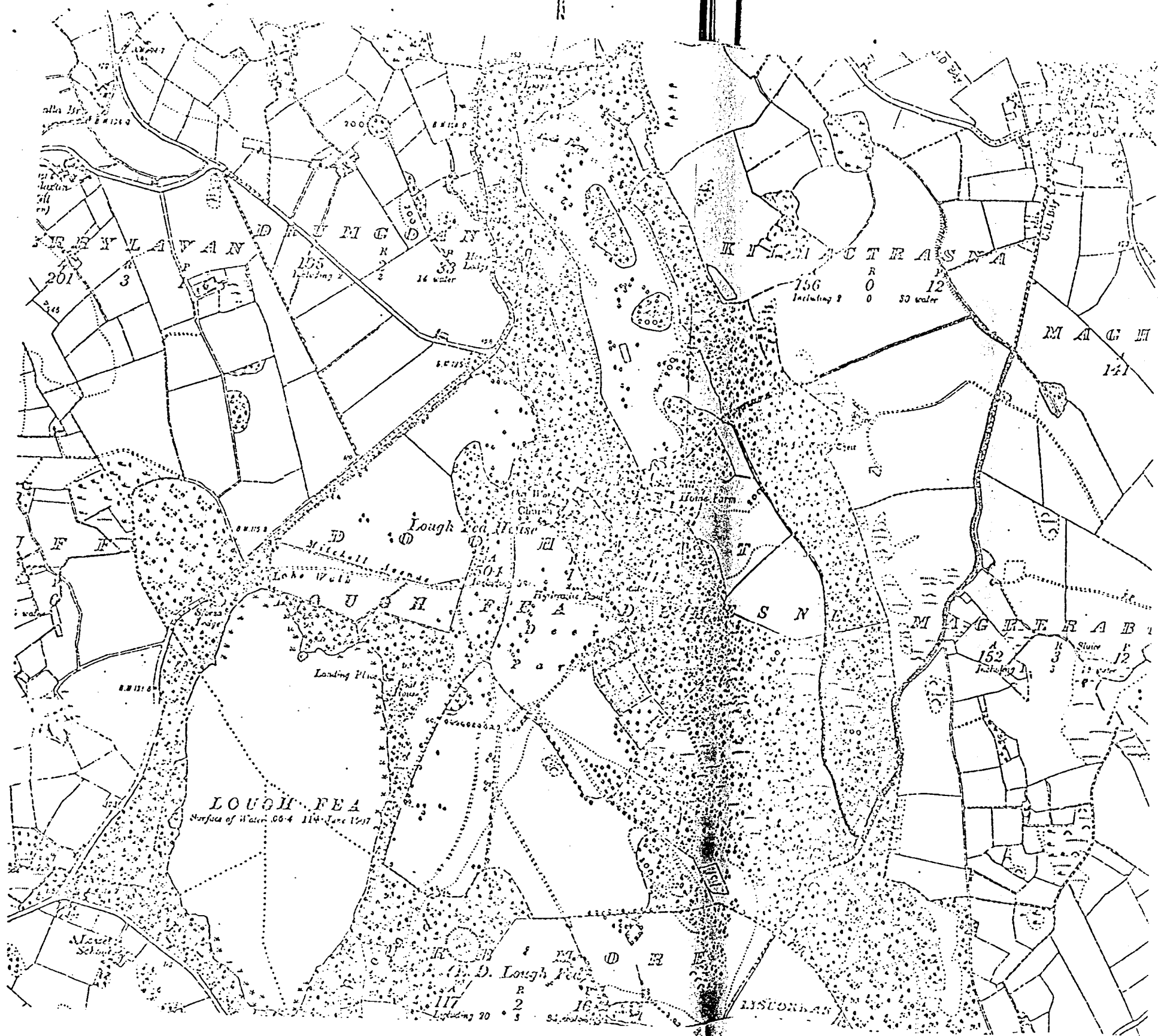
MAP SHOWING AREA OF SCIENTIFIC INTEREST — 31

Scale: 6 inches to 1 Mile



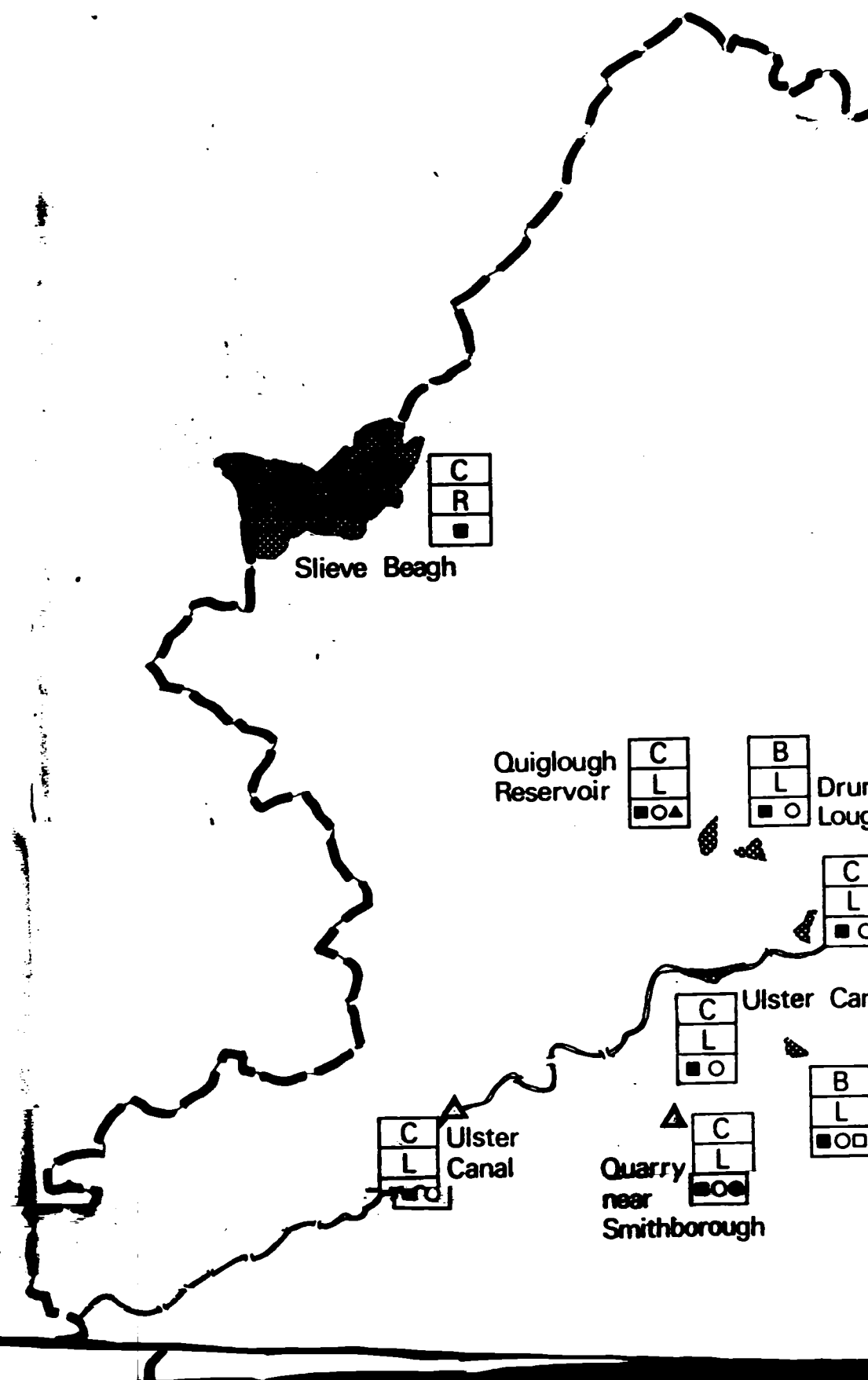
MAP SHOWING AREA OF SCIENTIFIC INTEREST — 1

Scale: 6 inches to 1 Mile



CO. MONAGHAN

Areas of Ecological and Geological Interest

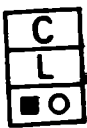




slough



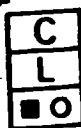
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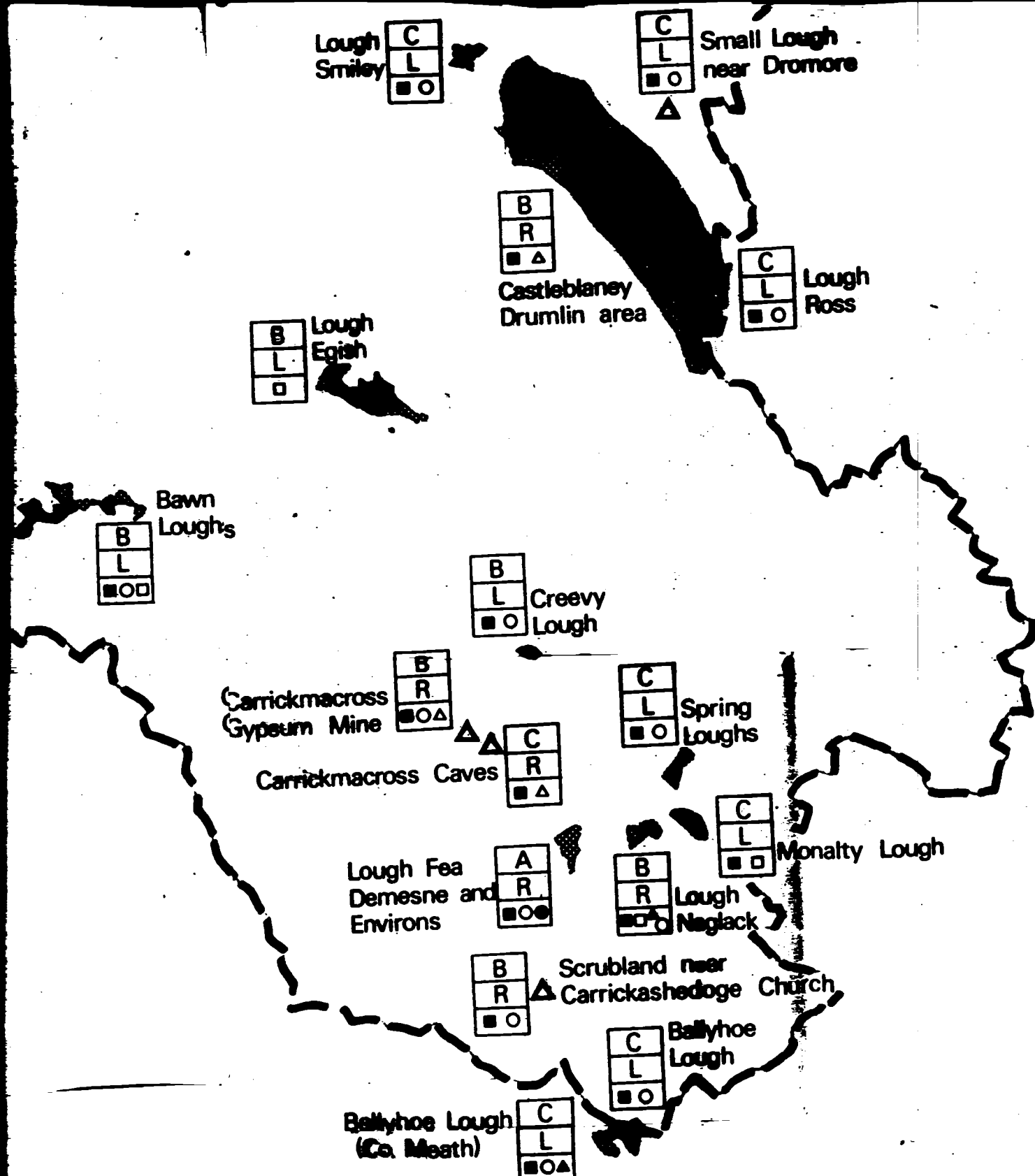


▲ Tassan
Lough



Drumgole Lough
and Quarry





PRIORITY

RATING

INTEREST

- International [INT]
- National [N]
- Regional [R]
- Local [L]
- Ecological [■]
- Ornithological [□]
- Geological [●]
- Botanical [○]
- Zoological [▲]
- Geomorphological [△]
- Small or indeterminate area [△]

SEPTEMBER 1972
 CONSERVATION AND
 AMENITY ADVISORY SERVICE