SURVEY TO LOCATE MOUNTAIN BLANKET BOGS OF SCIENTIFIC INTEREST IN IRELAND

Dr Enda Mooney Roger Goodwillie Caitriona Douglas

Commissioned by National Parks and Wildlife Service, OPW 1991

CONTENTS

INTRODUCTION	1
METHODS Site Evaluation	3 4
RESULTS:	
General Observations	6
High Blanket Bog	8
Flushed Slopes	9
Headwater Bog	9
Mountain Valley Bog	10
High Level Montane Blanket Bog	10
Low Level Montane Blanket Bog	12

SITES OF HIGH CONSERVATION VALUE

SITE NAME	COUNTY	PAGE NO
Cullenagh	Tipperary	17
Crockastoller	Donegal	19
Coomacheo	Cork	24
Meenawannia	Donegal	28
Malinbeg	Donegal	31
Altan	Donegal	34
Meentygrannagh	Donegal	36
Lettercraffroe	Galway	40
Tullytresna	Donegal	45
Caherbarnagh	Cork	47
Glenkeen	Laois	51
Ballynalug	Laois	54
Kippure	Wicklow	57
Doobin	Donegal	61

Meenachullion	Donegal	63
Sallygap	Wicklow	65
Knockastumpa	Kerry	68
Derryclogher	Cork	71
Glenlough.	Cork	73
Coumanare	Kerry	75

SITES OF MODERATE-HIGH CONSERVATION VALUE

Ballard	Donegal	78
Cloghervaddy	Donegal	80
Crowdoo	Donegal	83
Meenaguse Scragh	Donegal	86
Glanmore	Cork	88
Maulagowna	Kerry	90
Sillahertane	Kerry	91
Carrig East	Kerry	95
Mangerton	Kerry	97
Drumnasharragh	Donegal	99
Derryduff More or Derrybeg	Cork	100
Ballagh Bog (K25)	Kerry	103
Dereen Upper	Cork	105
Comeragh Mts.	Waterford	107
Tullynaclaggan	Donegal	109
Tooreenbreanla	Kerry	111
Glendine	West Offaly	114
Coomagire	Kerry	116

Graignagower	Kerry	118
Tooreenealagh	Kerry	119
Ballynabrocky	Dublin	121
Castle Kelly	Dublin	125
Shankill	Wicklow	126
Garranbaun	Laois	128
Cashel	Donegal	130
Table Mt	Wicklow	132
Ballynultagh	Wicklow	135
Curraun	Waterford	140

SITES OF A LOWER VALUE CONSERVATION

Kingarrow	Donegal	143
Meenvaghran	Donegal	145
Coomlettra	Kerry	147
Carrignabinnia Mt.	Tipperary	150
Carrickatimpan	Donegal	152
Tor	Donegal	154
Meenaboll	Donegal	155
Coguish (Crow R.)	Donegal	156
Knockanafrin	Waterford	158
Cloghermore	Galway	160
K42	Kerry	161
Dunloe Upr	Kerry	163
Cork	Donegal	164
WX1	Wexford	165

Drumnaliffeney Mt	Donegal	166
Saggartnadoish	Donegal	168
Lough Deale	Donegal	170
Lough Agrougha	Donegal	171
Binswilly	Donegal	172
Scraigs	Donegal	174
Croaghanard	Donegal	176
Owendoo	Donegal	178
Doobin	Donegal	180
Meenaguse L.	Donegal	182
Coguish (Crow R.)	Donegal	184
Owenteskinny Hill	Donegal	186
Knockreagh	Kerry	187
Tooreenbreanla (Glas. L)	Kerry	196
Sillahertane	Kerry	198
Goughane Barra	Kerry	200
Mangerton	Kerry	202
L. Namweela	Kerry	204
Slieveanore	Kerry	205
Loughnambrackdarrig	Kerry	207
Feohanagh	Kerry	209
Coumanare	Kerry	211
Glenlough	Cork	213
Crossterry	Cork	215
Derrryclogher	Cork	217
Borlin Valley	Cork	219
Knocknafallia	Waterford	221
Knockanask	Waterford	223

UNSORTED SITES

Coumtay	Waterford	224
Farbreaga	Tipperary	226
Moanyarha	Waterford	227
Galtybeg	Tipperary	228
Slieve Blooms	Laois	229
East of The Cut		
Sl. Bloom Mts.	Laois	231
West of The Cut		
Sallygap	Wicklow	233
Barnacullion	Wicklow	236
Garryknock	Wicklow	237
К8	Kerry	241
W8 Brockagh	Wicklow	243
K11	Kerry	245
C8 (No desc)	Cork	247
К37	Kerry	249
К39	Kerry	251
K11	Kerry	253
Graignagower K15	Kerry	255
C8 (no desc)	Cork	257
K21	Kerry	259
K27	Kerry	261
К30	Kerry	263
К32	Kerry	265
К36	Kerry	267
К5	Kerry	269

₩5	Wicklow	271
W6	Wicklow	273

CONTENTS

INTRODUCTION		1
METHODS	· · · · · · · · · · · · · · · · · · ·	3
Site Evaluation		4
RESULTS:		
General Observations		6
High Blanket Bog		8
Flushed Slopes		9
Headwater Bog		9
Mountain Valley Bog		10
High Level Montane Blanket Bog		10
Low Level Montane Blanket Bog		12

SITES OF HIGHEST CONSERVATION VALUE

A			
SITE NAME	COUNTY	PAGE	NO
Cullenagh	Tipperary	17	
Crockastoller	Donegal	19	
Coomacheo	Cork	24	
Meenawannia	Donegal	28	
Malinbeg	Donegal	31	
Altan	Donegal	34	
Meentygrannagh	Donegal	36	
Lettercraffroe	Galway	40	
Tullytresna	Donegal	45	
Caherbarnagh	Cork	47	
Glenkeen	Laois	51	
Ballynalug	Laois	54	
Kippure	Wicklow	57	
Doobin	Donegal	61	

Donegal		63
Wicklow	X	65
Kerry		68
Cork		71
Cork		73
Kerry		75
	Wicklow Kerry Cork Cork	Wicklow Kerry Cork Cork

SITES OF MODERATE-HIGH CONSERVATION VALUE

Ballard	Donegal	78
Cloghervaddy	Donegal	80
Crowdoo	Donegal	83
Meenaguse Scragh	Donegal	86
Glanmore	Cork	88
Maulagowna	Kerry	90
Sillahertane	Kerry	91
Carrig East	Kerry	95
Mangerton	Kerry	97
Drumnasharragh	Donegal	99
Derryduff More or Derrybeg	Cork	100
Ballagh Bog (K25)	Kerry	103
Dereen Upper	Cork	105
Comeragh Mts.	Waterford	107
Tullynaclaggan	Donegal	109
Tooreenbreanla	Kerry	111
Glendine	West Offaly	114
Coomagire	Kerry	116

Graignagower	Kerry	118
Tooreenealagh	Kerry	119
Ballynabrocky	Dublin	121
Castle Kelly	Dublin	125
Shankill	Wicklow	126
Garranbaun	Laois	128
Cashel	Donegal	130
Table Mt	Wicklow	132
Ballynultagh	Wicklow	135
Curraun	Waterford	140
SITES OF A LESSER CONSER	VATION VALUE	
Kingarrow	Donegal	143
Meenvaghran	Donegal	145
Coomlettra	Kerry	147
Carrignabinnia Mt.	Tipperary	150
Carrickatimpan	Donegal	152
Tor	Donegal	154
Meenaboll	Donegal	155
Coguish (Crow R.)	Donegal	156
Knockanafrin	• Waterford	158
Cloghermore	Galway	160
K42	Kerry	161

Kerry

Donegal

163

164

Cork

Dunloe Upr

WX1

28.

 \bigcirc

Wexford

165

Drumnaliffeney Mt	Donegal	166
Saggartnadoish	Donegal	168
Lough Deale	Donegal	170
Lough Agrougha	Donegal	171
Binswilly	Donegal	172
Scraigs	Donegal	174
Croaghanard	Donegal	176
Owendoo	Donegal	178
Doobin	Donegal	180
Meenaguse L.	Donegal	182
Coguish (Crow R.)	Donegal	184
Owenteskinny Hill	Donegal	186
Knockreagh	Kerry	187
Tooreenbreanla (Glas. L)	Kerry	196
Sillahertane	Kerry	198
Goughane Barra	Kerry	200
Mangerton	Kerry	202
L. Namweela	Kerry	204
Slieveanore	Kerry	205
Loughnambrackdarrig	Kerry	207
Feohanagh	Kerry	209
Coumanare	Kerry	211
Glenlough	Cork	213
Crossterry	Cork	215
Derrryclogher	Cork	217

Borlin Valley	Cork	219
Knocknafallia	Waterford	221
Knockanask	Waterford	223

UNSORTED SITES		
Coumtay	Waterford	224
Farbreaga	Tipperary	226
Moanyarha	Waterford	227
Galtybeg	Tipperary	228
Slieve Blooms	Laois	229
East of The Cut	Offaly	
S1. Bloom Mts.	Laois	231
West of The Cut	Offaly	. ,
Sallygap	Wicklow	233
Barnacullion	Wicklow	236
Garryknock	Wicklow	237
K8	Kerry	241
W8 Brockagh	Wicklow	243
K11	Kerry	245
C8 (No desc)	Cork	247
К37	Kerry	249
к39	Kerry .	251
K11	Kerry	253
Graignagower K15	Kerry	255
C8 (no desc)	Cork	257
K21	Kerry	259
K27	Kerry	261
•	•	

 \bigcap

Kerry	263
Kerry	265
Kerry	267
Kerry	269
Wicklow	271
Wicklow	273
	Kerry Kerry Kerry Wicklow

INTRODUCTION

Ireland's peatland habitats have long been recognised as being of international importance owing to their richness, diversity and relatively intact In recent years the rate of destruction of state. has greatly accelerated. In Irish peatlands recognition of this and of the urgent need for their conservation, the Wildlife Service embarked on a national inventory of Irish peatlands in order to ascertain their current status and to assess the relative scientific importance of individual sites. This began with the commissioning, in 1983, of a Since that time survey of Midland Raised Bogs. further surveys have been commissioned which completed which in the work of the original survey and determine the extent and addition, sought to scientific importance of Ireland's Western Raised Bogs and her Lowland Atlantic Blanket Bogs.

In April 1991 The National Parks and Wildlife Service (NPWS) commissioned a survey of Irish upland bogs. The aim was to determine the range of variation to be found in upland bog sites, their degree of intactness, their relative scientific importance and to select the sites most worthy of conservation. This report presents the results of that survey.

For the purposes of this survey, upland bogs are defined as those lying above the 152 m in altitude. This is the altitude use by Hammond (1979) to define the lower limits of mountain blanket bog. This author has calculated that out of an original area of 434 000 ha of this type of bog in Ireland, by 1979, 320 000 ha (74%) remained.

In characterising the vegetation of mountain blanket bogs, Hammond (<u>loc</u>. <u>cit.</u>) relies on the work of Moore (1964) who classifies Irish peatland plant

C] \mathbb{C} Π

communities. Moore (loc. cit.) distinguishes mountain blanket bogs on the basis of the occurrence of Vaccinium myrtillus, Empetrum nigrum and Diplophyllum albicans in the vegetation. In addition, species characteristic of Atlantic Lowland Blanket Bog and Raised Bog, are scarce or absent. These include <u>Molinia</u> <u>caerulea</u>, Schoenus nigricans, Pleurozia purpurea, Campylopus atrovirens, Potentilla erecta, Polygala serpyllifolia, Pedicularis sylvatica and Drosera intermedia, in the case of the former, and Andromeda polyfolia, Vaccinium oxycoccus, Sphagnum imbricatum, S. fuscum and S. magellanicum in the case of the latter.

Schouten (1984) subdivides the mountain blanket bog type, as defined by Hammond <u>(loc. cit.</u>), into mountain blanket bogs and highland blanket bogs. In the former type, he places bogs occurring above 300 m, and in the latter, bogs occurring at between 152 m and 300 m. These occur on areas with a very gentle gradient and generally have a vegetation intermediate between that characteristic of the lowland blanket bogs and the mountain blanket bogs.

The work of the foregoing authors was used as a basis for the present study. This study, while undertaking to examine the variation occurring in Irish upland peatland sites, does not attempt a detailed phytosociological examination of these sites, owing to limitations on time and resources. \mathcal{L}

METHODS

3

The methods used in this survey broadly follow those used in earlier surveys of Irish peatlands (e.g. Douglas <u>et al</u>.).

In identifying mountain blanket bog areas, use was made of the Peatland Map of Ireland compiled by Hammond (1979). Due to the small scale of this map and the fact that it was known that certain upland bog areas had been omitted from it, extensive use was made aerial photographs at a scale of 1:30 000, taken during the 1970's, in order to locate potential sites. Aerial photographs from all the major upland areas in the country were examined. Potential sites identified and drawn on 1/2" or where they were available, 1:50,000 Ordnance Survey Maps. Use was also made of forest inventory maps, belonging to <u>Coillte</u> and in the case of Co. Donegal sites, a LANDSAT satellite image, in order to exclude those sites which have been afforested since the aerial photographs were taken.

Although this desk survey covered all Irish upland areas, due to time constraints, field survey work was limited to the counties Donegal, Dublin, Wicklow, Wexford, Waterford, Cork, Kerry, Tipperary, Limerick, Laois, Offaly and Galway. Within these counties, the sites which appeared to be the most intact and interesting or alteratively, were located at the limits of the geographical range of the habitat, were visited.

Field work was carried out between mid-May and mid-September 1991. The individual sites were walked and the various salient features of the sites recorded on field record cards (Appendix I). Factors such as degree of intactness of the bog, wetness, vegetation, slope, orientation and the presence or absence on the

C] [] (]

site of features such as pool systems, swallow holes and drainage gullies were recorded. Other features, such as interesting successions in vegetation from that on the site to that on the land adjoining it, the occurrence of peat cutting or afforestation in the vicinity, the degree of grazing pressure and potential threats to the site were all noted. A complete list of the species occurring on the sites was made. Specimens of uncertain taxa were collected for subsequent identification in the laboratory.

Due to the altitude and remoteness of many the sites, a considerable percentage of time in the field was spent approaching and leaving them. This frequently did not permit sufficient time for a detailed examination and in a number of cases, the time spent on individual sites did not exceed one hour. Systematic analysis of the vegetation, involving the taking of relevés was not attempted although detailed field notes were taken.

Plant nomenclature follows Smith (1978, 1990) for bryophytes, Tutin <u>et al</u> (1964 - 1980) for higher plants,

<u>Site evaluation</u>

η

Evaluation of sites was based primarily on the professional experience of the surveyers. As an aid to the standardisation of the evaluation process however, a scoring system was also used (Appendix II). Sites were awarded scores based on a number of criteria: representitiveness of the habitat; habitat rarity; area of intact surface; degree of damage due to burning, cutting, drainage, grazing and trampling; interesting vegetational gradients to adjoining habitats and the presence of rare or protected species. It was felt appropriate not to award scores

C] ဂ၂

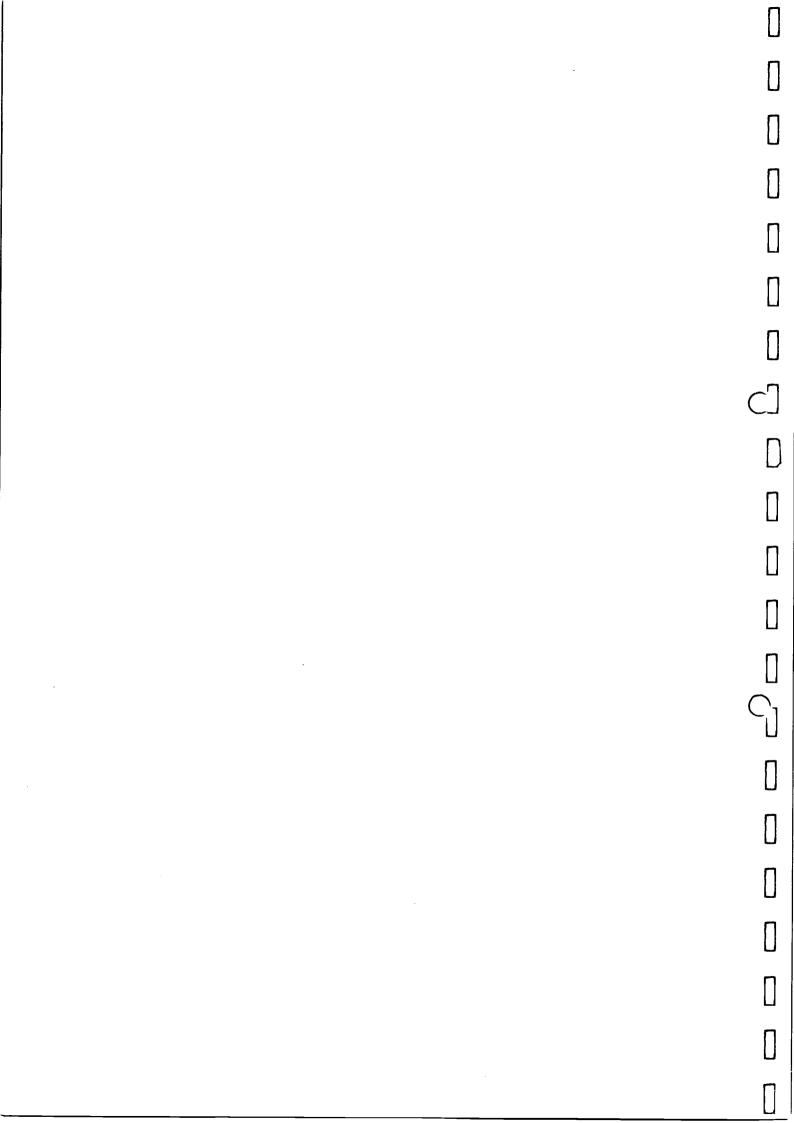
species or community diversity, as was the for practice in earlier surveys, since such diversity was result from damage to found frequently to or interference with a particular site. Often the best and most natural sites displayed a low degree of diversity. By and large, the results of the scoring with evaluations arrived at concurred system It must be emphasised that such a subjectivly. scoring system has limited use and that in cases where the results of scoring system diverged greatly from the professional judgement of the surveyer, emphasis was placed on the latter. Reasons for this dwergemen should be juien

[)

 \Box

]

5



RESULTS

General observations

1

r L

2

The distribution of upland bog sites in Ireland is not strictly correlated with the distribution of upland areas in the country. For instance, areas of high level mountain bog are absent from Co. Galway and scarce in Co. Donegal, despite the fact that these counties have extensive mountainous areas. Factors such as geology, topography, rainfall, temperature, the effects of grazing and trampling, and the balance between peat accumulation and erosional processes all play a part in determining the distribution of The relative importance of these peatland sites. individual factors varies from area to area and the absence of peat from one mountain range may not be due to same factors preventing bog development in another.

For example, the fact that extensive blanket peat does not occur on the horizontal and extensive plateau of Maumtrasna, Co. Mayo, is almost certainly due to the erosion of pre-existing peat. Up to 3 m of peat still occurs in isolated places there. The absence of blanket bog on the Twelve Bens mountain range, Co. Galway, on the other hand, may be related to the steep gradients which occur on these mountains. Patches of deep peat may be seen on very steep slopes in parts of this range, however. This suggests that the gradient only factor determining the alone is not the distribution of blanket peat here: a combination of overstocking and ease of erosion may be responsible.

By the same token, the variation which has been observed in the vegetation of the various sites is probably due to a combination of factors. Schouten Q

C] \mathbb{C}

(1981, 1984) has noted an east to west gradient in the vegetation of upland bogs. Mountain bogs in the west of the country tend to have a lower abundance of ericaceous species and Sphagnum species than those in This he attributes to the higher rainfall the east. in the west which reduces the vigour of heathers and causes a constant flow of water which in turn, reduces abundance of bryophytes along with causing the To attribute all these differences to the erosion. climatic gradient would be too west east to The mountain areas in the east simplistic, however. of the country are predominantly of granite. This gives rise to rounded, base poor summits which are easily blanketed in peatland vegetation. The mountains in the south-west, on the other hand, are predominanty of sandstone. This frequently gives rise to sharp summits composed of vertically bedded rock. This rock exposure tends to result in the flushing of the peat downslope of such summits and а less ombrotrophic vegetation results. rounded Where summits do occur in the west, the bog vegetation on these bears a greater resemblence to that occurring on mountains in the east of the country.

2

factor Management is also an important determining the composition of the vegetation. By and large, the upland sites in the east of the country tend to be burnt more frequently. This is bound to result in differences between these bogs and unburnt There is much evidence to suggest that sites. ericaceous species were once much more plentiful on the mountains of the west of Ireland. The decline in their abundances appears to be directly related to overstocking by sheep. This is probably the greatest single pressure which detracts from the quality of otherwise intact upland bog sites especially in the west of the country.

There beather but beshaft only on drive plates?

. C]

A total of xxxx sites were visited during the course of the survey. Of these, xxxx were found not to fit into the definition of "bog" and xxxx were found to have been destroyed by cutting, drainage or afforestation.

During the course of the survey, it became clear that a simple classification of upland bog sites into highland and mountain blanket bogs was inappropriate. The sites exhibited a diversity which was based on topography in addition to altitude. Differences in topography resulted in differences in bog morphology and in turn, differences in the vegetation and the surface patterns at the various sites. The following categories of bog have been tentatively recognized:

> <u>Highland Blanket Bog (H):</u> This type of bog coincides with that recognized by Schouten (1981, 1984) and occurs at altitudes between 152 m and The vegetation on these bogs is similar 300 m. to that on the Atlantic Blanket Bogs; Schoenus nigricans and Molinia caerulea being frequent or dominant. Species characteristic of mountain bog include Vaccinium occur. These also mav myrtillus, Diplophyllum albicans and Empetrum Sites in this type may show variations nigrum. in topography with drier undulations having peat and with rock occasionally shallower Since species indicative, to some outcropping. extent, of flushed conditions already occur on these sites, these variations in the topography do not unduly alter the composition of the Ericaceous species are more vegetation. plentiful on the drier hillocks. Frequently, wet quaking patches occur in flatter areas. These may be extensive. Here may be found species such Menyanthes trifoliata, Potamogeton as polygonifolia and Drosera intermedia. Algae may be abundant also but the areas otherwise bare of

1897

C]

Π

vegetation.

?

Flushed Slopes (F): This type includes peatcovered slopes of mountains above 300 m in altitude where the vegetation has been influenced by the effects of water draining from above. Usually, bedrock may be found outcropping uphill of the bog or else rocks protrude through the the shallow peat surface. This probably explains why these bogs appear to be somewhat enriched. The vegetation somewhat resembles that found on the highland bogs and is usually dominated by Molinia caerulea. Sphagnum occasionally forms a good carpet with <u>Sphagnum</u> <u>papillosum</u> being apparently more frequent than in more ombrotrophic mountain situations. Towards the tops of the slopes where the peat is sometimes less flushed, Molinia caerulea is less dominant and species such as Scirpus caespitosus may become prominent. Here the vegetation may resemble that of the Unflushed Slope (SL) type. The Flushed Slope type of bog occasionally grades into the Headwater Bog type.

9

<u>Headwater Boq (HR):</u> This type of bog derives its title from the fact that bogs which belong to it frequently form the source of one or more streams. These bogs normally occur on the saddle between two hills or alternatively, on very gently sloping plateaux or spurs, situated below The drainage is poor in these steeper slopes. areas and they may also collect water draining from the slopes above. This ensures that this type of bog is reasonably wet and that a good depth of peat may accumulate. The presence of Molinia caerulea indicates that some flushing occurs but this species is rarely vigorous. One feature of this type of bog is the frequent occurrence of systems of pools or wet hollows. These are probably referable to the tearing pattern described for upland bogs by Schouten (1981, 1984). Taxa characteristic of more open vegetation, such as <u>Sphagnum compactum</u>, <u>Pleurozia</u> <u>purpurea</u>, <u>Campylopus</u> species, and <u>Drosera</u> species occur on the pool edges and <u>Erica tetralix</u> and <u>Narthecium ossifragum</u> may be abundant. Towards the edges of the sites where the slope steepens, these pools may dry out and erosion of the surface may begin. Drainage of the bogs may occur beneath the surface and the subterranian water channels may collapse giving rise to swallow holes.

IPP7

J

- Mountain Valley Bog (V): This type of bog is to be found in flat hanging valleys, usually in the meanders of mountain streams. Essentially, it has a similar morphology to that of the valley raised bogs, found at lower altitudes, and may have a discernable dome. Usually, <u>Sphagnum</u> is much less abundant, however. Pools may be present but they are rarely deep and may only amount to wet hollows. <u>Campylopus</u> species and <u>Pleurozia purpurea</u> may be abundant on the barer areas.
- High Level Montane Blanket Bog (M): This type of bog usually occurs on the summit and ridge plateaux of mountains above 600 m in altitude. A general feature of these mountains seems to be their gently sloping rounded summits. An absence of outcropping rock ensures that the bogs are not enriched by water which has flowed over mineral substrata. The peat surface on these bogs is, despite the very high rainfall, usually firm and apparently well drained. This suggests that low

10

 \Box C C]

temperatures as distinct from waterlogging, may have an important influence on the accumulation of peat on these sites.

M. Javar

]

 \int

ij

The vegetation corresponds closely with the Vaccinio-ericetum tetralicis described by Moore (1964) from mountain blanket bogs in Ireland. It is usually dominated by Eriophorum vaginatum, Eriophorum angustifolium, Calluna vulgaris and Scirpus caespitosus and usually a good carpet of Sphagnum capillifolium is present. Other species which are constant in the vegetation include <u>Rhacomit</u>rium lanuginosum, nigrum, Empetrum Vaccinium myrtillus and Luzula sylvatica. The last species is noteworthy as Moore (1964) does not record it as being characteristic of mountain blanket bog, it being, along with Vaccinium myrtillus a species of acidophilous oakwoods. Juncus squarrosus may be locally abundant in the although this species may vegetation and sometimes be indicative of shallower peat depth, it is not always so. <u>Cladonia</u> <u>arbuscula</u> or <u>C</u>. uncialis is locally common on some sites. The absence of flushing or enrichment is indicated by the non-occurrence or scarcity of Molinia caerulea from the vegetation.

Where overgrazing is not a problem, the dominant plant species usually form a closed and dense canopy and for this reason, a number of plant taxa which are common on other upland bog types, are scarce or absent. These include <u>Campylopus</u> species, <u>Drosera</u> species, <u>Pleurozia</u> <u>purpurea</u> and <u>Erica</u> tetralix. In the last respect, the vegetation differs somewhat from the association described by Moore (<u>loc. cit.</u>).

Low Level Montane Blanket Bog (LM): This type of

C] •

bog is a variant of the last type and occurs Sount 300 m? below 530 m in altitude. It is limited to the Slieve Bloom mountain range. It differs from the High Level Montane Blanket Bog in the absence or scarcity of Empetrum <u>nigrum</u>, Rhacomitrium and <u>sylvatica</u> from the <u>lanuginosum</u> <u>Luzula</u> vegetation and in the greater frequency of Andromeda polyfolia and Vaccinium oxycoccus. These differences may be altitude related.

J

 \int

г'-

]

J

12

C

xxxx sites have been categorised into one of the six types of upland bog described above, based on the most significant peatland type present on each site. Within each type, sites were then rated (see methods).

As stated earlier, some of the criteria for evaluation used in previous bog surveys were found to be not as useful on this survey. By and large, direct human interference such as peat cutting, was not as significant a factor affecting the scientific value of Afforeststion was found to be a frequently sites. encountered threat in the case of the highland bog interference including Indirect human sites. overstocking and burning were found to be the most commonly encountered factors affecting the ecology of the higher level sites. Fire is a particularly common problem in Dublin/Wicklow mountains but less so on the high altitude sites elsewhere.

in this were further divided into groups based on criteria such as geographical significance, degree of intactness, freedom from interference and

Sites have been rated based on the criteria set out in the evaluation score sheet (Appendix).

In most upland situations there is great spatial heterogeneity based on the topography. This causes variation in the peat depth and in the vegetation. Within a given area, it is quite normal to have areas of grass heath, <u>Calluna vulgaris</u>-dominated heath or



montane heath interspersed with areas of true bog. This variation makes the delineation of sites and areas of bogland difficult. Owing to the constraints imposed by the terms of reference of the survey which limited its scope to upland bogs, proper account could not be taken of the presence of interesting areas of heathland, or flushed springs, while undertaking site evaluation. Ideally, the range in variation of habitats, and the various successional stages in the vegetation should all be assessed in a upland survey of this sort.

ŅÝ

The definition and delineation of areas of bog was also sometimes difficult. Occasionally, heathland vegetation may be found occurring on peat of up to 2 m in depth. This is sometimes, although not always, related to human interference such as burning. Best Site (Not Complete!)

 \Box

Γ

(h (h (h) 22		 Large site containing a number of bog types including a headwater bog. Many of the upper slopes are eroded but good pool systems exist in parts of the site. Breeding golden plover. Encompasses slopes, flats and streams. Some very wet, quaking areas. Largely unaffected by human activities. Site adjoins equally 	Threat (T) Damage (D) D. Erosion D/T Turbary Forestry, Erosion, Overgrazing
2 13 ('H) 22	386 200 300 29 200 26 225	 Large site containing a number of bog types including a headwater bog. Many of the upper slopes are eroded but good pool systems exist in parts of the site. Breeding golden plover. Encompasses slopes, flats and streams. Some very wet, quaking areas. Largely unaffected by human activities. Site adjoins equally 	(D) D. Erosion D/T Turbary Forestry, Erosion,
С́н) 22	300 29 200 26 225	 number of bog types including a headwater bog. Many of the upper slopes are eroded but good pool systems exist in parts of the site. Breeding golden plover. Encompasses slopes, flats and streams. Some very wet, quaking areas. Largely unaffected by human activities. Site adjoins equally 	Erosion D/T Turbary Forestry, Erosion,
н) 22	29 200 26 225	 Including a neadwater bog. Many of the upper slopes are eroded but good pool systems exist in parts of the site. Breeding golden plover. Encompasses slopes, flats and streams. Some very wet, quaking areas. Largely unaffected by human activities. Site adjoins equally 	D/T Turbary Forestry, Erosion,
	26 225	 Encompasses slopes, flats and streams. Some very wet, quaking areas. Largely unaffected by human activities. Site adjoins equally 	Forestry, Erosion,
	26 225	wet, quaking areas. Largely unaffected by human activities.	Erosion,
/HR 12		' less strand de la	
	300	s a muerestino stodes or	
		Sliabh League which greatly enhances its scientific interest.	
/HR 79			T. Grazing Erosion
	300	,	
/HR 19	.92 250	Adajacent to forest. Gentle slopes with good	T/D. Forestry, Turbary,
	70 225		Erosion. T. Cutting,
2			Overgrazing.
			T/D. Fire,
x 51		L L	Drains Erosion.
(1) 20		7 Surface completely intact and uniform. Dense	T (?). Forestry
(1) 2	293 450		T. No immediate threats
1			T/D. Erosion
L 4			D. Fire T. Forestry.
	2222 200	O- Very Large site, the most	D.
			Overgrazing T. Forestry, peat cutting
	(HR 1 2 (1) 2 (1) 2	HR 79 250 HR 192 250 HR 192 250 2HR 192 250 2TO 271 271 2TO 271 271 1 288 38 (1) 288 38 (1) 293 45 124 65 71 432 40 50 2223 20 20	IntIntInteresting slopes of Sliabh League which greatly enhances its scientific interest.'HR79250- 300Interesting system of pools and spring flushes.'HR192250Scarcely flushed. Adajacent to forest. Gentle slopes with good Sphagnum cover.'HR192250Scarcely flushed. Adajacent to forest. Gentle slopes with good Sphagnum cover.270225- 275Gentle, somewhat flushed, slopes. Good Sphagnum cover.270225- 275Gentle, somewhat flushed, slopes. Good Sphagnum tover.(1)288387- 497Gently sloping plateau. Surface completely intact and uniform. Dense Sphagnum carpet.(1)293450Uniform surface with closed vegetation. Good Sphagnum cover. Contains pool system.124650- 710Largest area of intact high montane peat in Cork or Kerry.2223200- 325Very large site, the most important upland bog in Co. Galway. Various habitats. Parts very wet.

]

Crockbarabris- ta B95 07	Do25	1/3	H/F	145	195- 240	Flushed. Pools and lawns occur. Golden plover and dunlin breeding site.	D. Fire, trampling T. Erosion
Doobin G86 90	Do36	3	H/HR, F	215	240- 270	Slope with stream flushes and an ombrotrophic saddle. Intact with good <u>Sphagnum</u> cover. Golden Plover breeding.	T/D
Knockowen KNOCICASTUMPA V79 57 Caha Hrs	К 7	24	H/HR	100	285- 300	Ombrotrophic wet dome on mountain saddle with <u>Sphagnum imbricatum</u> , and <u>S. molle</u> . Intact. Long species list.	
Ballinastoe (Sally Gap) 014 13	W3/4	16	HR	480	520- 550	Best headwater bog in Wicklow. Large wet pool system. Source of four rivers.	D/T. Drainage, Fire, Erosion
Glenlough Cuine Mrs. V84 55	C 2	24	F	312	420- 465	Many small areas of peatland giving range of habitats	D. Fire
Derryclogher W01 62	C 9	24	F	536	540- 630	Complex site with many gradations to heath and flushes. Practically untouched.	
Coumanare ^{µt.} Brenclan. Q53 06	K 43	20	F	293	360- 390	Impressive flushed bog with very large scragh.	D. Fire, Erosion

1,5

]

]

CULLENAGH

SITE NO: Т 3 Tipperary COUNTY: AIR PHOTO NO: R 746 51 AREA (ha): ALTITUDE (m): 690-760 **CATEGORY:** М RATING: 6 RG **RECORDERS:** WRITE UP: RG

11

1/2" MAP NO:	22
GRID REF.:	R90 23
6" MAP NO:	80
AREA INTACT (ha)	:16
FOREST AREA:	Glengarra
TOWNLANDS:	Cullenagh
GEOLOGY:	Granite

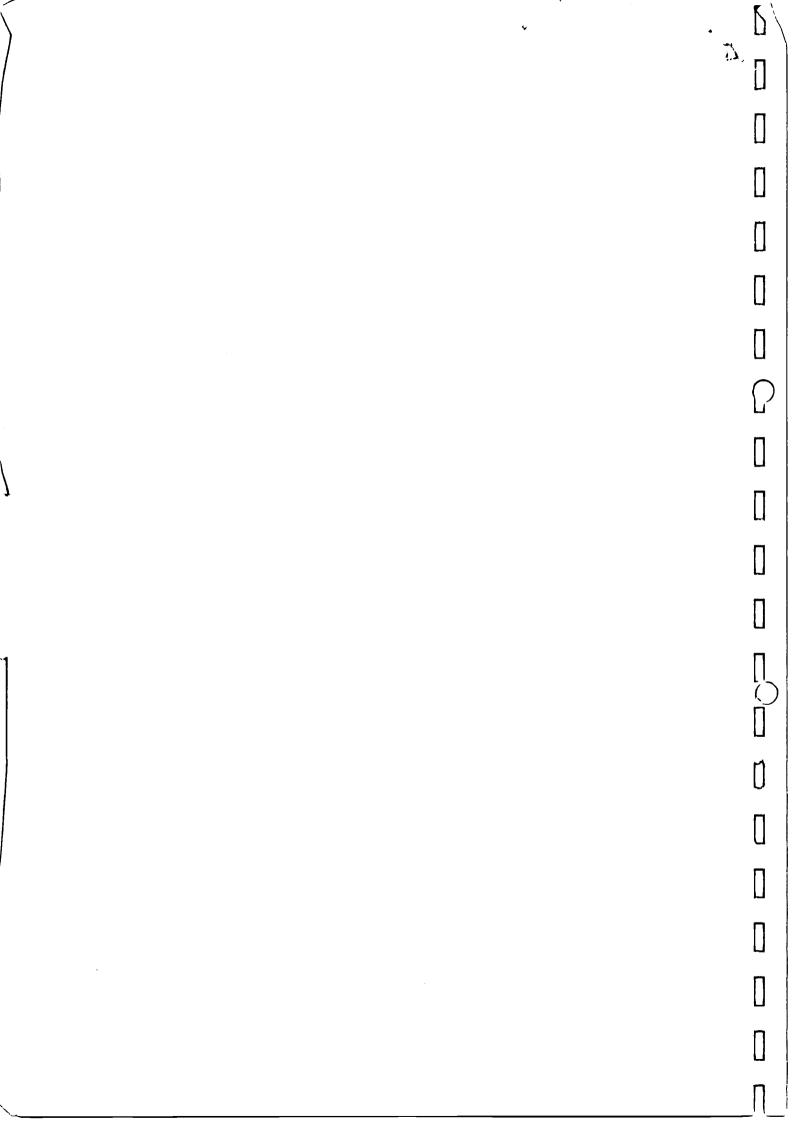
GENERAL SITE DESCRIPTION

The site consists of the summit ridge of the Galtees east of Galtybeg where there are fragments of intact peat. It runs eastwards towards Lough Muskry as an undulating succession of rounded summits and cols. It is a high altitude site averaging about 720m.

The vegetation of the deeper (1m) peat is generally Eriophorum vaginatum/Calluna/Sphagnum capillifolium with some Vaccinium myrtillus, Festuca vivipara, Empetrum, Juncus squarrosus and a little Luzula sylvatica. Scirpus occurs regularly but there is no Molinia. With height the plant cover becomes shorter, the Calluna and Empetrum reaching only 6-8cm. They are overtopped by Eriophorum angustifolium to about 30cm. There is more open ground and some bare peat, suiting Carex panicea and Campylopus atrovirens. Sphagnum cuspidatum and S.subnitens occur in a few depressions.

The summit regions have in some cases retained their peat cover but are also sometimes stony. Whatever the substrate Racomitrium is a major species with Calluna, Juncus squarrosus and Festuca vivipara. The peaty have hummocks 1.5m in places) of sites (up to Polytrichum alpestre, often crowned by a compact growth of Mylia taylori. Lophozia ventricosa, Kurzia pauciflora and Cephalozia bicuspidata occur in sheltered positions. Growing through the mosses in scattered patches are Cladonia arbuscula, C.furcata, C.polydactyla, C.bellidiflora and C.rangiferina. The stony areas nearby have fewer of these lichens in a dwarf mix of Racomitrium and Calluna with Agrostis canina and Polytrichum juniperinum. Occasional plants of Carex bigelowii also occur.

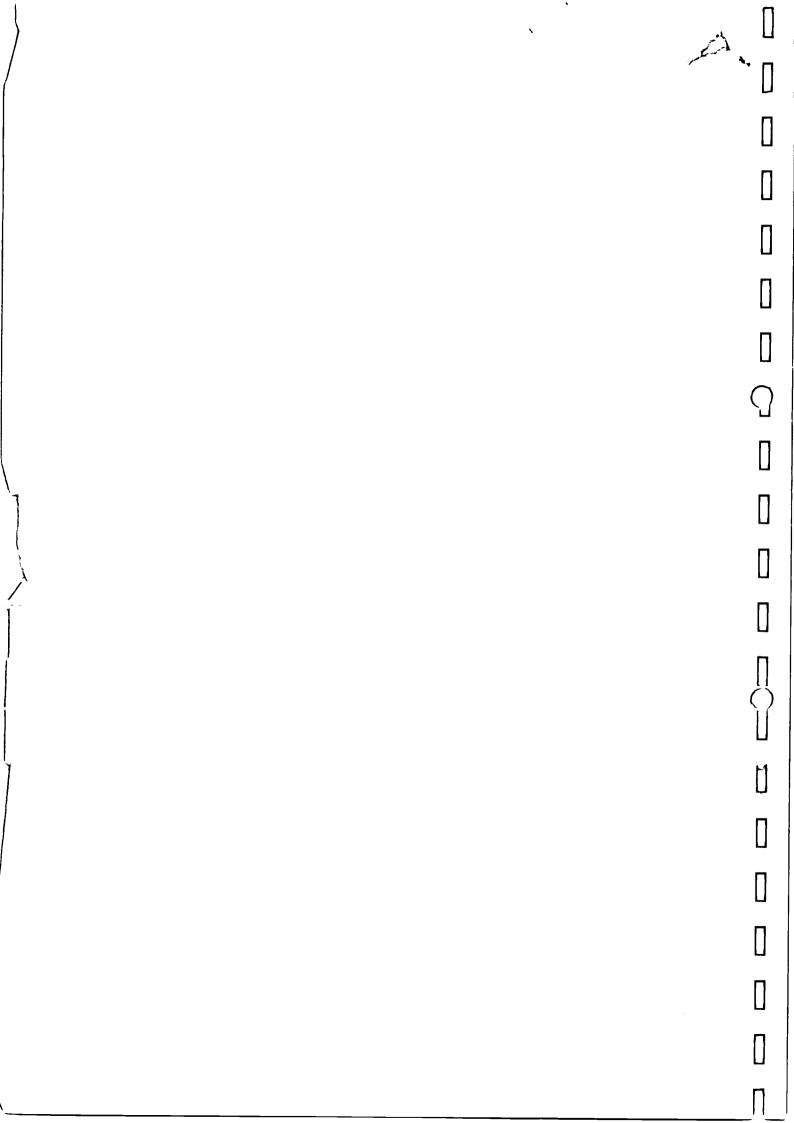
Along the ridge are saddle areas which are slightly wetter and contain more Sphagnum, especially S.papillosum and S.cuspidatum, along with Scirpus cespitosus. Cladonia portentosa is commonest in these sites: it is quite rare in the more exposed



vegetation. A large tor, O'Loughnan's Castle, is situated in one such saddle but its coarse conglomerite does not harbour any plants of interest. To the east the peat becomes thinner though there is one further block above Lough Muskry that is reasonably intact. The ridge runs NW thereafter and the peat areas become progressively more broken up. Some cutting even seems to have been done beside the stone wall which runs here.

EVALUATION

The vegetation of this site shows it to be a montane bog, recalling Mangerton in Kerry with its lichen flora and dwarf vegetation. The peat cap however is fragmented, small in extent and beset by gully erosion and sheep grazing. It retains some ecological interest however.



CROCKASTOLLER

SITE NO: COUNTY: AREA (ha): 6" MAP NO: ALTITUDE (m): CATEGORY: RATING:

Do 1 Donegal 1386 51 200 - 300 S (+ F, V, H) 10

. •• J

> 1/2" MAP NO: GRID REF: AREA INTACT (ha): AIR PHOTO NO: FOREST AREA: TOWNLANDS:

Meeniroy Crockastoller, Ardachrin, Drumnasharragh

1

117

B21

B96 10

RECORDERS: EM, RG WRITE UP: EM, RG

GENERAL SITE DESCRIPTION

This is a very large site, centred around Crockastoller Mountain, Co. Donegal. Part of the site lies on the watershed between the Garten Lough catchment (Bullaba & Owenbeg Rivers) and the Finn, to the east and south of Crockastoller mountain. The site is bounded on the south-west and the northwest by a stream which flows eventually into Lough This lake lies at the western end but the Muck. site ceases at the break of slope above the lake. (Do 25 runs west and south-west from Lough Muck). On the south-east, a stream and a flat ridge which runs up to Brallanmore Mountain, form the boundary. The north-east boundary of the site is contiguous to the south-west boundary of a Lowland Blanket Bog Site.

Much of the site consists of mountain slopes and ridges which are very eroded. The summit of Crockastoller itself consists of bare rocks. Lower down, much of the area is covered with eroding peat hags, between which are many deep gullies. To the east of Lough Muck, the ground is generally sloping to the SE though there are almost level terraces in places. It is cut by the shallow valleys of two streams but has no standing water apart from some small pools.

A number of differing types of upland bog systems are to be found within this site. These include flushed slopes, headwater bogs, upland valley bogs and highland blanket bogs.



Most of this site is in the possession of NPWS.

SPECIES OF NOTE

Golden plover.

EVALUATION

Ĵ

Although much of this large site consists of slopes where the peat has eroded down to the bare rock, the total area of intact peat is large and the quality of several communities good. The areas of most interest are the pool area close to Lough Muck which is linked to the east and south with substantial areas of intact <u>Eriophorum vaginatum-Scirpus caespitosus</u> bog, the headwater bog on the saddle north-east of Crockastoller which is one of very few occurring in Donegal, and the series of valley bogs, north of Crockastoller. The occurrence of a significant number of breeding golden plover on this site greatly increases its importance.

SPECIFIC AREA DESCRIPTIONS

The area situated in the south-east of the Area A site consists of a north-westerly facing slope, at an altitude of between 250 m and 300 m. Many rocks protrude above the surface and the vegetation, as a result, reflects the somewhat flushed nature of the slope. Towards the top of the slope, where conditions are drier and flushing less marked, <u>Calluna</u> <u>vulgaris</u> predominates in the vegetation. Lower down, S. caespitosus becomes prominent. The vegetation is tussocky, with <u>Calluna</u> occupying the tops of the tussocks and S. caespitosus the bases. Molinia occurs throughout. Further downslope, towards the river, <u>Molinia</u> becomes more prominent. Some diffuse erosion is taking place in this area. Lichen cover is reasonable and the area does not appear to be affected by burning. Overall, this area is not particularly interesting.

> Further south-west is a mixed area with old erosion prevalent and traces of a little hand-cutting. The slope is often around 5 degrees and there is a little rock exposed. The vegetation consists of tracks of dry <u>Molinia</u> <u>caerulea</u> and also wetter areas with broad bands of <u>Scirpus cespitosus</u> and <u>Eriophorum</u> <u>angustifolium</u> growing through <u>Sphagnum</u> <u>papillosum</u>, <u>Campylopus atrovirens</u> and <u>Drosera</u> <u>anglica</u>. In certain areas large hummocks capped with <u>Racomitrium</u> <u>lanuginosum</u> occur: some have

<u>Huperzia selago, Pleurozium schreberi</u> and <u>Mnium</u> <u>hornum</u>. These are now semi-stable areas but there are a few more active channels and flushes where some enrichment brings in <u>Sphagnum auriculatum</u>, <u>S.recurvum</u> and <u>Juncus</u> <u>effusus</u>. In one particularly eroded section where subterranean flow has dried out the surface, <u>Aira praecox</u>, <u>Juncus bulbosus</u> and <u>Polytrichum longisetum</u> have colonised the peat where it is sprinkled with gravel.

- Slopes decline to the south-west where <u>Area</u> B several streams cut across the hillside. Around them there are uneven areas of Racomitrium hummocks which are rich in <u>Cladonia</u> species, including <u>C</u>. <u>arbuscula</u>, <u>C</u>. <u>cervicornis</u> ssp verticillata and ? C. incrassata. In between are channels or rather bare pools. These often occur in a stepped series, their downslope sides marked by hummocks and their overflows with Narthecium ossifragum. Dunlin and golden plover were nesting here. Further from the channels an intact surface takes over in which <u>Scirpus</u> <u>cespitosus</u>, <u>Eriophorum</u> <u>vaginatum</u> and Molinia caerulea are important and there is a little <u>Schoenus</u> <u>nigricans</u>. More recent burning here than elsewhere has left some bare slimey peat with <u>Campylopus</u> atrovirens but <u>Sphagnum</u> capillifolium is recolonising also.
- <u>Area C</u> As the ground rises to the watershed with Lough Muck (C) a series of intact Sphagnum pools is found, linked by occasional winding streams. There are many rock outcrops nearby and the enrichment brings in <u>Menyanthes</u> <u>trifoliata</u>, <u>Carex limosa</u>, the two varieties of <u>Sphagnum auriculatum</u>, much <u>Schoenus</u> and a little <u>Rhynchospora alba</u>. <u>Sparganium</u> <u>angustifolium</u> occurs in one of the pools and there is more <u>Sphagnum magellanicum</u> nearby, in a mixed <u>Sphagnum</u> lawn.

 \square

<u>Area D</u> In the south (D) the ground is wetter and although burning has taken place only 3 years ago there is a considerable <u>Sphagnum</u> cover with occasional large <u>S</u>. <u>capillifolium</u> hummocks. This community extends north-eastwards along the mid-slopes of the hillside. In places (D-1) there are linear pools (and more golden plover) on the contours with <u>Sphagnum cuspidatum</u> and a little <u>S</u>. <u>magellanicum</u>. A major flush occurs just below this with <u>Juncus effusus</u>, <u>Carex</u> <u>rostrata</u>, <u>C</u>. <u>paniculata</u> as well as <u>Stellaria</u> <u>alsine</u>, <u>Potentilla palustris</u> and <u>Potamogeton</u> <u>natans</u>. It runs downslope into <u>Anthoxanthum</u> <u>odoratum</u>, <u>Nardus stricta</u> etc.



- <u>Area E.</u> (See Area A as this area was visited by both fieldworkers and both descriptions have been amalgamated.)
- This area is situated directly across the Area F. river from Area E/A and is a south-easterly facing slope spanning the altitude range 250 m - 300 m. In the vicinity of the river, <u>Schoenus nigricans</u>, <u>Molinia</u> and <u>S. caespitosus</u> are abundant. The slope above has a gradient of approximately 15°. Rocks occasionally occur on the surface. The area has probably been burnt within the past two years. Calluna vulgaris is short and Sphagnum is not abundant. A number of large hummocks of S. capillifolium do occur, however. In some areas the peat surface is almost bare. Here Sphagnum compactum may be found. Further upslope, the vegetation is dominated by Molinia and many rocks occur on the surface. In places, the vegetation is dominated by Nardus stricta.
- This area, situated upslope of Area F, at <u>Area G.</u> an altitude of 300 m, exhibits extensive blanket erosion. Large areas of bare peat are present, in addition to deep gullies. The peat depth in this area is approximately 50 cm - 60 The vegetation is similar to that in Area cm. F except that Erica cinerea is common on the drier edges of the peat hags. Calluna is prominent along with Rhacomitrium lanuginosum, Molinia and <u>S</u>. <u>caespitosus</u>. Where erosion has exposed rock and bare peat, <u>Juncus</u> <u>squarrosus</u> is colonising. Other such areas have a good carpet of <u>Sphagnum</u> <u>capillifolium</u>. On the plateau, in the direction of the summit of Croaghacullin, the area is totally eroded.
- This area is situated on the saddle Area H. between Crockastoller and Croaghacullin at an altitude of 300 m - 350 m. The area is interesting as it is very wet and quaking and encompasses a system of large pools. A small lake occurs on the edge of this area as well as a number of flushed places. Overall, surface cover by <u>Sphagnum</u> is not great. A number of pools contain S. cuspidatum, Sparganium angustifolium or <u>Menyanthes</u> trifoliata but many are empty. Several <u>S. capillifolium</u> hummocks occur. Certain flat areas, between the pools, contain S. auriculatum and Campylopus atrovirens and take on a black appearance. Some areas are obviously flushed but this may be due to the enrichment resulting from the decay of drowned sheep. In these areas, Juncus bulbosus can be prominant. A number of headstreams flow beneath the peat in this area. In the lake may be found <u>Menyanthes</u>, <u>C</u>.

22,

 \int \Box $\left[\right]$ <u>rostrata</u> and <u>Eriophorum angustifolium</u>. A good growth of <u>Sphagnum</u> which includes <u>S</u>. <u>recurvum</u>, occurs around the margin. One side of the lake is rocky. The lake drains into a stream which runs downslope in a south-easterly direction. The area is flushed here and contains <u>C</u>. <u>limosa</u> and <u>Drepanocladus exannulatus</u>.

Area I. This is a small raised valley bog, situated to the north-east of Crockastoller, on the south-east of the site boundary stream and at an altitude of 200 m. The area has a poor Sphagnum cover. Many hummocks do occur however, and these consist of S. capillifolium or Rhacomitrium lanuginosum. Pools are plentiful and are orientated parallel to the river. Schoenus nigricans is abundant in this area and the other dominant species include S. caespitosus, Molinia, Calluna vulgaris, and Eriophorum species. Other species which occur in the area include Polytrichum alpestre and Drosera anglica

A smaller but similar area to this, occurs further downstream but time did not permit this area to be visited.

<u>Area J.</u> The north-west slope of Crockastoller is flushed and is dominated by <u>Molinia</u>.

 \Box $\widehat{}$

 \Box

COOMACHEO

SITE NO: COUNTY: AREA (ha): 6" MAP NO: ALTITUDE (m): CATEGORY: RATING:

C 8 Cork 432 C47, K76, K77 400 - 500 SL 12

1/2" MAP NO: 21 W22 86 GRID REF: AREA INTACT (ha): 432 AIR PHOTO NO: W12, W366 FOREST AREA: Ballyvourney **TOWNLANDS:** Coomacheo Greeves, Adrivale, Curroedhill, Kippaqh

24

RECORDERS: CD, RG, EM WRITE UP: CD, EM, RG

GENERAL SITE DESCRIPTION

The site is situated on the south side of Caherbarnagh Mountain, being bounded onm the north by the east ridge of that mountain and by the Clydagh River on the south. This river rises in the Derrynasaggart Mts in the area between Mullaghanish and Caherbarnagh. At its source the valley is wide and the slopes relatively slight but to the west it becomes constricted as the river increases in size and gradient. Both sides of the upper valley contain extensive areas of peat but the southern side has all been afforested. The site consists of even sloping ground on each side of the upper reaches of this river as it flows east and then south from Caherbarnagh Mountain. On the east, on the lower slopes, the site is bounded by forest plantations. Where the river flows west, some planting of conifers has taken place here also so that the site does not extend to the basin of the valley.

Much of the site has been affected by fire. As a result, the vegetation on much of it is uniform and not very interesting. It would appear to consist of a slightly flushed slope. This picture may be distorted due to the fire. On the northeastern side the ground is wetter with <u>Sphagnum</u> cover. This site is the only large area left unplanted but in view of the surveying poles found may not be left much longer.

SPECIES OF NOTE

<u>Sphagnum</u> <u>contortum</u>

EVALUATION

 \int \bigcap

 $\left[\right]$

This is one of the largest areas of intact upland peat in the south west of Ireland. This fact and the fact that it adjoins another important upland bog site (Caherbarnagh, C 7) confers on it considerable ecological value. Its value is somewhat diminished by the effects of recent burning on the vegetation and the uniformity of the site. The site is under imminent threat from afforestation, however.

SPECIFIC AREA DESCRIPTIONS

- <u>Area A1</u> Quaking area of hummocks and hollows in middle of small wet 'raised' type bog on watershed. The vegetation is intact with very little evidence of burning or grazing and the watertable is at or very near the surface. The canopy is dominated by Eriophorum angustifolium and E. vaginatum and underneath are hummocks of Sphagnum papillosum, S. capillifolium and occassional S. tenellum. The pools contain S. auriculatum, S. cuspidatum, Carex limosa, Drosera anglica while S. magellanicum occured in hollows.
- <u>Area A2</u> Downslope of Area A1 the pools are replaced by a lawn of Sphagnum papillosum and S. magellanicum. The ground is very wet. Molinia and Eriophorum species form a uniform canopy wih short Calluna.
- <u>Area A3</u> This is a wet area of sloping blanket bog occupying a wide, shallow depression between ridges and characterized by a sward of Molinia, Eriophorum angustifolium and E. vaginatum with occassional low hummocks of Sphagnum papillosum. The terrain is soft and wet.
- Area G. This is a large and fairly uniform area occupying a slope of approximately 2° gradient and bounded on the east and west by streams. The vegetation here is dominated by Eriophorum <u>angustifolium, E. vaginatum</u> and <u>S. caespitosus</u>, the dominance of these respective species varying from place to place. <u>S. caespitosus</u> tends to become more dominant on the upper slopes, on the north side of the area. Molinia is also very common in the vegetation. Sphagnum cover is poor and the bog surface was not very soft on the day the site was visited, despite the heavy rain which preceded the visit. It is very possible that the area was badly affected by burning in the recent past. This area merges upslope with Area M, described below. It has been marked out for drainage and is probably in

. . \Box \cap

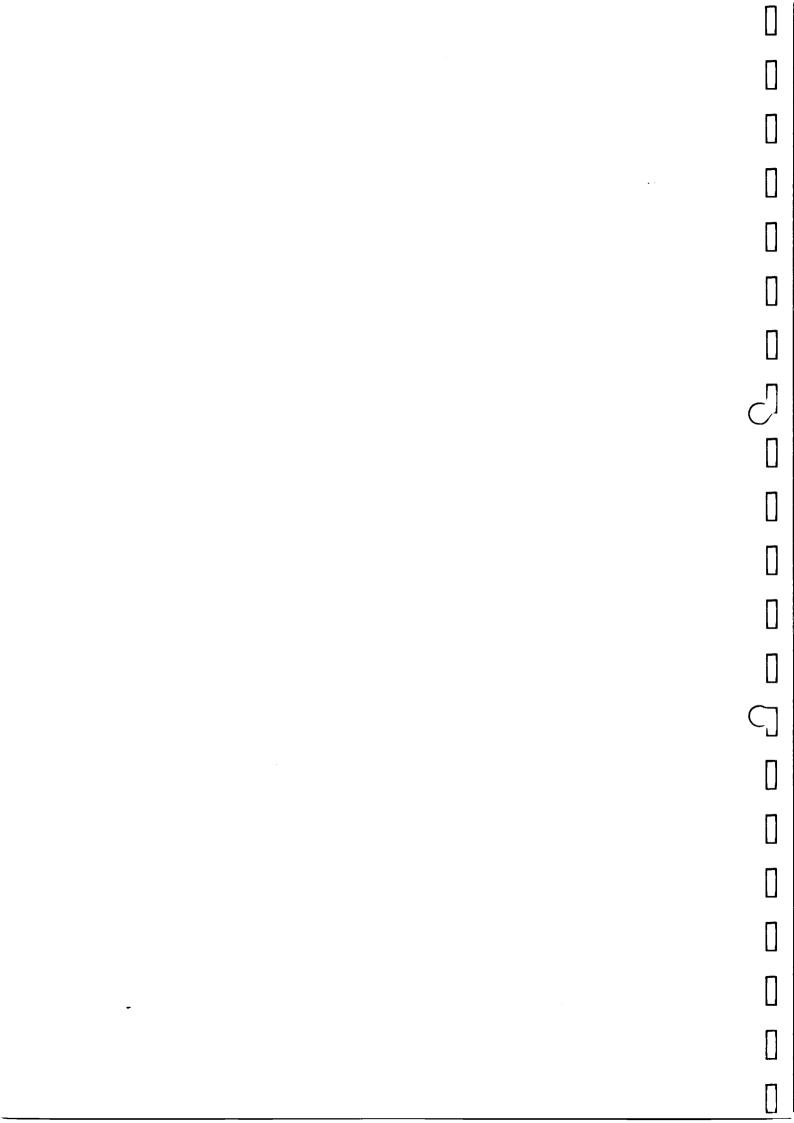
imminent danger.

- <u>Area H.</u> This is a small area on the east side of Area G which incorporates a small lake. <u>Carex</u> <u>rostrata</u> occurs in this lake. In this area hummocks, covered with <u>Calluna</u> <u>vulgaris</u> are mixed with areas dominated by <u>Molinia</u>. A number of bare wet areas are present and they may indicate incipient erosion.
- <u>Area I.</u> On the west side of Area G, is a small flushed area where the bog drains into the boundary stream. In this area <u>Juncus</u> <u>acutifloris</u> predominates and the vegetation contains such species as <u>Dactylorhiza maculata</u>, <u>Juncus effusus</u>, <u>Potentilla erecta</u>, <u>Polygala</u> <u>serpyllifolia</u>, <u>Luzula multiflora</u>, <u>Anthoxanthum</u> <u>odoratum</u> and <u>Viola palustre</u>. Various other flushes occur around the streams including several springs. <u>Carex paniculata</u> grows in some of them, together with <u>Sphagnum</u> <u>auriculatum</u> var. inundatum, <u>S</u>. contortum.
- <u>Area M</u> The vegetation is extremely uniform: in most places it is an <u>Eriophorum angustifolium</u> / <u>E. vaginatum / Scirpus</u> stand with frequent <u>Campylopus atrovirens and Sphagnum papillosum</u> and occasional <u>S. capillifolium</u>. There is a thin cover of <u>Molinia</u> throughout. There are wetter patches, almost pools in places, where <u>S. cuspidatum</u>, <u>Drosera anglica</u> and <u>Pinguicula</u> <u>grandiflora</u> are found. Higher up the slope, a series of faint, elongated hollows, perpendicular to the direction of the slope, occur along with slight erosion.
- <u>Area N</u> North of the river there is a flat expanse of Juncus effusus, Sphagnum recurvum, Carex nigra and Aulacomnium palustre backed by Molinia with Sphagnum papillosum and S. cuspidatum and all flushed from the nearby slope. Fire reappears as the dominant influence where the ground is drier and on all the slope the vegetation is an even stand of both species of Eriophorum, Molinia, Scirpus and Narthecium. The surface is firm with tiny clumps of regenerating Sphagnum and liverworts such as Cephalozia bicuspidata and C. connivens. On the ridge top above, erosion is occurring to the north side and the hummocky terrain with frequent Racomitrium brings in many additional species such as <u>Cladonia</u> portentosa, <u>Empetrum</u> <u>nigrum, Vaccinium myrtillus, Cladonia crispata</u> and <u>C</u>. <u>squamosa</u>.
- <u>Area O</u> Large colonies of <u>Juncus squarrosus</u> occur here, forming islands of 2m diameter in a sea of <u>Scirpus</u> and <u>Eriophorum</u> <u>angustifloium</u> while

J \bigcirc Π

η ப . 1

there are some low <u>Racomitrium</u> hummocks also. Recent burning (3 yrs) is a feature of the entire site though some parts of the north have escaped for 6-8 yrs. The response of the vegetation is seen in the abundance of <u>Campylopus paradoxus</u>, <u>C. pyriformis</u> and <u>C.</u> <u>introflexus</u> as well as the presence of the lichens, <u>Cladonia gracilis</u>, <u>C. coccifera</u> and <u>C.</u> <u>floerkeana</u>.



MEENAWANNIA

SITE NO:Do 37COUNTY:DonegalAIR PHOTO NO:G518AREA (ha):229ALTITUDE (m):200CATEGORY:HRATING:13

1/2" MAP NO: GRID REF.: 6" MAP NO: AREA INTACT (ha): FOREST AREA:

3 G83 90 74, 83 229 Lough Eske

TOWNLANDS:

Meenawannia, Tullynaclagg an, Baylagh

RECORDERS: EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is located 4 km south of the town of Glenties. It is bounded on the south-west by the L 24 road, on the north-east by a forestry plantation, on the north-west by a stream and a plantation and on the south-east by a stream and a lowland blanket bog site (No. 50?).

The site is a highland site and encompasses slopes, flats and streams. The bog, for the most part, drains in a south-westerly direction, although the most northerly section drains towards the northeast. The flats and domes of this bog are very wet and quaking and pool systems occur. Some areas are bare of vegetation and appear to have a black muddy surface. The slopes are firmer but nevertheless, have a reasonably good <u>Sphagnum</u> cover.

The site has not been affected by burning. Some turbary occurs on the margin, in addition to the afforestation. Threats to the site come from afforestation, turbary, erosion, and overgrazing. None of these threats appear immediate, however.

SPECIES OF NOTE

Sphagnum imbricatum, Sphagnum fuscum

EVALUATION

The site is an interesting example of highland blanket bog, largely unaffected by human activities

, \int

 $\left[\right]$

and containing good wet quaking areas. It forms a good example of a bog of intermediate character between lowland blanket bogs and those of higher altitudes.

SPECIFIC AREA DESCRIPTIONS

- <u>Area A.</u> This area, located on the north-east of the site, consists of a 5° slope with a southerly aspect. This is reasonably dry. The vegetation is dominated by <u>Calluna vulgaris</u> and <u>Scirpus caespitosus</u> with <u>Sphagnum recurvum</u> and <u>S. capillifolium</u> forming a carpet layer. A number of heathland species occur here also.
- <u>Area B.</u> This are is situated north of Areas A and slopes gently (2°) towards the north-east and the corner of the adjoining forest. It is delimited on the north, by a small stream which is rich in iron.

The area is quite wet and contains hummocks, hollows and pools. The pool system is reasonably extensive. The pools are elongated and alligned in a north-west to south-east direction. These are probably tear pools. A good cover of Sphagnum occurs on the The hollows have bare areas which surface. support Campylopus species. Rhynchospora alba also occurs here. Many of the pools are filled with Sphagnum; others contain no vegetation. Sphagnum imbricatum occurs in small hummocks. There is some indication that erosion may be begining in this area. On the northern edge, the pools degenerate into erosion hollows which are dry.

- <u>Area C.</u> This area is situated south-west of Area B and west of Area A. It is a mixed area, much if consisting of slopes of little interest. Here, <u>Juncus squarrosus</u> and <u>Polytrichum commune</u> are very common. <u>Calluna vulgaris</u> and <u>Molinia</u> <u>caerulea</u> also occur. A <u>Sphagnum</u> carpet still occurs but the surface oof the bog feels hard and dry. Sometimes, <u>Eriophorum vaginatum</u> becomes prominent. A number of flushes which support <u>Juncus acutifloris</u> and <u>Ranunculus</u> <u>flammula</u> occur. In the flatter areas, a good <u>Sphagnum</u> carpet as well as hummocks, is present. <u>Schoenus nigricans</u> occurs in places.
- <u>Area D.</u> In this reasonably large area, situated on the southern end of the site, <u>Sphagnum</u> is less prominent and <u>Molinia caerulea</u>, <u>Scirpus</u> <u>caespitosus</u> and <u>Schoenus</u> <u>nigricans</u> are more so.

Large parts of the surface are quaking and <u>Menyanthes trifoliata</u> occurs. Much of the surface is bare. <u>Campylopus atrovirens</u> and <u>Potamogeton polygonifolia</u> occur here.

MALINBEG

1/2" MAP NO: SITE NO: Do 45 3 COUNTY: Donegal GRID REF.: G53 79 AIR PHOTO NO: G467 6" MAP NO: 89 AREA (ha): 126 AREA INTACT (ha): 126 ALTITUDE (m): 225 - 300 FOREST AREA: 2 H/S CATEGORY: RATING: **TOWNLANDS:** 15 Malinbeg, Creeveen **RECORDERS:** EM **GEOLOGY:** Sandstone, quartzite WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is located on the south-west coast of Co. Donegal, on the saddle between Slieve League and Leahan Mountain and the mountain slopes north of this. The site is part of an ASI. The steeper slopes of Slieve League and Leahan form the eastern and western boundaries of the site, respectively. The precipitous sea cliffs form the southern boundary and the edge of a conifer plantation forms the northern boundary.

The northern part of the site consists of upland slopes which drain to form the headwaters of many small streams. There are many flushed areas here, as a result. The saddle area consists of a reasonably intact bog surface, located on a gentle slope. This area incorporates a shallow pool system. In this general area are a number of flushes. Small swallow holes occur also. The vegetation shows an interesting succession to that of wet <u>Empetrum nigrum/Calluna vulgaris/S.</u> <u>capillifolium</u> - dominated heath on the higher slopes which bound the area. The adjoining mountain is noted for its abundance of rare artic/alpine plants.

The site does not appear to be affected by burning. As yet, there area no obvious threats to it. Afforestation which is taking place lower down the mountain is unlikely to spread up to the site. Grazing by sheep is occurring but the site does not appear to be overgrazed. This site forms part of ASI No. 8.

SPECIES OF NOTE

C] Π

Possible site for Greenland Whitefronted Geese.

EVALUATION

This is an interesting site, the best part of which is located on the saddle north of Slieve League. The ecological interest of the site is greatly enhanced by the diversity and botanical importance of the adjoining land which supports the largest number of rare Artic Alpine species in Ireland and which also has an excellent wet heath vegetation with <u>Empetrum nigrum</u> as an important element. Together with this land, the site forms an important ASI.

SPECIFIC AREA DESCRIPTIONS

- This area consists of a north-facing 15° Area A. slope which is traversed by many headstreams resulting in the presence of many flushed areas. These flushes contain such species as Juncus effusus, J. acutiflorus, Sphagnum palustre and <u>S</u>. <u>recurvum</u>. A number of small scraghs occur and these contain Carex rostrata, Potamogeton polygonifolia and Ranunculus The rest of the area is mixed and flammula. uneven. Some erosion is obviously taking place, especially on the west side. Molinia is the prevalent species although <u>Calluna</u> <u>vulgaris</u> is plentiful. The area has a reasonable cover of <u>Sphagnum</u> but there are few definite hummocks and hollows. The depth of peat is approximately 1.5 m. A number of small swallow holes occur in this area.
- This area is situated in the col between Area B. the two mountains, where the gradient is approximately 5° or less. The area drains in both a northerly and southerly direction. On the south side, a stream eventually plunges down to the sea, 300 m below. A second stream flows through the centre of the area in a northerly direction and occasionally disappears beneath the peat. The vegetation is dominated by <u>S. caespitosus</u>, <u>Eriophorum</u> <u>angustifolitam</u> and Molinia. Ground cover by Sphagnum is good. Α system of shallow linear pools alligned in a north-east to south-west direction occurs here. These contain Sphagnum. Many other interconnecting pools also exist. Low hummocks of <u>Sphagnum</u> magellanicum and <u>S.</u> capillifolium were noted in this area along with Rhynchospora alba. A swallow hole was found to support Juncus effusus and Dryopteris dilitata. On the west side, a series of low hillocks and ridges

combine to form a slight amphitheatre around this area. Towards the east, an interesting progression to a particularly good wet, <u>Calluna</u> <u>vulgaris</u>-dominated, heathland may be seen. This covers the lower scree slopes of Slieve League. This progression adds to the scientific interest of the site.

- <u>Area C.</u> As the site begins to slope downwards in the direction of the sea, the character of the vegetation changes to that of grass heath. <u>S.</u> <u>capillifolium</u> is still plentiful but species such as <u>Molinia</u>, <u>Anthoxanthum</u> <u>odoratum</u>, <u>Holcus</u> <u>lanatus</u>, <u>Deschampsia</u> <u>flexuosa</u> and <u>Agrostis</u> <u>canina</u> become prominent.
- <u>Area D.</u> South-west of the stream which drains the southern part of Area B is an area where the vegetation is dominated by <u>S. caespitosus</u> and <u>Molinia</u>. There are few hummock/hollows in this area but the surface is soft and a good carpet of <u>Sphagnum</u> occurs. <u>Rhacomitrium lanuginosum</u> is prominent in the bryophyte layer. A small flushed area supports <u>Schoenus nigricans</u>, <u>Carex</u> <u>demissa</u>, <u>C. limosa</u>, <u>C. rostrata</u>, <u>Menyanthes</u> <u>trifoliata</u> and <u>Pinguicola</u> <u>vulgaris</u>. <u>C. limosa</u> and <u>Menyanthes</u> also occur in a number of other small areas. This area grades into upland heath on the western side. The peat is thin on these slopes. Erosion has taken place in some areas but revegetation has also occurred.

ALTAN

1/2" MAP NO: SITE NO: Do 6 1 B96 22 GRID REF.: COUNTY: Donegal 6" MAP NO: AIR PHOTO NO: B50 43 79 AREA INTACT (ha): 44 AREA (ha): Gweedore 250 - 300FOREST AREA: ALTITUDE (m): CATEGORY: H/S **TOWNLANDS:** Altan, **RATING:** 10 Meenacoppoge **RECORDERS: GEOLOGY:** Quartzite EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is situated directly north-west of the Dunlewy - Creeslough road. It consists of a flat plateau bog which eventually slopes in a northwesterly direction in the direction of Lough Altan. The site is a highland bog. The vegetation is dominated by <u>Molinia caerulea</u>. <u>Scirpus caespitosus</u> is very frequent. Large hummocks of <u>Rhacomitrium</u> <u>lanuginosum</u>, on top of which grows <u>Calluna vulgaris</u>, are common. Although a good carpet of <u>Sphagnum</u> occurs in places, <u>Sphagnum</u> cover is poor overall and in many places the vegetation is sparse and the peat is bare underneath.

The plateau part of the bog has many wet pools, some of them quite large. Most of these are free of vegetation although <u>Phragmites</u> <u>australis</u> occurs in a few. As the gradient steepens towards the northwest, the downhill sides of the pools are steep and these support tall vegetation. A number of pools are breaking down and forming erosion channels.

Further downslope of the plateau, the peat becomes shallower and rocks may be seen on the surface. A number of flushes occur here. Some of these support <u>Schoenus nigricans</u>, <u>Pedicularis</u> <u>sylvatica</u> and a vigorous growth of <u>Molinia caerulea</u>. Others, lower down, are iron-rich and support <u>Juncus</u> <u>effusus</u>, <u>J. acutifloris</u>, <u>Juncus squarrosus</u>, <u>Carex</u> <u>paniculata</u>, <u>Agrostis stolonifera</u>, <u>Glyceria fluitans</u> and <u>Chrysosplenium oppositifolium</u>. On the lower north-eastern side of the site the slope gets steeper and signs of erosion may be seen. Species more characteristic of heathland become more common here.

The site does not appear to be damaged by fire and has not been drained. The main threat to it appears to come from erosion and grazing. It forms part of ASI No. 18. \int

]

 \Box

-) u

J

 \Box

 \Box

 \Box

 \int

This is an interesting site which has an affinity with the headwater bogs except that it is at a low altitude. The system of pools and the various flushes, lower down the slope are the most notable features of the bogs. The site is already part of an ASI.

MEENTYGRANNAGH

SITE NO: Do 3 COUNTY: Donegal AIR PHOTO NO: C34, C4 AREA (ha): 192 ALTITUDE (m): 250 CATEGORY: н **RATING:** 11 **RECORDERS:** RG, EM

WRITE UP: RG, EM

1/2" MAP NO: GRID REF.: 6" MAP NO: AREA INTACT (ha): FOREST AREA:

1 C02 07 59 187 Meeniroy

TOWNLANDS:

Meentygrannagh, Cummirk

GENERAL SITE DESCRIPTION

This interesting site comprises the eastern slopes of Meenirroy Hill and the southern slopes of Altanieran, the hill in which the River Swilly It is located 16 km south-west of rises. Letterkenny town, Co. Donegal. The site is a highland site, having an altitude of approximately 250 m. It is bounded on its north-west side by a conifer. Most of the site consists of gentle slopes. Towards the top of the ridge the slope levels off. At the northern end of the site, in the vicinity of the headwaters of the R. Swilly, the bog is flushed and contains many species indicative of fen conditions. The evenly sloping hillside flattens out onto a large level saddle in the south. Overall, the bog surface has a very good cover of <u>Sphagnum</u>. Hummocks and pools are present on the site although the pools are not very deep. The site has more of a lowland character; <u>Diplophyllum</u> albicans was not recorded.

There is no sign of recent burning on the bog. Cutting of turf is being carried out on the margins but overall, the surface is quite intact. Since the bog encompasses the headwaters of a number of streams, several swallow holes are to be found on it.

There are indications that erosion may be beginning, in places. This threat is added to that of turbary and possible danger from afforestation.

SPECIES OF NOTE

<u>Sphagnum</u> <u>imbricatum</u>, <u>Carex</u> <u>dioica</u>

Зь

EVALUATION

This is a extensive area of largely intact bog although it is surrounded by some erosion. It is one of the best highland saddle bogs visited in Donegal but the proximity of the forestry somewhat devlues it. It scores highly in terms of size and quality of the vegetation. Unlike the similar areas of bog near L. Muck, (Do 1 & 25) it is scarcely flushed and contains no <u>Schoenus</u> <u>nigricans</u>.

SPECIFIC AREA DESCRIPTIONS

Area A The vegetation of the centre of the site includes a lower flushed section of shallow peat, interspersed with tracks of Sphagnum <u>recurvum, Juncus</u> <u>effusus, Polytrichum commune</u> and occasionally Carex rostrata. The middle ground is slightly flatter and has deeper Sphagnum peat dominated by S. papillosum and S. capillifolium with Eriophorum vaginatum and E. angustifolium. The <u>Sphagnum</u> cover is up to 80% in places, there is <u>Calluna</u> of at least 10yrs and abundant <u>Cladonia</u> <u>portentosa</u>. There are a number of small depressions which flood in winter and may be slightly enriched from upslope. Sphagnum subnitens, S. magellanicum and Aulacomnium palustre occur in these. A few Racomitrium hummocks rise out of the Sphagnum sheets, probably the relics of former \underline{S} . <u>capillifolium</u> colonies burnt and slightly eroded in the past. <u>Cladonia</u> <u>arbuscula</u> grows on some of these with a little Lophozia ventricosa but there are few of the smaller fire-related Cladonia species.

As the slope increases towards the top of the ridge the peat thickness declines and the vegetation becomes heathy. The dominant species are <u>Calluna</u>, <u>Molinia</u> and <u>Eriophorum vaginatum</u> but <u>Juncus squarrosus</u>, <u>Deschampsia flexuosa</u>, <u>Anthoxanthum odoratum</u> and <u>Luzula multiflora</u> enter the community. There are many traces of former erosion but few gullies appear active at present.

<u>Area B</u> At the southern end the hill drops steeply to the level saddle area (B) where water collects in a complex pool system. There are bare, steep-sided examples as well as <u>Sphagnum</u>filled pools separated sometimes by quaking areas. There has been little effective burning here so <u>Cladonia uncialis</u>, <u>C. portentosa</u> and <u>C. arbuscula</u> are almost dominant in some areas. Old <u>Calluna</u> grows on some <u>Racomitrium</u> hummocks with the epiphytes <u>Ramalina</u> <u>farinacea</u> and <u>Parmelia</u> <u>sulcata</u>. The pools are seldom larger than 2-3m across and some local enrichment gives rise to stands of <u>Carex limosa</u>, <u>C</u>. <u>rostrata</u>, <u>Sphagnum auriculatum</u>, <u>Juncus effusus</u> and in one place, <u>Carex curta</u>. The <u>C</u>. <u>limosa</u> grows through lawns of <u>Sphagnum papillosum</u> and <u>S</u>. <u>magellanicum</u> adjacent to the pools. There are a few strands of <u>Sparganium angustifolium</u> and <u>Utricularia minor</u> in the more open water.

Some old contour drains cut into the southern part of the pool area and have some effect in lowering water levels in nearby pools. There is little if any obvious flow in the drains, however. The more significant influence is afforestation which has taken over the western side of the shoulder. Here poorly growing trees are scattered, even among pools. It is possible that nutrient enrichment takes place from this source into the site though the surface vegetation among the trees shows no sign of fertilization.

- <u>Area C</u> Below the saddle the vegetation reverts to the more widespread and drier <u>Calluna</u> heath on a 3-4 degree slope. The vegetation is largely intact but has few special features.
- <u>Area Q.</u> This is an interesting area, situated north-east of the summit of Meenirroy Hill and of Area A which has a very intact surface and is free of drains. Downslope of the area, there are signs of marginal cutting. The vegetation has recovered here however. In the area as a whole, the vegetation cover is good. The vascular plants are dominated by <u>Scirpus</u> caespitosus, Calluna vulgaris and Eriophorum angustifolium. The area displays a good Sphagnum carpet in which S. magellanicum is prominent. A number of hummocks of are are present but these are not very pronounced. The area has not been burnt recently and lichens are common. Several naturally flushed areas are present and these contain <u>Carex</u> <u>nigra</u>, <u>C</u>. <u>limosa, C. rostrata</u> and <u>C. echinata</u>. Towards the top of the slope where the gradient eases off, large hummocks of Rhacomitrium lanuginosum occur. Between these hummocks, are flushes, and stream headwaters. These take on the appearance of longitudinal pools. On the ridge, immediately next to the conifer plantation, the terrain becomes more tussocky. Here, <u>Scirpus</u> <u>caespitosus</u> is abundant and Calluna vulgaris, Rhacomitrium lanuginosum, and <u>Cladonia</u> <u>portentosa</u> occur on tussocks which are firm and hard. North-east of this area a number of bare patches and pools occur. Here, the land drains in a north-easterly direction towards the conifer forest. Molinia caerulea

is the dominant plant. The bog surface appears to be beginning to erode in this area.

39

<u>Area R.</u> This area is situated immediately northeast of Area Q. It is a large area similar, to some extent, to Area Q. Many hummocks of <u>Rhacomitrium lanuginosum and S. capillifolium</u> occur between which are flat level areas. Many of these flat areas contain algal pools. <u>Rhynchospora alba</u> occurs here. The surface although wet, is not quaking. <u>Carex panicea</u> is more plentiful in this area. A number of swallow holes support species such as <u>Juncus</u> <u>effusus</u>, <u>Rumex acetosa</u>, <u>Carex paniculata</u>, <u>Ranunculus repens</u>, <u>Polytrichum commune</u>, <u>Potentilla palustris</u>, <u>Epilobium obscurum</u> and <u>Poa pratensis</u>.

> The occurrence of bare-sided hummocks suggests that erosion may be taking place. Nearthe north-east margin, are a number of deep pools, alligned in a north to south direction, at right angles to the slope. The remains of a hummock of <u>Sphagnum imbricatum</u> was noted here. <u>Carex limosa</u> and <u>Utricularia minor</u> occur here also. The bog surface, in this area is quaking.

<u>Area S.</u> This area is located on the north-east side of the site and borders a headwater stream of the R. Swilly. The area is flushed, resulting from drainage from the surrounding bog. A carpet of <u>Sphagnum</u> occurs here; hummocks are not very common. Other species which occur in this area include <u>Potamogeton</u> <u>polygonifolia</u>, <u>Sphagnum secundum</u> var. <u>inundatum</u>, <u>Selaginella selaginoides</u> and many <u>Carex</u> species.

~] C Π

LETTERCRAFFOE

R

SITE NO: COUNTY: AIR PHOTO NO: AREA (ha): ALTITUDE (m):	G 1 Galway M259, M261 2223 200 - 325	1/2" MAP NO: GRID REF.: 6" MAP NO: AREA INTACT (ha) FOREST AREA:	10, 14 M01 40 53, 54, 66, 67 :2223 Cloosh Valley, Oughterard
CATEGORY:	Н		
RATING:	14	TOWNLANDS:	Lettercraffoe, Shannadullaghau n, Derreighter, Shannawona, Lugganaffrin, Leam East
RECORDERS :	EM	GEOLOGY:	Granite
WRITE UP:	EM		

GENERAL SITE DESCRIPTION

This is a large highland bog which extends north-westards from Lettercraffoe Lake in the direction of Maam Cross and encompasses blanket bog communities of ridges, slopes and flats, many of the last being flushed. The areas within the site vary from being very interesting to being of little scientific value. The altitudinal range of the site is 175 cm - 350 cm. The drier ridges and slopes are subject to some erosion. In a number of these areas, the ground is poached by cattle. Large numbers of sheep were not in evidence on the days the site was visited. Nevertheless, a number of drowned carcasses were observed in the wetter areas indicating that sheep grazing is an environmental pressure.

The greatest threats to the site stem from the adjoining forestry plantations and to a lesser extent, by mechanised peat cutting which is being carried out on the north-eastern boundary. A lowland area to the north of the site is already owned by the NPWS. The individual localities within the site are described in greater detail below.

SPECIES OF NOTE

<u>Sphagnum pulchrum, S. imbricatum, Drosera</u> <u>intermedia</u>.

EVALUATION

This very large site is the most important

upland bog site remaining in Co. Galway. It is a highland site and although much of it has only shallow peat a substantial area in the core of the site has a totally natural and very wet quaking surface and an interesting system of lakes. It adjoins and forms a continuum with a lowland blanket site to the north which is now in the possession of NPWS.

SPECIFIC AREA DESCRIPTIONS

- <u>Area A.</u> This area on the eastern part of the site has recently (1990 ?) been planted with conifers.
- This is a flat ridge on which granite Area B. boulders outcrop. Between these boulders the surface is soft and the peat is of mixed depth. The vegetation is dominated by Molinia caerulea, Schoenus nigricans and Calluna Sphagnum cover is, in general, low <u>vulgaris</u>. but in certain patches, it is good and occasional hummocks of <u>S.</u> capillifolium occur. Much of the surface is covered by mats of <u>Campylopus</u> <u>atrovirens</u> is common, algae. especially in bare areas and around rocky slabs. On the north-west of the the area, a rocky streamline crosses from north-east to south-west. Here, tall <u>Calluna</u> <u>vulgaris</u> and <u>Molinia</u> <u>caerulea</u> occur along with <u>Pteridium</u> aquilinum. This area is, by and large, uninterfered with and intact. A few small iron-rich streamlets support Carex lasiocarpa and Phragmites australis. There is no sign of recent burning in this area.
- <u>Area C.</u> This is a small flat, low-lying area on the eastern margin of the site, south-east of Knockwaumnamoe and north of a stream. The vegetation is characterised by tall <u>Schoenus</u> nigricans, a good cover of Sphagnum and an abundance of Rhynchospora alba and Myrica gale. Fewer rocks occur on the surface here than in Area B. A small iron-rich streamlet supports a community which includes Phragmites australis, <u>Menyanthes</u> <u>trifoliata</u>, <u>Carex</u> <u>panicea</u>, <u>Cirsium</u> <u>dissectum</u>, <u>Utricularia</u> <u>intermedia</u>, <u>Anagallis</u> tenella and Potamogeton polygonifolia. One small wet area supports Phragmites australis and <u>Carex</u> <u>lasiocarpa</u>.

<u>Area D.</u> This is a flushed area along the west side

of a stream which connects Lettercraffoe Lake with a smaller one further north of it. The surface water in this area is rich in iron. A good carpet of <u>Sphagnum</u> moss occurs here and <u>Rhynchospora alba</u> is very abundant. Much of the area is quaking and the vegetation is open with an abundance of <u>Drosera intermedia</u>, <u>Carex</u> <u>limosa</u>. <u>C</u>. <u>lasiocarpa</u>, <u>Myrica gale</u> and <u>Menyanthes trifoliata</u>.

- <u>Area E.</u> On the north-west side of Lettercraffoe Lake is an area in which large hummocks of <u>Sphagnum</u> occur. These include species such <u>S.</u> <u>capillifolium</u>, <u>S. magellanicum</u> and <u>S</u>. <u>papillosum</u>. A number of drains occur here but do not detract greatly from the quality of the area.
- Area F. This area encompasses a rocky outcropping hilltop and a ridge of undulating hillocks, between which are shallow peat deposits. There are signs of heavy grazing and trampling pressures in this area and some peat erosion occurs in hollows and near to outcropping rock. The area has no outstanding features. The vegetation is dominated by Molinia caerulea, Scirpus caespitosus, Eriophorum angustifolium and <u>Calluna vulgaris</u>. <u>Sphagnum</u> cover is patchy, being abundant in localised spots and absent elsewhere. Large parts of the peat surface are covered with an algal crust, especially in the flat areas between the hillocks. In one or two such areas, traces of small pools are visible. These may indicate incipient surface tearing. S. compactum is common here.
- <u>Area G.</u> This area comprises a north-easterly facing slope which encompasses many drains, gullies and flushes, the last of which receive water draining from the surrounding land. The flushes support species such as <u>Viola</u> <u>palustris</u>, <u>Carex echinata</u>, <u>Eleocharis</u> <u>multicaulis</u>, <u>Potamogeton polygonifolia</u>, <u>Polytrichum commune</u> and <u>Sphagnum recurvum</u>.
- <u>Area H.</u> This is a relatively flat area, surrounded by hillocks and incorporating a few low ridges. It drains gently in a south-easterly direction. The ridges area dry and rocky in places. A number of lakes are located in this area . Between the ridges, the bog is flushed. In many parts the surface is quaking and <u>Menyanthes trifoliata</u> and <u>Carex echinata</u> occur.

Schoenus nigricans is common. There are many flat areas, bare of vegetation in which Drosera <u>intermedia</u>, <u>Potamogeton</u> <u>polygonifolia</u>, <u>Sphagnum</u> recurvum, S. auriculatum, Cladopodiella <u>fluitans</u>, <u>Utricularia</u> <u>intermedia</u>, <u>Carex</u> <u>limosa</u> and <u>C</u>. <u>lasiocarpa</u> occur. Much of the area is somewhat flushed, probably with water draining from surrounding slopes and the low ridges. There is much iron in evidence in the water. Α number of small pools occur. At the time the site was surveyed, these were steep-walled. This may have been due to the dry weather at Campylopus atrovirens occurs on the the time. edges of these pools. Many of the flat areas have a black coloration and contain Potamogeton polygonifolia. <u>Sphagnum pulchrum</u> and <u>S</u>. <u>imbricatum</u> have a sparse ocurrence here. Near the margins of the small lakes, <u>Carex</u> rostrata and Potamogeton natans grow.

The area appears to be very little disturbed, overall.

- <u>Area I.</u> This is a rocky area sloping in a northeasterly direction at an angle of approximately 10°. The area is grazed by cattle. Some erosion occurs here and overall, the area is not of great interest.
- <u>Area J.</u> North north-east of Area I is a valley. Although this area was not walked, from Area I it appears to be totally intact. There is a threat from peat extraction which is being carried on down the valley.
- <u>Area K.</u> This is an undulating ridge running in a north-west to south-east direction. The area is drier than the lower-lying areas and there is more evidence of sheep grazing and treading here. A relatively new fence runs across both the north-west and south-east ends of this area. A degree of peat erosion occurs here.
- <u>Area L.</u> This flat area on the northern end of Lettercraffoe Lake contains some large pools/lakelets in which grow <u>Menyanthes</u> <u>trifoliata</u> and <u>Carex limosa</u> but little else. The vegetation in this area is dominated by tall <u>Molinia caerulea</u>. A number of large hummocks of <u>S. capillifolium</u> occur hre. The area is not as interesting as would appear from inspection of the aerial photograph.

C] •

- <u>Area M.</u> The terrain here is mixed and comprises rock outcrops and peaty hollows. A number of flushed areas are present and support such species as <u>Carex</u> <u>demissa</u>. The area is grazed by cattle.
 - <u>Area N,</u> On the east side of Loughaunierin Lake is a flattish ara which supports occasional hummocks of <u>S.</u> capillifolium.

TULLYTRESNA

1/2" MAP NO: SITE NO: DO 28 3 GRID REF.: C06 03 COUNTY: Donegal 6" MAP NO: AIR PHOTO NO: **C** 6 60, 68 AREA INTACT (ha):270 270 AREA (ha): 225 - 275 FOREST AREA: Stranolar ALTITUDE (m): CATEGORY: Н **TOWNLANDS:** Tullytresna, RATING: 11 Meenanamph **GEOLOGY: RECORDERS:** EM WRITE UP: $\mathbf{E}\mathbf{M}$

GENERAL SITE DESCRIPTION

This site is situated 14 km south-west of Letterkenny town, Co. Donegal. It is bounded on the north by a stream, on the east by a bog road, on the west by an old track and on the south by peat cutting and erosion. It is a highland bog and consists mainly of gentle (8°) slopes which run down from a small plateau area. These slopes are somewhat flushed and become more so further down slope. In the north-western corner is a large area which is flushed and supports extensive <u>Sphagnum</u> carpets. There is good cover of <u>Sphagnum</u> over most of the site especially on the northern side which is somewhat wetter.

EVALUATION

The site, although it is managed and grazed has a very intact surface overall. Apart from the north-western corner, it is not very wet. The vegetation is symptomatic of a certain degree of flushing. Although it may not be considered to be a top grade highland bog, it is certainly high on the list of good intact sites.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> On the north side of the site, the area is fairly uniform with a steady slope. On the plateau, at the top of the slope, <u>Scirpus</u> <u>caespitosus</u> predominates. There is a <u>Sphagnum</u> carpet present and a hummock/hollow surface pattern visible. There are some evidence that slight erosion may have occured, in the past, but the area appears to have revegetated well.

Pleurozia purpurea is frequent in the barer hollows. Further down the slope, Molinia caerulea is dominant and a reasonably good carpet of <u>Sphagnum</u> occurs. Many heathland species occur also. Although the area is newly fenced and grazed by sheep, overgrazing does not appear to be taking place. The bog surface on the slope is totally intact although two streams may have been artificially deepened. The area has probably been burnt within the Towards the bottom of the last five years. slope, where flushing from above has influenced the vegetation, there are larger tussocks of Molinia caerulea and larger hummocks of S. <u>capillifolium</u> along with tall <u>Calluna</u> <u>vulgaris</u> and a good carpet of <u>Sphagnum</u> recurvum and Sphagnum papillosum.

<u>Area B.</u> Towards the north-west corner of the site, are some <u>Sphagnum recurvum</u>-dominated lawns and scraghs, in which <u>Juncus</u> <u>effusus</u>, <u>J. bulbosus</u> and <u>Menyanthes trifoliata</u> occur. Some of these flushes contain iron oxide.

On the west side of the bog are, some new and old peat cuttings.

<u>Area C.</u> The south - facing side of the site is drier than both Areas A and B and is also less interesting. Here, <u>Calluna vulgaris</u> and <u>Eriophorum vaginatum</u> predominate and <u>Sphagnum</u> is less in evidence.

Hb

CAHERBARNAGH

HTI

1/2" MAP NO: SITE NO: C 7 21 COUNTY: GRID REF.: W19 87 Cork 6" MAP NO: AIR PHOTO NO: W13 47 AREA INTACT (ha):47 AREA (ha): 124 ALTITUDE (m): 540 - 710 FOREST AREA: Ballyvourney M, V CATEGORY: **RATING:** 12 **TOWNLANDS:** Coomacheo, Toorboney, Knocknagowan **RECORDERS:** RG, EM **GEOLOGY:** Sandstone WRITE UP: RG, EM

GENERAL SITE DESCRIPTION

This site is situated just east of the Cork/Kerry border, on Caherbarnagh Mountain. It incorporates a mountain summit ridge, a saddle and surrounding slopes and some small bogs on its western side in the opposing valleys which flow north to the Awnaskataun and south to the Clydagh River. From here it slopes more gently to the south and south-west and on both sides there is extensive intact peat. Erosion is affecting the south side along the stream that forms the county boundary and as a single gully which reaches to within 200m of the summit.

Caherbarnagh itself consists of a gently rounded sandstone summit which has been deeply glaciated on the northern side so that the summit ridge runs as a horseshoe around a corrie. The summit is overlain by peat and there is an absence of rocks protruding above the surface. Because of this and of the higher altitude (650 m - 710 m), a montane bog vegetation occurs on the site. The slope varies from 0° to 5°.

The site comprises a very intact area of blanket bog and, apart from grazing, does not appear to be affected by any human activities. On the northern side of the site there is no visible sign of fire damage and erosion is only very slight. The northern slopes show an interesting altitudinal progression from Calluna vulgaris-dominated heath to Calluna/Juncus squarrosus-dominated heath which, in turn, merges with montane bog vegetation. The area incorporates a northern summit which forms the western wall of the north-facing corrie which is situated here. Between this northern summit and that of Caherbarnagh, is a saddle. A stream has its headwater below this saddle and flows in a southwesterly direction, collecting water from the

surrounding slopes. From the summit of Caherbarnagh, a ridge runs towards the north-east. This is covered by a blanket of shallow peat.

EVALUATION

This important site contains the largest area of intact peat of any mountain top in Cork or Kerry and despite the erosion along its southern edge, is of great ecological value. The fact that the site is not badly affected by overgrazing and that it adjoins another large upland site (Coomcheo, C 8) adds to its interest.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> The area includes the most northerly part of the site, incorporating a plateau, a saddle and the upper slopes below these. Its southern boundary is the summit of Caherbarnagh. The vegetation here is dominated jointly by <u>Calluna vulgaris</u>, <u>Scirpus</u> <u>caespitosus</u>, <u>Eriophorum</u> <u>angustifolium</u> and <u>E. vaginatum</u>. Beneath the vascular plants, a good carpet of <u>Sphagnum</u> <u>capillifolium</u> occurs. <u>Empetrum</u> <u>nigrum</u> and <u>Luzula</u> <u>sylvatica</u> are plentiful.

The vegetation is notable for the absence or scarcity of certain species. Molinia caerulea, although present, is not common. Erica tetralix and Drosera species were not recorded here and both Narthecium ossifragum and Potentilla erecta are scarce. Neither Campylopus atrovirens nor Pleurozia purpurea occur in the bog vegetation and this is probably due to competition from the vigorous vegetation. Apart from <u>S.</u> capillifolium, other species of Sphagnum are scarce or absent although Sphagnum papillosum was recorded on the summit point of Caherbarnagh. A single pool here contains <u>Juncus</u> <u>bulbosus</u> and <u>S</u>. <u>auriculatum</u>. <u>Vaccinium</u> <u>myrtillus</u>, although present, is scarce. However, along with Juncus squarrosus, it becomes more common towards the edge of the steep corrie, where the peat is better drained. Here, the peat has a depth of 0.5 m.

The surface of the bog is nearly completely intact and is covered by a dense vegetation. There are no pools in the area. On the western slopes, <u>Eriophorum vaginatum</u> tussocks are common and some flushing occurs in the headstreams. <u>Sphagnum cuspidatum</u> may be found in these.

- <u>Area B.</u> East of Caherbarnagh, the vegetation is scrappier and more heathy in nature. Tussocks of <u>Eriophorum vaginatum</u> occur here and <u>Juncus</u> <u>squarrosus</u>is more common along with <u>Galium</u> <u>saxatile</u>. <u>Luzula sylvestris</u> grows mixed with <u>Calluna, Pleurozium schreberi</u> and <u>Rhytidiadelphus loreus</u>. The surface here is for the most part, intact. Half way along this ridge, a break occurs in the peat surface. This is not very large, however.
- <u>Area E</u> On the southern side, wetter tracks of <u>Scirpus</u> and <u>Campylopus atrovirens</u> spread through this vegetation in places, and these are perhaps connected with the altered water flows above erosional gullies. <u>Sphagnum</u> <u>tenellum</u> is abundant in places, as is <u>Mylia</u> <u>taylori</u> which grows on the flat peat as well as on the frequent <u>Racomitrium</u> hummocks. Other <u>Sphagna</u> are quite rare and their place seems taken by algae to give a slimy surface that may be in part a response to fire.
- <u>Area F</u> Erosion becomes severe to the south and in places has worn down to the rock showing a peat depth of 2m. Erosion also reaches the summit ridge about halfway along on the eastern ridge (Area B). Here some former peat cutting is linked by a gully to the headwaters of the Clydagh River (Site C 8, Coomcheo).

To the north-west outside the site boundary a vigorous, unburnt and unusual <u>Empetrum</u> heath covers the steep slope of the corrie. Subsidiary species here are <u>Calluna</u> and <u>Eriophorum vaginatum</u>.

On the western side of the mountain at <u>Area D</u> about 525m the intact vegetation becomes tall on ground burnt about 8yrs ago and very rich in <u>Sphagnum</u> (50-80%). <u>Molinia</u> also becomes common and with the dense Calluna, Empetrum and Eriophorum vaginatum probably inhibits the establishment of <u>Cladonia</u> <u>lichens</u>. <u>C</u>. portentosa, C. uncialis and C. bellidiflora occur occasionally. On minor undulations rock seems to approach the surface and the vegetation becomes heathy in character with Luzula multiflora, Breutelia chrysocoma, Deschampsia flexuosa and Dactylorhiza maculata. There are also a few flushes where Sphagnum <u>recurvum, S. cuspidatum, Juncus squarrosus</u> and <u>Nardus</u> <u>stricta</u> may grow. As the lower slopes are reached, outside the area of intact bog, the angles increase to 15 degrees or so and Erica cinerea, Festuca ovina and Galium saxatile add to the content of heath species in

the vegetation.

Area The bogs along the river valleys occur at a lower level (375m and below) and consist of a series of lenses of peat on the flattish ground between adjacent streams. There is also a partially eroded one in the saddle between the two main valleys. Most often the vegetation is a mix of <u>Scirpus</u>, Eriophorum angustifolium and Calluna with scattered Molinia and abundant Sphagnum, especially <u>S</u>. papillosum, <u>S</u>. cuspidatum and S. tenellum. These may achieve almost complete coverage in places. Near to streams there is some \underline{S} . palustre and \underline{S} . subnitens as well as Juncus effusus, Carex echinata and a little C. nigra. Lichens are more numerous here than higher up the mountain with Cladonia squamosa, C. furcata, C. gracilis and \underline{C} . ?cariosa among others. Partly they are related to the slight erosion around the saddle where a few linear pools occur along the contours. Sphagnum auriculatum var. inundatum occurs in a few of these but without any of the characteristic higher plants.

GLENKEEN UPPER

1/2" MAP NO: SITE NO: Ls 2 15 N28 06 COUNTY: Laois, Offally GRID REF.: AIR PHOTO NO: 6" MAP NO: Ls 6, Oy 37 N201 AREA INTACT (ha):293 AREA (ha): 293 ALTITUDE (m): 450 FOREST AREA: Mountrath, Clonaslee M(1) + HRCATEGORY: **TOWNLANDS:** Glenkeen Upper, RATING: 12 Scarroon, Corragh, Glendine, Borlahan, Baunreagh RG, EM **GEOLOGY: RECORDERS:** RG, EM WRITE UP:

GENERAL SITE DESCRIPTION

This area comprises the ridge which runs northeast from the summit of Wolftrap Mountain, in the Slieve Blooms, and the ridge which runs east of this mountain to the Cut. This last ridge is lower and narrower than that to the east of the Cut. It consists of an extremely flat oblong area at 450m, hemmed in by forestry on the north and south. About 1km west of the Cut the site drops off slightly into the valley of the Gorragh River before rising again onto Wolftrap Mt.

The site is bounded on the north-east by a forest margin. On the north, extensive peat cutting below the plateau demarks the edge of the site, although this is not a clear delineation. The area below this is afforested. Much of the south-west side of the site is also delineated by coniferous plantations. A road runs from the public road, on the west of the site, to the summit of Wolftrap Mtn. A number of transmission stations and relay masts are located on this summit. The construction of these stations has caused some damage to the bog; a new drain runs north-east from the building with the biggest mast.

Most of the surface of the bog is uniform. The vegetation is closed. This is dominated by <u>Calluna</u> <u>vulgaris, Eriophorum angustifolium</u> and <u>E. vaginatum</u>. <u>Erica tetralix</u> is reasonably frequent and <u>Narthecium</u> <u>ossifragum</u> also occurs. <u>Vaccinium myrtillus</u>, while it occurs, is not very frequent in the vegetation. In the bryophyte layer, <u>Sphagnum</u> cover is good, this being mainly <u>S. capillifolium</u>. This gives a soft

spongy feel to the bog surface which is squelchy. Half-way along the north-east ridge, towards the north-west side, where the gradient increases, the vegetation becomes drier and more tussocky. This area eventually forms the headwater of a stream, lower down the slope. Some slight gully erosion occurs here and <u>Drosera rotundifolia</u> was recorded in this locality. The <u>Calluna vulgaris</u> which attains a height of 25 cm on the main bog surface, is more vigorous here. This area is easily identified on the aerial photograph.

On the south-east side of the north-east ridge, close to the forest margin, the bog is wet and somewhat flushed. This is probably due to the presence of a number of old drains which run parallel to the forest margin. Here, <u>Sphagnum</u> <u>magellanicum</u> and <u>S</u>. <u>cuspidatum</u> form a carpet. The wettest part of the site is on the plateau between the corner of the forest plantation and the top of Wolftrap Mtn., in the vicinity of the transmitter stations. Here, some enrichment occurs and species such as <u>Epilobium hirsutum</u> and <u>Sagina nodosa</u> were recorded.

The vegetation cover on the east ridge, west of the Cut, is an Eriophorum vaginatum/Sphagnum capillifolium/Calluna sheet with a network of low places marked out by Scirpus, E.angustifolium, Narthecium and Sphagnum. There are traces of pools where S.tenellum or S.cuspidatum are dominant but otherwise the Sphagna are S.papillosum or, occasionally, S.magellanicum. Vaccinium oxycoccus is locally found growing through damper stands of S.capillifolium. There are also fairly frequent hummocks of Leucobryum glaucum.

Slightly to the west of this, a well-developed pool and hummock system occurs which is reminiscient in many ways of a raised bog. Sphagnum cover is 80-90% of the ground in places with S.papillosum and, more rarely, S.magellanicum the major species. Their hummocks are topped off with S.capillifolium and frequently with Racomitrium, the only site seen in the Slieve Blooms where this species is at all common. The predominant greyness of the hummocks is augmented by Cladonia portentosa and C.uncialis. There are many habitats for liverworts too. Cladopodiella fluitans grows with Sphagnum cuspidatum in the pools: Calypogeia muellerana and C.sphagnicola, Mylia anomala and M.taylori, Lophozia ventricosa and Cephalozia connivens grow on the hummocks where Odontoschisma sphagni is also ubiquitous.

The pool system disappears once the ground begins to drop into the col area. Calluna, Eriophorum vaginatum, Hypnum jutlandicum and 5.2

Sphagnum capillifolium return with vigour and produce a vegetation resembling that on the more sloping ground across the Cut. Again shallow marking drains traverse the hillside, some of them supporting a dense growth of Odontoschisma denudatum and Kurzia pauciflora.

The col is dominated by the headwaters of the Gorragh River and a number of deeper drains that approach them from each side. The vegetaion still contains potentially good stands of Sphagnum with Scirpus and Narthecium in the depressions and old pools. The headwaters have caused numerous collapses in the peat where Agrostis stolonifera, Juncus effusus, Polytrichum commune, Carex panicea, C.echinata and Potentilla erecta are common. The natural stream channel running onto Wolftrap Mountain brings in Vaccinium myrtillus, Deschampsia flexuosa, <u>Galium saxatile</u> Carex nigra and Luzula sylvatica.

West of the col the land rises again and a uniform vegetation of Eriophorum spp., Calluna and Cladonia portentosa occurs with a Sphagnum cover of 10-20%.

The site is not under any immediate threat although the construction of the road and the transmitter stations is bound to have a continuing impact in the future.

SPECIES OF NOTE

Andromeda polyfolia, Vaccinium oxycoccus

EVALUATION

This area is an excellent example of intact low-level mountain blanket bog, notable, in this instance, for the occurrence of a well-developed pool system on part of it. The area is similar in other regards to other parts of the Slieve Bloom range which has the largest and most intact extent of mountain blanket bog in the country. Certain vegetational differences from other mountainous areas makes the Slieve Bloom bogs unique, however.

BALLYNALUG

1/2" MAP NO: SITE NO: Ls 1 15 COUNTY: Laois GRID REF.: N30 04 AIR PHOTO NO: N236, N203 6" MAP NO: Ls 6, Oy 37 AREA INTACT (ha):288 AREA (ha): 288 ALTITUDE (m): 387 - 497 FOREST AREA: Mountrath CATEGORY: M (1) **TOWNLANDS:** Ballynalug, RATING: 14 Cones, Monicknew, Glendineoregan. **GEOLOGY:** Silurian Rock RG, EM **RECORDERS:** RG, EM WRITE UP:

GENERAL SITE DESCRIPTION

This site is situated east of the road which runs through "The Cut" on the eastern end of the Slieve Bloom Mountain Range, Co. Laois. It is comprised of Barna Mountain and the ridges which run up to it, extending for at least 3km from the Cut to Baunreaghcong. The northern side lies above the upper valley of the Barrow while the south is drained by the Delour river which joins the Nore. The site is bounded along most of its edges by conifer plantations or peat cutting.

The area is a gently sloping plateau and drains in both a northerly and a southerly direction. It is a low-level mountain blanket bog being situated below 500 m (387 m - 497 m). Throughout the area the slopes are very slight and locating oneself is often a problem. They are generally of the order of 1-2 degrees in the upper reaches but increase to 5 degrees as the edges are approached or even more, close to streams. No rock is exposed however.

The surface of the bog is completely intact and very uniform with a deep spongy texture. The immediate impression given by the vegetation, on the lower slopes, is one of tallness and density, dependant on a lack of fire and of grazing. The vegetation is dominated by <u>Calluna</u> vulgaris and Eriophorum angustifolium and E. vaginatum are sub-Empetrum nigrum is reasonably frequent dominants. in the vegetation. There is a constant presence of Scirpus, Erica tetralix and Andromeda polifolia while Cladonia portentosa is frequently abundant. There is a little Huperzia selago despite the lack of erosion and also some Luzula sylvatica on the lowerm slopes, towards south side. These were not recorded in the general vegetation, on the north side however. The absence of Juncus squarrosus is

The dense carpet of Sphagnum capillifolium notable. which occurs below the vascular plants, is green in colour due, no doubt, to shading by the higher There is little or no bare peat on the plants. For this reason and due to the density of surface. the dominant species, species which would normally colonise bare areas, such as <u>Campylopus</u> species and Drosera species, are scarce or absent. Narthecium ossifragum ocurs but is tall and straggly. Occasional damper places allow other Sphagnum species to appear, including S.papillosum and S.magellanicum, but the 4-5 degree slope inhibits extensive wet areas.

At one point there is a dry swallow hole in the hillside which shows a peat depth of 2.5m. It is not associated with any obvious erosion or surface features and is of quite long standing. Trees of Sorbus aucuparia and Betula pubescens mark the spot and there are many bryophyte species also. Mnium hornum, Lophocolea bidentata, Pleurozium schreberi, Plagiothecium undulatum, Eurhynchium praelongum and Isopterygium elegans are the most obvious. Molinia, Deschampsia flexuosa, Galium saxatile and Potentilla erecta also occur: these are species absent from the main bog surface.

Higher up the slopes (B) where the angle is a mere 1-2 degrees the predominant Calluna/Eriophorum vaginatum community changes to a slightly wetter one including greater amounts of E.angustifolium, Narthecium and Sphagnum, which may cover 60% or more of the ground. S.subnitens seems relatively frequent but there is also S.papillosum and S.capillifolium. This species occurs in lawns but also, in places, as large hummocks crowned with sparse Calluna growth. The overall appearence of these areas is of an Eriophorum vaginatum/E.angustifolium stand but Calluna is also a constant component, covering about 50% of the ground. Empetrum becomes important too.

The Sphagnum hummocks are even better developed and more frequent on the ridge top towards the east (C). They are generally based on S.subnitens or S.papillosum with S.capillifolium above to give a maximum height of 70cm. Vaccinium oxycoccus is associated with some of them and Mylia taylori also sometimes establishes itself amongst the Sphagnum. Other liverworts that are present include Lophozia ventricosa, Cephalozia lunulifolia and Cephaloziella cf. hampeana.

The headwaters of some of the tributaries of the Barrow river are marked by extensive peat collapse and cracking though no outright surface erosion. The peat is 2m or more in thickness and along one stream has sheared into 15-20 sequential cracks separated by 8m or so of intact surface.

Calluna growth is enhanced in all this northern area and there are niches occasionally for Dryopteris spp., Rubus fruticosus etc. At the top of the slope but not associated with the erosion are a number of small pools with Sphagnum cuspidatum and Narthecium pools. One of them contains Campylopus atrovirens which otherwise is notably rare. C.paradoxus by contrast is frequent as is C.pyriformis and C.introflexus on the upturned peat of a few shallow drains - probably boundary markings.

Due north of the summit of Barna, is a headstream which flows in a north-easerly direction. Near this headstream, is a hollow which resembles a swallow hole. At the bottom of this rocks may be seen and the peat has a depth of 1.0 m. A large part of the stream catchment, lower down, has been planted with conifers. Conifers have also been planted as far as the top of the ridge on Knockachorra, on the north side of the site. Near here one or two bare pools occur but pools were not observed elsewhere on the site.

No obvious damage has been done to the site and there are no apparent threats to it, apart perhaps, from afforestation.

SPECIES OF NOTE

Andromeda polyfolia, Vaccinium oxycoccus

EVALUATION

This site is remarkable for the intactness and condition of its blanket bog vegetation. The absence of fire and grazing damage has ensured that the totally natural vegetation occurs here. The absence from these pressures, combined with altitudinal differences, probably explain the vegetational differences from other Irish mountain bog sites. Although the inherent site diversity is not very high, the site is undoubtedly one of international importance. Kippure

SITE NO: COUNTY: AIR PHOTO NO: AREA (ha): ALTITUDE (m): CATEGORY: RATING:

RECORDERS:

WRITE UP:

٦

 \Box

16 1/2" MAP NO: 013 15 GRID REF .: 6 6" MAP NO: AREA INTACT (ha):225 Glencree FOREST AREA: Kippure, TOWNLANDS: Kippure East, Powerscourt Mountain. Granite GEOLOGY:

GENERAL SITE DESCRIPTION

W 2

069

597

S

10

ΕM

Wicklow

450 - 700

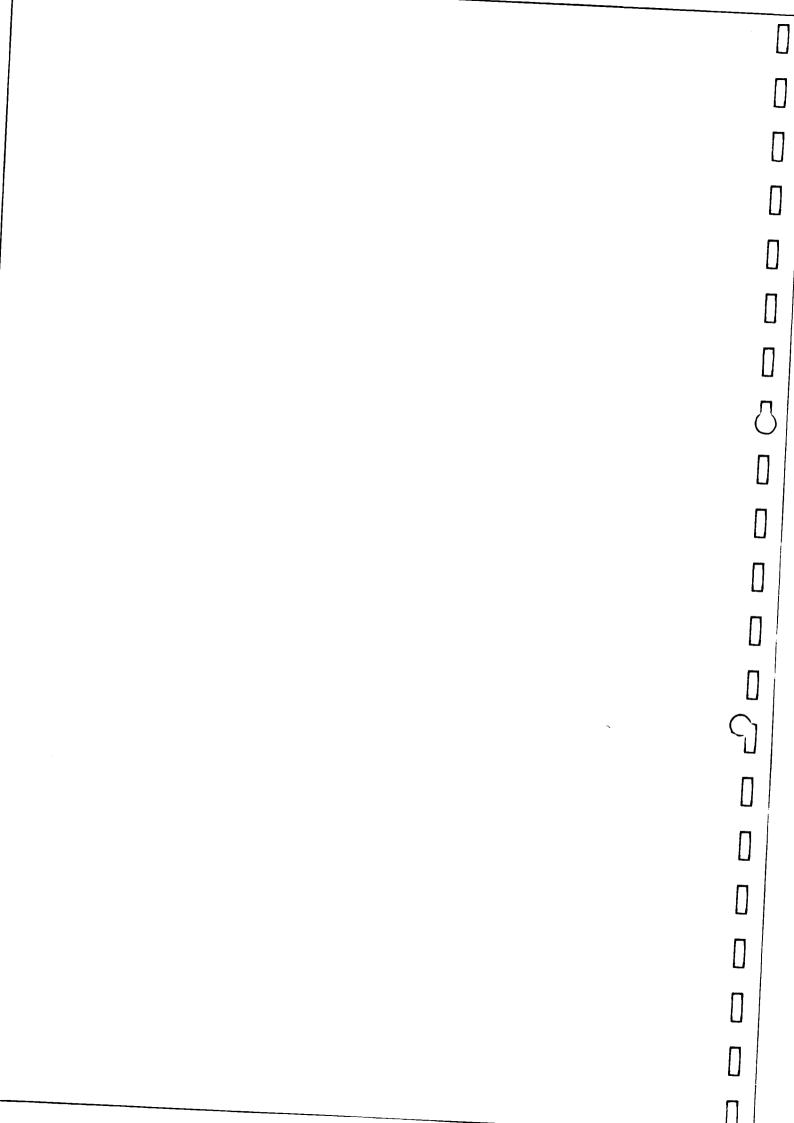
CD, RG, EM

This large site is comprised of the southfacing and east-facing flanks of Kippure Mountain, Co. Wicklow. It is bounded on the east by the old Military Road and on the south by extensive peat cutting along the road from Sally Gap to Kilbride. On the west, a forestry fence marks the boundary. The ridge from Seefin Mtn. to the summit of Kippure and from there to the edge of Lower Lough Bray.

It includes an area of wet headwater bog which begins on a plateau area situated above Upper L. Bray where the gradient is very gentle, and which extends south, towards the River Liffey headwater, into which it drains. The area contains a pool system and a number of gulley streams and swallow It is bissected by the road up to the R.T.E. Kippure transmitter. A very wet pool area is also holes. situated south of the junction of this road with the Military Road, on the east. Most of the site consists of fire-affected slopes which are covered by deep blanket peat but which have a definite heathy appearance. The vegetation here is dominated by <u>Calluna</u> <u>vulgaris</u> and cover by <u>Sphagnum</u> is poor. In some parts <u>Calluna</u> <u>vulgaris</u> is totally dominant and Hypnum jutlandicum the most common bryophyte. Erosion gullies occur here also. On the lower slopes where erosion is advanced, species such as Juncus effusus occur. The site is notable for the occurrence of Andromeda polyfolia and Vaccinium oxycoccus in the vegetation.

SPECIES OF NOTE

<u>Andromeda polyfolia, Vaccinium oxycoccus, Cladonia</u> macilenta 9 I



EVALUATION

]

]

This site which is situated adjacent to the Liffey Headwater bog site (*****) of the east side of the Military Road forms part of the most important peatland in the east of the Republic as well as being the best example of upland bog vegetation in Wicklow. A large proportion of the site has been so modified by fire that it no longer supports bog vegetation. Nevertheless, the area of headwater bog on the east side of Kippure is of such quality as to ensure that this site is of international importance.

SPECIFIC AREA DESCRIPTIONS

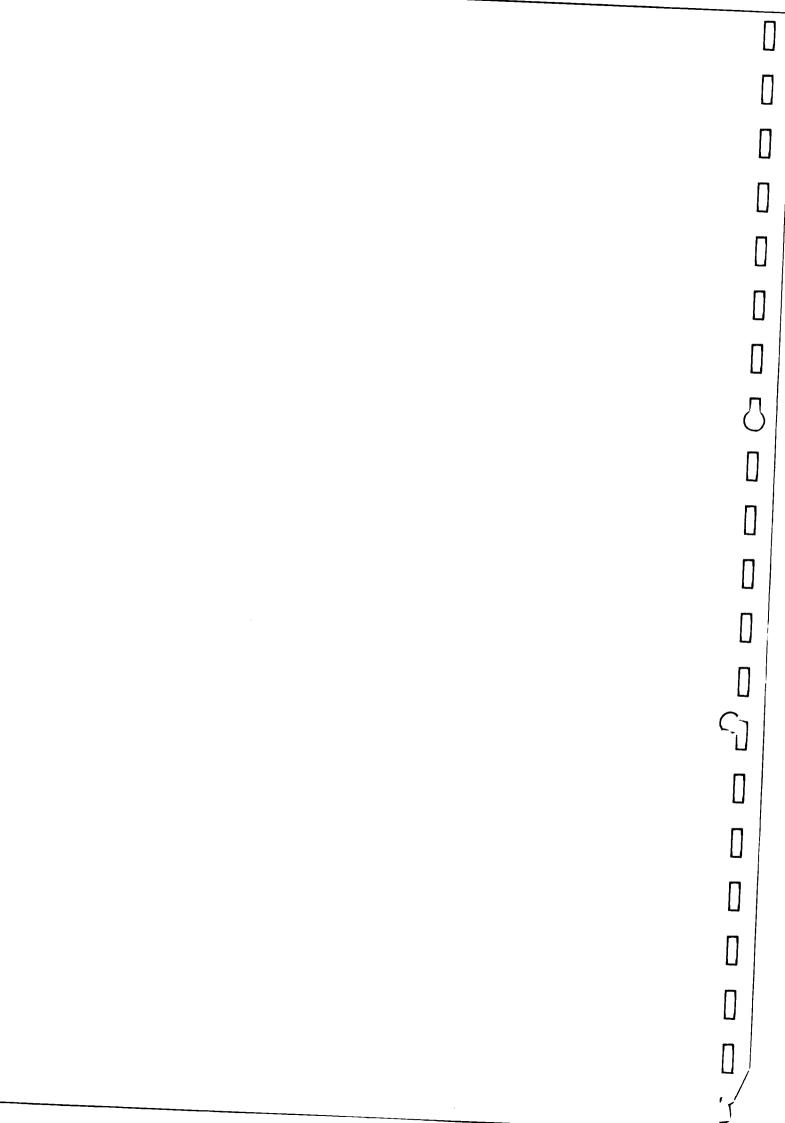
This area is comprised of the south-west and west facing upper slopes of Kippure <u>Area C.</u> Mountain, which have a gradient of up to 30°. It extends as far as a forestry boundary which runs south south-west from the ridge between Kippure and Seefinfgan Mountain. vegetation is dominated by <u>Calluna vulgaris</u> with Vaccinium myrtillus and Eriophorum angustifolium being of lesser importance and Eriophorum vaginatum having an occasional occurrence. The area has been heavily modified by repeated burning in the past and as a result, there is next to no cover of Sphagnum. Juncus squarrosus occurs here also. Where the peat has collapsed to form a swallow hole at a stream headwater, a depth of 1.5 m of peat was Where erosion has taken place, forming noted. longitudinal strips running down the slope, a grass heath vegetation exists. Species which occur here include Festuca rubra, Agrostis stolonifera, Galium saxatile, Juncus squarrosus and <u>Nardus stricta</u>, in addition to <u>Polytrichum</u> commune and Luzula sylvatica.

> North-west of Kippure is a saddle dissected by erosion channels although vegetated in between.

Lower down the slope, major flushes dominated by <u>Juncus effusus</u> occur.

Overall, the peat surface in this area is dry and firm. The bog here appears to be greatly man-modified.

<u>Area D.</u> This is an even south-facing, 10° slope which is cut with natural drainage gullies and peat collapses at intervals. The vegetation is



dominated by <u>Eriophorum angustifolium</u> and <u>Calluna vulgaris</u> with <u>Scirpus caespitosus</u> having a reasonable cover. <u>Sphagnum</u> cover is approximately 5%. Peat cutting is being undertaken towards the bottom of this slope and this may pose a threat to the area.

- This area is located east of Area D and a Area E. system of drainage runnels and is bounded on the east by a headwater stream which flows down from the plateau area situated above Lough Bray and on the south-east by the headwater of the River Liffey. Upslope, the terrain undulates between peaty areas and revegetated drainage channels. The vegetation is dominated by Calluna vulgaris, Eriophorum vaginatum, Scirpus caespitosus and Eriophorum angustifolium. Although Sphagnum occurs, its abundance is not very great and is patchy, being up to 10% in some places and 0% in others. Downslope, it is somewhat more abundant and a number of hummocks are visible. No lichens were observed and this is probably due to fire. A number of bare patches, on which there are algal mats, occur in places. Andromeda polyfolia is fairly frequent especially in bare pool areas.
- This area is bounded on the north and Area <u>F.</u> north-west by the headwater of the Liffey. the south, it is bounded by extensive peat On cutting and on the east, by the military road and old peat cuttings. The vegetation here, is very short and differs from that in other areas in the lack of dominance by <u>Calluna</u> <u>vulgaris</u>. Erica tetralix, Scirpus caespitosus and Eriophorum vaginatum dominate in the vegetation. Andromeda polyfolia also occurs here. Bare patches which support algal mats, Campylopus species and Narthecium ossifragum are common in places. <u>Sphagnum</u> cover is not great in this area and there is a larger area of bare exposed peat than that covered by Sphagnum. A number of runnels which run downslope are present along with some poor pools which contain Sphagnum cuspidatum.

On the southern margin of this area is a curious square excavation where the peat has been cleared down to the bare rock.

<u>Area G.</u> This area is bounded on the south by the Liffey Headwater, on the east and west by two tributaries of the Liffey Headwater and on the north by the road to the R.T.E. transmitter station.

 \bigcirc [] [] Π

The area consists of a southward facing slope of about 10° gradient which levels off towards the top. The lower part of the slope is dominated by Calluna vulgaris and Empetrum nigrum is plentiful. Higher up, the vegetation becomes more even and a good pool system There would appear to be some occurs. association between some of the pools, subterranean drainage and a series of swallow holes which eventually link up with the headwater of a stream lower down the slope. The vegetation higher up the slope is good and thick and is dominated by Eriophorum angustifolium, E. vaginatum and Calluna vulgaris. There is a ground cover of at least 50% by <u>Sphagnum</u> species, mainly <u>S.</u> <u>capillifolium</u>. <u>Scirpus</u> <u>caespitosus</u> is also abundant, Empetrum nigrum is occasional and Andromeda polyfolia is constant in the sward. The occurrence of <u>Cladonia</u> portentosa and the scarcity of lichens typical of bare peat, suggests that this area has not been burnt for The dense nature of the a number of years. vegetation appears to be responsible for the scarcity of liverworts in this area also. Near the R.T.E. road, the peat becomes firmer but Narthecium ossifragum is still frequent and occasional pools still occur. Towards the eastern side the slope steepens and the terrain becomes rougher. <u>Vaccinium myrtillus</u> is abundant on some of the bigger hummocks.

60

This area is bounded on the east by the Area H. Military Road, on the north-east by the R.T.E. road up Kippure and on the south-west by the Liffey Headwater. It is a relatively level site which has a thick vegetation cover of Eriophorum vaginatum and Calluna vulgaris, below which Sphagnum forms a carpet with at least a 50% cover. <u>Narthecium ossifragum</u> is common but less <u>Eriophorum angustifolium</u> and Scirpus caespitosus occur than higher up the mountain. Andromeda polyfolia and Empetrum nigrum are also less common here. An extensive pool system occurs in this area, in the vicinity of the road. These pools are steepsided and most are filled with Sphagnum. system of old but still active drains occurs in this area but the area is still very wet although it has a degenerating look about it. The area has an excellent lichen cover consisting of <u>Cladonia</u> portentosa. Rhacomitrium lanuginosum is also reasonably In the eastern half, some abundant here. damage has been caused to the bog surface, possibly by the hooves of fleeing deer.

ل ا

Π

[]

DOOBIN

6

1/2" MAP NO: SITE NO: DO 36 3 COUNTY: Donegal GRID REF.: G86 90 6" MAP NO: AIR PHOTO NO: G 516 84 (75) AREA (ha): 215 AREA INTACT (ha): 110 ALTITUDE (m): 240-270 FOREST AREA: Gweebarra **CATEGORY:** F, HR **RATING: TOWNLANDS:** Doobin, Disert, 15 Croankeeran **RECORDERS:** RG **GEOLOGY:** WRITE UP: RG

GENERAL SITE DESCRIPTION

The site lies around the source of the Owenroe River to the north-west of Carnaween. Its boundary follows the ridge of Meenagushogue Hill on the north-west side and crosses a flat watershed at the eastern end. The main part of the area is an evenly sloping hillside with a fan of flushes and small streams joining at the southern edge and then flowing west down the valley. One of the streams leads down from the saddle area which is shared with Site 44 of the 1990 survey.

The vegetation is generally intact with a firm peat surface in the upper part of the site becoming progressively softer and more mossy towards the base. There are some rock exposures close to the ridge with significant peat erosion around them but the amount of surface flushing lower down the slope seems relatively low. The plant cover is rich in Scirpus cespitosus, Eriophorum vaginatum and Erica tetralix with 8yr old Calluna. Sphagnum capillifolium and S.subnitens are the most frequent species in the drier parts, covering 30-50% of the surface. They give way downslope to S.papillosum, S.cuspidatum and a little S.magellanicum which together achieve 80 100% cover. A number of separate stream flushes occur and their upper parts are generally vegetated with Nardus stricta, Juncus effusus, S.recurvum, Carex echinata, C.demissa etc. These lead down through sinuous Sphagnum ponds and channels rich in Cladopodiella fluitans, Sphagnum auriculatum, Viola palustris, Carex rostrata, C.limosa and Potamogeton polygonifolius.

The saddle area is apparently ombrotrophic and has an intact cover of Eriophorum species, Campylopus atrovirens, Scirpus cespitosus and Drosera anglica. There are hummocks of Racomitrium, sometimes with Cladonia arbuscula and C.portentosa though burning

seems to have been more recent here than elsewhere. Sphagnum imbricatum also occurs as scattered, tall hummocks and there is a little Polytrichum alpestre. Lophozia ventricosa is prominent, presumably because of the past fires. It seems largely to replace the fire-related small Cladonias: only C.squamosa is recorded. Small pools are found in this area also, containing Eriophorum angustifolium, Carex limosa, Sphagnum cuspidatum and S.auriculatum. Some are related to tearing and erosion on the summit but others seem totally stabilized by vegetation. There was a pair of golden plover holding territory in this area.

South of the main river tall Calluna and Molinia cover much of the slope with Sphagnum capillifolium and S.papillosum at ground level. Empetrum nigrum is frequent, along with Erica cinerea and Dactylorhiza maculata.

EVALUATION

5

This is an important site that scores highly in terms of its integrity, Sphagnum cover and intrinsic interest. Anthropogenic pressures are limited though sheep do occur and erosion is very localised.

MEENACHULLION

1/3

59

B95 07

Meeniroy

Kingarrow

Meenachullion

63

1/2" MAP NO: SITE NO: Do 25 Donegal GRID REF: COUNTY: 6" MAP NO: AIR PHOTO NO: B 21 AREA INTACT (ha):90+ AREA (ha): 145 FOREST AREA: 195-240 ALTITUDE (m): CATEGORY: ਜ **TOWNLANDS: RATING:** 12 **RECORDERS:** RG **GEOLOGY:** WRITE-UP: RG

GENERAL SITE DESCRIPTION

This site runs south-westward from Lough Muck below a ridge that stretches southwards from Meenachullion. This consists of large rocky ridges which overlook the extensive Lough Barra bog. The site rises slightly along the SE side to the heathy summit of Crockbarabrista but there is no rock exposed here. From the lakeshore the ground first rises as an even, wet slope. There is a low watershed and then a slight slope down to Lough Agarvy and its outflowing valley. There is a northern limb of the bog extending west from Lough Muck but to the south it expands onto a low plateau which has several lakes in depressions on its surface.

Because of the frequency of rock, most of the Lough Muck end of the site is flushed. Molinia caerulea, Scirpus cespitosus and Schoenus nigricans are the major species with much Narthecium ossifragum, Pleurozia purpurea, Campylopus atrovirens and Drosera anglica. There are lawns of Sphagnum subnitens, S.capillifolium and S.papillosum with a few tall hummocks of this species and S.imbricatum rising above the general surface. The vegetation has been burned within the last five years but the plants are recovering well. Erosion is limited to the ground around rises or rocky outcrops where sheep have gathered. Here Molinia caerulea and Racomitrium lanuginosum are dominant.

The slope is less pronounced to the south where a plateau lies above the beginnings of the Finn valley and also above some extensive erosion. There are many small pools here in a site rich in Sphagnum. The pools are at all stages, some peaty and steep-sided (with Sparganium angustifolium), others infilling with the normal succession of Sphagnum species and higher plants. Occurring on flat land they are not strictly contoured and seem quite stable. Old lichen growth of Cladonia portentosa and C.arbuscula occurs on hummocks, with some Scapania gracilis, and there are also some taller mounds where Empetrum nigrum, Dicranum scoparium, Plagiothecium undulatum grow vigorously, together Cephalozia and Kurzia species. Golden plover and dunlin nest in this area and there was also a single chick of red grouse. 64

The site runs south-westwards into more uniform and fairly intact Eriophorum spp/Scirpus cespitosus vegetation with occasional hummocks of Polytrichum alpestre and Leucobryum glaucum as well as Sphagnum capillifolium. This leads down with various runnels and underground drainage to a star-shaped lake, surrounded by a rocky shore. Nymphaea alba, Menyanthes trifoliata and Carex rostrata are the marginal species and there is also an island with Sorbus sp. on it.

Just to the west of the watershed between Lough Muck and Lough ? a complex wetland is fed from springs around a granite outcrop. There is a series of small linear pools in a quaking area that eventually drains into a sub-peat swallow hole. Schoenus nigricans, Rhynchospora alba, Sphagnum auriculatum var. inundatum, S.magellanicum are notable species here with Menyanthes trifoliata, Carex limosa and Utricularia intermedia. Stellaria alsine also occurs with the mineral influence.

EVALUATION

This site contains a good variety of habitats with an emphasis on flushed vegetation because of the amount of exposed rock. However it does also have some ombrotrophic stretches which are largely intact though bordered on the south by eroding ground. The pool areas stand out as the most interesting features because of their flora and birdlife.

It would seem very worthy of inclusion in the adjacent ASI(1990 report) despite the lesser importance of the intervening ground.

SALLY GAP

1/2" MAP NO: SITE NO: W 3/4 16 COUNTY: Wicklow GRID REF: 014 13 AIR PHOTO NO: 6" MAP NO: 0 68 6,7 AREA INTACT (ha):415 AREA (ha): 480 outlined ALTITUDE (m): 520-550 FOREST AREA: Glencree CATEGORY: HR **RATING:** 17 **TOWNLANDS:** Powerscourt Mountain, Ballinastoe **RECORDERS:** CD, RG WRITE-UP: GEOLOGY: Granite RG

GENERAL SITE DESCRIPTION

The Sally Gap site is a gently undulating area at about 525m that lies between Kippure, Tonduff, War Hill and Sally Gap itself. The area of good intact vegetation is indicated by the continuous line on the map. It is almost all included by the much larger Nature Reserve area (dotted).

The site is the source of four rivers, The Liffey, The Clohogue or Annamoe, the Dargle and part of the Glencree but because of extensive erosion and sub-peat flow the drainage pattern is not easy to work out on the ground. Close to the Kippure-Sally Gap road there is much cutting and some recent associated drainage. The ground rises to an old shooting lodge (Grouse House) from where a view can be had to the south of the largest pool-filled area of bog. A subsidiary level site occurs to the east around the head of the Liffey above an intact north-facing slope. This has larger pools but some of them are being broken into by headwater erosion from the Annamoe River. Indeed erosion has almost linked the Annamoe and the Glencree rivers together with a rough area of vegetated peat hags and channels. The Dargle source is isolated to the east, its headwaters partly trapped by the more aggressive Annamoe. This is easily seen on the aerial photograph though it is not suggested by the 1/2 inch map. There are other small pool areas along the western edge of the intact bog but these have been interferred with by drainage behind the roadside cutting. However a natural flat site remains just above Liffey Head Bridge where a small bog is growing vigorously, surrounded by two streams.

Away from the pool areas much of the surface

(as at 1) carries a uniform vegetation which was burnt about 5 yrs ago. Erica tetralix is noticeable for this reason and with Eriophorum angustifolium, Calluna and Narthecium it forms a lowish sward. The ground is wet and spongy with frequent Sphagnum subnitens and S.capillifolium, recovering strongly from fire. In places they cover 30% of the surface though there is still some bare peat exposed. Scirpus is frequent though nowhere dominant and its tussocks, sometimes killed, provide sites for Campylopus introflexus and C.paradoxus or Cladonias such as C.crispata, C.floerkeana or C.chlorophaea. Moss hummocks are quite widespread: they are formed by Leucobryum glaucum, seldom if ever by Sphagnum capillifolium.

The pool areas are less burnt than elsewhere and the surrounding vegetation guite dense. It is characterised by Calluna, Eriophorum spp. and Scirpus with a good understory of Sphagnum capillifolium, S.papillosum and S.subnitens. Vaccinium oxycoccus occurs in low density. The southern pools (3) are well vegetated and quite small. Many are covered by Sphagnum cuspidatum or S.auriculatum and one or two have Carex rostrata in addition to Eriophorum angustifolium. The pools above the Liffey valley (2) are larger and deeper and there is more evidence of mineral enrichment. Juncus bulbosus, Cladopodiella fluitans, Drepanocladus fluitans and Scorpidium scorpioides occur in several and Sphagnum auriculatum is widespread. To the east in the Annamoe/Dargle region there are occasional patches of a Sphagnum/ Eriophorum angustifolium vegetation without pools but with the Sphagnum cover approaching 80%.

In these upper parts of the site hummocks are well developed and frequently have Cladonia portentosa, Lophozia ventricosa, Mylia anomala and M.taylori on them. There is some Calypogeia fissa also. The hummocks usually include Racomitrium lanuginosum and this becomes especially common where erosion is occurring in the Annamoe headwaters. The ground is uneven and the stream channels show a peat depth of 2-3m in places. Flushing brings in such species as Agrostis canina, Carex echinata, Deschampsia flexuosa and increases the Molinia which otherwise is thinly spread. Some of the edge pools have been drained by this erosion but there are a considerable number still out of range of it.

Grouse occur at reasonable density over all this higher ground.

Working down the Liffey valley (5) there is wet and intact vegetation dominated by Eriophorum spp. with Calluna and a good Sphagnum cover. There are occasional flushes and in one of these a pond is surrounded by Sphagnum cuspidatum and S.recurvum lawns on which Juncus bulbosus, Agrostis stolonifera and Carex echinata are abundant. Nearby a channel/swallow hole reveals a peat depth of more than 4m.

The Liffey Head (6) bog lies on a flat platform where a tributary stream reaches the main channel. The stream now feeds a small marginal fen of Carex rostrata, Anthoxanthum odoratum, Agrostis stolonifera, Sphagnum recurvum, Aulacomnium palustre and Juncus bulbosus. The growth of peat has diverted the stream eastwards around a transitional zone which includes Deschampsia flexuosa, Potentilla erecta and some Juncus effusus and Rumex acetosa in a carpet of Sphagnum. The bog itself has luxuriant and apparently unburnt vegetation reminiscient of a raised bog. The Sphagnum cover reaches 90-100% in places, consisting of S.papillosum, S.capillifolium, S.subnitens (including subsp. ferrugineus) and S.magellanicum while a uniform canopy of Eriophorum vaginatum, E.angustifolium, Calluna and Erica tetralix stands overhead. The substrate is wet and soft but there are no pools as such. Andromeda, Empetrum and Vaccinium oxycoccus wind through the rest of the vegetation which, because of its density, is largely without Cladonia portentosa or small liverworts.

EVALUATION

Sally Gap is clearly the best of the headwater bogs in Wicklow because of its size and quality of the vegetation. However it has not remained undamaged by erosion nor unaffected by fire and peat cutting. The most unexpected area was the small growing bog behind Liffey Head Bridge which shows many good features.

KNOCKASTUMPA

SITE NO: K 7 1/2" MAP NO: 24 GRID REF: V79 57 COUNTY: Kerry AIR PHOTO NO: V 10 6" MAP NO: 108, 109 AREA (ha): 100 AREA INTACT (ha):32 ALTITUDE (m): 285-300 FOREST AREA: Glengarrif CATEGORY: HR Knockowen, **RATING:** 15 **TOWNLANDS:** Creeveen **RECORDERS:** RG

GENERAL SITE DESCRIPTION

RG

WRITE-UP:

Knockastumpa is the hill behind Lauragh village and is reached from the Healy Pass road. The bog lies at mid-level on a shoulder east of the summit and extends southwards onto a saddle which is the watershed between the adjacent valleys of the Glanmore and the Glanrastel River. The boundary follows the ridge north of Knockastumpa and runs through peat cutting on the northern side. In the SE corner it encloses a wedge of the rising land of Knockowen Mt.

GEOLOGY:

The peatland is partly surrounded by rock outcrops but the centre rises as an ombrotrophic dome. As would be expected the vegetation is varied depending on the availability of minerals. Where these are available, as around the northern edge, Scirpus, Molinia and Rhynchospora alba are the dominant larger species with Campylopus atrovirens, Sphagnum compactum, S.molle, S.tenellum and Carex panicea. Obvious water tracks are marked by Drosera intermedia and Eleocharis multicaulis and they open out onto the smooth bog surface in a squelch of Sphagnum auriculatum var. auriculatum, S.cuspidatum and Campylopus atrovirens. All this area was burnt 2-3yrs ago which would seem to favour S.compactum. Tussocky Molinia occurs in places by the rocks but it is depressed by the grazing of very numerous sheep which have initiated some slight erosion. Herbertus aduncus is associated with some of the peaty mounds here.

Away from the rocks the Molinia falls off in abundance though it does not disappear until the very centre of the ombrotrophic area. The vegetation is Scirpus/Eriophorum vaginatum/Molinia in many places with Sphagnum papillosum, Campylopus atrovirens and Pleurozia purpurea. The surface is wet and all three Drosera species occur: D.intermedia the most localised. The wettest central area is a soft Sphagnum lawn in which S.papillosum, S.subnitens, S.magellanicum, S.cuspidatum and S.auriculatum var auriculatum are all abundant. A scattering of tall S.imbricatum hummocks is visible even from a distance while S.capillifolium occupies the tops of other hummocks along with Campylopus paradoxus and C.shawii, Mylia taylori, Calluna and Cladonia portentosa. Both Kurzia pauciflora and Cephalozia connivens seem frequent in the Sphagnum. Linear pools occur in a haphazard pattern unrelated to slope and there is Carex limosa and Rhynchospora alba within them.

This ombrotrophic area runs some way down the eastern slope towards the Glanrastel River where peat cuttings reveal a depth of peat of 2m. These are disused cuttings and in one place a bank extends almost 100m into the high bog. There is very little associated erosion however and the wetness of the area seems to prevent much related vegetation change. Similar cutting has taken place across the south-east corner of the site and this has a considerable local effect. It is insulated from the main bog, however, by the stream valley.

The saddle bog is the supply for two stream systems on opposite sides of the ridge and part of the one that eventually flows west rises in a discrete source at the southern end of the site. Here a small quaking area of Sphagnum recurvum, Eleocharis multicaulis, Hypericum elodes, Eriophorum angustifolium, Carex nigra and C.echinata is fenced off to prevent access by sheep. There is a little open water full of Sphagnum auriculatum var auriculatum, Drepanocladus fluitans, Menyanthes trifoliata and Potamogeton polygonifolius and surrounded by a ring of the other vegetation. Patches of Juncus acutiflorus, Viola palustris and S.auriculatum var inundatum are noticeable also. Run-off and seepage from the main bog enters this area but the water soon sinks, to reappear at intervals dowmstream. Juncus bulbosus, J.effusus, Glyceria fluitans and Hydrocotyle vulgaris are some of the species associated with lower sections of the channel. There is also Ranunculus hederaceus and Carex paniculata and, where the stream has cut a significant valley, Pinguicula lusitanica.

EVALUATION

This bog has the merits of site integrity, deep peat and wetness, an easily defined boundary, a diversity of habitat and long species list, a large measure of intactness and little erosion. It is the best saddle

bog seen in this survey in Kerry if not in the whole country and should be considered of national importance as an ASI.

DERRYCLOGHER

SITE NO:C 9COUNTY:CorkAIR PHOTO NO:W 26AREA (ha):536ALTITUDE (m):540-630CATEGORY:FRATING:11

1/2" MAP NO: 24 GRID REF: W01 62 6" MAP NO: 79, 91? AREA INTACT (ha):54 FOREST AREA: Glengarrif TOWNLANDS: Derryclogher, Curramore

RECORDERS: WRITE-UP:

GEOLOGY:

GENERAL SITE DESCRIPTION

RG

RG

The Cummeendarrig River rises on the eastern flank of the Knockboy ridge as a series of parallel streams which coalesce and flow southwards to the head of Bantry Bay as the Coomhola River. The site limits mostly follow the watershed of the upper valley which includes the county boundary. From Knockboy however the boundary runs eastwards to a subsidiary summit (1687 ft) and then down to join the Cummeenboy River. There is a break of slope with waterfalls and then a flattish valley below (which is another site, C 10).

The upper catchment is an undulating mixture of rocky outcrops and ledges, stream flushes and peat bogs. Many are small (1-2ha) but they occur with regularity on a series of shelves across the mountainside wherever the slope is 3 degrees or less. Towards the upper reaches of the site there is a more extensive and partly ombrotrophic peat cap whose edges must slope at about 5 degrees.

Slope appears locally to define the composition of the bog vegetation. The flattest sites consist of a squelchy mass of Scirpus cespitosus, Campylopus atrovirens, Pleurozia purpurea and Cladonia uncialis but rather little Sphagnum. This is mainly S.cuspidatum and S.papillosum but there is often a little S.compactum at the edges where Rhynchospora alba may also occur. Racomitrium is widespread though it does not form hummocks on these wet sites. On drier and slightly more sloping ground the Scirpus is joined by Molinia, Eriophorum angustifolium, Erica tetralix, Sphagnum capillifolium and occasional Pinguicula grandiflora. There is more Racomitrium, now forming hummocks on

which Cladonia arbuscula, C.portentosa and C.bellidiflora may grow. Liverworts are present in great variety responding to the constant moisture. Mylia spp., Lophozia ventricosa, Bazzania trilobata, Riccardia latifrons, Calypogeia sphagnicola and C.neesiana and, locally, clumps of Herbertus aduncus are conspicuous. 72

The Herbertus is most frequent on the steep edge of the highest bog which is eroding back slowly as a 1.5m bank. This is the largest area of intact peat on site. Its vegetation includes Eriophorum vaginatum along with Scirpus and Racomitrium and there is some Molinia, especially around the lower edges. The surface bears traces of linear pools and tracks which occur across the contours and are not associated with erosion. Sphagnum cuspidatum and S.tenellum fill some of them. Grouse visit this area but sheep are few in number and burning has not been recent. Despite this the Calluna growth is weak and the plant only grows tall in some adjacent flushed areas.

Most of the bogs are surrounded by such enriched ground where surface water is present in wet weather. Molinia is abundant, often with Sphagnum palustre, Juncus effusus, Polytrichum commune and Carex echinata. Sphagnum auriculatum is a feature of many of the flushed areas as is Juncus bulbosus and Rhynchospora alba, particularly at the lower levels. As nutrients increase towards stream banks species such as Juncus acutiflorus, Carex nigra, Anthoxanthum odoratum and Rumex acetosa enter the picture with Montia fontana, Anagallis tenella and Campylium stellatum close to springs. Tortella tortuosa occurs around the banks while there is much Pellia epiphylla, Fissidens adianthoides and Hyocomium armoricum also.

EVALUATION

This is a complex mountain site with much ecological interest. It includes many small patches of bogland but, more importantly, offers a multitude of gradations from rock and heath to bogland and stream flushes that is practically untouched by anthropogenic influence. Its species list is long for this reason.

GLENLOUGH

SITE NO:C 2COUNTY:CorkAIR PHOTO NO:V 105AREA (ha):312ALTITUDE (m):420-465CATEGORY:FRATING:11

1/2" MAP NO: 24 GRID REF: V84 55 6" MAP NO: 103, 104 AREA INTACT (ha):49 FOREST AREA: Glengarrif TOWNLANDS: Glenlough, Coomnakane, Crosterry West, Rougham

RECORDERS: RG WRITE-UP: RG

GEOLOGY:

GENERAL SITE DESCRIPTION

The area is situated in the central part of the Caha Mts, 7 km west of Glengarriff. It occupies an undulating plateau sprinkled with small lakes between Glenlough Mt and Ram's Hill. It is drained by the Adrigole River to the west and the Glengarriff River to the east. On the western side the boundary follows a local watershed between two branches of the Adrigole River: this includes the Cork/Kerry border at one point. In altitude the site averages about 480m.

The terrain is rocky but there are many patches of shallow, flushed peat and occasional ombrotrophic domes on the more even slopes. In coverage terms the most widespread vegetation is a Scirpus/ Eriophorum angustifolium blanket in which Narthecium ossifragum and Sphagnum auriculatum are rather common. S.compactum occurs in lesser quantity, especially where the peat is bared by trampling or fire. There is often Cladopodiella fluitans growing through it. In the flatter col areas a vegetation of E.vaginatum/Scirpus/ Molinia/Calluna is dominant and here Racomitrium lanuginosum tends to relace Sphagnum, forming a soft and even carpet without significant hummocks. S.capillifolium is the only species and is rare perhaps because of recent (3-4 yr) burning. In a few places on the ridges there are traces of gully erosion, but these are on a very small scale.

The southern part of the site is dissected with rocky ribs around which wind tributaries of the Adrigole River. There are frequent very wet areas

ponded against the ridges and on these scraws have frequently developed. In one examined there was about 40% open water in randomly arranged pools with scattered Eriophorum angustifolium . Elsewhere the vegetation is made up of Schoenus in a mixture of Scirpus cespitosus, E.angustifolium, Molinia and Rhynchospora alba. Sphagnum papillosum is the major species in these scraws while S.cuspidatum and S.auriculatum of both varieties grow in the wetter tracks along with Menyanthes, Drosera intermedia, Potamogeton polygonifolius and a little Drepanocladus exannulatus. Narthecium and Campylopus atrovirens make up the rest of the vegetation. There are occasional hummocks (of burnt, half-alive Sphagnum) on which Scapania nemorea and S.gracilis grow, together with Lophozia ventricosa and lichens such as Cladonia subcervicornis, C.cervicornis, C.polydactyla and C.coccifera.

Some of the small lakes on the eastern side of the site are surrounded by a Sphagnum carpet where the shelter allows it. S.recurvum, S.papillosum, S.palustre and S.auriculatum form extensive lawns with Carex limosa, Menyanthes trifoliata, Molinia, Carex nigra and C.rostrata growing through them. At the rear, Carex echinata and Juncus effusus occur sparingly.

In general terms Molinia is evenly spread through the vegetation, becoming more frequent around rock outcrops and near to streams where it assumes a tussocky form. If the streams are in contact with the underlying rock, as in springhead flushes, Carex paniculata, C.echinata and C.limosa are characteristic of the wetter areas with some Sphagnum recurvum and Aulacomnium palustre also.

EVALUATION

The site contains many small areas of peatland which add up to give a considerable range of habitat with little erosion or grazing. Adjacent habitats of heath, lake and streams are also of interest.

COUMANARE

SITE NO: K 43 COUNTY: Kerry AIR PHOTO NO: Q 10 AREA (ha): 293 ALTITUDE (m): 360-390 CATEGORY: F RATING: 11 1/2" MAP NO: 20 GRID REF: Q53 06 6" MAP NO: 35, 44 AREA INTACT (ha):54 FOREST AREA: Castlegregory TOWNLANDS: Coumanare, Ballyhoneen, Banogue North, Gowlane East. 75

RECORDERS: RG WRITE-UP: RG

GEOLOGY:

GENERAL SITE DESCRIPTION

This site is delineated by the summit of Slievenagower and the high ridge of Beenbo to the east and Slievenalecka to the west. From here the boundary runs to Lough Duh and eastwards along a low ridge around the upper catchment of the Glenahoo river.

The northern side of Slievenagower consists of a series of cliffs at the head of three adjacent glaciated valleys but the southern side slopes down more gently to a plateau area. Here the Glennahoo and the Scorid Rivers both rise before dropping to Brandon Bay on the north side. The Scorid in particular has a very flat course to the crest of the cliffs where it escapes as waterfalls and rapids. Along this middle course there is a line of springs so the ground is permanently saturated. A large scraw has developed over several hundred metres on the western side. It is dominated by Sphagna, notably S.cuspidatum, S.auriculatum var. auriculatum, S.papillosum and S.subnitens. More locally there are lawns of S.recurvum, S.palustre and S.auriculatum var. inundatum while Aulacomnium palustre is frequent throughout. In the spring areas Scorpidium scorpioides, Drepanocladus uncinatus, Aneura pinguis and Riccardia multifida form a sub-community while Cladopodiella fluitans is more widely spread. The main higher plant species are Eriophorum angustifolium, Menyanthes, Potamogeton polygonifolius, Juncus bulbosus and Carex limosa: there are odd tufts also of Molinia and Juncus effusus but the former is grazed quite strongly (and, in view of the terrain, quite incredibly) by

sheep. At the southern end of the scraw one of the feeding streams discharges into a stand of Carex rostrata, C.echinata and Sphagnum recurvum with some Juncus acutiflorus also.

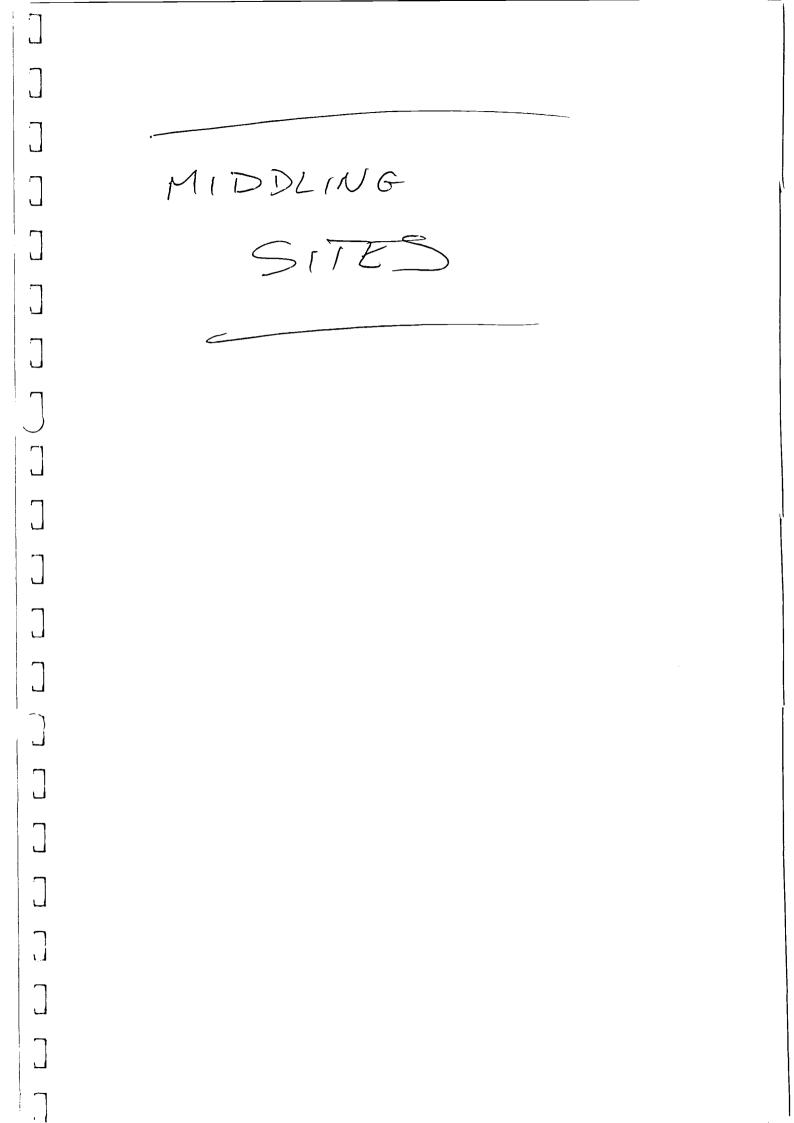
The scraw is a small part of the total site which includes a large intact area on the slopes of Knocknagower and Beenbo as well as a partially eroded area at the edge of the Scorid river basin. The former area is generally a Scirpus/Molinia stand with a 20-30% cover of Sphagnum papillosum and S.capillifolium. Burning has occurred about 3 yrs ago and there is, as yet, little Cladonia coverage. The vegetation is very uniform though traces of old erosion towards the base of the slope create a lumpier topography on which species like Carex echinata, C.demissa, Juncus effusus, and Pedicularis sylvestris flourish. To the west there is a more even and lower slope towards the river channel and here a Scirpus/Rhynchospora alba/Campylopus atrovirens community is found with hummocks of Racomitrium and Sphagnum capillifolium standing out. These are badly trampled close to the river though they do support Dicranum majus, Diplophyllum albicans, Calypogeia muellerana and Kurzia pauciflora s.s. Similar hummocks and hags on the eroded area to the south share most of these species with Scapania gracilis, Cladonia squamosa and C.strepsilis in addition.

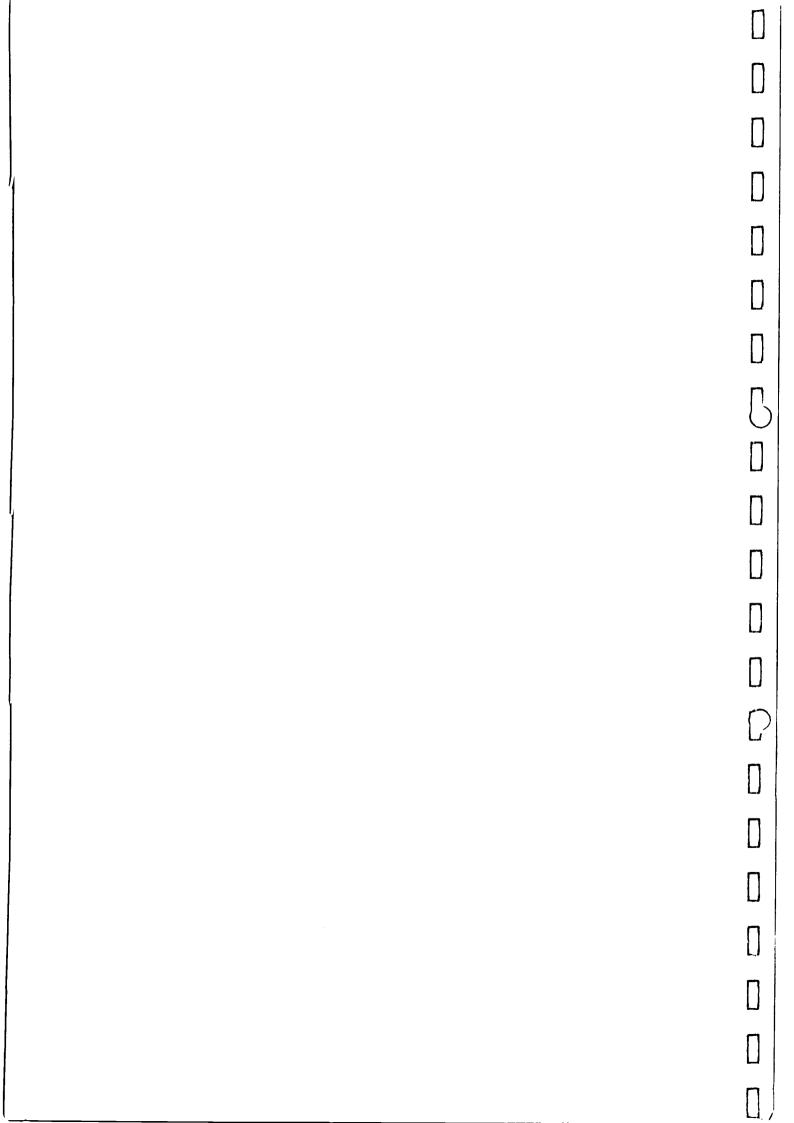
The erosion is concentrated on slightly greater slopes at the south end of the site. To the east on the watershed between the two rivers it peters out and there are more areas of Scirpus/Molinia with a greater proportion of Calluna as well as Sphagnum papillosum and S.capillifolium. The surface is uneven and there are a few channels of shallow erosion, some of them apparently repaired by Eriophorum angustifolium and Sphagnum capillifolium. Part of this area is marked by plastic sacks, as if for fertilizer application. It adjoins a large area of Molinia vegetation cut by occasional 1m slit drains that are visible on the aerial photograph. Water flows in some of them but the amount of Sphagnum in the vegetation remains high, the highest (at 70-80%) of any part away from the mineral flush. Erica tetralix and Scirpus are also present in the vegetation and assume greater prominence upslope where the drains cease to work. The vegetation is generally tall here though it does not seem fertilised. There is a total absence of Cladonia portentosa which may imply a regular burning pattern.

EVALUATION

This is quite an impressive area of intact mountain

bog, all flushed from the slopes above. The scraw, however, is the unique feature on the site and is far bigger and better developed than anything else seen on the survey. MT





BALLARD

1/2" MAP NO: SITE NO: Do 49 COUNTY: Donegal GRID REF.: G53 87 6" MAP NO: AIR PHOTO NO: G514 80, 81 AREA (ha): 149 AREA INTACT (ha):43 ALTITUDE (m): 150-275 FOREST AREA: CATEGORY: H **TOWNLANDS:** RATING: 6 Ballard **RECORDERS: GEOLOGY:** quartzite EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is situated on the west coast of Co. Donegal, just north of Glen Head, Glencolmcille. It encompasses a plateau area, a wet level area below it, a heathy slope and a slightly domed area bounded by two streams and a sea cliff on the west. Most of the site, although the peat is up to 75 cm deep, cannot be regarded as true bog as it has more of a heathy nature. Peat cutting is being undertaken on the southern half of the site and this area is seriously threatened. Other areas have been badly affected by overstocking with sheep.

EVALUATION

Most of the site consists of <u>Calluna vulgaris</u> heath and the most interesting part is heavily grazed and has no particular features of great interest apart from its intact margins and vegetation contrasting with its surounding area.

SPECIFIC AREA DESCRIPTIONS

This area includes part of the plateau north <u>Area A.</u> of Glencolmcille and the north-facing slopes below it. Here, despite a peat depth of 75 cm, the vegetation has a montane heathy character to The peat surface is hard firm and dry. The it. vegetation is short and stunted, and dominated by ericaceous species including Calluna vulgaris, Erica cinerea and Empetrum nigrum. Other vascular species which occur include Potentilla erecta, Eriophorum angustifolium, and Carex binervis. Among lower plants are the Rhacomitrium lanuginosum, <u>Sphagnum</u> tenellum, Cladonia arbuscula and C. portentosa.

The low height of the vegetation may be due the effects of wind and salt. On the north-west side of the plateau, an interesting system of low banks may be seen. These somewhat resemble small waves; the peat is exposed on the north-west side of each. They may possibly result from peat slippage. Peat cutting is being carried out in this area and a number of new drains have been cut. Towards the north, the area slopes downhill in the direction of the sea.

<u>Area B.</u> This is a small level area on the south-west side of Area A. A number of drainage runnels, filled with <u>Sphagnum</u> occur here which collect water draining off the upper slopes. The general vegetation is composed of <u>Scirpus</u> <u>caespitosus</u>, <u>Rhacomitrium lanuginosum</u>, <u>Cladonia uncialis</u>, <u>C</u>. <u>portentosa</u> and a reasonable covering of <u>Sphagnum</u>. As the slope steepens downhill in a northerly direction, erosion begins to have an effect. The area here is undulating and <u>Calluna</u> <u>vulgaris</u> becomes more common.

Peat is being carried out in this area and the remaining area of intact bog is threatened.

- <u>Area C.</u> This is probably the most interesting part of the site and is located on the north-eastern side. The area is situated between two streams and consists of a domed slope. The vegetation is characterised by an abundance of Schoenus nigricans. The surface is intact and although <u>Sphagnum</u> is not very prominent, a few dry hummocks of S. capillifolium and Calluna vulgaris occur. This area is greatly overgrazed and sheep appear to prefer the grazing here to that on the surrounding heathery slopes. The vegetation is short and quite bare. There are signs of damage due to heavy trampling by sheep. Campylopus atrovirens and C. brevipilus are common on the bare areas. Although the peat surface is soft, there are no pools. Some rain-filled hollows occur, however. The area would probably recover if sheep were removed from it.
- This area, on the south-east side of the Area D. site, consists of a fairly steep slope. The area is more of a wet heath than a bog. The vegetation is dominated by long <u>Calluna</u> vulgaris along with deep hummocks of Sphaqnum <u>capillifolium</u> and some of <u>C</u>. <u>palustre</u>. Erica species and other which cinerea are characteristic of heathland, occur here also. Towards the top of the slope, the peat is beginning to erode.

2

CLOGHERVADDY

1/2" MAP NO: SITE NO: Do 33 3 COUNTY: Donegal GRID REF.: H03 92 AIR PHOTO NO: 6" MAP NO: H360 76, 77 AREA INTACT (ha):140 AREA (ha): 259 ALTITUDE (m): 125 - 225FOREST AREA: Reelan CATEGORY: Н **TOWNLANDS:** Carrick, **RATING:** 9 Cloghervaddy, Cronamuck **RECORDERS: GEOLOGY:** granite EM WRITE UP: ΕM

GENERAL SITE DESCRIPTION

This site is located 17.5 km north-east of Donegal town on the north-east side of the Bluestack Mountains. It is bounded on the west by Croaghnamuck river; on the north by a tributary of this river and a forestry plantation; on the south-west by the steep slopes of Croaghnamuck Mtn.; and on the east and south-east by a forestry plantation and Clogher Hill.

The site is a highland bog and lies at a low altitude (125 m - 225 m). It consists of a gentle slope (approximately 5° gradient) which encompasses a number of streams and flushed headwaters. The uphill boundary of the site is somewhat arbitrary as towards the upper slopes the peat becomes shallow, the surface drier, the vegetation more heathy, and rocks begin to outcrop. This part of the site is of little interest. Some diffuse erosion occurs here. On the northern edge of the bog, peat cutting is being carried on, mainly by hand.

Overall, the site is not very wet but has a reasonably interesting species list. Burning does not appear to have recently occurred here except possibly in Area A(ii). A number of pools are to be found on this site.

3

SPECIES OF NOTE

Sphagnum imbricatum

EVALUATION

The relatively large area and intact nature of this site along with its rich species list and the small flushed areas which are present, make it of interest. However, it has no outstanding features and shows no great montane characteristics nor interesting vegetation succession at the higher altitudes.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This area comprises the largest part of the site and includes the lower slopes of the bog where the peat is deeper. The area is divided by two streams into three smaller areas. These are now described.

<u>A(i).</u> The north-west section of the site is gently sloping towards the east. The bog is soft and has a reasonable carpet of <u>Sphagnum</u> which includes such species as <u>S. capillifolium</u>, <u>S.</u> <u>magellanicum</u>, <u>S. subnitens</u> and <u>S. compactum</u>. <u>Rhynchospora alba</u> also occurs. On the upper slopes, <u>Schoenus nigricans</u> grows and this is probably associated with shallower, more enriched peat. There are a number of areas characterised by the presence of algal mats and dead leaves. These areas are not unduly common. Overall, the vegetation is reasonably uniform although on drier banks, heathy vegetation can occur. The area is crossed by recently erected fence.

<u>A(ii).</u> Situated south of Area A(i), this area has a more even textured vegetation than that occurring in A(i). The area may have been burnt approximately two years ago. <u>Molinia</u> <u>caerulea</u> is more dominant here but a reasonable carpet of Sphagnum still occurs. A single hummock of Sphagnum imbricatum was noted in this The increased dominance by Molinia may area. result from the abundance of headwater streams in In these, <u>Myrica</u> <u>gale</u> and <u>Juncus</u> be found. Much of the area is the area. <u>effusus</u> may be found. characterised by the presence of tall lank Calluna vulgaris. This appears to be associated with the occurence of <u>Schoenus</u> nigricans and is probably related to the presence of water flowing off the hillside.

<u>A(iii).</u> This area is located south-west of Area A(ii) and is similar to it except that it receives much more water draining off the steep slopes above it. Where a lot of water flows, algal mats occur.

<u>Area B.</u> This comprises the hillside above Area A. Here, the peat is shallow and drier. Rock outcrops are plentiful and the vegetation becomes more heathy in character. <u>Molinia caerulea</u> is more dominant and <u>Sphagnum</u> less common. <u>Erica</u> <u>cinerea</u> and <u>Scirpus caespitosus</u> are both more plentiful here. 82

<u>Area C.</u> This is a very small area located on the western end of the boundary between areas A(ii) and A(iii), near the confluence of two streams. The area is an iron flush and supports a scragh type vegetation which includes <u>Menyanthes</u> <u>trifoliata</u>, <u>Carex</u> <u>limosa</u>, <u>Potamogeton</u> <u>polygonifolia</u> and <u>Aulacomnium palustre</u>. <u>Sphagnum</u> has a cover of up to 75% in this area. CROWDOO

1/2" MAP NO: Do 58 3 SITE NO: G65 83 GRID REF.: COUNTY: Donegal 6" MAP NO: AIR PHOTO NO: G502 81, 82 AREA INTACT (ha):117 342 AREA (ha): FOREST AREA: Ardara ALTITUDE (m): 180 - 244CATEGORY: Н Crowbar, **TOWNLANDS: RATING:** 7 Crowdoo, Crowbane **GEOLOGY: RECORDERS:** RG, EM EM, RG WRITE UP:

GENERAL SITE DESCRIPTION

This highland bog site comprises the south-facing side of Crocknamurrin, 6 km east of Glencolmcille, Co. Donegal. It consists of a large and relatively uniform slope which is topped by an eroded plateau. The eastern side of this slope is also seriously eroded. The rest of the site has been divided into long fields seperated by fences and sometimes drains also. Despite this, the vegetation is surprisingly luxuriant and does not appear overgrazed on much of the site. Local information suggests that a number of land owners in the locality have either died or may explain the vegetation. emigrated. This Nevertheless, some parts are obviously suffering from overgrazing and some areas are being cut for peat. Peat cutting is extensive on the western end of the A conifer plantation adjoins the site on the site. north-west side. By and large the vegetation is uniform and dominated by <u>Molinia</u> <u>caerulea</u>, <u>Scirpus</u> <u>caespitosus</u>, <u>Calluna</u> <u>vulgaris</u> and <u>Sphagnum</u>. The uniformity may be the result of burning in the past. The Alternatively, it may be due to the sudden easing of grazing pressures.

Possible threats to the site come from afforestation, peat extraction, and overgrazing.

EVALUATION

This is a nice area which is probably recovering from more intensive management in the past. However the many fences dividing the site suggest that management may intensify at some time in the future and that the vegetation on the site is not totally natural.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> The south-east side of the site has a reasonably soft surface and despite the presence of many erosional areas, <u>Sphagnum</u> cover is sometimes good. Eroded areas sometimes give rise to <u>Juncus effusus</u> flushes. There are many drier banks and mounds, however. The plateau in this area is eroded with bare gullies and banks. 84

Area B. This area is fairly uniform. The vegetation which is low and even, is dominated by Molinia caerulea with <u>Eriophorum angustifolium</u> and caespitosus being less dominant. Scirpus <u>Sphagnum</u> cover is not very extensive but low hummocks exist. <u>Rhacomitrium lanuginosum</u> is plentiful here and forms a carpet through which short <u>Calluna</u> <u>vulgaris</u> grows. The bog surface is remarkably intact in this area. However, the tracks of some vehicle were noted, on the day the site was visited and a small number of drainage gullies occur on the surface. These gullies may have originally been sheep tracks . A number of large old drains run down this area and still carry streams of water. Some erosion occurs in their vicinity. Sheep grazing is occurring in this area and new fences have been erected. In the western part of this area the vegetation is longer and <u>Calluna</u> <u>vulgaris</u> growth and <u>Sphagnum</u> cover good. Cladonia portentosa occurs here also. Occasionally, where <u>Molinia</u> <u>caerulea</u> predominates, <u>Sphagnum</u> cover is sparse. Subtle differences exist between the divided sections of the slope; in the western part, <u>Scirpus</u> caespitosus dominates and Rhynchospora alba Here the vegetation is more open and ocurs. bare.

The relatively new fences in the area indicate that the site is not a commonage. This may have implications for the future of the site in that the management may become more intensive.

- <u>Area C.</u> This was originally similar to area B but has been cut with a sausage machine.
- <u>Area D.</u> The surface in this area has been badly disrupted and has probably been cut in the past. <u>Juncus effusus</u> now dominates. This area is of little conservation interest.
- <u>Area E.</u> This area is similar to area B but the surface is more broken up and some erosion has

taken place. It is bounded on the north side of the ridge by a forest margin. The peat in this area is shallower than elsewhere and heath species such as <u>Anthoxanthum</u> <u>odoratum</u>, <u>Juncus</u> <u>squarrosus</u>, <u>Galium</u> <u>saxatile</u>, <u>Potentilla</u> <u>erecta</u> and <u>Nardus</u> <u>stricta</u> occur in places.

- <u>Area F.</u> This area is similar to area B but its surface is slightly more tussocky and bare. There are signs of greater grazing pressure here. This area is also more horizontal than the other areas and one or two pools occur. <u>Sphagnum</u> <u>magellanicum</u> has been recorded here. Towards the north-west end, as the slope steepens, the surface becomes eroded.
- <u>Area G.</u> This area has been so damaged by peat cutting and the planting of windbreaks as to be of little value.

MEENAGUSE SCRAGH

TOOREENEALAGH

SITE NO: COUNTY: AIR PHOTO NO: AREA (ha):	Do 35 Donegal G514 81	1/2" MAP NO: GRID REF.: 6" MAP NO: AREA INTACT (ha)	3 G91 90 G514 :21
ALTITUDE (m): CATEGORY:	420 Scragh	FOREST AREA:	Gwebarra
RATING:	8??	TOWNLANDS:	Tooreenealagh, Coomaspeara, Toorasleen
RECORDERS: WRITE UP:	EM EM	GEOLOGY :	

GENERAL SITE DESCRIPTION

This site is located on the south-east side of Silver Hill, in the west part of the Blue Stack Mountains, Co. Donegal. The site is not strictly a bog but rather incorporates one area which is essentially the floodplain of a stream and another area which is an overgrown lake or scragh. The vegetation on the site is therefore one of flushes rather than ombrotrophic bog. There is no evidence of human interference with the site and no obvious threats.

EVALUATION

This area does not really fall into the category of "bog". An evaluation would therefore not be based on comparing like with like as there may be many comparable or better sites in the county.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This flushed floodplain of a stream collects water running off the surrounding hillside. Extensive <u>Sphagnum</u> lawns, composed of <u>S</u>. recurvum and <u>S</u>. <u>palustre</u> occur here and <u>Polytrichum</u> <u>commune</u> is another common bryophyte. The area is fairly uniform and has a low species diversity. <u>Menyanthes trifoliata</u>, and <u>Carex limosa</u> occur in one small area. Large tussocks of <u>Eriophorum</u> <u>vaginatum</u> grow through the <u>Sphagnum</u> carpet. <u>Juncus effusus</u> is locally abundant especially where small streams run through the peat to eventually connect with the main stream.

95

)

- <u>Area B.</u> Area A is seperated from the overgrown lake (Area C) by a raised rocky area which has a good growth of <u>Calluna vulgaris</u> and many hummocks of <u>Rhacomitrium lanuginosum</u>. <u>S.</u> <u>capillifolium</u> is plentiful on the ground. This area is suffering from much erosion and has a reasonably dry surface. In places small streams run under the peat.
- <u>Area_C.</u> larger and of This more open area lake/scragh is fairly uniform. It consists mainly of carpets of <u>Sphagnum</u> recurvum through <u>Carex</u> <u>rostrata</u> grows abundantly. which Menyanthes trifoliata occurs in a number of small areas where Sphagnum is less abundant. Other species which occur in this area include Potamogeton polygonifolia, Glyceria fluitans, Ranunculus flammula and Sphagnum subsecundum var. <u>inundatum</u>

ŗ)

Ŋ

ר ו

GLANMORE

SITE NO: C 5 1/2" MAP NO: 24 GRID REF.: V74 52 COUNTY: Cork AIR PHOTO NO: V134 6" MAP NO: C 102, K 111 AREA INTACT (ha):14 AREA (ha): 252 250 - 280 FOREST AREA: Glengarrif ALTITUDE (m): Highland Valley CATEGORY: **RATING: TOWNLANDS:** Glanmore, 7 Clogher Sandstone **RECORDERS:** ΕM **GEOLOGY:** WRITE UP: EM

GENERAL SITE DESCRIPTION

This small site is situated 3 km north-west of Hungry Hill, Co.. Cork, and 8 km south-west of the vilage of Lauragh, Co. Kerry. The site is, for the most part, a high level hanging valley bog, upstream from Glanmore Lake. The bog has an easterly aspect and is situated in the meanders of a mountain stream. It has a slightly domed morphology. Many rock outcrops occur around the margins and on the surrounding hillsides. These slopes are dominated by Molinia caerulea. The site grades upslope into this The abundance of Eriophorum Molinia moor. angustifolium gives the vegetation of the site a reddish colour. In the bryophyte layer, there is a low cover abundance of <u>Sphagnum</u> but a number of small hummocks occur. Rhacomitrium lanuginosum is abundant and forms a carpet and low hummocks. The site is also notable for the abundance of <u>Campylopus</u> species, especially <u>Campylopus</u> <u>atrovirens</u> and the rarer <u>C</u>. shawii which has been recorded from only three (?) Irish Vice-Counties. Much of of the peat is bare.

The vegetation is low in stature except for small hummocks of <u>Rhacomitrium lanuginosum</u> through which <u>Molinia</u> grows. <u>Calluna vulgaris</u> is very depauperate where it occurs. The surface of the bog is wet and quaking. <u>Schoenus nigricans</u> occurs in localised areas but does not become dominant. A large rock outcrop is present in the centre of the site. The bog is somewhat flushed and there are small localised quaking areas which support <u>Menyanthes trifoliata</u>, <u>Carex</u> <u>paniculata</u> and <u>Carex echinata</u>.

Near the stream bank the vegetation is more heathy and species such as <u>Anthoxanthum</u> <u>odoratum</u>, <u>Agrostis</u> <u>canina</u> and <u>Nardus</u> <u>stricta</u> occur. Flushed areas dominated by <u>Juncus</u> <u>acutifloris</u> occur here also.

There are no obvious signs of burning on this site. On the downstream margin if the site, along the stream bank, there are very slight signs of erosion. Upstream of the site, the soil becomes drier and <u>Molinia caerulea</u> dominates.

There are no obvious threats facing this site.

SPECIES OF NOTE

Campylopus shawii, cf. Cephalozia lunulifolia

EVALUATION

J

L

J

 \Box

 \Box

 \Box

This most significant part of this site is quite small. It is however, a good example of a hanging valley bog, allbeit at a low altitude. It has not been interfered with in any way apart possibly from grazing.

MAULAGOWNA

SITE NO: K 2 1/2" MAP NO: 24 COUNTY: Kerry GRID REF.: V87 64 AIR PHOTO NO: V49 6" MAP NO: 101 AREA INTACT (ha):17 AREA (ha): 20 ALTITUDE (m): 375 FOREST AREA: Kilgarvan **CATEGORY:** Headwater **RATING: TOWNLANDS:** 6 Maulagowna, Derrysallagh, Coornacaragh **RECORDERS: GEOLOGY:** EM Sandstone WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is a small headwater bog. The surface of the bog is uniform and there are no signs of erosion. The peat is soft and squelchy but not quaking. There are no pools present. The vegetation is even textured and is dominated by <u>Molinia caerulea</u>. This species does not form large tussocks at this site. Both <u>Calluna vulgaris</u> and <u>Scirpus caespitosus</u> are reasonably abundant. A number of hummocks of <u>Leucobryum glaucum</u> occur. Where the vegetation is more open, <u>Campylopus atrovirens</u> occurs. The low even texture of the vegetation suggests that the site may have been burnt at some time in the past. There is no obvious evidence for this, however.

A newly erected fence runs up to this site from the south-west. The only threat to the site comes from grazing by sheep.

EVALUATION

This appears to be quite a natural site although it is not very big. There are very few examples of headwater bog sites such as this in Co. Kerry.

SILLAHERTANE

SITE NO: K 24 Kerry COUNTY: AIR PHOTO NO: W120 AREA (ha): 315 315 AREA (ha): 350 - 480 ALTITUDE (m): CATEGORY: F 9(11RG) RATING: **RECORDERS:** RG, EM WRITE UP: RG, EM

1/2" MAP NO: 21 GRID REF.: W11 72 6" MAP NO: 95 AREA INTACT (ha):216 FOREST AREA: Kilgarvan TOWNLANDS: Sillahertane GEOLOGY: Sandstone

GENERAL SITE DESCRIPTION

This site is located 12 km east of Kilgarvin and along the Cork/Kerry border. This border forms the south-eastern boundary of the site. The site consists of a horseshoe-shaped ridge which opens out to the north-west and the hollow which it encloses. It is bounded by the 400 m contour although in the centre of the site, the elevation falls to 325 m.

This is, for the most part, a flushed site as is indicated by the predominance of <u>Molinia caerulea</u>. This fact is surprising since there is little rock exposed above the surface of the peat. It is likely however, that the peat is very shallow as the vertical bedding planes of the sandstone bedrock, beneath the peat, are clearly visible on the aerial photographs the site.

Overall, the area is very intact with little damage from drains and peat cutting apparent. The site may have been burnt in the last five years. The vegetation on the site is uniform although a number of interesting headwater flushes do occur on the site. The centre of the site (Area G.) is somewhat different in nature from the surrounding ridges. This part is a low-lying valley area which receives water draining from the surrounding slopes.

Possible threats to the site come from overgrazing and turbary.

Species of Nora R. grandeflora

EVALUATION

This a large natural site. The area of intact peat on this site is extensive but a large proportion

of it is dominated by <u>Molinia</u> <u>caerulea</u> and of limited vegetational interest. There are however, well developed flushes at the stream headwaters and some lenses of deeper peat with lowland features. 92

SPECIFIC AREA DESCRIPTIONS

- <u>Area A.</u> On the north-eastern side a few rock outcrops occur at the top of the ridge with a heathy vegetation of Festuca vivipara, Juncus squarrosus, Vaccinium myrtillus, Deschampsia flexuosa and Luzula sylvatica. This quickly gives way to Molinia caerulea, especially where the slopes are more than about 5 degrees or where cutting and some concomitant erosion has improved the drainage - on the Cork side of the county boundary. In this uneven ground Racomitrium hummocks stand up amongst Molinia and tall Calluna on 1m of peat.
- On flatter ground the dominant cover is <u>Area B.</u> either Eriophorum vaginatum with Calluna or, more commonly, with Scirpus/Molinia/ Erica tetralix. The former community is less burnt and contains Sphagnum papillosum and S.capillifolium, the latter is firmer. Sphagna occur in smaller colonies and there is Campylopus atrovirens though no Drosera anglica. Bare peat produced by fire is generally colonised by Odontoschisma sphagni or by Cladonia gracilis, C.floerkeana and C.crispata var cetrariiformis. In slightly ventricosa sheltered sites Lophozia and Cephalozia bicuspidata are also frequent.
- <u>Area C.</u> As the slope of the hillside increases into the valley Molinia once more become dominant with an understory of Sphagnum capillifolium, Erica tetralix and Potentilla erecta and much Calypogeia fissa on the leaf litter. This is a uniform vegetation changing only around small flushes where Deschampsia flexuosa, Sphagnum papillosum and S.recurvum come in. The amount of Molinia is emphasised by recent burning.
- <u>Area D.</u> Close to the headwaters of the stream a large flush occurs close beside a rock outcrop. In this Carex paniculata, C.rostrata, C.limosa, C.nigra, Juncus acutiflorus and Sphagnum recurvum are major species with Menyanthes trifoliata, Potentilla palustris, Potamogeton polygonifolius and Sphagnum auriculatum var auriculatum in the wettest places and Agrostis stolonifera, Angelica sylvestris, Hypericum elodes and Juncus bulbosus growing on the resultant scraw. There are areas of Polytrichum commune, Sphagnum cuspidatum and

S.palustre too.

Just west of here the first of the flatter peat domes occurs. It again is a recently burnt site but enough of the vegetation survives to show a community of Sphagnum papillosum, S.magellanicum and Rhynchospora alba in between hummocks of Racomitrium. Cladonia strepsilis and C.subcervicornis are colonising the wet peat surfaces with C.cervicornis ssp verticillata and the moss Campylopus paradoxus on the drier sites. Other similar areas occur down the valley . .

- This is a very even-textured area, situated <u>Area E.</u> on the south-western part of the site. The vegetation here is dominated by tall Molinia caerulea and has reasonably tall Calluna vulgaris growing through it. The heathy element of the vegetation is prominent here and includes species such as Anthoxanthum odoratum, Rhytidiadelphus and Agrostis canina. Eriophorum loreus angustifolium and E. vaginatum are frequent but not very prominent. The surface is soft and Sphagnum cover is reasonably good in places. The area has a very intact appearance and there is little sign of erosion. Overal, the bog surface seems to be dry here. The area is on a slight slope and would appear to be somewhat flushed although the source of the flushing is not obvious.
- This area incorporates the top of the ridge Area F. which runs along the south-western side of the site. Here, the vegetation is low and less tussocky than in Area E. Molinia caerulea is less dominant and Scirpus caespitosus, Eriophorum vaginatum, E. angustifolium and Erica tetralix become more prominant. This is probably due to a reduced input of nutrients. Hummocks of Sphagnum occur as well as those of Rhacomitrium lanuginosum. Towards the northern end of this area, an excellent carpet of Sphagnum occurs. <u>Narthecium</u> <u>ossifragum</u> grows here also. Few lichens were noted in this area and their absence may possibly indicate recent burning of the site. A small <u>Sphagnum</u>-filled flush occurs on the ridge this supports species such as <u>Sphagnum</u> and recurvum, S. cuspidatum, Carex nigra and Juncus bulbosus.

A number of drains have been cut into the south-west margin of the area. Peat cutting is being undertaken here. Some bare peat was observed here and there are signs of incipient erosion. On the top of the ridge, are signs of past erosion or cutting. These areas have completely revegetated.

<u>Area G.</u> This is a flat hollow inthe centre of the site into which the north-western part of the site drains. The vegetation here is dominated by <u>Scirpus caespitosus</u> and has a very even texture. The area has a reasonable <u>Sphagnum</u> cover. <u>Pleurozia purpurea</u> is particularly common here and <u>Rhynchospora alba</u> and <u>Pinguicula grandiflora</u> occur also.

л Л

 \int

 \int

 \Box

r

]

]

SITE NO: K 13 COUNTY: Kerry AIR PHOTO NO: V296 AREA (ha): 65 ALTITUDE (m): 300 - 400 **CATEGORY:** F **RATING:** 9 **RECORDERS:** EM WRITE UP: ΕM

1/2" MAP NO: 20 GRID REF.: V85 80 6" MAP NO: 83 AREA INTACT (ha):30 FOREST AREA: Killorglin TOWNLANDS: Carrig East GEOLOGY: Sandstone

GENERAL SITE DESCRIPTION

This site is situated approximately 3 km northwest of Molls Gap, Co Kerry. It is comprised of a south - facing slope which grade uphill into a saddle. This is located on the ridge which forms the south side of the Black Valley. The area is part of the upper catchment of the Owenreagh River, which drains into the Upper Lake, Killarney. Most of the site consists of a gentle slope which is surmounted by a rocky ridge above. Run-off from this ridge is probably responsible for some flushing of the site. The lower part of the site has a number of flushed stream areas. Some of the flushing is probably due to run-off from rocky hillocks in this part of the site. Towards the top of the site, the gradient eases and the area tends to resemble a saddle or plateau bog

The area is grazed by sheep but there are no other obvious threats.

SPECIES OF NOTE

Sphagnum molle, Pinguicula grandiflora

EVALUATION

This is a nice interesting site which is, so far, little affected by human activities. It shows a subtle transition in vegetation from a flushed slope to a more ombrotrophic saddle. The site may be regarded as of national importance.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> On the south-west side of the site, along

the river, is an area which has rocky outcrops on it and a gentle slope and which collects run-off from the mountain. In this area the vegetation is dominated by <u>Molinia</u> <u>caerulea</u>, which forms where the surface is wet. The tussocks is tall to flushing. vegetation here, due Schoenus nigricans is common and Carex paniculata occurs in places, along with a number of other species of smaller sedges. A large number of <u>Sphagnum</u> species occur here and these include <u>S</u>. <u>auriculatum, S. subsecundum</u> var. <u>inundatum, S.</u> <u>capillifolium</u>, <u>S</u>. <u>compactum</u>, <u>S</u>. <u>cuspidatum</u>, <u>S</u>. <u>molle</u>, <u>S</u>. <u>palustre</u>, <u>S</u>. <u>papillosum</u>, <u>S</u>. <u>recurvum</u>, S. subnitens and S. tenellum.

96

<u>B.</u> This area is more typically bog constitutes the main part of the site. and Area B. Ther vegetation is uniform and is dominated by Molinia Higher up the slope, the Molinia is <u>caerulea</u>. and dominant, Scirpus shorter and less caespitosus is plentiful. <u>Sphaqnum</u> forms a number of hummocks here. This area is much less flushed than Area A. At the top of the site, on the plateau, many hummocks occur. These are composed of Sphagnum, Rhacomitrium lanuginosum or Pleurozia purpurea. Molinia is much less common and Scirpus caespitosus is plentiful but not tussocky, here. The whole area is very intact. On the day it was surveyed, the surface was squelchy, after much heavy rain. Some traces of pools were apparent on the plateau but this may have been only temporary. In this area <u>Sphagnum</u> has a cover abundance of up to 50%. MANGERTON

1/2" MAP NO: SITE NO: K 28 20 GRID REF.: W00 00 COUNTY: Kerry AIR PHOTO NO: V291 6" MAP NO: 74, 75, 84, 85 AREA INTACT (ha):27 AREA (ha): 54 Kilgarven ALTITUDE (m): 700 - 750 FOREST AREA: CATEGORY: М **TOWNLANDS: RATING:** 6??? Mangerton, Gortaloughane, Gortdromakiery (?) **GEOLOGY:** Sandstone RG, EM **RECORDERS:** EM, RG WRITE UP:

GENERAL SITE DESCRIPTION

EVALUATION

Although the area of intact bog is not large, this site constitutes one of the highest areas of montane blanket bog in the country and has a well developed ombrotrophic vegetation. The occurrence of lichen-rich montane heath on peat is unusual and was not seen at any other site. Its value is increased by the fact that it is adjacent to Killarney National The degree of erosion which is extensive in Park. The places detracts from the site, to some extent. site is one of the few that are mentioned in the literature and for many years has been noted as suffering from erosion. This suggests that the process is slow and that the vegetation will survive in its present form for many years. It suffers some grazing damage and is perhaps also suffering trampling damage by walkers.

SPECIFIC AREA DESCRIPTIONS

This area is situated on the Mangerton plateau, south-east of the summit and approximately south of L. Erhogh, Co. Kerry. The site varies from being a flat plateau to being a slope of 15° gradient. It is a high level montane bog (700 m - 750 m) which is seriously eroded on its margins. It is this erosion line that delineates the site , rather than any any natural topographical features. Where the peat has not eroded, the surface feels firm underfoot and is

20

apparently well drained.

The dominant vascular plant is <u>Juncus</u> squarrosus and this gives to the vegetation a montane heathland Other vascular plants which are common character. here include Calluna vulgaris, Agrostis canina and Eriophorum anqustifolium. Empetrum nigrum, Vaccinium myrtillus and Luzula sylvatica occur also. Among the lower plants, <u>Rhacomitrium</u> <u>lanuginosum</u> and <u>Cladonia</u> Sphagnum <u>arbuscula</u> are particularly common. capillifolium is plentiful in some places. The vegetation on the site is typical of of montane bog except for the fact that <u>Juncus</u> <u>squarrosus</u> replaces Eriophorum angustifolium as a dominant species. The peat is up to 1.5 m in depth on the site. The can hardly be described as heathland, therefore. The area The vegetation does bear a resembles to that found on the top of peat hags. Drainage may be the determining factor, therefore. Towards the south side of the replaces Juncus angustifolium <u>Eriophorum</u> site, squarrosus as the dominant species. Here, the Sphagnum carpet is good and the vegetation resembles that found in parts of the Wicklow mountains, for example. The fact that <u>Drosera</u> species and <u>Erica</u> tetralix were not recorded here, is noteworthy. In areas where the peat is totally eroded, Rhacomitrium lanuginosum heath occurs.

There were many sheep observed on this site. It is likely, therefore that the site is overgrazed. The area has not been recently burnt and the only obvious threats to it emanate from erosion and overstocking.

DRUMNASHARRAGH

SITE NO: Do 24 1/2" MAP NO: 1 COUNTY: Donegal GRID REF.: C01 10 AIR PHOTO NO: 6" MAP NO: C34 51 AREA (ha): 225 AREA INTACT (ha):13 ALTITUDE (m): 250 - 350 FOREST AREA: Meenirroy CATEGORY: Η **RATING:** -3 **TOWNLANDS:** Drumnasharragh, Meenagannive **RECORDERS:** EM, RG ** GEOLOGY: WRITE UP: EM, RG

GENERAL SITE DESCRIPTION

This site comprises the north-west slopes of Binswilly Mountain, located, 14 km west of Letterkenny, Co. Donegal. The site is of poor quality, being badly affected by erosion and to some extent, drainage. Much of the area more closely resembles heathland rather than bog.

EVALUATION

This area is so seriously eroded as to be of little interest as a bog. A number of flushes occur which are of some interest but overall, the site is of poor quality.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This area consists of a grass heath.

- <u>Area B.</u> This area is badly eroding. Much of the peat is bare and there are many dry hummocks present. The lower part of this area has been recently drained. The vegetation is dominated by <u>Eriophorum angustifolium, Scirpus caespitosus</u> and <u>Rhacomitrium lanuginosum</u>. <u>Sphagnum</u> is not abundant. Near to a stream bank the vegetation is more grassy and consists of species such as <u>Glyceria fluitans, Poa pratensis</u> and <u>Juncus</u> <u>effusus</u>.
- <u>Area C.</u> This area is located uphill of Area B. It is a heathy area dominated by <u>Anthoxanthum</u> <u>odoratum</u> with abundant <u>Juncus effusus</u> in flushed areas. Certain wetter areas support <u>Schoenus</u> <u>nigricans</u>, <u>Carex</u> <u>rostrata</u>, <u>C. dioica</u> and <u>C.</u> demissa.

Derivise

100

- Now the start of the start of the

DERRYDUFF MORE

1/2" MAP NO: SITE NO: C 1 24 Cork GRID REF.: W00 61 COUNTY: W27 6" MAP NO: AIR PHOTO NO: 9 AREA INTACT (ha):34 AREA (ha): 34 ALTITUDE (m): 525 - 550 FOREST AREA: CATEGORY: F Derrybeg More, **TOWNLANDS: RATING:** 8 Derrybeg Beag **RECORDERS:** EM GEOLOGY: Sandstone WRITE UP: EM

GENERAL SITE DESCRIPTION

This site, situated south of Knockboy Mountain, on the Cork/Kerry border, consists of a north-facing hillside which slopes down to a lake, and the slopes above the lake's outflow stream. The lake is being used as a resevoir. The main slope is even textured in its vegetation but has little <u>Sphagnum</u> cover on it. On the east-facing slope, on the west side of the site, the surface is more uneven. The site incorporates a flushed area, located in a bend in the outflowing stream, and which also collects water from the mountain slopes above it.

There are no obvious threats to the site although tractor wheels have caused some surface damage in one area. The main danger comes from erosion and overstocking.

SPECIES OF NOTE aunculation var mundatum Calliergon sarmentosum, cf. Sphagnum subsecundum

EVALUATION

This small site is somewhat disjointed. The bog vegetation is of moderate interest although the flushed areas host a nice variety of species. The construction of the resevoir is bound to have affected the hydrology of the flush, to some extent, however.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This area is located west of the outflow stream from the lake. Although the area is reasonably well vegetated, some erosion is occurring or has occurred, in the past. This has resulted in the area having an uneven lumpy surface. The peat is relatively thin in places and rocks are sometimes exposed. The surface is wet and springy. The vegetation is dominated by <u>Scirpus caespitosus</u> and <u>Molinia caerulea</u>. <u>Calluna vulgaris</u> abundance is low except on the tops of hummocks. Many hummocks of <u>Rhacomitrium</u> <u>lanuginosum</u> occur, in addition to a less frequent number of <u>Sphagnum capillifolium</u> hummocks. Overall, <u>Sphagnum</u> cover is poor, however. In some places the vegetation is thin and bare areas or areas covered in dead leaves, occur.

- <u>Area B.</u> This area is a gentle slope situated south of Curramore Lake. Here the vegetation is dominated by <u>Scirpus caespitosus</u> with <u>Eriophorum</u> <u>vaginatum</u> becoming sometimes prominent, and <u>Eriophorum angustifolium</u> occasionally so, higher up the slope. <u>Sphagnum</u> is not abundant. Hummocks of <u>Rhacomitrium lanuqinosum</u> occur and where they do, <u>Molinia caerulea</u> may be found growing through them. The even texture of the surface suggests that fire may have occurred here. In the vicinity of the stream, some erosion is occurring. This area eventualy merges with a low, outcropping hillock on both the east and south end of the lake.
- <u>Area C.</u> This is the slope east of the outflow stream and Area A. It is drier than Areas A and B. <u>Calluna vulgaris</u> is more vigorous here and tussocks of <u>Molinia caerulea</u> are more prominent. A number of large hummocks of <u>Rhacomitrium</u> <u>lanuginosum</u> occur in this area in addition to <u>Juncus acutifloris</u>-dominated flushed areas.
- Area D. This is a small flat and very wet flushed area, situated west of a bend in the outflow strean. The surrounding slopes drain into this hollow. Some areas are quaking. A good carpet of <u>Sphagnum</u> occurs here which includes species indicative of flushed conditions, including <u>Sphagnum recurvum, S. auriculatum</u> and <u>Sphagnum</u> <u>subsecundum</u> var. <u>inundatum</u>. The vegetation is generally low and where open water occurs, <u>Menyanthes trifoliata</u> may be found. At least three dead sheep were observed in this flush and eutrophication caused by their decay is bound to affect the nutrient balance in the area. Towards the stream, <u>Juncus effusus</u> predominates. In the flush itself, <u>Juncus effusus</u>, <u>J. acutifloris</u> and <u>Polytrichum commune</u> are abundant and <u>Carex</u>

 \Box \int \Box \Box] -) \Box

<u>paniculata</u>, <u>Carex</u> <u>echinata</u> and <u>C</u>. <u>demissa</u> along with other small sedge species, may be found. A number of small springs/streams feed the area and in these, <u>Drepanocladus</u> <u>revolvens</u>, <u>Calliergion</u> <u>sarmentosum</u> and <u>Campyllium</u> <u>stellatum</u> were recorded.

K25 BALLAGH BOG

SITE NO: K 25 COUNTY: Kerry AIR PHOTO NO: W31 AREA (ha): 68 375 - 450ALTITUDE (m): **CATEGORY:** V, F RATING: 6 **RECORDERS:** EM WRITE UP: EM

1/2" MAP NO:	24
GRID REF.:	W08 68
6" MAP NO:	**
AREA INTACT (h	a):21
FOREST AREA:	**
TOWNLANDS:	**
GEOLOGY:	Sandstone

GENERAL SITE DESCRIPTION

This site is located 2 km north of Gougaunbarra, It incorporates a high-level river plain Co. Cork. and its surrounding mountain slopes. A series of small, slightly raised valley bogs, situated in the bends of a mountain stream merge uphill into а vegetation dominated by Molinia caerulea. The stream drains in an easterly direction and then turns northeast. On the south side of the valley, the surface of the hill slope is fairly even. On the north side, many rocks protrude. Isolated large rocks also occur on the valley bogs. These bogs are reasonably wet but do not have quaking surfaces. Water-filled hollows occur which are bare of vegetation. The vegetation on the site is dominated by <u>Molinia caerulea</u> and <u>Scirpus</u> <u>caespitosus</u>. <u>Rhacomitrium lanuginosum</u> is common in the bryophyte layer and forms both small hummocks and a carpet under the vascular plants. Cover by Sphagnum <u>compactum</u> along with <u>Campylopus</u> poor but <u>S</u>. is atrovirens are plentiful in the barer areas. <u>Carex</u> paniculata was recorded in one of the tributary streams flowing into the main stream.

Part of the area surrounding the site, on the east side, was burnt in 1991. The rest of the site may have been burnt within the last five years. Overall, the area is fairly intact and little erosion was noted. Time did not permit a more thorough examination of this site.

26

SPECIES OF NOTE

<u>Calliergon</u> <u>sarmentosum</u>

C \bigcirc Π

EVALUATION

This is a reasonibly small site which requires more investigation. Although the surface is intact, the vegetation is not particularly interesting and may be affected by grazing and burning. It is probably not very different from what would be its natural state, however. ioy

الا DEREEN UPPER

SITE NO: **C** 6 1/2" MAP NO: 24 V78 51 GRID REF.: COUNTY: Cork 6" MAP NO: AIR PHOTO NO: V135 103, 116 AREA INTACT (ha):15 AREA (ha): 43 ALTITUDE (m): 350 FOREST AREA: Glengarrif HR, F CATEGORY: **TOWNLANDS: RATING:** 8 Dereen Upper, Dereen Lower **GEOLOGY:** Sandstone **RECORDERS:** EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is located due south of Glanmore Lake and north-east of Coomadavallig Lake and Hungry Hill, Co. Kerry.

The site incorporates a mountain saddle, situated between two ridges and which is bounded on the southwest by a precipitous cliff. Towards the north-east, the slope gradually increases. A stream runs eastwards along the north side of the site and is joined by a second which flows northwards along the eastern side. East of where the streams meet, the vegetation becomes more flushed and rocks begin to outcrop.

The site is very intact and has had little or no disturbance.

SPECIES OF NOTE

Campylopus shawii

EVALUATION

This is a very nice site situated in a dramatic landscape. It would appear to be totally natural and of high ecological interest despite the fact that the area in question is quite small.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This area is situated on the western side of the site, It incorporates a saddle which is

bounded on the south-west by a cliff edge, and the slopes immediately east of it and below it. The vegetation, here, has an even appearance. This may be the result of burning at some stage but there are no signs this interference, however. The vascular plants are dominated by <u>Molinia caerulea, Eriophorum vaginatum</u> and <u>E</u>. <u>angustifolium</u>. These do not reach a great height. <u>Calluna vulgaris</u> which occurs on the area is very short. <u>Rhynchospora alba</u> is common and <u>Drosera intermedia</u> was recorded in the area. <u>Scirpus caespitosus</u>, although locally abundant, is not dominant. In the bryophyte layer, <u>Sphagnum</u> is not very prominent and there are very few hummocks of <u>S. capillifolium</u>. <u>Rhacomitrium</u> <u>lanuginosum</u> is abundant and forms both low hummocks and a carpet. <u>Campylopus atrovirens</u> is also common here.

The bog surface has a spongy texture and is sometimes quaking. A series of hollows occur which are alligned in an east north-easterly to west south-westerly direction, parallel with the contour lines. The bog slopes very steeply down to the confluence of the two streams, on the eastern side. Here, despite a gradient of approximately 40°, the vegetation is still characteristic of bog and does not have a heathy element.

<u>Area B.</u> Nearer the stream, <u>Molinia caerulea</u> predominates, forming tussocks. A more heathy element comes into the vegetation. This includes <u>Juncus squarrosus, Polytrichum commune</u> and <u>Galium</u> <u>saxatile</u>. Along the sides of the stream, rocks begin to outcrop and the peat is shallower. East of the stream, the vegetation is slightly boggier, although <u>Molinia</u> <u>caerulea</u> still predominates.

29

COMERAGH MOUNTAIN

1/2" MAP NO: SITE NO: Wa 3 22 577-09 52808 Waterford GRID REF.: COUNTY: 6" MAP NO: 14 AIR PHOTO NO: S730 AREA INTACT (ha):15 43 AREA (ha): FOREST AREA: Comeragh ALTITUDE (m): 350 Headwater, F, M CATEGORY: **TOWNLANDS:** Comeragh RATING: 8 Mountain, Lyre Mtn., Toreen Cutteen Mtn., Mtn., Carraig Brack Sandstone **GEOLOGY: RECORDERS:** EM WRITE UP: ĒΜ

GENERAL SITE DESCRIPTION

This site is situated on the Monavullagh Mountains, Co. Waterford, on an area of plateau northeast of Seefin Mtn. and south of Coumalocha. The boundary of the site is difficult to define as erosion is much in evidence and the intact surface occurs in patches.

EVALUATION

There is much of interest in this site as it is a high level bog with a characteristic vegetation. Its location on the south-eastern end of the range of Irish bogs adds greatly to its intertest. Enough intact peatland remains for it to be worth making into an ASI. Erosion is a severe problem, however.

SPECIFIC AREA DESCRIPTIONS

<u>Area G.</u> This small area is situated near the top of the spur which runs south-east and forms the south-west wall of Coumtay. The vegetation is closed and is dominated by <u>Calluna vulgaris</u> with <u>Scirpus caespitosus</u> as a second co-dominant. <u>Eriophorum vaginatum, E. angustifolium, Empetrum nigrum and Vaccinium myrtillus, with some <u>Juncus</u> <u>squarrosus</u>, all occur here. THe <u>Calluna vulgaris</u> is approximately 25 cm in height. The vegetation cover is reasonably intact overall, although it is somewhat tussocky. There is little <u>Sphagnum</u></u>

cover overall. Where the spur meets the main ridge, gully erosion ocurs. On the main ridge, parts of the bog have eroded back to the bedrock.

<u>Area H.</u> This area includes the plateau area southeast of Coumfea Mountain. Extreme erosion has occurred here. The peat is up to 2.0 m deep, in places. Where the surface is intact, <u>Calluna</u> <u>vulgaris</u> is less dominant than in Area G and <u>Scirpus</u> <u>caespitosus</u> is more prominent. In some places - probably where erosion has already occurred - <u>Eriophorum</u> <u>angustifolium</u> is totally dominant while

much of the peat surface is bare and possibly flushed. <u>Sphagnum</u> is not abundant in this area.

- <u>Area I.</u> South-west of Area H, a slope leads down to a col. On this slope the peat is thin and rocks protrude. Tussocks of <u>Scirpus</u> <u>caespitosus</u> and <u>Eriophorum</u> <u>vaginatum</u> make the surface uneven. <u>Calluna</u> <u>vulgaris</u> is reasonably long here. Some gully drainage occurs and in one of these drains, <u>Sphagnum</u> <u>cuspidatum</u> and <u>Polytrichum</u> <u>commune</u> were recorded.
- <u>Area J.</u> This area comprises the col or saddle, between Coumfea and Seefin. The vegetation here is totally dominated by tall <u>Scirpus caespitosus</u>. <u>Calluna vulgaris</u> is of much less importance. The wettest part supports <u>Eriophorum angustifolium</u> also. The peat surface is intact. Gully drains sweep down from the north-east (Area J) to this area and then curve south-wards.

South-west of this area the slope steepens in the direction of Seefin. The vegetation changes in character to that of a dry heath, occasionally becoming boggier.

TULLYNACLAGGAN

SITE NO: Do 38 COUNTY: Donegal AIR PHOTO NO: G518 AREA (ha): 56 ALTITUDE (m): 150 **CATEGORY:** Η **RATING:** 7 **RECORDERS:** EM WRITE UP: EM

1/2" MAP NO:	3
GRID REF.:	G82 88
6" MAP NO:	83
AREA INTACT (ha)	:56
FOREST AREA:	Lough Eske
TOWNLANDS:	Tullynaclaggan
GEOLOGY:	**

GENERAL SITE DESCRIPTION

This small site is located 6.4 km south of the town of Glenties, Co. Donegal. It is enclosed within a triangle formed by the intersection of three roads. The area is highland site, situated at an altitude of It very much resembles a lowland blanket site 150m. in character and is a fairly uniform wet quaking bog. Much of the area is taken up by shallow pools which egetation. Many of these are <u>Sphagnum</u> abundance is not very high are bare of vegetation. interconnecting. although some hummocks of Sphagnum magellanicum occur. The pools generally have an algal mat covering them. <u>Menyanthes</u> <u>trifoliata</u> is frequent in them. Along their bare edges, <u>Campylopus</u> <u>atrovirens</u> is common. Both <u>Schoenus</u> <u>nigricans</u> and <u>Rhynchospora</u> <u>alba</u> are frequent on the site.

The bog slopes on the north side down to the river. There are signs of much trampling by sheep along this side and the indications are that the bog is overgrazed. On the north-east side, a number of old drains are present. <u>Myrica gale</u> is plentiful in this part. The margins of the bog along the road have been cut. On the east side where old cuttings occur, a stream runs. Some small localised erosion occurs on the southern margin.

SPECIES OF NOTE

Golden plover.

EVALUATION

At present this is a very nice area of very wet bog. It is probably typical of a number of lowerlying bogs in the area. Its small size and its being surrounded by roads may make it vunerable to marginal /07

cutting. The presence of breeding golden plover adds greatly to its importance. It is already part of a larger ASI.

110

 \int

Ŋ

J

]

IJ

J

[]

J

 \int

Ŋ

TOOREENBREANLA

SITE NO: K 23 COUNTY: Kerry AIR PHOTO NO: V295 AREA (ha): 45 ALTITUDE (m): 350 - 400 CATEGORY: F RATING: 9(11RG)

RECORDERS:

WRITE UP:

Sovie

1/2" MAP NO:	21
GRID REF.:	V89 79
6" MAP NO:	84
AREA INTACT (ha)	:45
FOREST AREA:	Kilgarven
TOWNLANDS: GEOLOGY:	F o a r d a l , Tooreenbreanla, K i l k e a n a , Kilcurran East Sandstone

GENERAL SITE DESCRIPTION

EM EM

The Glas Loughs occur in a basin between Peakeen Mt and the Eagles Nest above the old Kenmare Road. The low summit ridge along the north-western side is largely peat-covered with perhaps ?90ha of intact surface. A smaller area also occurs to the south-east of the lakes.

The lakes themselves were not examined in detail but their flora includes Scirpus lacustris, S.fluitans, Potamogeton natans, Nuphar lutea and Lobelia dortmanna. Eleocharis multicaulis and Polytrichum commune are abundant around the edges and there is a little Scutellaria minor.

EVALUATION

There is an extensive area of peat on this site which is largely intact although it is surrounded on the lower slopes by significant erosion. At the higher levels the vegetation is in good condition although it has been affected by fire in places. Although the vegetation on the bog is not of particular significance, the diversity of habitat around the lakes means that many different bog and heath communities occur. The fact that the site adjoins Killarney National Park adds to its value.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> In overall terms this is an even plateau-like area with shallow slopes of about 5 degrees covered with a vegetation of Scirpus/ Molinia and Racomitrium and occasional large hummocks of Sphagnum capillifolium, often with Mylia taylori. There are small sections that are ombrotrophic in nutrition and also parts flushed from rock outcrops above. Though mostly burnt within 5 yrs or so, Cladonia uncialis is a feature of many of the damper sites. At the northern end there is almost flat ground on which Molinia dies out and is replaced by a wet Scirpus cover with Drosera anglica, Campylopus atrovirens and occasional Pinguicula grandiflora. Sphagnum compactum occurs quite frequently and is often associated with Cladopodiella fluitans. A few narrow pools occur here with Sphagnum cuspidatum and, in different sites, both varieties of S.auriculatum. The water that collects finds its way north-eastwards without erosional features.

Along the crest of the hill there are a few rises of Sphagnum capillifolium, Calluna and Juncus squarrosus where Hylocomium splendens, Pleurozium schreberi and Dicranum scoparium occur. Some have been avoided by fire and have colonies of Cladonia portentosa which is by no means common elsewhere. Southwards rocks begin to break through the surface and here the mineral influence makes Carex panicea abundant with Polytrichum juniperinum and Erica cinerea on the outcrops. Erosion becomes more obvious and there are swallow holes and some sub-peat drainage to the western slopes of the hill. It becomes pronounced outside the site boundaries on the western side of the hill.

The land drops quite steeply towards the Area B. Glas Loughs and Molinia dominates the slopes of up to 20 degrees, together with lesser amounts of Scirpus and Sphagnum capillifolium. There is little exposed rock but the vegetation on the shallow peat includes Breutelia chrysocoma and Vaccinium myrtillus. The upper parts of the slope have been burnt and in response lichens such as Cladonia coccifera, C.bellidiflora, C.cervicornis ssp verticillata, C.macilenta, C.subcervicornis and Pycnothelia papillaria are notably frequent. Halfway down to the lakes there is an edge to the burnt area and the Calluna becomes tall and over 10 yrs old. There are a few flushes here with Sphagnum recurvum, Polytrichum commune, Festuca vivipara and Juncus effusus. Sphagnum auriculatum also occurs. The topography becomes uneven and there are meandering streams, in one place circumscribing a tiny raised area in a Molinia lagg. Peaty hummocks nearby are crowned with Scapania nemorea and Kurzia pauciflora s.s. with Cladonia polydactyla on the drier ones and a

little Marsupella ?sphacelata on the wetter. Beyond this area and due west of the lakes there are low cliffs with scattered Ilex and Sorbus aucuparia amongst bushy Calluna.

<u>Area C.</u> This is situated south of the boundary of Killarney National Park, immediately south-east of the Glas Loughs, on a gentle, mainly northwesterly facing slope. South of this area the terrain becomes steep and rocky, and rises in the direction of Peakeen Mountain.

The area has suffered from burning in 1991 but has not been affected by peat cutting, erosion or afforestation. There are no immediate threats to the site that are apparent.

The vegetation is dominated by <u>Scirpus</u> <u>caespitosus</u> and in some places, by <u>Molinia</u> <u>caerulea</u>. Most of the original <u>Sphagnum</u> hummocks which once occurred on the area, have been destroyed by fire in 1991. In some places, a carpet of <u>Sphagnum palustre</u> occurs under the <u>Molinia caerulea</u>. In some places, small hillocks occur and rocks outcrop on the surface. There are no pools or quaking areas. On the south side of the area, below a rocky slope, is an area where the vegetation is dominated by <u>Molinia</u> <u>caerulea</u> but where a good carpet of <u>Sphagnum</u> <u>papillosum</u> occurs.

Overall, the area is very intact. on the western side, where the area slopes down to the lake, the vegetation becomes more heathy and a number of stream flushes dominated by <u>Juncus</u> <u>effusus</u> occur.

GLENDINE WEST

1/2" MAP NO: 15 SITE NO: 0y 1 GRID REF.: S23 99 Offaly, Laois COUNTY: 6" MAP NO: Oy 39, Ls 10 AIR PHOTO NO: S550 AREA INTACT (ha):144 AREA (ha): 144 Kinnity, ALTITUDE (m): 425 - 525 FOREST AREA: Camross CATEGORY: M (low) Glenamon, g **TOWNLANDS:** RATING: Glenkitt, Island, Glendine West Silurian slate **RECORDERS:** EM **GEOLOGY:**

GENERAL SITE DESCRIPTION

ΕM

WRITE UP:

This area is situated south of the Glendine Gap in the Slieve Bloom Mountain Range and encompasses the summit of Arderin Mountain and its surrounding slopes and ridges. The area is bounded by the margins of coniferous plantations.

Immediately south of the Glendine Gap the surface is somewhat tussocky. The bog has been somewhat disturbed here and a number of old drains occur. Growth of Calluna vulgaris is vigorous in this part of the site. Further south, the surface is intact and The vegetation is similar to that occurring in soft. other areas of the Slieve Blooms. Calluna vulgaris <u>Eriophorum</u> vaginatum, dominates along with Ε. angustifolium and Sphagnum capillifolium. Empetrum nigrum is plentiful. A radio repeating station is located on the summit and a relatively new drain has been dug in this area. A cairn of peat has also been built on the summit and on this, <u>Luzula sylvatica</u> occurs. Overall, the surface in this area is somewhat drier than other areas in the Slieve Blooms; Vaccinium myrtillus is more plentiful and there is less Sphagnum (although it still has a cover of over 75%) and more Hypnum jutlandicum in the bryophyte layer. A large old drain runs along the south-east margin of the site. This cuts across a ridge which runs down in a southerly direction. Although the surface is intact on the south side of this drain, a number of seedlings of Pinus contorta grow here. These may have been planted.

The site slopes down to a col on the south-west

side. A number of pine and spruce seedlings occur in this area also. Several depressions in the site support robust growths of <u>Calluna vulgaris</u>. Overall, the vegetation on this site is very uniform. The area south-west of the col was not visited but appears to be similar to that on the north-east side.

The main threat to the site would appear to come from conifer seedlings which may establish themselves on the bog.

EVALUATION

П

This area is remarkably intact for a mountain bog area. However it has suffered from more damage from the adjoining forestry activities than other areas in the Slieve Blooms which were visited. The surface would appear to be somewhat drier also. Invasion by conifer seedlings also reduces the value of the bog somewhat.

COOMAGIRE

1/2" MAP NO: 21 SITE NO: K 20 W22 82 GRID REF.: COUNTY: Kerry, Cork 6" MAP NO: C 58, C 47; K 77 AIR PHOTO NO: W365 AREA INTACT (ha):27 AREA (ha): 54 575 - 650 FOREST AREA: Ballyvourney ALTITUDE (m): CATEGORY: М **TOWNLANDS:** Coomagire, RATING: 8 Cummeenabuddoge Garraneycarney, Glendave **GEOLOGY:** Sandstone CD, RG, EM **RECORDERS:** WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is centred around the summit of Mullaghanish Mountain on the Cork/Kerry border. The summit of the mountain itself is the location of an R.T.E. transmission station and this along with the access road to the station has caused some damage to the mountain. The site is a small area of montane bog which extends towards a col in the north-east and a small way down the north-west slope of the mountain.

The site is interesting, despite its small size, because of its intact surface. The summit itself is typically ombrotrophic but lower down some flushing occurs. There appears to be the minimal disturbance caused by sheep, fire or erosion to the site. Much afforestation is going on to the north of the site but it seems unlikely that this will spread as far as it.

SPECIES OF NOTE

<u>Calliergon</u> <u>sarmentosum</u>, <u>Barbilophozia</u> <u>atlantica</u>

EVALUATION

Despite the fact that this is a small site, it has a remarkabky intact vegetation typical of high level montane bog and is one of the few sites in the country where the vegetation has not been damaged by overgrazing or erosion. It is certainly worthy of conservation.

SPECIFIC AREA DESCRIPTIONS

- <u>Area A</u>, This is the area in the immediate vicinity of the summit. Here, there is a very uniform blanket peat cover over the surface and no rock outcrops. The vegetation is close and dense and is dominated by <u>Calluna vulgaris</u>, <u>Eriophorum</u> <u>angustifolium</u> and <u>E. vaginatum</u> with <u>Empetrum</u> <u>nigrum</u> being frequent. <u>Sphagnum capillifolium</u> forms an even spongy understory. Disturbance by sheep is minimal, there are no drains and no signs of past fires. A very small amount of damage to the surface has been caused by a tracked vehicle in the immediate vicinity of the transmitter.
- <u>Area B.</u> This area is the north-west facing slope below Area A. Here the surface is tussocky and the vegetation is dominated by <u>Calluna vulgaris</u>, <u>Vaccinium myrtillus</u>, <u>Eriophorum vaginatum</u>, <u>Polytrichum commune</u> and <u>Eriophorum angustifolium</u>. The inter-tussock areas are characterised by the presence of <u>Luzula sylvatica</u>, <u>Rhytidiadelphus</u> <u>loreus</u> with the occasional occurrence of <u>Agrostis</u> <u>stolonifera</u> and <u>Festuca</u> <u>ovina</u> and <u>Sphagnum</u>. Occasional flushing is a minor feature and where it occurs, species such as <u>Sphagnum recurvum</u>, <u>Cardamine pratense</u> and <u>Carex nigra</u> occur.
- Area C. The ridge running north-east from Mullaghanish has a good vegetation cover. This is dominated by Calluna vulgaris, Eriophorum angustifolium and \underline{E} . vaginatum. There is a good covering of <u>Sphagnum</u> in the ground layer. A number of old erosion areas are present in the vicinity of the col. These are all well revegetated, however. In this area occur also, a number of interesting headwater flushes. In these may be found species such as <u>Pinguicola</u> <u>Drepanocladus</u> <u>grandiflora</u>, revolvens and Calliergon sarmentosum. From the col on to the next summit the surface becomes more uneven and Molinia caerulea more common.

40

GRAIGNAGOWER

SITE NO: K 15 COUNTY: Kerry AIR PHOTO NO: V297 AREA (ha): 225 ALTITUDE (m): CATEGORY: М **RATING:** 8

300 - 640

RECORDERS: CD, EM WRITE UP: EM

1/2" MAP NO: 20 GRID REF.: V80 77 6" MAP NO: 83 AREA INTACT (ha):29 FOREST AREA: Kenmare **TOWNLANDS:** Graignagower, Derrygarrane North Sandstone **GEOLOGY:**

C + K + L - L

GENERAL SITE DESCRIPTION - Suc also in the second

Cladonia mediterrania, Cladonia macilenta, Calliergon stramineum, Sphagnum platyphyllum (new VC?), Sphagnum molle, Pinguicula grandiflora, Saxiraga hirsuta.

SPECIFIC AREA DESCRIPTIONS

This is a mixed area located on the northern Area A: and eastern sides of Lough Fadda, much of which is not true bog but consists of rocky outcrops, flushes and small peat-filled hollows. A small area to the north of the lake, A (i), is flat and soft and dominated by Molinia caerulea. Some places are more flushed and support more species. Sphagnum, although it does occur here is not very South-east of this, A (ii), the prominent. ground is undulating with rocky slopes dominated Molinia by Calluna <u>vulqaris</u> and caerulea. Eriophorum vaginatum and Juncus squarrosus are common here, along with other heathland species. In one spring flush Calliergon sarmentosum, Sphagnum molle, S. platyphyllum, Philonotus <u>fontanum</u> were recorded. On the south-eastern side of the lake is a small area dominated by Molinia caerulea but with some Sphagnum present. Overall, apart from the presence of rare species, this area is not very interesting and is mainly a wet heath.

41

KNOCKNAMAN

TOOREENEALAGH TOORFENEALAGH

SITE NO: 1/2" MAP NO: K 35 20 COUNTY: Kerry GRID REF.: V64 83 AIR PHOTO NO: V244 6" MAP NO: 71 AREA INTACT (ha):45 AREA (ha): 144 ALTITUDE (m): 550 - 710 FOREST AREA: Killorglin CATEGORY: М RATING: **TOWNLANDS:** 9 Tooreenealagh, Coomaspeara, Toorsaleen **RECORDERS**: EM **GEOLOGY:** Sandstone WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is situated on the north - sloping mountain side between between Knocknagarry and Meenteog Mountain which forms the east side of near Glenbeigh, Co. Kerry. Coomasaharn, The underlying bedrock is sandstone and this forms a gently sloping plateau between the two mountains while, at the same time, falling away as cliffs on the east and west sides of the site. The site is high in altitude and as a result, the bog has a distinct montane character. The depth of peat is variable but is up to 2.0 m in some places. Depending on the depth of the peat subtle variations occur in the vegetation, from place to place.

Despite the depth of the peat, the surface is fairly firm and apparently well drained. <u>Calluna</u> <u>vulgaris</u> and <u>Juncus squarrosus</u> are the co-dominant vascular plants. The bryophyte layer is mainly composed of <u>Sphagnum capillifolium</u> which forms a carpet, <u>S. tenellum</u> which is particularly common on this site, and <u>Rhacomitrium lanuginosum</u>. The abundance of the last species, along with <u>Vaccinium</u> <u>myrtillus</u>, <u>Empetrum nigrum</u>, <u>Cladonia arbuscula</u> and <u>Diplophyllum albicans</u> help to characterise this as montane bog.

In places, the vegetation takes on a more heathy character and species such as <u>Nardus</u> <u>stricta</u> <u>Agrostis</u> <u>canina</u> and <u>Carex binervis</u> occur. Erosion has occurred in a number of places. Many of these have revegetated and here the peat is shallower. In at least two places on the east side of the ridge (cf Aerial Photograph) the bog has eroded down to the bare rock. In the vicinity of these places the vegetation is

dominated by <u>Scirpus</u> <u>caespitosus</u> or alternatively, where the surface is bare, by <u>Eriophorum</u> <u>angustifolium</u>.

Despite this erosion, there are large areas with an intact surface. Towards the summit of Meenteog Mountain, erosion increases however, and many bare areas exist in the vicinity. Where the bog remains intact, a good carpet of <u>Sphagnum</u> still exists.

The only obvious threat to this site comes from erosion which is probably accelerated by sheep grazing.

EVALUATION

L

J

 \Box

J

This area constitutes a very nice example of high level montane blanket bog - one of the best in Co. Kerry. This is nothwithstanding the fact that erosion is taking place in certain areas. It may be considered to be of at least national importance. BALLYNABROCKY

SITE NO: W 10 Wicklow COUNTY: AIR PHOTO NO: 070 750 AREA (ha): ALTITUDE (m): 400 - 600F CATEGORY: RATING: 7 CD, RG, EM **RECORDERS:** EΜ WRITE UP:

1/2" MAP NO:	16
GRID REF.:	009 13
6" MAP NO:	6, 11
AREA INTACT (h	ma):160
FOREST AREA:	Blessington
TOWNLANDS:	Ballynabrocky
GEOLOGY:	Granite

121

GENERAL SITE DESCRIPTION

This site is located on the south-west side of the road linking the Sally Gap to Kilbride, Co. Wicklow. from this road, it is seperated by peat cutings and the Coronation Plantation. It includes a ridge which runs north-west from Carraigvore Mountain, the slopes south of this which end in the ridge between the summits of Carraigvore and Gravale Mountain, and a large area of lower-lying relatively level bog situated north-west of Gravale. A tributary of Ballylow Brook and a forestry margin delimit the site on the south-west. It should be noted that an area which is potentially interesting, is situated directly south-west of the site. This area was not visited although it may well be worth including in the site.

The site is fairly mixed, including flushed slopes of shallow peat and protruding rocks and more ombrotrophic areas, dominated by <u>Calluna vulgaris</u> and perhaps bearing a greater affinity to wet heathlands. The most interesting area, although not the most typical of mountain bog, is the lower-lying area, situated north of centre of the site. This is quite wet and has an intact vegetation which somewhat flushed in places. More detailed area descriptions are provided below.

SPECIES OF NOTE

Andromeda polyfolia, Calypogeia neesiana

EVALUATION

This site is one of a very few sites in the east of the country on which <u>Andromeda</u> <u>polyfolia</u> may be found. Although the upper slopes are somewhat affected by erosion and a large area more closely resembles wet heath, the level area on the lowest part of the site has a very intact vegetation and a good cover of <u>Sphagnum</u>. This area is somewhat unusual in that it resembles a lowland bog to some extent. The site does not appear to be under any immediate threat.

SPECIFIC AREA DESCRIPTIONS

- This area is an uneven gentle, north-Area A: easterly facing slope, situated on the ridge leading up to Carraigvore. Lower down, the peat has been cut for fuel. The vegetation is a mosaic of Molinia caerulea-dominated communities with other areas being dominated by <u>Eriophorum</u> vaginatum which also includes a small amount of Sphagnum. The surface is rather dry and old erosion depressions which are tending to The surface has regenerate, are visible. obviously been degraded by burning. Overall, the area is rather species-poor.
- <u>Area B:</u> This area is situated above Area A, on a flat ridge. It is a rather poor area of dryish bog, quite badly affected by burning. The surface has many bare areas interspersed with tussocks of <u>Scirpus</u> <u>caespitosus</u>. A number of wet eroded hollows support lawns of <u>Sphagnum</u>. By and large, the area is hard lumpy and dry.
- This area is situated south-east of Areas A Area C: and B. It consists of north-westerly facing, 7° slopes, situated at an approximate altitude of The vegetation 600 m, below a saddle. is <u>Calluna</u> <u>vulgaris</u> and dominated by <u>Scirpus</u> caespitosus with Eriophorum angustifolium in the bare intertussock areas. These are encrusted with algae. There are few byophytes although Campylopus paradoxis, Sphagnum subnitens and S. cuspidatum are occasional. Although the area is mosaic of vegetation, fire is an obvious a environmental factor. Much of the vegetation has affinities with wet heath. Some erosion is taking place here and erspecialy further uphill.
- <u>Area D:</u> This area is located between two headwaters, adjacent to Area C. The vegetation is dominated by <u>Eriophorum vaginatum</u> and <u>Scirpus</u> <u>caespitosus</u> with quite a good <u>Sphagnum</u> cover on quite soft terrain. Very small cushions of <u>S. capillifolium</u> and <u>Sphagnum</u> <u>papillosum</u> occur in damp hollows. Some natural gully erosion is occurring in places.

- <u>Area E:</u> This area, situated west of Area D has a heathy vegetation which is dominated by <u>Calluna</u> <u>vulgaris</u> and <u>Vaccinium myrtillus</u> and which has an understory of <u>Sphagnum</u>. The area does not appear to have been burnt recently. The peat is approximately 1 m deep here and granite rocks protrude.
- Situated north-west of Area E this area is Area F: somewhat wetter and is an even slope where the vegetation is dominated by <u>Eriophorum</u> spp. with Scirpus caespitosus and sparse Calluna vulgaris The vegetation has a good and <u>Erica</u> <u>tetralix</u>. understory of Sphagnum. A number of linear flushes cut the area. Here <u>Juncus</u> <u>effusus</u> Polytrichum commune, Rhytidiadelphus squarrosus, Galium saxatile and Anthoxanthum odoratum may be found. In some places the terrain is more lumpy subterrainean drainage occurs. Here the and vegetation is characterised by Calluna vulgaris and Vaccinium myrtillus.
- In this area, situated between two <u>Area G:</u> G(i): streams on the lower slopes of the site, the topography is flat and the slope somewhat convex. The vegetation is a uniform stand of <u>Calluna</u> Eriophorum <u>Molinia caerulea</u> and <u>vulqaris</u>, vaginatum with <u>Sphagnum</u> <u>papillosum</u> and <u>S.</u> capillifolium forming small-scale hummocks in a complete vegetation cover. Some areas have been recently burnt whhich has resulted in the removal of <u>Calluna</u> vulgaris. The surface is quite soft with lots of Sphagnum but with little Eriophorum angustifolium. Further downslope, the ground becomes more sloping. <u>Calluna vulgaris</u> is more vigorous and <u>Sphagnum</u> less so. At the base of the slope is a large flushed area. This supports abundant Molinia caerulea along with Sphagnum recurvum, Eriophorum angustifolium, Carex nigra, Polytrichum commune, and Dicranum scoparium.

This is a large level area which G(ii): has a high cover abundance of Sphagnum (80%), <u>papillosum</u> and <u>s.</u> including <u>Sphagnum</u> The higher plants which occur <u>capillifolium</u>. here include <u>Scirpus</u> <u>caespitosus</u>, <u>Eriophorum</u> vaginatum, Narthecium ossifragum and Erica tetralix. The absence of Molinia caerulea from much of the area is notable as well as the occurrence of Andromeda polyfolia. Patches dominated by Molinia caerulea occur around about and in these may be found Drosera rotundifolia and Erica tetralix. This mosaic is not defined by fire but by slope. S. magellanicum occurs on part of the site. Some parts have been poached

46

slightly by deer and there are signs of damage by motorbikes. The area has been burnt approximately three years ago. It is somewhat unusual for a site of this altitude. Peat cutting is being carried on in the western half of the area.

 \Box

 \Box

 \Box

IJ

IJ

r L

 \Box

J

 \int

Ŋ

-) u

J

Y

CASTLEKELLY

SITE NO: D 1 Dublin COUNTY: AIR PHOTO NO: 092 AREA (ha): 143 ALTITUDE (m): 450 CATEGORY: SL RATING: 6 **RECORDERS:** CD, RG, EM WRITE UP: EΜ

1/2" MAP NO:	16
GRID REF.:	010 18
6" MAP NO:	25, 27, 27 ^A
AREA INTACT (h	a): 90
FOREST AREA:	Killakee
TOWNLANDS:	Castlekelly
GEOLOGY:	Granite

GENERAL SITE DESCRIPTION

This site is situated on a gentle part of the slopes which form the boundary of Glenasmole, north of Kippure Mountain. It is bounded on the west by the Slade Brook and on the east by the Cot Brook. The ridge joining Seefingan Mountain with Kippure forms the southern boundary. This site looks as if it has been severely damaged by burning in the past. The surface is hard and many old hard tussocks are present giving a lumpy appearance to the bog. The vegetation also looks messed up and is dominated by Scirpus caespitosus. In places Calluna vulgaris and Vaccinium <u>myrtillus</u> are prominent. <u>Sphagnum</u> cover is poor, being less than 5%. Not withstanding this, up to 3.0 m of peat may be found in some places. There are signs of erosion and in some areas bare patches occur. On the higher slopes, there are signs of damage caused by motorbikes. In the vicinity of the Slade Brook, there is better <u>Sphagnum</u> cover which includes <u>Sphagnum</u> papillosum. A flushed stream headwater, in which Sphagnum recurvum occurs, is present in this area.

SPECIES OF NOTE

Lophozia longiflora

EVALUATION

This is the only mountain bog site remaining intact in Co. Dublin. The site has been much damaged by burning however and the vegetation is not particularly interesting.

48

SHANKILL

1/2" MAP NO: 16 SITE NO: W 1 009 19 GRID REF.: Wicklow COUNTY: D: 24, 27^A; W: 2, 6" MAP NO: AIR PHOTO NO: 092 6 AREA INTACT (ha):50 81 AREA (ha): Blessington FOREST AREA: 500 - 618 ALTITUDE (m): SL CATEGORY: Shankill, TOWNLANDS: 6 RATING: Glasavullaun Granite CD, RG, EM GEOLOGY: **RECORDERS:** EM WRITE UP:

GENERAL SITE DESCRIPTION

This site consists of the south-west slope of Corrig Mountain and the saddle between this mountain and Seefingan Mountain. It is bounded on the north-west by the headwater of the Shankill River. The vegetation on the slope is of even texture. The surface of the bog is moist and there is a good understory of <u>Sphagnum</u> present. <u>Calluna vulgaris</u> is very short. The vegetation does not appear to have been burnt recently although the vegetation is of uniform height and texture. Towards the summit of Corrig, Eriophorum angustifolium becomes less common and Eriophorum vaginatum more so. Scirpus caespitosus is not too abundant. Bare patches become more frequent towards the summit also and Sphagnum becomes less common. The vegetation is unflushed and Molinia caerulea is not prominent. The summit itself is of bare uneroded peat. Juncus effusus and Taraxicum offinalis agg. occurs here. Scirpus caespitosus is more common here. The north side of the mountain, on the Dublin side, is in poorer condition and more erosion and bare patches occur here. On the slopes east of the summit, <u>Calluna vulgaris</u> and <u>Vaccinium</u> <u>myrtillus</u> are very common and the area is heathy. Damage has been caused to the site by motor bikes; many tracks caused by these were noted. These head in the direction of Kippure mountain.

The small narrow saddle, south of Corrig, contains a number of large pools. A good carpet of <u>Sphagnum papillosum</u> occurs here. <u>Eriophorum</u> <u>vaginatum</u> is abundant and <u>Scirpus caespitosus</u>, <u>Eriophorum angustifolium</u> and <u>Empetrum nigrum</u> are common. Between this area and Corrig, gully erosion is occurring. Below and adjoining this site on the south-westside is a recently burnt slope. This will

probably regenerate into a <u>Calluna</u> <u>vulgaris</u>-dominated wet heathland.

127

EVALUATION

г П

-

 \Box

Ū

This area is quite intact and has a reasonable cover of <u>Sphagnum</u>. It may, indeed, be the most northerly unflushed blanket bog slope in the country. Threats come from motorbiking and perhaps excess pressure from hillwalkers. Most of the site is owned by the Dept. of Defense and afforestation is therefore not a threat.

GARRANBAUN

1/2" MAP NO: 15 SITE NO: Ls 4 S20 97 Laois/Offaly GRID REF.: COUNTY: 6" MAP NO: L10, 039 AIR PHOTO NO: S 551 AREA INTACT (ha):48 AREA (ha): 100+ ALTITUDE (m): 375-420 FOREST AREA: Camross M(1)CATEGORY: **TOWNLANDS:** L-Garranbaun, RATING: Island, Glendine, 0-Beagh, -roe, Pollduff **GEOLOGY:** Silurian **RECORDERS:** RG WRITE UP: RG

GENERAL SITE DESCRIPTION

The site lies at the south-western end of the Slieve Bloom Mts, mostly east of the watershed that is also the Laois/Offaly border. It is enclosed in the Nature Reserve area (see map) though approached by forestry from the west.

The slopes are more gentle on the Laois side than in Offaly and there is also less turf cutting since the access roads are further away. Wedges of forestry run up the nearby valleys from the south-east and in one place east of the site, trees extend right over the ridge to merge with a forest above Tulla House.

The peat in this area is variable in thickness: in many places there is 1m or so but there are also thin patches where heathy vegetation suggests that it is much shallower. Overall it is quite a dry site since the slope is generally 3-4 degrees and there are few if any flat places.

Much of the vegetation is a uniform mixture of Calluna, Eriophorum vaginatum and Sphagnum capillifolium with a low but constant presence of Erica tetralix, Andromeda polifolia, Narthecium ossifragum and Empetrum nigrum. The flatter sites have Scirpus and Eriophorum angustifolium than more elsewhere but there are no hollows or pools and S.capillifolium and limited are to Sphagna S.subnitens. The area has been burnt more than 10 yrs ago but the vegetation seems to have been slow in recolonising, perhaps because of the heat of the fire relatively dry ground. At all events on the fire-dependant Cladonias are still widespread,

including much C.crispata, C.gracilis, C.fimbriata and C.bellidiflora. The bryophytes are limited in variety but there are frequent tufts of Campylopus paradoxus, Diplophyllum albicans and Odontoschisma sphagni as well as Calypogeia sphagnicola, Kurzia pauciflora and Cephaloziella cf. hampeana on the shaded sides of peat hummocks. Racomitrium and Polytrichum species were not recorded. 129

The uniformity of the vegetation is one of its most notable features. It is only broken by occasional patches of Molinia and Potentilla erecta. These sites are not related to springs or flushes and seem to be where the bedrock approaches the surface. Deschampsia flexuosa and Galium saxatile are found in some of them.

EVALUATION

This site cannot compare with the peatland around the Cut since it is much drier and has little inherent habitat variation. However the peat is intact without any erosion and the area quite large. CASHEL

1/2" MAP NO: 3 SITE NO: Do 46 GRID REF.: G52 83 COUNTY: Donegal 6" MAP NO: AIR PHOTO NO: G 507 89 AREA INTACT (ha):54 AREA (ha): 157 ALTITUDE (m): 225-250 FOREST AREA: Ardara H (F, HR) CATEGORY: **TOWNLANDS:** Malin 10 MOre, **RATING:** Cashel, Kilaned, Dooey **GEOLOGY: RECORDERS:** RG WRITE UP: RG

GENERAL SITE DESCRIPTION

on a plateau on the located The site is Glencolumkille. It rises of south-western side westwards from a flat area of thick, partly cut peat in a series of steps to two lakes in more jumbled topography. Beyond these there is a hillside sloping to the south with quite shallow peat. Along the south side the boundary follows the uppermost limit of the old fields and then crosses NE along the edge of the peat cutting. Here the site adjoins one covered by the 1990 survey.

The eastern half consists of level areas of peat set among rocky outcrops so most of the ground can be flushed. The vegetation in general alternates between Scirpus/Eriophorum vaginatum and Scirpus/Molinia depending on the amount of flushing but there are sites where abundant Sphagnum several watershed dominates with Calluna and Racomitrium on hummocks. Two of these contain a series of linear pools across slope in an 80% Sphagnum cover, involving the S.papillosum, S.capillifolium, S.magellanicum and S.imbricatum. The pools are stepped in a pattern that and elsewhere appears sometimes to be the precursor of erosion but in this case is completely stable. They contain Menyanthes trifoliata, Juncus bulbosus, Carex limosa, a little C.rostrata and Sphagnum cuspidatum. In the absence of fire the nearby hummocks are covered by an ancient growth of Empetrum nigrum, Cladonia portentosa, C.ciliata, C.arbuscula and C.uncialis. A little Mylia anomala occurs but none of the smaller Cladonia species, though they are present in some of the rockier areas where burning has taken place within the last 5 yrs.

Drainage from this hillside drops onto a saddle area

53

/30

where there is largescale and active turf cutting. It then flows either north to the road where a little Sphagnum auriculatum appears or southwards through an flat area (partly Site 55 in the 1990 survey) to Malin More.

Around the lakes on this site there are some small level areas of peat, most often dominated by Scirpus Campylopus atrovirens and Narthecium cespitosus. ossifragum are frequent species and there are occasional hummocks of Leucobryum glaucum, some of them colonised by Mylia taylori. The ground runs with water during wet weather but does not have the greasy appearence caused by excessive burning. A distinct area of Molinia/S.papillosum close to the eastern of the two large lakes with Eriophorum angustifolium, S.subnitens, S.cuspidatum, Erica tetralix and Eleocharis multicaulis is fed from cutover areas above.

As indicated above the site runs westwards onto a slope of 10-15 degrees with a uniform tussocky vegetation of Scirpus, Juncus squarrosus, Erica tetralix, Calluna and Sphagnum capillifolium. The peat is thick enough to attract some cutting by sausage machine, at least on the lower parts of the slope, but it is generally dry, sheep-grazed and of limited interest. Further peat cutting is associated with an old road which runs up the middle and over into Glen.

EVALUATION

There are some patches of well developed pool communities within this site but overall they cover a small proportion of it and would scarcely stand alone as an ASI. More suitably they would be included as an extension to an existing one.

TABLE MOUNTAIN

SITE NO: W COUNTY: Wi AIR PHOTO NO: T AREA (ha): 43 ALTITUDE (m): 54 CATEGORY: M, RATING: 8

W 13 Wicklow IO: T 88 438 a): 540-600 M, HR 8

1/2" MAP NO:	16
GRID REF.:	ТОО 98
6" MAP NO:	16, 22
AREA INTACT (ha)	:170
FOREST AREA:	Glen Imaal
TOWNLANDS:	Table Mountain, Pollaghdoo, Blackpits, Conragh, Granamore
GEOLOGY:	Granite

RECORDERS: WRITE UP:

GENERAL SITE DESCRIPTION

RG

RG

Table Mountain lies at the head of Glenmalure and overlooks the forests and firing range of the Glen of Imaal to the south-west. The mountain itself has a shoulder that runs north-westwards and it is on this that a substantial area of intact peat remains. It is cut by a boundary drain that runs along the centre of the ridge and is an obvious feature on the aerial photograph.

The site is divided into two parts by a stony col: that on Table Mt and that on the hill of 2097ft to the west. On Table Mountain peat is more widespread on the gentler slopes of the north side whereas on the hill to the west it surrounds the summit more evenly. The site boundary for the most part lies at about 550m though it is below this along the northern edge and also rises higher to cross the ridge below Table Mt.

Seen from Lyragh on the northern side the site seems to be a cap of peat clinging onto a 5-10 degree slope but in fact there is a large area where the slope is less than 5 degrees. Sheep grazing is a significant influence in the lower parts and some of the Scirpus tussocks which dominate the vegetation in A are bitten down to a hemisphere with stems of barely 1cm. Other nearby areas escape this pressure and the Scirpus has got away to reach flowering size. There is much bare peat (up to 30% at the worst places) but it is not obviously eroding. Other species in the vegetation are vaginatum, tetralix, Vaccinium Eriophorum Erica myrtillus, Campylopus paradoxus and Narthecium. The broken Scirpus tussocks bear Diplophyllum, Cladonia bellidiflora and C.gracilis in abundance while there

132

is a little Calluna and Empetrum also. The Sphagnum cover is scanty on the 8 degree slope with an average of 5% S.subnitens and S.capillifolium.

The hillside flattens out above (B) to 3-5 degrees and the vegetation is developed much better with less grazing pressure. Scirpus severe and the two Eriophorum species are dominant but there are small Sphagnum cuspidatum, S.subnitens and lawns of S.capillifolium with some 2 yr old Calluna. A single swathe of old erosion channels reaches the ridge line in this area but it appears quite stable although the peatland directly above may be dried out and firm because of the drainage. Racomtrium is a feature of Cladonias area with abundant this erosion (C.coccifera, C.crispata, C.furcata etc) and vigorous Calluna and Empetrum. Erosion has also worked up the slope from the south side though it is not active at present. There are a few contour-related pools above it with margins rich in Sphagnum cuspidatum and S.capillifolium.

The largest area of bog occurs on the shoulder that stretches north towards the Kings River. Although recently burnt the vegetation has considerable amounts of Sphagnum (up to 70% locally) in a cover of E.vaginatum/Scirpus. A few headwater streams rech the higher area and in one Sphagnum-rich hollow some grows through S.papillosum. Vaccinium oxycoccus Polytrichum alpestre is frequent, Mylia taylori less so and there are some low hummocks of Sphagnum still half dead at this stage after fire. In most cases these are covered with a thin growth of Campylopus pyriformis and liverworts such as Lophozia ventricosa, Calypogeia sphagnicola, C.neesiana, Kurzia pauciflora, Cephalozia connivens and Cephaloziella spinigera. Despite these hummocks the surface is rather flat: there are no large mounds of Racomitrium or Sphagnum capillifolium for example.

The area to the west (G) is on the rising slope of 2087 at 10-12 degrees. It has not been burnt so recently and there is Calluna present of 7 yrs age. Grouse feed here as they do also in the east. The vegetation is even more uniform than that on Table Mt. and is basically a sheet of Eriophorum vaginatum, Scirpus and Calluna with much Campylopus paradoxus, and Sphagnum with a coverage of 5-10%. On all the lower edges the intact bog runs into stabilised erosion where Calluna and E.vaginatum are dominant with scattered Deschampsia flexuosa. Juncus effusus grows in many of the channels in this lumpy ground. The vegetation is intact to the summit of the hill where there is no evidence of rock although species like Juncus squarrosus and D.flexuosa are frequent. The peat does thin to the south on the ridge to the Sugarloaf Mt. There are one or two pools in this region on the flattest ground. The bog extends further west but there is much evidence of old erosion here with uneven peat, old dry pools and runnels covered in abundant Cladonia crispata with C.squamosa and C.furcata also.

EVALUATION

The whole area contains high level peatland of considerable interest which would be in better shape without frequent burning and grazing. Although quite species-poor this does seem to be the natural condition for montane bog if the habitat is uniform. The peat covered summit of 2097 is unusual but the vegetation on the Table Mt side seems generally to have more potential than that on the west.

Adjacent ground supports heathland and stony eroded ridges with Vaccinium vitis-idaea growing amongst Deschampsia flexuosa and Juncus squarrosus. There is a quite exceptional abundance of Diphasium alpinum on Table Mt on a rocky patch eroded for many years.

134

BALLYNULTAGH

1/2" MAP NO: 16 W 10/11 SITE NO: GRID REF.: 004 07 COUNTY: Wicklow 6" MAP NO: 10, 11 AIR PHOTO NO: 0 75 AREA INTACT (ha):720 AREA (ha): 490 540-600 FOREST AREA: Ballinagee ALTITUDE (m): CATEGORY: M, HR Ballynultagh, **TOWNLANDS:** RATING: Q Ballynastockan, Glenbride **GEOLOGY:** Granite RG **RECORDERS:** WRITE UP: RG

GENERAL SITE DESCRIPTION

slopes of site the western includes The Mullaghcleevaun on the ridge from Moanbane, the ridge that runs north-west to Black Hill and, on the western side of this, the upper catchment of the small stream that discharges into Poulaphuca Reservoir at Kilmore. Its boundary crosses the shoulder west of the summit of Mullaghcleevaun and then runs below the two ridges leading to the NW and SW so as to include the area of intact peat. It descends steeply into the valley of the Kilmore stream from Black Hill and Moanbane.

The area thus ranges in altitude from 465 - 660m and includes montane bog, stream flushes and a small bog of headwater type caught between two arms of the river.

The col between Moanbane and Mullaghcleevaun (C) has almost been reached by erosion working up from the northern side. There is a small pond on the ridge with a number of other pools and channels related to slippage and erosion. The presence of Aulacomnium, Sphagnum recurvum and S.palustre, Polytrichum commune and Juncus bulbosus shows that the vegetation is in touch with the underlying granite and deriving minerals from there.

The slope up to the east (D) however is reasonably intact though there are traces of past erosion at the base - showing a peat depth of 1m. The vegetation is a mix of Scirpus, Eriophorum angustifolium with some E.vaginatum also. Sphagna are very rare here and about 30% bare peat is still exposed after a fire 2-3 yrs ago. The peat cover spreads north along the ridge to Black Hill (A) where, although the vegetation is strongly grazed, it is quite well developed. As /35

before, Scirpus and Eriophorum angustifolium dominate the cover but Sphagnum capillifolium and S.subnitens are coming back strongly after the fire. There are also Leucobryum hummocks and some of frequent Polytrichum alpestre. One or two swallow holes add like Plagiothecium undulatum, Juncus species squarrosus, Potentilla erecta, Deschampsia flexuosa and Dryopteris carthusiana to an otherwise very limited flora of higher plants. Grouse seem to favour these drier areas.

Some way to the west (B) the slopes decline from 5 to degrees and the response of the vegetation is 2 striking. The area was burnt 5 or more years ago and although Scirpus still remains common there are areas of Eriophorum vaginatum/Calluna as well as a dense Sphagnum cover (50-70%) consisting of S.papillosum and S.capillifolium. There are a number of Sphagnum-filled hollows rather than pools, with Drosera rotundifolia. Most of these overlook the headwaters of the Kilmore stream. Occasional large hummocks occur on the ridge top. They are based on Sphagnum capillifolium or, more commonly, Leucobryum and provide sites for Vaccinium myrtillus, Empetrum and Juncus squarrosus. The more recent fire affected the eastern side of the ridge but the amount of Sphagnum there is relatively high.

Bryophytes are abundant in this region of humid bare peat. There are frequent clumps of Campylopus paradoxus and C.pyriformis and abundant Diplophyllum and Lophozia ventricosa. Mylia anomala is more frequent than M.taylori while there are four species of Calypogeia including the distinctive C.azurea. Pohlia nutans is found occasionally on bare peat whereas Kurzia pauciflora, Cephalozia bicuspidata and C.connivens form a weft of shoots on all but the most exposed surfaces.

The headwaters of the Kilmore river form a completely intact area of dryish peatland on slopes of up to 10 degrees. Despite the stream channels which appear eroded on the aerial photograph, there is little bare peat and no active erosion. The channels are indeed sunken into the peat by 1m or so but are overhung and surrounded by dense Calluna. Along and above the streams there are often grassy, linear stands of Agrostis spp., Nardus, Juncus effusus and Galium saxatile. Two main branches of the stream surround a small level bog (C) at the base of the slope. It is intensively grazed and was burnt 2 yrs ago but retains traces of a former Eriophorum vaginatum/ Sphagnum cover which includes S.magellanicum with the more abundant S.papillosum, but also a few hummocks of S.imbricatum.

North of this river basin rises the slope of Black

 \Box] \Box

Hill (D) which at the base is almost a sheet of pure Sphagnum (S.capillifolium and S.subnitens) with Eriophorum spp. and Molinia. scattered Calluna, Scirpus is frequent on the slope which is up to 8 degrees and becomes grouped into discrete colonies for some reason higher up the hill. All this ground was burnt 3 yrs ago so it remains 30% bare. Sphagnum and the Eriophorum spp. decline upwards and the peat prominant firmer. Algae are its becomes in stabilisation and lichens also come into their own. Icmidophyllum ericetorum, Cladonia furcata, C.coccifera, C.crispata, C.pyxidata and C.macilenta are all common.

and pare

Ballynulbagh Weklen

Evaluation

NOU

This is a large and varied site which shows many of the features of Wicklow upland peat and has a rich species list. The intact river source would seem to be particularly unusual in a region beset with erosional problems. The surrounding land includes high level heath

with Vaccinium vitis-idaea, Empetrum etc as well as stony areas from which the peat has been totally removed. The south side of Mullaghcleevaun includes one of the largest areas of bare, eroding peat in Wicklow. There was a single golden plover on it in September.

13g

CURRAUN

1/2" MAP NO: 22 SITE NO: Wa 4 S28 03 Waterford GRID REF.: COUNTY: AIR PHOTO NO: S 769 6" MAP NO: 14, 23 AREA INTACT (ha):27 212 AREA (ha): ALTITUDE (m): 480-585 FOREST AREA: Comeragh **CATEGORY:** М 7 **TOWNLANDS:** Curraun, **RATING:** Cutteen South, Cumauraglin Mountain **GEOLOGY: RECORDERS:** RG WRITE UP: RG

GENERAL SITE DESCRIPTION

the Farbreaga lies at the south end of Monavullagh Mts about 9km north of Dungarvan. With Seefin it forms a N-S ridge which is isolated and somewhat lower than the rest of the plateau, e.g Coumfea (Waterford 3). The altitude of this site is 600m. It consists of two low summits, one with a makeshift television relay station, and the top of the ridge in between and to the north. It is delimited mostly on an altitudinal basis. There is a spectacular small corrie in the northern edge while to the south the limit is the townland boundary between Curraun and Boola- which is marked by piles of stones. Drainage water finds its way south to the Dalligan or west to the Araglin river.

The vegetation is similar but less recently burnt than the last site. The flatter areas (A) are covered by a mosaic of tussocky Eriophorum vaginatum, Calluna, Empetrum and Sphagnum capillifolium in which there are niches for Vaccinium myrtillus, Luzula sylvatica, Lophocolea bidentata, Plagiothecium undulatum and Calypogeia sphagnicola. After fire the litter is swept away and more Scirpus, Eriophorum angustifolium and Sphagnum papillosum seem to enter the community, because of а change in drainage probably characteristics. The eastern part of the site (C) is in this condition though around its edges there are traces of old erosional channels and some bare peat. Campylopus paradoxus, C.pyriformis and C.introflexus are frequent here and there are occasional flushes revealed by the erosion in which Polytrichum commune, Sphagnum cuspidatum and Juncus bulbosus find a home.

Erosion has occurred down to bedrock at the head of

the southern river valley (B) and Racomitrium is widespread, its hummocks following the winding channels and peat hags of this very uneven ground. Erosion is not fast here and there are many small lawns of Sphagnum papillosum, S.tenellum and S.cuspidatum which could be seen stabilising the remaining peat in the absence of further fire or grazing. The bare ground carries characteristic species like Cladonia floerkeana and C.bellidiflora in dry places and Lophozia ventricosa in damper ones.

EVALUATION

Though rather fragmented by erosion this site offers useful ecological information on the natural vegetation of mountains in this region because fire has been less prevalent than to the north (Waterford 3). It has not the size nor the variation found in this other site however.

Sites j lower conservation Value

·

]] $\left[\right]$ -) J J \Box η

K 12 (R.G.)

? A HEATH SITE ? Molls Gap.

KINGARROW

SITE NO: Do 70 Donegal COUNTY: B21 AIR PHOTO NO: 20 AREA (ha): 250 ALTITUDE (m): Η CATEGORY: 4 RATING: EM **RECORDERS:** WRITE UP: EM

1/2" MAP NO: 1
GRID REF.: B95 08
6" MAP NO: 59
AREA INTACT (ha):20
FOREST AREA: Meenirroy
TOWNLANDS: Kingarrow
GEOLOGY:

GENERAL SITE DESCRIPTION

This small site is located south south-east of Lough Muck, approximately 8km east of Doochary, Co. Donegal. It is nearly surrounded by forestry plantations and its south-easterly end is very close to bend in a river. It may be regarded as a highland bog although its location near the river and also a small lake gives it a somewhat different character; some of the site resembles a scragh. The part which resembles lowland bog is wet and quaking and incorporates a pool system. The site has been much affected by afforestation work and this will undoubtadly affect its future conservation prospects.

EVALUATION

This is a very small site although the pool system and the lakeshore vegetation are quite nice, the former is likely to dry up as the surrounding forests grow and both areas are likely to suffer from the effects of eutrophication resulting from forestry activities.

SPECIFIC AREA DESCRIPTIONS

<u>Area E.</u> This area is located on the bend in a river. The margin of the river has been ploughed up and planted with conifers. The area is thus nearly surrounded by trees. A sloping hillside occurs on the northern margin of the area and the vegetation here is dominated by <u>Molinia caerulea</u>. On the western side is a plantation composed of 6-8 year old conifers. The area is therefore under serious and imminent threat. The surface of the bog is still very wet and quaking however,

J J

and this may explain why it has not been planted. The area which is horizontal, contains large Sphagnum-filled pools which are orientated in a A number of these north - south direction. contain Carex limosa and C. rostrata. Closer to river, Eriophorum angustifolium is more This may be due to the effects of dominant. fertilizer or drainage. Sphagnum cover reaches approximately 50% and the area contains a number

management of the surrounding forest. This area is seperated from Area E by newly Area F. planted conifers. It consists of a flushed lake surrounded by a scragh. The vegetation here is typical of such areas and consists of an extensive carpet of <u>Sphagnum</u> and many sedge species including Carex paniculata, C. limosa, C. <u>nigra, C. rostrata, C. lasiocarpa, C. echinata</u> and <u>C. curta</u>. Among the species of <u>Sphagnum</u> which occur here are <u>S</u>. <u>auriculatum</u>, <u>S</u>. <u>palustre</u>, S. papillosum, S. recurvum S. subnitens and S. The area drains <u>subsecundum</u> var. <u>inundatum</u>. towards the south-west.

of good hummocks of S. capillifolium. It appears to be somewhat flushed and this may be due to

the



MEENAVAGHRAN

1/2" MAP NO: 3 Do 47 SITE NO: G56 83 GRID REF.: Donegal COUNTY: 6" MAP NO: 90 AIR PHOTO NO: G 505 AREA INTACT (ha):33 AREA (ha): 135 FOREST AREA: Kilcar 175 - 225ALTITUDE (m): CATEGORY: Η Meenavaghran, **TOWNLANDS:** RATING: 4 Cashel, Braade Lower **GEOLOGY: RECORDERS:** EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is located on the plateau area between Carrick town and Glencolmcille, Co. Donegal. It is bounded on the north-west by the upper slopes of Braade Hill, on the south-west by the Carrick to Glencolmcille road and on the east by the stream connecting Lough Divna to L. Unna. The site is a highland bog which forms the headwater catchment for a number of south-easterly flowing streams. These eventualy flow into L. Unna. The area around L. Unna is a feeding site for GWF geese.

The south-westerly margin of the site has been seriously damaged by active peat cutting. Here, the peat is up to 2.0 m deep. This cutting is adjacent to the most interesting part of the bog; an area with a system of large Atlantic Blanket Bog pools. Where the bog drains on the south-easterly side, some gully and blanket erosion is taking place. The bog extends up the hillside, north of L. Unna. This area was not visited but from a distance, the surface appears to be patchy and erosion is occurring in places. On the south-east margin some rough farmland is present. The hillside adjoining the site appears, for the most part, to be intact. The vegetation in this area is dominated by <u>Molinia</u>.

The most interesting part of the site incorporates an extensive pool system. These pools are large and wide although some on the east side are long and narrow. The larger pools support <u>Menyanthes</u> <u>trifoliata</u>, <u>Carex limosa</u>, <u>Eleocharis multiflora</u> and <u>Sparganium angustifolium</u>. These pools are deep and do not contain much <u>Sphagnum</u>. In the flat areas between the pools, <u>Sphagnum</u> cover is not high. Here,

4

C] [] [] Π

<u>Campylopus atrovirens, C. brevipilus</u> and <u>Rhynchospora</u> <u>alba</u> are common. In the centre of the pool system is a hollow stream area. This area is slightly flushed and quaking and supports <u>Schoenus</u> <u>nigricans</u>.

East of the pool system, the bog is badly damaged by cutting and is spoiled by the occurrence of rubbish from a nearby (now closed) dump.

SPECIES OF NOTE

Greenland Whitefronted Goose

EVALUATION

Although this was obviously once a very nice site, the degree to which peat cutting is impinging on it means that its chances of survival are slim. Lough Unna is a site for GWFs and the geese more than likely use the bog. This fact increases the importance of the site which should probably be considered as a unit with L. Unna

C]

COOMLETTRA

K 38 1/2" MAP NO: 20 SITE NO: V75 89 GRID REF.: Kerry COUNTY: 6" MAP NO: 64 AIR PHOTO NO: V9 AREA INTACT (ha):38 171 AREA (ha): 130 - 200 FOREST AREA: Killorglin ALTITUDE (m): CATEGORY: Η Coomlettra, **TOWNLANDS:** RATING: 5 Gortrelig, Oolagh East. Sandstone **GEOLOGY: RECORDERS:** EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is situated approximately 1.5 km east of Caragh Lake, Co. Kerry. The site is a highland bog. Its southern half consists of a narrow strip of land immediately surrounding three lakes. These are connected by a small south-easterly flowing stream. The south-eastern edge of this area is bounded by a forest margin. The northern part of the bog consists of a slope which drains gently, in a south and southeasterly direction, into a stream flowing from the southern half of the bog. The western margin of the bog is defined by extensive peat cutting and the presence of roadways.

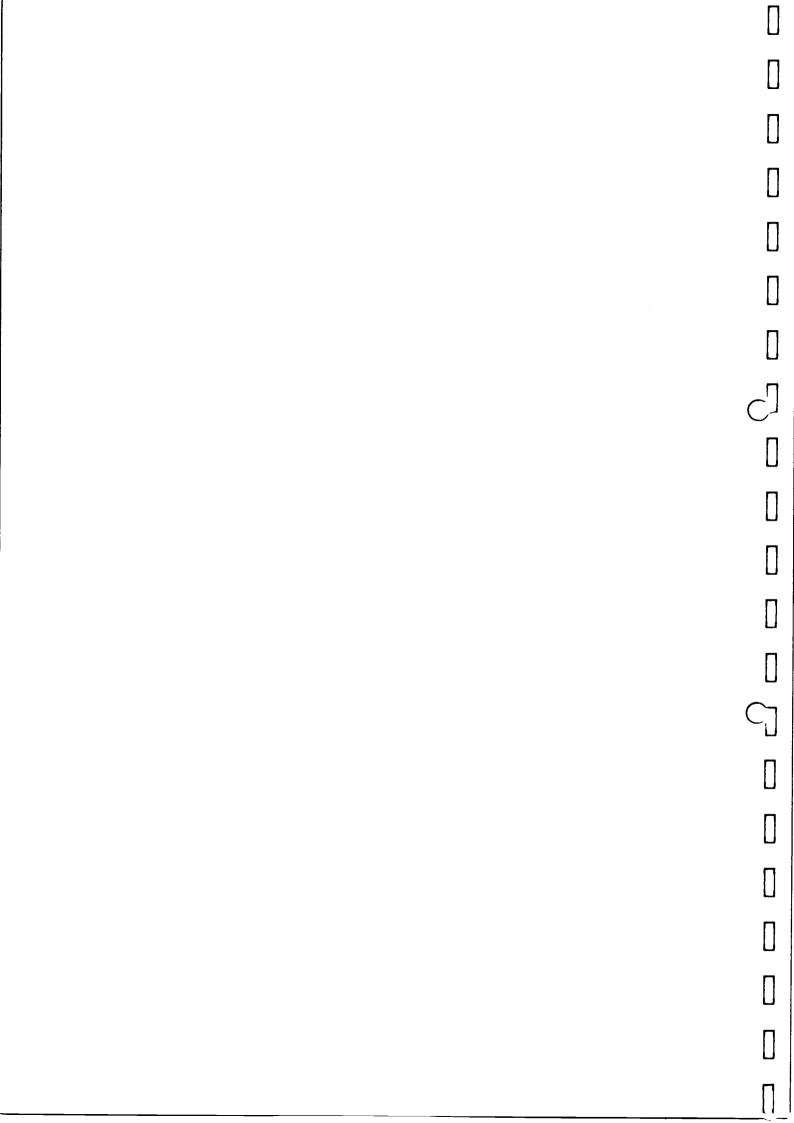
The largest section of this site has been seriously damaged by fresh drains and by new peat cutting activities. A number of new bog roads have been constructed in this area and this further reduces the conservation potential of this site. It appears unlikely that the site will not be irreversibly damaged in the forseeable future.

SPECIES OF NOTE

<u>Rhynchospora</u> <u>fusca</u>, <u>Sphaqnum</u> <u>pulchrum</u>, <u>Sphaqnum</u> <u>molle</u>, <u>Pinguicula</u> <u>grandiflora</u>

EVALUATION

The greatest part of this bog has been seriously damaged by peat cutting activities and afforestation has impinged on the rest. Very little remains intact and its future looks poor.



SPECIFIC AREA DESCRIPTIONS

<u>Area A</u>, This area consists of the level land surrounding the three lakes, in the southern half of the site. The area is surrounded by rocky hillocks, the vegetation of which is dominated mainly by <u>Molinia</u>. The hills to the east have been drained for afforestation.

Some flushing or enrichment of the area is indicated by the vegetation. Among the species to be found here are <u>Myrica gale</u> and <u>Sphagnum</u> <u>recurvum</u>. Small and distinctly flushed areas support <u>Carex limosa</u>, <u>C</u>. <u>paniculata</u>, <u>Juncus</u> <u>effusus</u>, <u>J</u>. <u>bulbosus</u>, <u>Menyanthes trifoliata</u> and <u>Eleocharis multicaulis</u>. The flushing effect is likely to increase as a result of increased enrichment from the adjoining forest. The bog south of the two most southerly lakes is bissected by an old bank and fence. The cover abundance of <u>Sphagnum</u> is good in this area and is up to 75% in places. A stream runing into the site from the adjoining plantation supports <u>Hypericum eloides</u>, <u>Ranunculus flammula</u> and <u>Sphagnum pulchrum</u>.

- <u>Area B.</u> This area is the narrow strip of land situated west of the stream which joins the northern and southern sections of this site. The stream itself is fast flowing. Its eastern side is afforested. The western side ends at the foot of a slope which is covered by heath vegetation, dominated by <u>Ulex galii</u>, <u>Pteridium aquilinum</u>, <u>Erica cinerea</u> and <u>Molinia</u>. The narrow strip of bog is firm underfoot and suports a number of species indicative of heath. These include <u>Succisa pratensis</u>, <u>Carex panicea</u>, and <u>Ulex galii</u>. Towards the north, (west of the lake) the bog surface is poached by cattle. <u>Rhynchospora alba</u> is plentiful on the north-west side of the lake.
- <u>Area C.</u> This area is situated north of the lowermost lake and is of very little interest. The peat is shallow, rocks protrude above the surface, and the area is dry and heavily grazed by cattle. A new bog road has been bulldozed along the west side.
- <u>Area D.</u> This gentle slope has a soft wet surface and a number of pools are present on it. Both <u>Rhynchospora fusca</u> and <u>Sphagnum pulchrum</u> were recorded in some of these. Much of the surface

7

• Ŋ

is quaking. <u>Sphagnum magellanicum</u>, <u>S</u>. <u>imbricatum</u> and <u>Drosera intermedia</u> occur here. <u>Menyanthes</u> <u>trifoliata</u> is plentiful, also. Unfortunately the area is being extensively cut for peat and new drains have been cut through the area. It is unlikely that this area will survive for long.

 \Box

 \Box

「) ⊔

]

 \Box

C C

Π

T 1 Carrignabinnia Mountain (Salkes)

SITE NO: COUNTY:	T 1 Tipp., Limerick	1/2" MAP NO:	22 GRID REF.:R85 24
AIR PHOTO NO:	R745	6" MAP NO:	L 50, T 73
AREA (ha):	11	AREA INTACT (ha)	:11
ALTITUDE (m):	800	FOREST AREA:	Galtee
CATEGORY:	М		
RATING:	4	TOWNLANDS :	
RECORDERS :	EM	GEOLOGY :	Silurian slates
WRITE UP:	EM		

GENERAL SITE DESCRIPTION

This small site is located on the summit of Carrignabinnia Mountain, in the Galty Mountains, on the Limerick side of the Tipperary/Limerick border. The high altitude of the site (800 m) is reflected in the vegetation which is typical of montane blanket bog. The site is traversed by a wall which divides it into a northern and southern section. The southern section is larger and more interesting than the northern one.

The vegetation is dominated by <u>Sphagnum</u> species which include <u>S. capillifolium</u>, <u>S. papillosum</u> and <u>S.</u> <u>palustre</u> and which form an excellent carpet. Vascular plants are dominated by <u>Eriophorum</u> <u>angustifolium</u> and <u>Calluna</u> <u>vulgaris</u>. In some places <u>E. angustifolium</u> becomes very dominant. Other species which occur here include <u>Carex</u> <u>bigelowii</u>, <u>Luzula</u> <u>sylvatica</u>, <u>Vaccinium</u> <u>myrtillus</u>, <u>Empetrum</u> <u>nigrum</u>, <u>Deschampsia</u> <u>flexuosa</u>, <u>Diplophyllum</u> <u>albicans</u>, <u>Festuca</u> <u>vivipera</u> and <u>Rhacomitrium</u> <u>lanuginosum</u>. The absence of species such as <u>Molinia</u>, <u>Narthecium</u> <u>ossifragum</u> and <u>Drosera</u> <u>species</u> is noteworthy.

Overall, the bog is moist and soft. A few vegetated runnels drain south of the site. Near the margins of the site, peat has eroded down to the Where deep erosion has not occurred, the bedrock. suface is still intact. The section north of the wall is less interesting and the vegetation cover here is less complete. This site may be affected by trampling on the part of hill walkers. There is no sign of The vegetation surrounding the burning on the site. <u>Vaccinium/Calluna</u> heath to from varies site Nardus/Festuca grass heath.

9

C] CΠ

SPECIES OF NOTE

<u>Carex</u> bigelowii

EVALUATION

п L _ _ _

 \Box

This small site is one of the highest in the country and this increases its interest. The occurence of <u>Carex bigelowii</u> adds further interest to it. The main features detracting from it is its small size, the presence of the wall and the danger of trampling damage on the part of walkers. The <u>Sphagnum</u> cover is excellent however, and the site may be underscored/under cleel.



3 JSP North

•

CARRICKATIMPAN

SITE NO: Do 2 Donegal COUNTY: AIR PHOTO NO: B47 AREA (ha): 58 ALTITUDE (m): 320 CATEGORY: S RATING: 5 **RECORDERS:** EM EM WRITE UP:

1/2" MAP NO: 1
GRID REF.: B97 15
6" MAP NO: 51
AREA INTACT (ha):14
FOREST AREA: Meenirroy
TOWNLANDS: Carrickatimpan
GEOLOGY:

GENERAL SITE DESCRIPTION

This small site is located in the Glendowan Mountains, Co. Donegal. It is bounded on the south by the slopes of Moylenanav Mountain and on the the north by Meenbog Hill. The site is a headwater bog which incorporates a mixture of intact areas, seperated, to some extent, by areas where erosion is taking place. The two main intact areas are decribed below. These display a number of interesting features which include a good bryophyte carpet of <u>Sphagnum</u>, a pool system, swallow holes and flushes. The pool system is interesting in that a sequence from wet pools to drier pools, to incipient erosion, occurs as the plateau grades into a downhill slope.

The site does not appear to have been affected by fire in the recent past. Overgrazing is not obviously a problem either. The main threat to the site comes from erosion.

EVALUATION

The subjective impression that this site is underscored, due mainly to its small size. It is one of few higher level bogs in Co. Donegal and the area that is intact is quite nice. It also exhibits a good natural sequence from wet pool system to a peatland erosion zone. It is part of ASI No. 2.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This area, situated on the north of the site has a soft spongy surface. The vegetation is dominated by <u>Molinia</u> <u>caerulea</u>. Other species which are abundant include <u>Calluna</u> <u>vulgaris</u> and <u>Scirpus</u> <u>caespitosus</u>, as is <u>Potentilla</u> <u>erecta</u>. <u>Sphagnum</u> cover is good in places, the main species being <u>S. capillifolium</u>. In the flat areas, <u>S. papillosum</u> is common, along with <u>Pleurozia purpurea</u>. North of this area, near the summit of Meenbog Hill, extensive erosion is taking place. This area drains to form a headwater for a stream which flows downhill in a south-easterly direction. The area around the headwater is flushed and supports such species as <u>Juncus effusus</u>, <u>Sphagnum recurvum</u>, <u>Galium</u> <u>saxatile</u>, <u>Luzula multiflora</u>, <u>Agrostis stolonifera</u> and <u>Anthoxanthum odoratum</u>. There are a number of small swallow holes nearby.

On the southern side of the headstream, are large pools. The narrow ones contain <u>Sphagnum</u>, the wider ones do not but some contain <u>Sparganium</u> <u>angustifolium</u>. These pools probably indicate the initiation of peat erosion. Large hummocks of <u>Rhacomitrium</u> <u>lanuginosum</u> occur in the vicinity and appear to be what remain of earlier eroded hummocks.

In this area which terminates in an eroded Area_B. uphill slope, on the south side of the site, the vegetation is dominated by Molinia caerulea with <u>Calluna</u> <u>vulgaris</u> and <u>Eriophorum</u> <u>angustifolium</u> growing through it. The southern part of the area has an excellent Sphagnum carpet, composed of <u>S. papillosum</u> and <u>S. capillifolium</u>, growing under the Molinia. Potentilla erecta is very common here. The bog surface is soft and spongy. In the northern part of this area are some lage pools, some of which are winding and some interconnecting. <u>Carex</u> <u>rostrata</u>, <u>Sphagnum</u> cuspidatum and S. auriculatum occur in a few of these but are not very abundant. The surface here is slightly quaking. The occurrence of bare Rhacomitrium lanuginosum sided hummocks of indicates that some erosion has taken place here. On the western end of the plateau, there is an interesting progression, from an intact surface with good <u>Sphagnum</u> carpet, through to a system of pools, alligned parallel to the contours, as the slope increases. Some of these are up to 30 m in These pools grade into dry pools and length. eroding hollows as the slope eventually, increases further downhill.

 \Box , CJ []

Do 5 SITE NO: COUNTY: Donegal B44 AIR PHOTO NO: 126 AREA (ha): 250 - 300ALTITUDE (m): Н CATEGORY: -2 **RATING: RECORDERS:** EM WRITE UP: $\mathbf{E}\mathbf{M}$

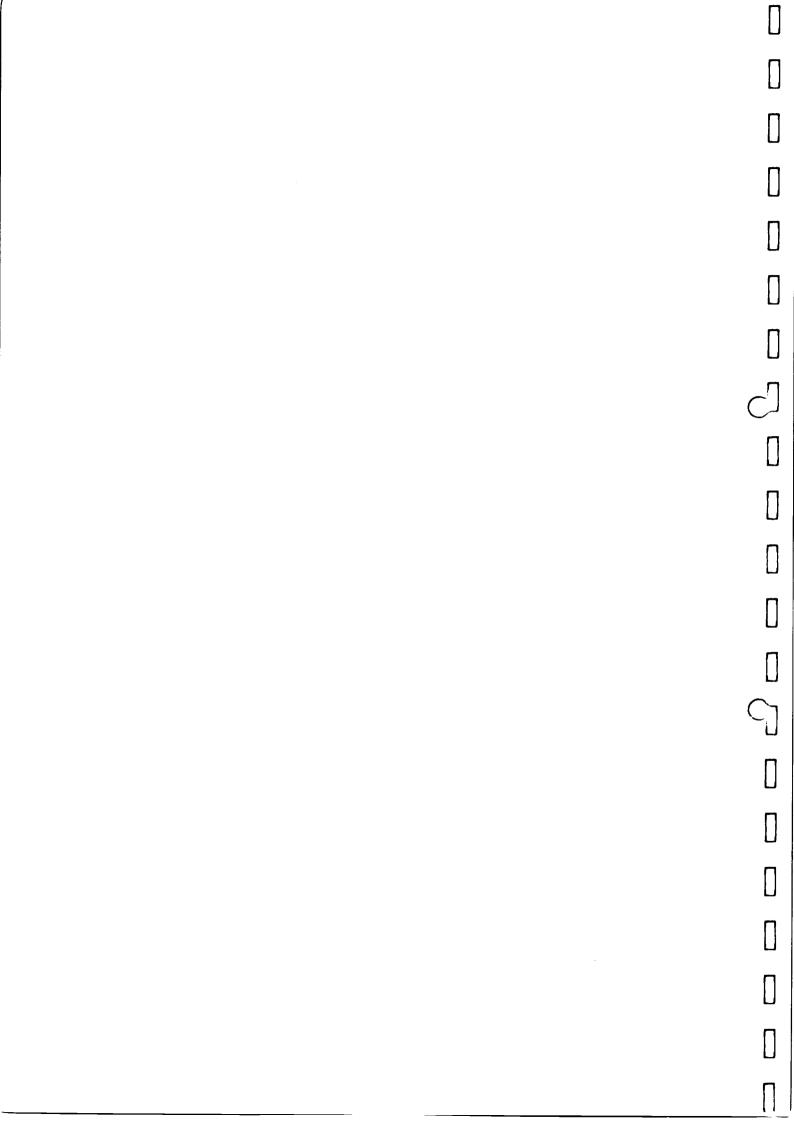
1/2" MAP NO: 1
GRID REF.: B88 15
6" MAP NO: 50
AREA INTACT (ha):0
FOREST AREA: Meenirroy
TOWNLANDS: Tor
GEOLOGY:

GENERAL SITE DESCRIPTION

This site incorporates both slopes of a river valley. The vegetation is dominated by <u>Molinia</u> <u>caerulea</u> and <u>Calluna</u> <u>vulgaris</u> grows through tussocks of this species. A general diffuse erosion is taking place here; this being indicated by the presence of <u>Rhacomitrium</u> of tussocks and hummocks bare A number of species indicative of lanuqinosum. heathland, including Nardus stricta and Erica cinerea occur. Many small streamlet flushes allso occur. These support species such as <u>Sphagnum auriculatum</u> and Juncus bulbosus. Further downstream the site becomes flatter and wetter and Schoenus nigricans and Scirpus However, much bare peat caespitosus become common. occurs here and many eroded hummocks are present. Peat cutting is taking place downstream. A number of drains have been cut in the lower part of he site. There is little left of the site that is really intact.

EVALUATION

This site is more of a heathland site, the likes of which are plentiful in Donegal. It is of low ecological value.



MEENABOLL

1/2" MAP NO: 3 Do 51 SITE NO: GRID REF.: G69 88 Donegal COUNTY: 6" MAP NO: 51 G524 AIR PHOTO NO: AREA INTACT (ha):0 AREA (ha): 408 ALTITUDE (m): 225 - 235 FOREST AREA: Ardara CATEGORY: Н Meenaboll, **TOWNLANDS: RATING:** -2 Meenagolan **GEOLOGY: RECORDERS:** EM WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is situated on the south-west side of Glengesh Hill, 6 km south-west of Ardara, Co. Donegal. The site consists the catchment areas of a number of small streams which eventually coalesce. The area is badly broken up by erosion and peat cutting. Few intact areas remain. Those that do are very small and some have either a heathy vegetation or else consist of flushes dominated by <u>Juncus acutifloris</u>. Where the surface is intact, the vegetation is dominated by <u>Calluna vulgaris</u>, <u>Molinia caerulea</u> and <u>Scirpus</u> <u>caespitosus</u> and a reasonable cover of <u>Sphagnum</u> exists. Both <u>Hylocomnium splendens</u> and <u>Rhytidiadelphus loreus</u> are plentiful. New drains have been cut through the most intact part, on the western side of the site. This site is of little interest, overall and has a low conservation potential.

SPECIES OF NOTE

Golden plover.

EVALUATION

This site has been too severely damaged to be of much botanical interest. The presence of breeding golden plover on the site substantially increases its ornithological value.

 \Box Π

COGUISH (Crow Preser

15/0

1/2" MAP NO: 3 SITE NO: Do 44 G65 83 GRID REF.: Donegal COUNTY: 6" MAP NO: 90, 91 AIR PHOTO NO: G502 AREA INTACT (ha):54 AREA (ha): 513 Kilcar FOREST AREA: ALTITUDE (m): 175 - 325 Η CATEGORY: Coguish, **TOWNLANDS:** RATING: 5 Croweighter, Crowkeeragh, Crowbar, Crowdoo RG, EM **GEOLOGY: RECORDERS**: RG, EM WRITE UP:

GENERAL SITE DESCRIPTION

This site is located 8 km north-east of Carrick village, Co. Donegal. It is bounded on the south-east by the ridge of Crockmeenabrade. The eastern margin is forced by an old track linking Glenballydoo to the road to Ardara. The western margin is bounded by a small stream. The site is divided by a bog road which runs in a north to south direction. This site is comprised of a mixture of areas; some of which are very badly damaged by extensive peat cutting and erosion, others which are mainly heathland areas. The most interesting area is situated west of the bog road and has the deepest covering of peat as well as the best covering of <u>Sphagnum</u>.

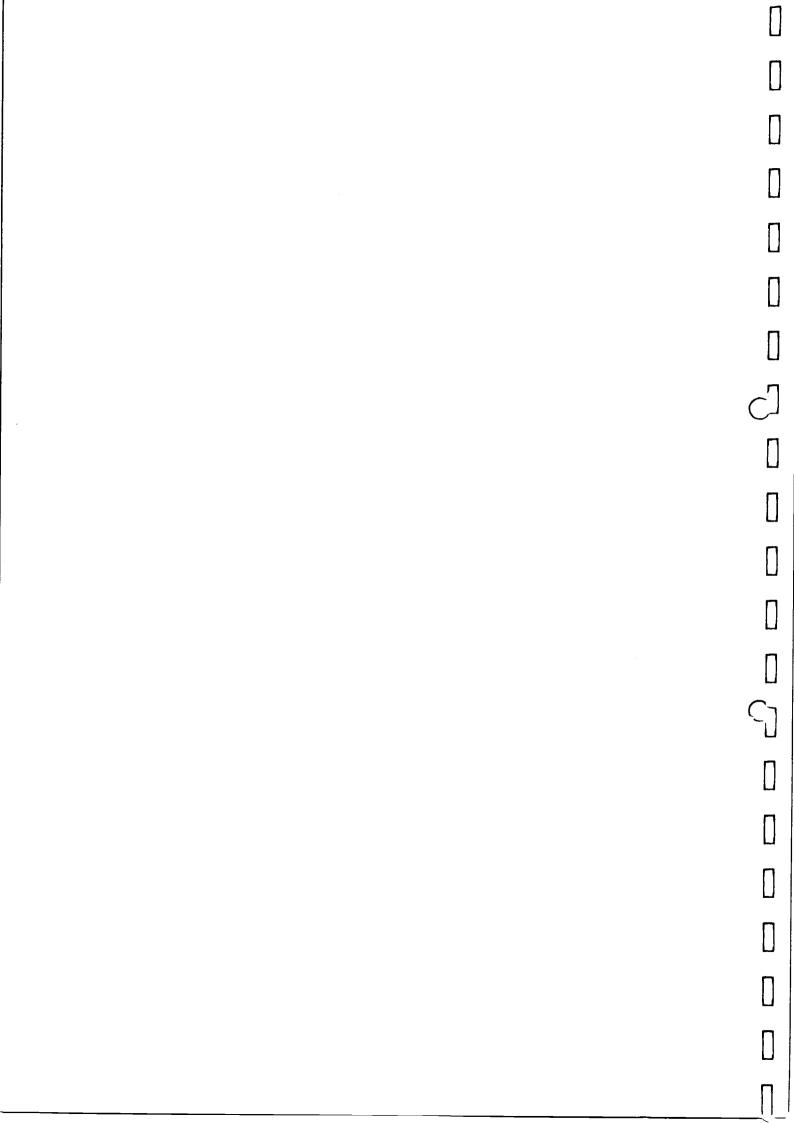
The site is threatened by mechanised cutting and extensive hand cutting and is also suffering the effects of overgrazing.

SPECIES OF NOTE

<u>Carex</u> <u>dioica</u>

SPECIFIC AREA DESCRIPTIONS

<u>Area E.</u> This area, situated east of the bog road and directly south of the River Crow, consists of a slope of little scientific value. The peat surface here is firm an lumpy. There are indications that the erosion is taking place and the peat is shallow. The vegetation is characterised by low tussocks of <u>Molinia caerulea</u>



along with <u>Scirpus</u> <u>caespitosus</u> and <u>Rhacomitrium</u> <u>lanuginosum</u>. <u>Calluna</u> <u>vulgaris</u>, although it occurs, is not dominant and is to be found mainly on drier humps along with <u>Juncus</u> <u>squarrosus</u>. 157

There are no pools in this area except in the erosion gullies. A small flushed area where a stream flows, supports <u>Juncus effusus</u>, <u>J</u>. <u>acutuifolia</u>, <u>Eriophorum angustifolium</u>, <u>Anthoxanthum odoratum</u>, <u>Menyanthes</u>, <u>Ranunculus</u> <u>flammula</u>, <u>Potamogeton polygonifolia</u>, <u>Potentilla</u> <u>palustre</u>, <u>Carex limosa</u>, <u>C</u>. <u>nigra</u>, and <u>C</u>. <u>echinata</u>, along with <u>Sphagnum auriculatum</u>, <u>S</u>. <u>cuspidatum</u>, and <u>S</u>. <u>recurvum</u>.

- <u>Area F.</u> This area is comprised of the steeper slopes above area E, where the gradient is approximately 20°. The vegetation here is heathy in character, being dominated by <u>Juncus squarrosus</u>, <u>Polytrichum</u> <u>commune</u>, <u>Hylocomnium splendens</u>, <u>Rhytidiadelphus</u> spp. and <u>Galium saxatile</u>. The peat here is approximatly 20 cm in depth. Some <u>Sphagnum</u> <u>papillosum</u> and <u>S. capillifolium</u> occurs also, along with tussocks of <u>Eriophorum vaginatum</u>. <u>Calluna vulgaris</u> is short but constantly present.
- <u>Area G.</u> The summit plateau is either eroded down to the rock surface or else the vegetation is dominated by <u>Juncus squarrosus</u>. A small lake in the area supports <u>Sparganium</u> <u>angustifolium</u>.
- <u>Area H.</u> The low-lying area on the north-east of the site is badly eroded. The surface is fairly firm and the <u>Sphagnum</u> cover is poor. This area is of low scientific interest.

C C• Π

KNOCKANAFFRIN

1/2" MAP NO: 22 SITE NO: Wa 5 S28 15 Waterford GRID REF.: COUNTY: 6" MAP NO: AIR PHOTO NO: S209 6 AREA INTACT (ha):10 27 AREA (ha): Kilsheelan 700 - 756 FOREST AREA: ALTITUDE (m): CATEGORY: M, F **TOWNLANDS:** Knockanaffrin, RATING: 4 Glennanore Sandstone **RECORDERS:** EM **GEOLOGY:** WRITE UP: EM

GENERAL SITE DESCRIPTION

This very small site is located on the northern end of the Comeragh Mountains, at the summit of Knockanaffrin, Mountain, Co. Waterford. This mountain forms part of a ridge which runs in a north-westerly The the ridge itself is covered with a direction. Nardus stricta/Festuca grass heath or by a Calluna <u>vulgaris\Vaccinium</u> myrtillus heathland shrubby vegetation. The site is located on the flat part of the ridge where a spur runs out from Knockanaffrin, towards the south-west and on the west side of the main ridge, south-east of the spur. The last area consists of a flushed slope with signs of enrichment. The peat is shallow on most of the site but on the plateau area, may reach 1.0 m. The vegetation on the plateau is typical of montane bog vegetation.

There are no obvious threats to this area apart from erosion and possibly overgrazing.

EVALUATION

This is a very small site and is therefore a poor representitive of the mountain bog habitat. In another mountain range, it would probably be ignored.

SPECIFIC AREA DESCRIPTIONS

<u>Area A.</u> This consists of a concave drainage slope located on the south-western side of Knockanaffrin Mtn. Rocks occur on the surface of the bog and these probably cause some form of enrichment. The vegetation is tussocky; <u>Calluna</u> <u>vulgaris</u> reaches 25 cm in height and <u>Eriophorum</u> <u>vaginatum</u> and <u>E. angustifolium</u> are plentiful. Other vascular plants which occur include

C CJ $\left[\right]$

<u>Vaccinium myrtillus</u> and <u>Empetrum nigrum</u>. In the bryophyte layer, <u>Sphagnum recurvum</u> is common. This is probably due to flushing from above. Towards the top of the slope, the area is less flushed and the vegetation is composed of <u>S</u>. <u>capillifolium</u>, <u>Empetrum nigrum</u>, <u>Calluna vulgaris</u>, <u>Juncus squarrosus</u>, <u>Eriophorum vaginatum</u> and <u>Scirpus caespitosus</u>. The bog surface is reasonably intact here. A number of old breakages in the peat surface occur and here, the bedrock is exposed.

This area is situated on the spur running <u>Area B.</u> south-west off the main ridge. The most interesting part of this area is towards the south side. Here, on the top of the ridge, the vegetation is tall and closed. Calluna vulgaris, Eriophorum vaginatum and S. capillifolium are the most abundant species and Empetrum nigrum is very plentiful. There is little species diversity in <u>Juncus</u> squarrosus and <u>Eriophorum</u> the area. angustifolium are also common in places. A new fence traverses this area and runs east to west along the south-west spur. There are no open areas or pools present. <u>Erica</u> <u>tetralix</u> was not recorded here. Some tall <u>Narthecium</u> <u>ossifragum</u> does occur, however. On the centre of the spur, some erosion occurs. The peat here is 0.5 m to 1.0 m deep. The area shows no sign of being damaged by fire in the past.

 \int CJ

CLOGHERMORE

1/2" MAP NO: SITE NO: G 2 14 V89 87 GRID REF.: Galway COUNTY: 6" MAP NO: 66 AIR PHOTO NO: V4 207 AREA INTACT (ha):45 AREA (ha): FOREST AREA: Cloosh Valley ALTITUDE (m): 200 - 275 **CATEGORY:** Η Cloghermore TOWNLANDS: RATING: 3 Granite **RECORDERS:** EΜ GEOLOGY: WRITE UP: EΜ

GENERAL SITE DESCRIPTION

This highland bog site is bounded on the southeast by the Oughterard to Casla road, on the northeast by a conifer plantation which extends up to the summit of the hill, and on the north-west and southwest by the 150 m contour line.

The surface of the bog is soft but not very wet. The vegetation is relatively short and appears to be very heavily grazed by sheep and cattle especially on the north-west side where trampling by sheep has caused erosion to occur. Apart from this, there is little sign of erosion. The vegetation is dominated by Molinia caerulea along with Calluna vulgaris and Schoenus nigricans. The peat is of mixed - although shallow - depth and many boulders occur on the surface. The most interesting part of the site is on the plateau. A lot of algal crust occurs on the bog surface and <u>Campylopus</u> <u>atrovirens</u> is common in the barer areas. A number of good hummocks of Sphagnum capillifolium occur but over all, Sphagnum cover is On the north-west side where the slope is low. steeper, tthe surface is more patchy, lumpy, tussocky and drier. <u>Nardus stricta</u> is more plentiful here. The western side of the site is rockier and has many exposed rocks on the slope. Significant turbary is being carried on around the margin of the lake. There are no obvious signs of recent burning on the site.

EVALUATION

The site does not have any features of particular importance. The overgrazing reduces its ecological value although this damage could probably be reversed if stock were kept off it. The occurrence of a forestry plantation detracts somewhat from the site also.

 \Box CJ Π

SITE NO: K 42 COUNTY: Kerry AIR PHOTO NO: 010 AREA (ha): 63 425 - 625 ALTITUDE (m): CATEGORY: М RATING: 5 ΕM **RECORDERS:** WRITE UP: EΜ

1/2" MAP NO:20GRID REF.:Q56 096" MAP NO:35AREA INTACT (ha):36FOREST AREA:CastlegregoryTOWNLANDS:**GEOLOGY:Sandstone

GENERAL SITE DESCRIPTION

This site is situated on the south-facing slopes of Beenatoor and Coumbaun Mountains, south-west of Castlegregory, on the Dingle Peninsula, Co. Kerry. It is bounded on the south and east, by a stream; on the west, by the edge of a steep slope; on the north, by the summits of the two mountains and on the east, by a saddle or col.

The peat on the slopes is shallow but reaches a depth of 1.5 m in places. The vegetation is dominated by <u>Calluna</u> <u>vulgaris</u>, <u>Scirpus</u> <u>caespitosus</u> and <u>Eriophorum</u> <u>angustifolium</u>. In drier areas, it is dominated by <u>Juncus</u> <u>squarrosus</u>. <u>Rhacomitrium</u> <u>lanuginosum</u> is very common and there is a reasonibly good cover of <u>Sphagnum</u> <u>capillifolium</u> in the bryophyte layer. The area is very heavily grazed by sheep. The vegetation is, for this reason, very short and the peat surface has a slimy feel to it, due to an abundance of algae.

On the bottom half of the site, a number of old drains cross it diagonally. Near the margins of these are the beginnings of gully erosion. Although the ground is squelchy, the surface is not very soft. The vegetation turns heathy in places and here, <u>Nardus stricta</u> and <u>Festuca</u> <u>vivipera</u> become prominent. <u>Molinia caerulea</u> is not plentiful on the site but does occur in occasional tussocks. The vegetation cover is poor in places. <u>Campylopus atrovirens</u> occurs here. On the higher slope, <u>Calluna</u> <u>vulgaris</u> is less plentiful, and <u>Scirpus</u> <u>caespitosus</u> dominates. <u>Rhacomitrium lanuginosum</u> and <u>Sphagnum tenellum</u> are plentiful here.

Near the summit there is less surface water present. The bog has a definite montane vegetation. The surface here is more spongy and the vegetation is 161

K 42



composed mainly of <u>Calluna vulgaris</u>, <u>Eriophorum</u> <u>angustifolium</u>, <u>Sphagnum capillifolium</u> and <u>Scirpus</u> <u>caespitosus</u>. <u>Empetrum nigrum</u> occurs here along with <u>Luzula sylvatica</u> and <u>Vaccinium myrtillus</u>. This is the most interesting part of the site. 162 1

Blanket erosion increases in extent on the eastern side of the site. The main threat to the site comes from overstocking.

EVALUATION

 \Box

This site has the potential to be a good site if grazing were stopped and is probably underscored. An interesting sequence of vegetation occurs from the bottom of the site to the top. The site is also the most westerly site in the country supporting a high montane bog vegetation and which was surveyed. As such, it has a particular significance.

C] CJ Π

DUNLOE UPPER

K 33 SITE NO: Kerry COUNTY: AIR PHOTO NO: V4 AREA (ha): 77 ALTITUDE (m): 450 - 865 CATEGORY: F RATING: 3 EM **RECORDERS:** ΕM WRITE UP:

1/2" MAP NO:20GRID REF.:V89 876" MAP NO:65, 66, 73, 74AREA INTACT (ha):11FOREST AREA:KillorglinTOWNLANDS:Dunloe UpperGEOLOGY:Sandstone

GENERAL SITE DESCRIPTION

This site is located half-way up the west side of the ridge between Tomies Mountain and Purple Mountain where the slope slackens off, somewhat. The site is flushed with water draining from the steeper slopes These consist of scree slopes covered by a above. shallow layer of peat which in turn, is covered by vegetation consisting mainly of short <u>Calluna</u> <u>vulgaris</u>. The site itself is mixed. Some areas consist of humps on which are exposed, bare rock and scree. These are relatively dry and their surfaces eroded. Tall Calluna vulgaris grows on the sides of The areas have a general lumpy these humps. appearance, resulting from localised erosion followed by recovery of the vegetation. There are some areas bare of vegetation. A number of small flat wet areas also occur. In these, the vegetation is dominated by Scirpus caespitosus and Sphagnum cover is good. Molinia caerulea dominates in other areas. A number of small headstream flushes occur.

SPECIES OF NOTE

<u>Pinguicula</u> grandiflora

EVALUATION

Overall, the area is not very intact and is of little scientific value.

163

C] C []

Π

164

CARK

1/2" MAP NO: SITE NO: Do 57 3 C06 04 GRID REF.: COUNTY: Donegal 6" MAP NO: 60 AIR PHOTO NO: C6 AREA INTACT (ha):27 AREA (ha): 32 Stranolar FOREST AREA: ALTITUDE (m): 250 CATEGORY: н TOWNLANDS: Cark 2 **RATING:** ** GEOLOGY: **RECORDERS:** EΜ WRITE UP: EM

GENERAL SITE DESCRIPTION

This small site, located 13 km south-west of Letterkenny and 2 km east of Cark Mountain, is bounded on the north by a stream and is surrounded by coniferous plantations. The area which has the morphology resembling that of a raised bog, is a highland site, and has been greatly affected by the surrounding forest and its drains. Much of the bog's surface is still soft, however, and some of it has a good Sphagnum carpet. A number of large hummocks of <u>S. capillifolium</u>, which are topped by <u>Rhacomitrium</u> <u>lanuginosum</u> occur. The vegetation is dominated by <u>Scirpus</u> <u>caespitosus</u>. Pools, resembling tear pools are present on the bog; these are long, steep-sided and are full of algae. The area in the vicinity of the forest edge, is flushed. This is probably due either to fertilisation or drainage. Some parts of this have been planted with Pinus contorta. Molinia caerulea dominates in the centre of the site where there are fewer hummocks of <u>Sphagnum</u>, but is absent from the north-east side of the bog. The growth of the surrounding plantation is likely to result in further drying out of this site.

EVALUATION

This site which was once part of a larger peat system has been left unplanted due to its wetness. However its small size, the proximity of the forest and the effects of drainage and fertiliser will probgably destroy this area in time.

C] [] Π

165

WX 1

1/2" MAP NO: Wx 1 19 SITE NO: GRID REF.: S82 52 COUNTY: Wexford 6" MAP NO: 8, 13 AIR PHOTO NO: S297 AREA INTACT (ha):0.7 AREA (ha): 58 FOREST AREA: ALTITUDE (m): 800 Bunclody **CATEGORY:** М TOWNLANDS: RATING: 2 Granite RG, EM **GEOLOGY: RECORDERS:** WRITE UP: EM

GENERAL SITE DESCRIPTION

This site is located at the summit of Mount Leinster and east of the Wexford border as far as a saddle.

**

The area cocsists of mainly eroded bog of up to 1.8 m in depth. The vegetation, where it is intact, is typical of high level montane blanket bog. It is dominated mainly by Eriophorum angustifolium, Calluna vulgaris, Sphagnum capillifolium, Eriophorum vaginatum and <u>Scirpus caespitosus</u>. <u>Empetrum nigrum</u>, <u>Carex</u> <u>bigelowii</u> and <u>Luzula</u> <u>sylvatica</u> also occur in the vegetation.

A number of drainage gullies coming from the summit of the mountain are flushed and grassy. These may be affected by enrichment from the R.T.E. Transmitter Station situated on the summit.

The col to the east of the summit is dominated by Scirpus caespitosus. Two large pools occur in this area in which may be found Carex rostrata.

SPECIES OF NOTE

Carex bigelowii

EVALUATION

Overall the site is of poor quality but is notable for its high altitude and for being towards the south-eastern extreme of the range for mountain bogs in the country.

C] [] (] Π

DRUMNALIFFENEY MOUNTAIN

SITE NO: Do 4 COUNTY: Donegal AIR PHOTO NO: B 46 AREA (ha): 66 ALTITUDE (m): 345 CATEGORY: F RATING: 5 RECORDERS: RG

RECORDERS: WRITE UP: TOWNLANDS: GEOLOGY:

1/2" MAP NO:

FOREST AREA:

AREA INTACT (ha):2.25

GRID REF.:

6" MAP NO:

1

B94 14

51 (43)

Gweedore

Mountain

Drumnaliffeney

GENERAL SITE DESCRIPTION

RG

This small bog is set in the Derryveagh Mts around a tributary branch of the Barra River on the south-western part of the Glenveagh fault. It almost reaches the cliffs which overlook the Poisoned Glen to the north. The boundary has been drawn on the ridge top of Crockfadda to the east and halfway up the slope of Crockbrack to the west.

The land rises steeply from the road with flushed slopes of dense Molinia and scattered Myrica gale. Between them the river runs over slides and waterfalls with many rock outcrops rich in lichens such as Sphaerophorus fragilis and Stereocaulon evolutum. There is Juniperus communis here also.

Where the ground levels out there is some peat development with up to 1.5m peat. Mostly this occurs to the east of and between the two rock-girt lakes, Attirive and Avarnis. These bogs Loughs are extensively eroded probably because of the natural concentrating effect of the valley on the local sheep. There are stepped pools and channels linked by tracks of Narthecium ossifragum and Molinia caerulea or sometimes broken through by gullies. Sphagnum molle grows in some of the barer areas. There is also some intact bog: level areas of S.capillifolium and Molinia with Racomitrium lanuginosum growing through the general vegetation as well as in discrete hummocks. A few flat wet sites of Scirpus cespitosus, Molinia caerulea, Narthecium ossifragum and the two Eriophorum species occur, marked by an abundance of Campylopus atrovirens, Drosera anglica and Pleurozia purpurea. There is a strong flushing influence around all the edges of the site from the rock- and Molinia-covered slopes above. Pinguicula vulgaris, Riccardia latifrons and Sphagnum auriculatum exemplify this.

 \Box [] () Π

.

Old hummocks that are present especially in the eroding areas carry Empetrum nigrum, Huperzia selago, Racomitrium lanuginosum and a little Juniperus communis, along with a good selection of Cladonia spp, including C.arbuscula, C.polydactyla and C.gracilis.

EVALUATION

[)

]

The very small extent of intact vegetation and the prevalence of sheep grazing and erosion makes this site of little value. However it is beside the Glenveagh National Park and contains a few interesting species.



SAGGARTNADOOISH

SITE NO:	Do 7		1/2" MAP NO:	1
COUNTY:	Donegal		GRID REF:	B98 22
A	B 84 REA (ha):	304	6" MAP NO:	34 (43) AREA INTACT
(ha): 31.5 ALTITUDE (m):	195 CATEGORY:	F	FOREST AREA:	Gweedore
RATING:	7		TOWNLA	NDS:
Bunnatreesruha	n			Devlin
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	Deviin

Site Description

The area is situated between the Dunlewy-Glenveagh road and the lower slopes of Saggartnadooish Mt. It is dissected by several streams flowing off the mountain and is also partly flushed from the slopes above. However there are a few places where it rises above this influence and is ombrotrophic. The boundary of the hills, Dooish and the two site is the watershed on Saggartnadooish. This makes the area large for the amount of intact peatland involved.

Like the topography the vegetation is mixed and shows the extent of flushing with an abundance of Molinia caerulea. The main slopes carry almost a pure stand with scattered, leggy Calluna and some Sphagnum capillifolium and Scirpus cespitosus. Close to the streams the community is augmented by Polygala serpyllifolia, Viola palustris, Sphagnum palustris, Dactylorhiza maculata and Myrica while the actual banks are covered by Galium saxatile, Festuca vivipara and Luzula spp, with Pellia epiphylla on the vertical surfaces. There is localised erosion into the streams, significant in places.

Patches of boggier vegetation alternate with the stream valleys and carry a community of Scirpus cespitosus with Campylopus atrovirens, some Molinia and a little Schoenus nigricans. There are some contour pools in the central part of the site with some incipient erosion. The pools have scattered shoots of Sphagnum cuspidatum in them or, where they may dry out, denser Eriophorum angustifolium. Drosera anglica grows on the margins where Sphagnum auriculatum var. inundatum is occasional. Between these pools the uneven ground shows two periods of burning (2 & 9 yrs ago) and is being recolonised by vegetation which includes much Campylopus paradoxus, Kurzia cf pauciflora and the lichens, Cladonia strepsilis, C.gracilis and C.pyxidata. Grouse feed in the area. The peat lobes at the western end of the site are the most ombrotrophic and the vegetation here is in best condition. Burning has been less frequent thopugh there has been a little hand-cutting close to the road. The surface is soft and Sphagnum cover reaches 80% in places. Scirpus cespitosus is the dominant higher plant and its stems colour the vegetation from afar. There are hummocks of Leucobryum glaucum and Sphagnum capillifolium as well as of Racomitrium and they are taken over in some cases by Mylia taylori, Scapania undulata, Cladonia macilenta and C.arbuscula. The pools are much less related to erosion and many are filling with Sphagnum papillosum and S.subnitens. A few contain Menyanthes trifoliata and/or Utricularia intermedia.

Evaluation

[]

 \Box

The mosaic of different communities that occurs here is of some interest though the best developed, ombrotrophic area is of small extent. It would be worth including as an ASI but would scarcely stand alone. Its position within the Glenveagh National Park means that its future is secure though attention should be given to stopping any further peat cutting. 169

C C]

LOUGH DEALE

SITE NO:	Do 9	1/2" MAP NO:	1/3
COUNTY:	Donegal	GRID REF:	C07 06
AIR PHOTO NO: AREA (1	C 33 ha): not mapped	6" MAP NO: AREA INTAC	60 CT (ha): -
ALTITUDE (m):	CATEGORY:	FOREST AREA: Le	etterkenny
RATING:	CALEGORI.	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

Site Description & Evaluation

J

J

 \int

, [)

J

J

]

J

J

Formerly this seems to have been a good bog but it has been subject to a burst of recent peat-cutting as well as afforestation. Much is now cutover with active drains extending outwards from the cut areas in all directions. These run up to the crest with Lough Deale which is also approached by forestry from the west. There is possibly some intact ground on Cronamuck but a new road has been recently cut up the centre, for sheep or forestry.

[] [] (_] $\left[\right]$

LOUGH AGROUGHA

SITE NO:	Do 11	1/2" MAP NO:	1
COUNTY :	Donegal	GRID REF:	B88 24
AIR PHOTO NO: AREA (1	B 80 ha): not mapped	6" MAP NO: AREA INTAC	33 T (ha): 8
ALTITUDE (m):	180-390 CATEGORY: Heat	FOREST AREA: h	Gweedore
RATING:	-3	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

Site Description

 \Box

The site consists of an area of heathland which occurs around Lough Agrougha and also the eastern slopes of Carntreena. East of the lake the ground is hummocky with occasional outcrops of rock and a sheep-grazed vegetation of Scirpus/Schoenus/Molinia. There are runnels of peat erosion between Racomitrium hummocks, especially on the slopes at each end of the lake. Although these fade out to the south and south-east where the plant cover is essentially intact, there is recent peat cutting here.

The site drops to the lake over rocks and shallow eroding peat before rising again as a slope of 20-30 degrees on Carnatreena. This carries a dry heath of Calluna vulgaris, Juncus squarrosus, Molinia caerulea and prominent Cladonia gracilis with occasional flatter platforms of Eriophorum vaginatum. Sphagnum capillifolium occurs throughout and to the north it grows under tall Calluna with an exceptional abundance of Listera cordata. Grouse seem relatively common also.

Where the ground levels out on the summit of the hill erosion has totally removed the peat cover leaving a gravelly area of tiny wind-blown ridges. Narrow peat hags here show an original thickness of 1.5m or so.

Evaluation

The area should not be considered as a peatland site though the density of the Listera is of some interest.

[] (] [] [] Π

BINSWILLY

SITE NO:	Do 24		1/2" MAP NO:	1/3
COUNTY:	Donegal		GRID REF:	C00 09
	C 34 REA (ha):		6" MAP NO:	59 (51) AREA INTACT
(ha): 18 ALTITUDE (m):	300-350 CATEGORY:	F	FOREST AREA:	Meeniroy
RATING:	-1 DC FM		TOWNLANDS:	
RECORDERS: WRITE-UP:	RG, EM RG		GEOLOGY:	

Site Description

J

L

The site consists of the ridge top that connects Meenaboll Hill and Binswilly, running NE-SW above the Letterkenny-Fintown road. At the north-east end it extends around a patch of forestry into the upper catchment of the Owenbeg River.

The ridge is much dissected by erosion and difficult to traverse. A few fragments of the original Eriophorum vaginatum/Sphagnum cover persist but mostly the vegetation consists of dry strips of bog covered by Racomitrium, Calluna, Juncus squarrosus and Sphagnum capillifolium. It is all enriched as a result of the erosion and is classified as a flushed slope bog for this reason although there is little Molinia on the ridge top. Campylopus paradoxus is prominent rather than C.atrovirens and Cladonia arbuscula, Huperzia selago and Pleurozium schreberi also suggest a relatively dry substrate. Cladonia coccifera, C.subcervicornis, Pycnothelia papillosum and even Lepraria incana colonise bare peat surfaces. The drier blocks of peat separate flats of Eriophorum angustifolium, Scirpus cespitosus, Sphagnum papillosum and S.cuspidatum. In addition there are some fans of bare peat and E.angustifolium although these are localised. In a few places they reach the underlying rock, 1-2m below.

Forestry runs up the hillsides below and in one place a narrow ploughed section connects both sides.

The condition of the vegetation improves to the north-east though there are traces of former erosion throughout. As the ground drops into the Owenbeg valley Molinia and Sphagnum capillifolium become abundant and there is some more obviously flushed vegetation with Carex echinata, C.nigra, Nardus stricta, Anthoxanthum odoratum, Polytrichum commune, Festuca vivipara and F.rubra. Carex rostrata and Juncus effusus occur in the most permanent streams. There are traces of field banks towards the base of the site.

Evaluation

C [] СJ [] Π

Erosion is too widespread on this site to consider it of ecological value.



SCRAIGS

SITE NO:	Do 29		1/2" MAP NO:	3
COUNTY:	Donegal		GRID REF:	B95 01
AIR PHOTO NO: AREA (1	B 18 ha): 48		6" MAP NO: AREA INTAC	67 T (ha): 36
	150-180 CATEGORY:	F	FOREST AREA:	Reelan
RATING:	0	-	TOWNLANDS:	Montymeane Lughveen
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	2

Site Description

This area slopes down to the Strannagoppogue River just east of Scraigs Hill. It is bounded by roads on the south and east, by forestry to the west and the river to the north. At the south end the slope is 3-4 degrees but this drops off to nothing close to the river.

It is a flushed site with several temporary springs as well as a major stream, located centrally. The stream itself has cut down to underlying rock and therefore brings species such as Myosotis Epilobium palustre and Carex demissa into the site. laxa, Elsewhere the drainage is downslope rather than into the stream. The vegetation is arranged as low ridges of blanket bog between linear flushes. At the top of the site the communities are heathy with Eriophorum angustifolium and Calluna common on the peatier parts and Juncus squarrosus, Festuca rubra, Cirsium palustre, Carex echinata and Galium saxatile in the flushes. Lower down the flushes accumulate more aquatic species like Sphagnum recurvum, S.palustre and S.cuspidatum, Calliergon stramineum, Myrica gale and Ranunculus flammula. There is even a little Carex rostrata with Philinotis fontana and Bryum pallens type around the more permanent springs. The peat also become thicker (up to 2m) with patches of Scirpus cespitosus/Eriophorum angustifolium/Campylopus atrovirens alternating with Calluna/E.vaginatum. In this there are occasional drier sheep lies where Vaccinium myrtillus, Molinia caerulea, Anthoxanthum odoratum and Luzula multiflora dominate the cover.

The lower half of the site becomes progressively broken up by erosion from sheep grazing. Bare runnels surround isolated small hummocks of Racomitrium, with Cladonia portentosa and Scapania irrigua. The erosion is especially pronounced in the NW corner with gullies running into the stream channel. C.strepsilis is conspicuous on the seeping peat and there is a little flat ground also, including some quaking areas with Carex limosa.

A few ancient drains occur on the site and a small amount of old hand-cutting but grazing is the predominant influence on the vegetation. Extensive peat cutting is taking place across the 174

road.

Evaluation

Lying at only 160m the vegetation on this site has a lowland feel about it and is surrounded by forestry and peat cutting. It is much overgrazed and does not have enough value to make an ASI. 175

[] [] ĺ [] [] [] Π

CROAGHANARD

SITE NO:	Do 31	1/2" MAP NO:	3
COUNTY:	Donegal	GRID REF:	G95 92
AIR PHOTO NO: AREA (G 554 ha): 156	6" MAP NO: AREA INTACT	76 (ha): 49
ALTITUDE (m):	150-195 CATEGORY: V	FOREST AREA:	Reelan
RATING:	5	TOWNLANDS:	Edergole coaghanard
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

Site Description

This area lies in the valley of a major tributary of the Reelan River flowing north from Croaghanard Lough in the Blue Stack Mts. The main area of peat is east of the river and it is bounded by the break of slope with the ridge that leads into Glascarns Hill. A spur of land runs north-west from this hill close to the mouth of the valley and this contains the flattest land and the deepest peat. It is partly cut however and quite extensively drained for future cutting. The site boundary runs along the top of this ridge turning east to the Effernagh River as the slopes become less. On the western side where there is little peat it runs about 200m from the 'Croaghanard' River.

The dominant vegetation here and elsewhere is wet Scirpus cespitosus and Campylopus atrovirens which grows on slightly There are low Racomitrium or Sphagnum ground. sloping capillifolium hummocks also, on which Cladonia portentosa, C.arbuscula and C.ciliaris are a feature. Molinia is scattered through the central parts and becomes dominant on the slopes of the hills. Towards the hillside there are some tall mounds also which are generally based on rock outcrops. Here Vaccinium myrtillus and Deschampsia flexuosa grow with Dicranum scoparium, Plagiothecium undulatum and Mnium hornum. A few tracks of Schoenus nigricans run through them with Carex panicea, C.demissa and C.pulicaris and also a little Selaginella selaginoides. Grouse feed here.

There are a few groups of small pools on the flatter places, both at the mouth of the valley and higher up, close to the river. The pools are bare or have Sphagnum auriculatum var.auriculatum or S.cuspidatum in them. In several cases they lie above the beginnings of gullies but erosion is nowhere widespread.

Southwards into the valley there is a series of peat lobes separated by small streams. Most are susceptible to flushing in the wettest weather and contain a good deal of Molinia and also Sphagnum papillosum and S.subnitens. Close to the river they run into a soft Molinia/Myrica/Erica tetralix community with 176

Rhynchospora alba abundant in the more open places. Carex echinata, Eleocharis multicaulis and Nardus stricta also occur.

A distinctive, flatter bog is found below the lake. Its vegetation is made up of Scirpus cespitosus, Eriophorum vaginatum, Sphagnum auriculatum, S.compactum and Campylopus atrovirens with a little Calluna on the few small hummocks. The surface is exceedingly wet and slimy and seems to have been burnt less than 5 yrs. The hummocks however have a reasonably rich flora with lichens such as Cladonia polydactyla, C.furcata, C.squamosa and C.crispata as well as a little Coelocaulon muricatum. Lophozia ventricosa, L.incisa and Cephalozias are frequent and there is both Scapania gracilis and S.nemorea.

Evaluation

η

This would be a valuable valley bog site were it not for the drainage carried out at the northern end. It contains a good species list and varied bog communities that are not overly affected by fire or grazing. While the drains could be filled in and the site restored it is perhaps not of sufficient merit to justify an all-out effort. The adjacent Owendoo valley (Do 32) is of equal if not greater value though it has partially different vegetation.

C] [] Π

OWENDOO

SITE NO:	Do 32		1/2" MAP NO:	3
COUNTY:	Donegal		GRID REF:	G99 91
AIR PHOTO NO: AREA (G 555 ha): 420		6" MAP NO: AREA INTAC	76 Г (ha): 38
ALTITUDE (m):	135-150 CAMECODY:	V (E)	FOREST AREA:	Reelan
RATING: Edergoole	CATEGORY: 8	V (F)	TOWNLANDS:	
Owendoo			Cr	onakerny,
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	

Site Description

The Owendoo valley runs north-east from the vicinity of Lough Belshade under the ridge of Croaghbarnes in the Blue Stack Mts. The upper part of the river is steep with waterfalls but it soon drops into a glaciated valley where it starts to meander with only minor rapids. The site boundary follows the ridge tops on each side of the valley so includes a large area (420ha).

Peat has developed in patches on the valley floor so that there are a number of peat domes separated by small side valleys where mineral flushing is the rule. At the base of the mountain slopes on each side there is an area of springs which are covered by scraw vegetation. Occasional rocky ridges also occur so the site is physiographically very varied.

The vegetation is similarly complex with extensive Molinia slopes along the edges of the valley and a Molinia/Myrica community close to the river. The peat areas are strung out along the river, especially in the lower part of the valley. They are fairly flat and mostly burnt in the last two or three years. A degree of flushing is shown by the occurrence of Schoenus in the cover of Scirpus/Molinia, Eriophorum vaginatum, Sphagnum capillifolium and Rhynchospora alba. Pleurozia purpurea and Campylopus atrovirens are frequent with C.paradoxus in the drier sites.

The two main flushes (A) occur one each side of the river. On the west an extensive area of Carex rostrata and Phragmites australis give way to lawns of Sphagnum auriculatum var. auriculatum, S.papillosum and Cladopodiella fluitans with Drosera rotundifolia, D.anglica and their hybrid growing on the surface. The leaves of Potamogeton polygonifolius, Menyanthes trifoliata, Carex limosa and C.lasiocarpa rise above the mosses in places. In the other flush across the valley there is more open water and

Sparganium angustifolium, Eleocharis multicaulis and Utricularia minor grow in the several pools. In addition to many of the other species Sphagnum magellanicum and S.auriculatum var. inundatum both occur.

The main river and the lower parts of the subsidiary streams are of acid grassland with such species as Nardus stricta, Festuca ovina, F.vivipara, Carex binervis, C.pilulifera, Eleocharis multicaulis and Galium saxatile. Viola palustris, Sphagnum palustris and Pinguicula vulgaris grow in seepage areas while in the channel are Juncus bulbosus, J.effusus and Equisetum fluviatile.

A peaty slope reaches some of the way to Cronloughan on the western side but it becomes very eroded on the crest with contoured bare pools and channels. There is vegetation in between, mostly 5-10 yr old Calluna with Eriophorum angustifolium, Molinia caerulea and Schoenus nigricans. Some of the hummocks bear Cladonia arbuscula.

Evaluation

The drier parts of the site are currently quite heavily grazed by sheep as well as being burnt and there is some hand cutting of turf outside the NE boundary. However the vegetation retains many features of interest particularly in the flushed areas. It is the better of the two Donegal valley bogs as defined in this report.

. C] $\left[\right]$

-OWENROE-1/2" MAP NO: 3 Do 36 SITE NO: G86 90 GRID REF: COUNTY: Donegal 6" MAP NO: 84 (75) AIR PHOTO NO: G 516 AREA INTACT 215 AREA (ha): (ha): 110 Gweeebarra FOREST AREA: ALTITUDE (m): 240 - 270(also F, Headwater CATEGORY: Lough Eske, Reelan) Doobin, TOWNLANDS: RATING: 15 Disert Croankeeran **RECORDERS:** RG **GEOLOGY:** RG WRITE-UP:

Site Description

The site lies around the source of the Owenroe River to the north-west of Carnaween. Its boundary follows the ridge of Meenagushogue Hill on the north-west side and crosses a flat watershed at the eastern end. The main part of the area is an evenly sloping hillside with a fan of flushes and small streams joining at the southern edge and then flowing west down the valley. One of the streams leads down from the saddle area which is shared with Site 44 of the 1990 survey.

The vegetation is generally intact with a firm peat surface in the upper part of the site becoming progressively softer and more mossy towards the base. There are some rock exposures close to the ridge with significant peat erosion around them but the amount of surface flushing lower down the slope seems relatively low. The plant cover is rich in Scirpus cespitosus, Eriophorum vaginatum and Erica tetralix with 8yr old Calluna. Sphagnum capillifolium and S.subnitens are the most frequent species in the drier parts, covering 30-50% of the surface. They give way S.cuspidatum and а little S.papillosum, downslope to S.magellanicum which together achieve 80_100% cover. A number of separate stream flushes occur and their upper parts are generally vegetated with Nardus stricta, Juncus effusus, S.recurvum, Carex echinata, C.demissa etc. These lead down through sinuous Sphagnum ponds and channels rich in Cladopodiella fluitans, Sphagnum Viola palustris, Carex rostrata, C.limosa and auriculatum, Potamogeton polygonifolius.

The saddle area is apparently ombrotrophic and has an intact cover of Eriophorum species, Campylopus atrovirens, Scirpus cespitosus and Drosera anglica. There are hummocks of Racomitrium, sometimes with Cladonia arbuscula and C.portentosa though burning seems to have been more recent here than elsewhere. Sphagnum imbricatum also occurs as scattered, tall hummocks and there is a little Polytrichum alpestre. Lophozia



] [] С] CJ []

ventricosa is prominent, presumably because of the past fires. It seems largely to replace the fire-related small Cladonias: only C.squamosa is recorded. Small pools are found in this area also, containing Eriophorum angustifolium, Carex limosa, Sphagnum cuspidatum and S.auriculatum. Some are related to tearing and erosion on the summit but others seem totally stabilized by vegetation. There was a pair of golden plover holding territory in this area.

South of the main river tall Calluna and Molinia cover much of the slope with Sphagnum capillifolium and S.papillosum at ground level. Empetrum nigrum is frequent, along with Erica cinerea and Dactylorhiza maculata.

Evaluation

L

 $\left[\right]$

This is an important site that scores highly in terms of its integrity, Sphagnum cover and intrinsic interest. Anthropogenic pressures are limited though sheep do occur and erosion is very localised. It also adjoins a site (\$\$44) that

MEENAGUSE LOUGH

SITE NO:	Do 39	1/2" MAP NO:	3
COUNTY:	Donegal	GRID REF:	G90 87
AIR PHOTO NO: AREA (1	G 514 na): 112	6" MAP NO: AREA INTAC	84 T (ha): 20
ALTITUDE (m):	210 CATEGORY: F	FOREST AREA:	Lough Esk
RATING:	6		juse More natawy
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

Site Description

lake.

L

The site includes the lake, an extensive scraw that leads out of its western end and a level area of deep peat to the south-west that is being cut for fuel. The boundary runs along a roadway some distance to the north-west of the scraw. Elsewhere it roughly follows the surrounding watersheds except north of the lake where there is rocky ground.

This northern part is very uneven and the vegetation consists of patches of wet heath with intervening flushed depressions of peat, often dissected by streams. Calluna, Molinia, Juncus squarrosus and Deschampsia flexuosa are the major species in the heath while by the streams Juncus effusus, Sphagnum recurvum and Carex paniculata are prominent. The lakeshore itself is made up of Carex rostrata/ S.recurvum flats with frequent Aulacomnium palustre, C.limosa, C.paniculata, Eleocharis palustris, Mimulus guttatus and Potentilla palustris. Scirpus lacustris and Equisetum fluviatile occur offshore. Both snipe and common sandpiper occur in the vicinity of the

The marginal vegetation extends into an arm of the lake in which some peat growth and subsequently peat cutting has occurred. It is now a large scraw based on Menyanthes trifoliata, Potamogeton polygonifolius, E.fluviatile and Carex limosa with patches of C.paniculata, C.lasiocarpa and Juncus acutiflorus. Beneath these species, Sphagnum recurvum, S.palustre and S.auriculatum var. with S.cuspidatum and large areas inundatum grow over S.auriculatum var. auriculatum amongst the Potamogeton. There are sites where some mineral enrichment allows species such as Pedicularis palustris, Anthoxanthum odoratum, Epilobium palustre, Stellaria alsine and Agrostis canina to grow. Both Sphagnum contortum and S.subsecundum occur here. Towards the west the off and Sphagnum subnitens and influence falls mineral S.papillosum become dominant, together with Myrica gale, Erica tetralix, S.capillifolium and Dactylorhiza maculata.

South-west of the main lake one climbs up through a section of sheep-eroded bog with much bare peat and scattered Racomitrium hummocks. As the ground levels out a Scirpus cespitosus, Molinia caerulea and Eriophorum angustifolium stand takes over which is seemingly dried out by occasional slit drains originating in the cut bog to the south. There are remnants of pools, still with Menyanthes trifoliata and Carex limosa in them. These become numerous to the north east out of the range of the drainage and are frequently filled by Sphagnum species, most often S.papillosum. The ground between is soft and Racomitrium seems to be replacing Sphagnum, perhaps because of a general drying out. The hummocks have a rich bryophyte flora, e.g. Scapania nemorea, S.irrigua, Lophozia excisa, Dicranodontium denudatum, Cephaloziella rubella and Cephalozia cf lunulifolia. Cladonia polydactyla also occurs here.

At the eastern end of the lake a few former fields are now reverting to bogland, covered by Sphagnum papillosum, Carex echinata, Erica tetralix and Myrica and with flushes of Carex nigra, C.limosa, Juncus bulbosus and Rhynchospora alba.

Evaluation

The area contains a relatively small area of bog in the terms of this survey and it is affected both by turf cutting and sheep grazing. However there is a most interesting and species-rich scraw containing Sphagnum subsecundum, (perhaps a NCR - Donal S checking).

L

 $\left[\right]$ C CJ Π

C S (AN) (M)

CROW RIVER

SITE NO:	Do 44		1/2" MAP NO:	3
COUNTY:	Donegal		GRID REF:	G63 83
AIR PHOTO NO: ARE	G 502 A (ha):	180 +	6" MAP NO: AREA IN	90,91 TACT (ha):
ALTITUDE (m):	120-140 CATEGORY:	F	FOREST AREA:	Kilcar
RATING:	8	Ľ	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG, EM RG		GEOLOGY:	

Site Description

L

J

This site is situated in the interior of the Glen peninsula on an even north-facing slope below the ridge of Crockmeennabrade. It consists of a sloping bog with a series of small parallel flushes above the Crow River and also extends to almost level ground in the south where there is turf cutting on a large scale.

Much of the northern and lower part of the area (A) is subject to flushing and its Molinia-dominated vegetation shows this. It has been burnt within the last five years so Calluna is less obvious than it would naturally be. The slope is slightly stepped in profile so there is a pattern of Calluna-dominated vegetation on the slopes and Molinia-dominated stands on the platforms in between, modified by occasional downslope flushes.

The abundance of Sphagnum in the understorey is a notable feature of the vegetation and in many places it forms 70% of the cover. In the wetter tracks S.papillosum is predominant with a little S.auriculatum. There are flushes of Juncus effusus, Sphagnum recurvum, Nardus stricta and Polytrichum alpestre and also more permanent springs tenanted by Menyanthes trifoliata, Carex nigra, C.echinata and C.limosa with Rhynchospora alba and Schoenus nigricans. In the drier Calluna areas, S.capillifolium is abundant and there are unburnt sections where Cladonia portentosa and a little C.ciliata var tenuis and small C.furcata are noticeable. Old Sphagnum hummocks here often have a varied flora, including Scapania gracilis, Mylia anomala, Lophozia ventricosa and Kurzia pauciflora. There is also Cladonia coccifera and C.floerkeana in response to the burning.

Towards the west of the site there are significant areas of Agrostis stolonifera mixed with the Molinia, possibly on shallower peat. This end too has been ploughed and planted with trees showing the peat to be of a notably fibrous (Molinia?) type. The forestry is in a discrete block and a Scirpus/Molinia community reappears to its west (Y,Z) with a flora similar to the rest of the site but apparently impoverished by recent fire and

a slightly drier substrate.

The stream which flows through the forest area gives rise to local erosion on the valley sides (B) and this tendancy is apparent also on the highest part of the site (C) close to the peat cutting. In general the southern part is based on deeper peat (up to 2m) and has a Scirpus cespitosus/Eriophorum angustifolium type of vegetation in which Sphagnum is less abundant than elsewhere. However there is some S.molle here. Pleurozia purpurea and Drosera anglica are common along with frequent patches of Rhynchospora alba. There are flats of Eriophorum angustifolium which is mixed with Eleocharis multicaulis close to rock outcrops. Campylopus paradoxus and C.introflexus are also noticeable.

Turf cutting is in general based around the road which leads in from the south but there are a few recent drains extending outwards into good areas of intact vegetation.

Evaluation

J

This is one of the most Sphagnum-rich sites surveyed. It includes an area of flat bog in reasonable condition on the highest parts and flushed Molinia slopes with good quality vegetation. The proximity of forestry and of peat cutting are adverse influences but grazing is for once not a problem. In total the site is a large one.

OWENTESKINNY HILL

SITE NO:	Do 58		1/2" MAP NO:	3
COUNTY:	Donegal		GRID REF:	G62 85
	G 502 A (ha):	108 +	6" MAP NO: AREA I	81,82 NTACT (ha):
· · /	120-145		FOREST AREA:	Ardara
RATING:	CATEGORY: 0	F	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG, EM? RG		GEOLOGY:	

Site Description

п L

> The site consists of the western end of the ridge linking this hill with Crocknamurrin. The summit is generally level and the side slopes up to 8 degrees.

> In general the vegetation is subjected to too much interference to reach its full potential. It is surrounded on the lower slopes by turf cutting, either in permanent banks or, to the east, by sausage machine cutting. Associated drainage also penetrates the few intact areas where grazing and fire are obvious influences.

> The plant cover includes extensive tracts of Molinia and Eriophorum angustifolium, sprinkled with Erica tetralix, Potentilla erecta, Polygala serpyllifolia and Scirpus cespitosus. Wetter hollows have Narthecium ossifragum and limited amounts of Sphagnum papillosum and S.capillifolium. Erosion is in progress on the northern slope which overlooks a forest area and the Racomitrium hummocks are separated by bare peat runnels. They carry a little Cladonia portentosa and C.arbuscula as well as Dicranum scoparium. Nearby there is some Schoenus nigricans and Rhynchospora alba.

Evaluation

The vegetation on this site is of poor quality and much fragmented by anthropogenic activities. It is also for the most part below the altitudinal limits covered by the survey.

C [] CJ [] [] []

KNOCKREAGH

SITE NO:	К З		1/2" MAP NO:	24
COUNTY:	Kerry		GRID REF:	V82 61
A	V 51 REA (ha):	140	6" MAP NO:	101,109 AREA INTACT
(ha): 13 ALTITUDE (m): RATING:	450 CATEGORY: 1	F	FOREST AREA: TOWNLANDS:	Kenmare Glantrasna,
Garranes			Dro	mbohily Lower
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	

Site description

r L

> The site consists of the northern slopes of this hill together with the col that connects it to Coomnadiha and the other mountains on the south-west side of Inchiquin Lough. The boundary follows the edge of the townland which is the crest of the hill above Uragh Wood. To the south it lies on a slight break of slope above the headwaters of the Glantrasna River.

> The area of peatland is fragmented because of the topography which includes many rocky outcrops. Small platform-like bogs may be isolated or interlinked by sloping shallower peat. In many cases the bogs are only 80m wide or so and are therefore much influenced by flushing from their upslope side. In the larger ones however peat growth has created a slight dome to give a degree of ombrotrophy. The vegetation generally comprises a mix of Scirpus cespitosus, Erica tetralix and Campylopus atrovirens which runs into tussocky Molinia caerulea below the rocky ridges. Seepages close to the rocks may have Carex nigra, C.echinata and Potamogeton polygonifolius. Sphagnum cover on the individual patches of bog varies from 20-60% and includes both S.compactum and S.molle with S.papillosum, S.tenellum and S.capillifolium. Hummocks are rather few and low but Racomitrium occurs in abundance, sometimes growing as an even low-level cover. Scapania gracilis and large clumps of Cladonia portentosa characterise the low hummocks that do occur.

> The lower reaches of the bog which are reached by a rough road are cut for fuel, in one place even into a quaking area with Carex paniculata. There is also a lot of motorcycle activity above this area spreading onto much of the hill above on both soft and hard terrain. Grazing is also an susidiary influence but there is no real erosion.

> In contrast, the col to the east is much affected by erosion but there is a reasonably intact block of peat on the ridge from which a branch of the Glantrasna River takes its source. The

vegetation is again a sheet of Scirpus cespitosus with Eriophorum angustifolium. Racomitrium lanuginosum and a little dwarf Calluna also occur but the adjacent erosion seems to have dried out the vegetation somewhat.

Evaluation

These are small peat areas probably characteristic of many mountain areas in Kerry but with too much human influence to be of ecological importance. The occurrence of Sphagnum strictum is of interest.

EAST OF KNOCKNADOBER

1/2" MAP NO: 20 SITE NO: K 6 V53 86 GRID REF: COUNTY: Kerry 6" MAP NO: 70 AIR PHOTO NO: V 251 AREA INTACT (ha): 7 30 AREA (ha): Killorglin/ FOREST AREA: ALTITUDE (m): 555-580 CATEGORY: М Cahirciveen TOWNLANDS: Roads, Gortnagree RATING: 5 Killurly Commons Lisbane RG **RECORDERS: GEOLOGY:** RG WRITE-UP:

Site Description

The site occurs on the summit ridge of this hill which is close to the northern edge of the Iveragh peninsula east of Cahirciveen. It is delimited by a contour line at about 525m on the south side and 570m on the north. It was visited when totally covered in cloud so some obvious features may be omitted from the description.

The ridge is stony but in those parts with a slope below about 5 degrees peat accumulation has occurred. The peat varies from 0.5-1.5m in thickness: the latter sites generally have a slope of less than 3 degrees and are noticeably wetter underfoot. The vegetation here is largely a Scirpus/Eriophorum vaginatum/E.angustifolium mixture with considerable amounts of Racomitrium, Calluna, Potentilla erecta and occasional Solidago virgaurea. Sphagnum tenellum seems relatively frequent and there is S.cuspidatum and S.capillifolium also. Campylopus paradoxus is quite frequent but there seems to be no C.atrovirens.

The slightly drier, more sloping areas have much more Calluna in the community, often restricted to a windshorn turf of 5-10cm with Racomitrium lanuginosum and Empetrum nigrum. Grouse droppings show that the birds feed in this area. The larger Cladonia lichens grow through the vegetation and there are scattered plants of C.arbuscula, C.rangiferina, C.portentosa and C.furcata. Scapania gracilis is characteristic of this community and there is also Dicranum scoparium and Breutelia chrysocoma.

In places, especially towards the eastern end of the site, the peat cover thins and the loose underlying rock appears. The lack of peat may be related to sub-surface drainage as there is little evidence of erosion on this scale. At all events the peat vegetation is replaced by stony heath. Racomitrium and Calluna are still abundant in this, together with Erica cinerea, Empetrum nigrum, Juncus squarrosus and some Cladonia uncialis. Outside the confines of the site the slopes are too steep to allow peat accumulation but there are occasional hollows with Sphagnum. In one of these on the south-east side of the hill, Sedum anglicum grows in a carpet of S.auriculatum var. inundatum.

Evaluation

L

Ц

J

L

This is a very small area of montane bog with some of the same features as Mangerton but in no way as well developed. It should not be thought of as an ASI.

DERRYGARRIFF

SITE NO:	K 12	1/2" MAP NO:	20/21
COUNTY:	Kerry	GRID REF:	V87 76
AIR PHOTO NO: AREA (1	V 296 na): 58	6" MAP NO: AREA INTACT	83 (ha): 11
ALTITUDE (m):	250 CATEGORY: F		Killarney
Kenmare RATING:	1	TOWNLANDS: Ca	rrig East
RECORDERS: WRITE-UP:	EM,RG RG	GEOLOGY:	

Site description

L

i

The site consists of part of the south side of Derrygarriff Mt. close to the Molls Gap-Kenmare road. It is a stepped landscape with rocky ridges on which small peat bogs have built up at different levels around the headwaters of the Finnihy River. The larger bogs occur in the lower part of the site close to the main stream channel. The lower part of the site is crossed by some wall and fences and contains much heathy ground.

Much of the vegetation is Molinia/Schoenus but in the deeper peat sections Eriophorum vaginatum plays a part with Scirpus cespitosus, Narthecium ossifragum and a little Leucobryum glaucum. Burning has occurred over most of the area within the last two years so the vegetation is still thin and Sphagnum quite rare. Its maximum coverage is of the order of 5-10%. On thinner, flushed peat Pinguicula grandiflora and Myrica gale occur while there are many spring sites with such species as Sphagnum recurvum, Carex demissa, C.hostiana, Anagallis tenella, Viola palustris and Scutellaria minor. In the wettest of these Hypericum elodes and Potamogeton polygonifolius grow.

There are frequent heathy knolls with Anthoxanthum odoratum, Ulex spp, and Pteridium aquilinum and many rock outcrops. This vegetation in fact covers more ground than the peat dependant types.

Evaluation

There is too little peat on this site for it to be considered a mountain bog and what is there has no special features of interest.

[] \bigcirc [] Π **KNOCKNABREEDA**

SITE NO:	K 14	1/2" MAP NO:	20
COUNTY:	Kerry	GRID REF:	V82 79
AIR PHOTO NO: AREA (1	V 297 na): 210	6" MAP NO: AREA INTACT	83 (ha): 57
ALTITUDE (m):	270-390 CATEGORY: F	FOREST AREA:	Killarney
RATING: Graignagreana	CATEGORY: F 7	TOWNLANDS	:
Derry,			Cross
- /		В	ealdarrig
RECORDERS: WRITE-UP:	CD,RG RG	GEOLOGY:	

Site Description

An extensive area of blanket bog occurs on the southern slopes of Knocknabreeda, overlooking the valley of the Owenreagh River. This valley is glaciated so that the flattest slopes occur just above the valley sides from about 250m to 400m. The site consists of a basin-like stream catchment which slopes eastwards and also a more evenly sloping hillside cut by minor north-south streams. Its northern boundary runs along the ridge top through rocky and heathy terrain.

The eastern section of the site receives obvious drainage from the mountain slopes above and has an abundance of Molinia which becomes tussocky in hollows close to the river. Here it grows with Myrica gale, Schoenus nigricans, Carex panicea and a little C.nigra, C.hostiana and C.pulicaris. There are low cushions of Sphagnum papillosum, S.capillifolium and a few plants of S.strictum. At the lowest points S.auriculatum grows with Narthecium ossifragum. An oval mound about 4m high occurs north of the right-angled bend in the Cummeralooderry Stream.

Flushed ground extends up the valley close to the stream and is characterised by Juncus acutiflorus, Menyanthes trifoliata, Festuca vivipara and Succisa pratensis. On the south side there is deeper peat, up to 1.5m. The surface has been burnt within the last few years and is firm and grazed by cattle and sheep. In many places the ground is hummocky and Racomitrium is frequent with a fair amount of Mylia taylori, Pleurozia purpurea and Cladonia portentosa. Scirpus cespitosus, Eriophorum angustifolium and Molinia dominate the flatter parts along with Campylopus atrovirens and occasional C.paradoxus. Less grazed areas to the west have more frequent Eriophorum vaginatum and Sphagnum papillosum but the vegetation is still not well developed. A few other flushes occur in these slopes, most often tenented by

Sphagnum recurvum, Aulacomnium palustre, Juncus acutiflorus and Viola palustris.

The peat thins on a shoulder of the hill to the west but then deepens again in a region of headstream flushes and flatter bog. Much of the vegetation is a Molinia/Scirpus/Racomitrium stand, locally with good Sphagnum patches. Eriophorum angustifolium runs through it all and is especially prominent along the crest of the valley where there is incipient erosion. At the west end a series of recent drains speeds up run-off and augments the erosional effect where it is released. This area is fenced for sheep and runs up to a col where the old Racomitrium hummocks support a few tufts of Cladonia arbuscula as well as Juncus squarrosus and Vaccinium myrtillus.

The flushes that occur regularly across the slope are generally of Sphagnum recurvum and Juncus effusus though the wettest places may have Potamogeton polygonifolius and Carex paniculata. S.auriculatum var. inundatum and Polytrichum commune also occur.

Evaluation

This area includes mountain bog vegetation of reasonable quality but scores mainly because of its overall size. It is not considered of special value though the occurrence of Sphagnum strictum is of interest. CUMMEENSLAUN

SITE NO:	K 17	1/2" MAP NO:	20/21
COUNTY:	Kerry	GRID REF:	V92 77
AIR PHOTO NO: AREA (1	V 296 na): 61	6" MAP NO: AREA INTA	84 .CT (ha): 9
ALTITUDE (m):	275 CATEGORY: F	FOREST AREA:	Kilgarvan
RATING:	4	TOWNLANDS: Gortna Istale	
Launs			
RECORDERS:	RG		
WRITE-UP:	RG	GEOLOGY:	

Site description

This is a small site in a glaciated gap just east of Knockanaguish. It is at the divide between two river systems, the Ullaun and the Cleady. The topography is uneven with one large lake (Cummeenslaun) and several small ponds, meandering rivers and a series of small bogs amongst the rock outcrops and piles of morainic material. The peat areas are mostly close to the river and the site boundary includes large areas of hillside above them.

The bogs are dominated by Scirpus/Eriophorum vaginatum/Molinia with quite frequent Campylopus atrovirens and occasional Racomitrium hummocks. A little Schoenus occurs but Sphagnum is rare on the bog surface because of a recent fire (1yr) and is replaced by a greasy, algal skin. A proportion of the higher hummocks escaped burning so have some older Calluna and a little Cladonia portentosa and Pleurozia purpurea. Polygala sylvestris scattered serpyllifolia and Pedicularis are throughout, perhaps because of nutrient input from the fire.

The southern parts of the site, outside the Park boundaries have been cut for turf in the past and there is a road up from the Cleady side. There is sheep and deer grazing but no obvious erosion.

The ground between the peat domes is usually filled by Molinia with Myrica and Sphagnum species including S.palustre. Carex echinata, C.nigra and C.hostiana occur locally with Juncus acutiflorus and Hydrocotyle vulgaris close to the river. The channel itself is about 3m wide and supports such species as Nymphaea alba, Scirpus fluitans, Carex rostrata and Equisetum fluviatile. Osmunda regalis, Athyrium felix-femina and Euphorbia hiberna grow on the banks.

Cummeenstaun Lough is bordered by peat for the most part with stands of Phragmites and Carex rostrata.

Evaluation

This is a mosaic of wetland habitats including small bog areas without much vegetational interest.

= Toorce Abreada

----GLAS--LOUGHS---

SITE NO:	K 23	1/2" MAP NO:	20 or 21
COUNTY:	Kerry	GRID REF:	V89 79
A	V 295 REA (ha):	6" MAP NO:	83 & 84 AREA INTACT
(ha): 83 + ALTITUDE (m):	340-400	FOREST AREA:	Killarney
	CATEGORY: F		
also Kilgarv	an?		
RATING:	11		l, Cappamore eenbreanla eana, Carrig
East			
RECORDERS: WRITE-UP:	RG, EM RG	GEOLOGY:	
HICTID OL .		00001.	

Site Description

The Glas Loughs occur in a basin between Peakeen Mt and the Eagles Nest above the old Kenmare Road. The low summit ridge along the north-western side is largely peat-covered with perhaps ?90ha of intact surface. A smaller area also occurs to the south-east of the lakes.

In overall terms this is an even plateau-like area with shallow slopes of about 5 degrees covered with a vegetation of Scirpus/ Molinia and Racomitrium and occasional large hummocks of Sphagnum capillifolium, often with Mylia taylori. There are small sections that are ombrotrophic in nutrition and also parts flushed from rock outcrops above. Though mostly burnt within 5 yrs or so, Cladonia uncialis is a feature of many of the damper sites. At the northern end there is almost flat ground on which Molinia dies out and is replaced by a wet Scirpus cover with Drosera atrovirens Campylopus and occasional Pinguicula anglica, grandiflora. Sphagnum compactum occurs quite frequently and is often associated with Cladopodiella fluitans. A few narrow pools occur here with Sphagnum cuspidatum and, in different sites, both varieties of S.auriculatum. The water that collects finds its way north-eastwards without erosional features.

Along the crest of the hill there are a few rises of Sphagnum capillifolium, Calluna and Juncus squarrosus where Hylocomium splendens, Pleurozium schreberi and Dicranum scoparium occur. Some have been avoided by fire and have colonies of Cladonia portentosa which is by no means common elsewhere. Southwards rocks begin to break through the surface and here the mineral with Polytrichum influence makes Carex panicea abundant juniperinum and Erica cinerea on the outcrops. Erosion becomes more obvious and there are swallow holes and some sub-peat drainage to the western slopes of the hill. It becomes pronounced outside the site boundaries on the western side of the hill.

The land drops quite steeply towards the Glas Loughs (B) and Molinia dominates the slopes of up to 20 degrees, together with lesser amounts of Scirpus and Sphagnum capillifolium. There is little exposed rock but the vegetation on the shallow peat includes Breutelia chrysocoma and Vaccinium myrtillus. The upper parts of the slope have been burnt and in response lichens such coccifera, C.bellidiflora, C.cervicornis as Cladonia ssp verticillata, C.macilenta, C.subcervicornis and Pycnothelia papillaria are notably frequent. Halfway down to the lakes there is an edge to the burnt area and the Calluna becomes tall and over 10 yrs old. There are a few flushes here with Sphagnum recurvum, Polytrichum commune, Festuca vivipara and Juncus effusus. Sphagnum auriculatum also occurs. The topography becomes uneven and there are meandering streams, in one place circumscribing a tiny raised area in a Molinia lagg. Peaty hummocks nearby are crowned with Scapania nemorea and Kurzia pauciflora s.s. with Cladonia polydactyla on the drier ones and a little Marsupella ?sphacelata on the wetter. Beyond this area and due west of the lakes there are low cliffs with scattered Ilex and Sorbus aucuparia amongst bushy Calluna.

The lakes themselves were not examined in detail but their flora includes Scirpus lacustris, S.fluitans, Potamogeton natans, Nuphar lutea and Lobelia dortmanna. Eleocharis multicaulis and Polytrichum commune are abundant around the edges and there is a little Scutellaria minor.

Evaluation

There is an extensive area of peat on this site which is largely intact though surrounded on the lower slopes by significant erosion. Grazing has not yet initiated further erosion at the higher levels and the vegetation is mostly in good condition. The diversity of habitat around the lakes means that many different bog and heath communities occur.

SILLAHERTANE

SITE NO:	K 24	1/2" MAP NO:	21
COUNTY:	Kerry	GRID REF:	W10 71
AIR PHOTO NO: 68) INTACT (ha): 5	W 120 AREA (ha): 4 +	6" MAP NO:	95 (+Cork AREA
• •	360-435	FOREST AREA:	Kilgarvan
RATING:	CATEGORY: F 11	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG,EM RG	GEOLOGY:	

Site Description

The site lies due east of Kilgarvan towards the southern end of the Derrynasaggart Mts. It is a flat valley surrounding a tributary of the Roughty River with peat development on the slopes and as a series of lobes close to the river.

On the north-eastern side (A) a few rock outcrops occur at the top of the ridge with a heathy vegetation of Festuca vivipara, Juncus squarrosus, Vaccinium myrtillus, Deschampsia flexuosa and Luzula sylvatica. This quickly gives way to Molinia caerulea, especially where the slopes are more than about 5 degrees or where cutting and some concomitant erosion has improved the drainage - on the Cork side of the county boundary. In this uneven ground Racomitrium hummocks stand up amongst Molinia and tall Calluna on 1m of peat. On flatter ground (B) the dominant cover is either Eriophorum vaginatum with Calluna or, more commonly, with Scirpus/Molinia/ Erica tetralix. The former community is less burnt and contains Sphagnum papillosum and S.capillifolium, the latter is firmer. Sphagna occur in smaller colonies and there is Campylopus atrovirens though no Drosera anglica. Bare peat produced by fire is generally colonised by Odontoschisma sphagni or by Cladonia gracilis, C.floerkeana and C.crispata var cetrariiformis. In slightly sheltered sites Lophozia ventricosa and Cephalozia bicuspidata are also frequent.

As the slope of the hillside increases into the valley (C), Molinia once more become dominant with an understory of Sphagnum capillifolium, Erica tetralix and Potentilla erecta and much Calypogeia fissa on the leaf litter. This is a uniform vegetation changing only around small flushes where Deschampsia flexuosa, Sphagnum papillosum and S.recurvum come in. The amount of Molinia is emphasised by recent burning.

Close to the headwaters of the stream (D) a large flush occurs close beside a rock outcrop. In this Carex paniculata, C.rostrata, C.limosa, C.nigra, Juncus acutiflorus and Sphagnum recurvum are major species with Menyanthes trifoliata, Potentilla palustris, Potamogeton polygonifolius and Sphagnum auriculatum var auriculatum in the wettest places and Agrostis stolonifera, Angelica sylvestris, Hypericum elodes and Juncus bulbosus growing on the resultant scraw. There are areas of Polytrichum commune, Sphagnum cuspidatum and S.palustre too.

Just west of here the first of the flatter peat domes occurs. It again is a recently burnt site but enough of the vegetation survives to show a community of Sphagnum papillosum, S.magellanicum and Rhynchospora alba in between hummocks of Racomitrium. Cladonia strepsilis and C.subcervicornis are colonising the wet peat surfaces with C.cervicornis ssp verticillata and the moss Campylopus paradoxus on the drier sites. Other similar areas occur down the valley . . .

Evaluation

The area of intact peat on this site is extensive but a large proportion of it is flushed Molinia of limited vegetational interest. However there are lenses of deeper peat with lowland features which are unusual at this level as well as a large and well developed flush.



GOUGANE BARRA

SITE NO:	K 26	1/2" MAP NO:	24
COUNTY:	Kerry	GRID REF:	W06 65
AIR PHOTO NO: 80)	W 25 AREA (6" MAP NO: ha): 123	103 (+Cork AREA INTACT
(ha): 15 ALTITUDE (m):	450-480	FOREST AREA:	Gougane
Barra RATING:	2	CATEGORY: F TOWNLANDS:	Inchinanagh
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

Site Description

L

The site occurs on the plateau above the Gouganebarra valley around the source of the Slaheny River that flows west and then north into Kilgarvan. The boundary encompasses the entire upper catchment as it runs along the watersheds above.

It is a dish-shaped area of peat, 0.5-1.5m in thickness and with a very even slope. The surface was thoroughly burnt in April 1991 so there were few higher plants evident three months later to enliven the apparently endless sheets of Molinia caerulea. On the ground a few living shoots of Sphagnum occur in a cover that had recently been up to 60% in places. Much is Sphagnum capillifolium but S.subnitens and S.papillosum are also present with a little S.compactum.

Liverworts were notably prominent on the bare peat surfaces, perhaps because of the constant humidity in this high level site. Calypogeia species were especially common. C.arguta, C.fissa, C.muellerana and C.sphagnicola were all identified along with Cephalozia bicuspidata and Cephaloziella divaricata. The amounts of lichen were small but Cladonia strepsilis and C.cervicornis were both present.

The bog area is punctuated by the headwater streams of the Slaheny River. Their banks provide sites for Vaccinium myrtillus and Juncus squarrosus and there are occasional side branches off them with flushes of Sphagnum recurvum. A few swallow holes also occur usually lined with dense Pellia epiphylla. Where underground drainage resurfaces patches of Nardus stricta, Galium saxatile and Anthoxanthum odoratum occur, sometimes dusted with sand and gravel.

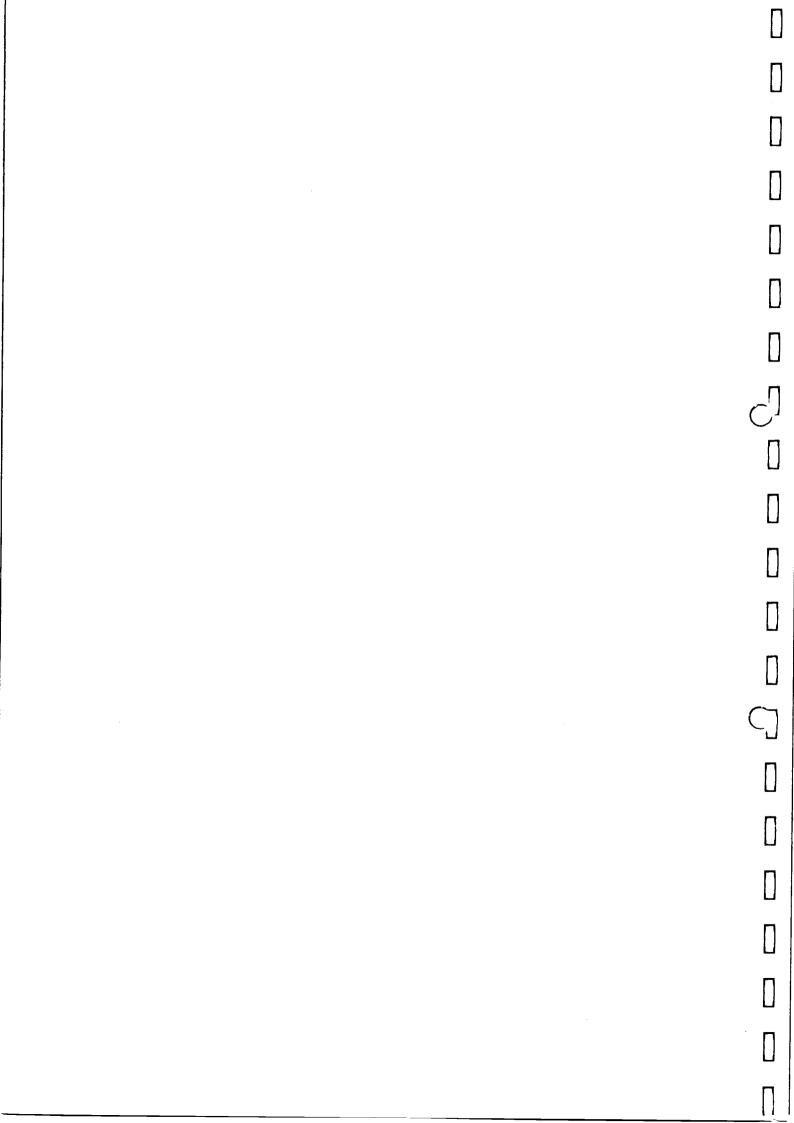
The origin of this material can be seen at a higher level at the eastern end of the site where erosion is quite severe. In many places the basement rock has been reached but some has been re-covered by thin Scirpus peat. Higher patches of bog still retain Racomitrium hummocks of large size which are out of the range of fires and a source of spores for recolonisation elsewhere. Scapania gracilis occurs here. There are odd wet patches of bog with abundant Campylopus atrovirens and at one place a large pool obviously enriched from the exposed rocks nearby. Sphagnum auriculatum of both varieties, Aulacomnium palustre and Juncus bulbosus grow here and there is a single plant of Sparganium angustifolium. 201

Evaluation

Γ

 \Box

This site has a very uniform Molinia vegetation on rather shallow peat and seems of little ecological interest in the terms of this survey. In addition, it is subject to flushing from an eroding peat area on the crest of the valley so its nutrition has been modified. Sheep grazing and fire are probably not as significant influences at this stage.



MANGERTON

SITE NO:	K 28	1/2" MAP NO:	20 or 21
COUNTY:	Kerry	GRID REF:	V98 80
	V 291 AREA (ha):	6" MAP NO:	74,75,84,85 AREA INTACT
(ha): 14 ALTITUDE (m):	750-825	FOREST AREA:	Kilgarvan/
ADITIODE (m).	CATEGORY:	M	Krigarvany
Killarne	∋у		
RATING:	8	TOWNLANDS:	
RECORDERS:	RG,EM		
WRITE-UP:	RG	GEOLOGY:	

Site Description

Mangerton is a rounded mountain of 834m whose north side has been cut into by a series of glacial corries. Its summit therefore lies just above the cliffs of the Devil's Punchbowl and the Horses Glen and there is a surprisingly flat area of deep (1.5m), ombrotrophic peat which extends eastwards and to the south.

The area is much affected by erosion but there are substantial blocks of intact bog separated by bare peat or by peat hags and stones. The intact patches seem large enough to be unaffected by their marginal erosion and close to the summit (B) are made up of Eriophorum spp with Calluna, Sphagnum capillifolium and S.papillosum. The Sphagnum cover is often high, reaching 70-80% in many places. Pleurozia purpurea, Mylia taylori and M.anomala are frequent also, the last two on small hummocks. Molinia is notably absent and there is also little Scirpus cespitosus. In places in this vegetation there are drier 'islands' of Juncus squarrosus and Vaccinium myrtillus, often with Empetrum nigrum and Melampyrum pratense and a little Luzula sylvatica. Grouse rest in these at times. In between, the wetter tracts have Sphagnum tenellum and S cuspidatum and there is some Campylopus Sphagnum tenellum and S.cuspidatum and there is some Campylopus atrovirens. Slightly better drainage near to the summit brings Galium saxatile which grows with J.sqarrosus, in Cladonia arbuscula and Sphagnum capillifolium. There is an adjacent sloping area (D) on loose stones where 10-20cm of peat are covered by a springy turf of dwarf Calluna and Racomitrium lanuginosum, peppered with the tufts of Cladonia uncialis, C.arbuscula and C.rangiferina and also Juncus squarrosus and Carex bigelowii. Dicranodontium denudatum occurs here.

South-west of the summit (C) there is again a close-knit community of Eriophorum vaginatum, Calluna and Empetrum with a well-developed lichen heath on the more exposed places. Traces of this community occur on rises through most of the summit area but it is best developed here. The Cladonias mentioned above are joined by C.portentosa, C.furcata and Cetraria islandica as well

 \Box C] Π as several bryophytes in a complex weft of shoots that is partly broken up by sheep and human trampling. The liverworts include much Diplophyllum albicans and Scapania gracilis but also Riccardia chamaedriifolia, Lophozia excisa, Cladopodiella francisci, Calypogeia muellerana and C.azurea.

This vegetation ceases abruptly to the west where there is an erosional edge but it is noticeable that there are no stream heads penetrating into the intact area and that erosion must therefore be slow.

The south-western boundary of the site is marked by a more uneven topography which introduces a lumpy peat cover partially broken up by rocks and gully erosion. There are extensive areas of Calluna but the slopes are too steep for the development of deep peat.

East of the summit area there is extensive erosion related to the headwaters of the Owbaun river but beyond this . . .

Evaluation

Although relatively small the Mangerton summit area contains very well developed ombrotrophic vegetation with many montane species. It is considerably more species-rich than Caherbarnagh which has a much larger area of intact peat. Several of the species are uncommon - Cetraria islandica and Cladopodiella francisci were not met with elsewhere on this survey while Cladonia rangiferina occurred in only one other site. Calypogeia azurea was not found elsewhere in the south-west but is a component of the high-level bogs in Wicklow.

The occurrence of such a pure lichen heath on peat is also unusual and was not seen in any other site.

The site is one of the few that is mentioned in the literature and for many years has been noted as suffering from erosion. This suggests that the process is slow and that the vegetation will survive in its present form for many years. It suffers some grazing damage but is perhaps more threatened by trampling damage from walkers. It is adjacent to the Killarney National Park. LOUGH NAMWEELA

SITE NO:	K 31			1/2"	MAP NO:	20	
COUNTY:	Kerry			GRID	REF:	V77	80
	V 299 A (ha):	65		6" MA		72, INTACT	
	150-240 CATEGORY:		F	FOREST	AREA:	Killo	rglin
RATING: Dromteewekeen	3		-		TOWNL	ANDS:	
RECORDERS: WRITE-UP:	RG RG			GEOLO	GY:		

Site Description

This is a small area of bog and heath on the sloping hillside below Lough Namweela. It is divided into two sections by outcropping rocks in the centre. The boundary follows the river draining the lake on the eastern side and also along a stream on the west before running at right angles along an old wall.

The upper part is uneven, though largely peat-covered, with rocky rises crowned by tall Calluna and well grown Molinia. The community is heathy in appearence with Carex echinata, Danthonia decumbens, Breutelia chrysocoma and Potentilla erecta sprinkled through it. Slightly deeper (1m) peat occurs in the intervening flatter areas and here the Calluna forms a community with Scirpus cespitosus, Molinia and Erica tetralix. Sphagnum capillifolium is dominant in the ground layer and because of a lack of burning Cladonia portentosa, C.ciliata and C.uncialis are prominent. This community spreads onto the lowlands to the west but it is cut for fuel here.

The lower part of the site is flushed by numerous small streams and its flora is augmented with species such as Rhynchospora alba, Myrica gale and Sphagnum auriculatum. Aneura pinguis grows in the wetter places with Juncus acutiflorus, Hypericum elodes, Anagallis tenella, Schoenus nigricans and Eleocharis multicaulis. In between there are banks of Calluna and Molinia with Sphagnum capillifolium and S.subnitens. The terrain is hard and the Sphagnum cover seldom reaches more than 40%. In some places the peat is only 50cm thick and the underlying substrate is exposed in the stream channels.

Evaluation

This area is too heathy and flushed to be included as a mountain bog and it is also at a low altitudinal level. The absence of burning is its most interesting feature.

SLIEVEANORE

SITE NO:	K 34	1/2" MAP NO:	20
COUNTY:	Kerry	GRID REF:	V76 84
AIR PHOTO NO: AREA (V 239 ha): 125	6" MAP NO: AREA INTACI	72 ' (ha): 20
ALTITUDE (m):	230-300 CATEGORY: F	FOREST AREA: K	illorglin
RATING: (twice)	5	TOWNLANDS: Der	rynafeana
(Lyreboy	7
RECORDERS :	RG		
WRITE-UP:	RG	GEOLOGY:	

Site Description

The site is situated in the upper reaches of the Lough Acoose catchment which eventually joins the Caragh River just above Blackstones Bridge. There is peatland on both sides of the main stream (Glanheenoultagh): the western side rises to the top of a low ridge, the eastern is more sloping and lies below a rocky slope from Caher and Curraghmore Mts. The entire slope on the western side is included in the site but on the east the boundary is set some way up the mountainside, above another N-S stream valley.

A recent (1990) fire has affected much of the site including all its western part. This coupled with intensive sheep grazing limits the vegetation to about 60% coverage with 40% bare, algae-covered peat. Scirpus cespitosus, Eriophorum angustifolium, Molinia caerulea and Rhynchospora alba are the most important species with occasional low hummocks of Sphagnum capillifolium, Hypnum jutlandicum or Leucobryum glaucum. The peat surface for the main part is quite dry and liverworts much rarer than would be expected. Calypogeia sphagnicola and Cepaloziella rubella s.s. are the most frequent. Towards the top of the bog on the western side there is more available water which results in an increased Sphagnum cover (up to 50% in a few places) and a softer texture. Sphagnum compactum, S.subnitens and S.papillosum are the major species and there is a little S.molle in addition. Campylopus atrovirens becomes more frequent and close to flushes there is abundant Drosera intermedia.

The bog also flattens out towards the north end as a summit col is reached with a tributary of the Cottoners River. Here there are some Racomitrium hummocks set among Scirpus cespitosus, with patches of Molinia, Myrica and tall Calluna along lines of water movement. There is Juncus effusus and J.bulbosus, Pleurozia purpurea, Sphagnum palustre and S.recurvum in the flushed sites. Schoenus occurs sparingly, becoming more frequent in the north-eastern corner of the site below the Calluna/Molinia heath

of the mountainside. Here there is a level patch of bog with Scirpus, Molinia, Rhynchospora alba, Sphagnum subnitens and S.auriculatum as the main species and a little Pinguicula lusitanica, Cladopodiella fluitans and Eleocharis multicaulis also.

Southwards on the eastern side of the stream the site has an 8 degree slope and is covered by Molinia and Scirpus, flushed from above. Sphagnum papillosum is commoner than on the other side and there are frequent hummocks of Leucobryum, some with Scapania irrigua. The vegetation is similarly burnt and grazed. This slope is cut through by a series of stream valleys which bring with them a number of minerotrophic plants like Festuca vivipara, Agrostis capillaris and Galium saxatile. Carex cf. strigosa occurs by one of them.

The southern edge of the site is marked by a larger stream which flows around a Rhynchospora/Erica tetralix/Scirpus bog. Where drainage from the bog enters the stream a quaking area dominated by Sphagnum recurvum, Hypericum elodes, Carex paniculata, Potamogeton polygonifolius and Anagallis tenella occurs. The site is iron-rich and has Campylium stellatum, Eleocharis multicaulis, Drosera rotundifolia and Carex echinata also. Wahlenbergia hederacea occurs nearby but was not seen inside the site boundary.

Evaluation

L

This site is much affected by burning and grazing but contains a good variety of habitats with an interesting species list. It is at a comparatively low level so may be classified as a highland rather than a montane site. Given another few years of recovery with a reduced sheep population it could become more important in the overall picture.

LOUGH NAMBRACKDARRIG

SITE NO:	K 40		1/2" MAP NO:	20
COUNTY:	Kerry		GRID REF:	V73 88
AIR PHOTO NO: AREA (1	V9 ha): 45		6" MAP NO: AREA INTACT	64 (ha): 11
ALTITUDE (m):	175-200 CATEGORY:	F,	FOREST AREA: K Highland	illorglin
RATING:	7		TOWNLANDS: Oo	lagh West Ahane
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	

Site Description

This is a low level site which lies to the south of Lough Caragh in a distinctive region of rocky outcrops and blanket bog. It is delimited by the road and associated peat cutting on the eastern side and by the lake itself and its outflow on the west. Two levels occur separated by a slope thinly covered by peat.

The top level is at road height and on 1m of peat a vegetation of Scirpus/Erica tetralix/Calluna occurs in a moderate Sphagnum cover of S.capillifolium, S.subnitens, S.papillosum and S.tenellum. Drosera anglica is quite frequent in depressions though part of the site has been drained in aassociation with cutting so it may not remain so. Molinia is associated with the few rocky knolls that break through the surface where there is some Myrica gale also. On average the surface vegetation is dry: there is no Campylopus atrovirens and Polygala serpyllifolia and Potentilla erecta are widespread. This type of vegetation extends also up tributary valleys south and south-east of the lake.

On the north-eastern side however there is a depression in the topography that is now filled by a small and very wet bog. The vegetation is flushed from the side slopes and there is also a spring in the northern corner. Sphagnum achieves almost complete coverage in much of the area and S.cuspidatum, S.pulchrum and S.papillosum are all abundant with smaller amounts of S.palustre and S.magellanicum. Myrica, Molinia, Scirpus cespitosus and Rhynchospora alba are thinly distributed over the quaking surface and trifoliata, Carex limosa Eleocharis Menyanthes while multicaulis are associated with winding channels that take water from the spring out to the lake. Both Cepalozia bicuspidata and C.connivens are mixed into the Sphagnum carpet but no Cladopodiella was seen. No idea of peat depth could be gained from the surface but 2m would not seem excessive. There was a marker pole sunk into the centre of the bog, perhaps prior to drainage.

[] \Box CJ Π

The margins of this basin are drier though water from the surroundings does flow over them. Sphagnum compactum and Drosera intermedia were a feature of this vegetation, changing into S.capillifolium and Molinia higher up the slope.

Evaluation

 \int

J

Ŋ

 \Box

J

]

]

J

The basin part of this site is untouched and of considerable ecological interest because of the occurrence of Sphagnum pulchrum. It is tiny however and difficult to isolate from land uses such as forestry that could take over the surrounding area. Neither grazing or fire is currently a threat though some burning took place about 5 yrs ago. FEOHANAGH

SITE NO:	K 41	1/2" MAP NO:	20
COUNTY:	Kerry	GRID REF:	Q45 08
AIR PHOTO NO: AREA (1	Q 14 ha): not mapped	6" MAP NO: AREA INTAC	34 CT (ha): 8
ALTITUDE (m): Castlegrogory	180-240 CATI	FOREST AI EGORY: Heath	REA:
RATING:	2	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

Site Description

The site is a glaciated valley under the western side of Brandon Peak. The Feohanagh River rises on the slopes above which are half-vegetated screes with low cliffs and waterfalls. It then flows west to discharge near Ballydavid Head.

The vegetation is all subject to flushing from above and is a mixture of wet heath and shallow bog, with rock outcrops. Its development has been arrested by extreme grazing pressure so that there is now a considerable area of bare or almost bare peat with a little erosion, especially around rocks. Scirpus/Molinia is the chief community with Sphagnum papillosum and S.cuspidatum as a limited (up to 20%) ground cover. There are hummocks of Racomitrium and tussocks of Eriophorum vaginatum but both are broken down by sheep treading and colonised by Pleurozia and Mylia taylori. The runnels in between have frequent Eleocharis multicaulis, Carex panicea and Rhynchospora alba and in one place Campylopus atrovirens and Sphagnum auriculatum var. inundatum. Cladonia strepsilis grows widely on the wet peat.

There are several rocky rises in the central area which bring in a different group of species including Herbertus, Thuidium tamariscinum, Scapania etc.

At the south end the bog vegetation runs into the shallow floodplain of the stream where Juncus effusus, Molinia caerulea, Eleocharis multicaulis and Agrostis stolonifera grow with Anagallis tenella, Carex demissa and Drosera rotundifolia.

Evaluation

Peat development has not been extensive enough to classify this site as a bog and it can be thought of instead as a wet heath subjected to a very high rainfall. Deeper peat occurs down valley but it has been much dissected by cutting and has no interest.

Grazing is an adverse influence on the vegetation and structure

 \Box \bigcirc [] Π

 \int

at present. In the surrounding area, however, it probably favours the large population of choughs, of which 30 were seen on the cliffs and old fields. -SLIEVENAGOWER COUMANNIC

SITE NO:	K 43		1/2" MAP NO:	20
COUNTY:	Kerry		GRID REF:	Q53 06
AIR PHOTO NO: AREA	Q 10 A (ha):	293	6" MAP NO: AREA INI	35,44 FACT (ha):
ALTITUDE (m): Castlegregory	360-390		FOREST AF CATEGORY: F	REA:
RATING: Puckisland,	11		TOWNLANDS: C	Coumanare,
r uchi biuna y			Ballyho Banoguo Gowlano	e North
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	

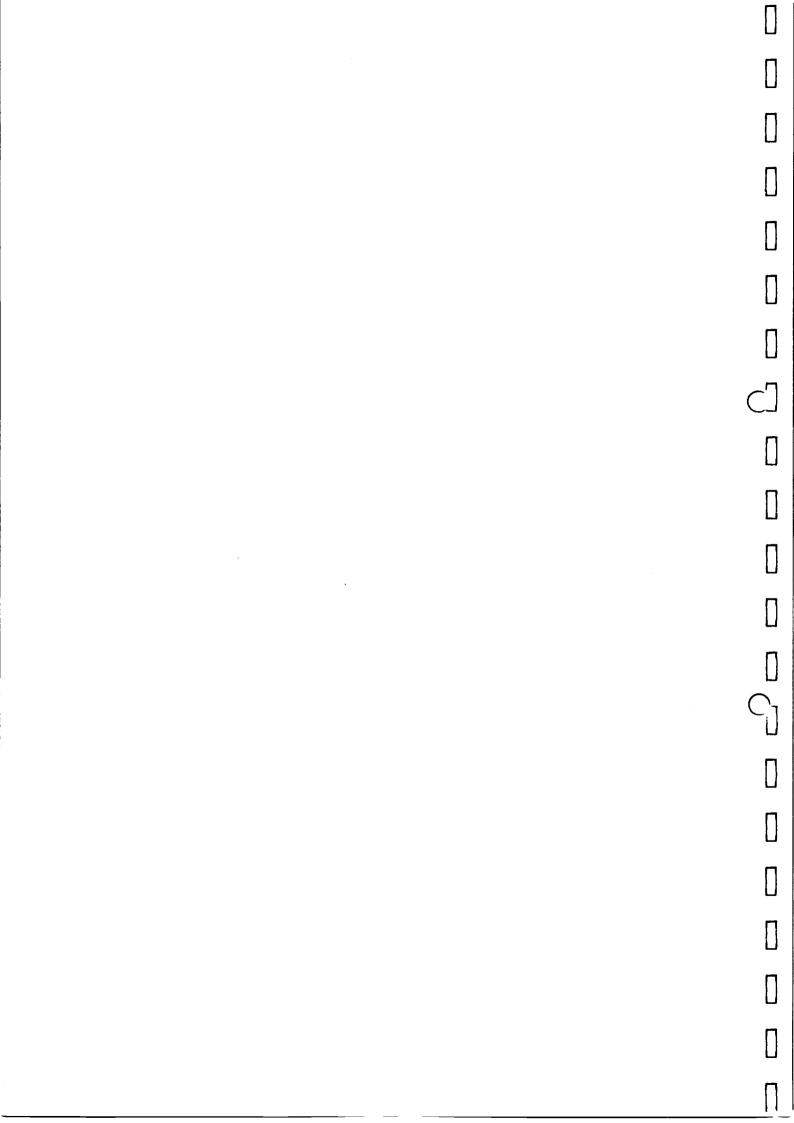
Site Description

r L

> This site is delineated by the summit of Slievenagower and the high ridge of Beenbo to the east and Slievenalecka to the west. From here the boundary runs to Lough Duh and eastwards along a low ridge around the upper catchment of the Glenahoo river.

> The northern side of Slievenagower consists of a series of cliffs at the head of three adjacent glaciated valleys but the southern side slopes down more gently to a plateau area. Here the Glennahoo and the Scorid Rivers both rise before dropping to Brandon Bay on the north side. The Scorid in particular has a very flat course to the crest of the cliffs where it escapes as waterfalls and rapids. Along this middle course there is a line of springs so the ground is permanently saturated. A large scraw has developed over several hundred metres on the western side. It is dominated by Sphagna, notably S.cuspidatum, S.auriculatum var. auriculatum, S.papillosum and S.subnitens. More locally there are lawns of S.recurvum, S.palustre and S.auriculatum var. inundatum while Aulacomnium palustre is frequent throughout. In the spring areas Scorpidium scorpioides, Drepanocladus uncinatus, Aneura pinguis and Riccardia multifida form a sub-community while Cladopodiella fluitans is more widely spread. The main higher plant species are Eriophorum angustifolium, Menyanthes, Potamogeton polygonifolius, Juncus bulbosus and Carex limosa: there are odd tufts also of Molinia and Juncus effusus but the former is grazed quite strongly (and, in view of the terrain, quite incredibly) by sheep. At the southern end of the scraw one of the feeding streams discharges into a stand of Carex rostrata, C.echinata and Sphagnum recurvum with some Juncus acutiflorus also.

> The scraw is a small part of the total site which includes a



large intact area on the slopes of Knocknagower and Beenbo as well as a partially eroded area at the edge of the Scorid river basin. The former area is generally a Scirpus/Molinia stand with 20-30% cover of Sphagnum papillosum and S.capillifolium. а Burning has occurred about 3 yrs ago and there is, as yet, little Cladonia coverage. The vegetation is very uniform though traces of old erosion towards the base of the slope create a lumpier topography on which species like Carex echinata, C.demissa, Juncus effusus, and Pedicularis sylvestris flourish. To the west there is a more even and lower slope towards the river channel a Scirpus/Rhynchospora alba/Campylopus atrovirens here and community is found with hummocks of Racomitrium and Sphagnum capillifolium standing out. These are badly trampled close to the river though they do support Dicranum majus, Diplophyllum Calypogeia muellerana and Kurzia pauciflora s.s. albicans, Similar hummocks and hags on the eroded area to the south share most of these species with Scapania gracilis, Cladonia squamosa and C.strepsilis in addition.

The erosion is concentrated on slightly greater slopes at the south end of the site. To the east on the watershed between the rivers it peters out and there are more areas of two Scirpus/Molinia with a greater proportion of Calluna as well as Sphagnum papillosum and S.capillifolium. The surface is uneven and there are a few channels of shallow erosion, some of them apparently repaired by Eriophorum angustifolium and Sphagnum capillifolium. Part of this area is marked by plastic sacks, as if for fertilizer application. It adjoins a large area of Molinia vegetation cut by occasional 1m slit drains that are visible on the aerial photograph. Water flows in some of them but the amount of Sphagnum in the vegetation remains high, the highest (at 70-80%) of any part away from the mineral flush. Erica tetralix and Scirpus are also present in the vegetation and assume greater prominence upslope where the drains cease to work. The vegetation is generally tall here though it does not seem fertilised. There is a total absence of Cladonia portentosa which may imply a regular burning pattern.

Evaluation

This is quite an impressive area of intact mountain bog, all flushed from the slopes above. The scraw, however, is the unique feature on the site and is far bigger and better developed than anything else seen on the survey. -LOUGH-SHANOGUE-

SITE NO:	C 2		1/2" MAP NO:	24
COUNTY:	Cork		GRID REF:	V84 55
	V 105 REA (ha):	312	6" MAP NO:	103,104 AREA INTACT
(ha): 49 ALTITUDE (m):	420-465 CATEGORY:	F	FOREST AREA:	Glengarriff
RATING:	11	-	TOWNLAND	S: Glenlough,
Coomarkane			Cro	ossterry West,
			Roi	ıgham
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	

Site Description

The area is situated in the central part of the Caha Mts, 7 km west of Glengarriff. It occupies an undulating plateau sprinkled with small lakes between Glenlough Mt and Ram's Hill. It is drained by the Adrigole River to the west and the Glengarriff River to the east. On the western side the boundary follows a local watershed between two branches of the Adrigole River: this includes the Cork/Kerry border at one point. In altitude the site averages about 480m.

The terrain is rocky but there are many patches of shallow, flushed peat and occasional ombrotrophic domes on the more even slopes. In coverage terms the most widespread vegetation is a Scirpus/ Eriophorum angustifolium blanket in which Narthecium ossifragum and Sphagnum auriculatum are rather common. S.compactum occurs in lesser quantity, especially where the peat is bared by trampling or fire. There is often Cladopodiella fluitans growing through it. In the flatter col areas a vegetation of E.vaginatum/Scirpus/ Molinia/Calluna is dominant and here Racomitrium lanuginosum tends to relace Sphagnum, forming a soft and even carpet without significant hummocks. S.capillifolium is the only species and is rare perhaps because of recent (3-4 yr) burning. In a few places on the ridges there are traces of gully erosion, but these are on a very small scale.

The southern part of the site is dissected with rocky ribs around which wind tributaries of the Adrigole River. There are frequent very wet areas ponded against the ridges and on these scraws have frequently developed. In one examined there was about 40% open water in randomly arranged pools with scattered Eriophorum angustifolium. Elsewhere the vegetation is made up of Schoenus in a mixture of Scirpus cespitosus, E.angustifolium, Molinia and Rhynchospora alba. Sphagnum papillosum is the major species in

these scraws while S.cuspidatum and S.auriculatum of both varieties grow in the wetter tracks along with Menyanthes, Drosera intermedia, Potamogeton polygonifolius and a little Drepanocladus exannulatus. Narthecium and Campylopus atrovirens make up the rest of the vegetation. There are occasional hummocks (of burnt, half-alive Sphagnum) on which Scapania nemorea and S.gracilis grow, together with Lophozia ventricosa and lichens such as Cladonia subcervicornis, C.cervicornis, C.polydactyla and C.coccifera.

Some of the small lakes on the eastern side of the site are surrounded by a Sphagnum carpet where the shelter allows it. S.recurvum, S.papillosum, S.palustre and S.auriculatum form extensive lawns with Carex limosa, Menyanthes trifoliata, Molinia, Carex nigra and C.rostrata growing through them. At the rear, Carex echinata and Juncus effusus occur sparingly.

In general terms Molinia is evenly spread through the vegetation, becoming more frequent around rock outcrops and near to streams where it assumes a tussocky form. If the streams are in contact with the underlying rock, as in springhead flushes, Carex paniculata, C.echinata and C.limosa are characteristic of the wetter areas with some Sphagnum recurvum and Aulacomnium palustre also.

Evaluation

The site contains many small areas of peatland which add up to give a considerable range of habitat with little erosion or grazing. Adjacent habitats of heath, lake and streams are also of interest. CROSSTERRY

C 4 1/2" MAP NO: 24 SITE NO: GRID REF: V93 59 COUNTY: Cork AIR PHOTO NO: V 103 6" MAP NO: 90,91 AREA INTACT (ha): 70 AREA (ha): 33 FOREST AREA: Glengarriff ALTITUDE (m): 255-350 CATEGORY: F **TOWNLANDS:** RATING: 3 Derreennagough Canrooska **RECORDERS:** RG **GEOLOGY:** WRITE-UP: RG

Site Description

Crossterry consists of the southern slopes of Barraboy Mt just north of Glengarriff. There is a evening out of the slope of the hill which extends southwards as a ridge and is the source of two tributaries of the Glengarriff River.

The site is chiefly remarkable for its peat cover since most of the surroundings are particularly rocky. The peat is quite thin however (50-100cm) and the vegetation probably retains some contact with the underlying rock.

Most of the area is a sea of Molinia with a scatter of heathy species like Polygala serpyllifolia and Potentilla erecta. This is mainly due to recent burning and there is some Calluna, Eriophorum angustifolium and Sphagnum coming back. S.capillifolium, S.tenellum and S.compactum are the species involved and in places they cover 5-10% of the ground. Where the Molinia has not yet monopolized the vegetation there is a little bare peat, sometimes in hummocks with Campylopus introflexus, C.paradoxus, Cladonia squamosa and Juncus squarrosus or, in damper sites, with Mylia anomala and Odontoschisma sphagnicola.

There are some wetter lines of Scirpus through the area, with Erica tetralix and sometimes Eleocharis multicaulis but in general the dryness is notable. A little flat ground occurs at the top of the ridge and here the Molinia dies out to be replaced with Scirpus/

Campylopus atrovirens/Rhynchospora alba with more frequent Sphagnum (S.papillosum, S.capillifolium) and Racomitrium lanuginosum forming the ground layer. Pleurozia purpurea, Cladonia uncialis and C.portentosa occur here, the only part of the hillside that they are found.

The slope of most of the site is of the order of 3-6 degrees but at its edges it increases to about 8 degrees, falling away into old fields with banks and many sheep.

Evaluation

J

J

]

 The site has little interest from a vegetational point of view and even when it recovers from burning it will remain a uniform habitat with abundant Molinia. It could be given over to forestry without concern. Derryclegher -- KNOCKBOY

SITE NO:	C 9		1/2" MAP NO:	24
COUNTY:	Cork		GRID REF:	W01 62
	W 26 REA (ha):	536	6" MAP NO:	79, 91? AREA INTACT
(ha): 54 ALTITUDE (m): RATING: Derryclogher	540-630 CATEGORY: 11	F	FOREST AREA: TOWNI	Glengarriff ANDS:
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	Curramore

Site Description

The Cummeendarrig River rises on the eastern flank of the Knockboy ridge as a series of parallel streams which coalesce and flow southwards to the head of Bantry Bay as the Coomhola River. The site limits mostly follow the watershed of the upper valley which includes the county boundary. From Knockboy however the boundary runs eastwards to a subsidiary summit (1687 ft) and then down to join the Cummeenboy River. There is a break of slope with waterfalls and then a flattish valley below (which is another site, C 10).

The upper catchment is an undulating mixture of rocky outcrops and ledges, stream flushes and peat bogs. Many are small (1-2ha) but they occur with regularity on a series of shelves across the mountainside wherever the slope is 3 degrees or less. Towards the upper reaches of the site there is a more extensive and partly ombrotrophic peat cap whose edges must slope at about 5 degrees.

Slope appears locally to define the composition of the bog vegetation. The flattest sites consist of a squelchy mass of Scirpus cespitosus, Campylopus atrovirens, Pleurozia purpurea and Cladonia uncialis but rather little Sphagnum. This is mainly S.cuspidatum and S.papillosum but there is often a little S.compactum at the edges where Rhynchospora alba may also occur. Racomitrium is widespread though it does not form hummocks on these wet sites. On drier and slightly more sloping ground the Scirpus is joined by Molinia, Eriophorum angustifolium, Erica tetralix, Sphagnum capillifolium and occasional Pinguicula grandiflora. There is more Racomitrium, now forming hummocks on which Cladonia arbuscula, C.portentosa and C.bellidiflora may grow. Liverworts are present in great variety responding to the constant moisture. Mylia spp., Lophozia ventricosa, Bazzania Riccardia latifrons, Calypogeia sphagnicola trilobata, and and, locally, clumps of Herbertus aduncus are C.neesiana conspicuous.

The Herbertus is most frequent on the steep edge of the highest bog which is eroding back slowly as a 1.5m bank. This is the

largest area of intact peat on site. Its vegetation includes Eriophorum vaginatum along with Scirpus and Racomitrium and there is some Molinia, especially around the lower edges. The surface bears traces of linear pools and tracks which occur across the contours and are not associated with erosion. Sphagnum cuspidatum and S.tenellum fill some of them. Grouse visit this area but sheep are few in number and burning has not been recent. Despite this the Calluna growth is weak and the plant only grows tall in some adjacent flushed areas.

Most of the bogs are surrounded by such enriched ground where surface water is present in wet weather. Molinia is abundant, often with Sphagnum palustre, Juncus effusus, Polytrichum commune and Carex echinata. Sphagnum auriculatum is a feature of many of the flushed areas as is Juncus bulbosus and Rhynchospora alba, particularly at the lower levels. As nutrients increase towards stream banks species such as Juncus acutiflorus, Carex nigra, Anthoxanthum odoratum and Rumex acetosa enter the picture with Montia fontana, Anagallis tenella and Campylium stellatum close to springs. Tortella tortuosa occurs around the banks while there is much Pellia epiphylla, Fissidens adianthoides and Hyocomium armoricum also.

Evaluation

This is a complex mountain site with much ecological interest. It includes many small patches of bogland but, more importantly, offers a multitude of gradations from rock and heath to bogland and stream flushes that is practically untouched by anthropogenic influence. Its species list is long for this reason. BORLIN VALLEY

1/2" MAP NO: 24 SITE NO: C 10 W03 62 GRID REF: COUNTY: Cork 6" MAP NO: 79 AIR PHOTO NO: W 26 AREA INTACT (ha): 34 27 AREA (ha): Glengarriff FOREST AREA: ALTITUDE (m): 255 V CATEGORY: TOWNLANDS: RATING: 2 Derryclogher **RECORDERS:** RG **GEOLOGY:** WRITE-UP: RG

Site Description

The Cummeendarrig River descends from its upper catchment by a series of waterfalls before meandering through the partly glaciated Borlin valley. There has been peat growth on both sides of the river so a number of separate lobes of bogland occur, mostly flushed by water from the valley sides above or from the network of tributary streams.

The site adjoins C 9 above and is bounded by the river on the south side and a hillside on the north.

The vegetation is strongly grazed and so is poached and more hummocky than natural. It has also been burnt quite frequently, the last occasion being 3-4 years ago. Erica tetralix, Rhynchospora alba, Eriophorum angustifolium and Scirpus cespitosus are the dominant species but they seldom achieve a complete cover and there is some bare peat exposed. Around the edges this is broken into a series of small hummocks crowned by Racomitrium with Cladonia pyxidata and C.coccifera and some Scapania gracilis. Few Racomitrium hummocks occur on the main bog surface though Leucobryum seems relatively frequent. In general there is a low cover of Sphagnum, including S.papillosum, S.subnitens and some S.magellanicum. S.auriculatum var. inundatum grows in the obviously flushed sites. The bog surface is firm and S.cuspidatum quite rare.

Myrica gale, Rhynchospora alba and Schoenus are conspicuous throughout the site. They occur all round the edges of the bogs, the first two sometimes in quite extensive flats with few other species. They grow also in low places within, either in hollows or more linear features which may in some cases be old drains.

Where the streams reach the lowland there are lagg areas in which Juncus acutiflorus and Carex hostiana are common along with Myrica and tall Erica tetralix.

Evaluation

This is clearly a lowland site which is extensively flushed. If

grazing and fire damage could be prevented it could become interesting as it shows a nice inter-relationship between the streams, the surrounding slopes and the vegetation. There is scarcely any erosion as the area is largely flat.

KNOCKNAFALLIA

SITE NO:	Wa 1	1/2" MA	P NO:	22
COUNTY:	Waterford, Tippe:	rary GRID RE	F:	S09 07
AIR PHOTO NO: 91) (ha): 2		6" MAP N not mapped	0:	12(+ Tipp AREA INTACT
ALTITUDE (m): Knockmealdown	_	CATEGORY:	FOREST M	AREA:
RATING: RECORDERS:	Cappoquin -1 RG	TOWNLAND)S:	
WRITE-UP:	RG	GEOLOGY:		

Site Description

r L

J

Knocknafallia is one of the most easterly mountains in the Knockmealdowns, lying north of Cappoquin. It is a conical mountain with slopes too steep for peat growth. However a ridge extends north-westwards to Knocknagnauv some way below the summit which formerly was thickly covered. Another hillside, the south side of Knockmeal was also examined.

The high fragment of bog takes the form of a narrow dissected strip standing some 1.5m above the basement rock. It carries a thick growth of Eriophorum vaginatum, Calluna, Empetrum and Sphagnum capillifolium which, because it is raised above the surroundings, seems to have escaped adjacent fires. A little S.tenellum occurs as well as Lophozia ventricosa. Locally there are small patches of Vaccinium myrtillus and Luzula sylvestris, the latter at the edges of the peat block where drainage is somewhat better. Aulacomnium palustre also grows in a shallow depression. Erosion is affecting all the edges of the site but in particular the northern and lowest part which is gullied. Sheep are abundant in the vicinity.

The peat block is only some 3-400m long by 40m wide. It stands above a stony heath of windshorn Calluna and Racomitrium lanuginosum. Cladonia ramulosa occurs in this, as do a few plants of Carex bigelowii.

The lower site on Knockmeal has a south-facing slope of about 7 degrees and peat of about 50cm thickness. Its vegetation is heathy in character with a proportion of grasses (Molinia and Agrostis canina) and Potentilla erecta in Calluna and Erica cinerea. Some Scirpus also occurs. The site was burnt 4 yrs ago and contains several of the fire-related Cladonias for this reason.

Evaluation

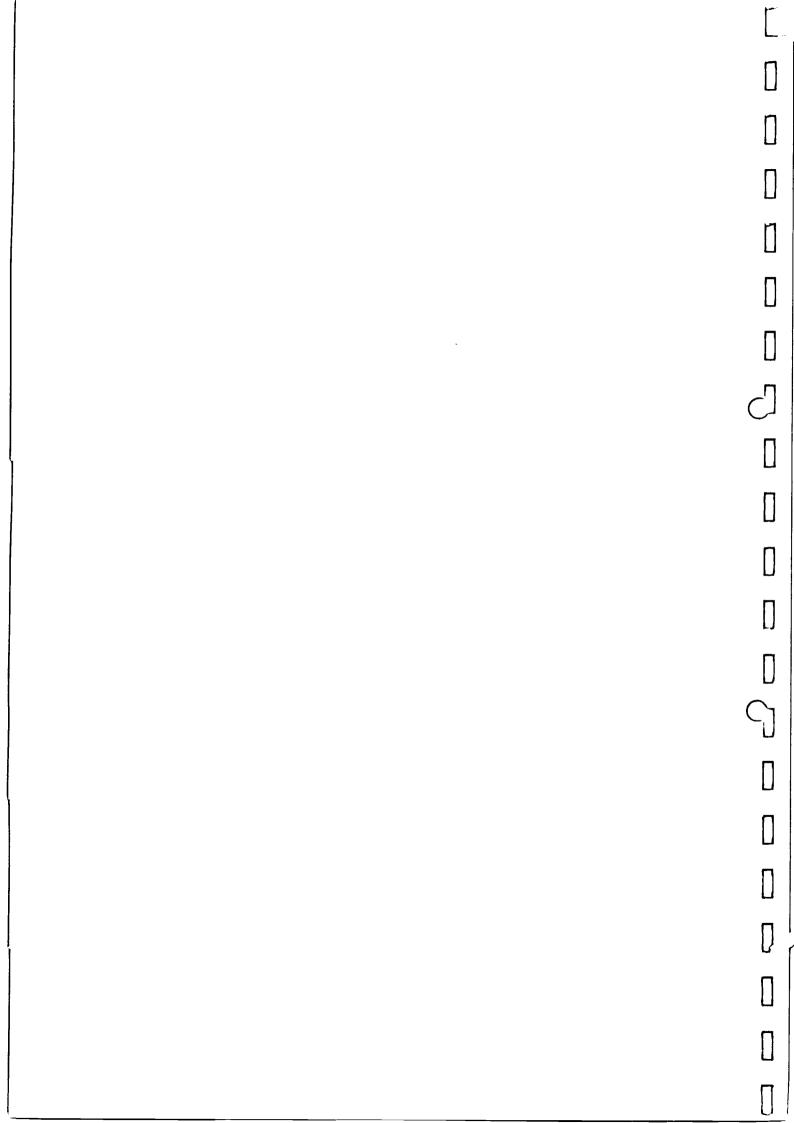
The tiny size of the upper site makes it of little value ecologically. Its vegetation is drier than it would naturally be



ROGERS SITES - NOT INCORPORATED INTO MAIN TEXT YET. - BEWARE!! :- Some Sites in this file have been meorforated. Some may have had nome changes. - Refer to Site Numbers on Top of Pages.

-) U

 \Box



and it is also liable to further erosion.

The site on Knockmeal should be considered heathland and not bog.

Ĺ [] [] 3 2 \int []CJ \Box

KNOCKNANASK

SITE NO:	Wa 2		1/2" MAP NO:	22
COUNTY:	Waterford		GRID REF:	S11 07
AF	S 775 REA (ha):	103	6" MAP NO:	166,167 AREA INTACT
(ha): 4 ALTITUDE (m):	420 CATEGORY:	F,	FOREST AREA: Heath	Cappoquin
RATING:	-2		TOWNLA	NDS:
Tooranaraheen				Knocknanask
RECORDERS: WRITE-UP:	RG RG		GEOLOGY:	

Site Description

r L

]

Ц

This is a low, flat-topped hill just to the east of the Newcastle - Cappoquin road in the Knockmealdowns. It is surrounded by forestry areas but as yet has not been affected. The peat is quite shallow (50-60cm) and has been extensively cut in the past so that there are frequent steps and trenches now partially concealed by Calluna growth. The site boundary follows the mid-slope of the hill which flattens out to the west of the summit.

The vegetation now consists largely of Calluna, Erica cinerea and Scirpus though there are some patches of Eriophorum vaginatum, Calluna and Sphagnum capillifolium where drainage is not as free. Fire has affected the area about 3 yrs ago and in some places Cladonia pyxidata, C.coccifera and C.crispata are abundant on the open peat. Deschampsia flexuosa, Galium saxatile, Festuca ovina and Juncus squarrosus are frequent species where the peat is cut away.

A tiny plateau bog also occurs to the north of the hill, running north-east. Here Scirpus and Calluna are the dominant plants with much Narthecium, Cladonia portentosa, Molinia and Juncus squarrosus. The surface is quite wet and includes Sphagnum papillosum and S.tenellum.

Evaluation

These sites are either too cutover or too small to merit further attention.

C C]

Π

COUMTAY

SITE NO:	Wa 3	1/2" MAP NO:	22
COUNTY:	Waterford	GRID REF:	S29 08
AIR PHOTO NO: AREA (S 730 ha):	6" MAP NO: AREA INTACT	14 (ha): 47
ALTITUDE (m):	540-690 CATEGORY: M	FOREST AREA:	Comeragh
RATING:	7	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG,EM RG	GEOLOGY:	

Site description

This is an extensive site which is located on the Monavullagh plateau to the west of the Mahon Falls. Two separate areas are included, the long ridge which runs north-west to Coumalocha and the ridge that connects this summit to Coumfea along the top edge of the huge corrie in which the River Nier originates. The site rises by about 60m from SE to NW, culminating at 690m close to Coumfea. The slopes on the main SE-NW axis are slight but increase on each side of the ridge into the adjacent valleys. Two main streams occur which flow down towards the Mahon Falls.

The peat cover varies between 1-2m over much of the site and generally carries a closed vegetation (as in A) of Scirpus, Calluna and Sphagnum capillifolium. Empetrum is locally important while Scirpus gives way to Eriophorum vaginatum where the slope is 1 degree or less. In such places there are a few pools though these seem mostly connected to peat slippage and incipient erosion. Sphagnum capillifolium and S.subnitens are the main species though there is some S.papillosum and a little S.auriculatum. In total the Sphagnum cover can be 80-90% but more generally over the site it averages at about 25%.

Eriophorum vaginatum assumes major importance in B where there is a well-grown cover 4-5 yrs old and so dense as to exclude Cladonia portentosa. Indeed this species is rare over the entire site. Large Sphagnum capillifolium hummocks are crowned by Calluna. Scirpus is restricted to slightly greater slopes and is especially prevalent above the headstream erosion which is working upwards from the east. The existing stream reveals a peat thickness of 2m and the bog is becoming dissected by fairly active channels. Racomitrium characterises the adjacent lumpy terrain with Cladonias such as C.strepsilis, C.bellidiflora, C.crispata and C.subcervicornis. In the stream channels the stony drift is being colonised by Juncus squarrosus, Deschampsia flexuosa, J.bulbosus, Sphagnum papillosum and S.recurvum. Erosion is also occurring on this part of the ridge along the stream as it turns NW.

Area D is the highest part of the intact bog and it is basically a Scirpus area with lawns and mounds of Sphagnum papillosum and S.capillifolium and a notable number of tight hummocks of Polytrichum alpestre. Although the peat seems thick a variety of other species are growing through it like Deschampsia flexuosa, Festuca vivipara and Empetrum nigrum. The Sphagnum species can cover 80% of the ground in places and in a dry condition they may give rise to the pale colour of the vegetation shown by the aerial photograph. The high level hummocks are rich in liverworts: Diplophyllum albicans and Lophozia ventricosa are conspicuous along with quantities of Kurzia pauciflora and Cephaloziella hampeana. Mylia taylori was not seen however.

Erosion sets in to the north working upwards from the Mahon Falls but not yet decimating the peatland vegetation. To the south by contrast the peat has been totally stripped so that the crest of the Coumfea cliffs is bare rock in places. Adjacent areas are either vegetated or bare soft peat, sometimes eroding in layers as in a pile of paper. At one point a permanent pond has allowed some excellent regeneration of Sphagnum papillosum and Polytrichum alpestre. Sheep seem to congregate on the rocky surfaces sheltering between the 1.5m peat hags.

Evaluation

There is much of interest in this site as it is high level bog with a characteristic vegetation modified by its south-eastrely location. The absence of Mylia and the abundance of Polytrichum alpestre would seem to be notable features.

Enough intact peatland remains for an ASI to be worth creating although erosion appears to be a severe problem.

An interesting stream flush occurs below the eastern end of the intact bog with Saxifraga stellaris.

MOANYARHA

SITE NO:	Wa 6	1/2" MAP NO:	22
COUNTY:	Waterford	GRID REF:	S26 17
AIR PHOTO NO: AREA (h on photo		6" MAP NO: AREA INTACI	2 ' (ha): 45
ALTITUDE (m):	400 CATEGORY:	FOREST AREA: K Headwater	ilsheelan
RATING:	2	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG,EM RG	GEOLOGY:	

Site Description

The site lies under low hills in a small flat valley at the north end of the Comeragh Mts. It is the watershed for two small streams, the southern one leading to the Nier and the northern one to the Glasha which discharges at Kilsheelan. The peat is very thick, up to 3m in places but it seems based on flat stony ground rather than on a former depression.

The vegetation has been much affected by drainage and fire and there is further recent work on the surface connected with largescale peat extraction. It consists now of a dryish mixture of Scirpus, Calluna, Erica tetralix and Hypnum jutlandicum with a Sphagnum cover of up to 10%, mainly of S.papillosum, S.capillifolium and S.tenellum. There is a certain amount of Narthecium and Drosera rotundifolia but the main feature is the abundance of small liverworts which covers all the recently burnt (3yr) ground. These are of widespread species including Calypogeia sphagniocola, Odontoschisma sphagni, Mylia taylori, Cephalozia connivens, Lophozia ventricosa and Kurzia pauciflora.

There is little apparent variation over the site though a good part of the vegetation has been destroyed by ridging prior to harvest.

Evaluation

The site now seems too far gone to be able to save but it appears to have been most unusual in location, depth and possibly vegetation.

Misplaced parest. or prostant paresport

Evaluation

This is a large and varied site which shows many of the features of Wicklow upland peat and has a rich species list. The intact river source would seem to be particularly unusual in a region beset with erosional problems. The surrounding land includes high level heath

GALTYBER CO TIPPERATRY

with Vaccinium vitis-idaea, Empetrum etc as well as stony areas from which the peat has been totally removed. The south side of Mullaghcleevaun includes one of the largest areas of bare, eroding peat in Wicklow. There was a single golden ployer on it in September.

Grazing and fire are obviously detrimental influences at the moment but if controlled the site would become even more valuable.

YThe site consists of the summit ridge of the Galtees east of Galtybeg where there are fragments of intact peat. It runs eastwards towards Lough Muskry as an undulating succession of rounded summits and cols. It is a high altitude site averaging about 720m.

The vegetation of the deeper (1m) peat is generally Eriophorum vaginatum/Calluna/Sphagnum capillifolium with some Vaccinium myrtillus, Festuca vivipara, Empetrum, Juncus squarrosus and a little Luzula sylvatica. Scirpus occurs regularly but there is no Molinia. With height the plant cover becomes shorter, the Calluna and Empetrum reaching only 6-8cm. They are overtopped by Eriophorum angustifolium to about 30cm. There is more open ground and some bare peat, suiting Carex panicea and Campylopus atrovirens. Sphagnum cuspidatum and S.subnitens occur in a few depressions.

The summit regions have in some cases retained their peat cover but are also sometimes stony. Whatever the substrate Racomitrium is a major species with Calluna, Juncus squarrosus and Festuca vivipara. The peaty (up to 1.5m in places) have hummocks of sites Polytrichum alpestre, often crowned by a compact growth of Mylia taylori. Lophozia ventricosa, Kurzia pauciflora and Cephalozia bicuspidata occur in sheltered positions. Growing through the mosses in scattered patches are Cladonia arbuscula, C.furcata, C.polydactyla, C.bellidiflora and C.rangiferina. The stony areas nearby have fewer of these lichens in a dwarf mix of Racomitrium and Calluna with Agrostis canina and Polytrichum juniperinum. Occasional plants of Carex bigelowii also occur.

Along the ridge are saddle areas which are slightly wetter and contain more Sphagnum, especially S.papillosum and S.cuspidatum, along with Scirpus

cespitosus. Cladonia portentosa is commonest in these is quite rare in the more sites: it exposed vegetation. A large tor, O'Loughnan's Castle, is situated in saddle but its one such coarse conglomerite does not harbour any plants of interest. To the east the peat becomes thinner though there is further block above Lough Muskry that is one reasonably intact. The ridge runs NW thereafter and the peat areas become progressively more broken up. Some cutting even seems to have been done beside the stone wall which runs here.

139

EVALUATION

The vegetation of this site shows it to be a montane bog, recalling Mangerton in Kerry with its lichen flora and dwarf vegetation. The peat cap however is fragmented, small in extent and beset by gully erosion and sheep grazing. It retains some ecological interest however.

SLIEVE BLOOMS, EAST OF CUT

SITE NO:	Ls 1	1/2" MAP NO:	15
COUNTY:	Laois	GRID REF:	N30 03
AIR PHOTO NO: AREA (h +		6" MAP NO: AREA INTACT	6 (ha): 164
ALTITUDE (m):	445-480 CATEGORY: M	FOREST AREA:	Clonaslee
Mountrat	h		
RATING:	13	TOWNLANDS: Bordow Monick	in, Con- new, ?,?
RECORDERS: WRITE-UP:	RG,EM RG	GEOLOGY:	

Site Description

The site covers the ridge top east of the Cut, extending for at least 3km to Baunreaghcong, the third peak in a SE direction. The northern side lies above the upper valley of the Barrow while the south is drained by the Delour river which joins the Nore. Throughout the area the slopes are very slight and locating oneself is often a problem. They are generally of the order of 1-2 degrees in the upper reaches but increase to 5 degrees as the edges are approached or even more, close to streams. No rock is exposed however.

The immediate impression given by the vegetation (at A) is one of tallness and density, dependant on a lack of fire and of grazing. Most of the lower part of the site is covered by a bushy stand of Calluna (up to 40cm high) and Eriophorum vaginatum above a layer of Hypnum jutlandicum and Sphagnum capillifolium. There is a constant presence of Scirpus, Erica tetralix and Andromeda polifolia while Cladonia portentosa is frequently abundant. There is a little Huperzia selago despite the lack of erosion and also Luzula sylvatica. The closeness of the vegetation means that there is no bare peat and no room for hepatics or the smaller Cladonias. Occasional damper places allow other Sphagnum species to appear, including S.papillosum and S.magellanicum, but the 4-5 degree slope inhibits extensive wet areas. Grouse, however, seem relatively frequent.

At one point there is a dry swallow hole in the hillside which shows a peat depth of 2.5m. It is not associated with any obvious erosion or surface features and is of quite long standing. Trees of Sorbus aucuparia and Betula pubescens mark the spot and there are many bryophyte species also. Mnium hornum, Lophocolea bidentata, Pleurozium schreberi, Plagiothecium undulatum, Eurhynchium praelongum and Isopterygium elegans are the most obvious. Molinia, Deschampsia flexuosa, Galium saxatile and Potentilla erecta also occur: these are species absent from the main bog surface.

Higher up the slopes (B) where the angle is a mere 1-2 degrees the predominant Calluna/Eriophorum vaginatum community changes to a slightly wetter one including greater amounts of E.angustifolium, Narthecium and Sphagnum, which may cover 60% or more of the ground. S.subnitens seems relatively frequent but there is also S.papillosum and S.capillifolium. This species occurs in lawns but also, in places, as large hummocks crowned with sparse Calluna growth. The overall appearence of these areas is of an Eriophorum vaginatum/E.angustifolium stand but Calluna is also a constant component, covering about 50% of the ground. Empetrum becomes important too.

The Sphagnum hummocks are even better developed and more frequent on the ridge top towards the east (C). They are generally based on S.subnitens or S.papillosum with S.capillifolium above to give a maximum height of 70cm. Vaccinium oxycoccus is associated with some of them and Mylia taylori also sometimes establishes itself amongst the Sphagnum. Other liverworts that are present include Lophozia ventricosa, Cephalozia lunulifolia and Cephaloziella cf. hampeana.

The headwaters of some of the tributaries of the Barrow river are marked by extensive peat collapse and cracking though no outright surface erosion. The peat is 2m or more in thickness and along one stream has sheared into 15-20 sequential cracks separated by 8m or so of intact surface. Calluna growth is enhanced in all this northern area and there are niches occasionally for Dryopteris spp., Rubus fruticosus etc. At the top of the slope but not associated with the erosion are a number of small pools with Sphagnum cuspidatum and Narthecium pools. One of them contains Campylopus atrovirens which otherwise is notably rare. C.paradoxus by contrast is frequent as is C.pyriformis and C.introflexus on the upturned peat of a few shallow drains probably boundary markings.

Evaluation

The intactness and condition of the vegetation on this site is remarkable in the context of the blanket bog habitat. Although the inherent site diversity is not high the area is undoubtedly of international value and must in some ways resemble what the Wicklow bogs would be like in the absence of grazing and burning.

SLIEVE BLOOMS, WEST OF CUT

SITE NO:	Ls 2	1/2" MAP NO:	15
COUNTY:	Laois	GRID REF:	N28 03
AIR PHOTO NO: AREA (h +	N 236 a):	6" MAP NO: AREA INTACT	6 (ha): 92
ALTITUDE (m):	445-460 CATEGORY:	FOREST AREA: M/Headwater	Clonaslee
Mountrath			
RATING:	13	TOWNLANDS:	?,?,?
RECORDERS: WRITE-UP:	RG,EM RG	GEOLOGY:	

Site Description

The ridge of the Slieve Blooms west of the Cut is lower and narrower than that to the east. It consists of an extremely flat oblong area at 450m, hemmed in by forestry on the north and south. After about 1km the site drops off slightly into the valley of the Gorragh River before rising again onto Wolftrap Mountain, the site of several communications towers.

The vegetation naturally resembles that in Laois 1 but because the site is flatter Calluna growth is less strong. The cover is an Eriophorum vaginatum/Sphagnum capillifolium/Calluna sheet with a network of low places marked out by Scirpus, E.angustifolium, Narthecium and Sphagnum. There are traces of pools where S.tenellum or S.cuspidatum are dominant but otherwise the Sphagna are S.papillosum or, occasionally, S.magellanicum. Vaccinium oxycoccus is locally found growing through damper stands of S.capillifolium. There are also fairly frequent hummocks of Leucobryum glaucum on which grouse sometimes rest.

Slightly to the west a well-developed pool and hummock system occurs which is reminiscient in many Ways of a raised bog. Sphagnum cover is 80-90% of the ground in places with S.papillosum and, more rarely, S.magellanicum the major species. Their hummocks are topped off with S.capillifolium and frequently with Racomitrium, the only site seen in the Slieve Blooms where this species is at all common. The predominant greyness of the hummocks is augmented by Cladonia portentosa and C.uncialis. There are many habitats for liverworts too. Cladopodiella fluitans grows with Sphagnum cuspidatum in the pools: Calypogeia muellerana and C.sphagnicola, Mylia anomala and M.taylori, Lophozia ventricosa and Cephalozia connivens grow on the hummocks where Odontoschisma sphagni is also ubiquitous.

The pool system disappears once the ground begins to drop into the col area in the west. Calluna, Eriophorum vaginatum, Hypnum jutlandicum and Sphagnum capillifolium return with vigour and

produce a vegetation resembling that on the more sloping ground across the Cut. Again shallow marking drains traverse the hillside, some of them supporting a dense growth of Odontoschisma denudatum and Kurzia pauciflora.

The col is dominated by the headwaters of the Gorragh River and a number of deeper drains that approach them from each side. The vegetaion still contains potentially good stands of Sphagnum with Scirpus and Narthecium in the depressions and old pools. The headwaters have caused numerous collapses in the peat where Agrostis stolonifera, Juncus effusus, Polytrichum commune, Carex panicea, C.echinata and Potentilla erecta are common. The natural stream channel running onto Wolftrap Mountain brings in Vaccinium myrtillus, Deschampsia flexuosa, Galium saxcatile, Carex nigra and Luzula sylvatica.

West of the col the land rises again and a uniform vegetation of Eriophorum spp., Calluna and Cladonia portentosa occurs with a Sphagnum cover of 10-20%.

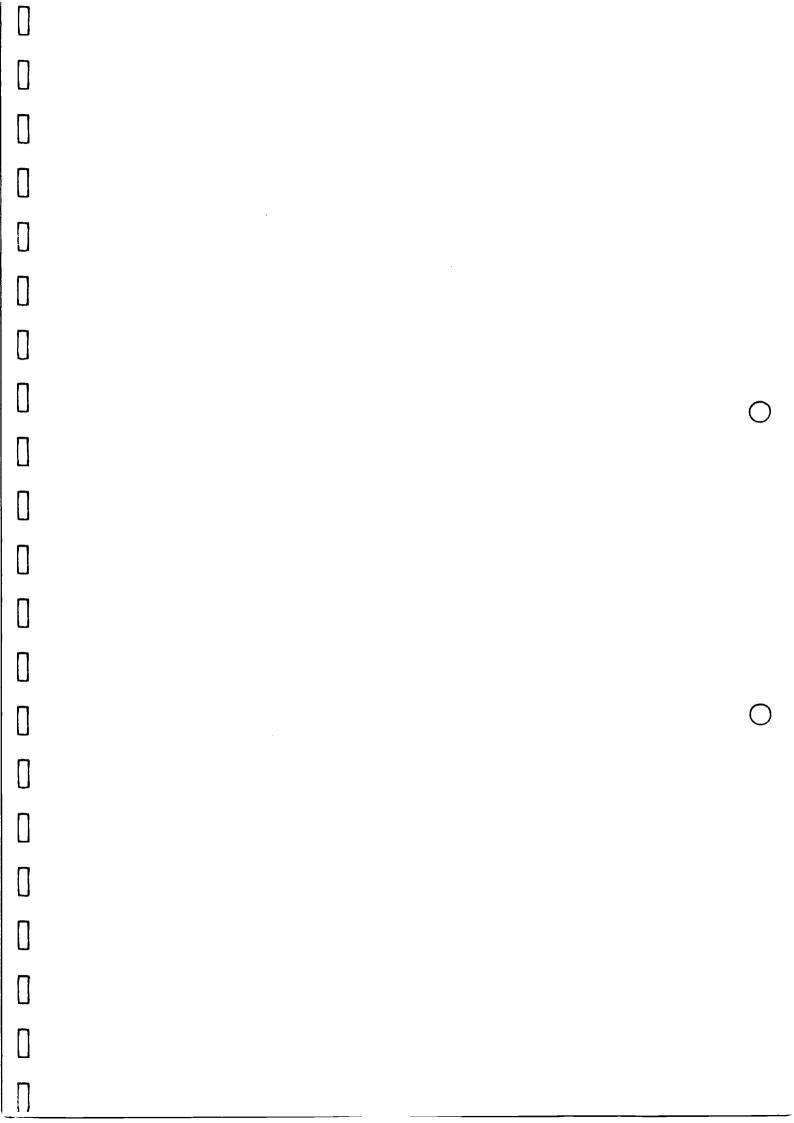
Evaluation

This is a more unusual site than Laois 1 because of the occurrence of an excellent pool and hummock system. It is essentially a development of the other site and cannot be considered more or less important than it.

[] [] Π

 \bigcirc

 \bigcirc



SALLY GAP

SITE NO:	W 3/4	1/2" MAP NO:	16
COUNTY:	Wicklow	GRID REF:	014 13
AIR PHOTO NO: AREA 415		6" MAP NO: outlined AREA	6,7 INTACT (ha):
ALTITUDE (m)	: 520-550 CATEGORY:	FOREST AREA: Headwater	Glencree
RATING: Mountain	17	TOWNLANDS:	Powerscourt
RECORDERS:	CD,RG	Ball	inastoe
WRITE-UP:	RG	GEOLOGY:	

Site Description

The Sally Gap site is a gently undulating area at about 525m that lies between Kippure, Tonduff, War Hill and Sally Gap itself. The area of good intact vegetation is indicated by the continuous line on the map. It is almost all included by the much larger Nature Reserve area (dotted).

The site is the source of four rivers, The Liffey, The Clohogue or Annamoe, the Dargle and part of the Glencree but because of extensive erosion and sub-peat flow the drainage pattern is not easy to work out on the ground. Close to the Kippure-Sally Gap road there is much cutting and some recent associated drainage. The ground rises to an old shooting lodge (Grouse House) from where a view can be had to the south of the largest pool-filled area of bog. A subsidiary level site occurs to the east around the head of the Liffey above an intact north-facing slope. This has larger pools but some of them are being broken into by headwater erosion from the Annamoe River. Indeed erosion has almost linked the Annamoe and the Glencree rivers together with a rough area of vegetated peat hags and channels. The Dargle source is isolated to the east, its headwaters partly trapped by the more aggressive Annamoe. This is easily seen on the aerial photograph though it is not suggested by the 1/2 inch map. There are other small pool areas along the western edge of the intact bog but these have been interferred with by drainage behind the roadside cutting. However a natural flat site remains just above Liffey Head Bridge where a small bog is growing vigorously, surrounded by two streams.

Away from the pool areas much of the surface (as at 1) carries a uniform vegetation which was burnt about 5 yrs ago. Erica tetralix is noticeable for this reason and with Eriophorum angustifolium, Calluna and Narthecium it forms a lowish sward. The ground is wet and spongy with frequent Sphagnum subnitens and S.capillifolium, recovering strongly from fire. In places they cover 30% of the surface though there is still some bare peat

exposed. Scirpus is frequent though nowhere dominant and its tussocks, sometimes killed, provide sites for Campylopus introflexus and C.paradoxus or Cladonias such as C.crispata, C.floerkeana or C.chlorophaea. Moss hummocks are quite widespread: they are formed by Leucobryum glaucum, seldom if ever by Sphagnum capillifolium.

The pool areas are less burnt than elsewhere and the surrounding vegetation quite dense. It is characterised by Calluna, Eriophorum spp. and Scirpus with a good understory of Sphagnum capillifolium, S.papillosum and S.subnitens. Vaccinium oxycoccus occurs in low density. The southern pools (3) are well vegetated and quite small. Many are covered by Sphagnum cuspidatum or S.auriculatum and one or two have Carex rostrata in addition to Eriophorum angustifolium. The pools above the Liffey valley (2) are larger and deeper and there is more evidence of mineral Cladopodiella fluitans, enrichment. Juncus bulbosus, Drepanocladus fluitans and Scorpidium scorpioides occur in several and Sphagnum auriculatum is widespread. To the east in the Annamoe/Dargle region there are occasional patches of a Sphagnum/ Eriophorum angustifolium vegetation without pools but with the Sphagnum cover approaching 80%.

In these upper parts of the site hummocks are well developed and frequently have Cladonia portentosa, Lophozia ventricosa, Mylia anomala and M.taylori on them. There is some Calypogeia fissa also. The hummocks usually include Racomitrium lanuginosum and this becomes especially common where erosion is occurring in the Annamoe headwaters. The ground is uneven and the stream channels show a peat depth of 2-3m in places. Flushing brings in such species as Agrostis canina, Carex echinata, Deschampsia flexuosa and increases the Molinia which otherwise is thinly spread. Some of the edge pools have been drained by this erosion but there are a considerable number still out of range of it.

Grouse occur at reasonable density over all this higher ground.

Working down the Liffey valley (5) there is wet and intact vegetation dominated by Eriophorum spp. with Calluna and a good Sphagnum cover. There are occasional flushes and in one of these a pond is surrounded by Sphagnum cuspidatum and S.recurvum lawns on which Juncus bulbosus, Agrostis stolonifera and Carex echinata are abundant. Nearby a channel/swallow hole reveals a peat depth of more than 4m.

The Liffey Head (6) bog lies on a flat platform where a tributary stream reaches the main channel. The stream now feeds a small marginal fen of Carex rostrata, Anthoxanthum odoratum, Agrostis stolonifera, Sphagnum recurvum, Aulacomnium palustre and Juncus bulbosus. The growth of peat has diverted the stream eastwards around a transitional zone which includes Deschampsia flexuosa, Potentilla erecta and some Juncus effusus and Rumex acetosa in a carpet of Sphagnum. The bog itself has luxuriant and apparently unburnt vegetation reminiscient of a raised bog. The Sphagnum cover reaches 90-100% in places, consisting of S.papillosum, S.capillifolium, S.subnitens (including subsp. ferrugineus) and S.magellanicum while a uniform canopy of Eriophorum vaginatum, E.angustifolium, Calluna and Erica tetralix stands overhead. The substrate is wet and soft but there are no pools as such. Andromeda, Empetrum and Vaccinium oxycoccus wind through the rest of the vegetation which, because of its density, is largely without Cladonia portentosa or small liverworts.

Evaluation

പ

 \Box

1

Sally Gap is clearly the best of the headwater bogs in Wicklow because of its size and quality of the vegetation. However it has not remained undamaged by erosion nor unaffected by fire and peat cutting. The most unexpected area was the small growing bog behind Liffey Head Bridge which shows many good features.

BARNACULLIAN

SITE NO:	W 9	1/2" MAP NO:	16
COUNTY:	Wicklow	GRID REF:	005 03
AIR PHOTO NO:	O 75 AREA (ha):	6" MAP NO: not mapped	16 or 17 AREA INTACT
(ha): - ALTITUDE (m):	540 CATEGORY:	FOREST AREA: Headwater	Ballinagee
RATING:	T	TOWNLANDS:	
RECORDERS: WRITE-UP:	RG RG	GEOLOGY:	

This has now a small area of intact peat confined by erosional channels to a col area east of Glenbride Lodge. There is forestry on the west side and fencing suggests that further planting may be done.

The vegetation consists of Calluna and Eriophorum vaginatum with Scirpus locally. Sphagnum cover, mostly of S.capillifolium, measures about 20%. The ground generally is lumpy with remnants of gullies and hummocks, partially revegetated.

The site has little ecological interest.

۲ ۱ ا

GARRYKNOCK

SITE NO:	W 12			1/2" MAP NO:	16
COUNTY:	Wicklow			GRID REF:	O 0304
AIR PHOTO NO: ARE	0 75 A (ha):	145		6" MAP NO: AREA	10,16 INTACT (ha):
ALTITUDE (m):	540		м	FOREST AREA:	Ballinagee
RATING:	CATEGORY: 4		М	TOWNLANDS:	Glenbride Garryknock
RECORDERS: WRITE-UP:	RG RG			GEOLOGY:	-

Site Description

The site consists of the small catchment of the Glasnadede Brook and is delimited by the watersheds around it. It is a sloping area of dry peatland, burnt 3 yrs ago and still with significant amounts of bare peat. The slopes are in general about 5 degrees and there are traces of old erosional channels and also some former peat cutting.

The vegetation consists of Scirpus, Calluna, Erica tetralix and Eriophorum angustifolium though where fire has missed patches of ground the Calluna grows tall along with some Empetrum and abundant Cladonia portentosa. Racomitrium is conspicuous at this level especially on the stabilised erosion.

Towards the top of the site patches of Eriophorum vaginatum/ E.angustifolium/Scirpus appear separated by ground with 30-40% bare peat and a cracked algal skin. Campylopus paradoxus is abundant here and there are scattered colonies of Mylia taylori and, on shallower peat, Deschampsia flexuosa and occasional Vaccinium vitis-idaea.

Evaluation

The site is too dry and separated from other peatland areas to be of much interest.

JITE NO:	8	1/2" MAP NO:	21
COUNTY:	KERRY	6" MAP NO:	275-300
AT.GRID: NTACT AREA (ha)	W092 870	ALTITUDE (m): AIR PHOTO:	W16
TOTAL AREA:		FOREST AREA:	
GATEGORY:	SADDLE	RECORDERS:	CD
ATING:	Bi	WRITE UP:	CD
'OWNLANDS :			

241

TTE DESCRIPTION

This small bog lies on Killeen Mountain in the Paps range, c. 12 m SE of the town of Killarney. It occupies part of a saddle Jetween peaks of 300m to the SW and 400m to the NE and is hydrologically positioned at the top of a catchment.

he surrounding slopes are dominated by Molinia and Scirpus and are grazed by sheep. There are also some old peat cuttings yearby.

The wettest and most interesting part of this small site is at AREA 1 and consists of an area of particularly wet bog over eep peat. This bog has good range of Sphagna and a nice lummock/hollow microtopography. The adjacent areas have flush vegetation dominated by tall sedges and rushes. The area is enerally grazed by sheep but AREA 1 has not been much affected n account of its wetness. Recent fires have however maintained a wericoid shrub and lichen cover.

JITE EVALUATION

his site is considered to be of scientific interest. It is a vulnerable site and would be easily destroyed by drainage. It does not appear to be under threat at present but is however ubject to burning. Ideally this should be prevented and grazing nimals i.e. sheep be excluded.

PECIES OF NOTE: None

k8

SPECIFIC SITE DESCRIPTION (k8)

AREA 1

et bog occupying headstream location characterized by a hummock/hollow vegetation structure with excellent cover and "ariety of Sphagna. The general aspect of the vegetation is of riophorum species and Scirpus. Ericoid shrubs are short on account of burning which has also eliminated much of the lichen flora. The moss flora is dominated by Sphagnum papillosum and S. apillosum in lawns and low hummocks. Sphagnum magellanicum also ccurs with relative frequency, which is a good indication of the wetness of the site. The hollows and pools are small and contain hagnum auriculatum. Rhynchospora alba and Carex limosa occur 242

REA 2

Lagg zone adjacent to AREA 1 with swamp dominated by tall Carex aniculata over a variety of small sedges (C. demissa, C. chinata, C. nigra, C. panicea) and lawns of Sphagnum auriculatum. This merges into a sward of Carex rostrata over Menyanthes.

AREA 3

Joping ground above AREA 1 featuring flush vegetation dominated by Juncus acutiflorus. This community has been been closely propped by sheep.

REA 4

this area has also been grazed by sheep and is much drier than AREA 1 and the ground is firm.

AREA 5

here are old peat cuttings in this area.

BROCKAGH "-site name " Brochagh (Hub Hot)

JITE NO:	WB	1/2" MAP NO:	16
COUNTY:	Wicklow O 101 003	6 " MAP NO: ALTITUDE (m):	
AT.GRID: NTACT AREA (ha):	0 101 003	AIR PHOTO:	0 125
TOTAL AREA (ha):		FOREST AREA: RECORDERS:	CD, EM
CATEGORY: ATING:	Valley Bi	WRITE UP:	CD CD
TOWNLANDS:			

ITE DESCRIPTION

This is a small valley bog situated c. 5 km NW of Laragh at the ead of a valley between Mall Hill (566m) and Brockagh (617m). The valley lies near the head of a stream which flows SE into the Glenmacnass River. The bog feaures a small peat basin lake c. 2m eep and surrounded by Sphagnum lawns. The slopes around this site re dotted with granite outcrops.

This site is reminiscent of a raised bog and is fairly intact hough damaged by fire in recent times. There is a plantation of conifers on the NW margin and any further planting would destroy the bog.

he vegetation is primarily characterized by Calluna, Scirpus, Eriophorum species and Narthecium with a good carpet of Sphagna ainly Sphagnum papillosum, S. capillifolium and S. cuspidatum. local species were Vaccinium myrtillus, Empetrum nigrum, Juncus fusus, J. squarrosus, Campylopus atrovirens and Aulacomnium valustre.

the vegetation is somewhat grazed by deer and sheep.

SITE EVALUATION

his is a small site consists of a raised type bog which is rare in Co. Wicklow perhaps on account of afforestation. It is fairly intact and generally featuring a good Sphagnum cover. It has been amaged to a moderate degree by fire and deer and sheep grazing. It is considered to be of scientific interest and efforts should soon be made to conserve it.

SPECIES OF NOTE

arex acuta (rare)

REA A

his area is dominated by Calluna, Eriophorum species, Scirpus hd Narthecium with a good ground cover of Sphagnum capillifolium, S. papillosum, S. subnitens and S. tenellum. 'pcally recorded were Empetrum, Vaccinium myrtillus, Polytrichum 244

pmmune, Carex echinata, Anthoxanthum odoratum, Drepanocladus rluitans, and Aulacomnium palustre. Some of these species are indicative of flushing.

AREA B

Whe banks of the stream are narrow and sandy and colonized by an acid community including Molinia, Nardus, Anthoxanthum, Luzula multiflora, Polytrichum commune, Rhytidiadelphus squarrosus. The are Carex acuta was notably recorded in the stream.

REA C

This is a marginal flush dominated by an open sward of young folinia with an even understory of Sphagnum papillosum. It is rather species poor community.

REA D

This domed area is similar to AREA A but with fewer higher lants and a better Sphagnum carpet, primarily of S. papillosum. ommon here were Scirpus, Molinia and Narthecium. Erica tetralix d Eriophorum vaginatum were frequent. A small peat-basin lake ccurs here which is surrounded by a good Sphagnum carpet. Is is . 2m deep and without vegetation. this area had been damaged by rire c. 5 years previous. There are some slightly quaking areas.

"_site_name_"

1/2" MAP NO: K11 JTTE NO: 6 " MAP NO: COUNTY: Kerry V 860 760 240m ALTITUDE (m): AT.GRID: V 296 AIR PHOTO: NTACT AREA (ha): FOREST AREA: TOTAL AREA (ha): CD **RECORDERS:** Valley GATEGORY: CD WRITE UP: Bii ATING: JOWNLANDS:

TE DESCRIPTION

his is a very small valley bog situated near Moll's Gap, c. 8 km W of Kenmare. It is drained by a small head stream in the Finnihy catchment. The mountains form a sort of rocky amphiheatre around this site and the Killarney/Kenmare passes longside though at a higher level.

The bog is subject to flushing and is consequently rather species ich. Much of the site is however quite heavily grazed by sheep.

The interesting species occur alongside the stream and at the bestern margin of the site where it adjoins a rocky ridge. The latter area is subject to base enrichment and has a varied sedge flora which includes the rather local Carex dioica. In addition among the bryophytes recorded was Calliergon sarmentosum, a lairly rare moss of montane flushes.

ITE EVALUATION

This is a very small bog with good natural boundaries. It would ot be difficult to conserve and may be worth considering. In management terms, grazing of this site would need to be immediat/ely halted.

SPECIES OF NOTE

¿arex dioica (local)

alliergon sarmentosum

(rare/occassional in montane flushes; H10, Smith (1980))

AREA 1

his is the main part of the bog and is dominated by Molinia, choenus and Myrica associated with Narthecium, Eriophorum angustfolium, E. vaginatum, Scirpus and with Sphagnum apillifolium, S. papillosum and S. subnitens. The cover of alluna is low and lichens are sparse. Some patches of vegetation are devoid of Schoenus and are instead dominated by Molinia and with occassional Juncus conglomeratus. Additional species in hese areas include Pinguicula grandiflora, Potentilla erecta, lrica tetralix and bryophytes; Sphagnum subnitens, Racomitrium, Leucobryum and Breutelia chrysocoma. The vegetation cover is mch affected by grazing sheep and the canopy is fairly open ile underneath the hummocks are also damaged.

REA 1A

In the margin of this bog beneath an adjacent rocky ridge is a community characterized by a mixture of small sedges and a hysiognomic dominance of Molinia. It was here that the locally are Carex dioica was recorded as well as C. demissa, C. pulicaris, C. echinata. C. hostiana and C. nigra. Quite a rich ryophyte flora also occurs here and includes; Campylium tellatum, Scorpidium scorpioides, Riccardia multifida, Sphagnum auriculatum var. inundatum, Pellia endivifolia, Diplophllum albicans and also Callliergon sarmentosum which is quite rare, aving been recorded from only 10 Irish vice-counties (Smith 1980). A number of the aforementioned species indicate base enrichment. The area characterized by this community is quite limited.

AREA 2

stream running through the middle of this site features an ddjacent sward of Carex paniculata with Carex lepidocarpa and Carex limosa. Associated species include Eleocharis multicaulis, nagallis tenella, Carex nigra, Galium palustre, Hydrocotyle ulgaris, Hypericum elodes, Menyanthes, Potamogeton polygonifolius, Ranunculus flammula, Vereonica sculellata, and jphagnum auriculatum and S. recurvum.

" site name " Jee Caherbarnagh

LITE NO: COUNTY:	C8 Cork & Kerry	1/2" MAP NO: 6 " MAP NO:	21 47 .
AT.GRID: NTACT AREA (ha):	W22 86	ALTITUDE (m): AIR PHOTO:	W366, W12
TOTAL AREA (ha): CATEGORY: ATING: NOWNLANDS:	Slope Bii	FOREST AREA: RECORDERS: WRITE UP:	EM/RG/CD EM/CD

TE DESCRIPTION

ITE EVALUATION

PECIES OF NOTE

REA A1

Quaking area of hummocks and hollows in middle of small wet raised' type bog on watershed. The vegetation is intact with ery little evidence of burning or grazing and the watertable is at or very near the surface. The canopy is dominated by riophorum angustifolium and E. vaginatum and underneath are ummocks of Sphagnum papillosum, S. capillifolium and occassional s. tenellum. The pools contain S. auriculatum, S. cuspidatum, Carex limosa, Drosera anglica while S. magellanicum occured in ollows.

REA A2

Downslope of AREA A1 the pools are replaced by a lawn of Sphagnum papillosum and S. magellanicum. The ground is very wet. Molinia nd Eriophorum species form a uniform canopy wih short Calluna.

REA B

This is a wet area of sloping blanket bog occupying a wide, hallow depression between ridges and characterized by a sward of olinia, Eriophorum angustifolium and E. vaginatum with occassional low hummocks of Sphagnum papillosum. The terrain is soft and wet. " site name "

249

SITE NO:	K37	1/2" MAP NO:	20
COUNTY:	Kerry V 61 855	6 " MAP NO: ALTITUDE (m):	120-200
NTACT AREA (ha):	م موج دره ⊥ 0 ∨	AIR PHOTO: FOREST AREA:	V 244
TOTAL AREA (ha): CATEGORY:	Slope	RECORDERS:	CD
ATING:	Bii	WRITE UP:	CD
TOWNLANDS:	· · ·	Discov_ map NO	83

)TE DESCRIPTION

This the can be termed a highland bog as it occurs at an altitude f less than 300m. It lies c. 20 km SW of Killorglin on a NE lacing slope below Coomaglaslaw Lake. The area is bounded on the SW by this lake, on the NW by a stream emerging from the lake, in the SE it adjoins the foothills of Teermoyle Mt. (Site K36), hile on the NE the base of the site is occupied by old cutaway adjacent to an unsurfaced road.

he vegetation is mostly characterized by a very uniform community primarily composed of Molinia, Eriophorum angustifolium, Erica tetralix and Scirpus over a good Sphagnum Inderstory of S. subnitens, S. papillosum, and S. tenellum. The errain is very wet in places and features flush vegetation in narrow runnels with Eleocharis multicaulis, Molinia and S. uriculatum var. inundatum. Grazing intensity is low on the iddle and lower slopes but the higher ground is quite heavily grazed. There are hummocks of S. capillifolium, S. subnitens and bucobryum glaucum but fires have apparantly interfered with heir development as none are large. Rhynchospora alba was noted on the wetter tracts.

JITE EVALUATION

his is a small area of highland bog on sloping ground. It is et and relatively intact. The slope is subject to run-off and beneath a canopy of Molinia and Eriophorum angustiflium features good ground cover of Sphagna. The vegetation is only damaged by razing on the higher ground. It is considered to be of moderate cientific interest.

REA 1

his area is dominated by Molinia, Scirpus, Eriophorum ngustifolium and Erica tetralix. The microtopography consists of and low, fire-damaged hummocks. The following species were recorded on the flats; Sphagnum tenellum, S. cuspidatum, S. apillosum, S. subnitens, Narthecium, Erica tetralix and Drosera rotundifolia. Wetter areas were colonized by Rhynchospora alba and Sphagnum auriculatum. The flats are characterized by Sphagnum lenellum, S. cuspidatum, S. papillosum, S. subnitens, Drosera otundifolia, Narthecium and algae. Wetter areas have Rhynchospora alba and Sphagnum auriculatum. Pinguicula rrandiflora is very frequent. The main hummock formers were () nagnum subnitens, S. capillifolium and Leucobryum. Lichens are absent. The terrain is fairly wet and features narrow runnels colonized by Molinia with Eleocharis multicaulis and Sphagnum uriculatum var. inundatum. This slope is mostly intact except on the higher ground which is quite heavily grazed.

" site name "

JITE NO:	K39	1/2" MAP NO: 6 " MAP NO:	20
COUNTY: AT. GRID:	Kerry V 750 910	ALTITUDE (m): AIR PHOTO:	140-180 V 9
NTACT AREA (ha): TOTAL AREA (ha):		FOREST AREA:	
ATEGORY: ATING:	Slope B i	RECORDERS: WRITE UP:	CD CD
'I'OWNLANDS :		•	

TE DESCRIPTION

This small site lies c. 5 km SW of Killorglin near the NE shore f Lough Caragh. It is a highland site (i.e. within altitude range of 150-300m).

he topography consists of hillocks, slopes and hollows. The egetation is locally grazed by cattle and sheep and there are also patches of turbary.

espite this however there is an intact, quaking basin mire, the size of a small lake, which consists of lawns of a variety of sphagna, including an abundance of the rare S. pulchrum and everal liverworts.

The rest of the site features two intact slopes with Molinia, Icirpus and Schoenus locally.

ITE EVALUATION

This site is considered to be of conservation interest on account f the Sphagnum-rich basin mire which contains abundant Sphagnum pulchrum, a rather rare moss.

SPECIES OF NOTE

phagnum pulchrum (regionally rare)

REA 1

loping flanks of hillocks are characterized by a community onsisting of Molinia, Scirpus and dwarf shrubs; Calluna and Erica tetralix. This forms a fairly open canopy over a moderate ground cover of Racomitrium and Sphagna. Hummocks are mostly bsent or very low. Wet patches have cushions of Sphagnum compactum. Locally frequent were Narthecium, Potentilla erecta, Eriophorum angustifolium and Drosera rotundifolia. The hillock ummits have a heathy vegetation dominated by Ulex gallii, alluna and Juncus squarrosus.

AREA 2

et sloping ground leading down to lake with deep Sphagnum Inderstory and canopy dominated by Molinia but with frequent Schoenus and Erica tetralix. Most frequent bryophytes were phagnum papillosum, S. capillifolium, Leucobryum and Racomitrium. pslope Schoenus decreases and the canopy primarily consists of Molinia, Myrica and Erica tetralix. Sphagnum magellanicum is local. Lichens are very scarce.

REA 3

Wet, species-rich basin mire consisting of quaking lawns of phagna (S. auriculatum, S. papillosum, S. cuspidatum, S. agellanicum and very frequent S. pulchrum). The herb layer is open and has Narthecium, Molinia, Rhynchospora alba, Myrica, losera anglica and occassional Carex limosa. Liverworts occur in onspicuous patches (Gymnocolea inflata, Cladopodiella fluitans, kurzia pauciflora, Aneura pinguis). Excellent area, though limited in extent.

AREA 4

his platform above the lake is rather grazed (Kerry cattle) and poached but is wettish and characterized by Molinia, Myrica, Rhynchospora alba, Scirpus, Erica tetralix and Calluna with requent Carex panicea, Eriophorum angustifolium, Pinguicula grandiflora and Drosera rotundifolia.

Plan motor areas

A.C.

253

ITE NO: COUNTY: NAT.GRID: NTACT AREA (ha):	K11 Kerry V 860 760	1/2" MAP NO: 6 " MAP NO: ALTITUDE (m): AIR PHOTO:	20 & 21 83 240m V 296
DTAL AREA (ha): CATEGORY: ATING: OWNLANDS:	Valley Bii	FOREST AREA: RECORDERS: WRITE UP:	Killarney CD CD

ITE DESCRIPTION

This is a very small valley bog situated near Moll's Gap, c. 8 km of Kenmare. It is drained by a headstream in the Finnihy catchment. The mountains form a sort of rocky amphi-theatre around this site and the Killarney/Kenmare road passes alongside, hough at a higher level.

The bog is subject to flushing and is consequently rather species ich. Much of the site is however quite heavily grazed by sheep. he interesting species occur alongside the stream and at the western margin of the site where it adjoins a rocky ridge. The latter area is subject to base enrichment and has a varied sedge lora which includes the rather local Carex dioica. In addition among the bryophytes recorded was Calliergon sarmentosum, a fairly rare moss of montane flushes.

SITE EVALUATION

his is a very small bog with good natural boundaries. It would not be difficult to conserve and may be worth considering. h management terms, grazing of this site would need to be urtailed.

PECIES OF NOTE

Jarex dioica (local)

Calliergon sarmentosum

(rare/occassional in montane flushes; H10, Smith (1980))

PECIFIC AREA DESCRIPTIONS

AREA 1

his is the main part of the bog and is dominated by Molinia,

KI

Schoenus and Myrica associated with Narthecium, Eriophorum hgustfolium, E. vaginatum, Scirpus and with Sphagnum hpillifolium, S. papillosum and S. subnitens. The cover of Calluna is low and lichens are sparse. Some patches of vegetation re devoid of Schoenus and are instead dominated by Molinia the occassional Juncus conglomeratus. Additional species in these areas include Pinguicula grandiflora, Potentilla erecta, Frica tetralix and bryophytes; Sphagnum subnitens, Racomitrium, eucobryum and Breutelia chrysocoma. The vegetation cover is in ach affected by grazing sheep and the canopy is fairly open while underneath the hummocks are also damaged.

AREA 1A

h the margin of this bog beneath an adjacent rocky ridge is a community characterized by a mixture of small sedges and a physiognomic dominance of Molinia. It was here that the locally are Carex dioica was recorded as well as C. demissa, C.

bre carex dioica was recorded as worr ab or dominate Quite a rich ulicaris, C. echinata. C. hostiana and C. nigra. Quite a rich bryophyte flora also occurs here and includes; Campylium cellatum, Scorpidium scorpioides, Riccardia multifida, Sphagnum criculatum var. inundatum, Pelia endivifolia, Diplophyllum albicans and also Callliergon sarmentosum which is quite rare, baving been recorded from only 10 Irish vice-counties (Smith

980). A number of the aforementioned species indicate base enrichment. The area characterized by this community is quite limited.

AREA 2

stream running through the middle of this site features an adjacent sward of Carex paniculata with Carex lepidocarpa and Carex limosa. Associated species include Eleocharis multicaulis, hagallis tenella, Carex nigra, Galium palustre, Hydrocotyle Julgaris, Hypericum elodes, Menyanthes, Potamogeton polygonifolius, Ranunculus flammula, Veronica sculellata, and phagnum auriculatum and S. recurvum.

graignagewerkagewer

JITE NO: COUNTY: AT.GRID: NTACT AREA (ha): TOTAL AREA (ha): CATEGORY: ATING: TOWNLANDS: K15 KERRY V 80 77 Slope

Bii

1/2" MAP NO: 6 " MAP NO: ALTITUDE (m): AIR PHOTO: FOREST AREA: RECORDERS: WRITE UP:

83 300 V 297 Kenmarl CD / EH CD

24

255

CIE DESCRIPTION

This site is situated on the NE facing slope and the summit of nocklomena (700m), c. 13 km NW of Kenmare.

The terrain is steeply sloping, rocky and uneven with numerous mall streams on the surface and in narrow gullies. The egetation is most often represented by flush communities except on the summit where an ombrotrophic bog flora occurs. On the 'rier, rocky ground between the flushes the vegetation is heathy in character. Towards the base of the slope the vegetation is dominated by Molinia and Scirpus with occassional flush species.

JITE EVALUATION

his site consists of foothills, slope and mountain summit. The oothills have a characteristic Molinia/Scirpus dominated wegetation. The slope is a characterized by a mosaic of egetation types; heathy areas dominated by bushy Calluna; grassy reas with Nardus and Festuca ovina and; several flushes associated with surface streams. The latter are quite varied and contain a fairly wide range of sedges and bryophytes. The site is ifficult to access as it largely consists of a fairly steep lope with rock outcrops and a shallow covering of peat. It is subject to much run-off and therefore largely covered by flush egetation. The more ombrotrophic vegetation at the base and ummit represent a rather mediocre example of mountain blanket bog.

SPECIES OF NOTE

arex dioca . Jourpan

REA B

brtheastward facing slope of c. 10 degrees with community pminated by Molinia and Scirpus with an understory of Sphagnum capillifolium, S. papillosum, S. subnitens, S. auriculatum and S. pmpactum. Additional species include Pinguicula grandiflora, arex demissa, C. pulicaris and Breutelia chrysocoma which are indicative of flushing.

REA C

Overal small flushes dominated by Juncus acutiflorus on the Otter slopes. Sphagna rare but other bryophytes quite common and include Scorpidium scorpiodes, Calliergon cuspdatum, Hylocomium oplendens, Plagiomnium undulatum, Rhizonium punctatum, hytidiadelphus loreus and R. triquetris.

REA D

Steeper terrain upslope of AREA C, with several small flushes ssocated with stream and stream risings. The flora includes a ariety of sedges, grasses and lower plants e.g. Carex dioca, C. pilulifera, Nardus stricta, Calliergon straminium, Campylopus pyriformis, Philonotis fontana, Bryum pallens, Herberta adunca, icranella palustris, Sphagnum palustre and S. recurvum. uniperus communis was also recorded.

REA E

Arrow summit characterized by generally good vegetation cover f Racomitrium, Sphagnum capillifolium, Vaccinium myrtillus, calluna, Scirpus, Empetrum, Luzula sylvatica, Eriophorum vaginatum and Juncus squarrosus. Erosion occuring in places but any revegetated depressions also present. This area is not bviously degraded by grazing or burning.

	-	 	170.	

SITE NO: COUNTY:	C8 Cork & H	Kerry	1/2" MAP NO: 6 " MAP NO:	21 47
NAT.GRID: INTACT AREA (ha):	W22 86		ALTITUDE (m): AIR PHOTO:	W366, W12
TOTAL AREA (ha): CATEGORY: RATING: TOWNLANDS:	Slope Bii	. .	FOREST AREA: RECORDERS: WRITE UP:	EM/RG/CD EM/CD

SITE DESCRIPTION

SITE EVALUATION

SPECIES OF NOTE

257

copy sent to Eno

AREA A1

Quaking area of hummocks and hollows in middle of small wet 'raised' type bog on watershed. The vegetation is intact with very little evidence of burning or grazing and the watertable is at or very near the surface. The canopy is dominated by Eriophorum angustifolium and E. vaginatum and underneath are hummocks of Sphagnum papillosum, S. capillifolium and occassional S. tenellum. The pools contain S. auriculatum, S. cuspidatum, Carex limosa, Drosera anglica while S. magellanicum occured in hollows.

AREA A2

Downslope of AREA A1 the pools are replaced by a lawn of Sphagnum papillosum and S. magellanicum. The ground is very wet. Molinia and Eriophorum species form a uniform canopy wih short Calluna.

AREA B

This is a wet area of sloping blanket bog occupying a wide, shallow depression between ridges and characterized by a sward of Molinia, Eriophorum angustifolium and E. vaginatum with occassional low hummocks of Sphagnum papillosum. The terrain is soft and wet. " site name "

TTE NO: COUNTY: AT.GRID: NTACT AREA (ha): TOTAL AREA (ha):	W6 Wicklow O 12 07 Saddle	1/2" MAP NO: 6 " MAP NO: ALTITUDE (m): AIR PHOTO: FOREST AREA: RECORDERS:	16 416-500 O 78 CD/RG/EM
ATEGORY: ATING: TOWNLANDS:	Saddle Bi	RECORDERS: WRITE UP:	CD/RG/EM CD

TE DESCRIPTION

This site lies c. 4 km south of Sallygap along the eastern side f the military road and just southwest of SITE 5.

The Inchavore River and tributary and the military road form the bundaries to the site.

The most interesting part of this site lies close to the road at REA 1 and features wet bogland with a good variety and cover of phagna and a small complex of large bog pools. AREAS I, IA, and $\kappa(i)$ are quite good also.

ITE EVALUATION

whis site incorporates a small, but remarkably intact area of wet gland, having seemingly escaped burning unlike the majority of he sites in Co. Wicklow. It should be conserved.

Hreas (F, X, Y) are in a uniform headwater region which is wet in winter and dryish in summer. It is of no great interest except to pd to existing site for catchment integrity.

REA F

neadwater stream with Luzula sylvatica, Anthoxanthum, Juncus effusus, Vaccinium mrytillus and Molinia. Dry knobbly peat beyond tream has much Scirpus and regenerating Sphagnum capillifolium. he shallower peat at he break of slope is colonized by Callunam Ericat tetralix, Molinia, Polygala serpyllifolia and Potentilla wecta. There are runnels of minor erosion towards Lough Dan and ()en nice Sphagnum lawns with Sccirpus, Molinia, Leucobryum and Drosera rotundifolia.

AREA X

road slope to south of stream, with Molinia, Scirpus, Leucobryum, Sphagnum papillosum and dry peat knobs with Agrostis apillaris, below arm of dry Scirpus/Sphagnum capillifolium bog. inks around to part of area overlooking Lough Dan valley.

REA Y

New, narrow drain on East side of stream with Nardus and nthoxanthum and Mnium hornum on edge.

AREA H

his is an area of heathy vegetation surrounding an outcrop of granite in an area of shallow peat. The vegetation is locally grassy here. Species recorded include Nardus, Anthoxanthum, Carex inervis, C. nigra, Poa annua, Vaccinium myrtillus and Cladonia f. metacorallifera.

REA I

Quite good quality area characterized by hummocks and hollows. The interhummock flats are characterized by a dominance of cirpus but with frequent Narthecium, Drosera rotundifolium, phagnum tenellum and S. papillosum. The hummocks consist of Sphagnum capillifolium with Calluna, Eriophorum vaginatum, Erica etralix and Scirpus. Occassionally the hummocks consist of eucobryum. The hollows are algal encrusted.

REA IA

reas adjacent to AREA I have recently been burnt and have new Molinia growth with Polygala, Potentilla erecta, short Calluna and scattered Eriophorum angustifolium and Scirpus. There is a till good ground cover of Sphagnum.

REA J

At the southern end of the site the peat is shallower with rock pucrops and a fire-damaged heathy vegetation of Calluna, accinium myrtillus, Anthoxanthum and locally Carex binervis and c. nigra. the Sphagnum cover is generally poor in this vicinity and the terrain is hard.

AREA K (i)

(is area is on the top of the ridge above the new forest plantation and in between two areas of forestry. The vegetation is dominated by Calluna, Scirpus and Molinia with good Sphagnum over (primarily S. capillifolium) > 50% in places. Thinly dispersed through this community are Eriophorum angustifolium and E. vaginatum.

AREA K (ii)

his is an area of short vegetation and poor Sphagnum cover on the top of a ridge. It has been damaged by fairly recent fires.

REA 1

his is a small 'plateau' with a number of large bog pools ontaining Sphagnum cuspidatum, Eriophorum angustifolium, Carex rostrata and marginal S. palustre and S. recurvum. There is a od Sphagnum ground cover, mainly of S. capillifolium but also f S. subnitens, S. papillosum and occassional S. tenellum.

REA 2

This ridge is characterized by a mixed community of Calluna and riophorum angustifolium and E. vaginatum with Scirpus and ocally dominant Molinia. This area has been affected by successive fires, the heather is c. 15-20 cm tall and bare peat *reas are colonizing with Campylopus species and squamulous ichens. The terrain is also hard.

" site name "

SITE NO:	K21	1/2" MAP NO:	21
COUNTY:	Kerry W 055 815	6 " MAP NO: ALTITUDE (m):	c. 330
AT.GRID: NTACT AREA (ha):	W 000 010	AIR PHOTO:	W 360
TOTAL AREA (ha):	a 1	FOREST AREA: RECORDERS:	CD
~ATEGORY: ATING:	Slope Biii	WRITE UP:	CD
TOWNLANDS:			

TE DESCRIPTION

This site is situated c. 13 km SE of Killarney on the southern lopes of Carrigawaddra (466m). The bog occupies a gentle slope, rare in this area, as most of the terrain consists of narrow, rocky terraces which are dominated by dense, tussocky Molinia ith Eriophorum species (angustifolium and vaginatum) and phagnum papillosum.

he site is dominated by the aforementioned Eriophorum species ith Scirpus, Molinia and occassional Narthecium, Potentilla erecta and Polygala serpyllifolia over an intermittent ground gover of Sphagnum magellanicum and S. capillifolium.

ITE EVALUATION

his site is not considered to be of conservation interest as it s small, rather species poor and not considered to be a representative example of this habitat type.

REA 1

Gentle NE-facing slope with homogenous species-poor vegetation possible primarily of Eriophorum angustifolium, E. vaginatum, plinia and Scirpus with Potentilla erecta and Polygala serpyllifolia. The ground cover consists of low hummocks of "phagnum papillosum, S. magellanicum and S. capillifolium. The pvering of heather is sparse. Unvegetated areas are colonized by algae and subject to run-off.

ITE NO: COUNTY: MAT.GRID: NTACT AREA (ha): OTAL AREA (ha): CATEGORY: ATING: OWNLANDS:	K27 Kerry V 955 805 Slope Bili	1/2" MAP NO: 6 " MAP NO: ALTITUDE (m): AIR PHOTO: FOREST AREA: RECORDERS: WRITE UP:	20 & 21 74 200-500 V 291 Killarney CD CD
--	--	---	--

SITE DESCRIPTION

his site is situated on the foothills of Mangerton Mt. within Killarney National Park just east of Cores Bog and the old Onmare road. The site occupies gently sloping terraces which One characterized by a rather homogenous and species poor vegetation.

ed deer frequent this area of the National Park and consequntly the herbage is locally heavily grazed and trampled. The vegetation is dominated by Molinia and Scirpus with Eriophorum ingustifolium, short Erica tetralix and Calluna. Sphagnum cover is poor.

SITE EVALUATION

this site has a rather homogenous, species-poor vegetation which is quite heavily grazed by deer. It is under no other threat as It lies within the National Park.

SPECIES OF NOTE

ephaloziella hampeana?

PECIFIC AREA DESCRIPTIONS

AREA 1

Jpen sward of Molinia and Scirpus with occassional hummocks

primarily of Sphagnum capillifolium and S. subnitens and topped ith Racomitrium and also Molinia. Interhummock areas are blonized by Scirpus, Campylopus atrovirens, Pleurozia and also Racomitrium. Lichens occuring were Cladonia portentosa, C. ncialis and C. ciliata. The vegetation is grazed by deer and ummocks are somewhat damaged by trampling. The terrain is firm but deer-poached.

REA 2

Very similar in character to AREA 1, but more intact as grazing ressure is less severe. Molinia is more prevalent and tend to pliterate the hummocks. Poaching and trampling is also less marked here.

263

TTE NO: COUNTY:	K30 Kerry	/2" MAP NO: 6 " MAP NO:	20
MAT.GRID: NTACT AREA (ha):	V 735 795	ALTITUDE (m): AIR PHOTO:	V 301
DTAL AREA (ha): CATEGORY: ATING:	Valley. Biii	FOREST AREA: RECORDERS: WRITE UP:	CD CD
bwnlands:			

ITE DESCRIPTION

This is a small lowland valley bog situated c. 17 km south of Ilorglin and c. 3 km SE of Boheesil. It is a badly degraded te on account of grazing pressure from sheep and may also be damaged by fires. It is characterized by a very low Sphagnum over and closely cropped herbage. There is much bare peat and lgae.

ITE EVALUATION

This small valley bog is very heavily grazed by sheep and is onsidered to be of no conservation value.

PECIFIC AREA DESCRIPTIONS

AREA 1

eavily grazed vegetation with open areas of unvegetated peat interspersed with small tussocks of Molinia. The vegetation on

" site name "

265

ITE NO:	K32	1/2" MAP NO: 6 " MAP NO:	20
COUNTY: AT.GRID:	Kerry V 865 880	ALTITUDE (m): AIR PHOTO:	00 V 6
NTACT AREA (ha): TOTAL AREA (ha): CATEGORY:	Mountain	FOREST AREA: RECORDERS:	CD CD
ATING: rOWNLANDS:	Biii	WRITE UP:	CD

TE DESCRIPTION

This small area of mountain blanket bog lies c. 10 km SW of illarney at the NW corner of the Gap of Dunloe. The bog occurs on a narrow, rocky and undulating plateau.

ld peat cuttings encroach upon the plateau margins and the egetation is subject to low intensity sheep grazing. A rather homogenous vegetation covers the plateau and consists of Scirpus with Molinia, Eriophorum angustifolium, Erica tetralix and alluna. Sphagnum cover is moderate in the form of low hummocks. a species were recorded including S. compactum and S. auriculatum

var. inundatum.

he terrain is firm and only slightly wet. Lichens are sparse but Cladonia incrassata and C. arbuscula were recorded.

TE EVALUATION

This is a small and rather uniform blanket bog on a narrow plateau. Scirpus tends to dominate the vegetation. It is onsidered to be of limited conservation interest.

REA 1

he vegetation on this narrow plateau is dominated by Scirpus ith Molinia, Eriophorum angustifolium, Erica tetralix and Calluna. Sphagnum cover is moderate and there are very low 'ummocks of Sphagnum capillifolium and occassional S. papillosum hich are somewhat overgrown by Molinia. Interhummock flats are colonized by Narthecium, Sphagnum subnitens, and occassional S. cuspidatum, S. auriculatum and S. auriculatum var. inundatum. alluna is only about 10 cm high. Lichen cover is poor but ladonia incrassata and C. arbuscula were recorded. Liverworts recorded include Diplophyllum albicans and Cephalozia catenulata. ماعالي

 \bigcirc terrain is firm and only slightly wet. Grazing intensity is low but there is a significant amount of old turbary encroaching \neg n the sides of the plateau.

" site name "

JITE NO:	K36	1/2" MAP NO:	20
COUNTY: AT.GRID: NTACT AREA (ha): TOTAL AREA (ha): CATEGORY: ATING: TOWNLANDS:	KERRY V 61 84	6 " MAP NO: ALTITUDE (m): AIR PHOTO:	500-550 V 244
	Mountain Biii	FOREST AREA: RECORDERS: WRITE UP:	CD CD

LTE DESCRIPTION

This site lies c. 20 km SW of Killorglin on a very narrow steep-sided plateau irectly upslope of Site K 37.

267

The main part of the site occupies quite a deep deposit of peat and is haracterized by a species poor community dominated by Scirpus, Eriophorum ngustifolium and Racomitrium.

The margins of the plateau are marked by deep erosion gullies which lack egetation. The lower slopes are grazed by sheep.

JITE EVALUATION

his mountain plateau features a small area of deep blanket peat with a pecies poor community characterized by Scirpus, Eriophorum angustifolium and Racomitrium. The site is affected by deep gully erosion which had initiated round the margins (especiallly the SW) but is also eroding backwards towards he middle of the site. It is not considered a representative or suitable sit for conservation purposes.

REA 1

Dominated by Juncus squarrosus with Rhytidiadelphus loreus, Vaccinium yrtillus, Calluna, Festuca rubra and Sphagnum subnitens. This community form closely grazed sward and is assocaited with firm and rather dry, rocky terrain.

AREA 2

pslope, where the terrain levels out and the peat deposit is leeper, the vegetation changes. Here Eriophorum angustifolium and Scirpus ar prevalent and the moss understory is dominated by Racomitrium. Cladonia rbuscula also occurs. It is a fairly species poor community. The ground is oft and wet.

The SW margin of this plateau is marked by deep erosion gullies which are evoid of vegetation. The opposite side is also eroded likewise.

1/2" MAP NO: 21JITE NO: К5 6" MAP NO: . Kerry COUNTY: ALTITUDE (m): 430-500 V 983 695 AT.GRID: V 100 AIR PHOTO: NTACT AREA (ha): FOREST AREA: TOTAL AREA: CD **RECORDERS:** Mountain CATEGORY: CD WRITE UP: Biii ATING: LOWNLANDS:

TE DESCRIPTION

This site lies c. 7 km to the SE of Kenmare.

the area consists of an undulating plateau with occassional rock outcrops and the vegetation is generally dominated by Molinia and cirpus and is moderately grazed by sheep.

ITE EVALUATION

This site is considered to be of limited scientific interest.

PECIES OF NOTE

Sphagnum imbricatum (local)

K5

REA 1

The vegetation is dominated by Molinia and Scirpus with ssociated Calluna, Erica tetralix, Eriophorum angustifolium and arthecium. The ground cover primarily consists of Sphagnum capillifolium with S. papillosum, S. cuspidatum, S. tenellum, Campylopus atrovirens, Racomitrium, Pleurozia purpurea and ccassional Cladonia uncialis. Sphagnum imbricatum occurs very locally. Lichens are scarce and Calluna is short due to periodic burning. The microtopography is of low hummocks and flats. Pools re absent. The area is divided by fences and the vegetation is bderately grazed by sheep. Old peat cuttings are present,

" site name "

271

JITE NO:	W5	1/2" MAP NO:	16
COUNTY: AT.GRID:	WICKLOW O 13 08	6 " MAP NO: ALTITUDE (m): AIR PHOTO:	c. 500 0 78
NTACT AREA (ha): TOTAL AREA (ha):	Tluch	FOREST AREA: RECORDERS:	CD/RG/EM
CATEGORY: ATING: IOWNLANDS:	Flush Biii ?	WRITE UP:	CD

TTE DESCRIPTION

This small site lies c. 5 km south of Sallygap near the head of he Cloghoge Brook catchment, on the eastern margin of the military road at Cloghoge.

he boundaries of the site consist of the military road on the W, a stretch of the Cloghoge Brook along the SW and a tributary of the Cloghoge along the NE.

ITE EVALUATION

A rather impoverished area of blanket bog probably on account of requent episodes of burning. Part of the area had just been urnt at the time of survey in fact. The only area of interest is the small, wet flush at AREA B which is a station for Carex curta.

PECIES OF NOTE

arex curta (northern species)

AREA A

ryish area of bog characterized by a species poor community dominated by Calluna, Molinia and Scirpus.The terrain is uneven with a suggestion of bummocks and hollows. the 'hummocks' consist of bushy Calluna underlain by ats of Hypnum jutlandicum. The 'hollows' contain Molinia, Scirpus, Potentill erecta and locally Sphagnum capillifolium and S. papillosum or occassionally S. subnitens and S. cuspidatum. The terrain is dry and firm with a generally ow cover of byryophytes. Lichens such as Cladonia crispata var. etrariformis, C. fimbriata and C. floerkeana colonized the areas of bare peat. The bog is scarred by a series of old drains at c. 100m intervals.

272

LACEA B

his is a flush with a canopy of Molinia and Eriophorum vaginatum tussocks an wet intertusscok areas dominated by sphagnum recurvum and also with Carex rostrata C. limosa, Vaccinium oxycoccus and occassional C. curta which is enerally considered a northern species.

REA C (1)

This area conists of Calluna heath interspersed with Sphagnum papillosum illed hollows resulting from the tearing of the the bog surface in the irection of the stream on the NW. On the ridge above this Calluna dominates with Scirpus and some Eriophorum angustifolium and Molinia. The latter become ocally dominant. The most prevalent bryophyte beneath the Calluna is ypnum jutlandicum.

∕`\ii)

Jownslope, approaching the junction of the Cloghoge Brook and a tributary, Sphagnum cover improves (c. 50% cover), Calluna and Molinia are less frequen hile Scirpus becomes more prevalent.

(iii)

his area is dominated by tall Calluna with little else.

REA D

This area had been severely damaged by fire just prior to the survey visit.