Information on

Areas of Scientific Interest

in An Foras Forbartha files

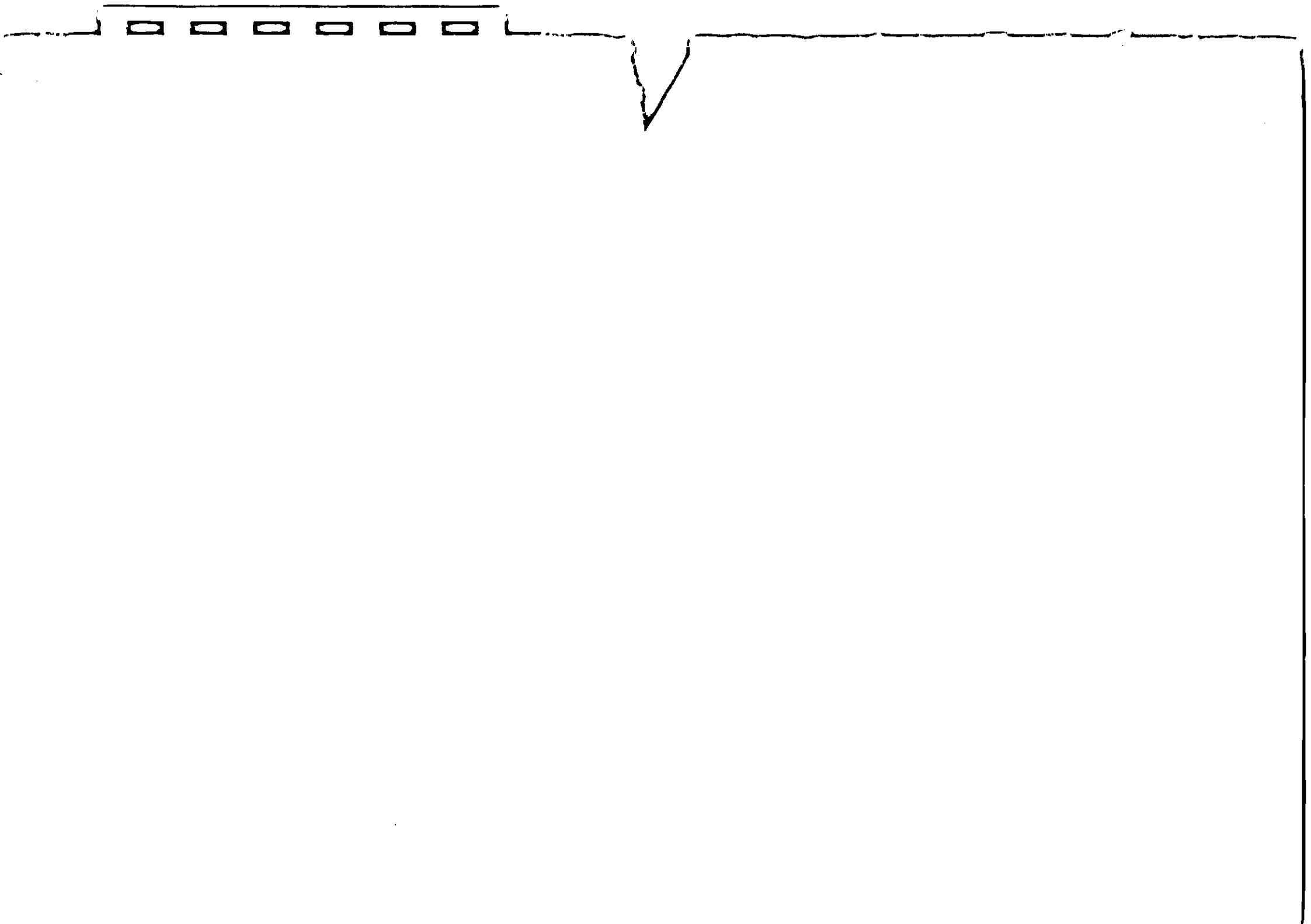
A Catalogue Prepared for

National Parks & Wildlife Service

Office of Public Works

Roger Goodwillie

1992



INTRODUCTION

This report is written under the terms of a contract (K/4/2/28) with the National Parks & Wildlife Service to catalogue the old files of An Foras Forbartha and extract information relevant to ASI's. Some more recent documents are also included.

Notes on format:

1. Counties are dealt with in alphabetical order
2. As far as possible entries are arranged chronologically though the actual files are not always so organised.
3. Reports are underlined and referred to by month/year,
4. Letters by day/month/year,
5. Miscellaneous pages by year if possible.
6. CAAS (Environmental Services) Ltd and other work from 1989 onwards by file no.(e.g. 56/91) or month/year
7. Existing *ASI's have an asterisk where mentioned
8. Maps or other data bound with this report are indicated # and are placed in county order at the back
9. Content or other comments are [enclosed in brackets]

Location of material:

All items mentioned are in the ERU, St Martin's House, in <8 Merrion Square> or in |Kilkenny|

CARLOW

Nothing seems to exist about this county that is anyway relevant to ASI's except one letter to Evelyn Booth. There are many town planning studies about shopfronts, villages, planning applications but nothing about how the list of sites was established or about problems related to any of them since. The only report is the original

May 73 E.Fahy A preliminary report on areas of scientific interest in Co Carlow

N.B. See also Reports relevant to all counties, listed at end

CAVAN

Date	*Author*	*Title/subject*
|1972|	L.Farrell	Notes on the Cavan flora [existing records, handwritten], plant field cards from many of the sites listed in Jul 72, letters from R.C.Faris and M.Scannell
Jul 72	L.Farrell	Provisional report on Areas of Scientific Interest in Co Cavan
|1971-84|	D.Scott	Bird counts from many sites in Cavan including some early ones from John Lovatt and a composite *Lough Oughter one in 1984
Aug 75	AFF	Index to heritage items in Co Cavan [by townland]
Sept 77	RG	Areas of scientific interest in Co Cavan
Feb 79	D.Stewart K.Mawhinney	Draft brief for the preparation of a development policy and plan for selected lakes in Co Cavan [inc *L.Oughter, *L.Gowna etc: study did not happen]
Apr 86	RG	The condition and future management of trees around *Drumkeen

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<92/12>	RG	Ecology of Green Lough in relation to its development [not bad but not an ASI]

N.B. See also Reports relevant to all counties, listed at end

CLARE

Date	*Author*	*Title/subject*
1968	W.Watts	Sites of scientific interest [typewritten pp]
1969?	ISPB	Ornithological sites
1969/70		File on proposed research station at Rine, *Finavarra for UCG.
1971		File on *Burren Conservation Order, incl. a draft Order and report of meeting of the Netherlands Commission for International Nature Protection on the Conservation of the Burren, by J.H.Westermann.
1971	Dept Fish	NHI Scientific Heritage - freshwater sites [sheets with char lakes]
1971	GSI	NHI geological site sheets
Mar 72	N.Green	An investigation into the effects of fertilizer application on limestone grassland in the Burren, Co Clare [incl a map of the treated areas]
Apr 72	RG	Provisional report on the areas of scientific interest in Co Clare
Jul 77	AFF	Index to heritage items in Co Clare [by townland]
1979	N.Taylor?	Handwritten rearranged Clare ASI's for a 2nd edition [which progressed no further]
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<90/37>	C.Skehan	Car park on the *Cliffs of Moher
<92/51>	RG	Management and development of *Tullagher Bog

N.B. See also Reports relevant to all counties, listed at end

CORK

Date	*Author*	*Title/subject*
11/7/69	A.Folan	Areas of Scientific Interest, Co Cork [2pp]
1970	W.Watts O'Donnell	Sites of scientific interest in Co Cork
1970	D.Cabot	ASI's in Co Cork - coastal area only [prob. for National Coastline Study]
1970		File on overall planning and development implications of a proposed refinery in *Bantry Bay
26/8/70	D.Cabot	Map of ASI's on Cape Clear Island
1971	GSI(A.Flegg)	National Heritage Inventory geological sites <also descriptive summaries of each>
1971	D.Saunders K.Preston	Seabird information for *Old Head of Kinsale etc
1972	E.Fahy	Provisional report on the areas of scientific interest in Co Cork
May 72	A.Quinn	Sand dunes in West Cork (Rosscarbery, Owenahincha,*Castlefreke and Inchydoney)
<Feb 73>	E.Fahy	Observations on the scientific heritage of the area adjoining Bantry Bay
Mar 73	E.Fahy	Management proposals for the *Lough Hyne catchment, SW Cork
Jul 73	RG	Sand dune damage at *Barley Cove: suggestions for action
Nov 73	E.Fahy RG	A study of the scientific importance of *Foaty Island, Co Cork with particular reference to its conservation [introduced insect fauna & birdlife]
May 74	E.Fahy RG	Observations on proposed development at *Lough Beg, Cork Harbour

20/11/74	Westermann, J.H.	Report on a short survey of the shores of the *channel north of Great Island, Co Cork by Netherlands Commission for International Nature Protection
May 75	RG E.Fahy	Amenity and recreation in Cork *Upper Harbour: its present and potential importance
Feb 76	An Taisce Cork Ass.	*Lough Ine - Ireland's First National Marine Reserve Park?
Dec 76	An F F	EIA of reclamation and cooling water discharge associated with the ESB gas-fired power station on *Whitegate Bay [Aghada] + file incl. 1. Important roosting and feeding areas for wildfowl in Cork Harbour. W.J.O'Flynn, May 76 2. Survey of gastropod molluscs on foreshore at Long Pt, Aghada. Rory Finegan, Sept 76 [original figures for this and algal production in Kilkenny]
Aug 83	RG R.Webb	Environmental appraisal of the proposed Cork to Midleton road - E30 [reclamation of *mudflats]
1983 ->		*Gearagh file incl 1. Ecological Study of the Gearagh - a unique freshwater habitat Tim Hickey Aer Lingus project 2. The Gearagh - a scientific wonder Macroom District Environmental Group 1985. 3. Letter (5/6/87) on proposed dam at the Gearagh, Macroom. 4. Schedule of Nature Reserve
Mar 84	RG	Development of the *Douglas Estuary for its amenity and ecological values
Apr 84	RG	Amenity developments at *Barley Cove
Jun 84	RG	Proposed study of the *Ballycotton/ Ballynamona area, Co Cork [did not go ahead]
1984-86		Revision file of Cork ASI's including 1. Re-ordering of old sites 2. NHI Botanical Revision of Cork District by T.O'Mahony for Cork Assoc. of An Taisce 3. *Kinsalebeg nr Kinsale by Clive Hutchinson 4. Wetlands Enquiry. *Cork Harbour Counts. IWC

		5. Waterfowl of *Cork Harbour 1982. C.Hutchinson & J.O'Halloran 6. Relic of the *Gearagh D.Kelly, 1982 7. The *Gearagh woodland. J.White's INJ draft. 8. Oak woods at *Glengarriff. D.Kelly field card
Jul 85	RG	Ecological impact of reclamation at *Midleton Estuary
Mar 86	RG	Report on Areas of Scientific Interest in Co Cork
28/4/87	RG	Erosion at Fountainstown, *Ringabella
<Dec 87>	E.ni Lamhna R.Webb	The environmental impact of a proposed hydro-electric power development at *Barley Lake, Co Cork

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<89/9>	RG	Comments on dredging and development at *Lissagriffin Lake, Barleycove
<89/15>	RG	Comments on a proposed tidal lake at Glounthaune *Cork Harbour
<90/45>	RG	Report on lands at Blarney Bog, Co Cork [potential ASI #]
<90/55>	RG	Comments on proposed infill at *Ballyvergan Marsh [redefinition of the ASI boundary. Map is incl. #]
|Oct 91|	RG	Ecological contribution to EIS of South Ring at *Douglas Estuary, Cork

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New ASI Blarney Bog as an extensive *Phalaris* fen with various *Carices* should be considered. What's left of it (after a road) must have local value I think

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N.B. See also Reports relevant to all counties, listed at end

DONEGAL

Date	*Author*	*Title/subject*
1966	D.Cabot	Comments on report on Co Donegal by W.Watts and notes on areas of zoological importance
May 68	A.Folan	Field studies with special reference to the Garten region, Co Donegal
Nov 68-Feb 69	,,	Minutes of meetings of the Garten Lough Working Group
Feb 69	,,	Report on the field centre at *Garten Lough, Co Donegal
1969-73		File on *Glenveagh proposed research, especially on red deer and woodland regeneration
Oct 71	R.Young	*Ardnamona Estate (L.Eske) re: proposed Tree Preservation Order
1971	GSI(A.Flegg)	National Heritage Inventory geological sites
1971?	B.Doran	The sand dune vegetation of Mullaghdoe, West Donegal [probably a thesis of some sort]
<Jan 72>	T.A.Barry	Districts of L.Barra, Gannivegil and Slieve League [Bord na Mona contribution to NHI]
Apr 73	R.Young	A report on areas of ecological and geological interest in Co Donegal
Apr 73	RG	Observations on the proposed excavation of sand and gravel at Doaghmore, *Isle of Doagh, Co Donegal [no ecological content]
1972-74		File on landscaping quarry in *Barnesmore Gap
Mar 76	AFF	Index to heritage items in Co Donegal [by townland]
27/9/76	P.J.Newbould	Brief report on Maghera dunes

Aug 77	RG	The development of *Inch Lough, Co Donegal, as a contribution to the Council of Europe's Wetlands Year, 1976-77
15/2/79		Comments on *Inch Lough report by Aileach, Fahan and Inch gun clubs.
12/9/79	RG	Comments on R.Sheppard's list of additions to the County ASI report
Oct 79	RG	Development and management proposals for *Inch Lough wildlife area [addendum to Aug 77 report]
28/8/80	RG	Proposed work at *Kinny Lough [with redefinition of ASI #]
Oct 81	RG	An evaluation of areas of bogland adjacent to *Slieve League, Co Donegal #
Dec 81	RG	Report on the attempted drainage at *Sheskinmore Lough, Co Donegal
[1982?]		*Inch Level - a case for preservation
Aug 85	RG	Comments on the environmental impact of a proposed hydro-elecrtric development at Edergoole (Lough Belshade). File includes a botanical survey by P.Foss [possible ASI, with *Lepidotis inundata*]

N.B. See also Reports relevant to all counties, listed at end

DUBLIN

Date	*Author*	*Title/subject*
<1961?>	J.P.Brunker	Flora of the North Bull [typescript - photocopy of Miss Scannell's copy]
	Anon.	Survey of the saltmarsh, N.Bull Island [invertebrates]
1968	Ann Folan	Geology, flora & fauna of *Howth Head
1968	Garry Doran	Breeding seabirds on *Howth Head
undated	ISPB	Bird sites of importance in the county
28/11/69	D.Cabot	Preliminary list of ASI's in Co Dublin
√ 1970	D.Cabot	*Howth, *Ireland's Eye & *Lambay birds √
1970	R.Piper	Records of orchids in Dublin and Wicklow [part handwritten]
16/7/71	DNF Club	Submission of ASI's to Draft Co Dev. Plan
c 1972	GSI	National Heritage Inventory geological sites
Jan 73	RG, E.Fahy	A preliminary report on areas of scientific interest in Co Dublin
Dec 73	Craig M, RG Haworth R	Dodder Valley Survey [a few plant and bird records included, no maps]
|May 74|	E.Fahy	The Sluice River marsh, a new ASI in Dublin
Jun 77	AFF	A study of *Bull Island, Co Dublin [ecological, landscape and recreational importance]
Sept 80	RG	Observations on the ecological implications of alternative layouts for St Anne's Golf Club, *Bull Island
30/1/81	R.Young	Examination of *St Doulagh's Quarry, Balgriffin [dumping]
20/8/81	RG	Comments on P.Carvill (1980) Floristic notes from Co Dublin. *Bull IBS* (4) [some comments on importance of plants written onto paper]
4/11/81	R.Young	Observations on Co Dublin species covered by Flora Protection Order [*Salvia, Groenlandia*]

	Feb 82	E.ni Lamhna	Preliminary report on Fitzsimon's Wood, Sandyford, Co Dublin [possible ASI]
	Oct 82	P.Kenny	Technical data requirements for assessing the environmental impact of a proposed barrage at *Baldoyle [+ file]
	Feb 83	RG	Nature Reserve status for the *North Bull Island [ecological status and management outline]
	Dec 83	RG	*Ballybetagh Bog: its values and conservation [mostly geological, *Megaceros*] #
✓	Aug 84	R.Macdonald RG	Gull management in the Dublin area [includes counts at tipheads and nesting *colonies] ✓
	Sept 84	K.Mawhinney RG, R.Webb	A report on the *Portmarnock sand dunes with special reference to a possible Special Amenity Area Order [some ecological details, partly derived from Declan Doogue]
	Nov 84	,,	Liffey Valley Study - sites of ecological and geological interest [one of three reports bound together, others being on landscape and recreation]
	|18/2/85|		*Baldoyle Estuary Preservation Society: papers re planning appeal against partial reclamation
	May 86	RG	Survey of *Booterstown Marsh with suggestions for management [some details of vegetational changes since 1970]
	30/1/87	RG	Infill and shore walk at *Broadmeadow Estuary [impacts on birdlife]
	Sept 87	RG	Ecological impacts of mowing natural grassland on *Bull Island [golf practice area]
✓	Sept 88	R.Macdonald	The control of gulls on *Lambay Island [with more counts] ✓
	Nov 88	RG, R.Webb E.ni Lamhna	A second report on areas of scientific interest in County Dublin
	Nov 88	ERU	EIS of proposed major road through St Helen's [and *Booterstown Marsh & strand]. Prepared for Dun Laoghaire Corporation

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<89/36> RG — *Bull Island Sedimentation Study [silting in channel]

<90/4> RG — EIS of walkway at *Bull Island [impact of a possible extra footpath along shore road]

<91/76> RG — Follow-up report on ASI in Co Dublin [a mapping correction of *Lucan outcrop, map included #]

N.B. See also Reports relevant to all counties, listed at end

GALWAY

Date	*Author*	*Title/subject*
1971		Correspondence about *Vertigo genesi* [at *Cloonascragh Bog M873257. N.B. This is in the Roscommon County files]
Nov 71	A.Quinn	Areas of scientific interest in Co Galway
July 72	RG	Report on the ecological impact of the proposed golf club at Creggoduff with recommendations for minimising ecological disturbance [*Aillebrack]
1972		File on *Gentian Hill development and planning appeal
1973		File on *Rahasane turlough, esp. the application to WWF for funds
<Mar 76>	AFF	Index to heritage items in Co Galway [by townland]
21/5/82		Letter from Stephen Heery offering help with ASI's
Jul 82	RG	Present and future state of *Barna Wood, Silver Strand, Co Galway
Oct 82	RG	Measures to counteract erosion at *Aillebrack Strand, Ballyconneely
Nov 82	RG	Sand erosion at *Dog's Bay and Gorteen Bay, Connemara with suggestions for remedial action
1974-82		Printout of Loughrea bird counts by Gordon Young
Feb 85	RG	Comments on the development of a caravan site at Keerhaunmore, Co Galway [in *Aillebrack ASI]

Nov 86	RG	Comments on the management of *Barna and Merlin Park woods with a note on other areas of ecological interest in the Galway County Borough File (Galway Dev Plan) includes two papers by Micheline Sh-Sk 'Vegetation surrounding Rusheen Lough area' and 'Lough Atalia and adjacent marshes - wildlife and flora of interest'

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<89/77> <91/2>	RG C.Skehan	Assessment of EIS for *Clifden Airport Visual impact
<90/53>	RG	Tree felling at *L.Cutra [redefinition of ASI to avoid conifers #]
<92/56>	RG	EIS of forestry at Loughatorick & Derrygoolin [critique of Coillte document - no new ecological info. or advertance to Wildlife Service surveys which covered part of area]

N.B. See also Reports relevant to all counties, listed at end

KERRY

Date	*Author*	*Title/subject*
1966-69	W.Watts	Co Kerry Sites of scientific interest: General Comments: Addendum
	ISPB?	Ornithological sites
	M.Scannell	Notes on botany - *Carex hibernica* and lichen, *Pseudocyphellaria lacerata*
Nov 67		File on *Akeragh Lough documentation and planning appeal
1967	P.Evans	The birds of some Kerry islands
1967?	E.Baynes	Secret entomological sites in Co Kerry
6/3/68	M.Stack	Draft of bibliography on Flora, Geology and Zoology in Kerry [county library]
Apr 69	R.Lovegrove	*Skelligs and *Inishtearaght bird accounts
1969?	Prof Gresson	Survey of natural amenities (Dingle) [botany/birds]
1969	A.Folan?	Master sheets and summary of Areas and Sites of Scientific Importance [coastal area only]
1969	P.G.Evans	Kerry Islands seabird counts
1971	GSI	NHI geological site sheets [some]
1971	Dept Fish	NHI lake sites in Kerry
1971	M.Scannell?	Co Kerry bibliographic refs
1971	J.Jackson?	Areas of importance [typescript]
9/12/71	J.R.Laudon	Letter on lichen sites in Killarney woodlands
Jan 72	D.Cabot R.Young	*Lough Gill Co Kerry. Report on likely ecological impact of a 200m pier proposed by Castlegregory Trout Anglers Club.
1972?	Anon	Additional ASI's Co Kerry. Handwritten
Sept 72	RG	A preliminary report on areas of ecological and geological interest in Co Kerry

Aug 75	AFF	Index to heritage items in Co Kerry [by townland]
1975-80		Natterjack toad file incl. 1. Map of *Inch colony 1963 and letters from Prof Gresson 2. 1973/74 Status report by Trevor Beebee 3. 1979 survey by John Buckley
28/7/76	G.Walton	Letter re Interim report on *Inishtearaght (sent to UCG Library)
20/10/78	R.Young	Two site maps for *Spiranthes romanzoffiana* at *Caragh Lough [data from R.Piper]
20/3/85	RG	Planning appeal 1307/84 at Kilnabrack Lower, *Glenbeigh with redefined ASI boundary [copy #]
Jul 86	R.Webb	Tree Preservation Orders at Baunclune and *Glanleam
Oct 87	,,	Protection of *Mucksna Wood, Kenmare

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|Dec 90|	RG	Ecological impacts of the development of Tralee sewage treatment works [part of EIS, *Tralee Bay]

N.B. See also Reports relevant to all counties, listed at end

KILDARE

Date	*Author*	*Title/subject*
25/2/70	D.Cabot	Provisional list of Areas of Scientific Interest in Co Kildare
c 1973	GSI	National Heritage Inventory geological sites
Mar 74	RG	Comments on a proposed development at Morristown Biller, close to *Pollardstown Fen [possible sewage impact]
May 74	RG	Effects of the drainage proposed for part of *Pollardstown Fen [+ file about a possible Conservation Order and subsequent appeal against it]
1975 -		File on *Louisa Bridge Nature Trail [incl. 1. Report on the Biological Survey conducted at Leixlip Spa, Co Kildare (by D.Doogue? *et al*); 2. Environmental Trail at Louisa Bridge (Leixlip Spa Amenity Scheme) by Ann Quinn; letter from D.Doogue (9/4/84) including data for a 3. Proposed Wildlife Guide to Kildare.
Aug 75	AFF	Index to heritage items in Co Kildare [by townland]
22/10/75		Letter and file on *Ballinafagh Lake and the protection of its birdlife [no new ecological data]
Apr 76	RG	A report on areas of scientific interest in Co Kildare
May 76	RG	Effects of effluent from a proposed development at Morristown Biller and further suggestions for pollution control around *Pollardstown Fen [suggested buffer zone at south end of fen]
Sept 77	RG	Observations on the amenity and scientific value of *Kilteel Wood, Co Kildare [includes species list]

May 78	R.Young R.Webb	*Pollardstown Fen: the need for a Special Amenity Area Order.
2/4/80		Letter and file on Lwr Liffey Valley Sewerage Scheme and the resulting impact on *Louisa Bridge fen. [committee of users set up]
18/4/80	RG	Erection of 2-storey house at *Pollardstown [its relationship to the fen - very little]
2/5/80	RG	Carpark at *Ballinafagh Lake [no data]
Dec 80	RG	*Carbury Bog: an evaluation of its scientific interest [i.e. Ardkill]
Jan 82	RG	Effects of the proposed gas pipeline on the *Usk marshes, Co Kildare [small]
Sept 84	RG	Evaluation of four raised bogs (*Mouds, *Carbury, *Prosperous and Ballina) for conservation.

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<91/8>	RG	Tree Preservation Order and comments on trees at *Ballymore Eustace [a geomorphological ASI]
|Apr 91|	RG	Re-definition of the *Carton Estate ASI. In: Carton Demesne EIS - Murray O'Laoire Associates.[Map included #]
<91/92>	RG	Letter re *Ballinafagh Lake and the suggested fishery development

N.B. See also Reports relevant to all counties, listed at end

KILKENNY

Date	*Author*	*Title/subject*
Sept 72	R.Young	A preliminary report on areas of ecological and geological interest in Co Kilkenny
1978	N.Taylor?	Handwritten addenda to summary table of this rept
1984	RG	ASI's in Co Kilkenny - addendum
6/6/84	RG	*Archersgrove Quarry [being filled but not obliterated]
16/4/86		File on possible Conservation Order at *Lough Cullin
Nov 87	C.Skehan	*Newpark Marsh - landscape and amenity proposals
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<88/66>	RG	Draining of lands at Tybroughney [*Tibberaghny marshes]
<89/35>	RG	Proposed dwelling at Maidenhall [does away with *Bennettsbridge field]
<89/53>	V.Dodd, RG	Extension to existing dairy herd facilities at Corlagh, Paulstown, Co Kilkenny [at *Whitehall Quarries]
<91/1>	RG *et al*	Comments on inadequacy of Galmoy EIS in its treatment of Galmoy Fen [potential ASI], Nore river (*Margaritifera*) and the *Loughans
<92/68>	RG	Wetland in Dunmore [new ASI to be added to the adjacent Newpark Marsh, map #]

Add wood to crocus field, Thomastown

ASI for Newpark marsh etc should be Wetlands north of Kilkenny

Add Galmoy Fen

LAOIS

Date	*Author*	*Title/subject*
1970?	ISPB	Bird sites in Laois: *Abbeyleix and Ballycolla (Ballacolla) - [the latter could be a turlough, it certainly floods in winter]
1/9/71	L.Farrell	General notes on *Slieve Blooms, Glendine Gap incl. some wildlife (for Fehily Assoc.)
1972	L.Farrell	Notes on sites from K.Lamb, J.J.Moore et al [handwritten]
Mar 72	L.Farrell	Report on areas of scientific interest in Co Laois
Apr 81	RG	Observations on gravel working at the *Woods of Maryborough and in the county as a whole
1982?	K.Higgs	Amended notes for Areas of scientific Interest #
1983	E.ni Lamhna	Sites of scientific interest identified since 1981 [table #]

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|1989|	RG	Ecological Interest of *Abbeyleix Estate [map #]
<92/24>	RG	Comments on the future of the *Great Heath, Portlaoise [upgrade parts to regional or national value #]

N.B. See also Reports relevant to all counties, listed at end

LEITRIM

Date	*Author*	*Title/subject*
1978	RG	A preliminary report on areas of scientific interest in Co Leitrim
Nov 80	R.Webb	Wood alongside *Lough Rinn [contiguous with ASI, recommended for TPO]
May 84	R.Webb	Design for an amenity area at *Garadice Lough, Ballinamore
	* * * * * * * * *	
<89/5>	C.Skehan	Caravan park at Lough Rinn [no mention of ASI]
<89/107>	RG	Lowering of water levels at Lough Errill [description of flora - incl *Ceratophyllum*]
<90/2>	RG	*Lough Allen tourism and rural development study [Appendix 3 - areas of ecological interest: some old ASI's, some new. #]
<90/6>	RG	Wetland in Attirory below Carrick-on-Shannon [probable ASI with *Carex aquatilis*, *C.elongata* #]
<90/13>	RG	*Garadice Lough Amenity area [planting and paths]

N.B. See also Reports relevant to all counties, listed at end

LIMERICK

Date	*Author*	*Title/subject*
Oct 71	R.Young	Report on areas of scientific interest in Co Limerick
<16/11/72>	A.Flegg	Notes on the geology of the Clare Glens
Dec 72	R.Young	Notes on areas of biological interest within the catchment of the R.Maigue with special reference to the proposed arterial drainage
<Nov 73>	R.Young K.Mawhinney	Future development of the *Clare Glens for amenity purposes
Nov 74	R.Young	Re: an Alumina Extraction plant on *Aughinish Island - proposal for a baseline ecological study and subsequent monitoring
Aug 79	R.Young	Notes on possible conflicts between amenity development and the scientific interest of *Lough Gur, Co Limerick
Jun 80	RG	Comments on a drainage scheme proposed for *Glen Bog, Lough Gur, Co Limerick
Aug 80	AFF	Ecological baseline study at *Aughinish Island, Shannon Estuary [birds covered, not geology]
May 82	R.Young R.Webb	Adare Manor Estate - an assesment of its development potential
2/5/84	RG	Ballinacurra Creek ASI #
17/2/88	E.ni Lamhna	Letter accompanying maps of ASI's created by 1981 report [maps themselves not incl.]
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<89/43>	RG	Monitoring environmental change at Westfields Marsh, Limerick City [possible ASI #]
<89/56> <90/89>	RG	Comments on value of Tory Hill [a new ASI - Tom Curtis also]

LONGFORD

Date	*Author*	*Title/subject*
1972	GSI	NHI geological site sheet [*Carrickboy Quarry]
|1972|	L.Farrell	Plant field cards for some sites visited Also old IWC count for Lough Kinale (12/1/69)
Jul 72	L.Farrell	Report on areas of scientific interest in Co Longford
29/4/75 - 10/12/75		Letters re: Pollution at *Lough Naback [farming run-off into char/trout lake]
May 77	AFF	Index to heritage items in Co Longford [by townland]
Jun 81	RG	Comments on the ecological impacts of a proposed dump at Barnacor, Lanesborough, Co Longford [beside *Lough Bannow, new boundaries suggested #]
1982	RG	Map of woodland at *L.Forbes from air photo #

N.B. See also Reports relevant to all counties, listed at end

LOUTH

Date	*Author*	*Title/subject*
|1970-76|	IWC	*Boyne Estuary bird counts
Aug 72	E.Fahy	A preliminary report on areas of scientific interest in Co Louth
Feb 74	E.Fahy	A raised beach at *Greenore, Co Louth
Dec 74	RG	Tree felling at *Blackhall, Co Louth: comments on an application for a licence
Feb 75	RG	Observations on a planning application at Townley Hall, Co Louth [in *King William's Glen]
Feb 75	RG J.McCullen	Development of a nature trail and car park on *Clogher Head, Co Louth
Mar 76	AFF	Index to heritage items in Co Louth [by townland]
Jul 77	RG	The ecological implications of a proposed magnesia plant on the *Boyne Estuary

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<92/44>	RG	The future of the Fox Covert, Ardee [nice wood, not an ASI]

N.B. See also Reports relevant to all counties, listed at end

MAYO

Date	*Author*	*Title/subject*
|8/2/67|	J.Jackson	Geological sites of major importance in Co Mayo
20/9/69		Birds seen on Achill 19-23 Aug by Bruce Campbell
|1970?|	D.Cabot	Areas of scientific interest in Co Mayo - coastal area only
|1970|	W.Watts	Co Mayo - Sites of scientific interest
1971	GSI	NHI geological site sheets
<25/9/74>		Report on the *Dooaghtry area, Co Mayo by J.H.Westermann & V.Westhoff (Netherlands Commission for International Nature Protection)
1975		File on Corrib/Mask Drainage scheme incl. comments on OPW report Corrib/Mask Drainage - effects on Scenic, Recreational and Scientific aspects of the catchment.
Jul 75	RG	The importance and potential of *Lough Mask to wildfowl
Oct 75	RG	Erosion on the Keel Sandybanks, Achill Island. Comments on ecology and management [site with transient *Lathyrus maritimus*]
5/5/78	R.Young	Erection of house at *Termoncarragh, Belmullet
Mar 79	RG	A preliminary report on Areas of Scientific Interest in Co Mayo
10/10/79	RG	Erection of two houses at Connor's Island, *Lough Carra
1982		File on *Croagh Patrick Special Amenity Area Order [not passed]
|27/1/84|	D.Scott	Recent wildfowl counts in Mayo incl. detailed scoter info from Loughs *Conn and *Cullin

MEATH

Date	*Author*	*Title/subject*
1970?	D.Synnott	1. Areas worthy of conservation for their natural history interest 2. Areas of Scientific Interest [2 typed pp] 3. Botany around Slane
5/11/70	,,	Mornington/Bettystown sand dunes
23/6/71	C.Breen	1. Preliminary list of areas threatened by Boyne Drainage [produced by DNFC] 2. Submission on marshes at Galtrim (Ballynamona)
<1971?>	C.Breen	Plant card for *Newtown Lough
|8/12/71|	GSI	Copies of NHI geological sheets
Mar 72	R.Young	A report on areas of scientific interest in Co Meath
|Apr 73|	J.Bracken	An independant survey of the *R.Boyne mussel fishery
1975		File on *Galtrim moraine and esker; compensation claim etc
Aug 75	A.Quinn	Beaches and dunes of Co Meath [includes a mention of *Mornington]
Dec 75	RG	The ecological importance of the *Lough Shesk area, Co Meath
1976		File on Boyne Drainage Scheme - *Lough Shesk and adjacent areas
Nov 76	R.Young	Report on riverside marsh at *Scurlockstown nr Trim [ASI mostly destroyed]
Aug 77	RG	Observations on the river valley at Naul and a proposal to extract gravel [adjacent to ASI]
Sept 77	RG	Development and conservation at *Flemingstown Woods (P76/549 & 1417)
Sept 77	R.Young	Planning application at Tuiterath, Co Meath [*Flemingstown]

|Aug 79|	RG, R.Webb R.Young	The effects of a proposed water abstraction scheme on the amenity values and fishery interest of Lough Bane [not an ASI; unlike *Ben Loughs (see Westmeath) which were visited at the same time]
11/8/80		Clay-washing plant in *Grangegeeth quarry, Slane [no objections]
Nov 86	RG	The ecological interest of the proposed Boyne Valley archaeological park [existing and new ASI #]

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<91/74>	RG	Ecological aspects of site acquisition at Bettystown, Co Meath [removes southern tip from *Mornington dunes #]
May 92	RG	Contribution to Oldbridge EIS [the holding includes the Boyne River islands, see below]

New ASI The Boyne river islands (Grove and Yellow, at least) below the Obelisk Bridge between Slane and Drogheda. Only seen from bank but could be as good as Fiddown. As floodable willow woods, they are an under-represented habitat

Dowth wetland, see #

N.B. See also Reports relevant to all counties, listed at end

MONAGHAN

Date	*Author*	*Title/subject*
|18/2/72|	GSI	NHI geological site sheets
|1/3/72|		Letters re: The *Glaslough Trust incl. fauna seen on Armagh FNC outing
|Jul 72|	L.Farrell	Plant field cards for many of the sites in -
Aug 72	L.Farrell	A preliminary report on Areas of Scientific Interest in Co Monaghan
Aug 75	AFF	Index to heritage items in Co Monaghan [by townland]
|31/8/79|	D.Scott	Areas of ornithological importance in Co Monaghan
Sept 80	RG	Dromore River: amenity impacts of the proposed low-flow augmentation scheme [*Dromore Lakes]
Nov 80	R.Young	The likely impacts of proposed water supply schemes on the amenity values of *Lough Muckno and its environs [includes one bird count]
2/9/81	R.Young	Re: application for Emerald Fisheries Ltd for a fish-processing plant . . . at Tullynamalra, *Lough Egish.
Feb 84	E.ni Lamhna	Revisions to the list of Areas of Scientific Interest in Co Monaghan [1981 sites + some from FWS]
14/6/84	RG	Tree felling at *Lough Bawn

N.B. See also Reports relevant to all counties, listed at end

OFFALY

Date	*Author*	*Title/subject*
20/8/71	L.Farrell	Wildlife in the Slieve Blooms - general notes Vegetation of sites visited in Offaly *Vertigo geyeri* paper Further notes on sites and literature, some from K.Lamb [handwritten]
<Sept 71>	L.Farrell	Plant species cards for Clonmacnoise marsh and esker and *Pallas Lough
|Aut 71|	L.Farrell	Plant species cards for some Offaly sites Also copy *The Charleville Woods - a comparative study by D.Hutton-Bury. B.A. Thesis, TCD
1971?		File with odd papers - *Little Brosna counts, *Lough Boora mesolithic site, Praeger records
1972	L.Farrell	A preliminary report on Areas of Scientific Interest in Co Offaly
Mar 73	L.Farrell R.Haworth	A report on a proposed quarry at *Croghan Hill, Co Offaly + file 1972-74
May 76	RG	Observations on the ecological impact of a proposed development at Cloghan Demesne Banagher [adjacent to *Little Brosna]
Jul 76	RG	Observations on a planning application to erect dwelling house on *Kilcormac esker, Blue Ball, Co Offaly
1978?	D.Kelly	Quadrat sheet of *Camcor R. alder wood, Kinnitty
Aug 81	R.Milligan	Comments on application to erect dwelling house on *Kilcormac Esker, Blue Ball [a different one]
Apr 84	E.ni Lamhna	Revisions to the list of ASI's in Co Offaly [Fin Lough and Clorhane #]
Aug 84	RG	The conservation of *Woodfield Bog, Co Offaly

19/3/85	K.Mawhinney	Letter and file on Eiscir Riada and its conservation
13/5/85	RG	Proposed gravel extraction at Clonascra [esker woodland noted in Clonmacnoise Heritage Study]
24/6/88	RG	Esker Conservation [response to an application for gravel extraction at Bunatern, Screggan in *Betula pendula* wood, *Kilcormac Esker]

N.B. See also Reports relevant to all counties, listed at end

ROSCOMMON

Date	*Author*	*Title/subject*
1970-85		Correspondence about Lough *Funshinagh and Lough *Croan, including a draft Conservation Order
1971?	J.Jackson?	Addenda Co Roscommon [3 sites - *St John's wood, a *Sarracenia* bog nr Lanesborough, *Carrowkeel Mt] + correspondence about *Vertigo genesi* [at *Cloonascragh Bog M873257 (actually in Galway) and Fiagh Bog, Borrisokane R953975, the latter being drained]
|Aut 71|	L.Farrell	Ornithological and botanical sites [prepared for Fehily Ass] Attached to Sites of Scientific Interest [1970] and Preliminary comments on scientific values in Co Roscommon [11/9/66] by W.Watts and Roscommon [bird sites] by ISPB
|Aut 71|	L.Farrell	Plant species cards for some Roscommon sites
<Oct 71>	L.Farrell	Plant species cards for Fin L., Boyle R., L.Key, L.Ree, Kilglass L., L.Funshinagh, Brideswell esker
Sept 72	D.Cabot	*St John's Wood, Co Roscommon [single page]
Apr 78	R.Young	Lough Key Study draft brief for Roscommon Co Council [a planning study]
Feb 80	R.Webb R.Young	Recommendations regarding the protection of *St John's Wood [file includes an ownership map]
1983	E.ni Lamhna	Sites of scientific interest identified since 1981 [single page summary #]
|1984?|	D.L.Kelly	St John's Wood, Co Roscommon - a preliminary report [3 pp description]
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<91/86>	RG	*Lough Key Forest Park. Comments on ecology in EIS [little new ecological info]

SLIGO

Date	*Author*	*Title/subject*
1969-71		File on SNIA factory at Hazelwood, Lough Gill
1970	ISPB	Sligo [ornithological sites]
|1970?|	IWC(old)	Sligo - Areas of special interest for bird life
7/1/70	D.Cabot	Areas of scientific interest in Co Sligo - coastal area only + Sites of Scientific Importance, Co Sligo [W.Watts]
3/2/70	A.A.Toher	Features of the Sligo/Leitrim area [list by An Taisce, Sligo Branch]
1971	A.Quinn	Botanical notes on Sligo [handwritten]
1971	B.Doran	Bibliography of Sligo natural history refs
|1971?|	B.Doran?	NHI: Areas of scientific interest, Co Sligo + typewritten notes for draft report
|1971?|	GSI	NHI geological sheets
13/12/71	D.Cabot	Proposed houses at *Streedagh, Co Sligo
Jun 72	RG	A preliminary report on Areas of Scientific Interest in Co Sligo
Aug 74	RG D.Cabot	Observations on the proposed development of the old barytes mine at Glencarbury, Balintrillick [*Ben Bulben]
Jan 76	RG	Summary of ecological evidence presented at planning appeal 921/1/760 concerning development at Rathtermon, Lisserlough [*Lough Gara goose site] + file
<1977>	R.Haworth	Draft Index to Heritage Items in Co Sligo [not published]
Aug 77	R.Young	Coastal erosion and suggestions for site management at Streedagh & Mullaghmore together with brief comments on problems at Rosses Point, Strandhill and Inishcrone

1977	T.Curtis RG, R.Young	Areas of Scientific Interest in Co Sligo
Feb 78	RG	Present extent of the Sligo Bay Barytes Co. mine at Glencarbury, Co Sligo [*Gleniff: found to be within planning conditions]
May/Jun 1985		*Ben Whisken cable car file incl. An EIS of the proposed Ben Whisken Cable Car Development by Tony Whilde [written for developer]

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|Oct 89|	RG	Kilbrattan - ecological value and role for education/recreation [adjacent to *Templehouse Lough and should probably be in ASI]
<91/84>	RG	Comments on Coillte's EIS of forestry proposed for two sites nr L.Easky, one an ASI

N.B. See also Reports relevant to all counties, listed at end

TIPPERARY NORTH

Date	*Author*	*Title/subject*
Apr 72	E.Fahy	Preliminary report on Areas of Scientific Interest in North Tipperary
May 72	R.Young	Notes on proposed development of *Templemore Park, North Tipperary [no reference to its ASI status -which it may not really have, RG]
<1972>	R.Young	*Templemore Town Park - Nature Trail original
1973	E.Fahy	File re *Taxus* trees at *Cornalack [seed planted in FWS nursery? - M.Neff]
May 78	R.Young E.ni Lamhna	Establishment of a nature trail in the *Clare Glens
|79-80|	D.Foulkes	Wildfowl counts at *Lough Ourna [per D.Scott]
13/4/87	RG	Development at Murraghboro [no ill effects on *Lathyrus palustris*]

TIPPERARY SOUTH

<1950+>	I.K.Ferguson	Composite plant cards for 10 km squares H7
<1972>	GSI	NHI Geological Sheet on Hollyford Quarry
Apr 74	E.Fahy RG	A preliminary report on areas of scientific interest in Co Tipperary S.R.

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|1985?|	RG	Flora of three sites at Ballybrado, Co Tipperary [includes Suir valley below Cahir - not an ASI on its own merits but could be included with an adjacent area. Done for IWC]
|Jun 89|	RG	Condition and vegetation of Cappamurra Cutover with suggestions for management and interpretation [quite a good and very well-studied cutover which should probably be an ASI]

WATERFORD

Date	*Author*	*Title/subject*
<1950+>	I.K.Ferg	Composite plant cards for 10 km squares H6
7/2/67	LM/AP	Ornithology of S. Waterford
1969	ISPB	Waterford ornithological sites (J.Temple Lang)
1969	J.Jackson	Notes on a few sites in Waterford (bot,geol,orn)
<1970>	M.Guiry	*Dungarvan Bay biological survey
1971	Dept Fish	NHI sites for fish - *Coomshingaun, *Belle L, *Kilsheelan L.
<Aug 71>	G.Crapp M.Guiry	Investigations on populations of the limpet *Patella vulgaris* around Ballinacourty Pt, Dungarvan Bay
Mar 72	GSI	NHI Geological sheets
<3/6/72>	D.Saunders	Letter with seabird count for *Helvick Head
Apr 74	RG	Scientific value of oakwoods at *Curraghmore (Portlaw) with recommendations for management [#] + |file|
Sept 75	J.Courlander	Report on old mine workings at Knockmahon
Oct 75	A.Quinn	Proposals for the Burrows nature trail, *Tramore + file
1976		Waterford Co Council (*Helvick Head) Conservation Order
Feb 77	D.Cabot	Proposals for controlling erosion on the north part of *Tramore sand dunes
Jul 77	AFF	Index to heritage items in Co Waterford [arranged by townland]
1978		File on Special Amenity Area Order for *Nire Valley

Mar 78	RG	The scientific value of *Ballin Lough with reference to possible drainage
14/9/78	M.O'Meara	For updating Waterford County Report [#]
Aug 79	T.Curtis	Botanical evaluation of the area of the cliff walk, Ardmore [not of ASI status]
Nov 81	E.ni Lamhna	Report on the saltmarsh area to the west of *Tramore Back Strand [old race-course area not the true saltmarsh behind the dunes where *Inula* grows]
Apr 83	R.Webb	A survey of woodlands in the *Nire Valley [incl. map of deciduous stands worth protecting]
Aug 83	RG	Comments on wildlife developments at *Tramore, Co Waterford + file with *Tramore Back Strand & Sand Dunes-its present and future by M.O'Meara (IWC Waterford Branch)
May 87	RG	The removal of beach material from *Tramore Strand with comments on erosion

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<88/63> <90/67>	RG	Landfilling of marsh at Belmont House, Suir Estuary [site of *Hordeum secalinum*]
|Dec 91|	RG	Ecological Impacts of proposed sewage treatment works at *Tramore [part of larger EIS. Map #]

N.B. See also Reports relevant to all counties, listed at end

WESTMEATH

Date	*Author*	*Title/subject*
1968-71	D.Cabot	File on potential nature reserve at Inner Loughs, *Lough Ree
3/6/69	J.Klein	Vegetation studies around *Lough Ree, including letter to A.Folan and a plant spp table for the studied woods around Lough Ree, i.e. in Westmeath, Longford and Roscommon
1969/70	IWC(old)	10 wildfowl counts for Westmeath lakes
1970	W.Watts	Co Westmeath - Sites of Scientific Interest
1971	L.Farrell	Notes on Westmeath flora and birds [part derived, part from site visits]. Also General Notes [for Fehily Ass]
<1971>	L.Farrell	Plant cards for *Killinure L and *Coosan Pt
1971	Inland Fish	NHI Scientific Heritage - freshwater habitats
|8/3/72|	M.Scannell	List of plants in DBN from BSBI trip in July 71 [includes *Oenanthe lachenalii* from canal nr Mullingar. If true, the ?only inland station in Ireland]
Mar 72	RG	A preliminary report on areas of scientific interest in Co Westmeath
16/7/73		Letters re *Cephalanthera* on *Coosan Pt and elsewhere (R.Piper, F.Perring)
Mar 75	RG	Comments on a proposed marina at Ballykeeran, Killinure Lough [adjacent to *Lough Ree]
Aug 76	RG	Tree groups at Liliput by *Lough Ennell
Sept 77	R.Webb	Housing and hotel development at Bloomfield, Mullingar, Co Westmeath [*L.Ennell shore]
Oct 78	R.Webb	Survey of trees near Lough Derravaragh [some on *Knockbody]

Dec 78	R.Webb	The amenity value of woods near *L.Derravaragh
23/6/81	R.Young	Motel development at Ballykeeran, Athlone [close to *Lathyrus palustris*, then protected]
27/1/84	R.Nairn	Copy letter about bog south of Athlone & geese [*Cloonbonny Bog]
Apr 84	E.ni Lamhna	Sites of scientific interest identified since 1981 [single page #]
|20/8/85?|	C.Breen	New stations for *Carex appropinquata* [letter with spidery maps]
Sept 88	E.ni Lamhna	Tourist trail at *L.Sewdy, Ballymore, Co Westmeath

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New ASI White/Ben Loughs # [noted during Meath |Aug 79|]

N.B. See also Reports relevant to all counties, listed at end

WEXFORD

Date	*Author*	*Title/subject*
1967	M.Crowley	Survey of Wexford Harbour [dredging and water samples]
<1970>	W.Watts	Co Wexford sites of scientific interest
<1970>	ISPB	Wexford [bird sites written by J.Lang]
1971		File re: *Lady's Island Lake Conservation Order
<Jun 71>	An Taisce	Survey and description of the *Mt of Forth with recommendations for future land use policy in the area
<1972>	A.Folan	Areas of scientific interest in Co Wexford: coastal area only
c 1974	GSI	National Heritage Inventory geological sites and a few papers
Mar 80	AFF/FWS	A study of the *Raven, Co Wexford
Oct 83	RG	Comments on cottonweed *Otanthus maritimus* at *Lady's Island Lake and its conservation.
21/3/84	RG	Proposed caravan park at the *Raven
Jul 86	RG	Scientific assessment of part of *Forth Mt [#]
Aug 86	RG	Impacts of the artificial cutting of the barrier at *Lady's Island Lake [+ file]
Jul 87	E.ni Lamhna	Removal of beach material from *Bannow Bay and Wexford Harbour.

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<89/18>	RG	Environmental impacts of water sports on *Lady's Island Lake
<89/20>		Drainage plans for *Camross pingo site [check with Willie Warren, GSI on outcome on the ASI]
<90/16>	RG	Proposed Tree planting on the *South Slobland, Wexford
<90/24>	RG	Proposed tree felling in *Clone Fox Covert
<91/71>	J.Blackwell G.Mallon RG	Report on the development of Coillte lands at the former Courtown Demesne [does away with *Courtown Glen]

N.B. See also Reports relevant to all counties, listed at end

WICKLOW

Date	*Author*	*Title/subject*
<Sept 67>	A.Folan	Co Wicklow sites of scientific interest: status in 1967
<1969/70>		File on fencing at Kypure Mt (Slazenger etc)
2/12/70	D.Cabot	Letter and file re *Broad Lough Game Birds Protection Order [map with core and buffer area suggested]
pre-1971	A.Folan	Wicklow ASI maps
26/7/72		Corrispondence re refusal of fencing application and reclamation on Kippure. Incl. Powerscourt Estate appeal.
Aug 72	E.Fahy	ASI's at Poulaphouca Reservoir, Co Wicklow [parts of the lake/shore then used by geese]
Aug 72	E.Fahy, RG	Ecological effects of the proposed fertilizing and reseeding scheme on Kippure Mt and the scientific interest of the area.
Aug 72	RG, E.Fahy	Some aspects of development on the Co Wicklow coastal *Murrough [contains no new ecological data]
Dec 72	RG, E.Fahy	Observations on the proposed development at *Maherabeg, Co Wicklow
1973	AFF	*Brittas Bay: A Planning and Conservation Study
Jul 75	N.Davin R.Young	A study of fences in the Wicklow Mountains
1975?	R.Young	The distribution and movements of day visitors to *Brittas Bay in relation to the new carpark and associated walkways through the dunes. [handwritten copy]
Dec 76	T.Curtis R.Young	Areas of scientific interest in County Wicklow 2nd report

Aug 77	RG	Values and potential of the *Kilcoole marshes with comments on a proposed drainage scheme
1978-87	R.Webb	File on Coolatin Estate [value of parkland trees, tree preservation orders, report on *Tomnafinnogue Wood, a possible ASI, and much correspondence]
Jun 80	E.ni Lamhna R.Young	Amenity developments in the *Black Castle area of Wicklow [no ref to ASI status]
Feb 81	RG	Comments on timber production at Newcastle on the *Murrough, Co Wicklow [part on ASI]
Feb 82	RG	Effects of a sewage outfall on the marshes at *Kilcoole [no new ecological information]
May 82	RG	Erosion caused by vehicles on the *Murrough with comments on its treatment and prevention [close to Wicklow town, no new data]
|May 82|	IWC	An evaluation of the wildlife interest of the marshes at *Broadlough, Co Wicklow [for Wicklow Co Council by R.Nairn and J.Davies]
25/5/82	RG	Tree planting by the *Leitrim River, Wicklow
21/9/83	RG	Clonmannon House village [ecol. comment on this development adjacent to ASI]
May 85	RG	Comments on turf extraction at *Sallygap [includes map of this well known site]
Jun 87	C.Skehan	Development proposals at the *Murrough, Broad Lough [includes acknowledgement of ASI values]

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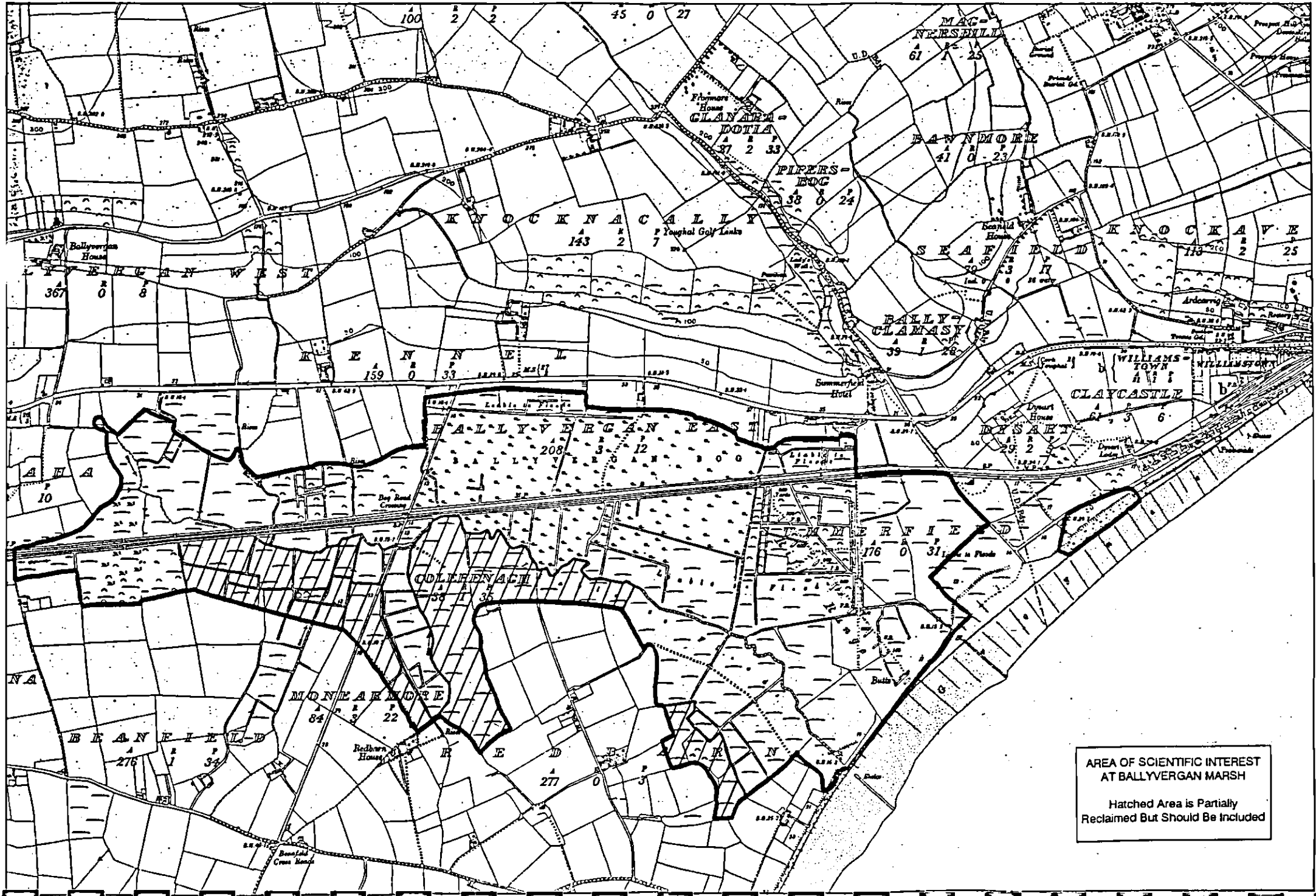
<89/41>	RG	*Tomnafinoque Wood Special Amenity Area Order [accepted as ASI #]
<91/30>	RG	Letter and file re gravel removal at Clonmanon on the *Murrough.
|Apr 91|	RG	Contribution to EIS of golf club at Ardinairy [*Buckroney Marsh and Dunes] for Lynch, O'Toole Walsh Partners.

REPORTS RELEVANT TO ALL COUNTIES

Date	*Author*	*Title/subject*
|Jun 71|	AFT	Interim report to National Heritage Inventory Working party: Lowland grassland (A.M.O'Sullivan) & Heath (J.Cotton & AMO'S)
|1971|	Dept Fish	NHI Scientific Heritage, Irish Ecosystems - Freshwater Habitats
|8/10/73|		Addendum
|16/12/71|	FWS	Semi-natural woodlands and other areas of scientific interest in state forests
|1974?|	IFTrust	Areas of Scientific Interest under development by Inland Fisheries trust


AREA OF SCIENTIFIC INTEREST
AT BALLYVERGAN MARSH
Hatched Area is Partially
Reclaimed But Should Be Included
6 CORK

Report on Lands at Blarney Bog

County Cork

A Report for

Cork County Council

by

CAAS (Environmental Services) Ltd

September 1990

I``RODUCTION

This report is written in response to a request from Mr. Brendan Kelleher (12/6/90), Chief Planning Officer of Cork County Council. It is based on a meeting with Mr. Kelleher on 2nd July at which the bog's ecological value and final use after the proposed land filling were discussed.

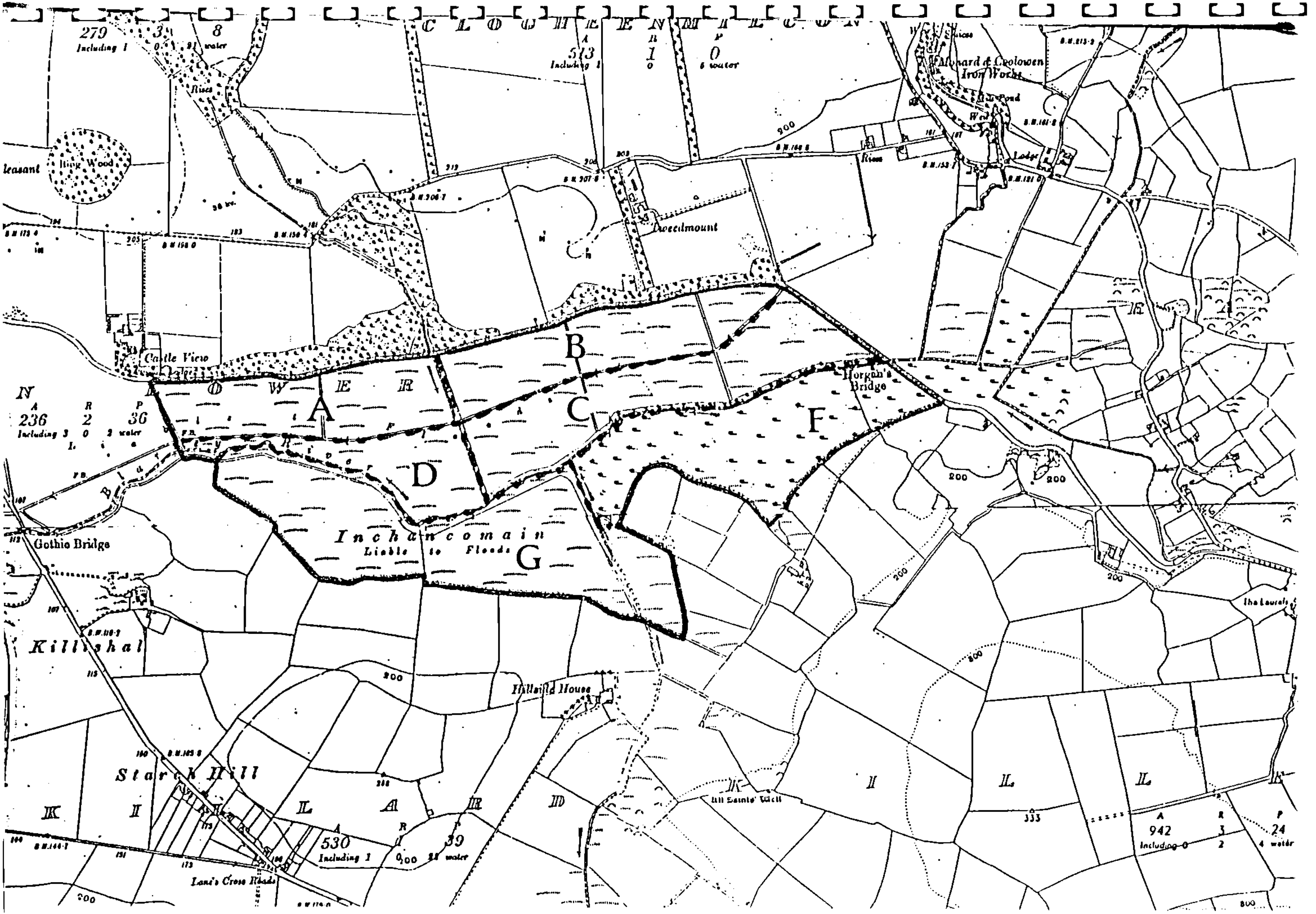
Site visits were made subsequently on that day and on 12th August and contacts with local naturalists have continued. The help of Tony O'Mahony, Pat Smiddy and Tom O'Byrne is acknowledged with thanks.

SITE DESCRIPTION (See map)

Ecological

Blarney Bog has been formed by the ponding of the Blarney River by a natural blockage (probably a fault) at Gothic Bridge. Sediment brought in by the river itself and two tributaries from the north and south has accumulated to form a flat valley floor which is damp all through the year and floods in winter. The resulting vegetation is an alluvial fen with a soil of fine silt and incorporated peat. Peat developed more extensively on the southern side (Inchancomain) and perhaps elsewhere, but has largely been cutaway by now. Traces of its presence remain in the slightly acid vegetation here.

The flora of the site is described in detail in the Appendix. It is mainly tall fen, ungrazed at each edge but with cattle in the D/C sections in the centre. There are extensive and rather uniform stands of grasses north of the Blarney River but in A these are augmented by quite a variety of sedges and broad leaved plants. There are two distinctive areas of tussock sedges, at Horgan's Bridge (F) and in a corner of D. Overall, the vegetation becomes drier as one goes upstream on the north side of the river though on the south side the situation is reversed. There is also an alkaline/acidic gradient from north to south with the result that there are at least three distinct vegetation types in the whole site. The plant species of most interest are the two sedges Carex riparia and C. vesicaria and the yellow loosestrife (Lysimachia vulgaris).



A
B
C
D
F
G
Inchancomain
Liable to Floods
Horgan's Bridge
Castle View
Tweedmount
Ring Wood
Gothic Bridge
Killishal
Starch Hill
Hillsfield House
All Saints' Well
Lane's Cross Roads
The Laurels
Monard & Coolowen Iron Works
Lodge
Rises
200

While the vegetation can be divided up into units depending on nutrient status and management patterns (both past and present), the birdlife uses the entire area and can be described as one. Breeding birds include sedge and grasshopper warbler, reed bunting, snipe, mallard, meadow pipit and stonechat. These occur in good, though not exceptional, numbers. In winter, additional snipe and mallard feed in the bog while teal also occur in numbers that are difficult to assess but are probably of the order of 20-30. The occurrence of hen harriers with regularity is a feature of interest. They hunt over all the wetter ground and may sometimes roost in the reed beds.

Visual

The important visual elements of the general area were (formerly) the pine and oak woodland on the north side of the existing road and the long view down the valley towards Blarney, overlooking the level fen. This was a wilderness area, the visual equivalent of a lake below road height and especially important for traffic approaching from the east, having travelled through enclosed hilly land. To the west this view of the fen is obscured by hedges until the environs of Blarney are met with.

EVALUATION

Blarney Bog is considered locally important in amenity terms. It has ecological interest, especially in the extent and variety of its vegetation types, and visual interest, by adding diversity to a much viewed landscape. It is one of those sites whose importance is increased by its proximity to a populated (and tourist) area. It should therefore be noted in the County Development Plan as it may be subject to development pressures again in the future.

In the ecological context, it is largest flora on this river system though other patches continue downstream to Tower Bridge. These have most of the same plant species, with the possible exception of the yellow loosestrife which is not a widespread plant in Cork.

COMMENTS

Effect of current works

Areas B C are now owned by the County Council and a considerable part has been covered by infill from the roadworks nearby. It is fortunate (and apparantly fortuitous) that this is the least interesting part of the Bog ecologically, though it is of visual significance, being the entrance to Blarney. No ecological interest will survive in those areas where infill takes place and

APPENDIX

Botanically the area can be divided into sections by the streams and ditches (see map). All sections consist of tall fen vegetation which is wettest at the west end and near the ditches. Typically there is much reed grass (Phalaris arundinacea), almost a pure stand in parts of A D, with the other tall grasses, reed fescue (Festuca arundinacea) and tufted hair grass (Deschampsia cespitosa). In wet places the large pond sedge (Carex riparia) forms considerable stands while the smaller Carex vesicaria and Iris are also important. Associated plants are meadowsweet (Filipendula ulmaria), marsh valerian (Valeriana officinalis) and locally, the two loosestrifes (Lysimachia vulgaris and Lythrum salicaria). This community is best developed in A spreading into D and the western parts of B C. Where paths exist, lower growing species like forget-me-not (Myosotis scorpioides), yellow cress (Rorippa palustris), water pepper (Polygouum hydropiper) and bur marigold (Bidens tripartita) can survive.

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LIFFORD
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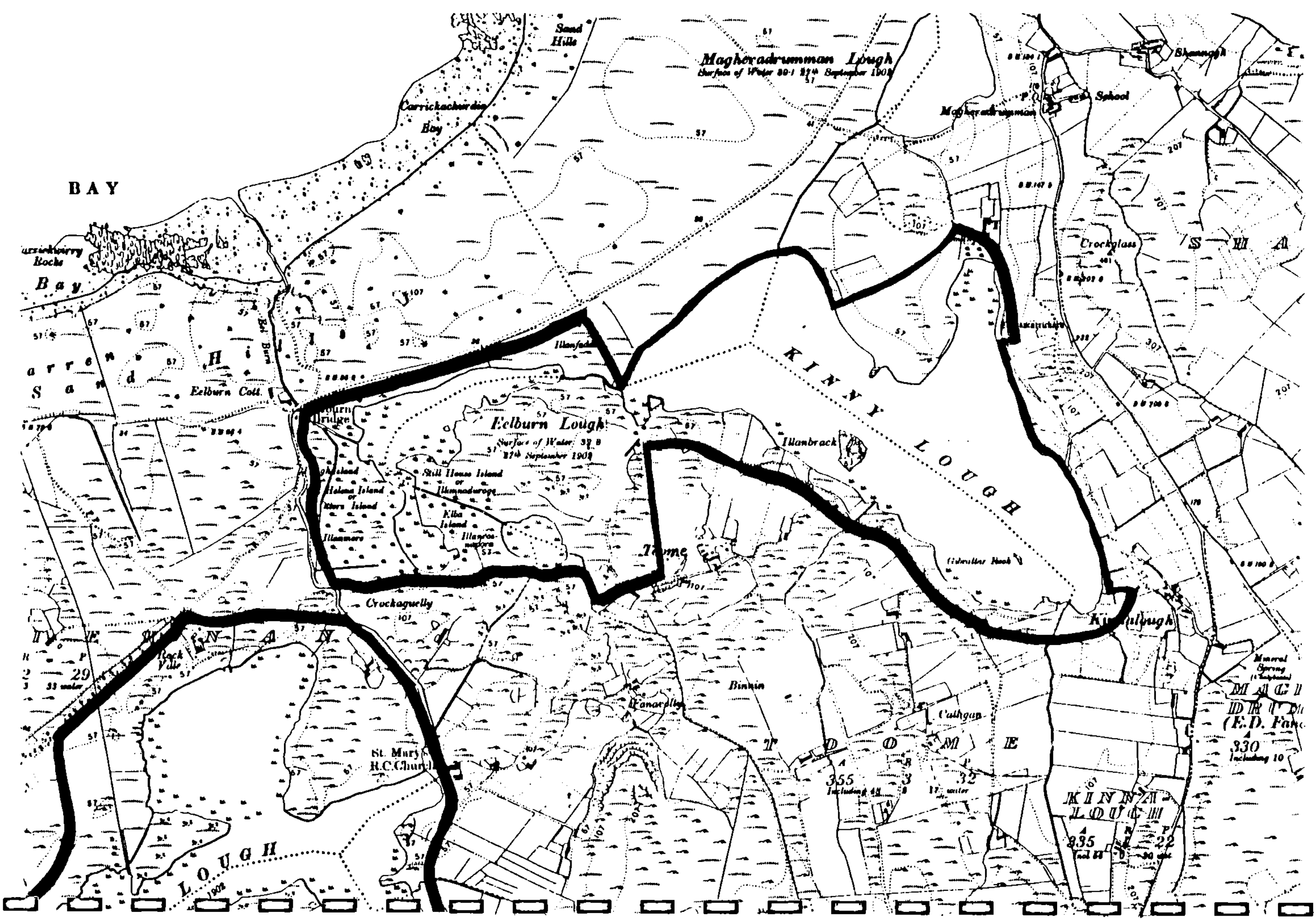
BAY
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Sand Hills
Carrickachurdin Bay
Magheradrumman Lough
Surface of Water 80·1 27th September 1901
Magheradrumman
School
Shannagh
Crockglass
KINNY LOUGH
Illanbrack
Gibraltar Rock
Kinnalough
Eelburn Lough
Surface of Water 37·8 27th September 1901
Still House Island or Illmnaduroge
Helena Island or Ribers Island
Kiba Island
Illanmore
Eelburn Cott.
Eel Burn
Eelburn Bridge
Trome
Crockaguelly
Binnin
Culhgan
Rock Ville
St. Mary's R.C.Church
LOUGH
KINNA LOUGH
330
355
335
29

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CONSERVATION AND AMENITY
ADVISORY SERVICE

AN EVALUATION OF THE ECOLOGICAL IMPORTANCE OF AREAS OF BOGLAND ADJACENT TO SLIEVE LEAGUE, CO DONEGAL

A REPORT FOR DONEGAL COUNTY COUNCIL

ROGER GOODWILLIE

OCTOBER 1981

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The bogland north of Slieve League along the road to Malinmore is dissected by drains and turf banks as it is intensively used for turf cutting and forestry. There are only three parts where an absence of cutting gives some idea of what the original vegetation was like (Figure 1). These comprise a sloping site between Lough Auva and Lough Unshagh and two flat and very wet sites, one west of Lough Auva and the other in a bend of the Owenwee River.

1. Lough Umlagh

The first site, north of the road, is bordered by cutting and also grazed by sheep so it is not in very good condition. It has a thin cover of peat with a characteristic though monotonous flora of wet heath and blanket bog. This resembles that on the flatter parts of the Slieve League massif.

2. Lough Auva

West of Lough Auva the ground conditions are wet and this, as well as an absence of heather, prevents sheep grazing to a large extent. In autumn the impression is of a 'red bog' similar to the transitional raised bogs of east Galway and Roscommon and resembling the Owenbeagh Bog in Glenveagh. The vegetation is coloured by an abundance of bog cotton (Eriophorum angustifolium) and moor grass (Molinia caerulea) while at ground level the Sphagnum mosses are very frequent, creating a soft spongy surface to walk on. Many Sphagnum species occur and at least six were identified including the oceanic S. imbricatum and the continental S. fuscum, two species of some interest. Among the higher plants, diversity is not so high owing to the rather homogeneous habitat. A scattering of the sedge Carex panicea and tormentil (Potentilla erecta) occurs in the community, which is typical of many blanket bog areas. The blackish moss Campylopus atrovirens is also characteristic. Heather growth, of Calluna and Erica spp. is sparse but plays a more important role in the southern half where a patch of hummocky ground is associated with a tributary of the adjacent stream. Here, deer sedge (Scirpus cespitosus), crowberry (Empetrum nigrum) and the moss Rhacomitrium become frequent also.

Can this be True? RG

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The Owenwee Bog is very different in appearance and structure. It consists of three sections separated by river channels and their associated fen areas. The western part has been afforested, the central is largely intact - though some marginal cutting is going on, and the eastern is also intact but is less well developed.

The bog is flat or slightly domed in profile and, were it not for the peat cutting, would grade into the wet heath of the fields below Slieve League School. These are used for grazing and are frequently burnt and it appears that fire has also spread onto the area in question. The peat of its northern and western edges feels tough and greasy and the moss contact of the vegetation is unnaturally low. There is also some impact from grazing cattle.

The plant cover is a mixture of bog cotton and deer sedge with much moor grass and bog myrtle (Myrica gale). The flora is fairly rich in higher plants, partly because of the influence of river flooding. Lousewort (Pedicularis sylvestris) and clubmoss (Huperzia selago) occur sparingly. The main feature of the bog is a series of deep linear pools which run along the contours of the central area. These are up to 1 m wide and 10 m long and are clearly visible on aerial photographs. They allow other plants to grow that are not typical of blanket bog, e.g. bogbean (Menyanthes trifoliata) and bladderwort (Utricularia minor).

There are fewer Sphagnum species apparent than on the Lough Auva bog but Campylopus is common, often picking out the edges of the pools, and the western liverwort Pleurozia purpurea occurs.

EVALUATION

Both the area west of L. Auva and the Owenwee bog are of considerable ecological interest as examples of the variation that exists in western blanket bogs. Such flat areas are infrequent and because they generally have a good depth of peat have normally been modified by cutting.

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The other patch of uncut bog between Lough Auva and Lough Umlagh resembles that in many other parts of the country and is not particularly valuable.

CONCLUSION

It is felt that both the Lough Auva and the Owenwee bogs should be included in the Slieve League area of scientific interest which can now be defined as on Figure 2. Strenuous efforts should be made to curtail the new turf cutting on Owenwee and to prevent any additional cutting.

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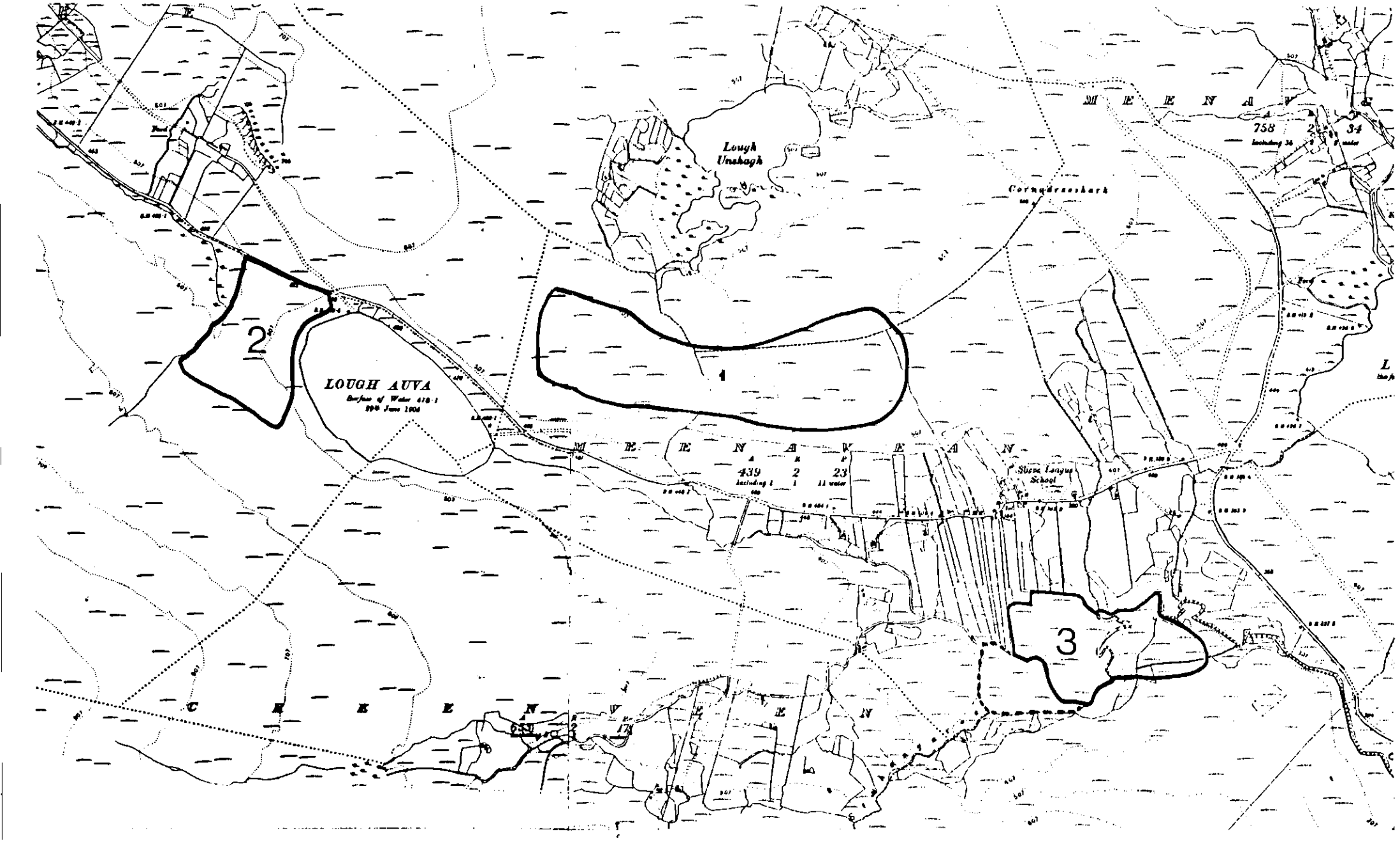

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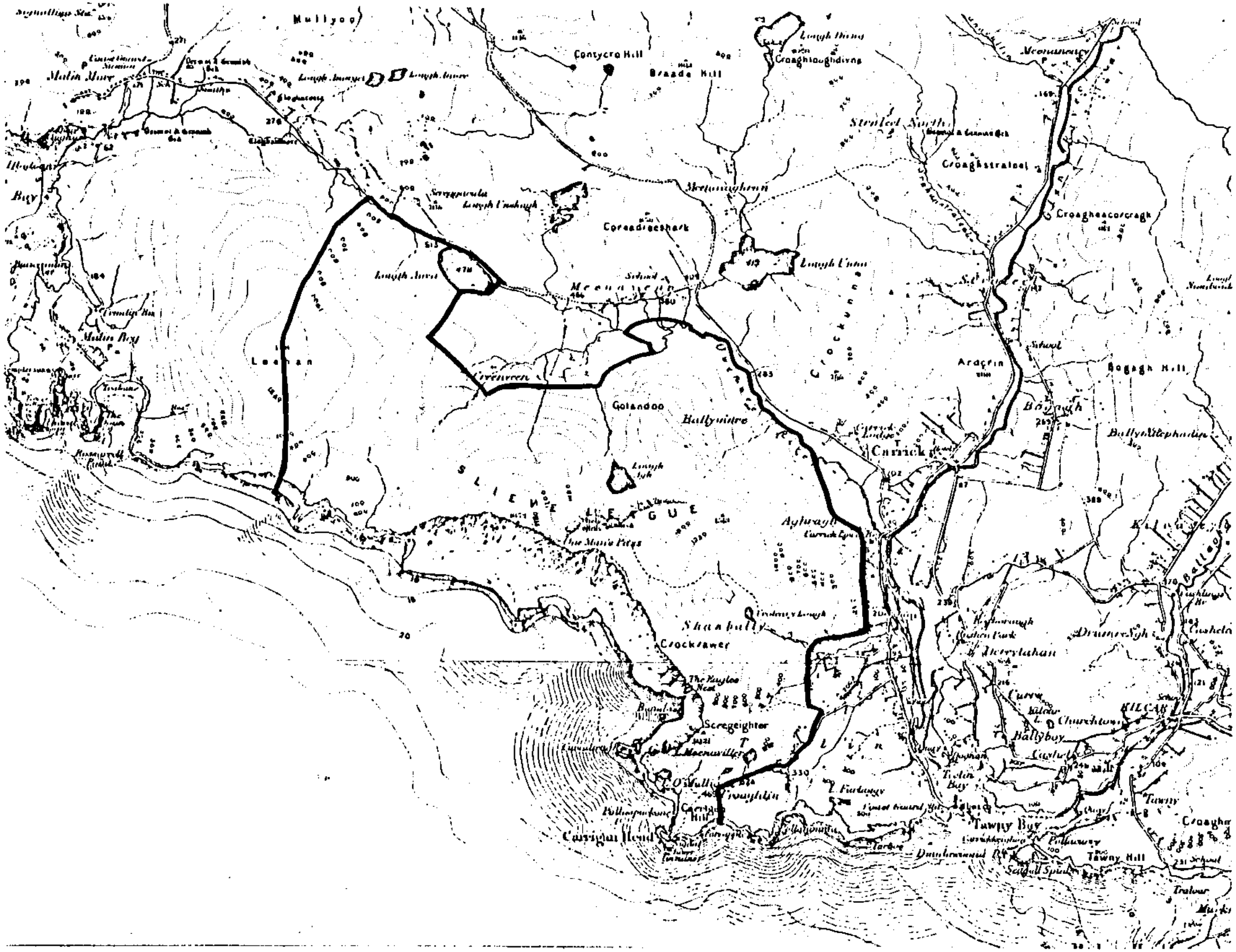


Figure 2: Limits of the Area of Scientific Interest at Slieve League, Co Donegal

Report on Lands at Blarney Bog

County Cork

A Report for

Cork County Council

by

CAAS (Environmental Services) Ltd

September 1990

INTRODUCTION

This report is written in response to a request from Mr. Brendan Kelleher (12/6/90), Chief Planning Officer of Cork County Council. It is based on a meeting with Mr. Kelleher on 2nd July at which the bog's ecological value and final use after the proposed land filling were discussed.

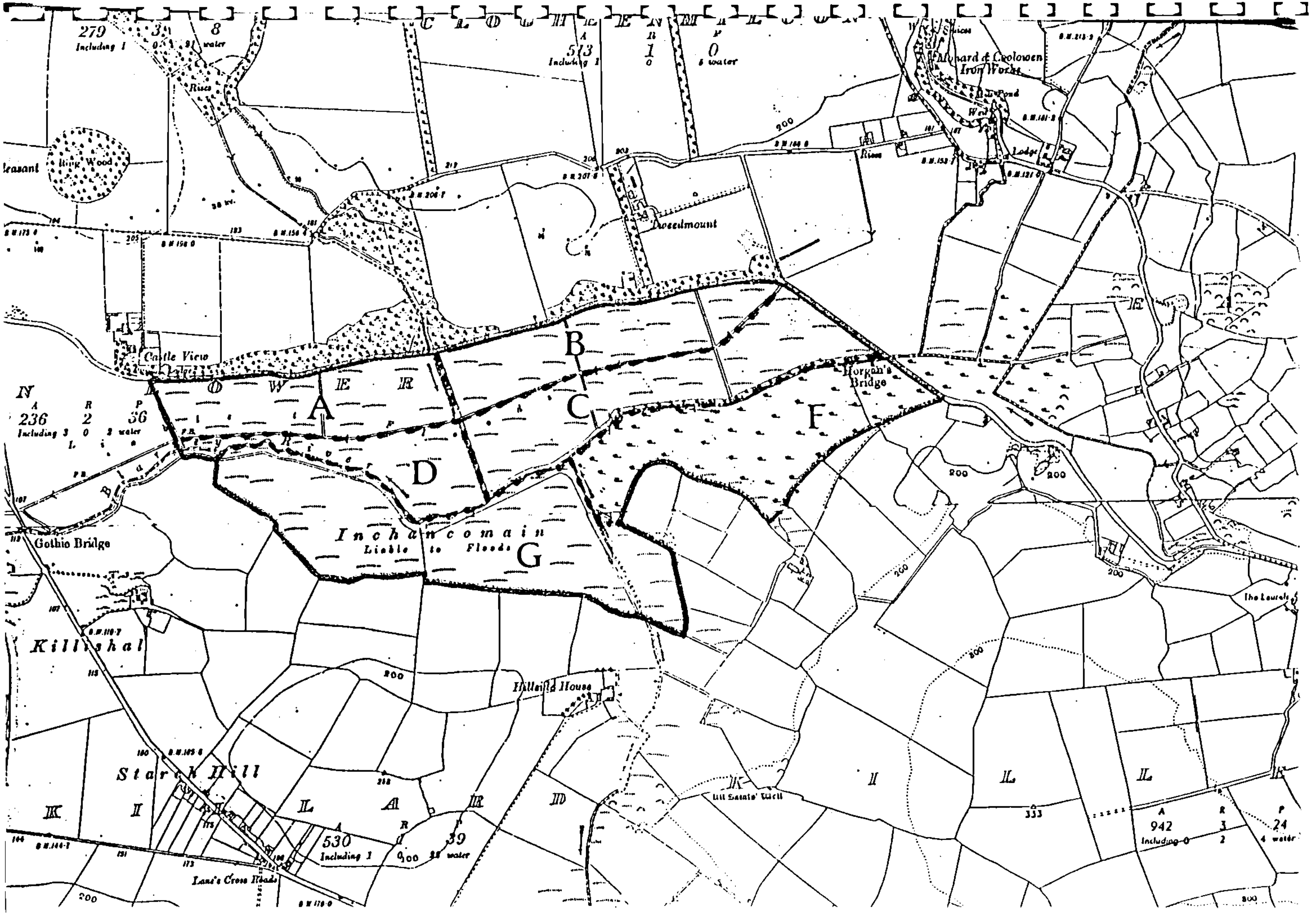
Site visits were made subsequently on that day and on 12th August and contacts with local naturalists have continued. The help of Tony O'Mahony, Pat Smiddy and Tom O'Byrne is acknowledged with thanks.

SITE DESCRIPTION (See map)

Ecological

Blarney Bog has been formed by the ponding of the Blarney River by a natural blockage (probably a fault) at Gothic Bridge. Sediment brought in by the river itself and two tributaries from the north and south has accumulated to form a flat valley floor which is damp all through the year and floods in winter. The resulting vegetation is an alluvial fen with a soil of fine silt and incorporated peat. Peat developed more extensively on the southern side (Inchancomain) and perhaps elsewhere, but has largely been cutaway by now. Traces of its presence remain in the slightly acid vegetation here.

The flora of the site is described in detail in the Appendix. It is mainly tall fen, ungrazed at each edge but with cattle in the D/C sections in the centre. There are extensive and rather uniform stands of grasses north of the Blarney River but in A these are augmented by quite a variety of sedges and broad leaved plants. There are two distinctive areas of tussock sedges, at Horgan's Bridge (F) and in a corner of D. Overall, the vegetation becomes drier as one goes upstream on the north side of the river though on the south side the situation is reversed. There is also an alkaline/acidic gradient from north to south with the result that there are at least three distinct vegetation types in the whole site. The plant species of most interest are the two sedges Carex riparia and C. vesicaria and the yellow loosestrife (Lysimachia vulgaris).



Monard & Coolowen Iron Works
Sluices
Lodge
Rises
Dorsetmount
Castle View
Ring Wood
Horgan's Bridge
A
B
C
D
E
F
G
Inchancomain
Liable to Floods
Gothic Bridge
Killishal
Starch Hill
Lane's Cross Roads
Hillside House
All Saints' Well
The Laurels

While the vegetation can be divided up into units depending on nutrient status and management patterns (both past and present), the birdlife uses the entire area and can be described as one. Breeding birds include sedge and grasshopper warbler, reed bunting, snipe, mallard, meadow pipit and stonechat. These occur in good, though not exceptional, numbers. In winter, additional snipe and mallard feed in the bog while teal also occur in numbers that are difficult to assess but are probably of the order of 20-30. The occurrence of hen harriers with regularity is a feature of interest. They hunt over all the wetter ground and may sometimes roost in the reed beds.

Visual

The important visual elements of the general area were (formerly) the pine and oak woodland on the north side of the existing road and the long view down the valley towards Blarney, overlooking the level fen. This was a wilderness area, the visual equivalent of a lake below road height and especially important for traffic approaching from the east, having travelled through enclosed hilly land. To the west this view of the fen is obscured by hedges until the environs of Blarney are met with.

EVALUATION

Blarney Bog is considered locally important in amenity terms. It has ecological interest, especially in the extent and variety of its vegetation types, and visual interest, by adding diversity to a much viewed landscape. It is one of those sites whose importance is increased by its proximity to a populated (and tourist) area. It should therefore be noted in the County Development Plan as it may be subject to development pressures again in the future.

In the ecological context, it is largest flora on this river system though other patches continue downstream to Tower Bridge. These have most of the same plant species, with the possible exception of the yellow loosestrife which is not a widespread plant in Cork.

COMMENTS

Effect of current works

Areas B C are now owned by the County Council and a considerable part has been covered by infill from the roadworks nearby. It is fortunate (and apparantly fortuitous) that this is the least interesting part of the Bog ecologically, though it is of visual significance, being the entrance to Blarney. No ecological interest will survive in those areas where infill takes place and

APPENDIX

Botanically the area can be divided into sections by the streams and ditches (see map). All sections consist of tall fen vegetation which is wettest at the west end and near the ditches. Typically there is much reed grass (Phalaris arundinacea), almost a pure stand in parts of A D, with the other tall grasses, reed fescue (Festuca arundinacea) and tufted hair grass (Deschampsia cespitosa). In wet places the large pond sedge (Carex riparia) forms considerable stands while the smaller Carex vesicaria and Iris are also important. Associated plants are meadowsweet (Filipendula ulmaria), marsh valerian (Valeriana officinalis) and locally, the two loosestrifes (Lysimachia vulgaris and Lythrum salicaria). This community is best developed in A spreading into D and the western parts of B C. Where paths exist, lower growing species like forget-me-not (Myosotis scorpioides), yellow cress (Rorippa palustris), water pepper (Polygouum hydropiper) and bur marigold (Bidens tripartita) can survive.

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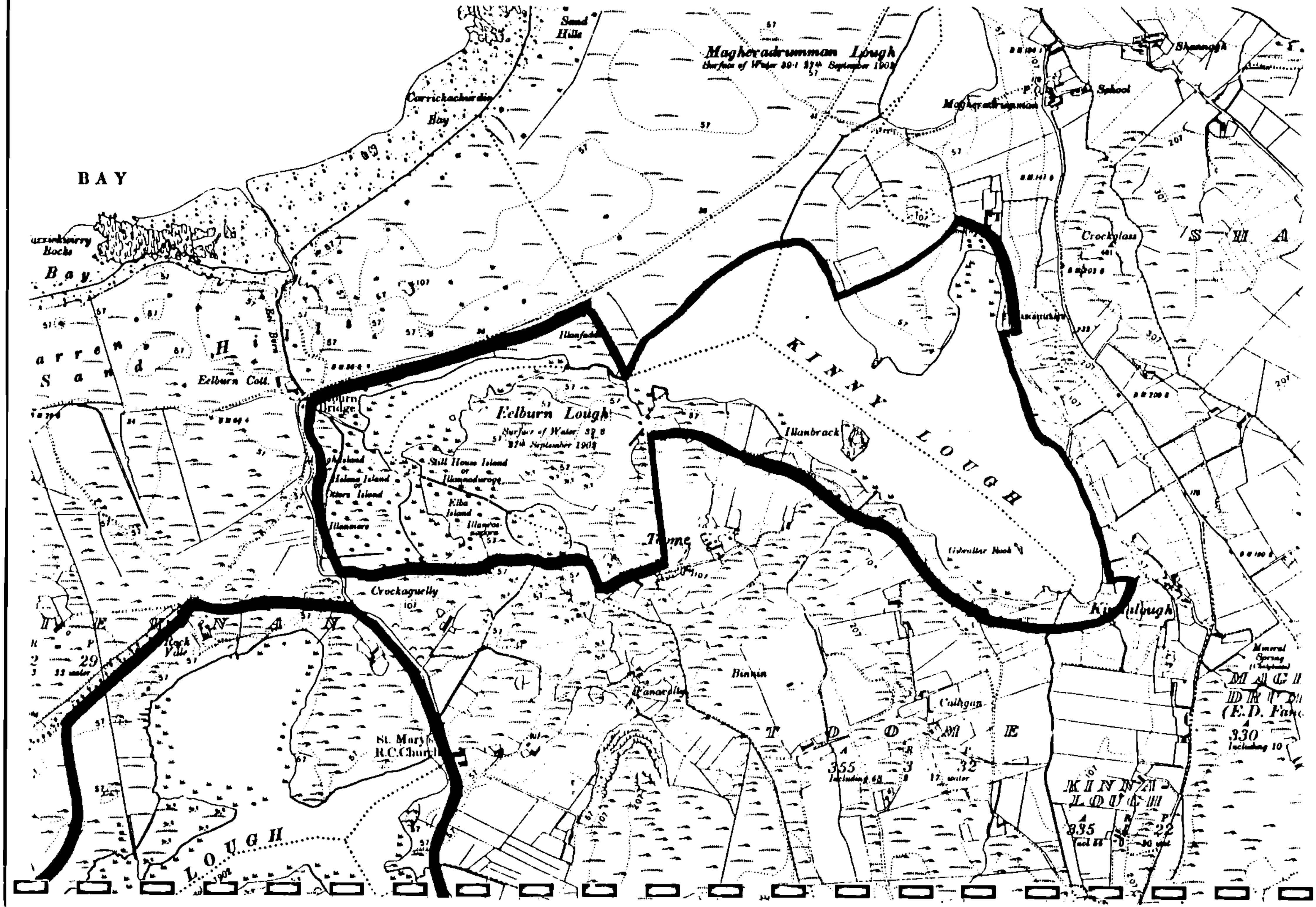
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Surface of Water 32·8 27th September 1903
Still House Island or Illannaduroge
Helena Island or Stors Island
Elba Island
Illanmore
Illanfada
Illanbrack
KINNY LOUGH
Gibraltar Rock
Kinnylough
Crockaguelly
Tawne
Binnin
Crockglass
School
Magheradrumman
Shannagh
St. Mary's R.C.Church
Rock Ville
LOUGH
Mineral Spring
Cullgan
(E.D. Fan
330
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22

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CONSERVATION AND AMENITY
ADVISORY SERVICE

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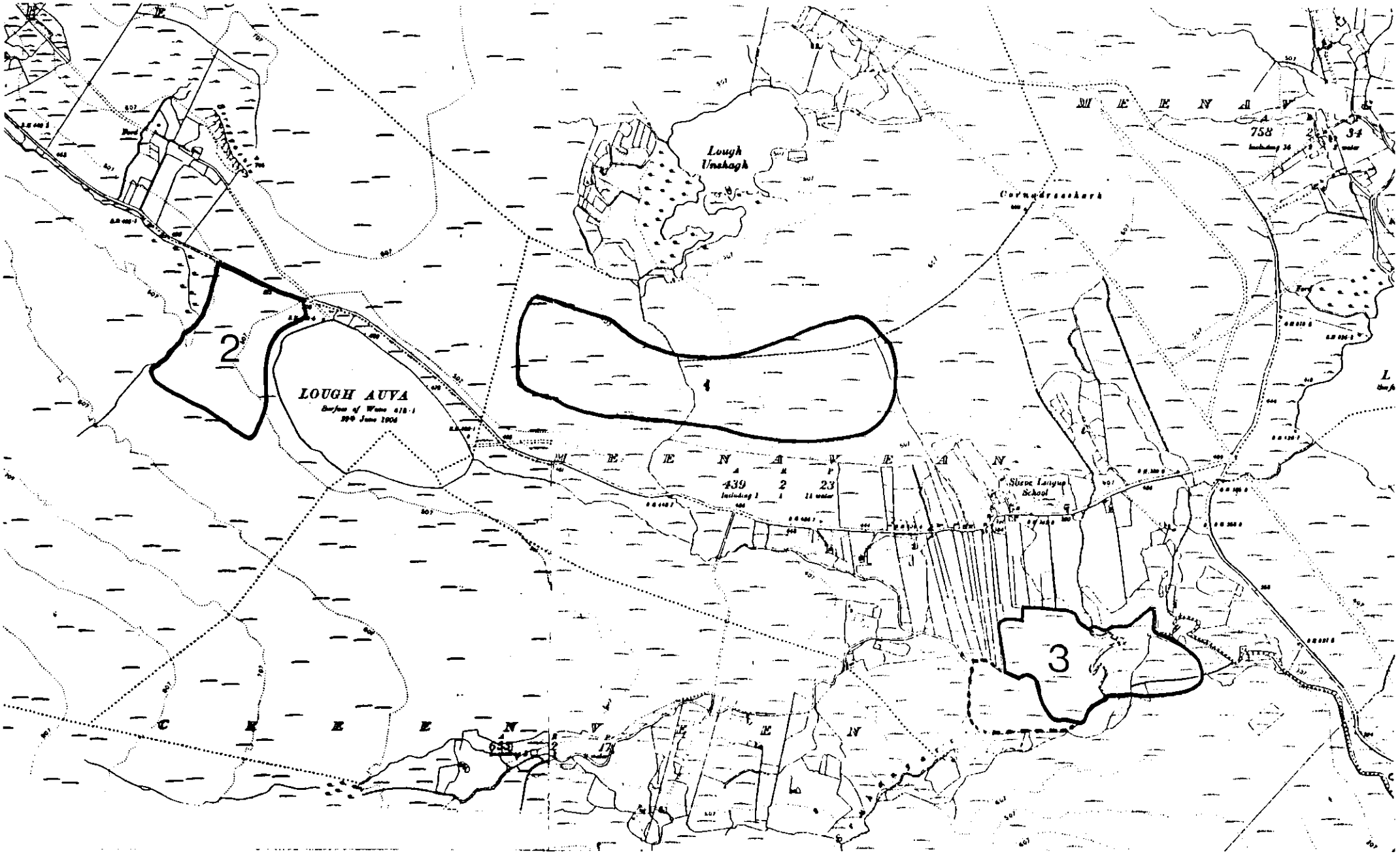

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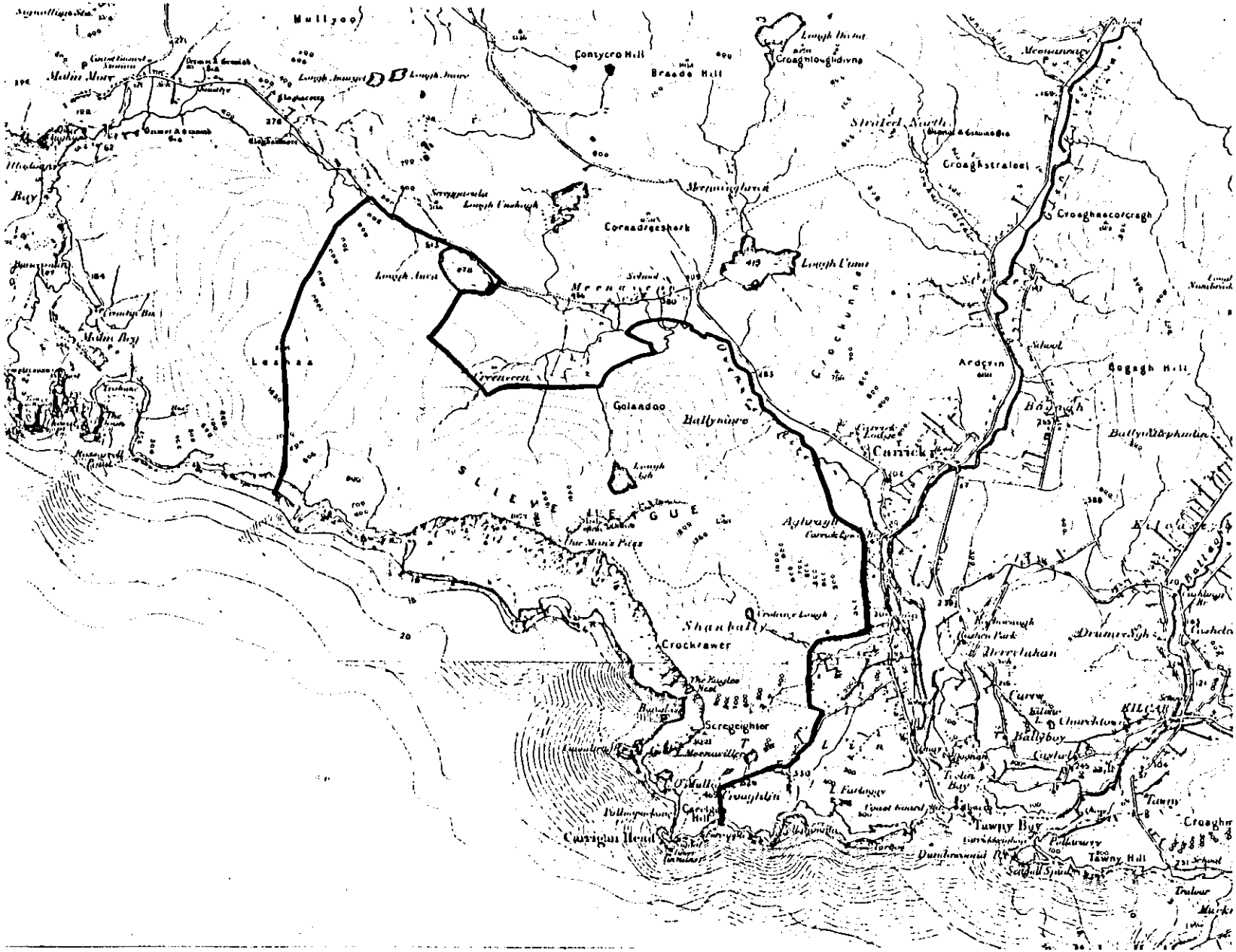

Figure 2: Limits of the Area of Scientific Interest at Slieve League, Co Donegal

An Foras Forbartha Teoranta

The National Institute for Physical Planning and Construction Research

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Bóthar Waterloo
Áth Cliath 4
Telefón 68211
St. Martin's House
Waterloo Road
Dublin 4

CONSERVATION AND AMENITY ADVISORY SERVICE

SUPPLEMENTARY REPORT

THE SLUICE RIVER MARSH AN AREA OF SCIENTIFIC INTEREST IN CO. DUBLIN

Edward Fahy

May, 1974.

INTRODUCTION:

The Preliminary Report on areas of Scientific Interest in Co. Dublin* contained all the information which had been assembled up to January 1973 on the County. Since that Report was written the Sluice River Marsh has been discovered and examined. As this marsh is situated within an area of expanding housing development it is desirable to bring it to the attention of the Local Authority without delay.

The same criteria are supplied in assessing rating and priority in this as in the earlier report. An indication of the frequency of plant species is given by the letters:

a	abundant
c	common
r	rare

The map used in this report is reproduced from the Ordnance Survey by permission of the Government (licence number 121/74).

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* Goodwillie, R & Fahy, E., Foras Forbartha (1973).

Rumex crispus	curled dock	c
Galium palustre	marsh bedstraw	c
Potentilla reptans	creeping cinquefoil	c
Acrocladium spp.	moss	a
Carex disticha)	sedges	c
C. nigra)		a
Filipendula ulmaria	meadowsweet	c
Mentha aquatica	watermint	a
Alisma plantago-aquatica	water plantain	c
Angelica sylvestris	wild angelica	c

As the water table rises still further Iris pseudacorus (yellow flag) occupies small depressions; still deeper water is dominated by Typha latifolia (common reedmace) with which the following are associated:

Hippurus vulgaris	marestail	c
Equisetum fluviatile	horsetail	c
Callitriche sp.	starwort	a
Scirpus lacustris	common bulrush	c
Ranunculus scleratus	celery leaved crowfoot	r
Ranunculus aquatilis	water crowfoot	c
Apium inundatum	fool's water cress	c
Lemna sp.	duckweed	a

The fauna of the area consists of common and widespread species of invertebrates, particularly Nematocerous flies. Beetles of the Deronectes group were captured as were Lymnaea peregra (pond snail) and the orange tip butterfly (Authocardis cardamines) was common. This species feeds on Cardamine pratensis and deposition of eggs by it and other insect species was fairly plentiful.

Birds included several passerine species, chaffinch, robin and wren, indicative of a woodland range of species. Mallard and herons were seen and the site could provide suitable conditions for a heronry. Moorhens occur in small numbers as do reed buntings.

The two fields which contain the area of scientific interest provide seasonal grazing for cattle. The marshland is shot over with some intensity during the winter months.

EVALUATION:

Animal and plant species in this marsh all occur commonly and are widespread. Habitats of this kind are, however, rare in Co. Dublin; the nearest which have been recommended for conservation are 16 miles to the north and 7 miles to the south west. Further this is at the centre of a region whose use is being changed from agricultural to residential. The River Sluice marsh could provide a suitable area for recreational and educational purposes.

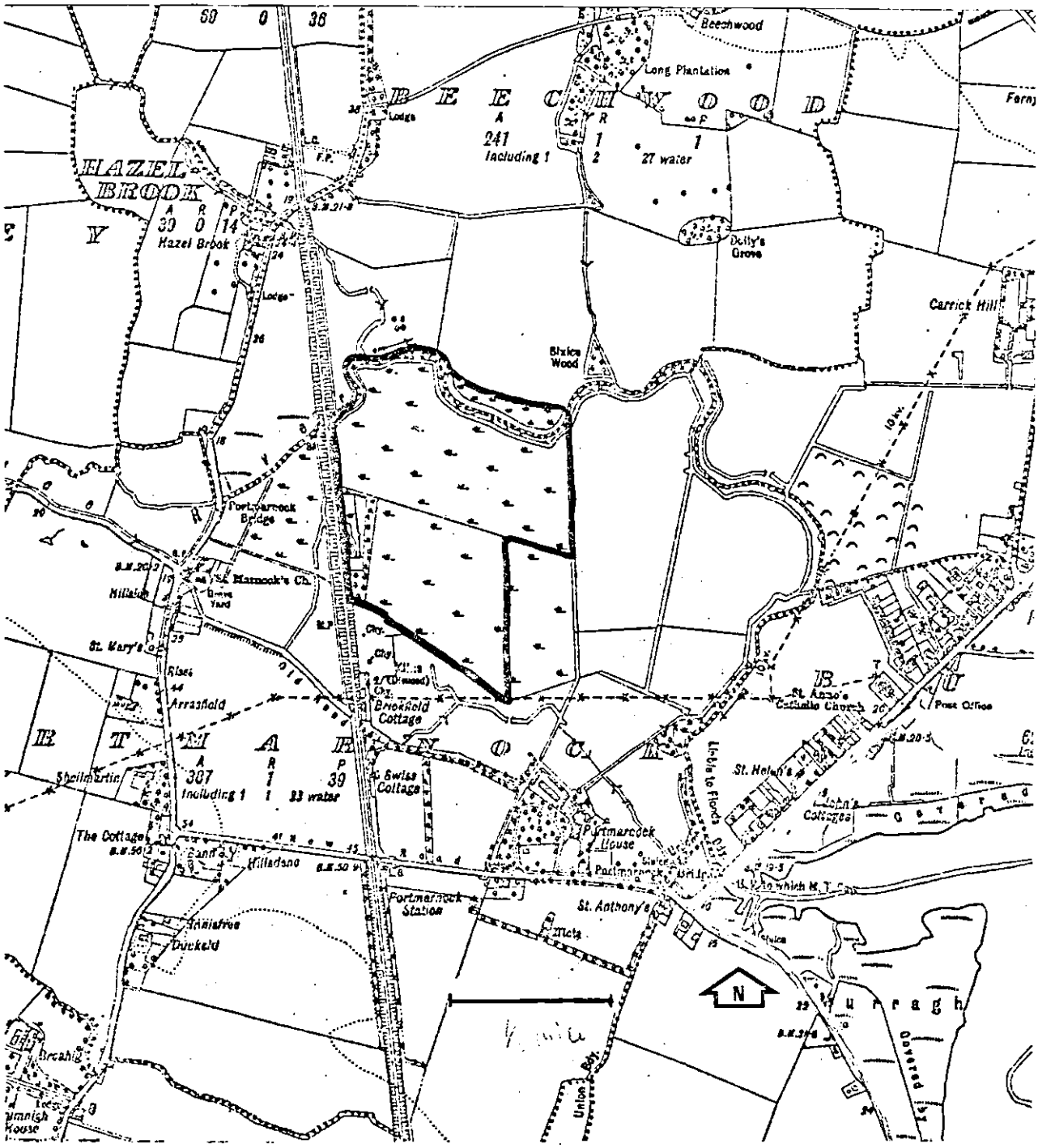
THREATS TO THE AREA:

Should this marsh be considered suitable for agricultural development it might be drained. On the western side of the railway dry fill, refuse and clay, are being dumped on the wetland to raise ground level above the regional water table and a similar undertaking could be carried out on the eastern side of the line.

RECOMMENDATIONS:

In view of the low agricultural values of this area and its potential merit as an area of recreational and educational uses every effort should be made to preserve the site. A conservation order under the Local Government Planning and Development Act (1963) would be a useful first step. The wetland could also be artificially made more interesting, however, and an investigation into how this could be achieved should be undertaken.

SLUICE RIVER MARSH AREA OF SCIENTIFIC INTEREST.



CONSERVATION AND AMENITY
ADVISORY SERVICE

Ballybetagh Bog: its values and conservation

A report for Dublin County Council

Roger Goodwillie
December 1983

INTRODUCTION

This report is written in response to a letter (28 November 1983) from Mr E G McCarron, Dublin County Council, which asked for an evaluation of the different parts of Ballybetagh Bog near Kilternan. The matter arose because of development works being carried out in its vicinity.

The site was visited on 1 December with Dr Tony Burnosky of the Geology Department, Trinity College, Dublin to whom I am grateful for much background detail.

DESCRIPTION OF THE AREA

Three or four separate areas of marshland are found in the area known as Ballybetagh Bog (see map). Two of them, the north-west and middle bogs occur in County Dublin, the south-east bog is shared with County Wicklow and Mulligan's Bog is totally within that county.

The north-west and middle bogs lie in a small valley which is an old glacial spillway, much smaller and at a higher level than its more famous neighbour, the Scalp. The sites are dryish grassy fens which are spring-fed and drained by a large cut in the centre, now filled by sedges. The south-east bog is in a flatter and more open site. There is more surface water in evidence as drainage has not been so thorough and the vegetation is of greater interest than elsewhere.

Ballybetagh Bog is renowned for the number of skeletons of the extinct giant Irish deer (Megaloceros giganteus) that have been dug out of it. The first was discovered during Famine times when the (unnecessarily) large drainage ditch was being dug as a relief project. Several collections were made in the years after discovery, the major ones in 1878 and 1913. The middle and south-eastern bogs were extensively dug and yielded the remains of 60-100 giant deer with some reindeer bones. More analytical excavations were done in 1880 and 1934 (Jessen and Farrington, 1938) which examined the whole range of fossils of the period, about 11,000 years ago. This gave an idea of the vegetation

and environment in which the deer lived and the work was further extended in 1976 (Watts, 1977) and during the past autumn by Burnosky.

It is the intensity of the research effort in this one small area that gives it its value in the scientific context. The bones of giant deer have been found in upwards of 150 sites in the country but nowhere else have their surroundings been subjected to so much research.

This has led to Ballybetagh being listed as a site of international importance in Areas of Scientific Interest in Ireland (An Foras Forbartha, 1981).

CURRENT SITUATION

Recent scientific work on the site has concentrated on the NW bog where a pit was dug in the summer and autumn and will soon be filled in again.

During the last few weeks the landowner on the eastern side of this bog - the central channel seems to be the boundary line of two properties - has begun excavation at the northern end, with the aim of reopening the ditch and reversing some of its flow northwards. In the course of this work he unearthed more deer antlers and has agreed to suspend operation till early 1984 to allow the current geological work to be completed. About 20 m of an open ditch have been created so far.

Other work has been the clearance of furze bushes and hedges on the hillside to the east but this has not affected any of the valuable areas.

IMPACT OF DEVELOPMENT

Drainage work on the NW bog is concerned with re-establishing water flow in the ditch and thereby lowering water levels in this and the middle bogs. Since it is largely redoing old work it will not affect the scientific values of the area. The animal remains lie in impervious clay at quite a depth and a lowering of the water table will not cause them to suffer oxidation.

RECOMMENDATIONS

The ditch should be dug on exactly the same line as the former one to avoid disturbing intact ground which may be fossil-bearing.

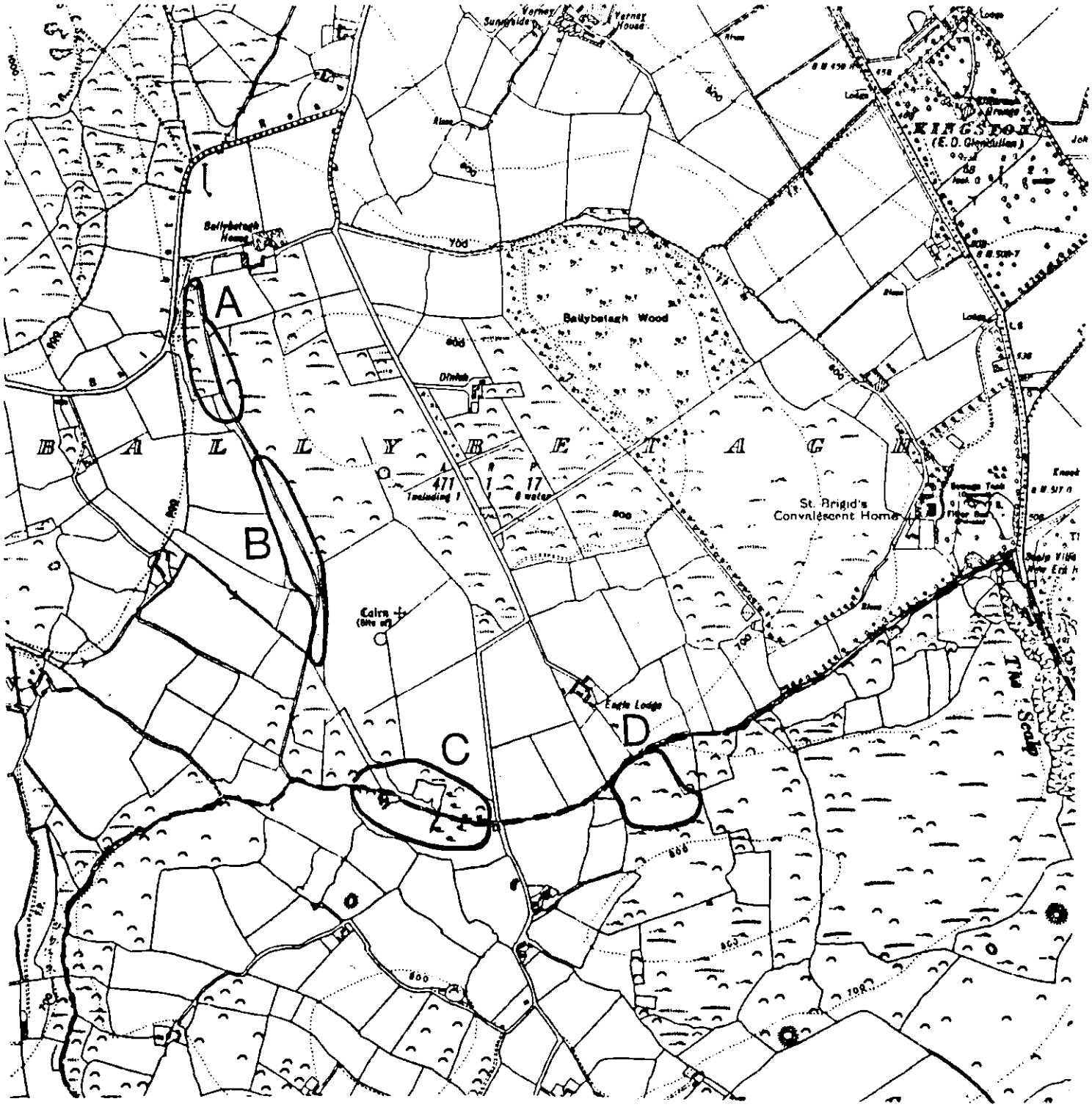
Spoil taken from the ditch should be dumped as close as possible to its edges, preferably on one side. Most of the skeletons are found at the edges of the bogs (the margins of their pre-existing lakes). While spoil could be easily separated from the interesting clay and peat layers, it might nevertheless interfere with future excavations.

No other earthmoving work should be allowed in any part of the outlined areas. The landowner appears to be responsible and interested in the work going on and should be approached with this in mind.

REFERENCES

Jessen, K. & Farrington, A. (1938) The bogs at Ballybetagh, near Dublin, with remarks on late-glacial conditions in Ireland.
Proc. R. Ir. Acad. B 44, 205-260

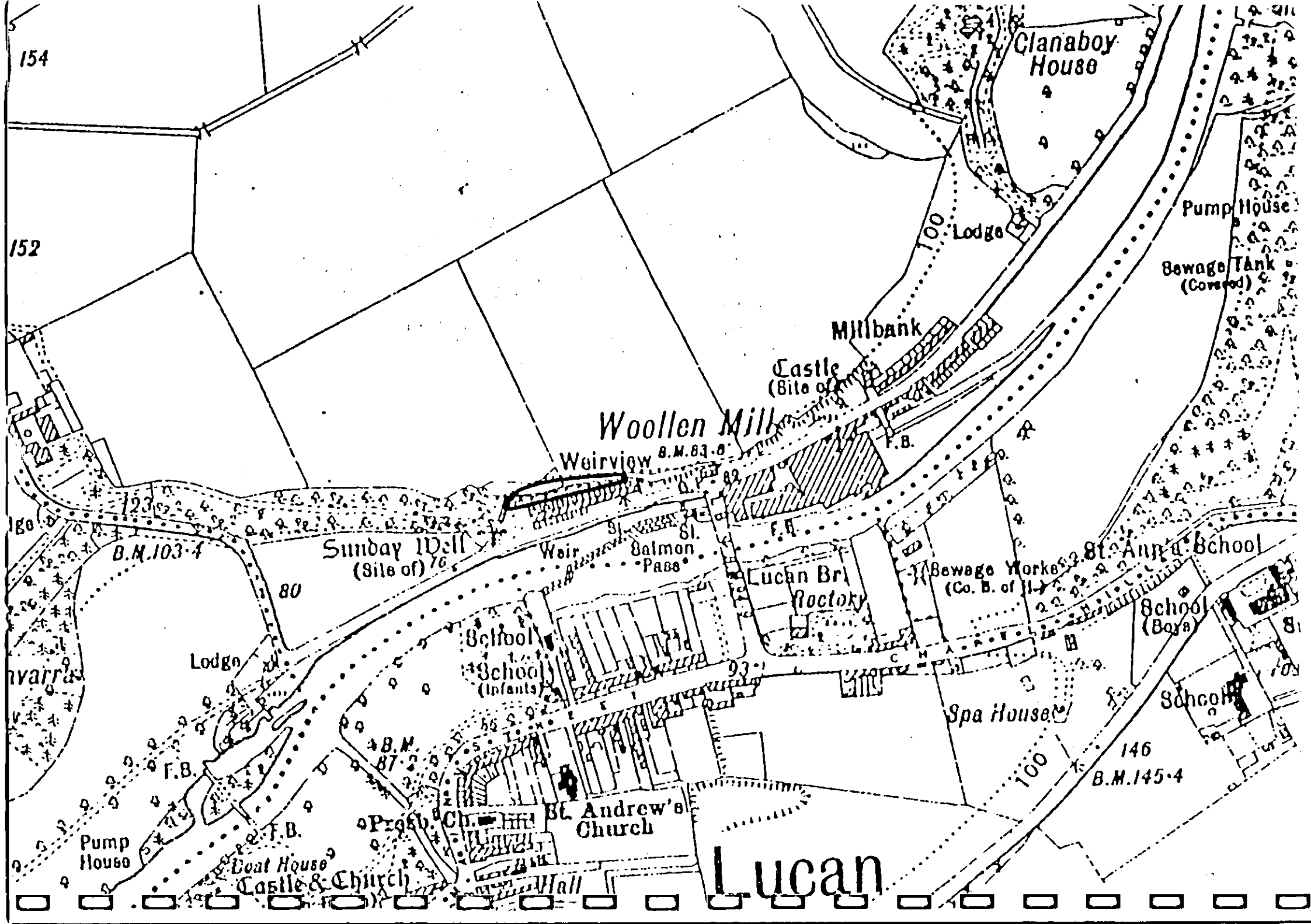
Watts, W.A. (1977) The Late Devensian vegetation of Ireland.
Phil. Trans. R. Soc. Lond. B. 280, 273-293.



Map of the Ballybetagh area to show the four bogs mentioned in the text.

A = north-western, B = middle, C = south-eastern,

D = Mulligans. County boundary ———


154
152
Clanaboy House
Lodge
100
Pump House
Sewage Tank (Covered)
Millbank
Castle (Site of)
Woollen Mill
Weirview
B.M.83·6
F.B.
123
Sunday Well (Site of)
Weir
Salmon Pass
B.M.103·4
80
Lucan Br
Rectory
Sewage Works (Co. C. of I.)
St. Anne's School
School (Boys)
Lodge
School (Infants)
93
Spa House
B.M. 87
St. Andrew's Church
Pump House
Boat House
Castle & Church
Wall
146
B.M.145·4
Lucan

CAAS
ENVIRONMENTAL
SERVICES LIMITED

8 Merrion Square
Dublin 2, Ireland
Tel: (01)612142
Fax: 619048

TECHNICAL ASSISTANCE TO LOCAL AUTHORITIES

Mr Brian Callagy
Planning Section
Galway County Council
Prospect Hill
Galway

Your Ref: DB/MOH3/14B

19 September 1990

Re: Application for tree felling at Loughcutra, Gort

Dear Brian,

I found myself in Gort two weeks ago so I had a look at the Loughcutra woodlands despite the fact that the application has been changed to thinning rather than clear-felling.

I believe all the woods were included in Areas of Scientific Interest in Ireland (An Foras Forbartha, 1981) - hence the large area - but the site can be redefined now as the lake and lakeshore itself and only parts of the shoreline woods, i.e. plots 67, 66, 18, 46, 47, 48 in this estate.

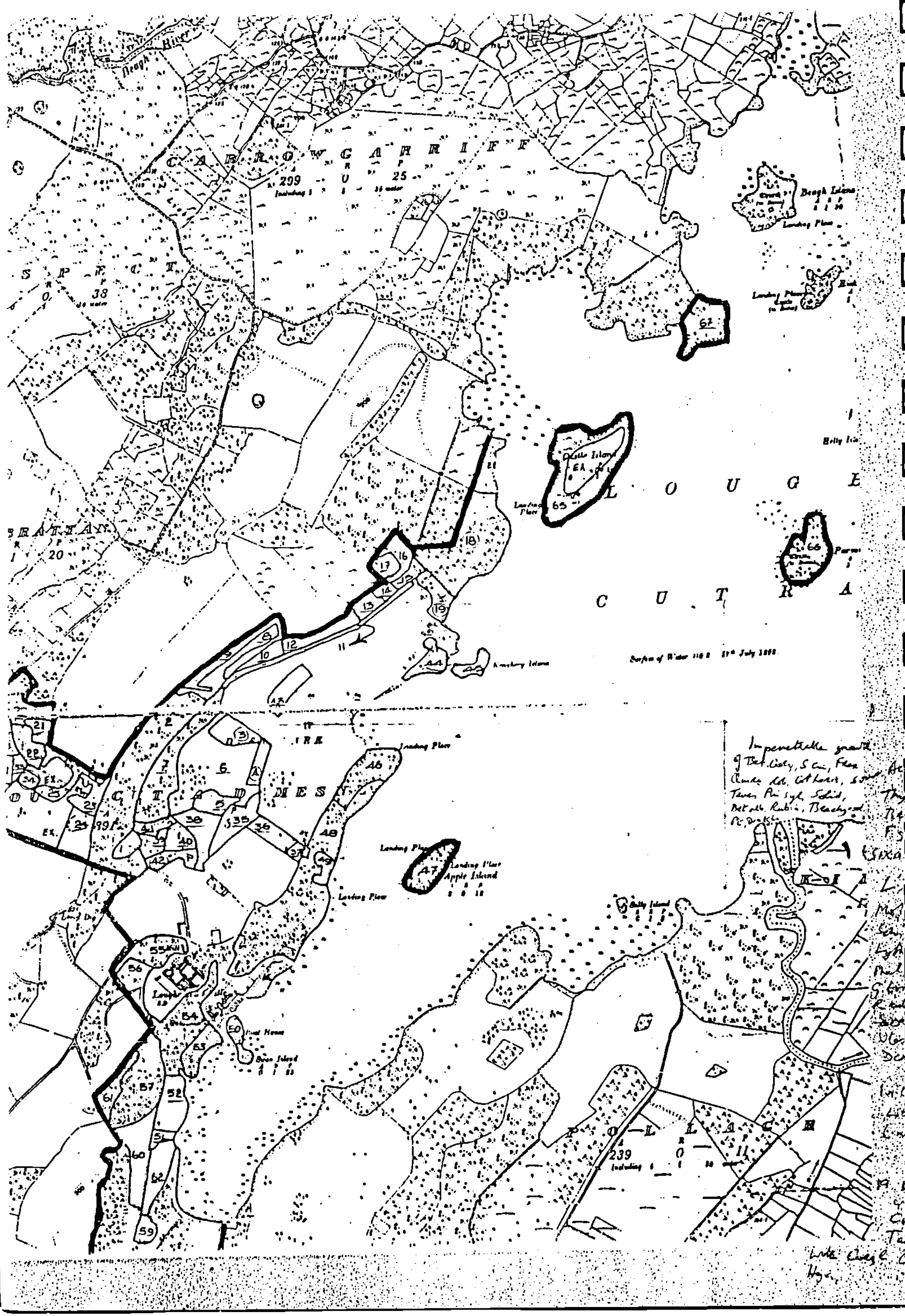
In any future felling application, I think you should be concerned to retain lakeshore deciduous woodland and where native species are involved, to prevent felling at all. Such fringing woodland often has significant ecological interest, having developed naturally from scrub. For instance plot 18 is an impenetrable tangle of new growth of birch, hazel, willow and oak. In time it will become more open, the ground flora will re-invade and an interesting stand develop which will complement the actual shoreline with its characteristic limestone species.

Please contact us again if we can be of further help in this area.

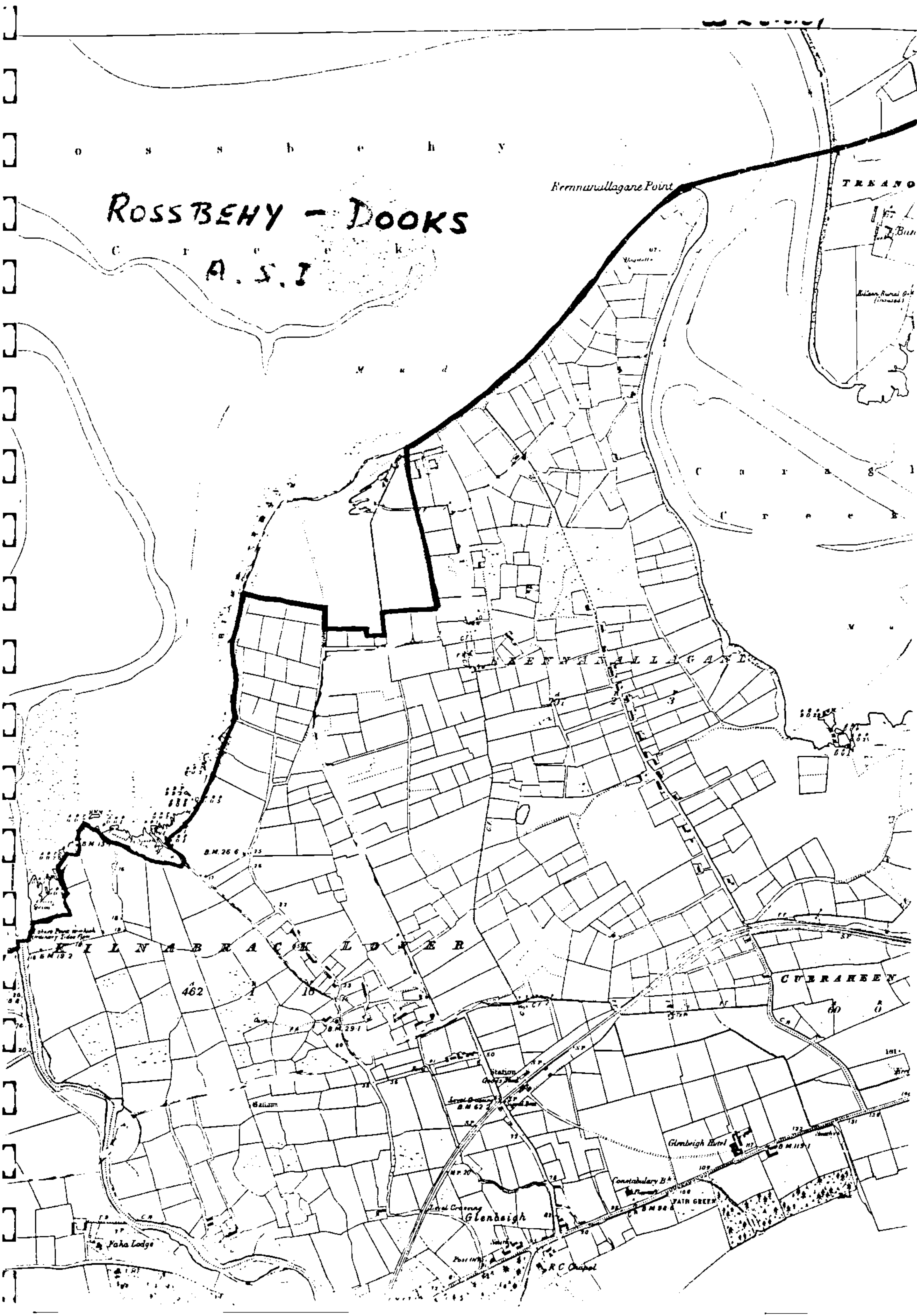
Yours sincerely,

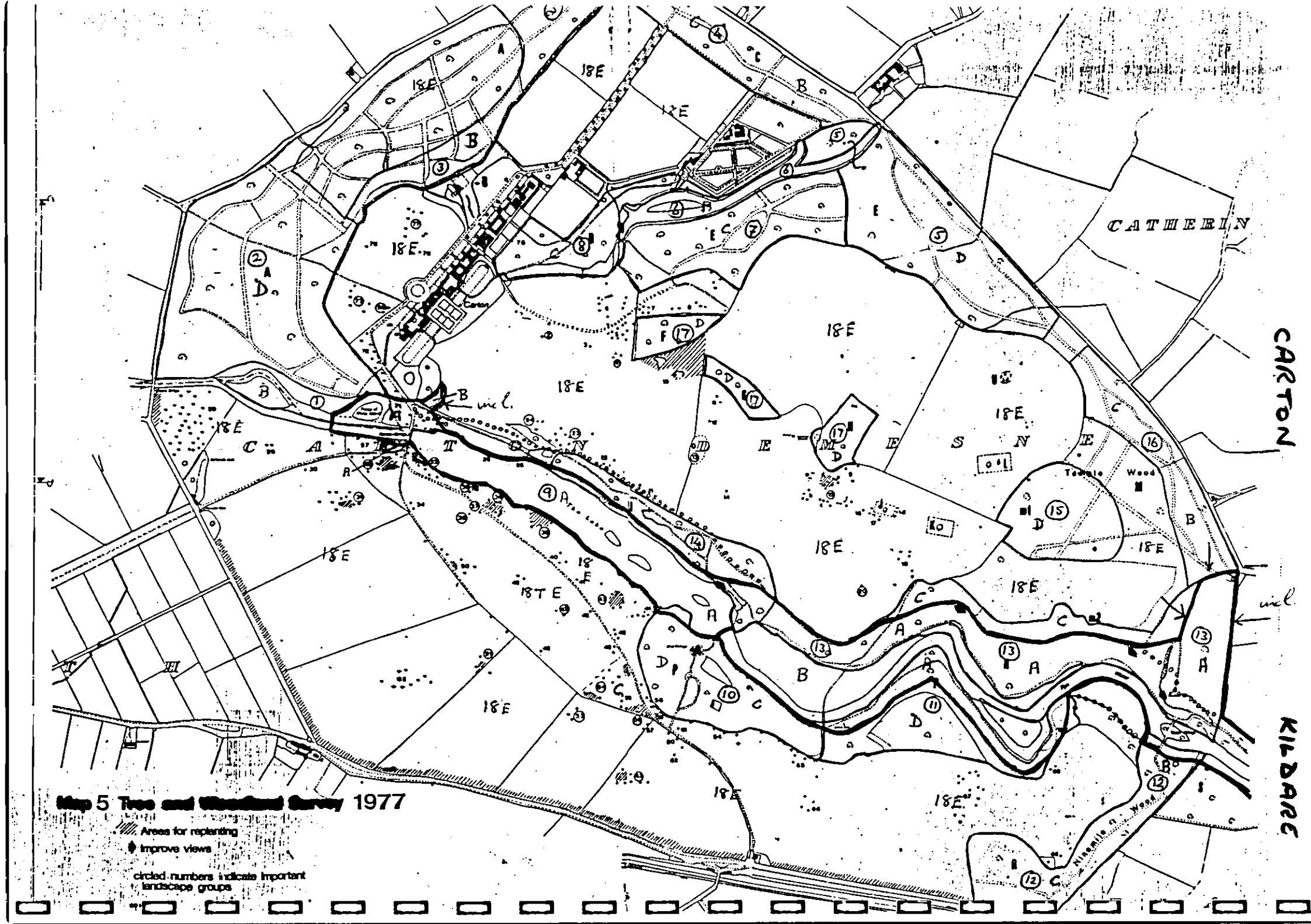
Jon Blackwell

P.P. Roger Goodwillie



Beagh River
CARROWGARRIFF
299
25
Beagh Island
Landing Place
Castle Island
Landing Place
LOUGH CUTRA
Knockery Island
Landing Place
Apple Island
Bully Island
Boat House
Bean Island
POLLAGH
239
Impenetrable growth


ROSSBEHY - DOOKS
A.S.I
Rossbehy
Creek
Mud
Fernnunullagane Point
TREANO
Coragh
Creek
KILNABRACK LOWER
CURRAHEEN
Station
Glenbeigh Hotel
Constabulary Bk
FAIR GREEN
Glenbeigh
R C Chapel
Faha Lodge
Gallows


CATHERIN
CARTON
KILDARE
Temple Wood
18E
Areas for replanting
Improve views
circled numbers indicate important landscape groups
1977

Ecological Value of a Wetland

in

Dunmore Townland (near Glendine), Kilkenny

A Report for

Kilkenny County Council

by

CAAS (Environmental Services) Ltd.

August 1992

ECOLOGICAL DESCRIPTION

The site is a hollow to the west of the Castlecomer Road opposite Glendine. It is being gradually filled from the south end by dumped rubble and soil but a substantial area remains uninfluenced by this. The site is divided into two sections by the old railway line - the eastern is bounded by the trees along the edge of the main road, the western by rising farmland and an old sandpit.

Vegetation

The wetland is a tall herb fen, i.e. a nutrient-rich community of herbs growing in an organic soil. It is partly invaded by willow trees, especially east of the railway line, but these have only locally changed the vegetation into carr or wet woodland.

Throughout the area the main species are tufted sedge *Carex elata*, yellow loosestrife **Lysimachia vulgaris*, great water dock **Rumex hydrolapathum*, water horsetail *Equisetum fluviatile*, bogbean *Menyanthes trifoliata* and wild angelica *Angelica sylvestris*. Other frequent species are greater

spearwort *Ranunculus lingua*, skullcap *Scutellaria galericulata*, amphibious bistort *Polygonum amphibium*, marsh willowherb *Epilobium palustre*, the sedges *Carex rostrata*, *C.disticha* and *C.diandra*, marsh pennywort *Hydrocotyle vulgaris* and lady's smock *Cardamine pratensis*. West of the railway line there is more open water present and both bulrush *Typha latifolia* and bur reed *Sparganium erectum* are important. On the east side there are more trees and yellow flag *Iris pseudacorus* becomes frequent. An overgropwn ditch here contains the duckweeds *Lemna minor* and *L.trisulca* and the floating liverwort *Ricciocarpus fluitans*.

As dry ground is approached at the edges of the fen the brown sedge *Carex disticha* becomes abundant along with the buttercups *Ranunculus repens* and *R.acris*, false oat *Arrhenatherum elatius*, sweet vernal grass *Anthoxanthum odoratum*, meadow vetchling *Lathyrus pratensis*, cinquefoil *Potentilla reptans*, the willowherbs *Epilobium hirsutum* and *E.parviflorum*, hard rush *Juncus inflexus* and brambles *Rubus fruticosus*. At the north end marsh horsetail *Equisetum palustre* and eared willow *Salix aurita* are prominent along with reed fescue *Festuca arundinacea*, clovers *Trifolium repens* and *T.pratense* and, in places, tufted vetch *Vicia cracca*. Closer to the gravel deposit on the west side glaucous and hairy sedges *Carex flacca* and *C.hirta*, self heal

Prunella vulgaris and purging flax *Linum catharticum* join the vegetation in a grazed place. There are also some tussocks of soft rush *Juncus effusus*.

A distinct community is established around the cattle drinking area with speedwells *Veronica beccabunga* and *V.catenata*, water crowfoot *Ranunculus trichophyllus*, celery-leaved buttercup **Ranunculus sceleratus* and toad rush *Juncus bufonius*. At this side also the water dropwort **Oenanthe aquatica* makes an appearence.

Birdlife

The birdlife of the area was not prominent in August but it includes sedge and willow warbler, moorhen, reed bunting, snipe and mallard, at least in winter. These are all characteristic species of such wetlands and when singing in the spring they would have a considerable impact.

EVALUATION

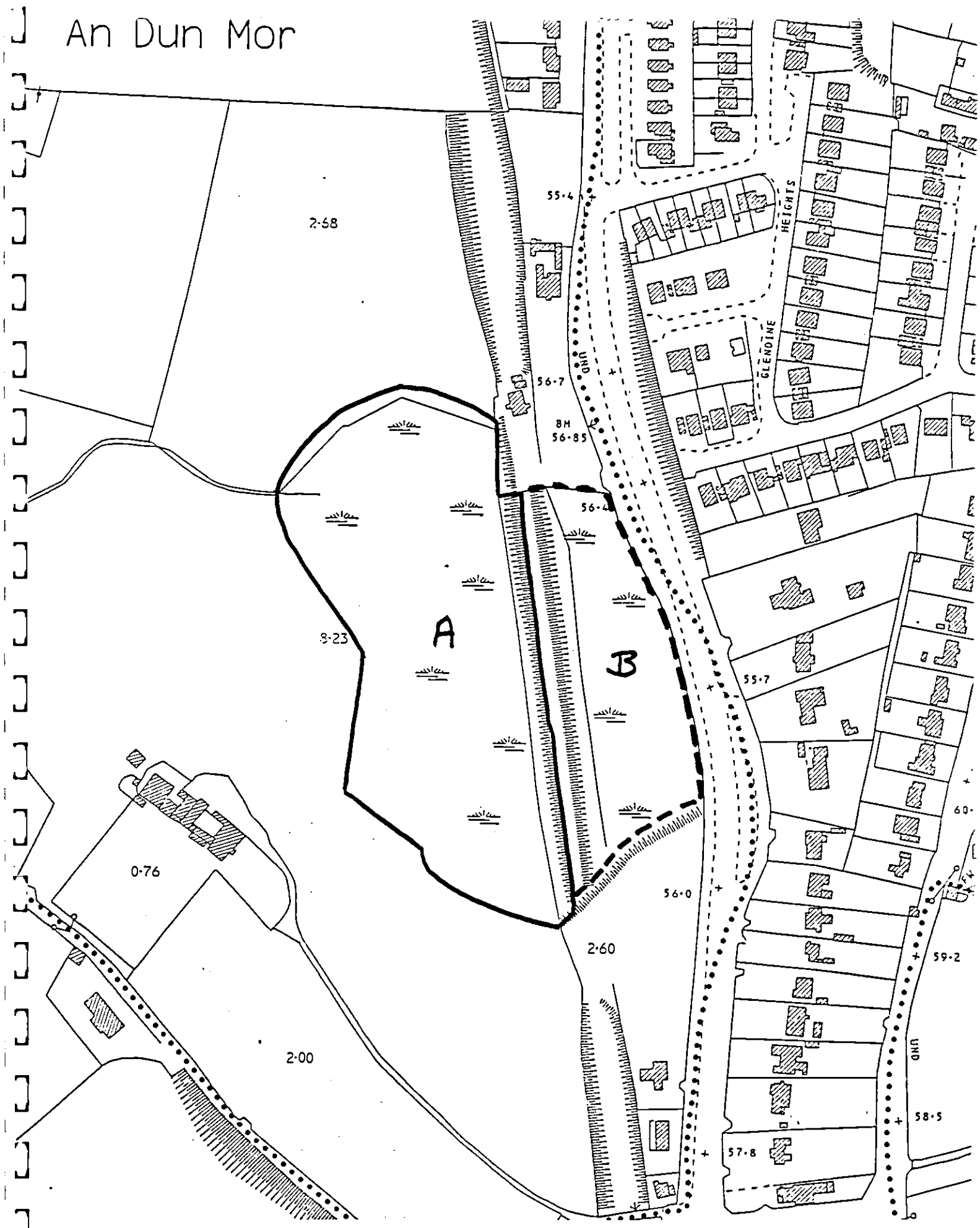
The site in Dunmore is of considerable interest from an ecological point of view and can be valued equally if not more highly than the Newpark Marsh. On the one hand it is smaller than this area and altered by the presence of the railway embankment but on the other it contains a better developed vegetation with a greater abundance of interesting species. The more unusual of these are marked by asterisk above, where it may be seen that eight are rare on a county basis. The liverwort *Ricciocarpus* was a new discovery for the county as it had not been found elsewhere in S.E.Ireland before. However a search of one of the marshes in the sandpit area to the north (see below) also revealed it.

The other species of particular interest are skullcap *Scutellaria* and spearwort *Ranunculus lingua* which very seldom occur in such abundance.

The land north and west of Kilkenny is marked by a series of hollows containing fluctuating ponds and wetlands. There are several superficially similar areas within the Roadstone sandpit at Dunmore but on first sight these seem poorer in nutrients and more

calcareous. They can be thought of complementing the present site rather than replacing it. In terms of their value for conservation they are further from the city and their future is by no means secure. A site that can be protected and is close to a housing area can have the dual importance of preserving some local scientific interest and in maintaining a diverse local environment.

A previous report (on a wetland in the East Environs) indicated that only two areas close to Kilkenny, Newpark Marsh and Lough Macask, were known to be of interest. To these the present site should now be added and it will in fact be included in a new national listing of Areas of Scientific Interest being undertaken by the Office of Public Works (probably under a joint name such as Fens north of Kilkenny).



Wetland in Dunmore showing A - minimal area and
A + B - optimal area to be retained intact

LA015
Ken Higgs

AMENDED NOTES FOR AREAS OF SCIENTIFIC INTEREST

(Blue Book)

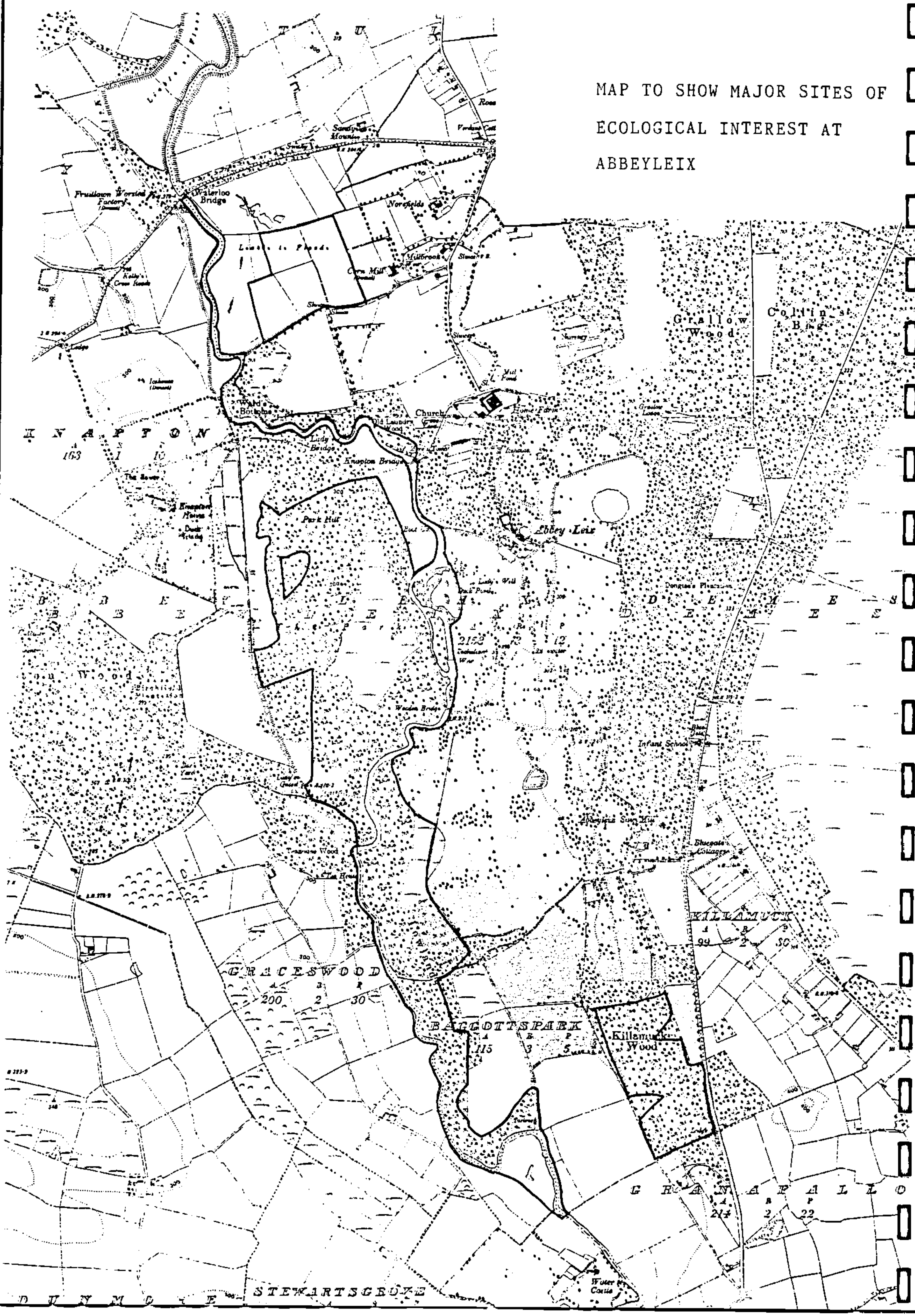
1.	Moyadd Stream	Mis-spelt 2 km section not 1 km.
2.	Killeshin Glen	A 2.5 km section not 0.5 km.
3.	Luggacurren	A 1 km section not 0.5 km section: change to ... in the lower to middle Namurian of the Castlecomer Coalfield type section for Luggacurren Formation containing many fossil bands.
4.	Rossmore - Widow Malone's Quarry	change to ... a good exposure of the No. 2 Coal Seam of the Castlecomer Coalfield, which is overlain here by the Clay Gall Sandstone.

LAOIS

Sites of Scientific Importance which have been identified since 1981

Name of Area	Habitat	Interest Local Importance	Description
River near Cullahill, S.W. of Durrow S 37	River	Ecological	Contains a rare plant species which is protected under the 1977 Wildlife Act
Canal at Grattan Aquaduct	Canal	Ecological	Contains a rare plant species which is protected under the 1977 Wildlife Act
Mountrath Bog S 39	Bog	Ecological	This raised bog is still fairly intact and contains interesting plant communities
Grantstown Lough Forest & Wildlife Nature Reserve S 335 800	Lake with woodland surrounding it	Ecological	This woodland area surrounding the lake is a Forest and Wildlife Nature Reserve and has interesting plant communities and a variety of bird life on the lake.
Coolacurragh Wood Forest and Wildlife Nature Reserve	Woodland	Ecological	This woodland is a Forest and Wildlife Nature Reserve and is of considerable botanical interest

MAP TO SHOW MAJOR SITES OF ECOLOGICAL INTEREST AT ABBEYLEIX



Fruitlawn Worsted Factory
Waterloo Bridge
Sandyford Mounds
Norefields
Millbrook
Corn Mill
Kelly's Cross Roads
Lodge
Icehouse
Wald Bottoms
Church
Old Laundry Wood
Home Farm
Lady Bridge
Knapton Bridge
KNAPTON
163 1 10
Knapton House
Park Hill
Abbey Leix
Mill Pond
Nursery
Grallow Wood
Collins Bog
Lady's Well
Duck Ponds
ABBEY DEMESNE
2152 3 12
Wooden Bridge
Infant School
Abbeyleix Saw Mill
Bluegate Cottages
KILLAMUCK
99 2 30
GRACESWOOD
200 2 30
BAGOTTSPARK
115 3 5
Killamuck Wood
GRANAFALLO
214 2 22
STEWARTSGROVE
Water Castle

GREAT HEATH, PORTLAOISE

3. VEGETATION

3.1 Heath

The plant cover is formed of sweet vernal grass *Anthoxanthum odoratum*, bent grasses *Agrostis capillaris*, *A.stolonifera*, red fescue *Festuca rubra*, woodrush *Luzula campestris*, spring sedge *Carex caryophyllea* and pill sedge *C.pilulifera*. Broad-leaved plants grow through this turf such as heath bedstraw *Galium saxatile*, violet *Viola riviniana*, tormentil *Potentilla erecta*, milkwort *Polygala serpyllifolia* and St John's wort *Hypericum pulchrum*. In places with slightly higher pH there is birdsfoot trefoil *Lotus corniculatus*, yarrow *Achillea millefolia*, the other milkwort *Polygala vulgaris* and clovers *Trifolium repens*, *T.pratense* while more acid but still free-draining ground brings heath pea *Lathyrus montanus* to the fore. Mosses are everywhere abundant, especially *Rhytidiadelphus squarrosus*, *Hylocomium splendens* and *Pseudoscleropodium purum*.

On the flattest section (A) there has been some accumulation of organic material and a thickness of peat occurred at one time which has since been cut away. These areas are partly indicated by mat grass *Nardus stricta*, heather *Calluna vulgaris*, lousewort *Pedicularis sylvestris*, moor grass *Molinia caerulea* with a little heath rush *Juncus squarrosus*, woodrush *Luzula multiflora* and the sedges *Carex binervis* and *C.panicea*. The moss *Dicranum scoparium* and sheep's sorrel *Rumex acetosella* often grow on the peatiest parts while in wetter places the black sedge *Carex nigra* and the rush *Juncus conglomeratus* are characteristic, along with other mosses *Polytrichum commune*, *P.juniperinum* and *Aulacomnium palustre*. There is now no peat accumulation and *Sphagnum* is restricted to the vicinity of Bog Lough.

The eastern section (B) of the Heath slopes slightly to the east and has no traces of peat. The vegetation is still acidic however and being less grazed is generally taller. The heather reaches 1m in places and the St John's wort and heath pea are particularly common. Additional species such as star sedge *Carex echinata* and tufted hair grass *Deschampsia cespitosa* occur occasionally. In one places near an old ?quarry the topography is uneven with old field banks and slopes. Here the vegetation is richer and there are even a few small trees. Ash *Fraxinus excelsior* and elder *Sambucus nigra* occur along with stitchwort *Stellaria holostea*, bluebell *Hyacinthoides non-scripta*, speedwell *Veronica chamaedrys* and ground ivy *Glechoma hederacea*. There are also some taller grasses like cocksfoot *Dactylis glomerata* and Yorkshire fog *Holcus lanatus*. A similar site occurs beside the road west of Little Bog Lough but these are the only places where 'normal' vegetation similar to hedgebanks in the nearby farmland is found.

Surface disturbance around the circular gallops and the motor cycle trail causes some enrichment and here there are considerable amounts of glaucous sedge *Carex flacca* and a little flax *Linum catharticum* mixed into the vegetation. Lime particles from the tarred roads bring a typical grassland containing daisies *Bellis perennis*, yarrow *Achillea millefolia*, hawkweed *Hieracium pilosella* and bulbous buttercup *Ranunculus bulbosus* onto road verges and parking areas.

There has been a little recent ploughing at the south-eastern corner of the Heath but this disturbance does not seem to bring weed seeds to light. There is no rapid colonisation by weeds as would be found on formerly tilled land. Indeed the annual species are limited largely to parsley piert *Aphanes arvensis*, mouse-ear *Cerastium diffusum* and meadow grass *Poa annua* which appear on burnt and other ground.

3.2 Wetlands

Groundwater generally moves south on the Heath and it appears in two main places, the Little Bog Lough beside the golf club and the fen (C) in the south-eastern corner near the church. The Bog Lough lies between the golf course and the road and there is a fall of 1-2m on its northern shore. Here amongst the bushy gorse there are patches of grassland particularly rich in pill sedge *Carex pilulifera*, sheep's fescue *Festuca ovina* and sweet vernal grass *Anthoxanthum odoratum* with crested dogstail *Cynosurus cristatus* and yorkshire fog *Holcus lanatus* as well as the sedges *Carex pulicaris* and *C.flacca*.

Along most of the shore of the lake there is a fringe of water horsetail *Equisetum fluviatile*, bottle sedge *Carex rostrata*, water mint *Mentha aquatica* and spike rush *Eleocharis palustris* with some large patches of bulrush *Typha latifolia*. Fool's watercress *Apium nodiflorum*, water parsnip *Berula erecta*, water crowfoot *Ranunculus aquatilis* and the two duckweeds *Lemna minor* and *L.trisulca* make up the aquatic flora with marsh marigold *Caltha palustris*, speedwell *Veronica scutellata*, marsh pennywort *Hydrocotyle palustris* and yellow sedge *Carex demissa* scattered along the marshy edge.

West of Bog Lough there are a number of depressions in the ground which flood in winter and remain damp in summer also. These generally have a cover of black sedge *Carex nigra*, sweet vernal grass *Anthoxanthum odoratum* and a few clumps of moor grass *Molinia caerulea* in a carpet of the mosses *Aulacomnium palustre* and *Sphagnum auriculatum* (var. *auriculatum*). A similar linear feature winding towards the end of the lake is distictly calcareous with the sedges *C.flacca*, *C.lepidocarpa* and

C.panicea alongside bog cotton *Eriophorum angustifolium*, spike rush *Eleocharis quinqueflora* and the marsh dandelion *Taraxacum* sect. *Palustria*. These occur in shallow water (in May) with the mosses *Campylium stellatum* and *Calliergon cuspidatum*.

The fen area itself has a similar distinctive flora which is much more species-rich because of the variation in habitat. The vegetation is characteristic of calcareous seepage areas in the midlands and elsewhere. Black bog rush *Schoenus nigricans*, blunt-flowered rush *Juncus subnodulosus* and moor grass *Molinia caerulea* cover most of the ground but there are many other associated plants including butterwort *Pinguicula vulgaris*, quaking grass *Briza media*, meadow thistle *Cirsium dissectum*, grass of Parnassus *Parnassia palustris*, fragrant orchid *Gymnadenia conopsea*, bog pimpernel *Anagallis tenella* and the mosses *Campylium stellatum* and *Ctenidium molluscum*. Limey tufa accumulates in some parts and the flea sedge *Carex pulicaris*, clubmoss *Selaginella selaginoides*, spike rush *Eleocharis quinqueflora* and fen bedstraw *Galium uliginosum* grow here.

One or two springs feeding this fen occur within the gorse on the northern side and here water mint *Mentha aquatica*, meadowsweet *Filipendula ulmaria*, marsh pennywort *Hydrocotyle vulgaris*, hairy sedge *Carex hirta*, spotted orchid *Dactylorhiza fuchsii* and self-heal *Prunella vulgaris* are characteristic, along with brambles.

3.3 Evaluation

The vegetation on the Heath proper is an unusual type being lowland acid grassland. In phytosociological terms it is a Nardetalia- a grassy heathland on mineral soil. Two possible associations occur, the Achilleo-Festucetum tenuifoliae Birse et Robertson 1976 and the Hylocomio-Centaureetum nigrae Br.-Bl. et Tx. 1952.

This vegetation is common in hilly locations elsewhere in Ireland and is characteristic of hill sheep pastures. It is found especially in the east of the country but also in places on the western mountains. Apart from the Heath and the Curragh it is almost unknown in the lowlands where all such sites have been altered to more productive pastures by liming and cultivation. (The absence of bracken at the Heath is supporting evidence for a long-standing lack of cultivation as it is a plant which frequently colonises such vegetation.)

The species content of the Heath vegetation does not include rare plants as such, it is more the community structure that is rare. However the wetland areas have both interesting vegetation and species as they include some of the only *Galium uliginosum*, *Eleocharis quinqueflora* and *Taraxacum* sect. *Palustria* in the county

(Foss, pers.comm.). There is also an old record for the bistort *Polygonum minus* on the Heath which again is the only county record.

4. BIRDLIFE

The gorsey parts of the Heath have a high population of stonechat and linnet as would be expected but also good numbers of yellowhammer and occasional whitethroat and willow warbler. There is enough open ground for skylark and meadow pipit while kestrels frequently hunt over the area. Where bushes or trees occur, the 'garden' species like song thrush, blackbird, robin and dunnock enter the picture.

The Bog Lough supports moorhen and little grebe (2-3 pairs) and is visited by mallard and heron at times. The sand martins of which about 7 prs nest in the nearby sandpit, frequently feed over it.

4.1 Evaluation

There are no features of the birdlife that are particularly important on a national basis.

5. ARCHAEOLOGY

The Heath has a rich collection of archaeological remains listed in the Sites and Monuments Record, County Laois (Office of Public Works, 1989). Mostly these are ring barrows which are late Bronze Age or early Iron Age burial structures. At the south-west corner there are seven separate remains while there are four similar 'rings' elsewhere as well as the larger Rathshane. This could be a ringfort because of its size.

Several of the sites have come to light because of the recent aerial photograph work and there is every likelihood that some other structures are hidden by the cover of gorse. In particular the eastern section (B) has no known remains at this stage but this cannot be definitive until the vegetation is removed.

5.1 Evaluation

Ring barrows are not well known structures since very few (only 10-12) have been excavated (Waddell, pers.comm.). They are the only relics from a period when the ordinary ways of life of the people are unknown. They seem to be located in large open areas amongst settled land where ceremonial gatherings were possible for large numbers of

people though this could be because many others in cultivated land have been destroyed.

Their distribution in the country is in scattered clusters and these are the only ones in Laois. There are other groups on the Curragh and on Carbury Hill in Kildare. They occur also in several other western European countries.

Without excavation it is impossible to grade any particular archaeological site in importance. Remains may be concealed in any of them that will revolutionize our whole knowledge of a period.

6. HERITAGE SUMMARY

The entire Heath was listed as an Area of Scientific Interest (of local importance) in the Report on Areas of Scientific Interest in County Laois (An Foras Forbartha, 1972) and this was retained in Areas of Scientific Interest in Ireland (An Foras Forbartha, 1981) and in the Index to Areas of Scientific Interest (Wildlife Service, 1989).

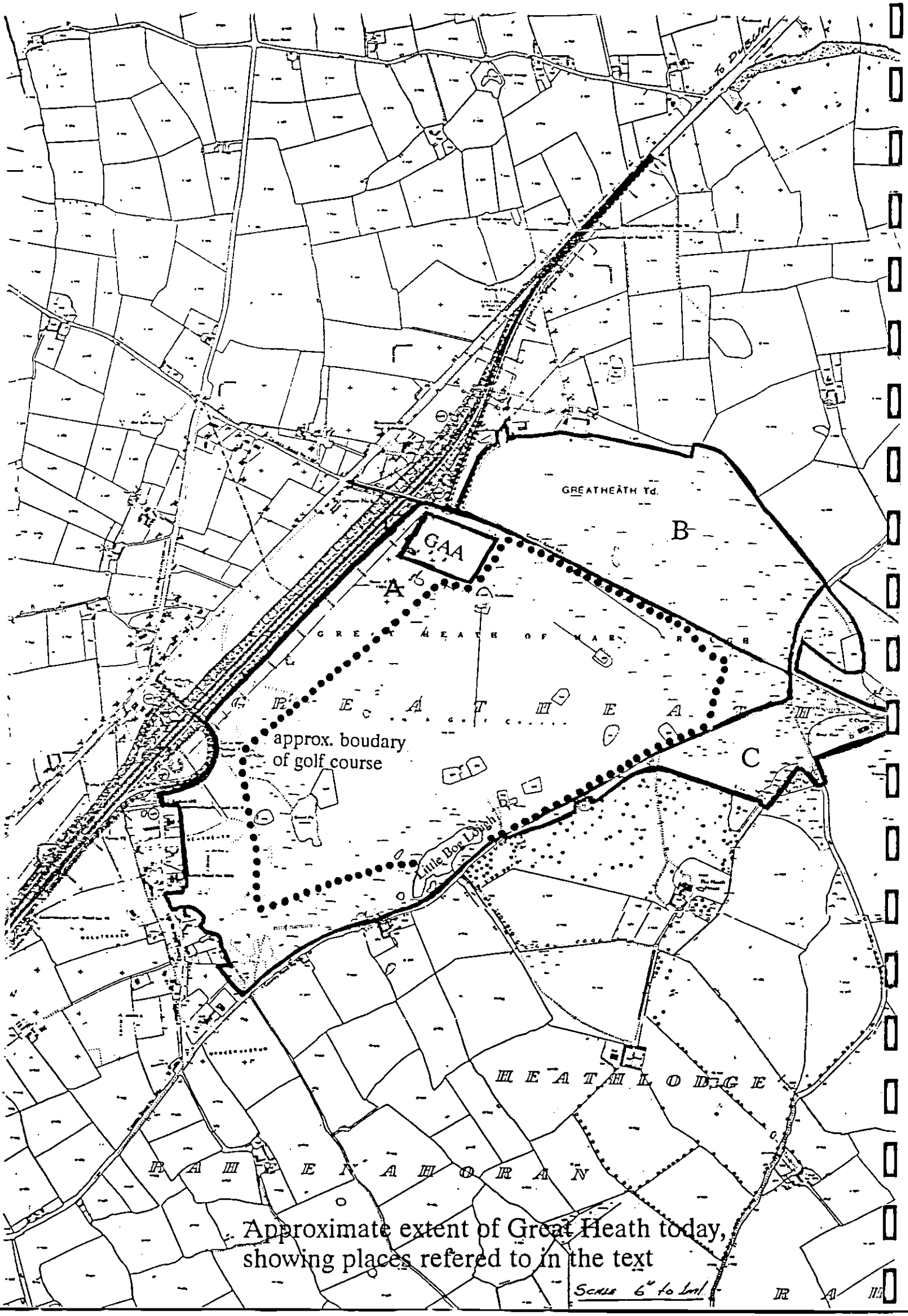
It is now thought that the Heath should be upgraded to regional or national importance for its flora and fauna. Which level of importance is most suitable depends on a countrywide survey of permanent grassland being carried out. The Heath cannot be considered as valuable as the Curragh in Kildare which, as a prime example of lowland natural grassland in the country, has international importance.

Archaeologically the same proviso about lack of survey data must be made. However it is generally accepted that ring barrows are particularly valuable to retain because of our ignorance about them and their builders. At the Heath these remains could therefore be thought of as of national importance.

7. LANDUSES ON THE HEATH

Existing landuses on the Heath are rough grazing, golf, walking and picnicking, a G.A.A. pitch, a circular horse gallop and one or several motorbike trails. For many years the area has provided a halting site to travellers though it is only comparatively recently that large, motorised groups have been using it.

The natural values of the area are its visual quality, ecology and archaeology. Existing and future land uses should be examined for their impacts on these aspects as well as on each other.



Approximate extent of Great Heath today, showing places refered to in the text

APPENDIX THREE: AREAS OF ECOLOGICAL INTEREST AROUND LOUGH ALLEN

1. Annagh Lower Bog

This is a cutover bog now re-colonised completely by vegetation. It has an unusual appearance because of scattered alder and willow trees and because of the abundance of royal fern. Otherwise the plant cover consists of Sphagnum moss (S. squarrosum, S. palustre) and sedges (Carex rostrata, C. curta) with much bogbean (Menyanthes trifoliata), marsh cinquefoil (Potentilla palustris) and speedwell (Veronica scutellata). Occasional flooding by lake water is probably holding back the succession at the fen stage, transitional to bog.

The associated bird life includes snipe and, in summer, sedge and grasshopper warblers.

2. Owengar Bridge Woodland

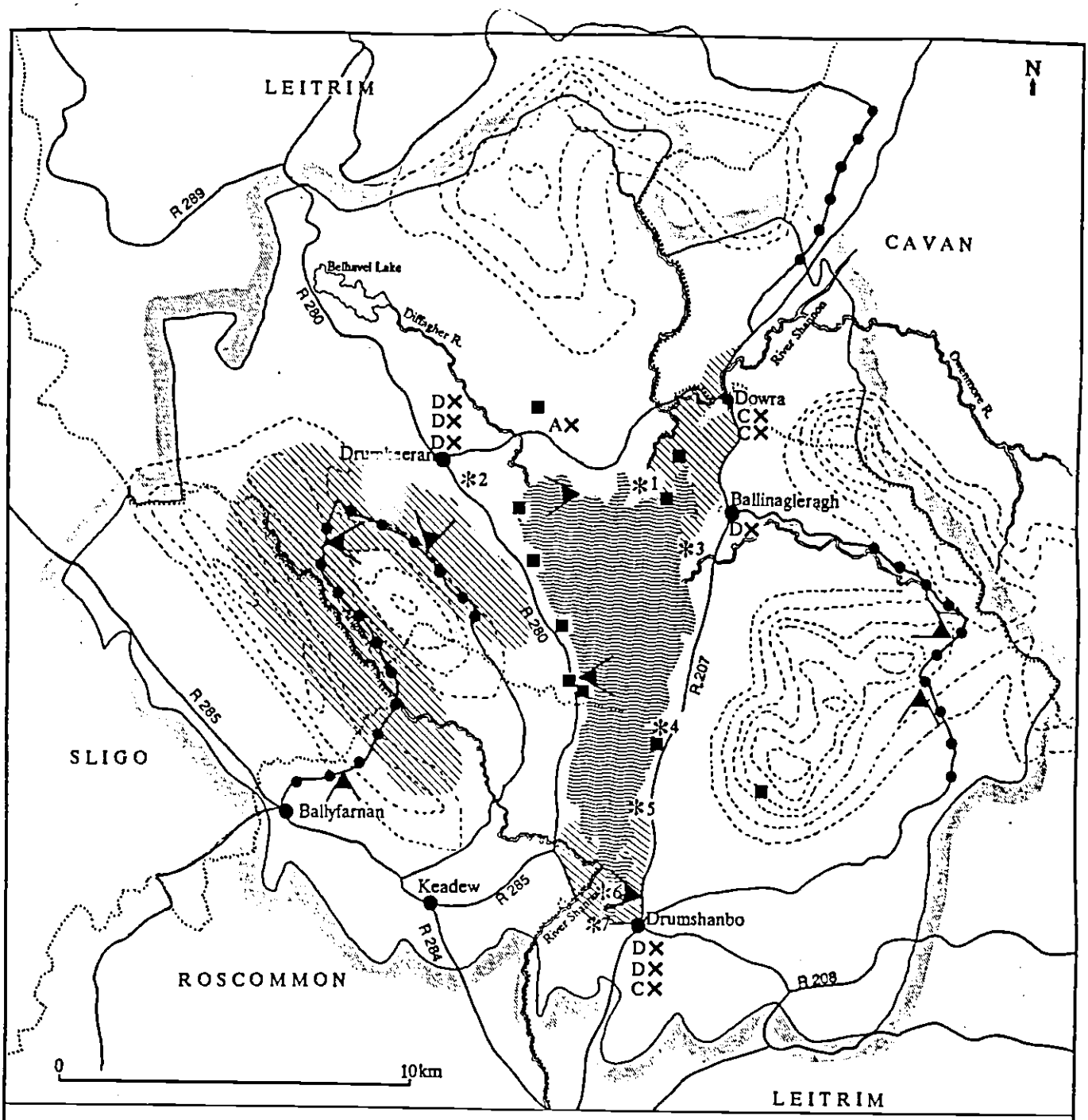
A small wood occurs on the northern bank of the Owengar River at this point where the river has cut a deep valley. The dominant trees are alder and willow though there is a little beech. The shrub layer consists of hazel, hawthorn and holly. The woodland has been left to develop naturally for some time (with only occasional grazing) so has quite a rich ground flora including many ferns, sedges (C remota, C. sylvatica, C. laevigata) and broad leaved plants such as primrose (Primula vulgaris), sanicle (Sanicula europaea), and barren strawberry (Potentilla sterilis). Its slightly acidic nature is shown by the occurrence of foxglove (Digitalis parpurea) and hair grass (Deschampsia flexuosa).

Numerous song birds are associated with the trees but the woodland is not extensive enough to maintain larger specialist species.

3. and 5. Lakeshore at Fahy and Cornashamsoge.

These are relatively untouched parts of the marginal woods on the lakeshore. The tree cover, as elsewhere, is largely of alder with some willow, hawthorn and ash. The broken, rocky ground beneath the trees has much moss with such other plants as foxglove (Digitalis purpurea), ground ivy (Glechoma hederacea) and false brome (Brachypodium sylvaticum). Towards the lake, as flooding becomes more frequent, ragwort (Senecio aquaticus), buttercup (Ranunculus repens) and self heal (Prunella vulgaris) become frequent.

These shores slope quite steeply into the water so marginal vegetation is limited and there is little space for wildfowl. However teal visit the areas in winter, along with redpolls and siskins.



Map No. 9

AMENITY AND CONSERVATION

KEY

- Archaeological Site
- Scenic Quality
  - View Point
  - Scenic Area
  - Scenic Route
- Area of Scientific Interest
  1. Annagh Lower Bog
  2. Owengar Bridge Woodland
  3. Lakeshore at Fahy
  4. Woodland at Gubcormongan
  5. Lakeshore at Cornashamoge
  6. Rocks at Mahanagh
  7. Rose Lodge Shore
- Architectural Sites
  - A International Importance
  - B National Importance
  - C Regional Importance
  - D Local Importance
- Lough Allen
- Study Area Boundary
- River / Canal
- R 207 Road (Regional)
- Town
- Contour Line

4. Woodland at Gubcormongan

The shallow shore of this headland carries a broad band of swamp woodland growing in a sandy soil and subject like the rest of the shore to regular flooding and exposure. It is the largest stand of trees that occurs on the lake and is a woodland rather than just a belt of trees. It consists of alder and willow but there is a little black poplar and ash in addition. The more open places in the wood allow meadowsweet (Filipendula ulmariea), yellow cress (Rorippa amphibia and R. sylvestris) and bittersweet (Solanum dulcamara) to grow and these grade out into fully aquatic species like spikerush (Eleocharis palustris) and shoreweed (Littorella uniflora) at the lake.

Wildfowl occur in good numbers (100+) in this area in winter with teal and mallard the prevalent species. Both feed on alder seeds.

6. Rocks at Mahanagh

This is a limestone exposure on the west shore of the southern part of the lake and its vegetation contrasts sharply with that elsewhere. Together with some sandy till deposits behind, it supports a dry grassland cover with a little blackthorn scrub. Crested dogstail (Cynosurus cristatus), yellow oat (Trisetum flavescens) and quaking grass (Briza media) occur in the grassland with blue moor grass (Selseria albicans), hairgrass (Aira spp) on the rocks. This is the only site for certain plants around the lake which otherwise consists of sandstone/shale or has low muddy or sandy shores.

7. Rose Lodge Shore.
This most sheltered part of the lake is a muddy bay with a flat shore on which trees and marsh plants extend far out. At the back the trees are alder (of about 15m) while further down the shore moss-draped willow trees take over, the individuals falling over and re-sprouting as they reach a certain size. A tall herb vegetation grows amongst the trees, reedgrass (Phalaris arundinacea), yellow loosestrife (Lysimachia vulgaris), purple loosestrife (Lythrum salicaria) and an Aster being prominent. In wetter places cowbane (Cicuta virosa), yellow cress (Rorippa amphibia) and marsh marigold (Caltha palustris) occur sometimes with the sedge Carex vesicaria. To the front of the woodland flote grass (Glyceria fluitans) becomes common with horsetail (Equisetum fluviatile) and yellow water lily (Nuphar luteum). Two species of the mud under the trees are the small yellow cress (Rorippa palustris) and marsh bedstraw (Galium palustre). At the east end of the site the vegetation grades into taller redswamp in which the northern sedge (Carex aquatilis) occurs with bur reed (Sparganium erectum) and water dropwort (Oenanthe aquatica). The area is used by ducks and swans in winter and often has some of the 60 or so whooper swans that frequent the lake.

LEITRIM

INTRODUCTION

This report describes a potential role for land in Attirory, just below Carrick-on-Shannon, as a wildlife/amenity area. The area was examined on 25th April, and again in June, 1990, after discussions with Mr. P. Doyle (County Manager) and Mr. D. Walsh (County Engineer), Leitrim County Council.

SITE DESCRIPTION (SEE MAP)

The area lies between the new roundabout on the south side of the town and the small marina opposite Crose's Islands. It consists of eight low lying fields on the outside of a bend of the Shannon. They surround the raised area of the traveller's site, adjoining the main Longford road on the north-west and the county road to the marina on the south-east. All of this land is subject to flooding (it was covered in early 1990).

The riverbank itself is lined with a thin reedbed of reed (Phragmites), horsetail (Equisetum fluviatile), bogbean (Menyanthes trifoliata) and reed grass (Phalaris). Inland a band of 30m or so is inundated regularly and carries a marsh vegetation. Sedges predominate (Carex elata, C. vesicaria, C. aquatilis and C. elongata with other broad-leaved plants such as cowbane (Cicuta virosa), yellow loosestrife (Lysimachia vulgaris), flag iris (Iris pseudacorus), water dock (Rumex hydrolapathum) and marsh stitchwort (Stellaria palustris).

Away from the river, rough grass and rushes become important. There is much hair grass (Deschampsia cespitosa), reed grass (Phalaris) and reed fescue (Festuca arundinacea) mixed with meadow foxtail (Alopecurus pratensis), sorrel (Rumex acetosa) marsh valerian (Valeriana officinalis) and meadowsweet (Filipendula ulmaria). The four small fields at the south-eastern end of the site have been mown for hay so smaller rosette plants like plantain (Plantago lanceolata) and creeping buttercup (Ranunculus repens) are common with much moss (Calliergon cuspidatum). The rushes (Juncus effusus) here are growing in open tufts but where they are not mown in the rest of the site they form large tussocks 1.5m in height. On the north-west boundary close to the Foot Stick there is a low lying pool area (A) with much angelica (Angelica sylvestris), cuckoo flower (Cardamine pratensis), bottle sedge (Carex rostrata) and water horsetail (Equisetum fluviatile).

The square field (B) beside the main road is somewhat drier than the rest of the site. Red fescue (Festuca rubra), meadow foxtail (Alopecurus pratensis) and carnation sedge (Carex panicea) are the most frequent plants with field buttercup (Ranunculus acris), sorrel (Rumex acetosa), the moss Rhytidiadelphus squarrosus and a little meadow vetchling (Lathyrus pratensis).

The fields are all surrounded by ditches, two of which take small streams, at least in winter, from Attifinlay to the north. Mostly the ditches contain quite a rich flora though they lack the plants of the Shannon riverbank. Species such as burreed (Sparganium erectum), forget-me-not (Myosotis scorpioides), marsh bedstraw (Galium palustre), watercress (Nasturtium officinale) and starwort (Callitriche stagnalis) are common.

The two small fields forming the southern tip of the site are being colonised by willows (Salix aurita, S. cinerea) and alder and these occur as scattered bushes amidst sedges, Iris and meadowsweet. The marsh as mapped is an old back water of the river extending that particular flora into the fields.

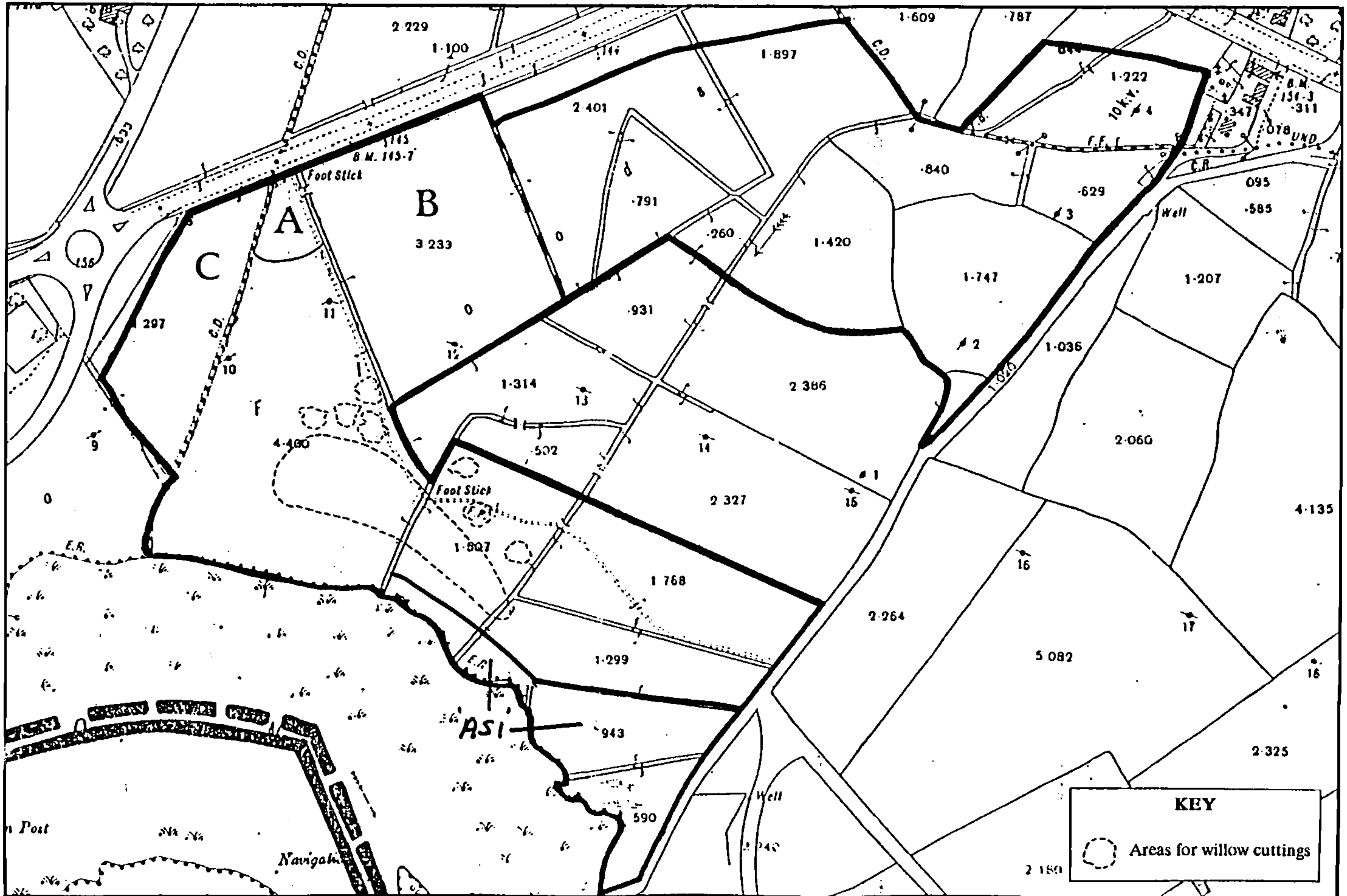
Birdlife using the area is restricted by the predominant vegetation to a few species. In summer moorhen are found along the riverbank with snipe here and in the pool A. A pair of reed buntings was seen as well as sedge and willow warblers in the trees at the south east corner. Other passerines like tits and goldcrest occur also. In winter a few mallard and teal feed in the drains and curlews visit the mown fields occasionally. Swans are also present on some days.

EVALUATION

The site has some interest from a botanical point of view because of the presence of a distinct set of aquatic species growing on the banks of the river and to a distance of 30m inland. Stellaria palustris, Carex aquatilis and C. elongata are the plants of most interest and for the last this is only the second place it has been found in Co. Leitrim. Otherwise the area consists of damp fields similar to many others in the midlands and with a limited bird fauna.

DEVELOPMENT

The features of ecological interest are all located on the riverbank. The rest of the site is somewhat uniform and the vegetation too dense to accommodate much birdlife. To increase the wildlife using the area it is important to diversify the habitat. The obvious thing to do is to excavate a pond and develop a small wetland. The pond will be fed from the river watertable so can be a simple excavation without elaborate feeding streams. Its shape should be roughly crescentic, mimicking a natural oxbow lake (see map).



KEY
Areas for willow cuttings
A
B
C
ASI
Foot Stick
Well

LIMERICK

BALLINACURRA CREEK

Grid Reference	R 5456
Area	54 ha.
Interest	Ecological (botanical)
Rating	National importance

Description

The edges of the Shannon below Limerick flood regularly during high tides and high river flows and the adjacent agricultural land is protected by continuous high banks. On the outer side of these the vegetation is subjected to inundation, brackish water and silt deposition and these factors mean that it is of distinctive character.

Reedswamp and grassland are the plant communities most commonly occuring. The reedbeds mark the edges of the various river and stream channels with a belt of varying width. As well as the common reed (Phragmites australis), the clubrushes Scirpus triqueter, S. lacustris and locally S. maritimus are characteristic, with some bulrushes (Typha latifolia and T. angustifolia) and canary grass (Phalaris arundinacea). A few lower growing plants are mixed in, for example, marsh marigold (Caltha palustris), water dropwort (Oenanthe crocata) and, locally summer snowflake (Leucojum aestivum). Grassland grades into the edges of the reeds: there is much bent (Agrostis stolonifera) and meadow grass (Poa trivialis) with tall herbs like marsh ragwort (Senecis aquaticus), docks (Rumex sanguineus) and some sedges (Carex riparia, C. otrubae). In muddier places the buttercup (Ranunculus sceleratus), scurvy grass (Cochlearia anglica) and bistort (Polygonum persicaria) are noticeable whereas in areas away from the influence of brackish water the yellow cress (Rorippa sylvestris), flowering rush (Butomus umbellatus) and arrowhead (Sagittaria sagittifolia) may be found.

The area is used by birdlife to a limited extent: mallard, curlew and snipe feed there but the fluctuations of water level inhibit nesting.

Evaluation

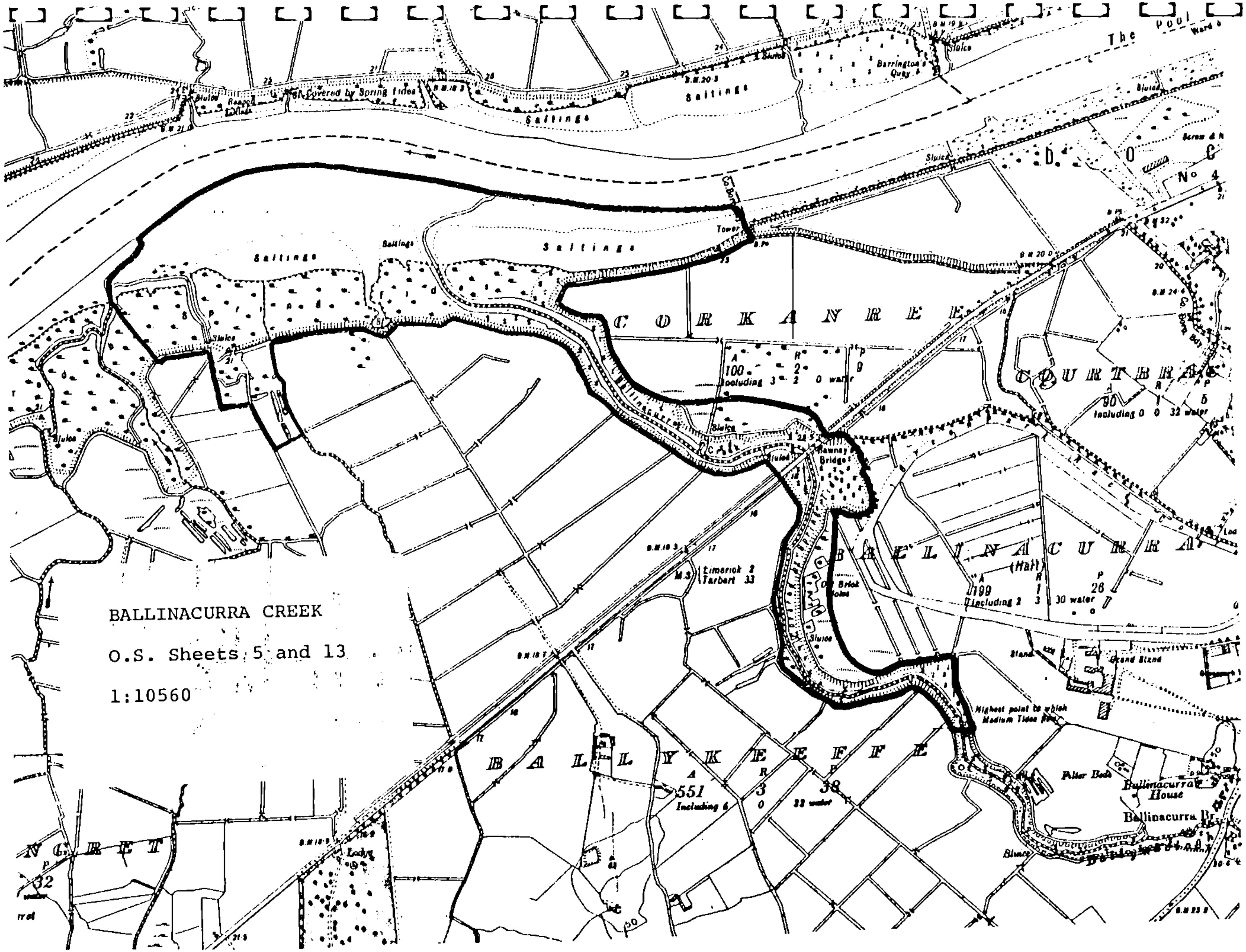
Brackish estuarine marshes are a feature of most of our large rivers but they are nowhere better developed than around the Shannon. The habitat extends for many miles and the Ballinacurra area is chosen because it is fully representative and, in addition, has the interest of the two plant species, Scirpus triqueter and Leucojum aestivum. The former only occurs at Limerick while for the latter, Ballinacurra is the third most important site in Ireland.

Vulnerability and Recommendations

The area is relatively secure although so close to industrial development and to the city. It would be susceptible to various forms of toxic water pollution, but is tolerant of the present level of suspended solids and organic matter. Reed cutting which occurs in certain places has the effect of maintaining the Leucojum population (Farrell, 1982) and does not constitute a threat, provided it is carried out so as to leave about 30 cm uncut at the base of the reeds.

Land use should be maintained in its present form.

Farrell, L. (1982) The distribution of Leucojum aestivum L. in Ireland. Irish Nat. J. 20(11):483-489.



BALLINACURRA CREEK

O.S. Sheets 5 and 13

1:10560

WESTFIELDS, LIMERICK

INTRODUCTION

This report is written in response to a letter (13/5/88) from Mr M B MacCurtain, City Engineer, requesting the setting up of a monitoring programme to examine environmental change in the Westfields marsh, recently affected by the new Ring Road.

The report describes the past and present state of the marsh, concentrating on the vegetation and birdlife. Survey work during the next two seasons will show if and how these aspects are changing and will investigate various options for habitat management. Such conclusions and suggestions that are included in this report must be regarded as preliminary and will be developed further for the final report (1990).

DESCRIPTION OF AREA (Figure 1)

Westfields marsh is part of the original tidal channel of the River Shannon which is now isolated by the embankment that runs downstream to Coonagh and beyond. It is a semi-circular area which is wettest in the centre where the main lake occurs, and drier at each end. Springs occur along the northern margin of the site and their flow, together with drainage water, is taken out by sluices into the river. A pair of interconnected sluices was constructed in the 1960s when the nearby housing estate was built. These link the two main marshes to the river and allowed for regular tidal flooding of the area amounting roughly to a 1 m fluctuation on a river fluctuation of about 5 m (Lysaght 1986).

Vegetation

An overall vegetation map (Figure 2) which is derived from Lysaght (1986) shows that there is a substantial amount of tree growth and also extensive reed and sedge beds. Around the lake the situation is more complex and also more likely to change. Figure 3 gives an impression of the present vegetation derived from a photograph taken in December 1986, complemented by fieldwork in 1988.

Four plant species cover most of the ground. Reed canary grass (Phalaris arundinacea) grows at the landward side of the marsh, extending down to the water's edge in the vicinity of the old duck pond. In deeper water flote grass (Glyceria maxima) and pond sedge (Carex riparia), sometimes mixed with the bulrush (Typha latifolia), cover an extensive area, some of which floats as a raft of vegetation on the water. The zones of deepest water have the narrow-leaved bulrush (Typha angustifolia) and the clubrush (Scirpus lacustris), often growing in isolated clumps. The sea clubrush (Scirpus maritimus) forms a few thin patches on the estuary side of the pond and covers a larger area in the narrow lagoon between the road and the embankment. Willow trees are scattered in the south-western corner of the pond and along the landward side. They include the grey and almond-leaved willow as well as the osier (Salix cinerea, S. triandra, S. viminalis). A few other emergent plants grow in the reed beds, usually associated with Phalaris or Carex riparia. They include purple loosestrife (Lythrum salicaria), softrush (Juncus effusus), yellow flag (Iris pseudacorus), forget-me-nots (Mysotis spp.), meadowsweet (Filipendula ulmaria), wild angelica (Angelica sylvestris), mint (Mentha aquatica) and water dropwort (Oenanthe crocata).

The bulrush (Typha latifolia) is one plant obviously grazed by swans but they probably depend more on the submerged water weeds (Potamogeton pectinatus, P. pusillus and Callitriche brutia). Stems of these species are frequently found floating in the water having been pulled up by birds.

Birdlife

The bird fauna of Westfields was studied intensively in the 1982-83 period by Lysaght who published a paper on the subject in 1986. Some notes from years previous to this and more recently are also available from Collins, Lysaght and Tarpey (pers. comm.) who has obtained monthly counts since September 1988.

Of the 87 species of birds recorded, 38 are dependent on the water area or its surrounding reedbeds. Mallard and teal are the most

frequent duck (Table 1) but tufted duck, pochard and shoveler are also regularly present. A picture of the bird fauna is given by the following summary of counts (+ = present but not counted).

	Species	Pre-Ring Road Average	Pre-Ring Road Peak	Post-Ring Road Average	Post-Ring Road Peak
Winter	Little grebe	2	6	2	4
	Cormorant	+	11	1	1
	Grey heron	+	24	4	18
	Mallard	80	230	57	86
	Teal	105	473	43	57
	Shoveler	24	40	5	9
	Tufted duck	41	107	26	81
	Pochard	8	16	3	7
	Mute swan	4	12	9	9
	Moorhen	6	40	14	21
	Coot	+	232	19	41
	Snipe	+	300	+	+
	Redshank	+	50(135)	-	-
	Dunlin	+	5(100)	2	12
	Herring gull	+	114	-	2
	Common gull	+	13	6	18
	Black-headed gull	+	340	80	95
Breeding	Little grebe		3 prs		
	Mallard		8 prs		
	Tufted duck		2 prs		
	Mute swan		1 pr		
	Water rail		2 prs		
	Moorhen		+		
	Coot		+		
	Grasshopper warbler		3 prs (1974) 1 (1984)		
	Sedge warbler		7 prs		
	Reed bunting		5 prs		
Autumn passage	Sand martin) roost in		60 birds		
	Swallow) reedbeds		250 birds		

EVALUATION

The Westfields marsh is of more value for its proximity to Limerick City and its resulting use for amenity and education, than it is for its ecology or wildlife. Many estuaries have 'intakes' along their shores that have developed along similar lines. However, the presence of one plant, Typha angustifolia, which is generally rare over the country though it occurs elsewhere on the lower Shannon,

is interesting. As well as this, the birdlife is unusual in its diversity in such a small area. Teal, snipe and coot occur in significant numbers: for coot it can be thought of as the fourth most important site in North Munster (Lysaght 1986).

HABITAT CHANGE

Even before the Ring Road was planned, changes were occurring at Westfields. Old bird records from 1970 and before suggest a much less vegetated site, with open mudflat conditions being used by numbers of shorebirds such as redshank, dunlin, curlew, greenshank and blacktailed godwit. These species occur rarely if at all today, though they are seen in other parts of the estuary. Presumably at the time the flap valves were not working and the tide had full access to the area. When the Westfields estate was built the sluice arrangements were improved so as to prevent tidal inflows which could have caused flooding. In the more stable conditions created, the vegetation was able to spread so that by 1986 it covered the area shown in Figure 3. Debris from leaves and roots has accumulated to such an extent that the water has been shallowed and in the case of the western half, completely overgrown.

After the building of the causeway for the road a further alteration to ths sluice caused marsh water levels to rise considerably. They were at their highest level in late 1984 and early 1985 until a new pipe put into the box drain released some of the water in the late spring of 1985. The effect of the pipe was to reduce the amount of water flowing during the rise and fall of the tide with the result that the lake fluctuated very little. About 3 cm difference was recorded over the tidal cycle. A functioning flap valve on the river side meant that Westfields could drain almost completely in drought conditions, as it did in late 1987.

In early 1988 a fluctuation was re-established in the pond by keeping the flap valve open. This amounted to 20-30 cm on any one tide and over the period of 7-19 April to 40 cm altogether.

DISCUSSION

Marshland is an unstable habitat, so its plant and animal life is well adapted to fluctuations in water level at any time of the year. The organisms can tolerate such sudden changes in conditions without damage, though they will naturally respond to a consistent habitat change, to wetter or drier conditions.

For this reason it is most unlikely that the changes that have occurred at Westfields over the last three years will have done any lasting damage, at least to the vegetation. Much more likely is that the growth of some species has been enhanced and of others retarded. It appears from 1988 observations that Typha angustifolia is one of the benefiting species. Many of its clumps are surrounded by new shoots which are enlarging its range at about 30 cm per year. Scirpus lacustris is similarly increasing, though S. maritimus appears more stable. Glyceria maxima and Carex riparia are slower species to spread and it is not yet clear if either or both are invading the open water. Marker posts have been put in around a sample of all species to measure their rates of spread. An aerial re-survey is also planned for December 1989.

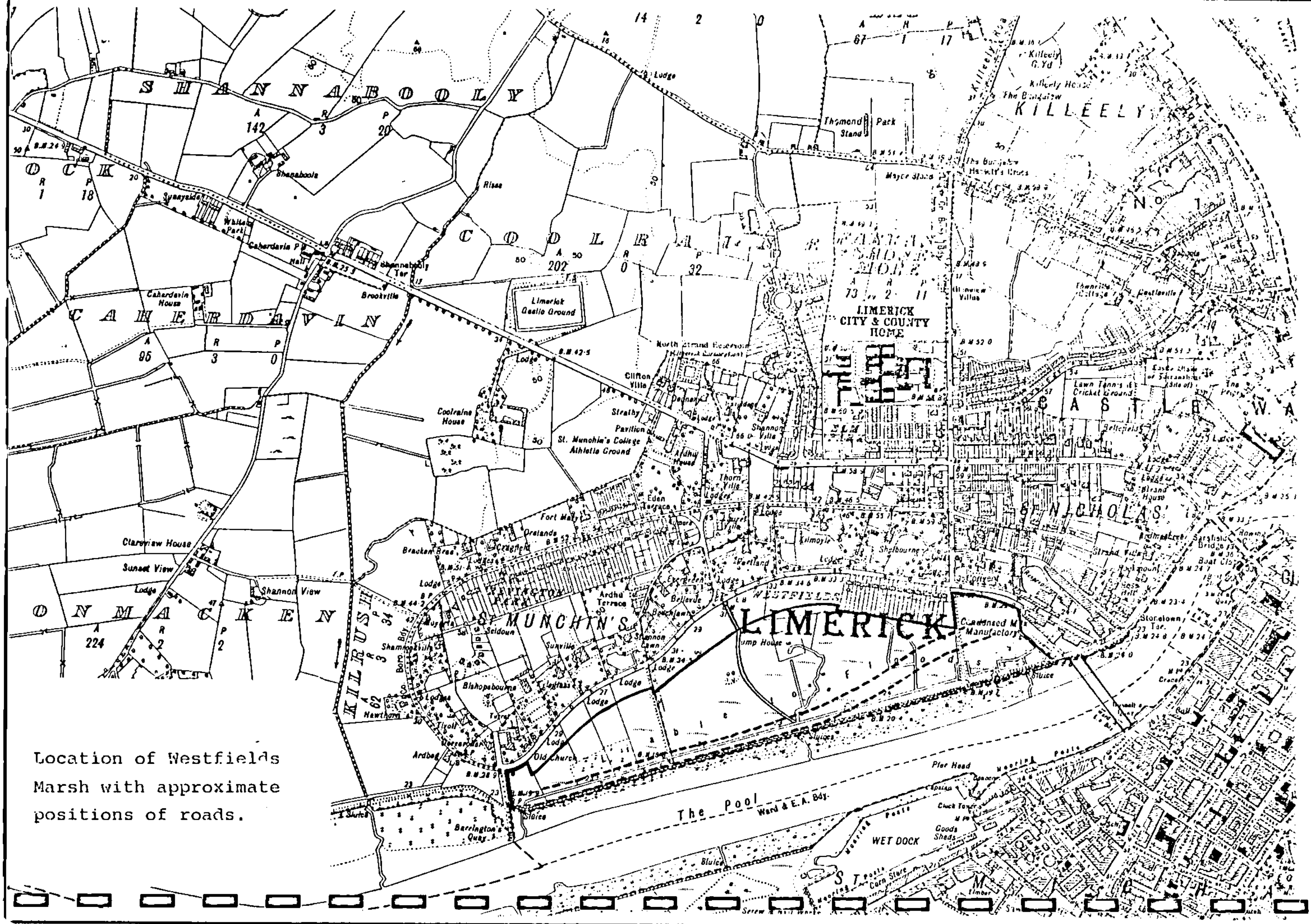
Birdlife is sensitive both to habitat conditions and disturbance and it is in regard to the latter that some concern is merited. There is such a thing as a critical habitat size for each species - a minimum area in which a bird does not feel safe even if there is abundant food and other attractions. It may be that the subdivision of Westfields by the road embankment has created two areas that are not quite big enough to attract the same numbers of birds as heretofore. Add to this the pressure of pedestrians and dogs at the water's edge, and it can be seen that conditions are now substantially different from what they were. The preliminary wildfowl counts recorded in Table 1 suggest that there has been a decline in certain species, but it should be remembered that the 1988-89 winter was unusually mild and that the peak numbers of birds recorded in the past have always occurred during prolonged cold spells. Any permanent changes to the bird populations are for the moment pure speculation.

POSSIBLE MANAGEMENT

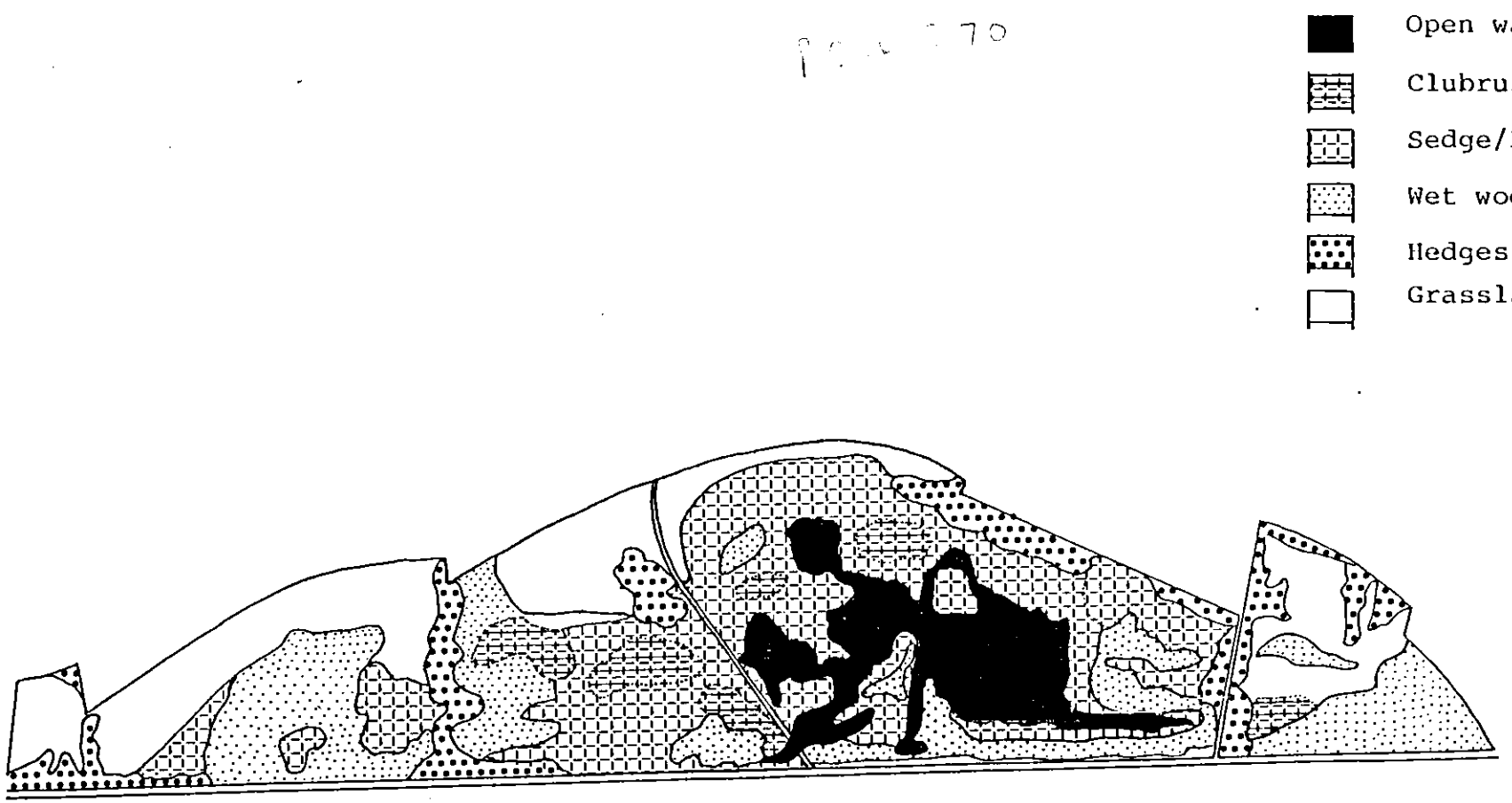
The purpose of management is either to stablilise a habitat that is in the course of changing or to modify it into something more attractive to animals or plants or to people. All water bodies have a natural tendency to fill up with the growth of aquatic plants. Their dead parts fail to decay under water, so accumulate as a peatlike layer on the bed of the lake. The process of infill occurs slowly to begin with, but increases rapidly as the lake begins to shallow.

Management of shallow lakes and marshes is often a battle to contain the spread of plants. At Westfields it appears that full control of the water sources may be enough to restrict vegetation growth in the main pond, if this is in fact reducing the area of open water. It may be that filling the marsh with water on the spring tides in March (or September) and leaving it for some weeks would provide sufficient depth to kill off some of the reeds. This would involve opening the flap valve on the incoming tide when water level outside was higher than that inside, and sealing it at other times. A flap on the inner end of the pipe might accomplish this, though there could be some seepage out through the embankment. Such manipulation of the water levels would be done outside the breeding season of birds so that nests would not be flooded.

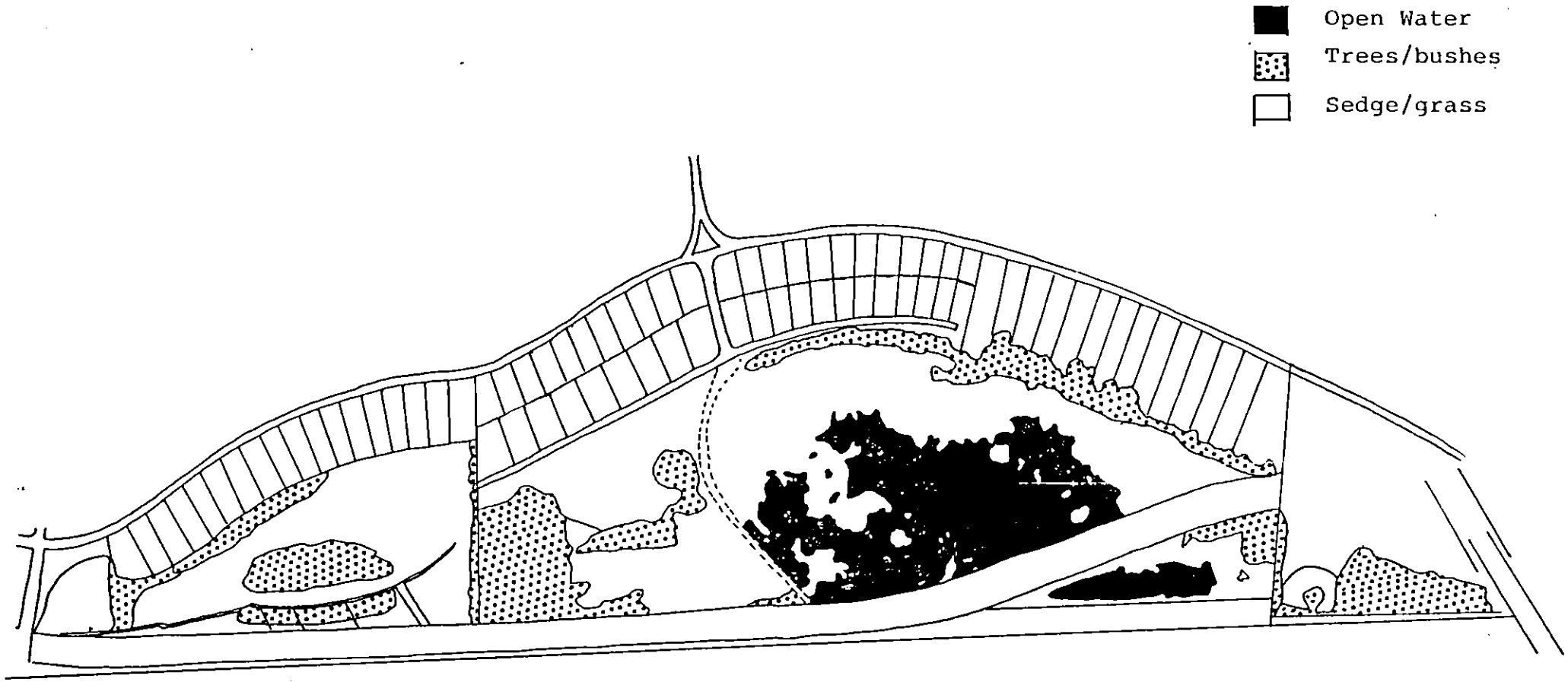
In addition, it may be desirable to open up the reedswamp in the western part of the area, to put back the plant succession to a stage where there is some open water. This would increase the variety of birds using this part without, it is thought, displacing any found there now. Such action might in large part compensate for the damage the Ring Road has done in fragmenting the area. Material excavated (by dragline) from the reedbeds could be piled into an embankment giving access through the area. A proper water supply would also have to be provided: at the moment it is not clear if sufficient flow is available.


SHANNABOOLY
CAHERDAVIN
ONMACKEN
COOLRAINE
KILLEELY
CASTLE
ST NICHOLAS'
ST MUNCHIN'S
LIMERICK
WESTFIELDS
KILRUSH
LIMERICK CITY & COUNTY HOME
Thomond Park Stand
Limerick Gaelic Ground
St. Munchin's College Athletic Ground
Coolraine House
Caherdavin House
Clareview House
Sunset View
Shannon View
Brookville
Clifton Ville
Strathy
Pavilion
Eden Terrace
Fort Mary
Oralands
Cragfield
Bracken Brae
Seldoun
Sunville
Bishopsbourne
Newthorn
Ardbeg
Old Church
Pump House
Condensed Milk Manufactory
Barrington's Quay
The Pool
WET DOCK
Goods Sheds
Pier Head
Lodge
Sluice
Rises
Shanabooie
Sunnyside
Stonetown Ter.
Lawn Tennis & Cricket Ground
North Strand Reservoir
Kilmoyle
Shelbourne
Westland
Bellevue
Ardhu Terrace
Ardhu House
Thorn Ville
Shannon Ville
Mayce Stand
The Bungalow
Killeely House
Killeely G.Yd
Killeely Road
Thomondville Cottage
Castleville
Bellefield
Strand House
Strand Villas
Rockmount
Stonetown
Sarsfield Bridge
Boat Club
Corn Store
Timber

Location of Westfields Marsh with approximate positions of roads.



Vegetation map of Westfields Marsh in 1984 (after Lysaght, 1986)



Vegetation of the Marsh in December 1986 to show the state of colonisation of open water.

Co LONGFORD

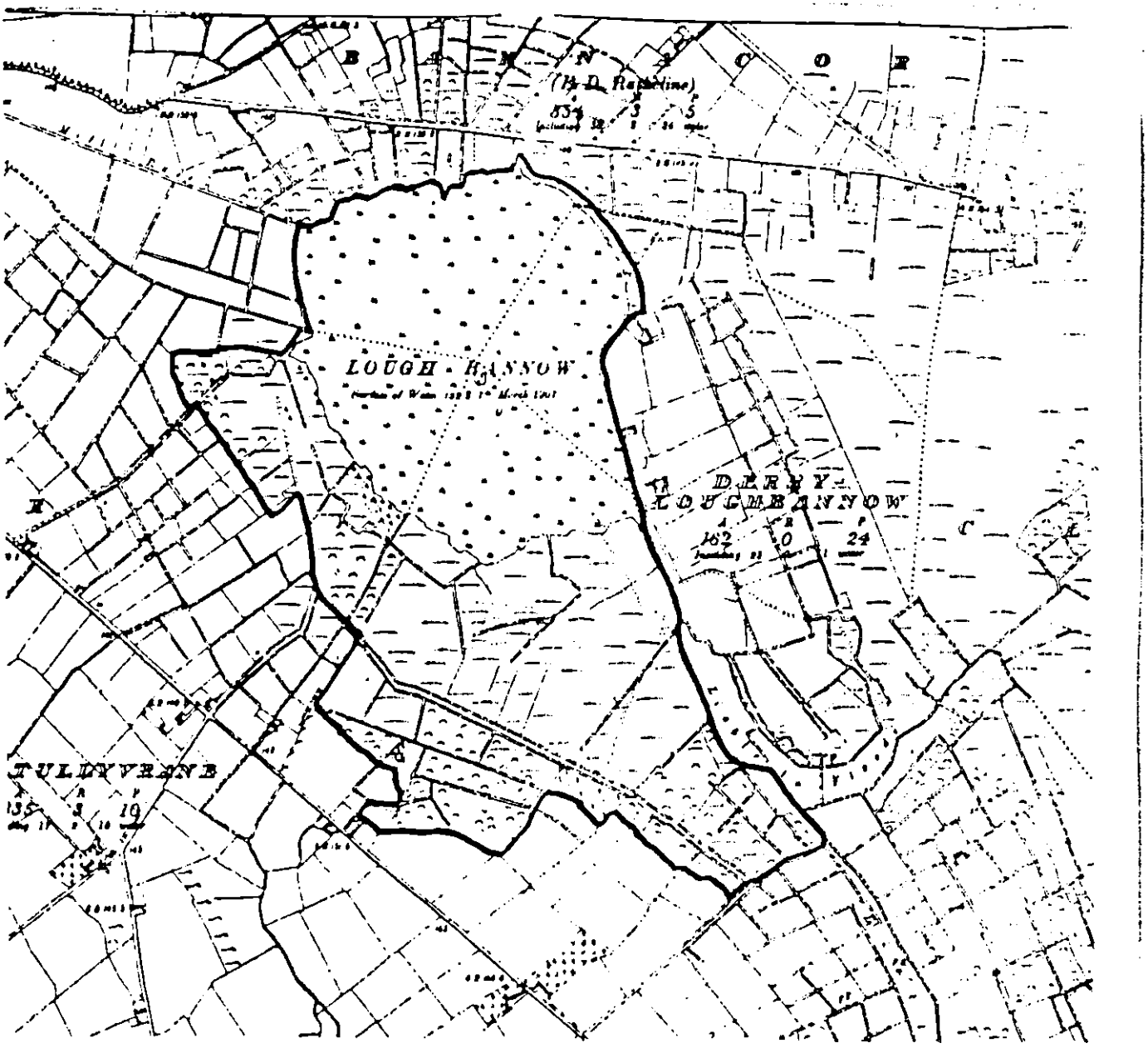
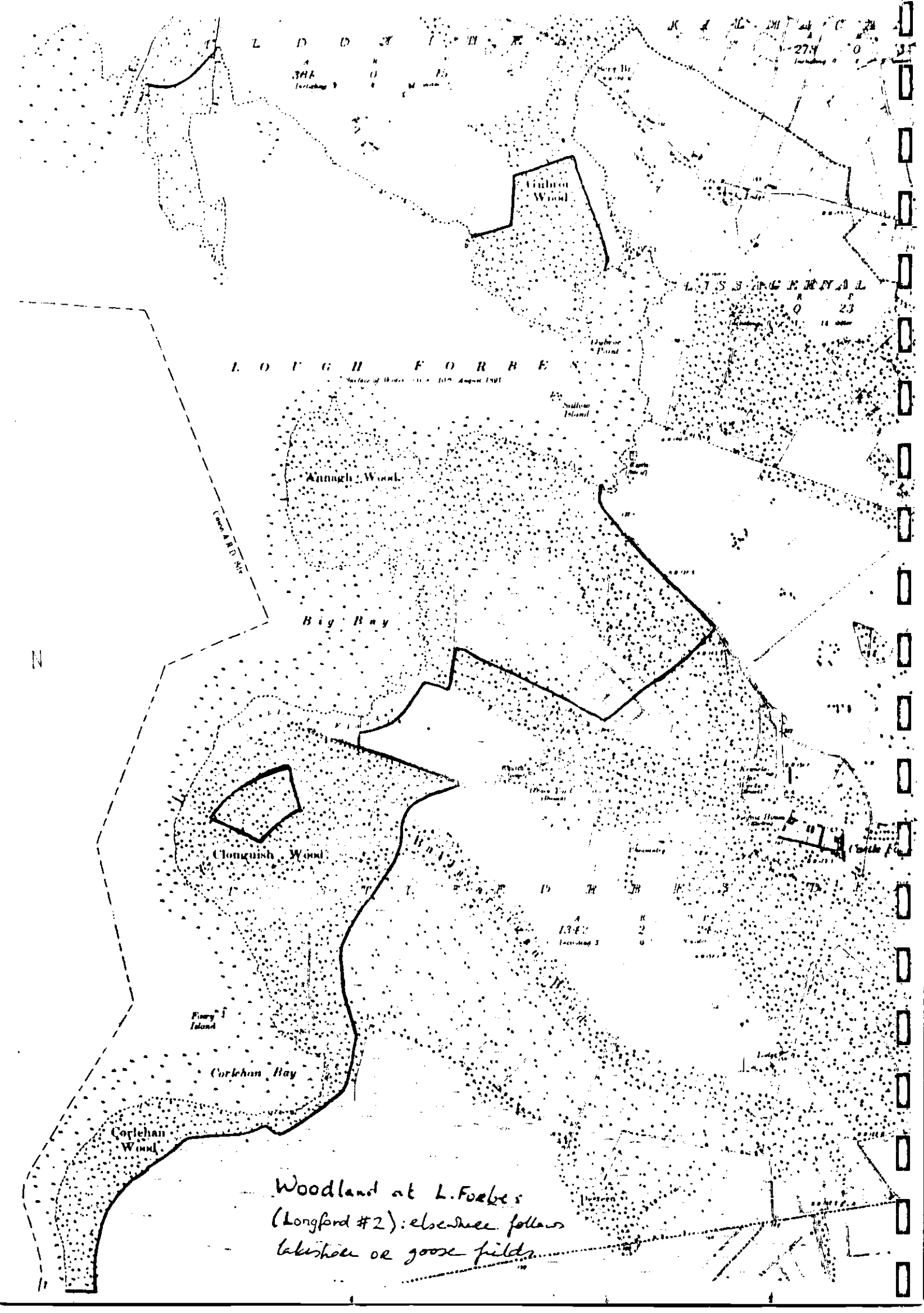


Fig. 3 : Suggested new boundary of area of scientific interes


L O U G H F O R B E S
Annagh Wood
Big Bay
Clonguish Wood
Corlehan Bay
Corlehan Wood
Woodland at L. Forbes (Longford #2): elsewhere follows lakeshore or goose fields

MEATH

The Ecological Interest of the Proposed Boyne Valley Archaeological Park

A Report for Bord Failte

November 1986

Roger Goodwillie

INTRODUCTION

This report is written in response to a request (10/9/86) from Mr Keith Sargeant, Bord Failte, for information on the flora and fauna of the area proposed for a Boyne Valley Archaeological Park. The area was visited in early October and the report written with the assistance of Mr Donal Synnott, National Botanic Gardens.

The area (see map at end) is primarily of farmland managed intensively, except in Dowth Hall. It is similar to much of eastern Ireland and not of special ecological interest. Attention was concentrated on the few sites of more natural character, the scrubland and woods and the various wetlands along the course of the Boyne.

The whole river is interesting because it has not suffered drainage in modern times. It is therefore, free to overflow its banks and to change course in response to natural causes. The river itself and its bankside communities are comparatively rich and easily accessible. In the western part the old canal towpath runs north of the main channel. Below Newgrange it crosses to the other side but the northern bank remains passable for practically all its length.

Apart from the river two sites stand out as having particular ecological interest. Both Crewbane and Dowth have a range of species typical of the region but also have a more specialised group, generally rare in Louth and Meath.

1) Crewbane Complex

This site is based on an area of scientific interest included in the original Meath county survey* as Crewbane and also in the national

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* Report on Areas of Scientific Interest in Co. Meath, An Foras Forbartha, March 1972

report Areas of Scientific Interest in Ireland, An Foras Forbartha 1981. It is a steep valley side created by one of the meanders of the Boyne moving slowly downstream. At the western end the river has moved away from the valley edge, creating a marshy floodplain at its base but in the east it is still in contact with it, steepening an already unstable slope. This high ground in Knowth deflects the Boyne southwards and the area of interest is extended by seepage and marshy conditions close to the old canal.

The taller woodland (A) is generally of ash with sycamore and oaks and a little wild cherry (Prunus avium). The trees are well spaced and large but there is only limited regeneration. The ground vegetation is largely of ivy which shows the absence of grazing animals, with brambles in the brighter places. Ferns are frequent (e.g. Dryopteris filix-mas and Polystichum setiferum) and a selection of other woodland herbs occurs, such as bluebell (Hyacinthoides non-scripta), red campion (Silene dioica) and foxglove (Digitalis purpurea). At this point the slope of the woodland is so steep as to prevent access but towards the west it evens out and there are paths through a somewhat younger stand (B). There are scrubby areas of blackthorn and hawthorn with taller trees coming through. Cattle graze sporadically in most of the area and the associated flora contains more frequent weeds (docks, nettles, burdock).

The wildlife of the woodland here is relatively rich with fox, badger, stoat, red and grey squirrels. There are, in addition, a few records of pine martens, and otters are regularly seen in the river.

The level ground in the valley floor (C) consists of marshland and grass. It rises towards the riverbank so that the wettest ground is close beside the woodland. The marsh is made up of sweet grass (Glyceria maxima) with yellow flag (Iris pseudacorus) and a few

sedges species (Carex). Cattle have created muddy areas at the edges of the swamp so water starwort (Callitriche spp.) and celery-leaved buttercup (Ranunculus sceleratus) are plentiful. The whole wetland is large enough to support a variety of bird life including snipe, water rail, moorhen, reed bunting and sedge warbler. It provides feeding for visiting wildfowl also, at least in winter.

The narrow marshy area (D) around the course of the disused Boyne canal contains a variety of aquatic vegetation depending intimately on habitat conditions. Seepage from higher ground to the north is important as there is little winter flooding here. There are small areas of tall sedge (Carex riparia, C.acutiformis) and wet fens containing water dropwort (Oenantha fistulosa), willowherb (Epilobium palustre) and, occasionally, the spearwort (Ranunculus lingua). Because of their size these wetlands are more vulnerable to farming changes than the preceeding one. This does not affect their value, however.

As a whole the Crewbane/Knowth site should be thought of as of local importance on the four point scale adopted by Areas of Scientific Interest in Ireland. It was formerly listed as regionally important but this was before the Dowth site (see below) became known.

2) Dowth Wetland

This site resembles Crewbane in that it consists of woodland on a steep valley side and a flood plain swamp and fen. The woodland is set on rocky ground and consists of sycamore, ash and elm, with beech, oak and hazel in places and alders and willows at the river margin. The latter area is flooded in winter and contains suitable areas for otters to breed. The woodland was planted in all probability but has developed to produce a stand with a natural ground flora and self-seeding trees. Ferns are again important in the vegetation (e.g. Polystichum setiferum, Phyllitis scolopendrium) with a greater variety of other herbs than at Crewbane. Soil depth

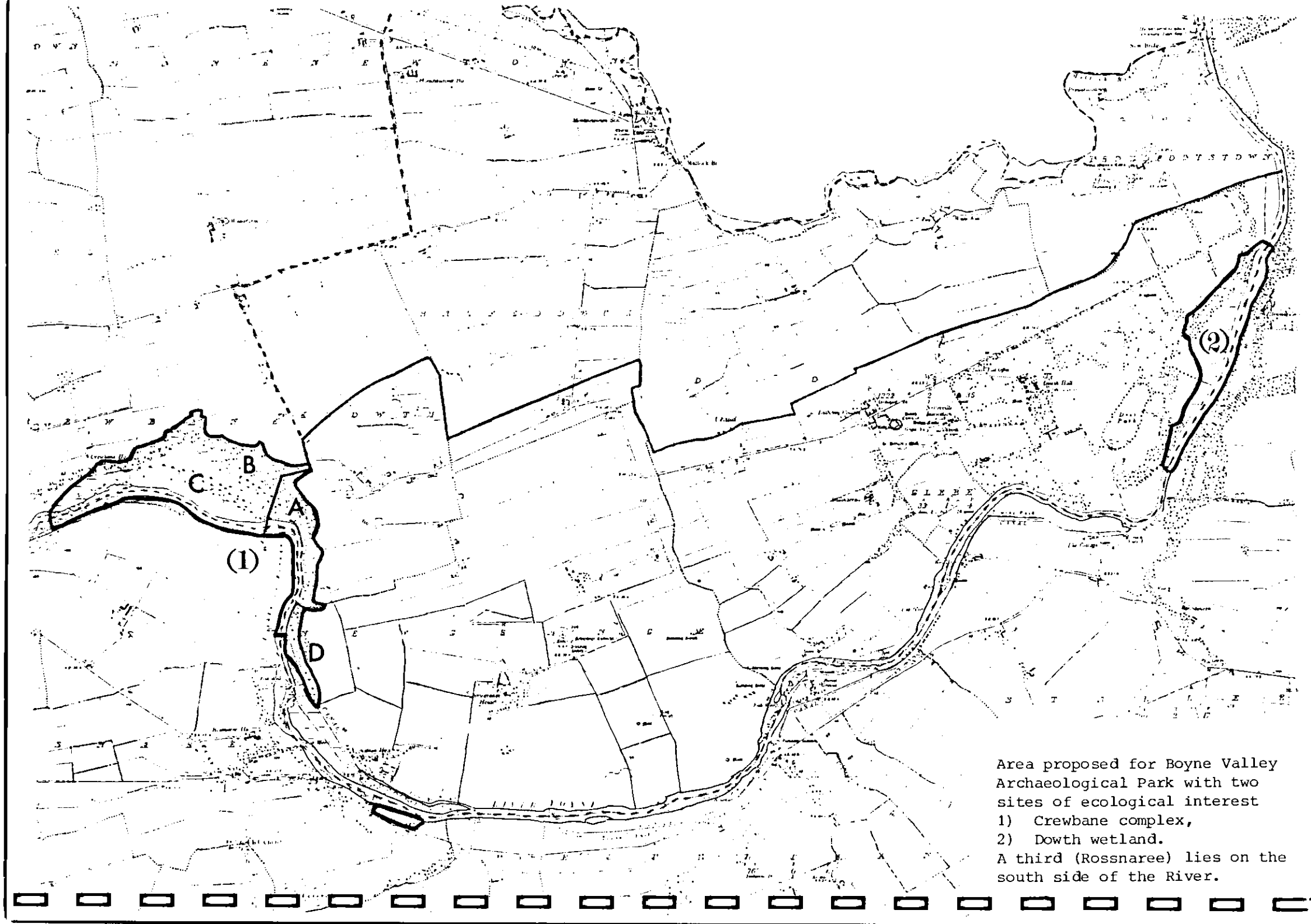
is relatively greater and the ground damper as shown by the species list: e.g. wild raspberry (Rubus idaeus), tutsan (Hypericum androsaemum), golden saxifrage (Chrysosplenium oppositifolium) enchanter's nightshade (Circaea lutetiana) and the sedges Carex remota and C.divulsa. Woodland bird species such as woodcock, sparrowhawk and jay may be expected here while the river seems to be full of fish, judging by the number rising.

Southwards the woodland leaves the riverside and is replaced by a level swampy area, part of which floods frequently. The ground differs from Crewbane in that there is no grazing and less silt deposition. Nutrients come from below in the form of calcareous seepage which exerts a characteristic effect on the vegetation. There are extensive beds of sedges (including Carex disticha) grasses (Molinia caerulea, Festuca arundinacea) and rushes (Juncus acutiflorus x articulatus) with bulrush (Typha latifolia), horsetail (Equisetum fluviatile) and iris. Bogbean (Menyanthes trifoliata) and red rattle (Pedicularis palustris) occur with ragged robin (Lychnis flos-cuculi), a little stitchwort (Stellaria spp.) and spotted orchids (Dactylorhiza spp.). Mosses are frequent in places and the fen bedstraw (Galium uliginosum) with them.

The richness of this aquatic community is enhanced by more sedge and reed beds bedside the river, giving a unit of high ecological interest and minimum human disturbance. It is probably one of the most important wetlands in the whole Boyne basin in view of the extensive drainage that has affected the upper part of the catchment.

CONCLUSION

There are two areas within the proposed Boyne Valley archaeological park that have significant ecological values. These are the Dowth wetland which is of regional importance and the Crewbane complex, of local importance.

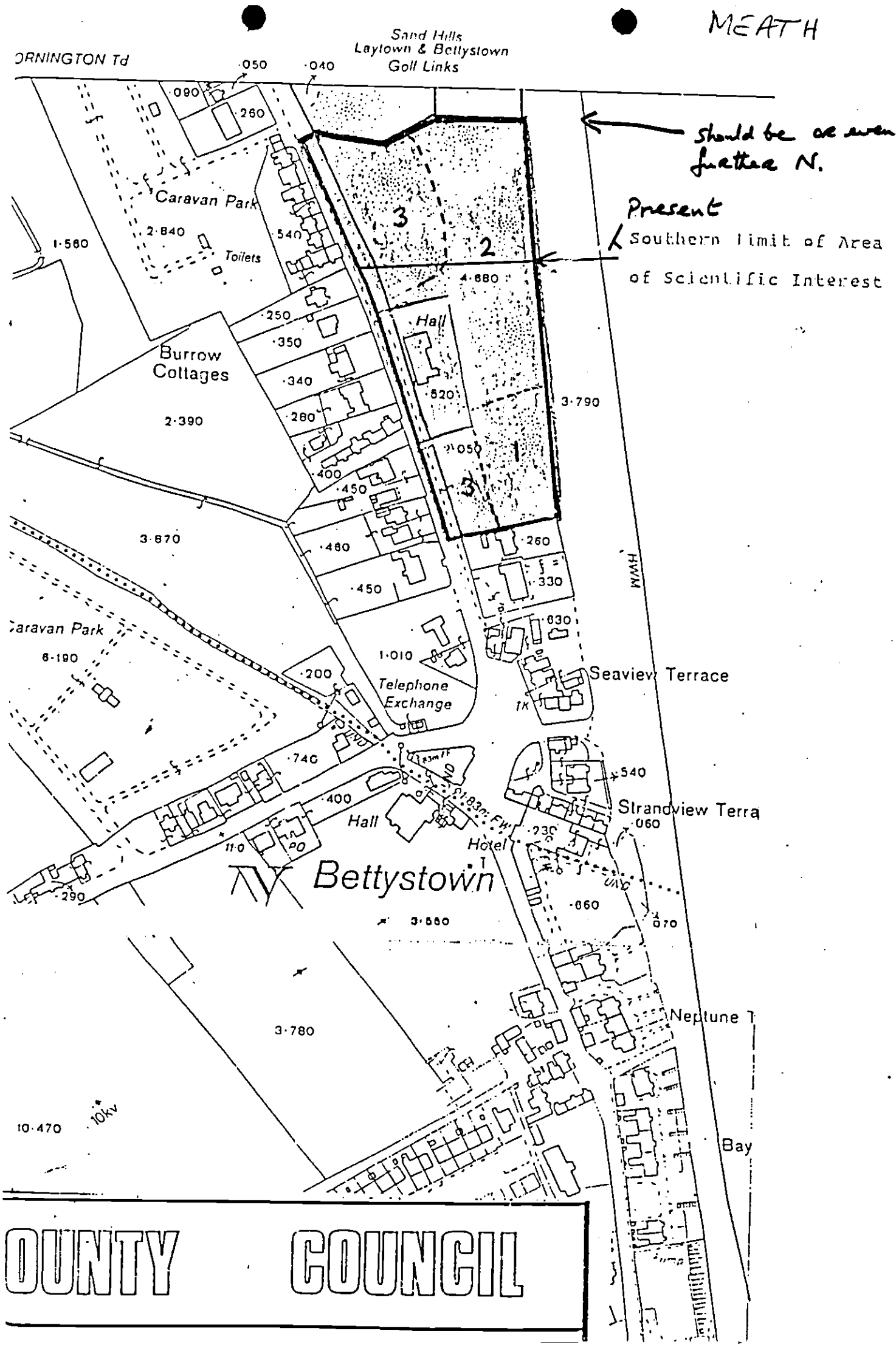


Area proposed for Boyne Valley Archaeological Park with two sites of ecological interest

1) Crewbane complex,
2) Dowth wetland.

A third (Rossnaree) lies on the south side of the River.

MEATH



OUNTY COUNCIL

(Lycopus europaeus) and marestail *(Hippuris vulgaris)* are occasional.

4) **Damp woodland**

The three islands in the Boyne; Yellow, Grove and the smaller one above it, support willow woodland (fig E:E) that was formerly cropped for basket making. *Salix viminalis, S. fragilis, S. alba, S. purpurea* and *S. cinerea* are the commonest willows and they form a dense tangle of growth together with nettles *(Urtica dioica)*, reed grass *(Phalaris arundinacea)* and reeds *(Phragmites australis)*, bittersweet *(Solanum dulcamara)* and goosegrass *(Galium aparine)*. They are flooded at times of high water, including some tides.

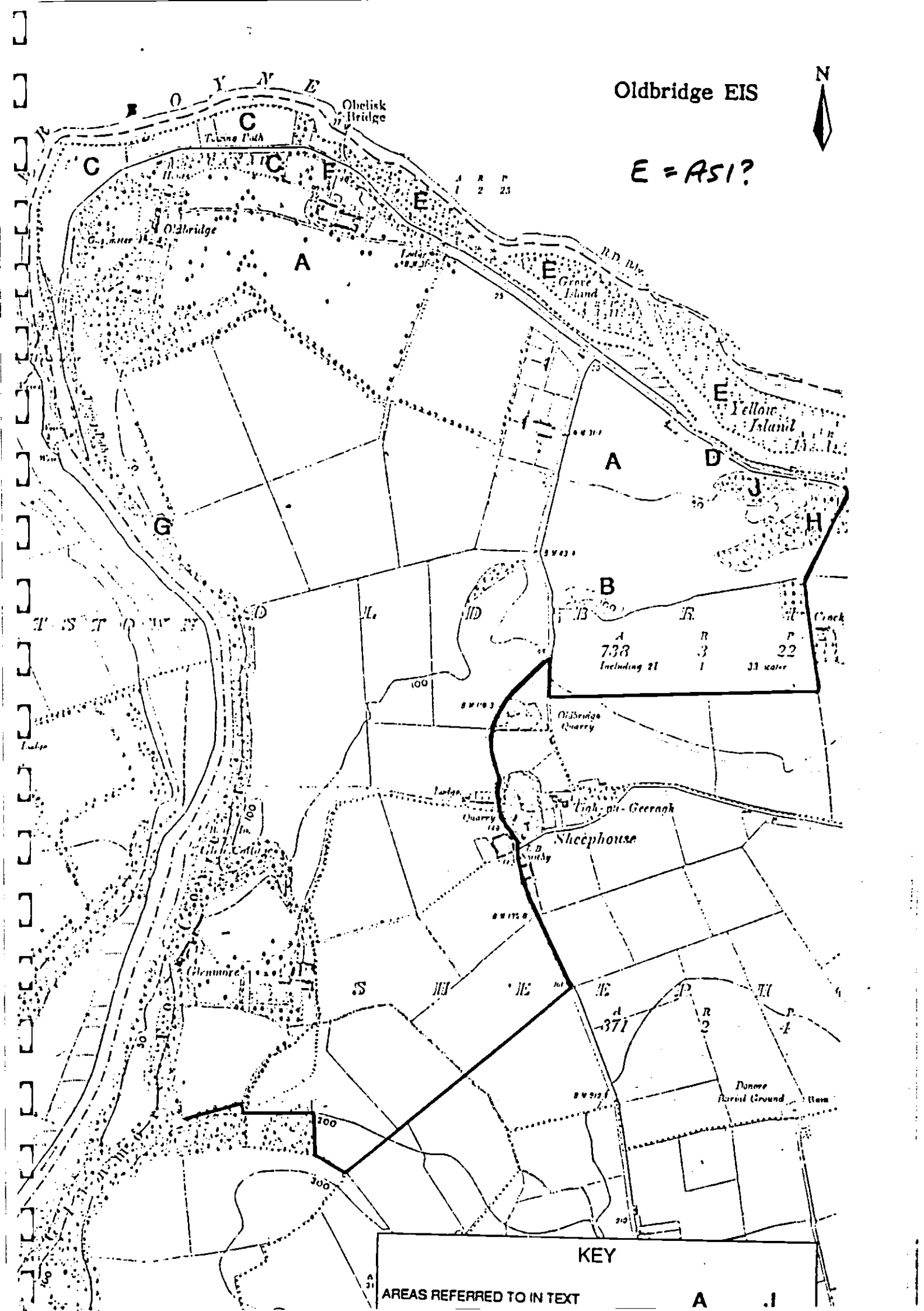
A small area of alder wood *(Alnus glutinosa)* occurs on soft ground at the edge of the canal below the farm buildings (fig E:F). In it the pond sedge *(Carex acutiformis)* is abundant and there is also some angelica *(Angelica sylvestris)*, wood cress *(Cardamine flexuosa)*, marsh bedstraw *(Galium palustre)* and marsh ragwort *(Senecio aquaticus)*.

5) **Dry Woodland**

A linear wood occurs all along the canal and also in the S-N section of the river where the valley is more incised than elsewhere. Though often beside water the ground does not flood regularly and the community is basically a dry deciduous wood, usually with a planted origin. The trees include all the common types: beech, sycamore, ash and formerly elm, are abundant with lesser amounts of oak and horse chestnut, as well as lime and cherry *(Prunus avium)* at the southern end.

The understory generally consists of young trees and shrubs or below the house, Rododendron and knotweeds *(Reynoutria japonica, R. sachalinensis)*.

There is a well-developed beech stand in the vicinity of the old quarry (fig E:G) though a fire there some years ago


Oldbridge EIS
N
E = ASI?
Obelisk Bridge
Oldbridge
Greave Island
Yellow Island
Oldbridge Quarry
Sheephouse
Donore Burial Ground
KEY
AREAS REFERRED TO IN TEXT
A

CONSERVATION AND AMENITY
ADVISORY SERVICE

Revisions to the List of Areas of Scientific Interest in County Monaghan

Eanna Ni Lamhna

February 1984

INDEX

INTRODUCTION

A Preliminary Report on Areas of Scientific Interest in County Monaghan was produced by An Foras Forbartha in 1972. This contained 28 areas, of which 15 were listed in the 1978 County Monaghan Development Plan as areas of scientific importance worthy of conservation.

In 1981, Areas of Scientific Interest in Ireland was published by An Foras Forbartha, in which areas of scientific importance in each county were revised, updated, and summarised. For County Monaghan, 24 areas are considered to be of scientific importance, i.e. 6 were dropped from the 1972 County Report, 2 were described under one heading and 3 new ones were added.

The Forest and Wildlife Service has undertaken extensive field-work in the county and, as a result of this work, 8 additional areas of scientific interest have been added to the county list. An Foras Forbartha is indebted to the Service for supplying data relating to these areas. The situation in 1984, therefore, is as follows:

- There are 32 listed areas of scientific interest in County Monaghan.
- 24 of these are listed and briefly described in the report Areas of Scientific Interest in Ireland, 1981, and include 3 new areas.
- An additional 8 areas have been added since 1981.
- 6 areas have been dropped since the original county report of 1972. These are listed below; the one marked* was included in the 1978 County Monaghan Development Plan.

No. in County Report, 1972	Name of Area	Reasons for Omission from Current List
*7	Castleblayney Drumlin Area	Although a fine area of drumlins it is too large to be conserved as a site of scientific importance.
14	Spring Loughs	Not a notable site. Better loughs have been found since.
16	Quarry near Smithborough	Not a notable example of silurian slate.
18	Tassan Lough	) Better examples of the veg-
23	Lough Ross	) etation types described in
25	Cordoo Lough	) these sites have been dis-) covered as a result of) further fieldwork.

- Areas 3 and 6 in the 1972 report have been merged to form Area 1 in Areas of Scientific Interest in Ireland, 1981.

ADDITIONAL AREAS OF SCIENTIFIC INTEREST IN COUNTY MONAGHAN

The following pages describe areas of scientific interest which should be added to those in the County Report of 1972. The areas are in two groups:

(i) In the report Areas of Scientific Interest in Ireland, 3 sites extra to the 1972 report are named. These are:

No. 2	Dromore Lakes
No. 5	Muckno Lake
No. 22	Tobermannan Bridge (Riverbank near)

(ii) Since 1981 8 other sites of scientific importance have been added. These are:

Emylough
Allagesh Lough
Lisarilly Bog
Killyhoman Marsh
Corcreeghy Lake and Woodland
Rosefield Lake and Woodland
Mullaghmore Lake (South)
Kilroosky and Dummy's Lough

Name of Area	DROMORE LAKES
Size	280 ha
Grid Reference	H 62 17
Scientific Interest	Ecological (Ornithology and Zoology)
Rating	Regional Importance

Description of Area

The area of interest is shown overleaf. The site consists of three waterbodies of 180 ha. lying amongst drumlins and surrounded by extensive coniferous woodlands. The woodlands contain such mammals as red and grey squirrel, pine marten, and fallow deer. The water area is of greater importance, holding food supplies for a large number of wildfowl. Nesting cover exists practically all around the lakeshore where grebes, coot, mallard, teal and tufted duck breed.

The area is more important as a wintering site and probably supports the highest density of wildfowl for its size in County Monaghan. It also has good diversity of species. A count taken in January 1980 showed the following birds to be present:-

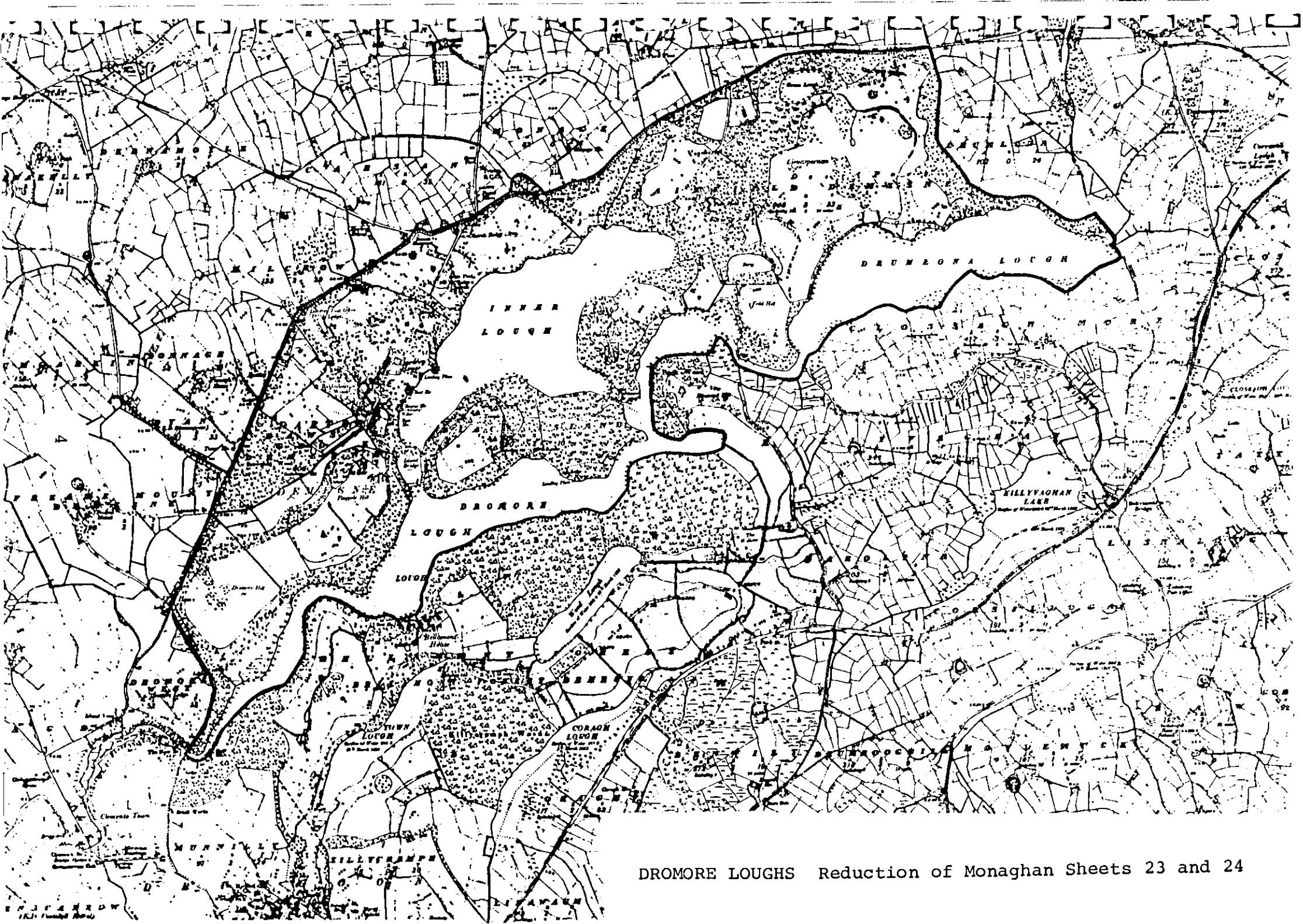
Species	Population
Great-crested grebe	56
Little grebe	12
Cormorant	10
Mallard	132
Teal	56
Wigeon	56
Pintail	8
Shoveller	24
Tufted Duck	62
Goldeneye	39
Whooper Swan	26
Coot	6

Evaluation

As regards the total numbers of birds present the Dromore Lakes are surpassed by Lough Egish and equalled by Lough Muckno, but these lakes are considerably bigger. The wildfowl numbers have been enhanced by the fact that the area is a bird sanctuary under the terms of the Wildlife Act, 1976.

Threats to the Area

A Low Flow Scheme was proposed for the area in 1980. Following a study carried out by An Foras Forbartha in September 1980 it was concluded that the proposed changes to the water regime would not adversely affect the bird life and might positively create a habitat for wading birds in autumn.



DROMORE LOUGHS Reduction of Monaghan Sheets 23 and 24

Name of Area	MUCKNO LAKE
Size	360 ha.
Grid Reference	H 84 19
Scientific Interest	Ecological (Ornithology & Zoology)
Rating	Regional Importance

Description of Area

The area of interest is marked on the map overleaf.

This site consists of a eutrophic limestone lake surrounded by a few small marginal fens. It has a moderate number (500) of wintering wildfowl, some of which breed around its margins in the April-June period.

A bird count in February 1979 showed the following birds to be present:

Species	Population
Great crested grebe	4
Little Grebe	6
Cormorant	12
Mallard	78
Teal	4
Shoveler	1
Tufted Duck	160
Pochard	65
Goldeneye	12
Mute Swan	5
Coot	44
Lapwing	50

Other wetland birds recorded for the lake are: grey heron, water rail, snipe, common sandpiper, redshank, black-headed gull, reed bunting and sedge warbler.

Fish species present in the Lake are brown trout, pike, rudd, perch, bream, tench and eels. Amongst the aquatic vegetation and under stones and in mud on the lakebed are large populations of invertebrates such as caddis fly larvae, waterboatmen (Notonecta and Corixa spp), the water hoglouse, (Asellus aquaticus) turbellarians, and spire shells (Limnea spp). There is considerable scientific interest in a water flea, Bythotrephes, which shows a complete gradation between two distinct species.

Threats to the Area

Possible threats to the scientific value of the area are:

(i) the eutrophication of the lake caused by the discharge of domestic and agricultural effluent,

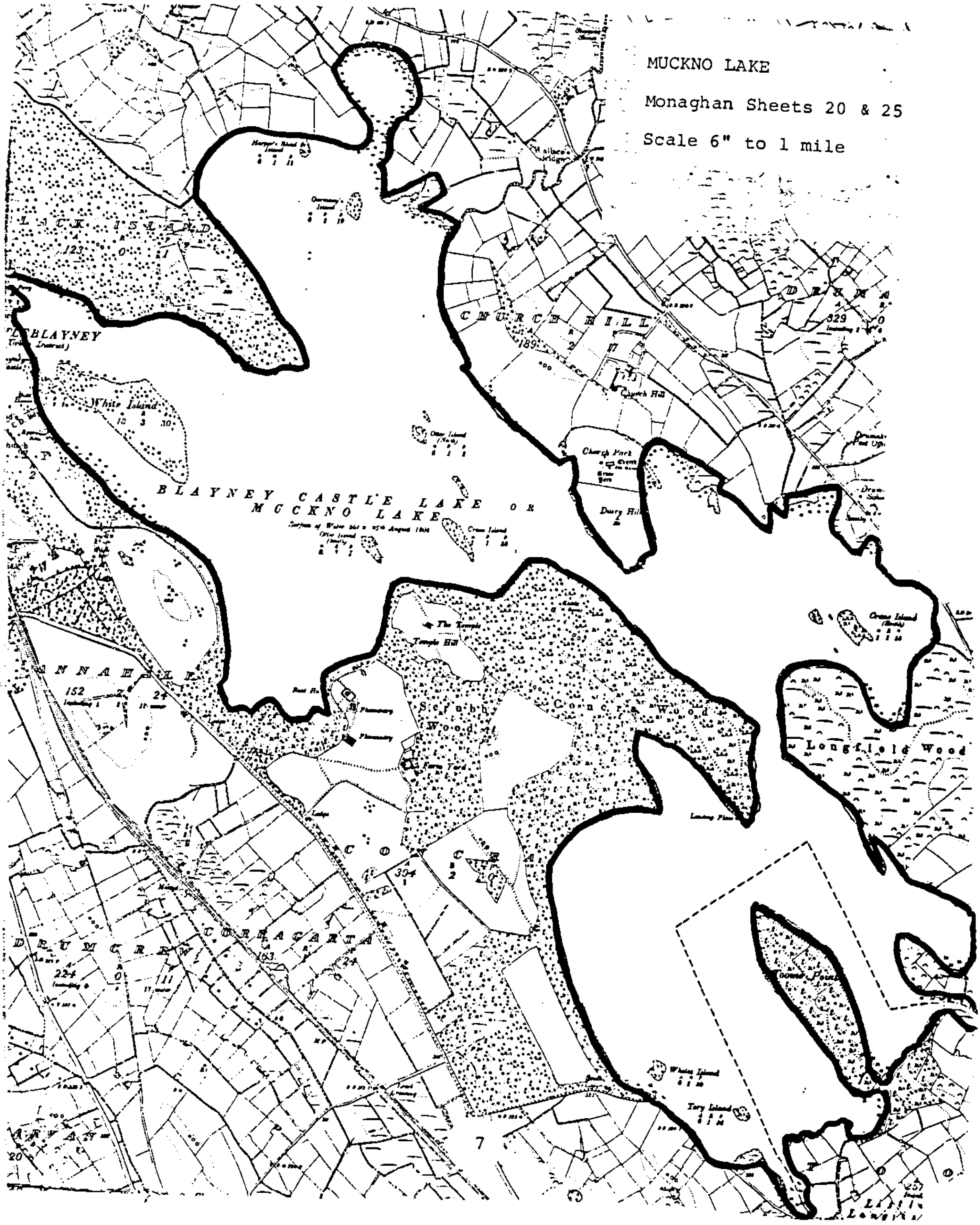
(ii) the use of the lake as a source of urban water supply,

(iii) the use of the lake for recreational purposes.

MUCKNO LAKE

Monaghan Sheets 20 & 25

Scale 6" to 1 mile



Name of Area	RIVERBANK NEAR TOBERMANNAN BRIDGE
Acreage	1 acre
Grid Reference	N 827, 967
Scientific Interest	Geological
Rating	Local Importance

Description of Area

The area of interest is shown on the map overleaf.

In this region the river Lagan passes through flat pasture land. Generally its shallow channel has been cut through clays, but in this bend the river crosses a narrow band of limestone. In this limestone have been found large numbers of the fossil blastoid, Orbitremites derbiensis.

Evaluation

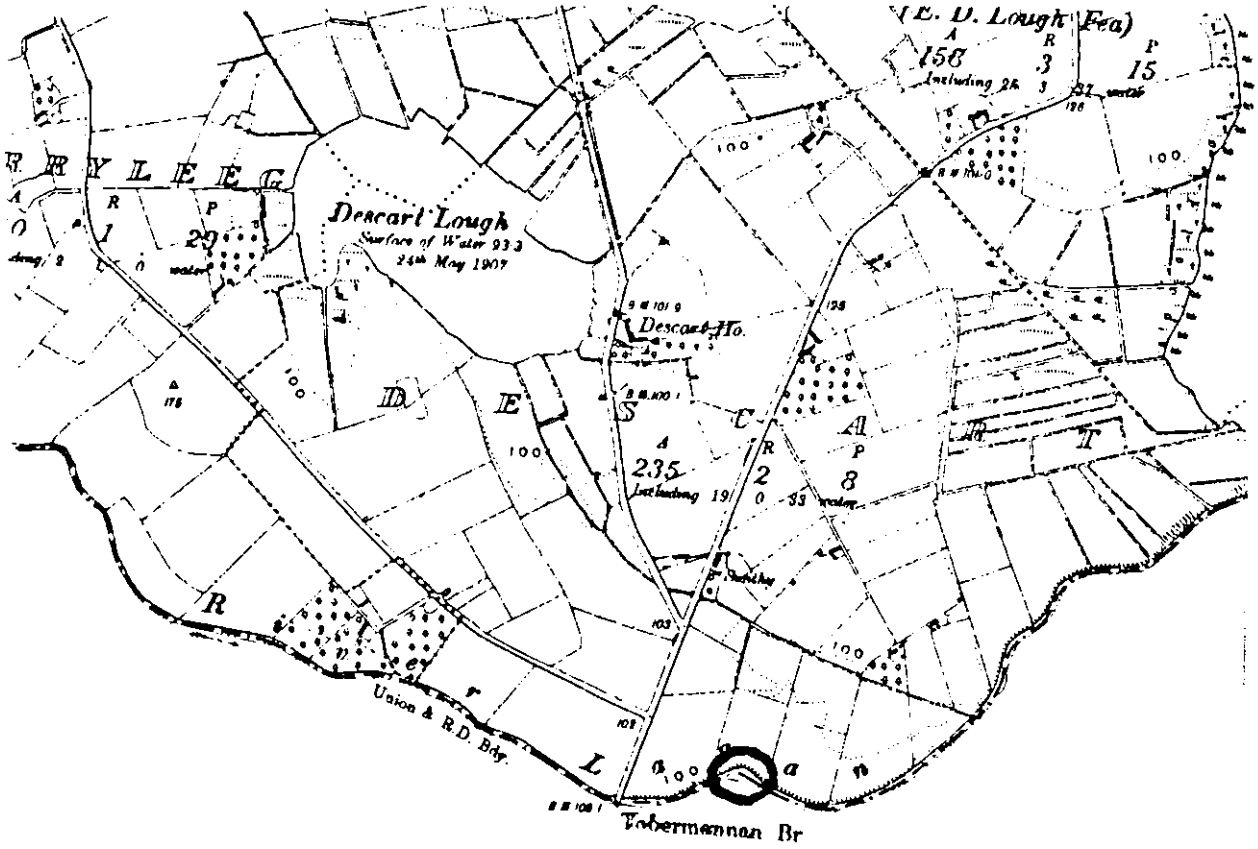
Although this species of blastoid has been found in a number of other localities in Ireland, the extraordinary abundance of specimens at this site results in its being considered a site of scientific importance worthy of conservation.

Threats to the Area

None known or foreseeable.

Recommendations

No development should be permitted that would destroy or restrict access to this site.



TOBERMANNAN BRIDGE

Monaghan Sheet 34

Scale 6" to 1 mile

Name of Area	EMYLOUGH
Size	50 ha.
Grid Reference	H 690, 440
Scientific Importance	Ornithological
Rating	Regional Importance

Description of the Area

The area is outlined on the map overleaf.

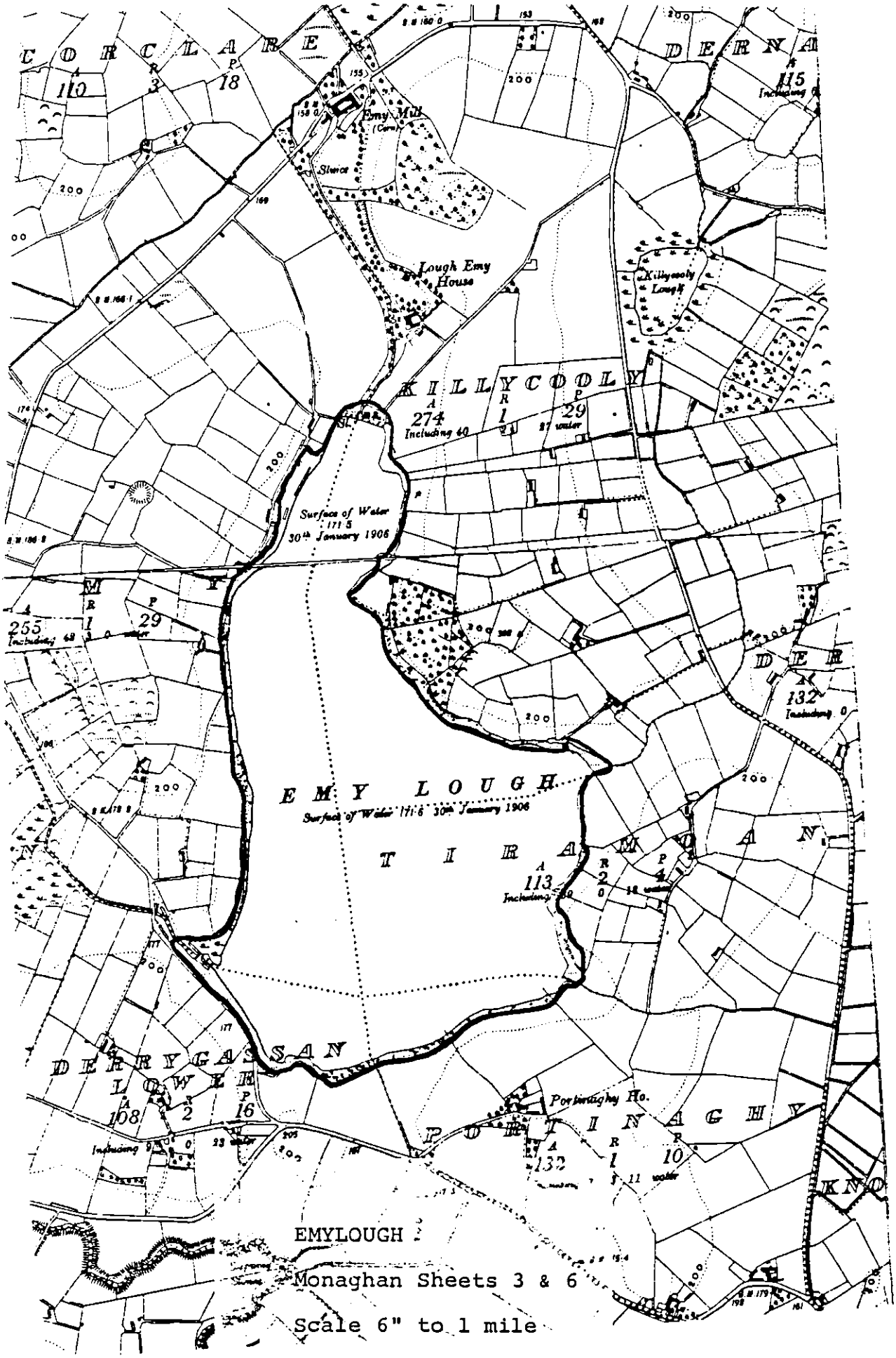
This lake is a mesotrophic lake lying in an inter-drumlin hollow in the Blackwater catchment area. The north and western shores are stony and are fringed by a narrow band of alder (Alnus) and willow (Salix atrocinerea). The southern shore has extensive zones of sedge (Carex vesicaria), horsetail (Equisetum fluviatile) and pondweed (Polygonum amphibium).

The site is of interest ornithologically. A flock of 50-60 greylag geese regularly use it as a night roost. This species of goose has a total Irish wintering population of only c 1,000 confined to a small number of regular sites. A daytime count carried out in December 1980 found the following species present.

Species	Number	Species	Number
Little Grebe	2	Tufted Duck	46
Cormorant	6	Whooper Swan	13
Grey Heron	9	Moorhen	1
Mallard	11	Coot	13

Evaluation

The area because of the roost of greylag geese can be considered to be of regional importance. It is a statutory wildfowl sanctuary.



EMYLOUGH

Monaghan Sheets 3 & 6

Scale 6" to 1 mile

Name of Area	ALLAGESH LOUGH
Size	4.8 ha.
Grid Reference	H 590 346
Scientific Importance	Ecological
Rating	Regional Importance

Description of Site

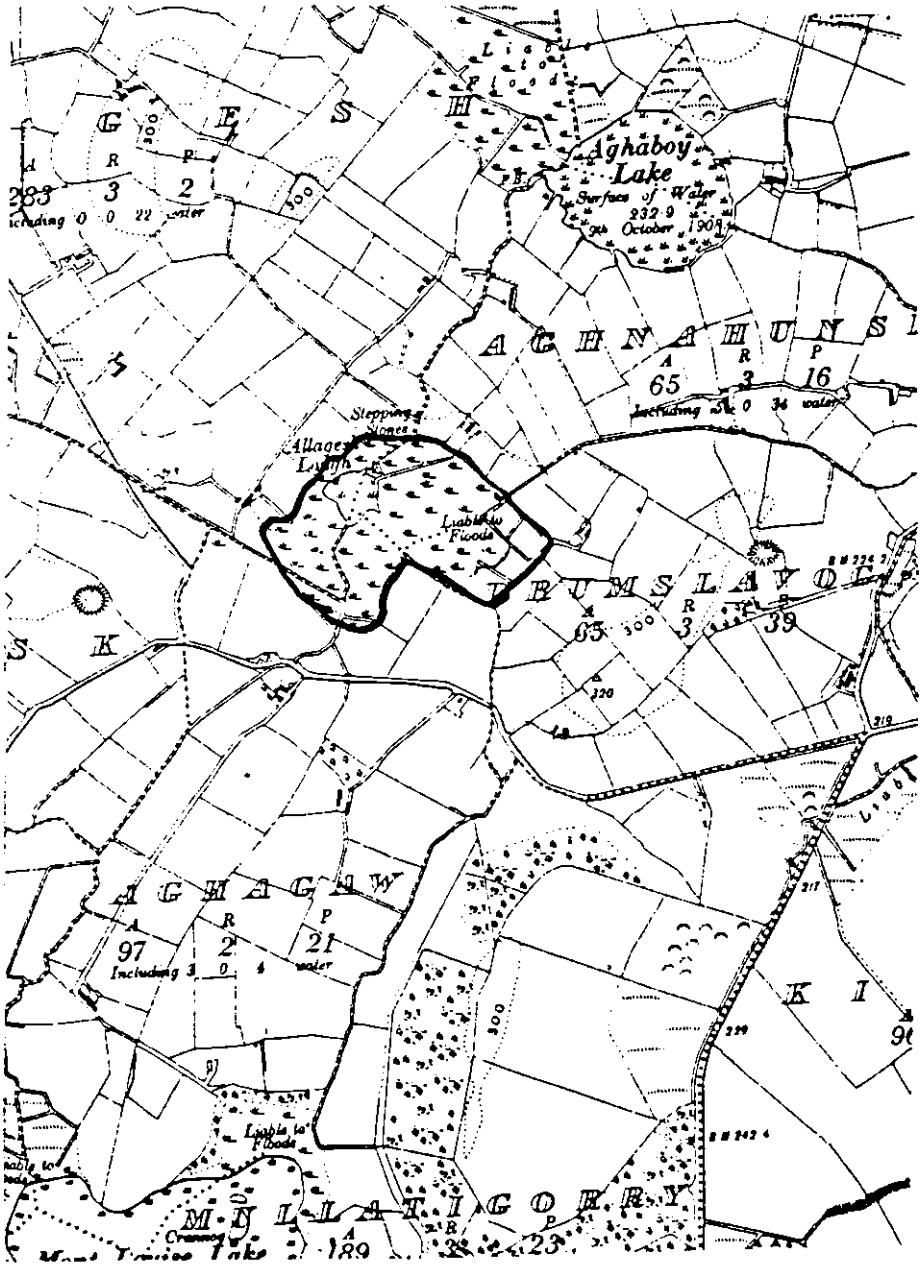
The site of scientific importance at Allagesh Lough is marked on the map overleaf. This is a small calcareous lake almost overgrown with water lily (Nuphar). The water edge is fringed with reed beds of Phragmites (common reed), Scirpus (clubrush), Typha (bullrush) and Sparganium erectum (burr-reed). Outside these reedbeds on the south-east side is an area of quaking scraw bog.

Ten different types of plant communities occur containing such notably rare plants as:

Epipactis palustris	Marsh Orchid
Equisetum variegatum	Horsetail
Carex lasiocarpa	Downy-Fruited Sedge
Carex acutiformis	Lesser Pond Sedge
Carex rostrata	Bottle Sedge
Thelypteris palustris	Marsh Fern
Juncus subnodulosus	Blunt Flowered Rush
Potomogeton coloratus	Pondweed
Utricularia intermedia	Bladderwort

Threats to Site

The site is threatened by drainage works to be carried out by the Office of Public Works which will ruin the site as a site of scientific importance.



ALLAGESH LOUGH

Monaghan Sheet 8

Scale 6" to 1 mile

Name of Area	LISARILLY BOG
Size	1.2 ha.
Grid Reference	H 582 268
Scientific Importance	Ecological (Botanical)
Rating	Regional Importance

Description of Area

Lisarilly Bog is marked on the map overleaf.

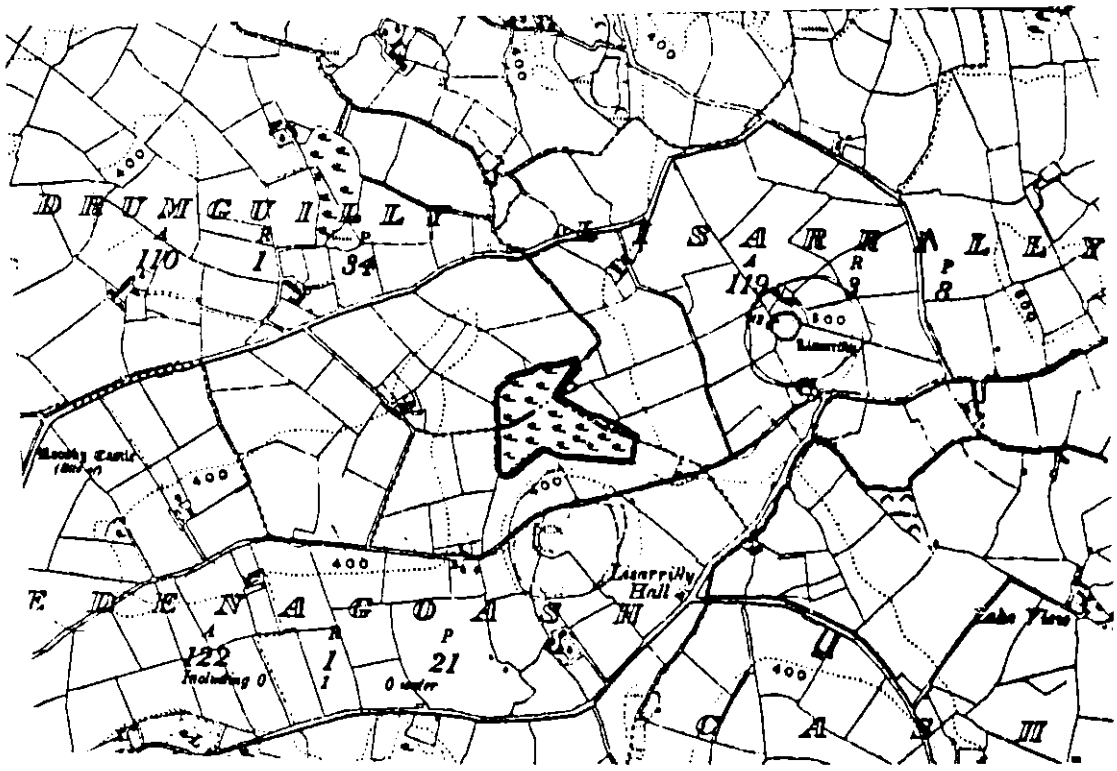
This is a small fen in transition to a raised bog. It is the only reasonably intact example of raised bog development in the Finn-Lachey catchment area and is not due to be drained by the Office of Public Works.

This is an area of acid scraw in a hollow surrounded by drumlins. Some areas have been cut for peat, but it is mostly undisturbed. The following plant communities occur:

Willow Scrub (Salix)
Vaccinium oxycoccus (Cranberry) scraw
Carex diandra (2 Stamened-Sedge) scraw
Sphagnum (Bog Moss), Carex limosa (Mud Sedge) scraw
Grassy zone with Carex rostrata (Bottle Sedge) and Holcus lanatus (Yorkshire Fog)
Sphagnum (Bog Moss) and Menyanthes (Bog Bean) scraw
Cutaway Bog with Calluna (Ling Heather), hummocks and Chara (Stonewort) in pools

Threats to the Area

The area could easily be conserved as drainage is difficult due to its position in the hollow.



LISARILLY

Monaghan Sheet 12

Scale 6" to 1 mile

Name of Area	KILLYHOMAN MARSH
Size	22 ha.
Grid Reference	H 630 523
Scientific Importance	Ecological
Rating	Local

Description of Area

This area of scientific importance is marked on the map overleaf.

This is an area of solid scraw which has been invaded by Salix (willow), Alnus (alder) and Betula (birch). There is a succession from scraw with such plants as:

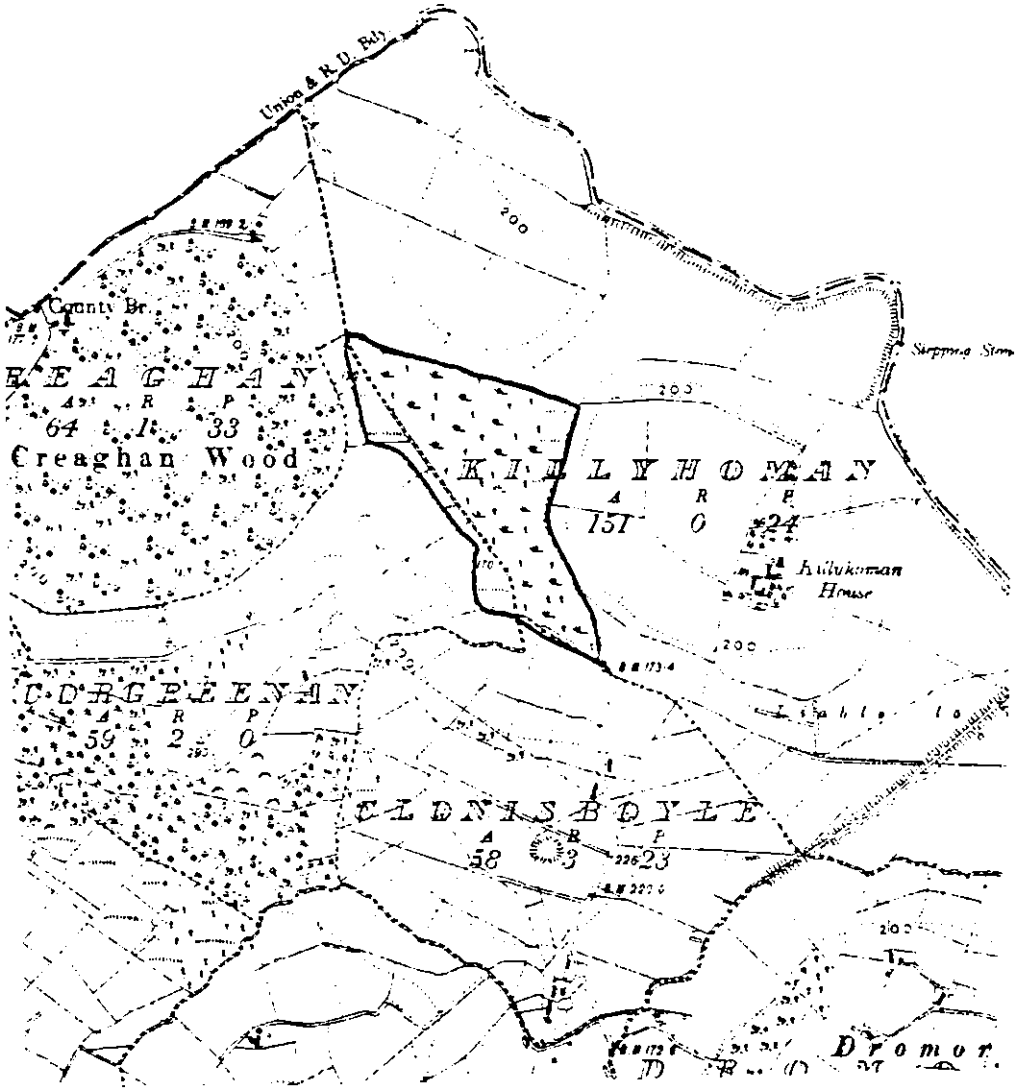
Equisetum fluviatile	Horsetail
Carex nigra	Common Sedge
C. diandra	Two-Stamened Sedge
C. rostrata	Bottle Sedge
Typha angustifolia	Bullrush

to birch woodland on wet mineral soil.

Threats to the Site

The area is listed for drainage under the Office of Public Works Blackwater catchment drainage scheme. If this takes place the reclamation following the drainage will destroy the scientific interest.

This site is at the end of the proposed drainage channels and could be removed from the scheme with a minimum degree of disruption.



KILLYHOMAN MARSH

Monaghan Sheet 1

Scale 6" to 1 mile

Name of Area	CORCREEGHY LAKE AND WOODLANDS
Size	4.6 ha.
Grid Reference	H 627 315
Scientific Importance	Ecological (Botanical)
Rating	Local

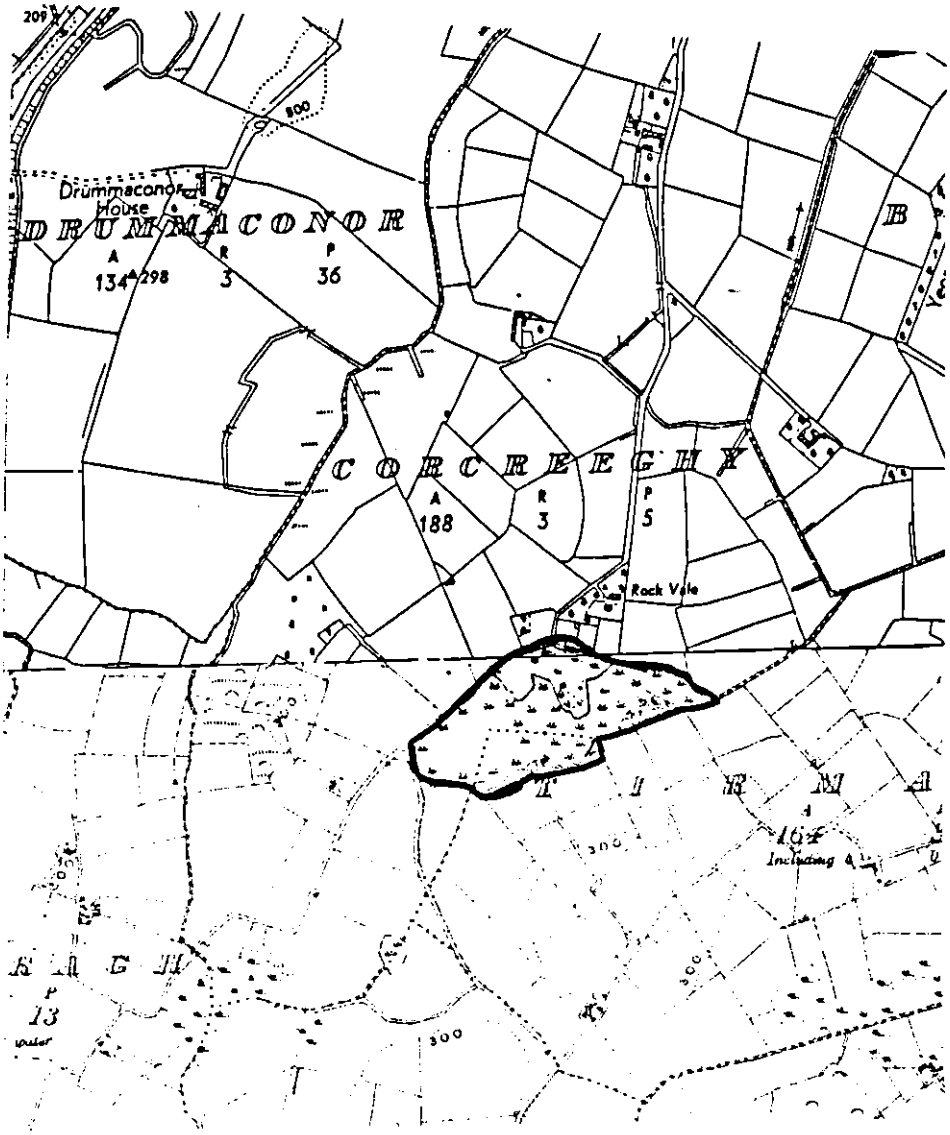
Description of Area

The area is marked on the map overleaf.

This is a small undisturbed lake with a thin margin of marsh/scraw with the exception of the eastern end which has extensive wet Salix (willow), Alnus (alder) woodland, with Thelypteris palustris (marsh fern), a plant rare in County Monaghan. There is an intact succession from open water, through reed beds of Phagmites (common reed), to a drier marsh with Angelica, Filipendula (meadow sweet), Lychnis flos-cuculi (ragged robin), Eriophorum angustifolia (bog cotton) to woodland with willow and beech. This wetland is notable in that it occurs in an area of shale and grits.

Threats to Area

This area will be drained if the present OPW plan for draining the Blackwater catchment area goes ahead. However as the site occurs at the end of a drainage channel it could be removed from the scheme with a minimum degree of disruption.



CORCREEGHY

Monaghan Sheet 13

Scale 6" to 1 mile

Name of Area	ROSEFIELD LAKE AND WOODLAND
Size	14 ha.
Grid Reference	H 633 337
Scientific Importance	Ecological (Botanical)
Rating	Local Importance

Description of Area

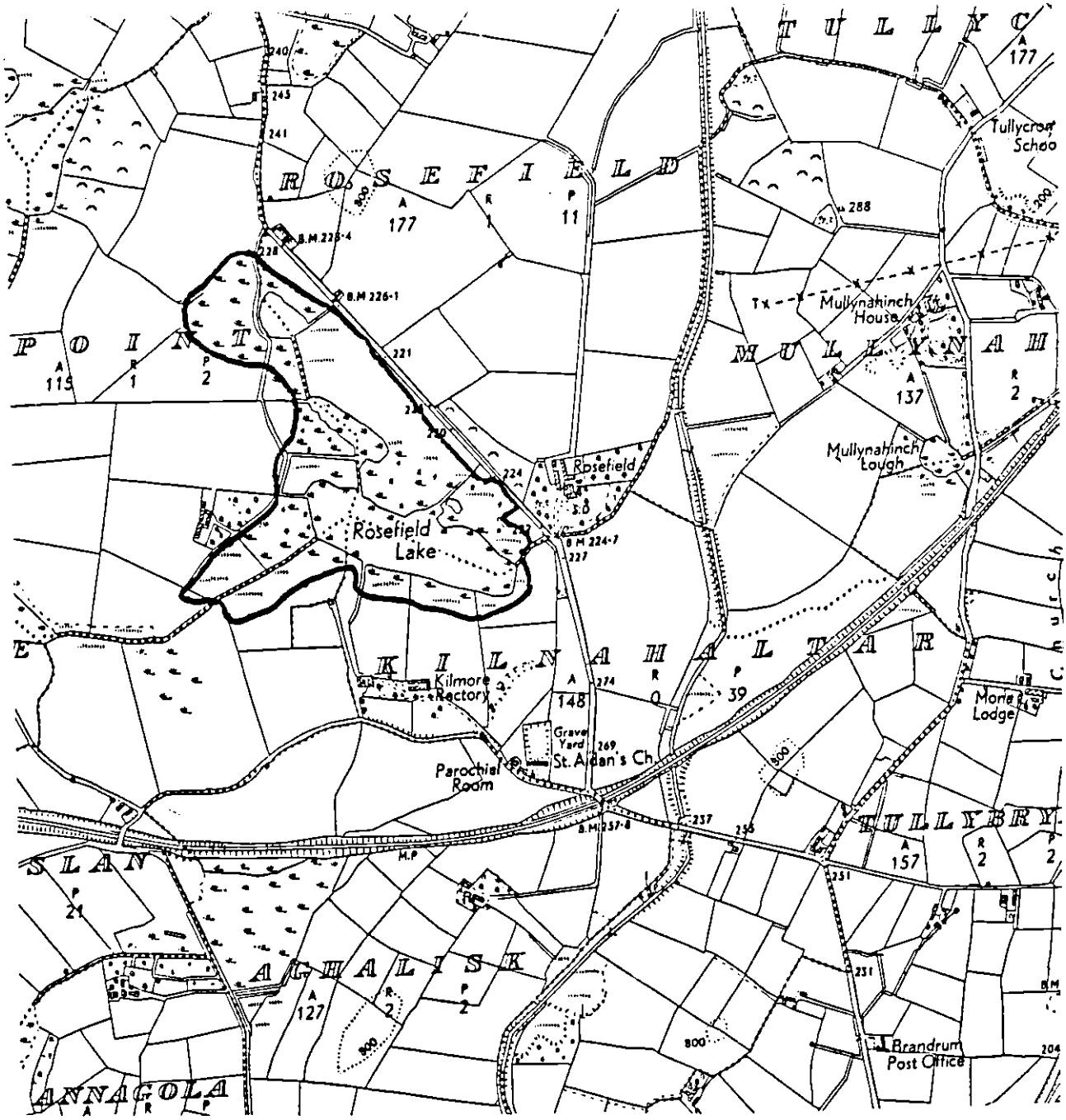
Rosefield Lake and the surrounding zone of scientific importance are shown on the map overleaf.

This is a calcareous lake surrounded by reed beds and an alder wood. The lake contains Chara (stoneweed), Elodea (Canadian pondweed) and Potamogeton natans (pondweed). There is an emergent zone of Scirpus lacustris (clubrush), Typha (bullrush) and Cladium (saw sedge). This zone is surrounded by reed beds of Phragmites (common reed), Carex rostrata (bottle sedge) and Juncus articulosis (rush). There is an alder wood on the north, east and west margins varying in width from 1-20 m which contains Salix atrocinerea (willow) and Carex disticha (creeping brown sedge).

This is a very good example of the transition from lake shore to alder woodland.

Threats to Area

This area is threatened by the OPW Blackwater drainage scheme.



ROSEFIELD LAKE

Monaghan Sheet 9

Scale 6" to 1 mile

Name of Area	MULLAGHMORE LAKE (SOUTH)
Size	20 ha.
Grid Reference	H 624 381
Scientific Importance	Ecological (Botanical and Ornithological)
Rating	Local Importance

Description of Area

This site of scientific importance is marked on the map overleaf.

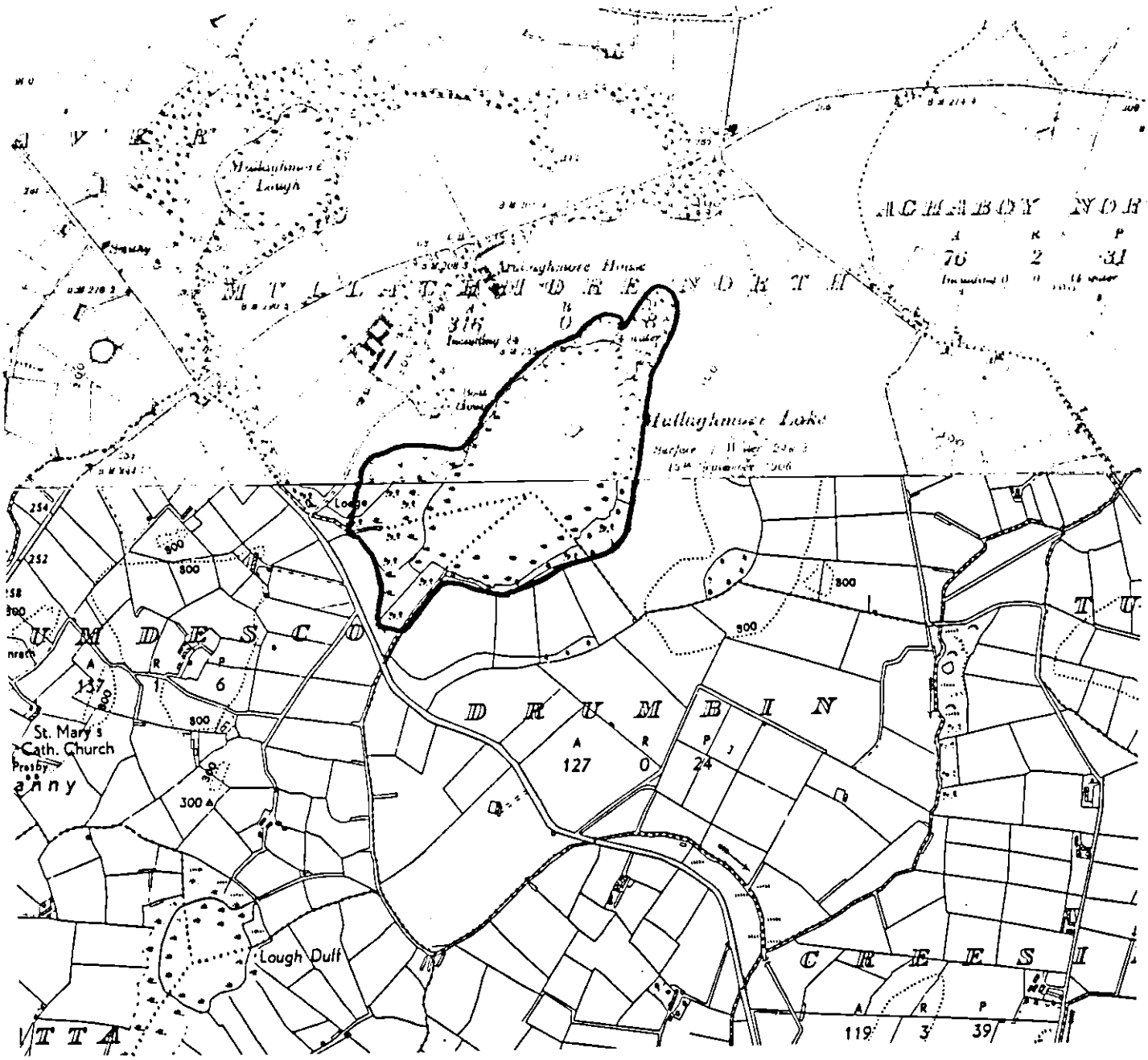
This is a shallow lake which is rapidly infilling, and provides an excellent example of colonisation of open water by floating scraw.

The lake surface is colonised by Nymphea and Nuphar (lilies). The emergent vegetation consists of dense reed beds of Scirpus lacustris (clubreed) and Equisetum fluviatile (horsetail) especially in the south and west. This is surrounded by marsh vegetation containing Menyanthes (bog bean), Lysmachia vulgaris (yellow loosestrife) and Galium palustris (marsh bedstraw). There is an alder/willow scrub woodland on the SE side.

There is a better than average number and variety of waterfowl on the lake including Tufted Duck, Pochard, Mute and Whooper Swan and a small breeding colony of Grey Heron.

Threats to the Site

None. This area is not in the Blackwater drainage scheme.



MULLAGHMORE LOUGH

Monaghan Sheet 6

Scale 6" to 1 mile

Name of Area	KILROOSKY AND DUMMY'S LOUGH
Size	11 ha.
Grid Reference	H 490 275
Scientific Importance	Ecological (Botanical)
Rating	Local Importance

Description of Area

This area of scientific interest is marked on the map overleaf.

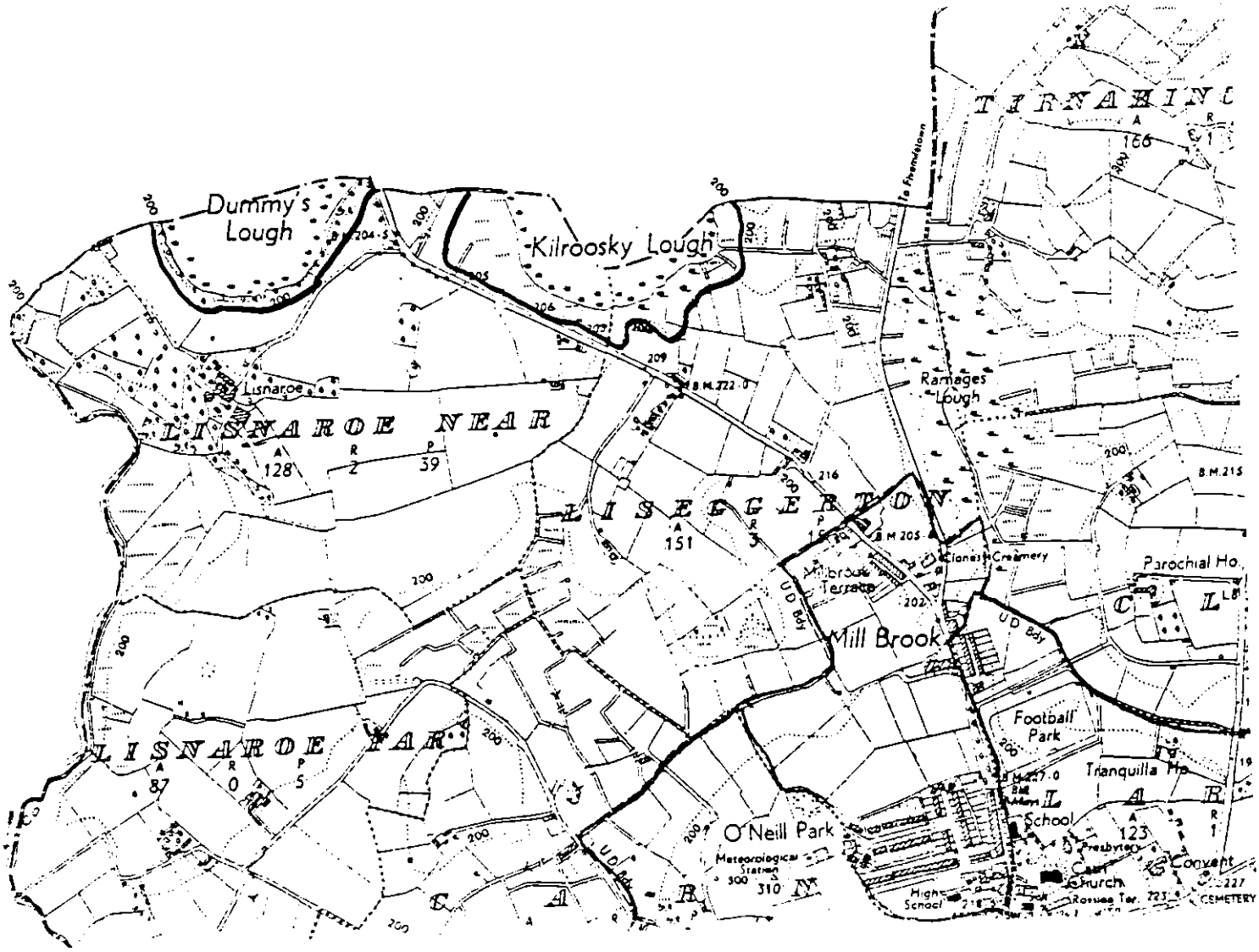
Kilroosky Lake is a large calcareous lake with beds of Chara (stone-wort), Nuphar and Nymphea (water lilies). Reed beds of Scirpus (club-rush), Phragmites (common reed) and Cladium (saw sedge) encircle the lake. There is some woodland on the western shore. Six different plant communities and 43 plant species have been recorded in the area, of which the following are the most interesting:

Eleocharis quinqueflora	Spike-Rush
Potamageton coloratus	Pondweed
Parnassia palustris	Grass of Parnasseus
Epipactis palustris	Marsh Helleborine
Galium uliginosum	Fen Bedstraw
Cladium mariscum	Saw Sedge

Dummy's Lake is a calcareous lake surrounded by reed beds of Cladium (saw-sedge) and Typha angustifolia (bullrush). These well developed reed beds constitute the scientific importance of the lake.

Threats to the Area

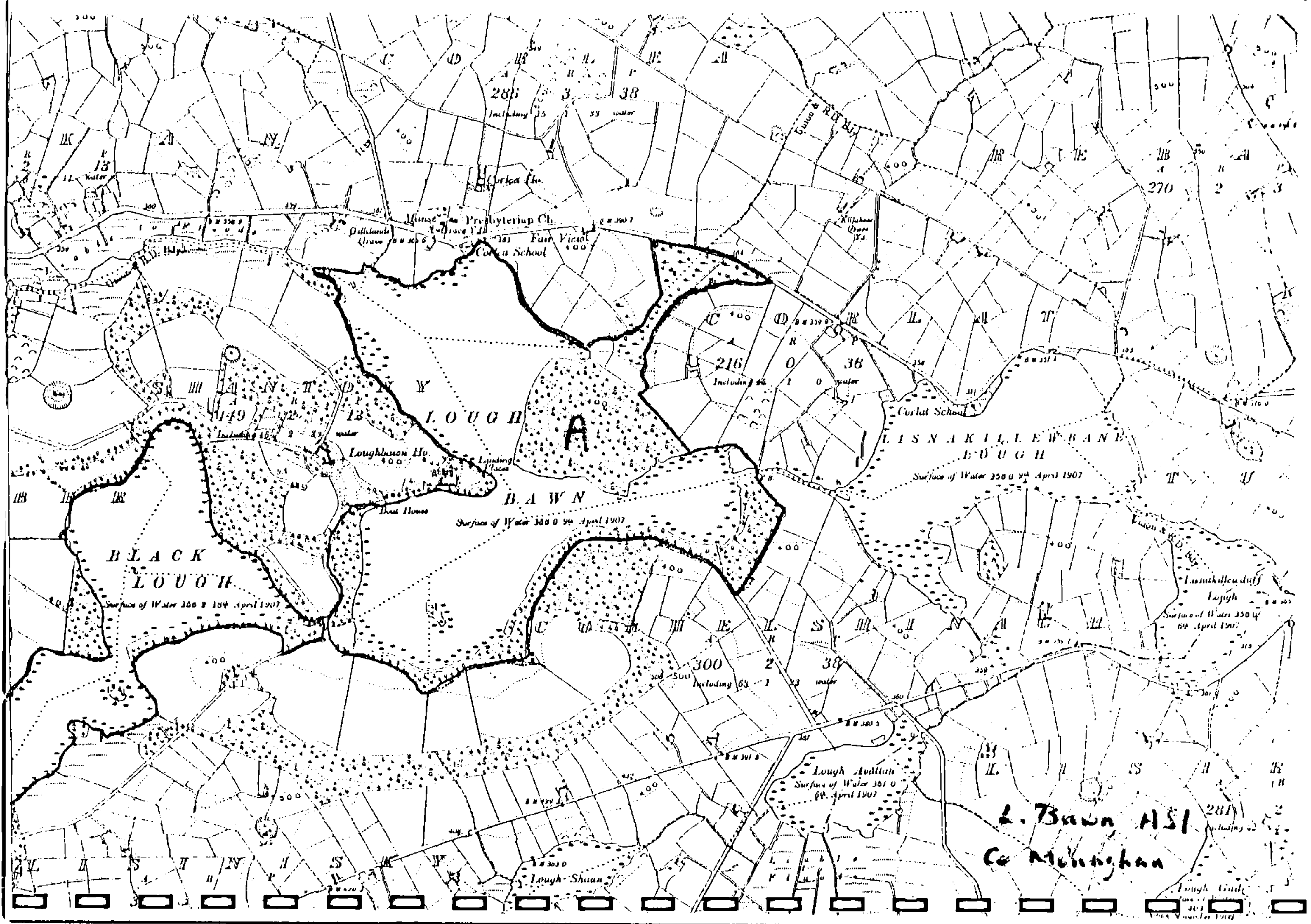
These two lakes are not due to be drained under the Office of Public Works catchment drainage schemes in Monaghan and so are not under any foreseeable threat in the future.



KILROOSKY AND DUMMY'S LAKES

Monaghan Sheet 11

Scale 6" to 1 mile



LOUGH BAWN
Surface of Water 366 0 9th April 1907
BLACK LOUGH
Surface of Water 366 2 18th April 1907
LISNAKILLEW BANE LOUGH
Surface of Water 356 0 9th April 1907
Lough Avaltan
Surface of Water 361 0 6th April 1907
Lough Shaun
Loughbawn Ho.
Boat House
Landing Place
Corlat School
Corlea School
Manse
Presbyterian Ch.
Fair View
Corlea Ho.
A
L. Bawn 451
Co Monaghan

CONSERVATION AND AMENITY
ADVISORY SERVICE

Revisions to the List of Areas of Scientific Interest in County Offaly

Eanna Ni Lamhna

April 1984

INDEX

Introduction

A Preliminary Report on the Areas of Scientific Interest in County Offaly was produced by An Foras Forbartha in 1972. This contained 37 areas, of which thirty-four were listed in the 1979 Offaly County Development Plan as areas of scientific importance worthy of conservation.

In 1981, Areas of Scientific Interest in Ireland was published by An Foras Forbartha, in which areas of scientific importance in each county were revised, updated, and summarised. For County Offaly thirty-five areas are considered to be of scientific importance; i.e. four were dropped from the 1972 County Report; four were described under two headings and four new ones were added.

Fieldwork in County Offaly has been carried out by the Department of Environmental Studies in Trinity College, and by the Forest and Wildlife Service since 1981 and as a result of this work two additional areas of scientific interest have been added. A schedule to the 1976 Wildlife Act added in 1980 52 plant species to the list of preserved species in Ireland and in addition to making it an offence to remove the plants it also made it an offence to interfere with the habitat of the plant. Three sites where these protected species grow occur in County Offaly.

The situation in 1984, therefore is as follows:-

- There are 37 listed areas of scientific interest in County Offaly.
- 35 of these are listed and briefly described in the report Areas of Scientific Interest in Ireland, 1981, and include 4 new areas since the County Report of 1972.
- An additional 2 sites have been added since 1981.
- A new category - sites which contain a plant species protected under the 1976 Wildlife Act - has been devised and County Offaly has 3 such sites.
- Four areas have been dropped since the original County Report of 1972. These are listed over and were all included in the 1979 County Offaly Development Plan.

No. in County Report, 1972	Name of Area	Reasons for Omission from Current List
28	Leap Castle	The two plants for which it was conserved are not now rare enough in Ireland to warrant the site's protection.
31	Shannonbridge Bog	Much better areas of bog have been described since.
32	Knockydown Wood	Not now considered worthy of preservation. It is not a natural woodland and has poor ground flora.
36	Quarry Nr. Cloneen	Not now considered of scientific importance. Better examples of the vegetation types described occur elsewhere in Offaly.

- Areas 6 and 26 in the 1972 report have been merged to form Area 8 in Areas of Scientific Interest in Ireland, 1981, and Areas 4 and 15 have been merged to form Area 4.

Additional Areas of Scientific Interest in County ~~Monaghan~~ Offaly

The following pages describe areas of scientific interest which should be added to those in the County Report of 1972. The areas are in three groups:

(i) In the report Areas of Scientific Interest in Ireland four sites extra to the 1972 report are named. These are:-

No. 3 Rahugh Ridge (Kiltober Esker)

No. 6(a) Mongan's Bog

No. 24 Camcor Wood

No. 32 Lough Boora

(ii) Since 1981 two other sites of scientific importance have been added. These are:

Camas Callows, Clonmacnoise

Screggan Bog

(iii) Sites which contain plant species protected under the Wildlife Act 1976. These are:

Canal at Tullamore

Canal at Kilbeggan

Shannonharbour near Bullock Island

Name of Area	RAHUGH RIDGE (KILTOBER ESKER)
Size	30 ha
Grid Reference	N 39 32
Scientific Interest	Ecological (botanical, geomorphological)
Rating	National
Priority	A

Description of Area

The area of interest is shown overleaf.

The vegetation on this esker is semi-natural woodland. Oak (Quercus robur) is frequent and is regenerating. Among the species recorded are:-

Rosa arvensis	field rose
Hypericum androsaemum	tutsan
Fragaria vesca	wild strawberry
Potentilla sterilis	barren strawberry
Viola riviniana	violet
Geum urbanum	wood avens
Sanicula europaea	wood sanicle
Conopodium majus	pignut
Galium odoratum	woodruff
Stachys sylvestris	hedge woundwort
Ajuga reptans	bugle
Glechoma hederacea	ground ivy
Lysimachia nemorum	yellow pimpernel
Primula vulgaris	primrose

Hyacinthoides non-scripta	bluebell
Orchis mascula	early purple orchid
Festuca gigantea	tall brome
F. altissima	a grass

Mosses are common and Atrichum undulatum, Brachythecium rutabulum, Eurhynchium striatum and Plagiochila asplenoides were noted as common species. Several grassy areas occur on its south side in which characteristic species occur. Some are being actively enlarged by scrub clearance and grazing sheep. Four pheasants were seen in this wood and there was evidence of badgers.

Evaluation

Two things make Rahugh Ridge interesting ecologically. One is the presence of oak, presumably the climax forest tree of the area. Its first establishment, spread and influence on the rest of the vegetation are interesting ecological facets of plant succession.

Equally important for geomorphologists is the preservation of the end of an esker: regions of transition frequently are more useful than regions of stability.

Vulnerability

Removal of material though it bares the sediments to the eyes of geomorphologists, at the same time destroys any biological interest in the area. The largest eskers are most vulnerable to exploitation, but they are also the rarest.

Recommendations

The sand pits should not be allowed to breach the ridge.

Felling of hazel and other trees along the south side should not be allowed to spread further as a wood on the south side is a valuable comparison for the more extensive cover on the north. Grazing animals should be confined by agreement with the landowner.

A conservation order is desirable to prevent the gradual destruction of the esker itself and of its scientific interest.

Name of Area	MONGAN'S BOG
Acreage	100 ha
Grid Reference	N 03 30
Scientific Interest	Ecological
Rating	International

Description of Site

This bog is situated 1.5 km west of Clonmacnoise on the Athlone road. It is currently owned by Bord na Móna but it is planned to transfer ownership to An Taisce, when it will be managed for conservation purposes.

From the edge there is a 50 m margin where pools dry out regularly in summer. In this area woodrush (Luzula multiflora) and purple moor grass (Molinia caerulea)occur but the flora mainly consists of the typical raised bog plants:

Carnation grass	Carex panicea
Bell heather	Erica tetralix
Bog cotton	Eriophorum angustifolium
Hare's tail grass	Eriophorum vaginatum
Bog aspodel	Narthecium ossifragum
Deer grass	Scirpus caespitosus
White beak sedge	Rhynchospora alba
Beak sedge	Rhynchospora fusca*

*common on this bog, rare elsewhere.

A limited number of Sphagnum spp.(bog moss) (4-5) besides other bryophytes are found here with several species of Cladonia (Reindeer moss). As one penetrates the wetter area of hummocks and permanently wet pools, only the more typical bog plants are found. The number of Sphagnum species increases while on the hummocks, some of the Calluna (heather) stems (up to 30 years old) have a rich and diverse epiphytic flora 10 species/stem. Scheuzeria palustris, a rare bog plant was transferred here in

1959 but has not been seen recently. This plant was transferred because the bog where it grew, Pollagh Bog, was earmarked for development by Bord na Móna.

Lists are available of all the vascular plants, mosses, lichens and macrofungi. Up to 300 species of invertebrates have been identified. These include 120 species of lepidoptera: 60 spiders: 20 each of beetles Trichoptera: Hymenoptera and Hemiptera, 12 of Diptera, 6 of Odonata: and two each of harvestmen centipedes Orthoptera: with a single mollusc, the common slug.

Also found on the bog are frogs and hares which construct their forms in the drier hummocks. Snipe are seen regularly, grouse not as often and in winter the Greenland white-fronted geese are known to roost on the bog.

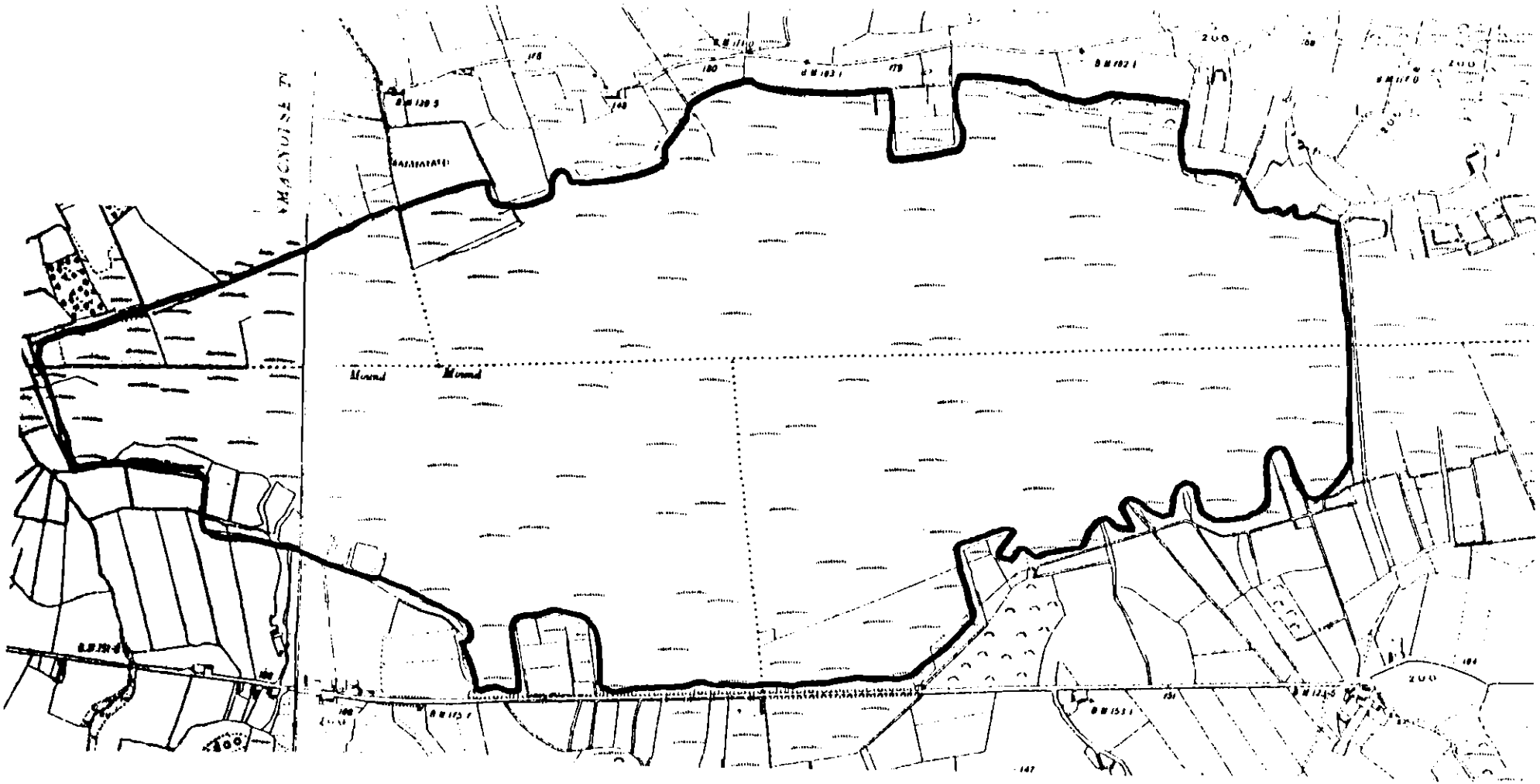
Information is also available on the hydrological regime affecting the bog, in particular how the water table rises and falls each season, and on flow lines through the cutaway margin. Current work involves the examination of a dated peat core which will provide information on the rate of peat accumulation.

Evaluation

The raised bog is relatively intact and as a result of widespread destruction of other bogs is rapidly increasing in importance for conservation. The central portion of the bog has not been interfered with by fire or drainage and gives a good impression of the natural condition of such a bog, now modified at most other sites. The heather is of substantial age and has a particularly rich lichen flora. As a result of current studies this is probably the best documented bog in the country.

Recommendations

Drainage of surrounding land could damage this valuable site and should be controlled as far as possible.


Mound
Mound

Name of Area	CAMCOR WOOD
Size	10 ha
Grid Reference	N 22 04
Scientific Importance	Ecological
Rating	Local Importance

Description of Area

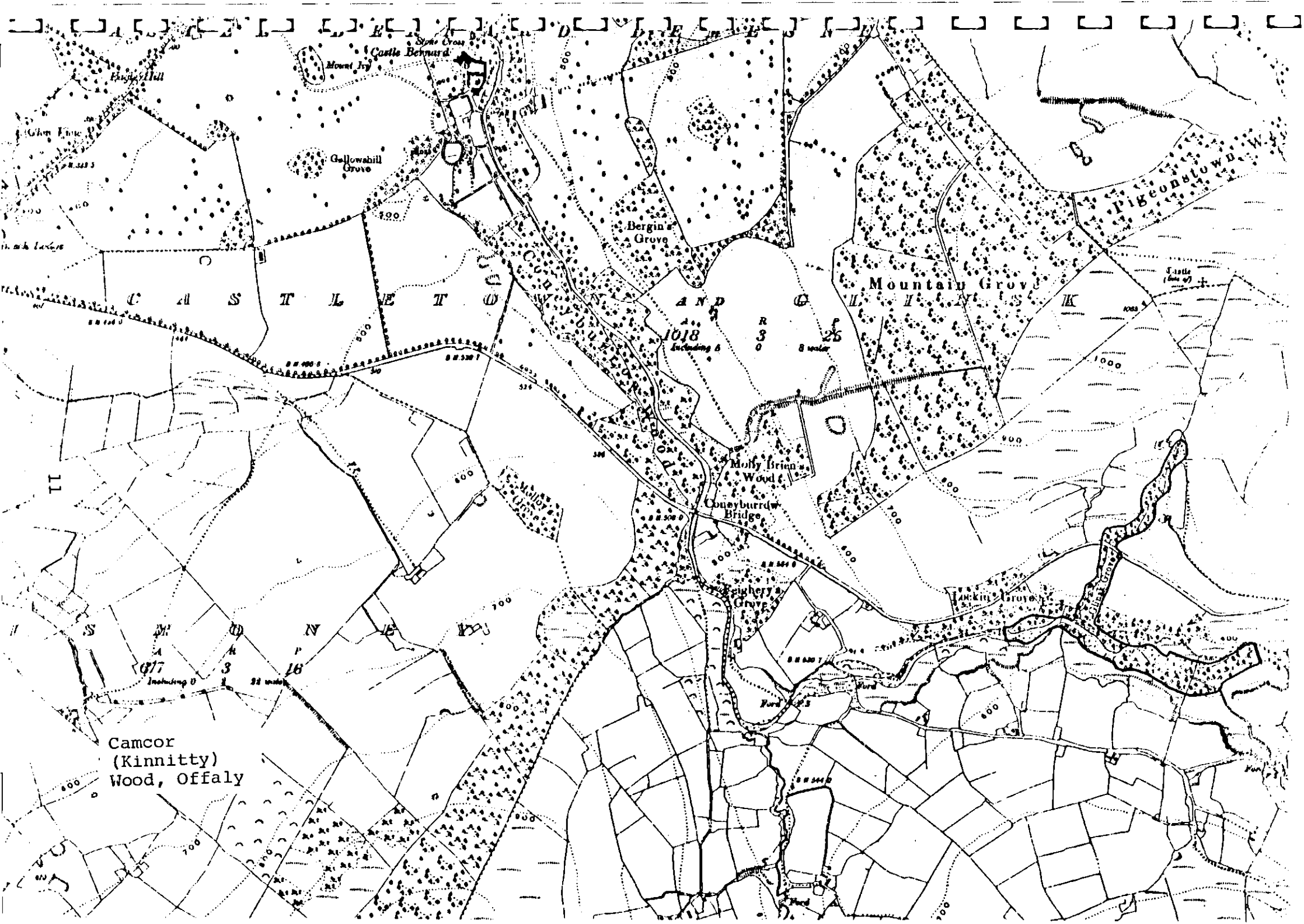
The area of interest is outlined on the map overleaf. It is an alder woodland in the Camcor Valley on the mountain slopes above Kinnitty. Alder is the dominant tree and it is regenerating. There is also birch, hazel, elm and ash with an understorey of hawthorn, holly and willow. Ground cover includes such species as bluebell (Hyacinthoides non-scriptus), bugle (Ajuga reptans), meadow sweet (Filipendula ulmaria), wood sorrel (Oxalis acetosella) and enchanter's nightshade (Circaea lutetiana). Altogether twelve species of fern, fifteen grasses, 42 mosses and ninety higher plant species have been recorded.

Evaluation

It is thus a very species rich woodland with canopy understorey, ground and moss flora intact. Such alder woodlands are uncommon.

Recommendations

Grazing should continue to be prevented as this would prevent the regeneration of the trees and be detrimental to the ground flora.


Camcor
(Kinnitty)
Wood, Offaly

Name of Area	LOUGH BOORA
Size	40 ha
Grid Reference	N 16 18
Scientific Importance	Botanical and archaeological
Rating	Local Importance

Description of Area

The botanical site (which is now the property of the Irish Wildlife Federation) and the archaeological sites are shown on the map overleaf.

The Lough Boora site is a former peatland lake, approximately 40 ha. in area, which was drained by Bord na Móna during the development of the surrounding bog in 1951. Since then the surface of the western portion has been left undisturbed allowing colonisation and regeneration of plants on a drained lake-bed consisting of shallow fen peat overlying calcareous shell-marl.

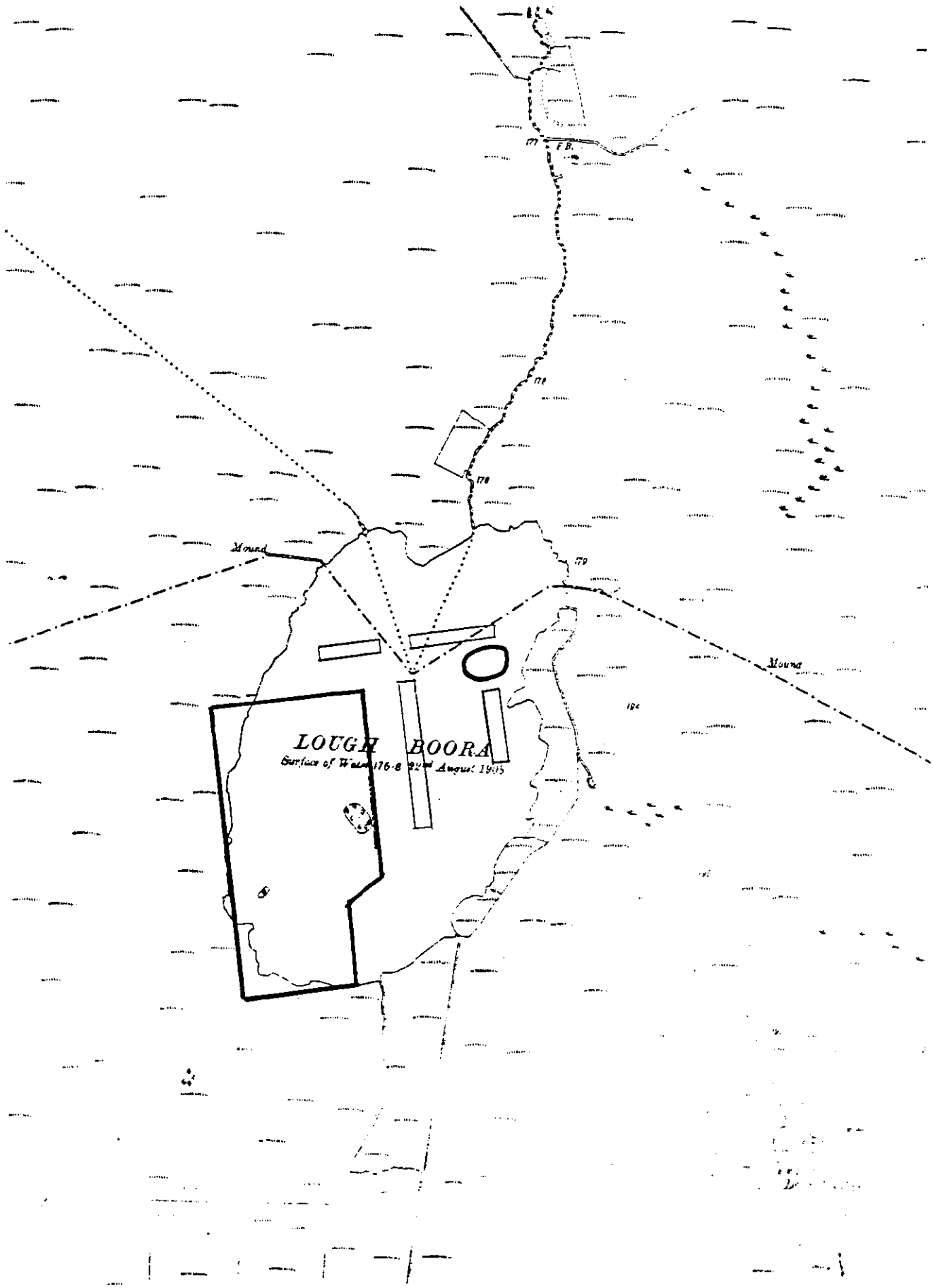
Trees which have colonised the site include Betula (birch) and Salix sp. (willow). The ground vegetation consists of a mixture of acid-loving plants, such as Myrica gale (bog myrtle), Eriophorum angustifolium (cottongrass) and Calluna vulgaris (heather), and more base loving fen species. These include Cladium mariscus (saw sedge), Potentilla palustris (marsh cinquefoil) and Lychnis flos-cuculi (ragged robin). The site also contains various orchids, e.g. Dactylorhiza spp., Gymnadenia conopsea (fragrant orchid) and Platanthera bifolia (butterfly orchid), and a wide range of fen mosses.

In 1976 during the excavation of silt traps, which prevent the pollution of streams and rivers by water-borne silt from Bord na Móna production areas, sections of a stone ridge or causeway were uncovered in the eastern section of the lake-bed. Investigation of this stone ridge, by the Geological Survey, suggested that it originated as a storm beach along the eastern edge of a large post-glacial lake. The ridge runs north-south and maintains a fairly constant level at 52 m (170') O.D. From depth/contour studies of the basin it has been established that a lake with a surface level of around 52 m could have occupied an area of 320 ha. in the post-glacial era. Later growth and development of the raised bog, especially during the last 2,500 years, impounded a much smaller lake (Lough Boora) to a height of 2 metres above the ancient lake.

An Early Mesolithic site has been discovered on the shore of this ancient lake. The site was excavated in 1977 under the supervision of Mr Michael Ryan of the National Museum. These excavations revealed areas rich in charcoal - "ancient hearths", burnt animal bones and debris of toolmaking from chert. Artefacts found at the site include microliths, chert and flint blades, chert scrapers and polished stone axes. The animal bones reveal that the Mesolithic diet included deer, wild pigs, hares, birds and fish.

Radiocarbon dating of charcoal from the hearts gave dates ranging from 8,400 BP to 9,000 BC, establishing the presence of man in this area in the 7th millenium BC. This was the first evidence of an Early Mesolithic, hunter-gatherer settlement in the Irish midlands. Other sites may have been inhabited along the lake shore, but these must await further removal of the peat by Bord na Móna before discovery and excavation.

Thus this area contains both an area of scientific interest and an archaeological site and it may be categorised under both headings.


177
F.B.
178
178
Mound
179
Mound
LOUGH BOORA
Surface of Water 176·8 ... August 1905

Name of Area	CAMUS CALLOWS, CLONMACNOISE
Acreage	56 ha
Grid Reference	N 02 3I
Scientific Interest	Ecological (B, O)
Rating	National

Description of Site

Camas callows lie directly below and to the north of the National Monument at Clonmacnoise. Access is via the banks of the Shannon or down the track to the left just beyond the Nun's Chapel.

The list of plants identified in the flooded zone comes to 128 species which are found in several distinct areas.

1. Between the Shannon's edge and nearby esker ridge there is a distinct zonation in plant distribution.

   Water's edge ⟶ wet margin ⟶ drier land

   Plants at the edge include such species as bulrush (Scirpus lacustris), pondweed (Potamogeton pectinatus), Canadian pondweed (Elodea canadensis) and yellow water-lily (Nuphar lutea). In the wet margins are such species as water mint (Mentha aquatica), marsh forget-me-not (Myosotis scorpioides) and common spike-rush (Eleocharis palustris). On the drier land are tussocks, two feet high, of tufted sedge (Carex elata) and also marsh cinquefoil (Potentilla palustris).

   This margin also broadens into a reed swamp which is an important wildfowl habitat.

2. The area is criss-crossed with drains. Along these are found:

Branched bur-reed (Sparganium erectum), water parsnip (Sium latifolium), great spearwort (Ranunculus lingua) and reed sweet grass (Glyceria maxima).

Beside the drains and in the nearby meadows is found marsh pea (Lathyrus palustris) which is very common throughout the callows.

3. In the centre of the callows, is an acidic heath dominated by purple moor-grass (Molinia) which rarely gets flooded.

The whole area is of great importance to wintering wildfowl as well as having a resident population of ducks and swans. Corncrakes are known to nest in the meadows while in winter Greenland white fronted geese feed on the aftergrass in the hay meadows.

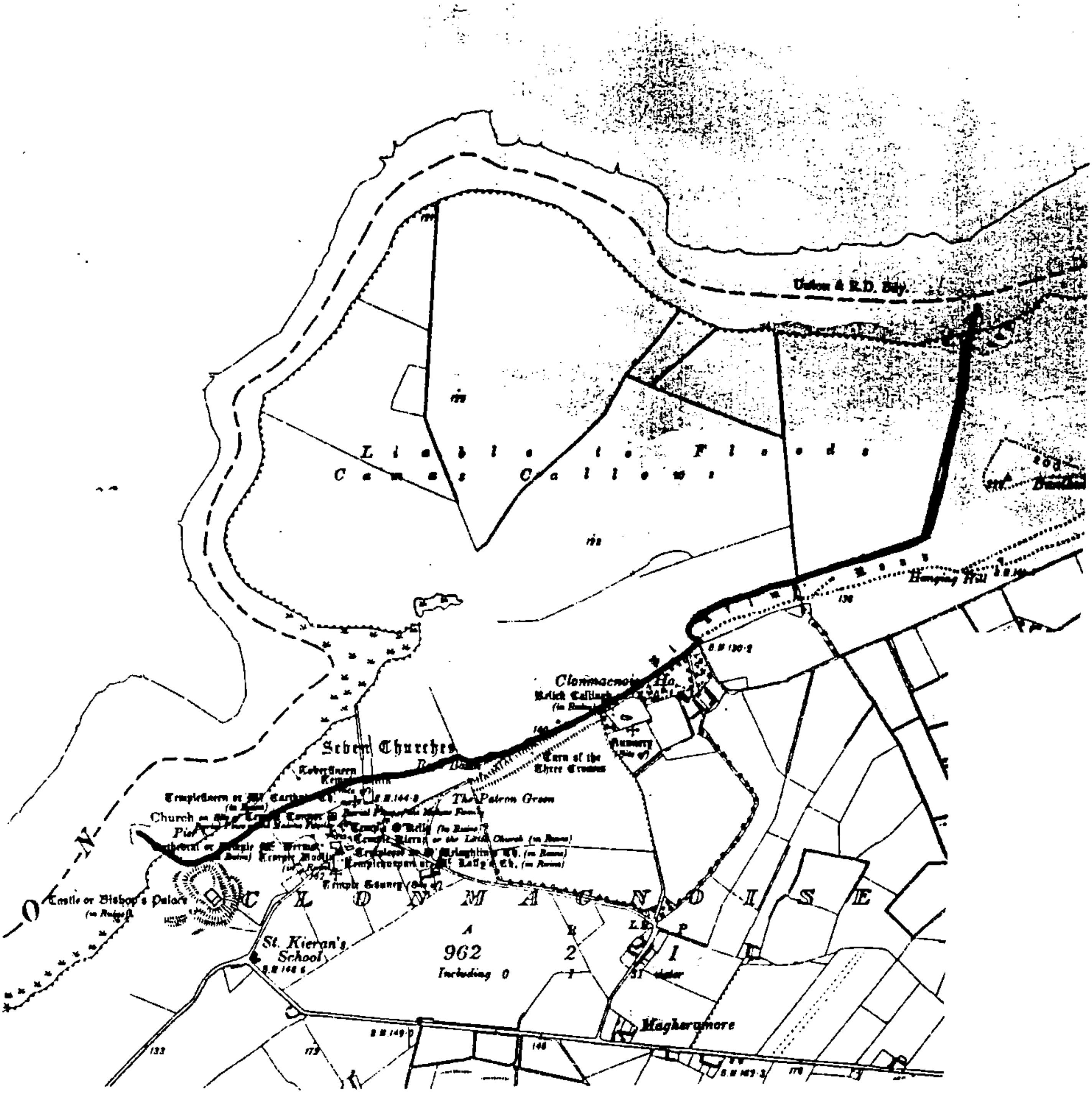
Evaluation

The area of callows forms one of the largest units of flood-plain grassland on the Shannon. In the European context it is unusual in its type of management, which makes use of the nutrients derived from flood waters. The fields receive little artificial fertilizer and are used for hay. As a result the vegetation is extremely rich and diverse. This also contributes to its suitability as a feeding and roosting site for birds.

Recommendations

Traditional management should be maintained and the drains cleared out as little as possible.

Ref. S. Heary,
The Vegetation of the Flood Plain Grasslands on the Shannon,
Brit. Ecol. Soc. Bull., Vol. XIV 2, May 1983.



Liable to Floods
Clonmacnois Ho.
Seven Churches
The Patron Green
Castle or Bishop's Palace
St. Kieran's School
962
Magheramore
Hanging Hill
C L O N M A C N O I S E

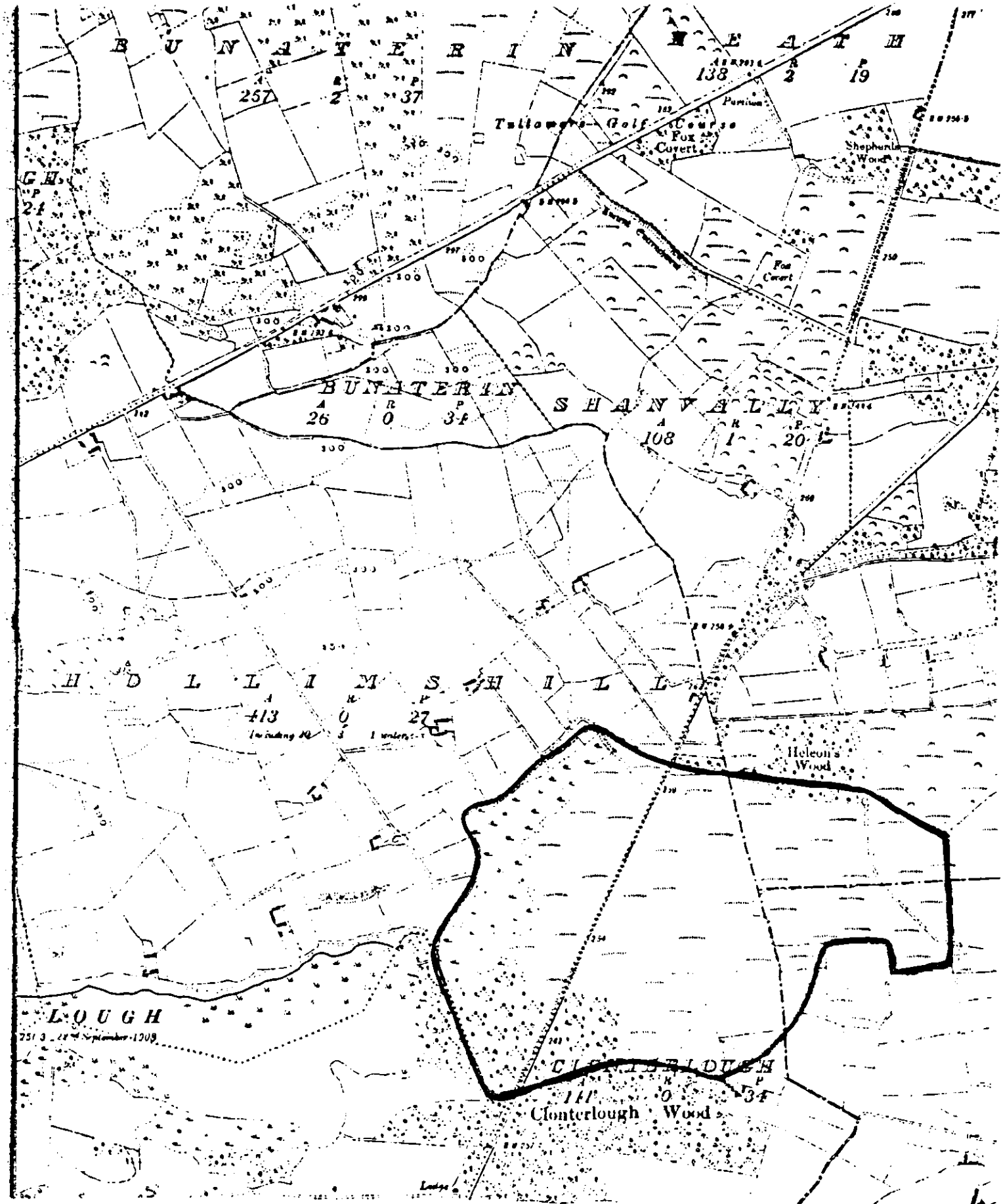
Name of Area	SCREGGAN BOG
Grid Reference	N 287 195
Size	54 ha
Scientific Interest	Botanical
Rating	Local

Description of Site

The area described is outlined on the map overleaf. It is a remnant of raised bog to the north-east of Pallas Lake. It contains the usual raised bog flora and there is a good Spaghnum (bog moss) growth on part of it. The main scientific interest is the growth of pines trees (Pinus sylvestris) on the surface of the bog. These trees are of different ages and are regenerating naturally. All are of introduced stock but it is very uncommon to find pine trees naturally regenerating on a bog.

Threats to the Area

The site seems to suffer from burning and indeed across the road pine trees have been exterminated by burning. Any further burning should be discouraged.



Name: Screggan
Grid Ref: N 287 195
Scale: 6" to one mile
Area: 54 ha.
½" Sheet: 15
6" Sheet: Offaly 24

Sites which Contain Plant Species Protected under the Wildlife Act 1976 (Order S.I. No. 338 of 1980)

A list of 52 plant species is appended to the Wildlife Act of 1976, and it is an offence to disturb any of these plants or to interfere with the habitat in which they grow. In County Offaly there are four such sites.

The Grand Canal at Tullamore N 340 250 Groenlandia densa Opposite-leaved pondweed was recorded here by Praeger in 1899 and it is probable that the plant still occurs here.

The Grand Canal at Kilbeggan N 35 35 Groenlandia densa Opposite-leaved pondweed was recorded here by Praeger in 1896 and it is probable that the plant still occurs here.

Shannonharbour near Bullock Island N 020 178 Lathyrus palustris Marsh pea was found here in 1974 by John Cross of the Forest and Wildlife Service.

Camas Callows
As mentioned in the description of this site of scientific importance, Lathyrus palustris (marsh pea) occurs here.

Recommendations

The Council should be aware of these small sites if development is planned in these areas.

Name of Area	FIN LOUGH
Acreage	274
Grid Reference	N. 035,295
Scientific Interest	Ecological, botanical, ornithological
Rating	Regional
Priority	B

Description of Site

This lake is situated across the road from Mongan's Bog, 2 km from Clonmacnoise on the Athlone road. It is accessible via the wide trackway to the right of the railway bridge.

To the north and west runs the Clonfinlough esker ridge, to the south and west the lake margin grades into a fen which is on the edge of a raised bog being developed by Bord na Móna.

The lake itself is very shallow, mostly less than 1 m deep. Plant growth is limited by phosphate. Potamogeton pectinatus and Chara sp grow in extensive beds in the areas of open water, pH 8.1. Zannichellia palustris, an aquatic rarely found inland, grows near the northern margin. Reed beds cover large areas of the lake and it is obvious from aerial photos and maps that this cover is increasing. In these beds are found:

Berula erecta	Valeriana officinalis
Stellaria palustris	Ranunculus lingua

among the typical reed swamp flora.

As the north end is bordered by esker ridges a wet sedgy meadow has developed at this side dominated by C. panicea and C. lepidocarpa with Parnassia palustris, Samolus valerandi, Selaginella selaginoides, Schoenus nigricans. To the south is a contrasting type of vegetation found at the transition of lake/fen/bog. This flora includes:

Carex dioica
Cirsium dissectum x palustre
Cladium mariscus

and many species of marsh orchids. Because of the great diversity of habitats a plant list from Fin Lough includes 140 sp.

The lake and margin provides an important habitat for wildfowl. An indication of its importance is given by the following count made in January 1969.

Mallard	
Teal	19
Wigeon	64
Shoveller	22
Tufted Duck	3
Mute Swan	14
Whooper Swan	2
Coot	11

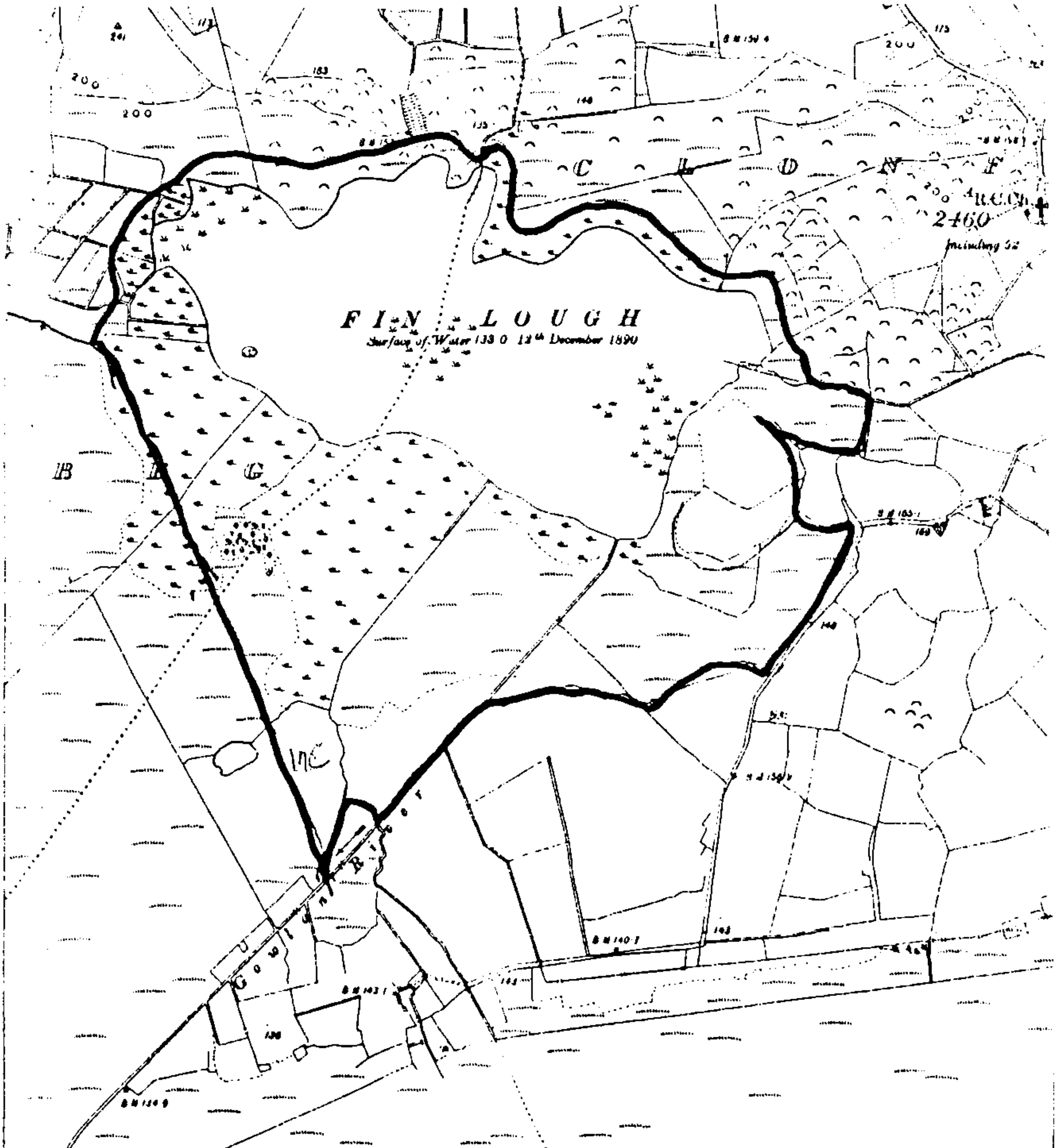
Other sp seen in the vicinity include herons, water rails and hen harrier. Mink have been observed at the edge of the lake.

Evaluation

This is one of the few remaining lakes in County Offaly and represents an important resource for several reasons. It offers a diverse range of habitats in a small area which accounts for a diverse flora and fauna. It is accessible from the road and would make an excellent educational area. It is relatively undisturbed and shows well the process of infilling which a lake develops into a bog.

Recommendations

Attention should be given to monitoring water levels in the lake in conjunction with Bord na Móna who own some of the land.



FIN LOUGH
Surface of Water 133.0 12th December 1890
C L O N F
2460
B O G

Name of Area	CLORHANE HAZEL WOOD
Acreage	110
Grid Reference	M. 987, 278
Scientific Interest	Ecological (B), geomorphological
Rating	Regional
Priority	B

Description of Site

This is situated 2 miles north of Shannonbridge on the Clonmacnoise road and is accessible by means of a narrow track which leads to the Shannon.

The limestone pavement mainly supports a thicket of hazel but at the western margin which gets flooded occasionally there are patches of bare rock and species rich calcareous grassland.

The wood has mature trees of hazel up to 9 m tall. Other shrubs contributing to the dense thicket include the spindle tree (Euonymus europaeus), blackthorn (Prunus spinosa), buckthorn (Rhamnus cathartica) and hawthorn (Crataegus monogyna). The ground flora is dominated by bryophytes which form a luxurious cover over the limestone rocks. Herbs include:

Arum maculatum	Potentilla sterilis
Epilobium parviflorum	Oxalis acetosella*
Geum montanum	Viola sp.
Geranium robertianum*	Hedera helix

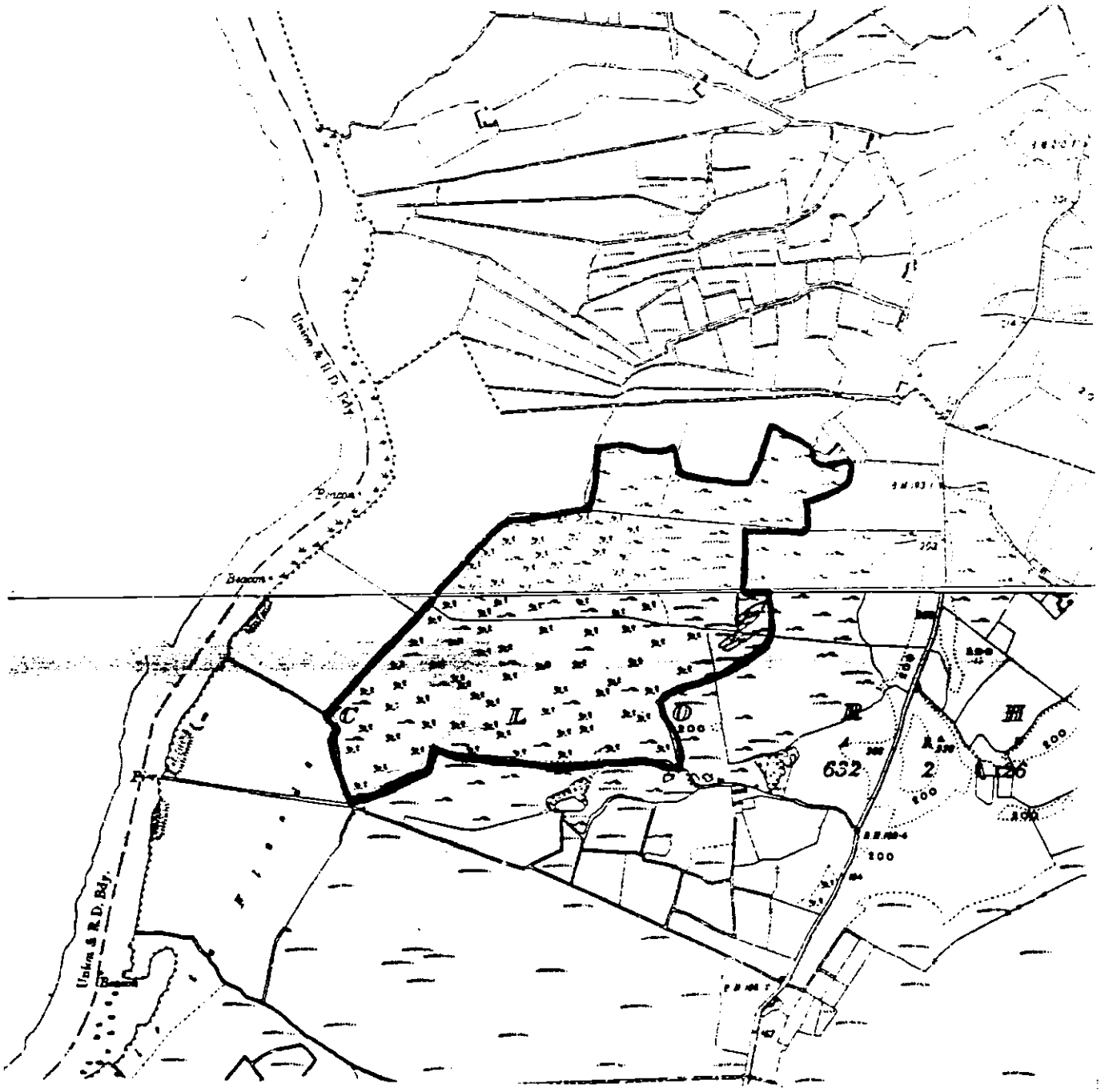
*commonest sp.

Unfortunately two thirds of the hazel wood has been under-planted with a varied collection of conifers, none of which are growing well. This plantation has introduced an exotic element into what was a semi-natural wood.

The grassland is a short turf with scattered bushes of buckthorn and blackthorn. Yews (Taxus baccata) can also be found in this area but as it is cut for timber specimens are rare.

The pavement is notable for the presence of: ferns, which have colonised the grykes in the rock.

Polypodium agg.
Asplenium ruta-muraria
Asplenium trichomanes


Beacon
632
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ROSCOMMON

Sites of Scientific Importance which have been identified since 1981

Name of Area	Habitat	Interest Local Importance	Description
Lough O'Flynn M 585 500	Lake shore	Ecological	The vegetation surrounding this lake is of considerable botanical importance
Lough Drumharlow G 90 02	Lake shore	Ecological	The lakeside vegetation is of considerable botanical importance
Loughs Bofin & Boderg N 03 90	Lake shore	Ecological	The few vegetation surrounding these lakes is of considerable botanical interest
Clooneigh River M 9366	River edge	Ecological	This area is the site of a rare plant species protected under the 1977 Wildlife Act
N.W. end of Lough Key G 80	Lake shore	Ecological	This area is the site of a rare plant species protected under the 1977 Wildlife Act

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? Carrigeennee Hough M1

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CONSERVATION AND AMENITY SECTION

The scientific value of the oakwoods at Curraghmore (Portlaw wood), Co. Waterford, and recommendations for their management

A Report for Waterford County Council

Roger Goodwillie

April, 1974.

FORWARD

A letter dated 26th February, 1974, was received from the Secretary, Waterford County Council, concerning an application for a tree felling licence in Curraghmore Estate, Portlaw.

An on-site meeting was arranged by Mr. Jim Shine between Estate Personnel the County Council, the Forest and Wildlife Service (Dept. of Lands) and the Conservation and Amenity Section, An Foras Forbartha. An encouraging consensus as to the broad future of the woodland was reached during the afternoon of the 5th March and this prompted a fuller investigation of the undoubted scientific value of the area.

The present report contains the results of this investigation, together with recommendations for the future management of the oakwood.

It is made up of four sections:-

The scientific evaluation of woodland

In examining and evaluating a particular wood it is helpful to consider the perfect stand - that which is most sought after by research workers to identify new ecological processes or to test existing theories. The main attributes of such a stand include:-

(A) A varied age structure including fallen timber, overmature trees, mature standards, saplings and seedlings.

(B) Advanced community development with a substantially complete canopy in tree, shrub and ground vegetation layer.

(C) Variety of species occurring in each layer

(D) Recorded history of management

(E) Recorded continuity with primaeval woodland

(F) Large size

(G) Absence of alien species, especially aggressive colonizers

A good spread of tree ages (A) indicates that regeneration has been going on without check in the past and that the immediate future of the wood is assured. While regeneration in natural forest is a cyclical process following on tree-fall and the creation of clearings, there will always be some suitable sites for it in a wood that is behaving naturally. Probably about 15% of the total area should be at these early successional stages (0-40 years, assuming the death of mature trees at 200 years).

Natural*woods are thought to have complete tree and shrub canopies (B) except for such windthrown trees as mentioned above. There would seem to be no good reason to assume otherwise except where a very dense canopy species is involved such as beech or yew.

The richness of species (C), subject to the flora available in a certain geographic region, is one of the most important and easily judged criteria for a valuable wood. Species tend to fill all the spaces available to them in time. Thus a rich variety indicates that conditions have been undisturbed for a relatively long time and that species have been able to find and exploit the conditions that suit them. This is especially true of lower plants such as mosses and lichens that grow on the ground and on tree trunks. The Irish members of these groups (the available species) are much more numerous than shade-adapted higher plants, and many of them require the moist climate that is produced by a dense tree and shrub stand that has not been regularly opened out during management.

Rare species are often good indicators that this variety is present in a wood. They imply that specialised conditions exist that are not widely found in woods elsewhere and also that most of the sites suitable for other, more frequent, species have in all probability been filled.

* 'Natural' is used in this account to describe woods behaving as they would without management or other man-made influences, whether they were originally planted or not.

This scoring factor makes it one of the most important woods in the south-east, if not the most important. The more intimate knowledge of Portlaw gained in this survey forces it to be upgraded to national importance. (See A Report on Areas of Scientific Interest in Co. Waterford, An Foras Forbartha, June 1972). It is definitely of equal status to the woodlands in the Nire valley but is a larger more compact and manageable stand with better grown trees, a more complete age structure and denser regeneration.

Description of Portlaw wood

The wood lies on both sides of the valley of the Clodiagh River which flows roughly W - E. There is thus a different aspect and climate between each side - the south-facing side being warmer and brighter, the north-facing cooler and shaded from a low sun. Such a difference is in fact exaggerated by the current spacing of the canopy trees. On the south-facing side the stand is much more open and has been so for a long time. The oaks (mainly Quercus robur) are well grown and spreading, ivy (Hedera helix) is common on the trunks and ground as are brambles (Rubus fruticosus) indicating relatively high light conditions. Also oak regeneration is dense, varying in age from 0-40 years and holly fairly common but mostly quite young. Across the valley, by contrast, the trees are much more closely spaced and though taller are poorly grown on average. A greater volume of timber exists but its quality is reduced and the value of most individual stems small. There are no clearings; large oaks extend to the boundary wall. In the darker conditions, ivy is much rarer and holly much more frequent, forming a closed canopy in places. Oak regeneration is uncommon since there are as yet few natural clearings. The holly understorey is so dense that it might be thought to inhibit oak seedlings completely but since the most natural western oakwoods in these islands have an almost complete holly canopy but still remain dominated by oak, this cannot in fact be the case. Presumably in natural clearings oak can outgrow holly when the two are present at the seedling stage.

Parts of the Portlaw woods have been more affected by past management than others. The elimination of the deer herd lifted an adverse influence from the whole area at the end of the last century but more recently management may have included selected felling on the south-facing side and some action to combat the spread of holly. Also weed species such as Rhododendron and beech (Fagus sylvatica) have been spreading through some of the wood. Within such variation it is possible to pick out four types of vegetation (see map). In descending order of scientific value these are:-

(1) Prime areas with many natural features in tree and ground cover

(2) Oak mixed with other well-grown deciduous trees of introduced species e.g. beech, sycamore

Species		Frequency on N-facing	S-facing side
Yorkshire fog	Holcus lanatus	o	o
Creeping soft-grass	H. mollis	r	o
Red fescue	Festuca rubra	r	o
Wood sedge	Carex sylvatica	r	o
Greater stitchwort	Stellaria holostea	r	o
Cow wheat	Melampyrum pratense	-	r
Wood false-brome	Brachypodium sylvaticum	-	o
Mosses & liverworts	Polytrichum formosum	not adequately	
	Thuidium tamariscinum	assessed	
	Rhytidiadelphus triquetrus		
	R. loreus		
	Dicranum scoparium		
	D. majus		
	Hylocomium brevirostre		
	Thamnium alopecurum		
	Hypnum cupressiforme		
	Isothecium myosuroides		
	Eurhynchium praelongum		
	Brachythecium rutabulum		
	Mnium hornum		
	Plagiothecium undulatum		
	Plagiochila asplenoides		
	Lophocolea cuspidata		
	Ulota spp.		
	Lepidozia spp.		
	Frullania spp.		

Lichens: (subject to confirmation)

Usnea comosa
Ramalina fastigata
Evernia prunastri
Parmelia sulcata
P. physodes
Physcia adscendens
Lecanora spp.
Pertusaria spp.
Lecidea spp.
Cladonia squamosa
Lobaria pulmonaria

Both the mosses and liverwort and the lichen lists could be greatly enlarged by more intensive collecting.

The last mentioned lichen is a rare but conspicuous species, occuring uncommonly in eastern and southern Ireland. This site is its only known station in Co. Waterford, and underlines the unusually moist conditions that prevail in these woods.

main avenue. In the last instance a large area has been overrun and the plant forms an impenetrable jungle except for a path cut through it. From here it is spreading up the valley and young individuals approach one of the best oakwood areas. Little scientific value remains within the dense areas except in the oak canopy above but on the north-facing side the plant is more open (except near Guilcagh House) and does not completely monopolise the shrub and ground layers.

Management of the different areas

For scientific as well as amenity reasons it is essential to preserve as much of this stand as possible as deciduous woodland. Its scientific value is comparable to any oakwood outside the very best areas in Kerry and Wicklow and its size and regenerative status make it exceptional in any context. If it was more widely known it is certain that more scientific studies would be carried out within it, many of its peculiarities (see Section 1) being especially suitable.

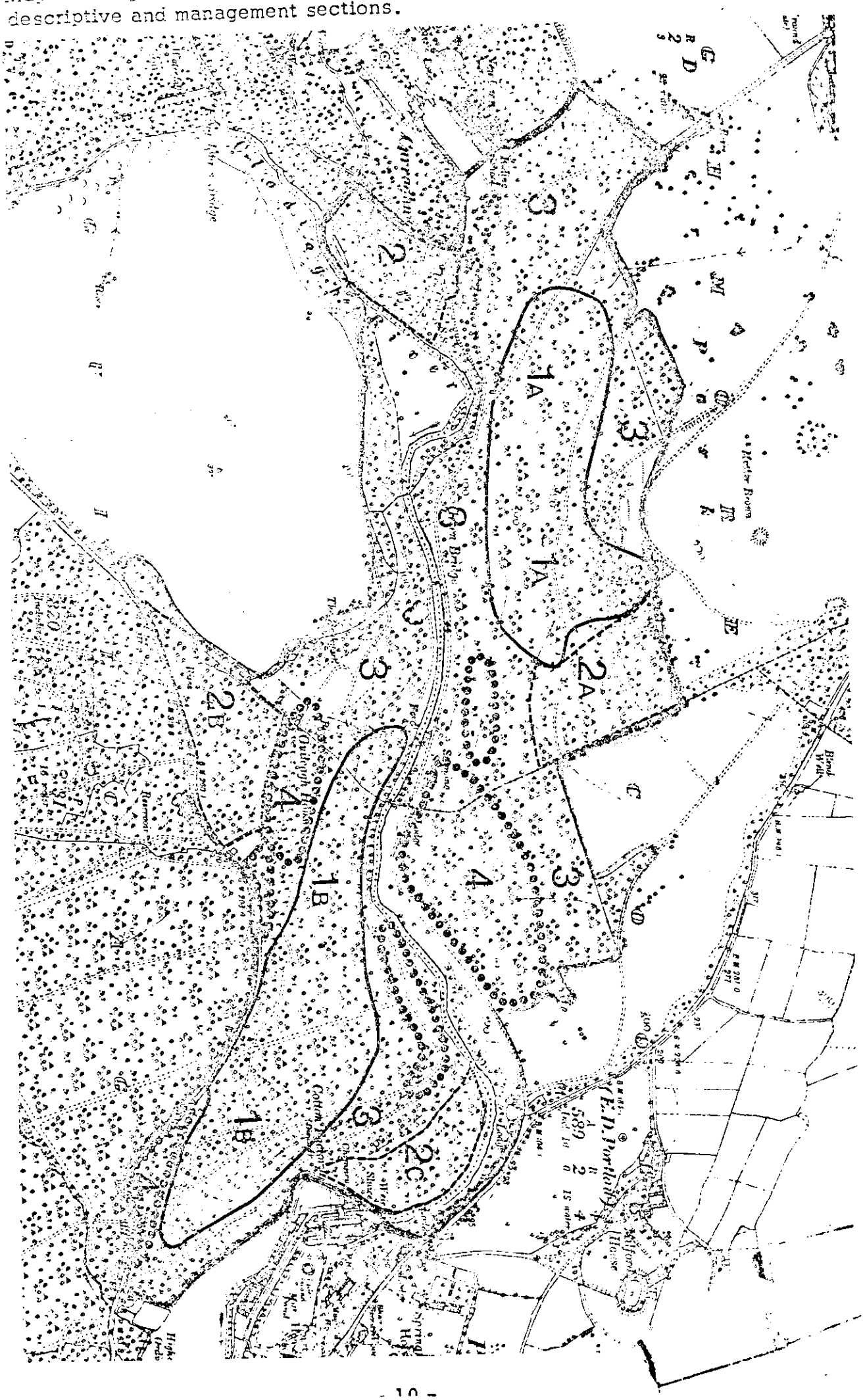
Its amenity value is at present most felt in the context of Portlaw village, the woods forming a most impressive backdrop to it. However, it is possible that at some time in the future more public use will be made of the woodland area and it is important to keep such options open by retaining its attractive appearance within the estate; quite apart from its personal importance for the resident families.

The two obvious alternatives to retention of the status quo are management as a commercial oakwood or replacement by coniferous woods - the fate that has befallen so many similar natural deciduous stands in the country. Everything should be done to prevent this latter course being followed except possibly in small areas. The most suitable management pattern as it appears to this first ecological survey of the problem would deal with each category of the woodland as follows :-

(1) Prime oakwood. Retain character, species composition and age structure by very limited selective felling - of veneer quality oak timber only. The rate should total less than 5% in the first 5 years on the south-facing slope but could rise above it on the north-facing. Replacement growth by natural regeneration. Keeping this fairly dense will at the same time simulate completely natural conditions and produce straight stems to be selected at a later stage to grow on into the canopy. Artificial clearings may be necessary to initiate regeneration at 1B but these should be limited to 2 - 3 trees at any location. Removal of holly within these areas only may be desirable. Cutting out of the Abies (firs) and beech from 1A is recommended during the course of ordinary management.

(2) Mixed woodland of little scientific but more amenity interest. Manage for saw timber. Other introduced species could be used including exotic conifers if necessary. Deciduous fraction should include oak scattered through and not restricted to marginal bands. Preferable to exclude beech due to its tendancy to invade valuable woodland.

Map showing distinct woodland types in Portlaw wood. For explanation see descriptive and management sections.



M O Meara 14/9/78

For updating of Waterford County report

The following areas are important for wildlife in Waterford and are intended to compliment information already in the An Foras Forbartha County Reports.

Tramore Back Strand and Dune System

Being heavily reclaimed at present and under great shooting pressure. Any area reclaimed should be proclaimed a 'No Shooting' area.

The dunes are under threat from tourist traffic mainly. Has several rare plants, terrestrial molluscs and isopods. Needs to be planted with buckthorn or escalonia sp. to prevent blowouts.

Brownstown Head

Has very good colony of Grayling butterflies on western slopes. The gorse should not be disturbed. This species is extremely local in the county and this is by far the largest colony identified. It should be preserved.

Migration

Croadon Head, Strand and Fornaght Bog - Waterford Harbour.

Does not carry any resident populations of note, but on several days in Spring and Autumn large numbers of Warbler species and Hirundinis use the bog particularly for feeding and roosting purposes. While birds are migrating the bog should not be drained or reclaimed.

Several places between Brownstown Head and Croadon Head also fall into this category of habitat, and include Coolun Cove and Glen, Ballymacaw Glen just north of the cove, and just north of Rathmoylan. Hundreds, possibly thousands of Passerines gather in these places each Autumn mainly for feeding and roosting purposes. All are steep-sided small glens with virgin scrub and small trees. They should not be reclaimed by dumping or leveling.

The whole area around Croadon Head and Knockaveelish Head (Waterford Harbour) is extremely important for migrating birds and insects. It represents an area of mixed habitat very conducive to feeding and roosting for diverse animal liveforms and also contains several rare plants and animals, including the Lusitanian isopod, Orthiniscus flavus.

Seacliffs

These are not under particular threat from the county but Dunmore East, Porthally and Beenlea Head hold established colonies of Kittiwakes and Auks. Halvick Head has a fine mixed colony under intermittant threat from vandals.

Tourism

In a county that is highly developed for tourism, information on wildlife should be provided at appropriate places throughout the county. These should be durable information panels depicting birds, butterflies, trees etc. and giving concise information on species to be seen. Places suitable for these are Gawleen car park at Tramore Back strand, Ballychunnock at Dungarvan and at Ardmore and Halvick. Permanent bird hides should be provided at Tramore Back strand. With almost one million bird watchers in Britain, bird-watching holidays have tourist potential in Ireland and should be exploited.

General

The coastline from Brownstown Head to Croadon Head, and Halvick Head to Mine Head should be preserved in a natural state. The farmer has the only outcrop of pure old-red sandstone on the Waterford and south coast. Tourist and other development should be contained within the area from Tramore to Dungarvan and west of Mine to the Blackwater where it is well established.

The practice of covering thatch-roofed cottages with corrugated mineral felt, mainly between Tramore and Dunmore East should be discouraged. Although both areas mentioned above are under considerable threat from housing, reclaimation and general suburbanisation, every effort should be made to restrict the building of houses and chalets between the main roadways and the sea, so that the maximum amount of natural habitat might be protected for migrating species.

The Waterford coast represents the first or last landmass for thousands of migrating birds and insects. Planning in this area should show sensitivity to their needs and to our obligation to the countries from which they come and go for the continued existence of these animals.

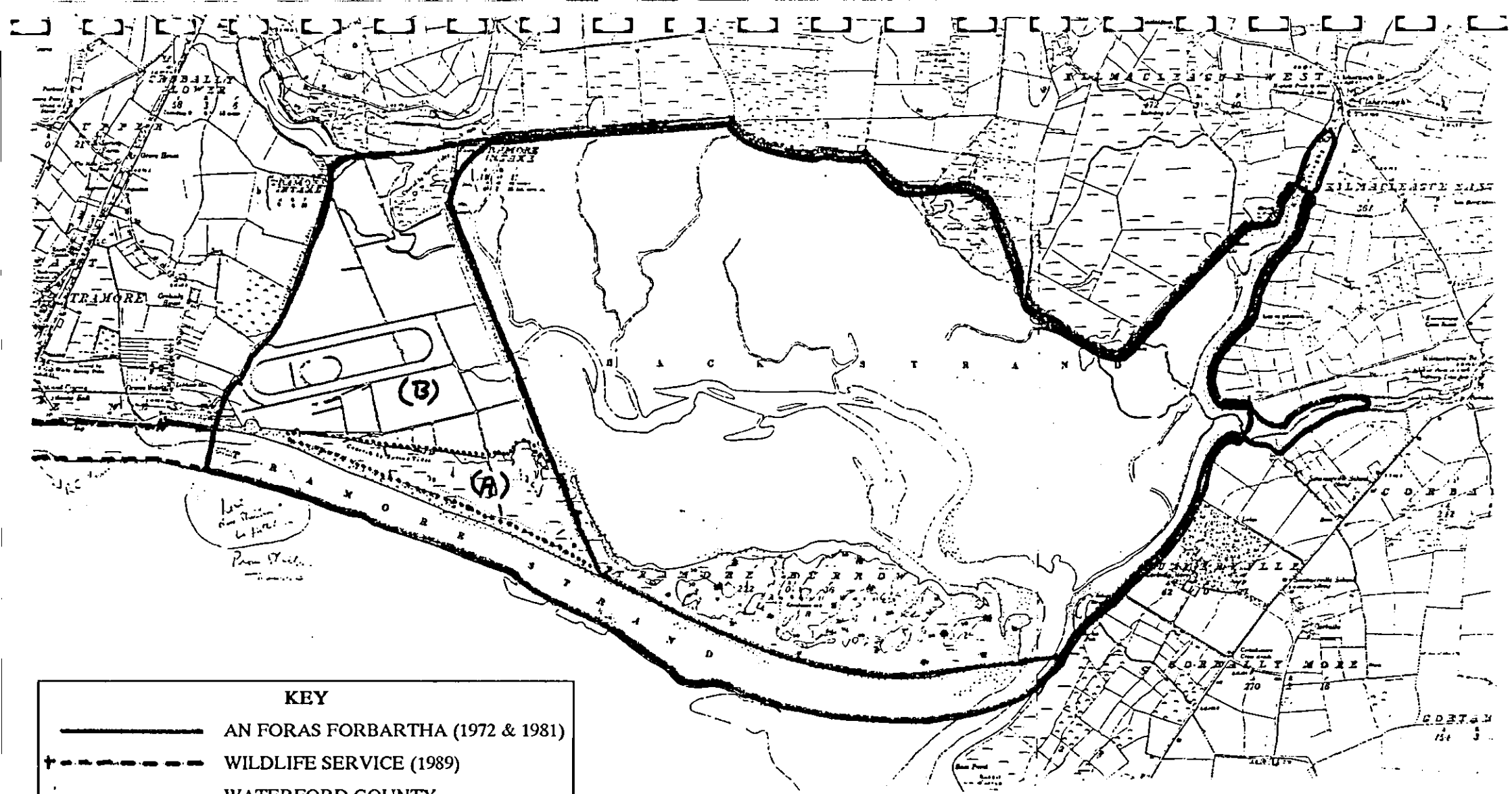
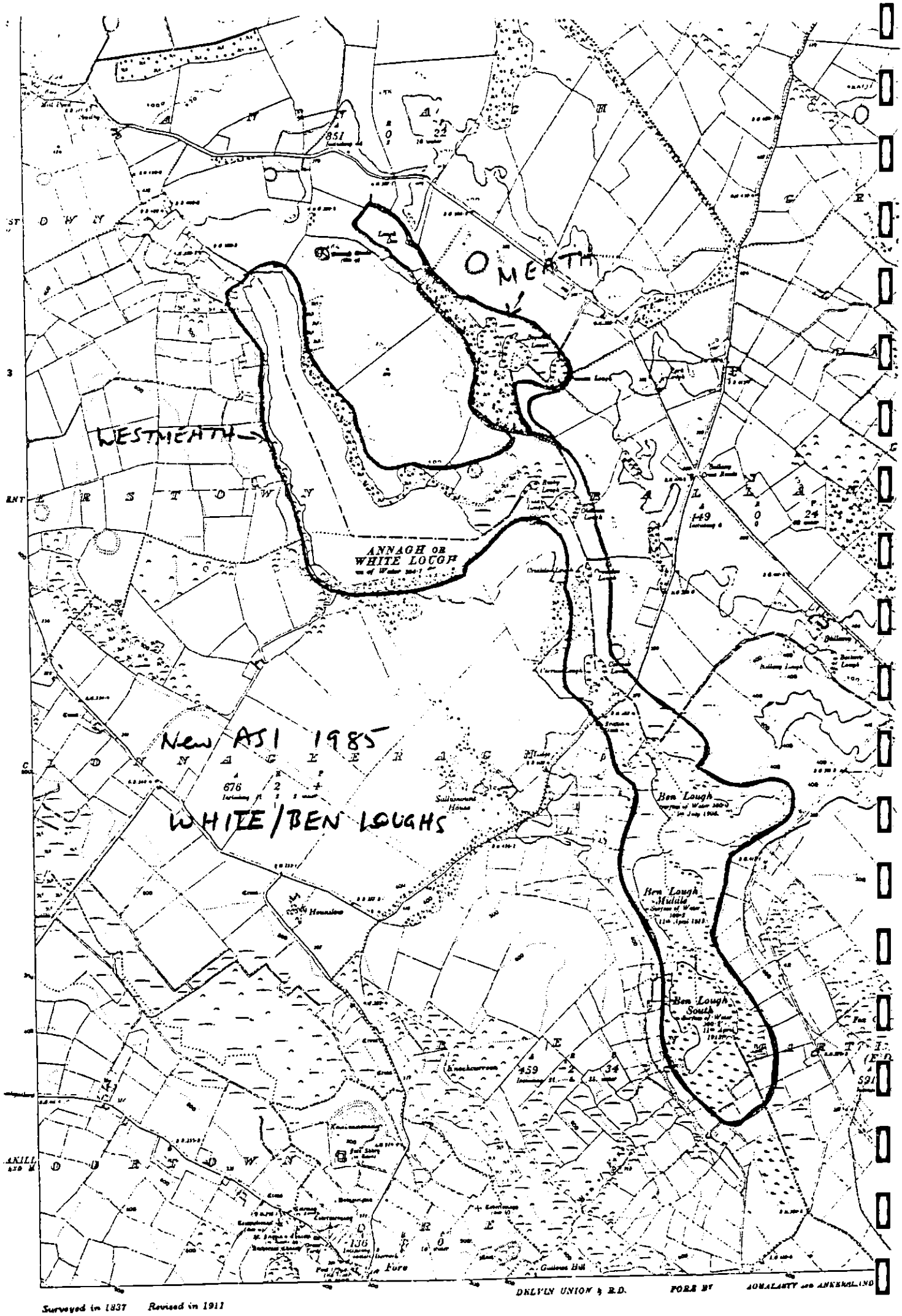


FIGURE 1 VARIOUS BOUNDARIES OF TRAMORE AREA OF SCIENTIFIC INTEREST 1972-89


OMERTH
WESTMEATH
ANNAGH OR WHITE LOUGH
New ASI 1985
WHITE/BEN LOUGHS
Ben Lough
Ben Lough Middle
Ben Lough South
Surveyed in 1837
Revised in 1911

Scientific Assessment of Part of Forth Mountain

A Report for Wexford County Council

JULY 1986

Roger Goodwillie

INTRODUCTION

This report is written in response to a letter (24/4/86) from Ms. R. Nixon, Senior Executive (Planning) of Wexford County Council for an assessment of the importance and value of that part of Forth Mountain included in the Development Plan as an area of scientific interest.

Fieldwork was carried out in June to compare this area with other parts of the county.

SITE DESCRIPTION (See Map)

Forth Mountain is a ridge of quartzite with relatively low slopes crowned by a number of large rocks (or tors). These were formed during the last Ice Age when surrounding loose rocks were removed to lower levels by freezing and thawing, leaving a large central core.

The land is now covered by heathland, wet heath on the lower slopes which grades into dry heath on the rockier ground. Both these communities contain attractive flowers including the heathers (Erica cinerea, E. tetralix, Calluna vulgaris), autumn gorse (Ulex gallii), bog asphodel (Narthecium ossifragum), tormentil (Potentilla erecta) and frochan (Vaccinium myrtillus). Sphagnum and other mosses became frequent on flatter areas and the reindeer moss lichens (Cladonia) are also noticeable.

Nutritionally the community is not a rich one so the animal life that can be supported is relatively sparse. However, it contains some interesting species, characteristic of heathland. For example the lizard and pygmy shrew occur quite widely. The butterflies include the small heath, grayling and wall and it is a paticularly good area in which to see the migratory species, red admiral and painted lady. The dry summer climate

favours all flying insects such as solitary wasps and hoverflies and work on these groups might produce interesting results: Wexford in general has a high number of species in these groups. One of the only records of invertebrate animals is that of the snail, Lymnaea glabra, which occurred in a small stream on the southwestern slopes of the mountain until 1980 (Hurley, 1981). This is one of the rarest snails in Ireland and is not currently known from any other sites. It is probably still present somewhere on the mountain.

The birdlife of the area is also of heathland species, the skylark, meadow pipit, wheatear and stonechat being common and the kestrel and hood crow visitors. Whitethroat, linnet and grasshopper warbler occur in peripheral regions where taller shrubs exists.

Outside the area of scientific interest much of the mountain has been planted with conifers. The plantations were begun in 1934 and now have reached their maximum extent of about 300 ha. They cover former heathland with a few hayfields. Tree growth varies from place to place: it is good on the deeper soils if fertilizer is added but very slow on the summits or other rocky areas. The presence of trees brings in a wide variety of additional wildlife. The number of red squirrels is noteworthy and the fox, badger and stoat also occur. Woodpigeons, sparrowhawk, blackbirds and robins breed in the cover and woodcock and pheasant are found, particularly in winter. Many of the common moths and butterflies such as the speckled wood, ringlet and meadow brown are common at the woodland edge.

EVALUATION

The Forth Mountain heathland has moderate intrinsic interest as an

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Hurley J. (1981) A history of the occurrence of Lymnaea glabra (Gasteropoda: Pulmonata) in Ireland. Irish Naturalists Journal 20 (7) 284 - 287.

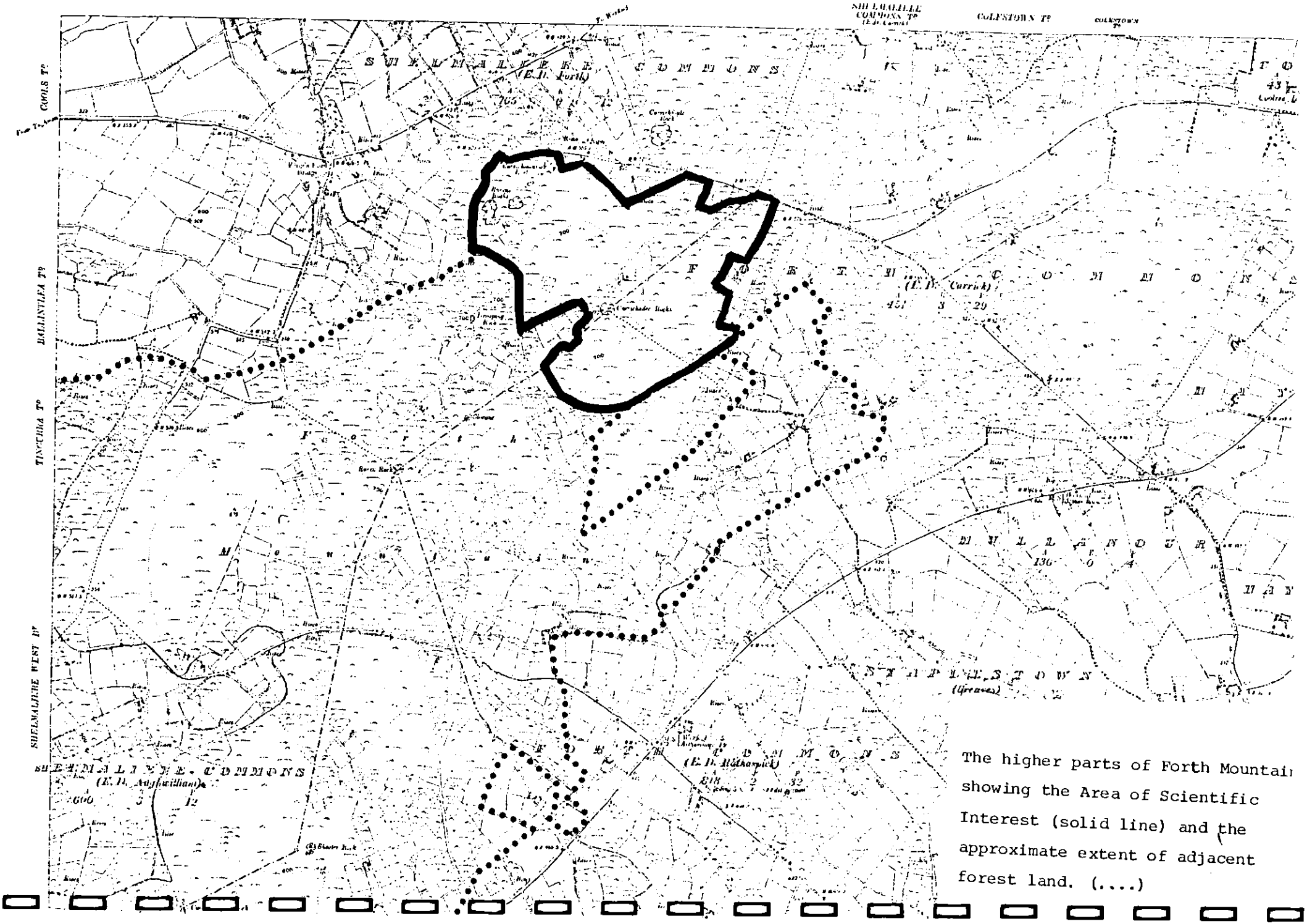
example of wet and dry heathland. However, when put in the Wexford context it assumes a much greater importance as there is no other comparable area in the county. The majority of other hills that could be expected to have heaths have been afforested. Slievecoiltia, Carrickbyrne, Camaross and Bree Hills for example are now planted as are the lower hills around Oulart and Gorey. Tara Hill has patches of dry heath but because of its steep slopes has no wet heath. Indeed this steepness is a feature of the Wexford Mountains. Annagh Hill and Slieveboy near Carnew and the entire Blackstairs range have slopes that prevent wet heathland developing. The few saddle areas, as above Cloroge and below Caher Roe's Den receive sufficient rainfall that they are covered by blanket bog rather than heathland. The only place where environmental conditions suit wet heath, and forestry has not swamped it, seems to be on Ballythomas Hill on the slopes of Croghan Mountain on the Wicklow border. Here there is some wet heath but it differs from Forth Mountain because of climatic factors (average temperatures, growing season, rainfall, wind and sunshine).

Apart from its strict scientific interest Forth Mountain is a good wildlife area, the heathland and forest areas complementing each other and supporting a good variety of species. It is particularly valuable in an educational/recreational sense because of its proximity to Wexford town.

CONCLUSION

In the context of the county the wet heathland on Forth Mountain has considerable scientific and amenity value. It has no counterpart in Wexford and is probably most comparable with parts of the Drum Hills near Dungarvan. In view of this rarity the site would be rated as of regional value in the national sense if it were not for its small size and its consequent vulnerability.

It is considered that its area should not be any further reduced by building developments.



The higher parts of Forth Mountai showing the Area of Scientific Interest (solid line) and the approximate extent of adjacent forest land. (....)

WESTMEATH

Sites of Scientific Importance which have been identified since 1981

Name of Area	Habitat	Interest Regional Importance	Description
Lough Garr N 34 67	Lake shore	Ecological	The vegetation along this lake-shore contains plant communities of considerable botanical importance
Tullaghan Bog S.W. corner of Lough Owel N 42 56	Fen & Marsh	Ecological	Fen and marsh vegetation containing Carex appropinquata and C. limosa
		Local Importance	
Lough Naneagh and Lough Doo N 51 76	Lake shore	Ecological	Fen and lake vegetation and limestone grassland with considerable botanical interest
Ballynafid N 41 61	Lake	Ecological	The vegetation at the shore-line of this lake contains a plant species protected under the 1977 Wildlife Act
Lisclogher Bog	Fen	Ecological	This fen contains a rare plant species protected under the 1977 Wildlife Act
Cloonagh Lake near Delvin	Lake shore	Ecological	The lake-shore vegetation contains a rare plant species protected under the 1977 Wildlife Act
S.W. of Streamstown N 2342	Fen	Ecological	This fen contains a rare plant protected under the 1977 Wildlife Act

WICKLOW

TOMNAFINNOGE WOOD

1.0 History of Tomnafinnoge Wood

Evidence suggests that Tomnafinnoge is a remnant of the ancient and famous Shillelagh oakwoods. There has always been woodland present on the site. Part of the wood was replanted in the 1850's, but the bulk of the trees are around 200 years old. It would appear that much of the wood was managed as a hazel coppice with oak standards, a common form of woodland management in Britain but one not widely practiced in Ireland. Tomnafinnoge is one of the very few authentically documented 'coppice with standard' woods in Ireland and is therefore of considerable historical interest (Jones, 1986). Open parts of the wood have also been grazed in the past, the wide spacing of the trees allowing some grass growth between them.

2.0 Visual Importance

A detailed visual analysis of Tomnafinnoge Wood was included in the CAAS report of 1978. (1) At Ballyraheen on the main Tinahealy to Shillelagh Road, the view dramatically opens up to give a fine prospect of Coolattin demesne, now diminished in broadleaved woodland. Tomnafinnoge Wood however still dominates the far side of the valley in the middle distance and crests the skyline (photos 1, 2 and 3). Wicklow County Council recognised the special amenity value of this view by including its preservation as an objective of the draft County Development Plan 1988, under Part IV, Section 7, of the third schedule to the Local Government, (Planning and Development), Act, 1963. The wood forms a major part of one of the most outstanding views in south Wicklow and was one of the main reasons for making the Tree Preservation Order.

2.1 Coolattin is included also in the Inventory of Outstanding Landscapes in Ireland (An Foras Forbartha, 1977).

2.2 Within the wood the size and quality of the trees is immediately apparent. They can be seen from a distance in a way that is seldom possible in woodland: this is because of the openness of the stand in at least its lower portion. The riverside walk is of exceptional visual quality but anywhere in the wood gives one a unique wildwood experience so lacking in coniferous plantations (Photo 5). The wood has visual interest all through the year with the changing seasons but is perhaps most spectacular in spring and early summer and

in autumn. It is, without doubt, an area of outstanding natural beauty.

3.0 Ecological Importance

Sessile oak (Quercus petraea) is the dominant tree throughout the wood with subsidiary birch and rowan, hazel and holly. These have been augmented locally with planted beech and scot's pine and also western hemlock.

3.1 The upper part of the wood has a more natural structure than the lower with a canopy of oak above a shrub and sapling layer, rich in holly and hazel. Woodrush (Luzula sylvestris) and fraochan (Vaccinium myrtillus) cover much of the ground. Closer to the river the oak stand opens out and the fraochan becomes abundant, along with bracken (Pteridium aquilinum) and some bramble (Photo 4). The herb species include primrose, wood sorrel and anemone, bluebell, wood and germander speedwell and cow wheat, the latter an indicator of acidic and long-standing oakwoods. Many of the trees carry an epiphytic flora of mosses, polypody fern (Polypodium vulgare) and lichens, for example Usnea comosa, Evernia prunastri, Ramalina and Parmelia spp.

3.2 The fauna in the wood is relatively rich with frequent sika deer, red squirrel, two sorts of bats, badger, fox and rabbit. Otters use the river bank. The bird populations include woodcock and pheasant, jay, raven and sparrow hawk, tree creeper, goldcrest, blackcap, chiffchaff and many other woodland species. Because of their numbers, the area provides some of the best bird song in the region.

3.3 The ecological value of Tomnafinnoge Wood lies in the size of its trees, their capacity to regenerate and their genetic continuity with ancient woodland. The wood grows on comparatively deep soils and is thus unique in Wicklow where most other stands are on rock. In comparison to the woods at Rathdrum and Avoca, at Laragh and in the Glen of the Downs, the trees are well grown and give an impression of the ancient forests as well as of the potential of this sort of woodland for timber production. The nearest comparable stands are at Abbeyleix and Portlaw, Co Waterford.

3.4 Tomnafinnoge is one of the only woods in the country where oak is regenerating naturally (Photo 6). There is no damage yet from grey squirrel and little from sika deer. As well as being of ecological interest, and in direct contrast to many other oakwoods, this regeneration would allow for a group felling system at some time in the future, simulating natural processes.

3.5 Tomnafinnoge Wood is all that remains of the former forests of Shillelagh. Prior to 1980, the Coolattin Woods covered 250 ha but this has today been reduced by three quarters. Tomnafinnoge at 66 ha is the only oakwood that remains intact. It is estimated that there are only eleven square kilometres of deciduous high forest remaining intact in Ireland of which Tomnafinnoge forms about 3% (D.Ball, pers. comm.). Its continuity with the ancient woodland is of primary importance, for as well as retaining distinctly Irish genes from the postglacial recolonisation of the country by trees to the present day, there is the likelihood that some of the soils have never been deforested.

3.6 Tomnafinnoge Wood was added to the inventory of Areas of Scientific Interest in 1987 (3) when its ecological quality became known. It is rated as of national importance.

4.0 Objectives of a Special Amenity Area Order

The aim of making a S.A.A.O. for Tomnafinnoge, would be to allow the planning authority to make a Conservation Order, under Section 46 of the Local Government (Planning and Development) Act 1963, as amended by Sections 40 (b) and 45 of the 1976 Act. Under the Conservation Order, specified flora and fauna of special interest or amenity value, may be protected from destruction.

4.1 A S.A.A.O. implies a significant management input to conserve and enhance the natural resources concerned and the main aim of management for Tomnafinnoge Wood is to reconcile the requirements of landscape and wildlife conservation with the long-term need to regenerate the woodland on a phased basis and to make use of its timber.

4.2 The general aims are set out in the Tomnafinnoge Woodland Management Plan, CAAS 1988 (4) which is adapted from the model employed by the Countryside Commission UK. (Leay, 1986)

These are:-

(i) To maintain the property as oak high-forest in perpetuity encouraging natural regeneration and a variety of age classes of trees.

(ii) To maintain the existing landscape value of the wood in local views.

(iii) To maintain and enhance the wildlife value of the wood.

(iv) To improve the recreational value of the wood.

(v) To involve local people in the care and management of the wood.

(vi) To produce good quality timber and woodland products, primarily for local markets, on a sustainable basis.

(vii) To develop and demonstrate production techniques for timber compatible with the conservation of landscape, wildlife and recreational resources, which may be applicable to other broadleaved woodlands in Ireland.

Conventional clear-felling and replanting is increasingly being recognised as inappropriate for broadleaved woodlands which have a high value for landscape, amenity and nature conservation. (Evans, 1984)

For woods of this nature, group systems are probably the most desirable of all sylvicultural systems (Pryor & Saville, 1988) and are increasingly being recommended for ancient and semi-natural woodlands elsewhere, as they mimic the natural character of such woods, (Peterken, 1981, Kirby 1984 and Evans, 1984).

Such methods are used by such bodies in Britain as the Forestry Commission, the Nature Conservancy Council, the National Trust and the Woodland Trust as well as by private owners.

FOOTNOTES

(1) Coolattin Woodlands Survey. CAAS May 1978.

(2) Coolattin Parkland Trees Survey. CAAS July 1978.

(3) An addition to the Preliminary Report on Areas of Scientific Interest in Co Wicklow. CAAS April 1987.

(4) A Woodland Management Plan for Tomnafinnoge Wood, Coolattin. CAAS March 1988.

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