

AN FORAS FORBARTHA
TEORANTA

**The National
Institute
for Physical
Planning and
Construction
Research**

CONSERVATION AND AMENITY
ADVISORY SERVICE

PROVISIONAL SURVEY OF AREAS OF
SCIENTIFIC INTEREST IN COUNTY GALWAY

Ann C. M. Quinn,
Research Officer,
An Foras Forbartha.

December, 1971.

Teach. Mhartin
Eóibh. Waterloo
Ásh. Clár.
Telefón 64211

**St. Martin's House
Waterloo Road
Dublin 4**

CONTENTS

INTRODUCTION	1.
OUTLINE OF REPORT	2.
HABITAT TYPES	3.
DESCRIPTION OF AREAS	
WEST GALWAY	5.
NORTH EAST GALWAY	18.
SOUTH EAST GALWAY	24.
ASSESSMENT AND RECOMMENDED PLANNING CONTROLS	28.
SUMMARY CHARTS	31.

AREAS OF SCIENTIFIC IMPORTANCE

IN

COUNTY GALWAY

INTRODUCTION

The landscape is a living entity. This fact is realised by too few people. The living landscape of County Galway is unique. Shaped by its varied geology, its boglands, woodlands, lakes, turloughs and coastline are truly alive. Its wealth of wildlife is recognised by scientists as being of inestimable value. County Galway is set on the west coast of an island in Western Europe. Favoured by a mild oceanic climate which lacks extremes, a wide range of plant and animal life occurs here. Plant species such as the American Pipewort, the Pyrenean St. Dabeoc's Heath, the Mediterranean Heath and the Arctic-Alpine Bearberry find suitable habitats in County Galway. The numerous bogs, lakes and turloughs provide niches for thousands of nesting, breeding and wintering wildfowl from many countries.

In its relatively small area, County Galway acts as a focal point for species and communities which are widely dispersed in America, Europe, the Canary Islands, the Arctic-Circle and even in the Southern Hemisphere. The occurrence of all of these species and communities closely together in apparently inhospitable conditions provides one of the scientific wonders of the world.

Visiting scientists have frequently expressed their concern for the welfare of the Areas of Scientific Importance. Many of these Areas are of international rating, many are excellent examples of particular types of habitat. Wildlife species and habitats are merely our legacy to be held in trust for future generations.

The aim of this Report is to advise and assist Galway County Council in the conservation of these Areas of Scientific Importance. It describes and evaluates each of the selected Areas. This is followed by recommended planning controls. It is the responsibility of Galway County Council, under the Planning

and Development Act, 1963, to ensure the conservation of their wildlife heritage. Let Galway show how it is able to cater for its treasury of wildlife by positive action and forward planning. Galway has so much to give the world, so much of the world within its boundary, so much to learn of its secrets and so much of its values to appreciate.

OUTLINE OF REPORT

Three main geological types form the basis of the renowned scenery of County Galway - granite in West Galway, limestone in East Galway and Old Red Sandstone in South-East Galway. In this Report, for ease of reference, the County has been divided into three "vice-counties", approximating those geological types. West Galway is that area west of Lough Corrib and North to Killary Harbour. North-East Galway is bordered by Lough Corrib and the River Suck, while South-East Galway is bounded by the Shannon, Lough Derg and County Clare. The boundary between North and South-East Galway is taken to be the main Galway-Dublin railway line.

Within each of these three "vice-counties", the wildlife habitats are treated in the following order: Woodlands, Bogs, Freshwater, Maritime, Geological and Turloughs. Each of the Areas of Scientific Importance is listed in alphabetical order under each habitat type. The scientific value of each Area is described, together with its Grid Reference, likely impacts and recommendations. A Summary Chart illustrates the interest, rating and priority for each Area, followed by the recommended planning controls which are relevant.

WEST GALWAY

The Roundstone Region is renowned for its magnificent undisturbed expanse of blanket bog, so well seen from the summit of Errisbeg. The complex of scientific sites in this Region stretches to include the Ballyconneely Peninsula, well known for its wildfowl habitat and dune grassland. Taken in conjunction with the Twelve Pins nearby, with their Arctic-Alpine flora, the whole Region should be considered as a National Park.

NORTH-EAST GALWAY

Raised bogs and turloughs are the main wildlife habitats. In contrast with the blanket bogs of West Galway, the raised bogs originate from former lakes which have been colonised by vegetation over thousands of years. This habitat type is becoming increasingly rare. County Galway can claim the unique distinction of having both types of bog. They are divided only by the Corrib and by the change in geology from the granite of Connemara to the limestone of East Galway.

SOUTH-EAST GALWAY

The turloughs, with their fluctuating water level, are a unique feature from the geological and botanical viewpoints. They provide very rich feeding, breeding and overwintering wildfowl areas. Rahasane Turlough is internationally recognised and is one of the most important wildfowl areas in Ireland. The Lough Derg shore has an assemblage of rare plants, some shared with the Tipperary shore. Joint co-operation would be invaluable here in the conservation of such rare species and a unique habitat.

HABITAT TYPES

Woodlands

An outstanding example of Oak woodland is that at Derryclare, now a National Forest Reserve. The luxuriance of its lichen flora indicates the climatic conditions which suit species whose distribution ranges from the Canary Islands to the north of Scotland. Other woodlands are of importance for their occurrence in limestone as distinct from granite. The limestone woodlands are principally Ash/Hazel, with a diverse flora.

Bogs

Bogland stretching to the horizon - a common sight in County Galway. Nevertheless, a unique experience, as such expanses are fast dwindling. The blanket bogs north of Errisbeg, southwest of Maam Cross and in the valley of the Cashla River have been selected as being excellent examples of the Atlantic bog formation - to be found nowhere else. The raised bogs, with their different species composition are also becoming increasingly rare. Ahascragh Bog is

is now administered as a Nature Reserve by An Taisce. Other excellent examples are to be found in the Suck Valley, and even near the shores of Lough Derg.

Freshwater

These sites are of interest for their fish and microscopic life, which indicate the health of a water system. The Lough Kip, River and Ballycurke Lough are important as demonstrating the change from acid upland heath to lowland limestone grassland and its outlet to Lough Corrib. Fishery Statutes cover most of the lakes selected in this category.

Maritime

Along its varied coastline County Galway has a great diversity of habitat types. From the purely marine point of view, the shore of Mweenish Island, so intensively studied by staff and students of University College Galway, is of recognised international importance. The dune grassland of the Ballyconneely Peninsula also merits international rating, as does the Roundstone complex of sites. Another interesting complex of sites is that formed by Gentain Hill, Silver Strand and Lough Ruisín. This is of importance not only because of the diversity of habitats - Burren grassland, saltmarsh, mudflat and woodland - but also because of the educational value and use of the area. The fact that Lough Ruisín is already a Bird Sanctuary should give an impetus to protection for the other adjacent sites.

Geological

What other country can boast of both black and green marble - occurring within a few miles of each other? The now unworked quarries - at Merlin Park and Angliham for the Black Marble and in the Ballynahinch area for the Green "Connemara" Marble - are being used as dumping grounds and by avid souvenir collectors. The little that remains of this non-renewable resource should be protected. Unlike plants or animals, geological sites cannot "re-generate", and once gone, are gone forever. Other geological sites are of interest for fossils and rock exposures.

Turloughs

Disappearing and re-appearing rivers and lakes - this is frequent in the water-studded limestone region of East Galway. Outstanding examples are Rahasane, in the Dunkellin River Valley, and Caherghiassaun Lough, described by Praeger in his classical description of "The Flora of Turloughs" (1934).

DESCRIPTION OF AREASWEST GALWAYWOODLANDS

1. BALLYNAHINCH L 760 480

Owned by the Forestry Division of the Department of Lands, this extensive area of forest/woodland is of general ecological interest and importance due to the diversity of environmental conditions. The deciduous woodland area is an outlier of the Blechno-Quercetum type described for Killarney by Braun-Blanquet and Tüxen and which is confined to Ireland. The Type Locality for Sorbus hibernica E.F. Warburg is here in the Ballynahinch Area.

THREATS: Large scale felling
RECOMMENDATION: Tree Preservation order for selected areas and Special Amenity Area Order.

2. DERNASLIGGAUN L820 620

Situated in the valley between Lough Fee and Killary Harbour, this is an Oak woodland, divided by the Bunowen River. The western section is owned by locals, the eastern by Mr. Thompson, Dublin. Part of the former is used for grazing cattle and there is no evidence of seedling regeneration. The eastern section showed evidence of deer. There is a rich bryophyte (moss) and lichen flora. Two interesting species, indicative of high atmospheric humidity, occur here - Hymenophyllum tunbrigense (Filmy Fern) and Saxifraga spathularis. The owners of the western section did not intend interfering with the woodland. Mr. Thompson's section includes the Lodge, which looks down on the valley. There is the danger that Rhododendron, which surrounds the Lodge, may invade the woodland below.

THREATS: Overgrazing, felling and Rhododendron
RECOMMENDATION: Tree Preservation Order

3. DERRYCLARE L835 498

This Oak wood is of special importance because of its rich lichen flora, with 105 types recorded, some of which are new to the Irish flora. Fungi parasitic on the lichens are also of interest, several unique in Ireland, and one new to the Northern Hemisphere. Owned by the Forestry Division, this wood was declared a Nature Reserve in February, 1971. "The Lichens and Lichen Parasites of Derryclare Wood, Connemara" by A. Folan and W. Mitchell. Proc. Roy. Ir. Acad. Vol. 70, B7, 1970.

THREATS: Drainage and longterm effect of surrounding forest on humidity
RECOMMENDATION: General planning control and Special Amenity Area Order.

4. DRIMCONG M 205 340

This is a large area of coniferous and deciduous wood, some of which is privately owned and the remainder is owned by the Forestry Division. Part of the area is used as a deer forest. On limestone, it provides a rich environment and a diversity of species and habitats.

THREATS: Large scale felling
RECOMMENDATION: General planning control

5. FURBOGH M185 230

An oak woodland, with Hazel/Birch understorey. It is very rich in flowering and cryptogamic (e.g. lichens, ferns, mosses) species. Site for Lobaria scrobiculata (rare lichen). There has been little interference and is of general ecological and educational importance.

THREATS: Felling, Building development
RECOMMENDATION: General planning Control and Educational use.

6. GLENDOLLAGH L843 470

A very extensive oak woodland, privately owned by an American. This area needs further examination, but is similar in general woodland flora to Derryclare nearby. It is important not only from the scientific viewpoint, but also in the interests of amenity.

THREAT: Felling
RECOMMENDATION: Tree Preservation Order

7. HILL OF DOON M027 495

This fine woodland has an Oak canopy, with a Holly/Oak understorey. There is occasional Yew, Pine and Ash, the latter regenerating. No Oak regeneration was noted. There is a Vaccinium/Blechnum field layer, with Luzula sylvatica, Calluna and Daboecia. Both species of Filmy Fern are also present, together with Oxalis, Anemone, Primula, Scilla, Glechoma. There is a rich cryptogamic flora, particularly on rock faces. Mosses include Hookeria, Dicranum, Fissidens, and hepatics present include Diplophyllum, Plagiochila, Marchantia and Lunularia. Lichens species include Pannaria, Parmeliella, Peltigera, Lobaria, Leptogium and the eu-oceanic species Sticta dufourei Del.

The property of the Earl of Mayo, this woodland is in excellent condition, with no evidence of interference.

THREATS: Felling
RECOMMENDATION: Tree Preservation Order; Special Amenity Area Order; Conservation Order

8. KYLEMORE L747 588

Formerly a very diverse Oak woodland, the lichens of which had been very well studied by Labalestier, who was tutor to the Mitcheli-Henry family at the Castle. Rhododendron ponticum has now spread over most of the area and only small pockets of the original wood remain. Further spread of this species should be controlled if any of the Oak Wood is to be retained.

THREATS: Rhododendron
RECOMMENDATION: General planning control

9. NEWTOWN HILL M190 345

Birch/Hazel Woodland with occasional Oak and Hawthorn. The wood is rich in mosses and lichens. The land between the wood, at the base of the hill, and the main road was drained in 1967. This may have a longterm effect upon the humidity in the wood and consequently on the moss and lichen flora.

THREATS: Drainage
RECOMMENDATION: General planning control

10. SHANNAGURRAUN M130 240

Situated in the valley of the Owenboliska River, Spiddal, this fine Oak wood has a Hazel/Holly/Birch understorey and is very rich in ferns, mosses and lichens. The River is renowned for fishing; both the wood and the fishing rights were formerly owned by Lord Killanin. The bogland area to the north and west of the wood are of national importance as the lowland breeding site of Golden Plover.

THREATS: Felling, drainage
RECOMMENDATION: Tree Preservation Order; Conservation Order;
 General Planning Control

11. SILVER STRAND M245 240

This beech woodland on granite is unique in Galway and is interesting because of its proximity to Gentian Hill and Loch Ruisín. There is active beech regeneration and a good age-mixture. There are occasional Ash and Oak. In contrast to the other woodlands, this is not rich in cryptogamic species, although some of the fungi are of interest.

This complex of sites lies eastwards from Barna House to the junction of the roads L100 and L100A and southwards to include the two promontories, the eastern being Gentian Hill. The wood, Loch Ruisín and Gentian Hill are considered to be of great educational importance, with a diversity of habitats so near to Galway.

THREATS: Felling, building development.
RECOMMENDATION: General planning control; Tree Preservation Order;
 Educational Use.

BOGS

12. CASHLA RIVER LM 990 300

The valley of the Cashla River is of importance because of the blanket bog and Loughs Muckanagh, Formoyle, Cloonadoon and Glenicmurrin. The latter is also of importance as a freshwater lough. There is a valuable aviary at Lough Formoyle, owned by Mr. Stephens.

THREATS: Drainage, largescale cutting of peat
RECOMMENDATION: General planning control

13. ERRISBEG L700 400

This mountain near Roundstone is one of a complex of sites described separately in this Report. The mountain is of importance because of its varied geology, which includes the rare orbicular gabbro, and its rare plant species Asplenium septentrionale (only site in Ireland) and Erica mediterranea on the northern slope.

Reference for geology: "The West of Ireland - its existing condition and prospects", Henry Coultres, Dublin, 1862.

THREATS: Building development
RECOMMENDATION: General planning control; Special Amenity Area Order.

13a. BOG NORTH OF ERRISBEG L670 440

From the summit of Errisbeg Mountain there is a wonderful panorama of the internationally recognised area of blanket bog north of the mountain. It includes the townlands of Derrycunlagh, Slieveburke, Tullaghlumman Beg, Tullaghlumman More, Arkeen Beg, Arkeen More, Cushatrower; Letterdife Errisbeg E., Emlaghmore and Derryvickrune. The area is bounded by the roads linking Ballinaboy, Toombeola, Roundstone and Ballyconnelly. The blanket bog has been described by a number of scientists and as well as the interesting bog formation it has a number of rare heather species.

Erica mediterranea occurs on Errisbeg and at Lough Bollard at its base;
Erica mackaiana occurs near Hill 201.

THREATS: Largescale cutting of peat

RECOMMENDATION: Special Amenity Area Order; Public acquisition;
 Conservation Order.

14. MAAM CROSS L900 440

Another extensive area of blanket bog, with rare species Eriophorum gracile and Deschampsia setacea, first recorded for Ireland by V. Westhoff, a Dutch phytosociologist in 1967. The area is bordered by the roads linking Glendollagh, Maam Cross, Screeb, Derryrush, Loughanillaun. This area is also a lowland breeding site for Golden Plover.

THREATS: Largescale cutting of peat.

RECOMMENDATION: Conservation Order.

15. MUCKANAGHT

One of the Twelve Pins, selected because of its Arctic-Alpine Flora, of which a number of species grow near the summit.

THREATS: Minimal; botanists.

RECOMMENDATION: General planning control; Conservation Order.

FRESHWATER

16. BALLYCUIRKE M225 312

The catchment area of Lough Kip, Loughkip River and Ballycuirke Lake are of importance because the upper reaches are on granite-igneous beds while the eastern half of the lakeshore and its outlet to Lough Corrib are on limestone. The freshwater Algae and invertebrates along the river and in the lake are of interest.

THREATS: Building development; pollution

RECOMMENDATION: General planning control

17. BALLYNAHINCH LAKE L780 475

Of general ecological importance, this lowland acid lake also contains char. It is protected by Fishery Statute and its microscopic life has been described in "The Phytoplankton of Some Irish Loughs"

Proc. Roy. Ir. Acad. 60 B4 1953, by F. E. Round and A. J. Brook.

THREATS: Pollution

RECOMMENDATION: General planning control; Special Amenity Area Order

18. CANAL BRIDGE, BALLYNAHINCH L802 475

Undemeath the bridge, on the eastern side, is the site of rare aquatic lakeshore vegetation including such rare species as Subularia aquatica and Littorella uniflora. The community has been described by Westhoff in Dutch publications.

THREATS: Physical interference with lakeshore

RECOMMENDATION: General planning control

19. CREGDUFF LOUGH L718 390

One of the Roundstone complex of sites, this Lough is known for the occurrence of the very rare plant Naias flexilis which grows in the Lough. Other species confined to Connemara on an international level are Eriophorum gracile, Deschampsia setacea, Eriocaulon septangulare and Lobelia dortmanna. The latter two species are American and present in Connemara in several lakes. They do not occur anywhere else in Europe.

THREATS: Physical disturbance of shore and surrounding area.

RECOMMENDATION: Conservation Order; General planning control.

20. DERRYNEEN LOUGH L89 46

A lowland acid lake of general ecological importance. It contains the rare fish Salvelinus (char) and the Lough is protected by Fishery Statute.

THREATS: Physical disturbance; Building development.

RECOMMENDATION: General planning control.

21. DOUGHRUAGH MOUNTAIN L760 600

Five small bog lakes at about 1600'. They contain several species of Arctic-Alpine insects. A collection was made by Walton (U.C.C.) in 1966. Access difficult, so this acts as a form of protective measure.

THREATS: Minimal

RECOMMENDATION: General planning control

22. GLENDOLLAGH LOUGH L840 750

An acid lake of general ecological importance and also contains Char. The Lough is protected by Fishery Statute, and should be considered as a unit with the Woodland mentioned earlier.

THREATS: Physical interference with shore; pollution

RECOMMENDATION: General planning control

23. GLENICMURRIN LOUGH M000 310

An acid lake of general ecological importance, containing Char and protected by Fishery Statute. This Lough is within the area described under Cashla River Valley.

THREATS: Physical interference on shore; pollution

RECOMMENDATION: General planning control

24. KYLEMORE LOUGH L770 585

This Lough is of general ecological importance, containing Char and protected by Fishery Statute. Its microscopic life is described by F. E. Round and A. J. Brook in "The Physoplankton of Some Irish Loughs", Proc. Roy. Ir. Acad. 60, B4 1953.

THREATS: Physical disturbance on shore.

RECOMMENDATION: Special Amenity Area Order.

25. LOUGH AUNEMLAGH L70 50

With an average depth of 17', this lowland acid lake contains Char and is of general ecological importance. A chemical analysis and experiments to study the growth rate of resident brown trout before and after fertilisation were carried out and are reported in "Fertilisation of Some Acid or Bog Lakes in Ireland" by Twomey, 1956.

THREATS: Pollution; physical disturbance

RECOMMENDATION: General planning control

26. LOUGH INAGH L840 530

Of general ecological importance, containing Char and protected by Fishery Statute. The island vegetation has been described in "Vegetation and Flora of Some Islands in Connemara Lakes", Proc. Roy. Ir. Acad. 62 B5, 1961 by Webb. This Lough should be considered as a unit with Derryclare Wood.

THREATS: Building development.

RECOMMENDATION: Special Amenity Area Order

27. LOUGH SHINDILLA L960 460

Of general ecological importance, containing Char and protected by Fishery Statute. The Woodland on the island is interesting and referred to by Webb (1961). Rare aquatic vegetation along the lakeshore (Westhoff).

THREATS: Physical disturbance; pollution

RECOMMENDATION: Special Amenity Area Order

28. RINVYLE LOUGH L690 620

A rare plant species, Hydrilla verticillata syn. Elodea nuttalli was recorded here by Praeger but as far as is known no other recordings have been made.

This is the only locality recorded in Ireland for this species.

THREATS: Physical disturbance; pollution

RECOMMENDATION: General planning control

MARITIME

29. AILLEBRACK L585 435

This is an area of calcicole dune grassland with dune slack and saltmarsh vegetation. It is very rich in species and is also of importance because of a small colony of less common terns.

THREATS: Physical disturbance; building

RECOMMENDATION: General planning control; Conservation Order.

30. BALLYCONNELLY MARSH L620 436

Of ornithological importance and recognised by the Irish Wildbird Conservancy as an important site for waders and wintering wildfowl.

THREATS: Drainage; physical disturbance

RECOMMENDATION: General planning control

31. BUNOWEN CASTLE L595 430

A marsh, bog and lakes of general ecological importance. A rare plant species, occurring rarely elsewhere in Ireland, is by the stone wall along the north side of the road underneath the Castle.

THREATS: Building development

RECOMMENDATION: General planning control.

32. CORRANROO BAY M325 115

An island in this Bay near Kinvara is of ornithological importance for nesting seabirds.

THREATS: Minimal

RECOMMENDATION: General planning control.

33. DOGS BAY L690380

One of the Roundstone complex, this area is of importance for the formation of a tombolo - where the mainland is joined to an offshore island by the accumulation of sand and subsequent colonisation by vegetation. The flora is very rich, a calcicole dune grassland, with many rare species. The sand is also of interest as it is formed of foraminiferan shells. The very nature of the tombolo with its two bays has led to erosion problems in the narrower

section. Planting of Marran Grass has been carried out by the Land Commission.

THREATS: Overuse of dune grassland; physical disturbance.

RECOMMENDATION: General planning control; Special Amenity Area Order.

34. GENTIAN HILL M260 230

This site should be considered in conjunction with Loch Ruisin and Silver Strand. This hill is of geological interest because of its limestone formation in an area which is completely granite. Its vegetation is that of the Burren grassland type, and is considered as an outlier of the famed Burren flora. Such Burren species as Gentiana, after which the Hill is named, Dryas, Antennaria and Juniper have been recorded.

THREATS: Building development

RECOMMENDATION: Acquisition; Conservation and Special Amenity Area Orders

35. INISHMORE L85 08

The cliffs are of importance for nesting seabirds.

THREATS: Minimal

RECOMMENDATION: General planning control

36. HIGH ISLAND L505 575

This island is of ornithological importance because of breeding colonies of Manx Shearwaters and Storm Petrels as well as some less common breeding seabirds. Small flocks of Barnacle Geese are present in winter, and it is also a site for breeding Peregrine Falcons.

THREATS: Minimal

RECOMMENDATION: Planning control.

37. LETTERDIFE HOUSE L723 415

Owned by a group of Dutch scientists, the House and grounds have been used as a base for their scientific studies, in particular the Roundstone Area. Complete inventories of the breeding birds and of the flora have been carried out. It is recognised as a Joint Reserve by the Irish Wildbird Conservancy and EUREL.

THREATS: Physical disturbance

RECOMMENDATION: Planning control.

38. LOUGH RUISIN M255 230

In conjunction with Silver Strand Wood and Gentian Hill, this area is of ornithological importance. It is an area of mudflats and saltmarsh and is a wintering area for waders and wildfowl. It is a Bird Sanctuary under the Wild Birds Protection Act 1930 and is under the care of Galway County Council.

THREATS: Physical disturbance and interference with birds.

RECOMMENDATION: Planning control; Special Amenity Area Order.

39. MANNIN BAY L600 465

The south shore of this Bay is of international importance for its calcicole dune grassland - the most interesting in Ireland and of its type in Europe. The beach is of importance for its coral strand, which should be protected.

THREATS: Building development; physical disturbance on shore

RECOMMENDATION: General planning control; Special Amenity Area Order.

40. MUTTON ISLAND M297 230

This island, near Galway, is of ornithological importance as a breeding site for Sandwich Terns and for a large colony of tern species.

THREATS: Disturbance

RECOMMENDATION: Planning control

41. MWEENISH ISLAND AND SHORE L765 300

University College Galway have been carrying out marine biological research in this area for over ten years and a great fund of knowledge has been acquired. The College have a Field Station, based at the Pier, which is used for teaching and research purposes. There is a very diverse marine fauna and flora around these shores about which little would be known or appreciated without the staff or students of the Botany and Zoology Departments.

THREATS: Building; commercial collection of Algae.

RECOMMENDATION: General planning control; Conservation Order.

42. TAWIN PENINSULA M310 190

The lagoon area is of importance for wintering wildfowl and as a haul out of Grey Seals.

THREATS: Disturbance of habitat

RECOMMENDATION: Acquisition.

GEOLOGICAL

43. CLOONACARTON L843 490

Within this townland there is a site for crystals of the rare mineral cordierite. The site is at the north end of a small roadside quarry on the east side of the road from Recess to Kylemore.

THREATS: Quarrying; removal of material

RECOMMENDATION: Planning control

44. LISSOUGHTER L855 488

Site for Connemara Green Marble quarry. Urgent action required to conserve remaining marble.

THREATS: Exploitation of marble

RECOMMENDATION: Planning control

45. OWENDUFF BRIDGE L810 596

This is a site for interesting fauna of Silurian Age in rocks exposed at this Bridge.

THREATS: Physical disturbance

RECOMMENDATION: Planning control.

46. OWENGLIN RIVER L750 510

Site for Connemara Green Marble Quarry. Urgent action required to avoid removal of all remaining marble.

THREATS: Exploitation of marble

RECOMMENDATION: Planning control

NORTH-EAST GALWAYWOODLANDS

47. ANNAGHDOWN M 280 335

This is a fine example of Ash woodland on limestone and differs from these already described in West Galway which were on granite. There is a great diversity of species in the woodland and a good example of zonation from the wood to the lakeshore, with the various plant communities well represented.

THREATS: Felling, Disturbance.

RECOMMENDATIONS: General Planning control.

48. BALLYGLUNIN: M 466 430

Woodland with mixed canopy and of interest because of the understorey of Box, Buxus, which has become naturalised. It is a game preserve within the surrounding area and has a good diversity of species.

THREATS: Felling:

RECOMMENDATION: General Planning Control.

49. CASTLE HACKET M 356 490

Owned by Mr. Paly, the original castle was destroyed by fire in January 1923 and rebuilt in 1929. The woodland is mixed, and of interest because of naturalised Vinca as ground cover over a large area. This is the only wood where this species was found naturalised.

THREATS: Felling

RECOMMENDATION: General Planning Control.

50. ROSS LAKE: M 190 370

A mixed woodland of general ecological importance because of the diversity of species and habitats .

THREATS: Felling.

RECOMMENDATION: General Planning Control.

BOGS

51. AHASCRAUGH: M340 400

Owned by An Taisce as a Nature Reserve, this is a large area of Raised bog-as distinct from the blanket bog present in West Galway. The town-land is Addergoole N. and is near Daly's Grove.

THREATS: Fire

RECOMMENDATION: General planning Control.

52. BALLYGAR: M 780 535

This extensive area of Raised Bog is situated just northwest of the town, west of the large forestry area. There is localised cutting at the margins and pine seedlings from the forest are colonising the edge of the bog. Towards the centre there are very good examples of the hummock-hollow formation - typical of this type of bog formation.

THREATS: Drainage, Fire.

RECOMMENDATIONS: General Planning control.

53. ISLANDCAUSE: M800 490

Also known as Trehill, this area is locally known as "Jim O'Brien's Bog". It is bordered by the river Suck on the east and by the river Shiven to the north. There is a very good flora and excellent hummock-hollow formation and there has been very little disturbance.

THREATS: Drainage, Fire.

RECOMMENDATIONS: General planning control.

54. KILLACLOGHER: M 555 400

This is also an excellent example of the raised bog formation. There has

been disturbance at the edges, but the centre is very wet, with the typical flora represented there.

THREATS: Fire, drainage.

55. POLLBOY: M 865 290

This bog area is of interest because of the occurrence of a rare Mollusc, Vertigo genesi, thought to be extinct in Western Europe. The main bog has been drained, but an area two miles south of the main area might be saved. This information came from the Conchological Society of Great Britain and Ireland.

THREATS : Drainage; Fire.

RECOMMENDATIONS : General planning control.

56. TIAQUIN M 565 345

Another excellent example of a raised bog, included in a Game Preserve. Bordered by some birch wood, which adds to its value because of the change in plant communities from bog through to woodland.

THREATS : Drainage; Fire.

RECOMMENDATIONS : General Planning control.

FRESHWATER57. COOLAGH M295 280

This area, so near to Galway, is an interesting complex of lakeshore, marsh and limestone pavement just north of Coolagh, where the road swings westwards. There is a great diversity of species within a small area. It is also of ornithological and educational importance.

THREATS : Physical disturbance, pollution.

RECOMMENDATIONS : General Planning control.

58. MOUNT ROSS M 265 425

This inlet of Lough Corrib is a very important wintering area for duck - Gadwall, Mallard, Teal, Tufted duck, Fochard, Pintail, Shoveler and swans.

THREATS : Physical disturbance, Pollution.

RECOMMENDATIONS : Planning control.

GEOLOGICAL59. ANGLIHAM M 290 305

Situated near Menlough, these famous quarries were the site of the Galway Black Marble. Now no longer operative, the quarries are a valuable amenity and are also botanically interesting. A rare orchid, Coeloglossum viride has been recorded here, and on the shore nearer Menlough other rare species such as Epicactis palustris, and Juniper are recorded.

THREATS : Dumping; physical disturbance.

RECOMMENDATION : General planning control; dumping.

60. MERLIN PARK M 340 260

This area is of Carboniferous Limestone of the Upper Visean $D_1 - D_2$ strata. The quarry is the site where Galway Black Marble was quarried from 1878-1969, and as such is a very important geological site together with that at Angliham. The Maidenhair Fern is reputed to be growing there and some brachiopod fossils have been recorded.

THREATS : Dumping; physical disturbance.

RECOMMENDATION : General planning control- no dumping.

TURLOUGHS

61. BLINDWELL M 350 590
- This turlough area is of ornithological importance for breeding duck and swans, a wintering area and occasional geese.
- THREATS : Drainage, disturbance.
- RECOMMENDATIONS : General planning control.
-
62. CALLOW LOUGH, KILCONNELL M720 344
- Of ornithological importance for wintering wildfowl.
- THREATS : Drainage; disturbance.
- RECOMMENDATIONS : General planning control.
-
63. KILLOWER M 375 520
- Of ornithological importance for wintering wildfowl.
- THREATS : Drainage, disturbance.
- RECOMMENDATIONS : General planning control.
-
64. LEVALLY LOUGH M 530 535
- Of ornithological importance for duck and wild swans. This is a breeding area for some unusual water-fowl.
- THREATS : Drainage, disturbance.
- RECOMMENDATIONS : General Planning Control.
-
65. LOUGH HACKET M 310 490
- An area of ornithological importance for wintering wildfowl.
- THREATS ; Drainage, disturbance.
- RECOMMENDATIONS : General planning control.
-
66. TURLOUGHCOR M 295 440
- Of ornithological importance for wintering wildfowl.
- THREATS : Drainage; disturbance.
- RECOMMENDATIONS : General planning control.

SOUTH EAST GALWAY

WOODLANDS

67. CLOGHBALLYMORE M 395 114

This is an Oak/Ash wood, with a diversity of species. There is also limestone pavement with a number of interesting species. The woodland and pavement together provide a unique combination of habitats.

THREATS : Felling

RECOMMENDATIONS : General planning control.

68. COOLE PARK AND GARRYLAND WOOD M 430 045

Owned by the Forestry Division, the former is to be made a Forest National Park. There is an interesting combination of forestry, woodland, open limestone pavement, grassland and turlough habitats. This whole area is representative of the most important habitat types to be found in South and East Galway.

THREATS : Felling; Physical disturbance.

RECOMMENDATIONS : General planning control, Special amenity Area Order

BOGS

69. BALLIN LOUGH M 695 040

Situated in the Slieve Aughty mountains, this area was selected as an example of blanket bog on Old Red Sandstone as distinct from blanket bog on granite in West Galway.

THREATS : Drainage ; Cutting of peat.

RECOMMENDATIONS : General planning control.

FRESHWATER

70. BELLE ISLE M 873 040

Of ornithological importance because of the large numbers of Grasshopper

Warblers, Water Rails and other Water birds. This area is just south of the bridge over the Shannon outside Portumna.

THREATS : Physical disturbance ; pollution.
RECOMMENDATIONS : General planning control.

71. LOUGH CUTRA R 470 980

An area of mixed woodland, rock outcrop and lakeshore. It also includes the "Punchbowl" , where the river disappears underground. There is great habitat diversity, with a number of species, and should be treated as a unit for management purposes.

THREATS : Felling, physical disturbance
RECOMMENDATION : General planning control, Special Amenity Area Order

72. LOUGH REA M 610 160

This lake is of general ecological importance. Detailed chemical analyses have been made as well as studies of Brown Trout and Perch in relation to re-stocking. It is a highly productive limestone lake, with an average depth of 6'-8'.

Healy A, 1953 Trout in Lough Rea Sci .Proc. .R.D.S XXVI (9)
1954 Perch in three Irish lakes Sci.Proc. R.D.S. XXVI (23)
Round, F.E. & Brock A.J. The Phytoplankton of some Irish Loughs.
Proc. Roy Ir . Acad. 60 B4 1959

THREATS : Building, disturbance, pollution.
RECOMMENDATIONS : General planning control.

73. SILVER ISLAND Lough Derg M 835 020
of ornithological importance

THREATS : Disturbance.
RECOMMENDATION : General control.

74. STONEY ISLAND , LOUGH DERG M 803 032

This is the locality of Bangia atropurpurea, a red alga usually found only in the sea. This may be the only freshwater site for this alga. It was found as a red "bloom" on stones in July 1966, Miss M. Scannell, National Botanic Gardens.

THREATS : Pollution ; building;
RECOMMENDATION : General planning control.

6/10/66

75. WOODFORD RIVER AND LOUGH DERG SHORE R 788 970

This area is of importance because of the occurrence of Sisyrinchium bermudiana, an american species, and for Teucrium scordium and Inula salicina. Each of these species is very rare and their occurrence together on both the Galway and Tipperary shores is unique.

TREATS : Drainage, physical disturbance.

RECOMMENDATIONS General planning control.

GEOLOGICAL

76. BOLEYNEENDORRISH RIVER M 530 060

This is the site of an Interglacial peat deposit under boulder clay in the valley of the Boleyneendorrish River east of Peterswell. There is a rich interesting fossil flora with exotic species. This exposure is unique in Ireland and is described in Proc. Roy. Ir. Acad.. 1959 Vol. 60. BI

TREATS ; Excavation , physical disturbance.

RECOMMENDATION : Planning Control.

TURLOUGH

77. CAHERGIASSAUN LOUGH M 415 062

This turlough was described by Praeger in his classical description of vegetation in turloughs. ("The Flora of Turloughs" Proc. Roy. Ir. Acad. 1934) The zonation of plant species, regulated by the rise and fall of the water level is very evident.

TREATS Drainage; Physical disturbance

RECOMMENDATION : General planning control.

78. LOUGH FENGALL M 418 175

The lakeshore and esker are described by W.A. Watts as having " a very good representation of the Burren Flora (Reports 1967).

THREATS : Physical disturbance.

RECOMMENDATIONS : Planning control.

79. RAHASANE M 480 195

Last, but by no means least, is the internationally recognised ornithological area in the Dunkellin River Valley. It is one of Ireland's finest wildfowl localities, with variety and abundance of species. Its general turlough ecology fits into that described for other turloughs described by Praeger.

THREATS : Drainage; physical disturbance.

RECOMMENDATION : General planning control Conservation Order,

ASSESSMENT AND RECOMMENDED PLANNING CONTROLS

Interest;

Each of the Areas described in this Report have been selected on the basis of a number of criteria. These range from rarity, diversity and abundance of species and communities to excellent examples of a representative range of habitat types. Lough Derg for example, has a number of rare plant species, while Rahasane Turlough has a great diversity and abundances of wildfowl as well as being an excellent example of the turlough habitat. An evaluation of the plant and animal communities of a particular Area results in an overall classification of the habitat into Botanical (B), Ecological (E), Ornithological (O), Zoological (Z) and Geological (G).

RATING

A species or habitat may occur once, twice or several times in a county, Region or in the country as a whole. Distribution and frequency of occurrence are criteria for the classification of an Area underneath the headings International (I), National (N), Regional (R) and Local (L). Species and communities are of international importance when they are the only and/or the best examples of their type in Ireland. Those of National importance are those of which there are a few examples, particularly within one or two counties. Areas of Regional and Local Importance are fairly well represented all over the country, but are included as being the best examples of their kind. They are ideally suited for educational use.

PRIORITY

Development pressures, likely impacts and changing situations result in unexpected crises in dealing with Areas of Scientific Importance. Constant watchfulness is necessary. Urgent action by conservationists is often equalled, and overtaken by development beyond their control. Though the Rating is interest in the Area itself, the priority is very much dependent on external circumstances. All of the Areas are included and rated because of their intrinsic value. External factors are constantly changing.

Priority "A" areas need immediate attention, positive action and intensive care. Those listed under "B" may have some measure of protection, or are less vulnerable. However, time may alter an Area either to A or to C. Under "C" are those Areas which are considered to be least vulnerable to impacts e.g. because of inaccessibility. Nevertheless, their very inclusion merits attention.

Each of the Areas must be considered for their intrinsic values, not solely under their priority heading. Conservation Action should be initiated on several sites rather than on piecemeal "saving operations" when Areas are under immediate threat.

RECOMMENDED PLANNING CONTROLS

General Control

Planning applications in or near Areas of Scientific Importance require attention. The likely impacts of the proposed development should be assessed. Refer such application to the Statutory Bodies, An Foras Forbartha and to voluntary organisations. The officials and councillors should be supplied with a copy of this Report so that they are aware of the Areas within their jurisdiction. Teachers should be informed of Areas which they could use for teaching purposes. Those who are made aware of the Areas and their values can act in a "watchdog" capacity.

Acquisitions:

It is recommended that Galway County Council should acquire one of each habitat listed i.e. an Oak and an Ash woodland, a Blanket and a Raised Bog, a freshwater and a Marine habitat, a geological site and a Turlough. Particular attention is drawn to the Silver Strand-Lough Riusin - Gentian Hill complex.

Conservation, Tree Preservation and Special Amenity Area Orders.

It is recommended that Orders be made for those Areas indicated in the Chart. Conservation orders should be made for those Areas containing rare species and outstanding examples of the habitat type for which they are included. Tree Preservation Orders are recommended for woodlands. No compensation is liable if the woodlands were planted for amenity, but is necessary where trees were planted for their timber value. Many of the woodlands included are native, and therefore were not planted

and so are not liable for payment of compensation. Special Amenity Area Orders should be made for those parts of the County deserving of them for their scenery alone, but also because of the presence of an Area of Scientific Importance.

Advice and assistance may be obtained from An Foras Forbartha for any particular Area or conservation problem. It fully supports Galway County Council in its efforts to care for its Areas of Scientific Importance. The conservation of these Areas is anxiously awaited by all those who know and love the wildlife and scenery of County Galway.

WEST GAIWAY

No.	AREA	ASSESSMENT			RECOMMENDED			PLANNING			CONTROL	
		INTEREST	RATING	PRIORITY	GENERAL	ACQUISITION	CONSERVATION	SPECIAL	AMENITY	ORDER	SPECIAL	AMENITY

WOODLANDS

1.	Ballynahinch	BE	R	C	*				*			*
2.	Derrasmiggaun	BE	L	B	*	*						*
3.	Derryclare	BE	I	C	*							*
4.	Drimcong	BE	L	C	*							*
5.	Furbogh	BE	L	C	*	*						*
6.	Glendollagh	EE	R	B	*							*
7.	Hill of Doon	BE	N	A	*			*				*
8.	Kylemore	BE	R	B	*							*
9.	Newtown Hill	BE	L	C	*							*
10.	Shannagurraun	BOE	N	A	*			*				*
11.	Silver Strand	BE	L	A	*	*						*

WEST GALWAY

NO.	AREA	ASSESSMENT			RECOMMENDED			PLANNING			CONTROLS	
		INTEREST	RATING	PRIORITY	GENERAL	ACQUISITION	CONSERVATION ORDER	SPECIAL AMENITY ORDER	TREE PRES ORDER			

BOGS

12.	Cashla River	BO	R	C	*						
13.	Errisbeg Area	BE	I	A	*	*	*	*	*		
14.	Maam Cross	BOE	N	B	*		*	*	*		
15.	Muckanaght	B	N	C	*			*	*		

FRESHWATER

16.	Ballycuirke	GZB	R	A	*						
17.	Ballynahinch L.	BE	R	B	*					*	
18.	Ballynahinch Br.	B	N	C	*						
19.	Cregduff Br.	B	N	B	*	*	*	*	*		
20.	Derryneen L.	E	R	C	*						
21.	Doughruagh Mtn.	EZ	R	C	*						
22.	Glendollagh L.	E	R	C	*						
23.	Glenicmurrin L.	E	R	C	*						
24.	Kylemore L.	E	R	B	*					*	
25.	L. Aunemlagh	E	R	C	*						
26.	L. Inagh	E	R	A	*	*	*	*	*	*	
27.	L. Shindilla	E	R	B	*	*	*	*	*	*	
28.	Pinnacles T	R	R	C	*						

WEST GALWAY

No.	AREA	ASSESSMENT			RECOMMENDED			PLANNING			CONTROLS	
		INTEREST	RATING	PRIORITY	GENERAL	ACQUISITION	CONSERVATION ORDER	SPECIAL AMENITY ORDER	TREE PRES ORDER			

MARITIME

29.	Aillebrack	OB	N	C	*	*	*					
30.	Ballyconneely	O	R	B	*	*						
31.	Bunowen	B	R	C	*	*						
32.	Corranroo Bay	O	R	B	*	*						
33.	Dog's Bog	GB	N	B	*	*				*		
34.	Gentian Hill	GB	R	B	*	*				*		
35.	Inishmore	O	L	C	*	*						
36.	High Island	O	R	C	*	*						
37.	Letterlyfe	BOZ	N	C	*	*						*
38.	L. Ruisin	OB	R	B	*	*					*	
39.	Mannin Bay	B	I	A	*	*					*	
40.	Mutton Is.	O	L	C	*	*				*		
41.	Mweenish Is.	BZ	I	C	*	*				*		
42.	TawIn Pa.	OZ	N	B	*	*						

GEOLOGICAL

43.	Cloona carton	G	N	B	*	*						
44.	Lisoughter	GB	N	A	*	*				*		
45.	Owenduff Br.	GZ	R	B	*	*						
46.	Owenduff D.	C	N		*	*						

NORTH EAST GALWAY

No.	AREA	ASSESSMENT			RECOMMENDED PLANNING CONTROLS				FREE PRES. ORDER
		INTEREST	RATING	PRIORITY	GENERAL	ACQUISITION	CONSERV. ORDER	SPECIAL AMENITY ORDER	

WOODLANDS

47.	Annaghdown	BE	R	C	*	*			
48.	Ballyglunin	BE	L	C	*				
49.	Castle Hacket	BE	L	C	*				
50.	Ross Lake	BE	R	C	*				

BOGS

51.	Ahascragh	BE	N	C	*	*			
52.	Ballygar	BE	R	B	*				
53.	Islandcausk	BE	R	C	*	*			
54.	Killaclogher	B	L	B	*				
55.	Pollboy	Z	R	B	*				
56.	Tiaquin	OB	L	B	*				

FRESH WATER

57.	Coolagh	GOB	L	B	*				
58.	Mount Ross	OB	R	B	*	*			

SOCIETY
 ORDER
 TRUE
 PRES.
 ORDER

No.	AREA	ASSESSMENT			RECOMMENDED				PLANNING CONTROLS	
		INTEREST	RATING	PRIORITY	GENERAL	ACQUISITION	CONSERV. ORDER	SPECIAL AMENITY ORDER	FREE PRES. ORDER	

GEOLOGICAL

59.	Angliham	CB	R	A	*					
60.	Merlin Park	GBZ	R	A	*		*			

TURLOUGHES

61.	Blindwell	O	L	C	*					
62.	Kilconnell	O	L	C	*					
63.	Killower	O	L	C	*					
64.	Icvally L.	O	L	C	*					
65.	L. Hacket	O	L	C	*		*			
66.	Turloughcor	O	L	B	*		*			

AREA	ASSESSMENT			RECOMMENDED			PLANNING CONTROLS		
	INTEREST	RATING	PRIORITY	GENERAL	ACQUISITION	CONSERVATION ORDER	SPECIAL AMENITY ORDER	FREE PRES. ORDER	

WOODLANDS

67.	Cloghballymore	BE	R	C	*			
68.	Coole	BE	R	C	*			*

BOGS

69.	Ballin L.	BE	R	C	*			
-----	-----------	----	---	---	---	--	--	--

FRESHWATER

70.	Belle Isle	O	L	C	*			
71.	L. Cutra	L	R	B	*			*
72.	L. Rea	E	R	A	*			
73.	Silver Is.	O	L	C	*			
74.	Stoney Is.	B	I	B	*			
75.	Woodford R.	B	N	B	*			

GEOLOGICAL

76.	Boleyneendorrish R.	GB	I	B	*			
-----	---------------------	----	---	---	---	--	--	--

TURLOUGHS

77.	Caherglassaun L.	GB	R	B	*			
78.	L. Fingall	GB	R	C	*			
79.	Rahasane	O	I	A	*		*	