

Upland Resource Survey Consolidation Project

Phase II: Eden Vale, Lake District, Morecambe Bay Limestones,
Yorkshire Dales, Southern Pennines, Vale of York, Coal Measures

Phase III: Border Uplands, Northern Pennines, Tyne Vale

No. 93 - English Nature Research Reports



working today
for nature tomorrow

No. 93

Upland Resource Survey Consolidation Project

**PHASE II. Eden Vale, Lake District, Morecambe
Bay Limestones, Yorkshire Dales, Southern Pennines,
Vale of York, Coal Measures**

**PHASE III: Border Uplands,
Northern Pennines, Tyne Vale**

Ecological Advisory Service, Keighley

(Contract F72-18-20)

Nominated Officer: J. Manley

**Further copies of this report can be obtained from
Uplands and Freshwater Team, English Nature
Northminster House, Peterborough PE1 1UA**

ISBN 0967-876X

© Copyright English Nature 1994

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT II

CONTENTS

PHASE II

Summary

1	Introduction	1
2	Methodology	2
3	Results	5

Tables & Figures	1 + 2	Eden Vale
	3 + 4	Lake District
	5 + 6	Morecambe Bay Limestones
	7 + 8	Yorkshire Dales
	9 + 10	Southern Pennines
	11 + 12	Vale of York
	13 + 14	Coal Measures
	15	Total Area Surveyed

Appendices	1	Data Source Table
	2	Study Area Coverage
	3	Habitat Codings
	4	Natural Area Boundaries

PHASE III

1	Introduction	1
2	Methodology	2
3	Results	5

Tables & Figures	1 + 2	Border Uplands
	3 + 4	Northern Pennines
	5 + 6	Tyne Vale
	7	Total Area Surveyed

Appendices	1	Study Area Coverage
	2	Habitat Codings
	3	Natural Area Boundaries
	4	Areas already covered by digitised data
	5	Acknowledgements

PHASE II

**Eden Vale, Lake District
Morecambe Bay Limestones,
Yorkshire Dales, Southern Pennines,
Vale of York, Coal Measures.**

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT II

1 INTRODUCTION

- 1.1 The *Ecological Advisory Service (EAS)* was awarded a contract in September 1993 by English Nature (EN) to continue the work which had been carried out in URSC I. This was to collate existing vegetation data for a further 2800 km² of the uplands in northern England, in order to produce summary results.
- 1.2 The pilot project URSC I involved mapping the entire Less Favoured Area (LFA) in Dartmoor and the Peak District up to the OS northing 4412. However, this area was found to include a large quantity of semi-improved grassland and a recommendation was therefore made that future work should concentrate on the Severely Disadvantaged Area (SDA) only. In view of this, the working area for URSC II was defined using purely the SDA boundary, continuing northwards from OS northing 4412 until the required area had been covered within the SDA. This area included all available data within North Yorkshire and Cumbria to OS northing 3540 and OS easting 3540. Data from County Durham were not included in this survey.

2 METHODOLOGY

Data Sources

- 2.1** The first stage of the project identified and evaluated the available data sources for the area covered by the SDA boundary. This was done by contacting the following organisations:

English Nature Regional and Sub-Regional Offices - Blackwell, Newcastle,
Leyburn, York

Yorkshire Dales National Park Office, Grassington

Bury Council, Metropolitan Borough of Bury

Greater Manchester Countryside Unit, Ashton-under-Lyne

Agricultural Development & Advisory Service (ADAS), Leeds

- 2.2** All of the organisations had Phase I habitat data covering part of the SDA in northern England. A decision was then made as to which of these areas were to be mapped, based on the availability of the data and the size of the area to be studied in this contract.

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT II

2.7 The Phase I survey of Harrogate and Hambleton District in North Yorkshire was found to be largely incomplete and, therefore, a decision was made to exclude the district from this phase of the project. It is expected that this survey will be completed early in 1994 and could, therefore, be included at a later stage in the URSC Programme.

2.8 Despite the effective removal of these areas from the project, it was calculated that sufficient habitat data could still be gathered from the organisations which had been contacted. Namely for the following areas: (See Appendix 2)

Greater Manchester

West Yorkshire

North Yorkshire

. YDNP - Richmondshire and Craven

. Craven - outside YDNP

Cumbria - LDNP and outside LDNP

2.9 The data collection process was carried out by following the same methodology as in the pilot URSC project, using a reduced Phase I classification which groups together various categories from the current Phase I classification to give a more manageable group of

Upland Resource Consolidation Survey Phase II

Natural Area 7 : Eden Vale

Area = 93730 Ha

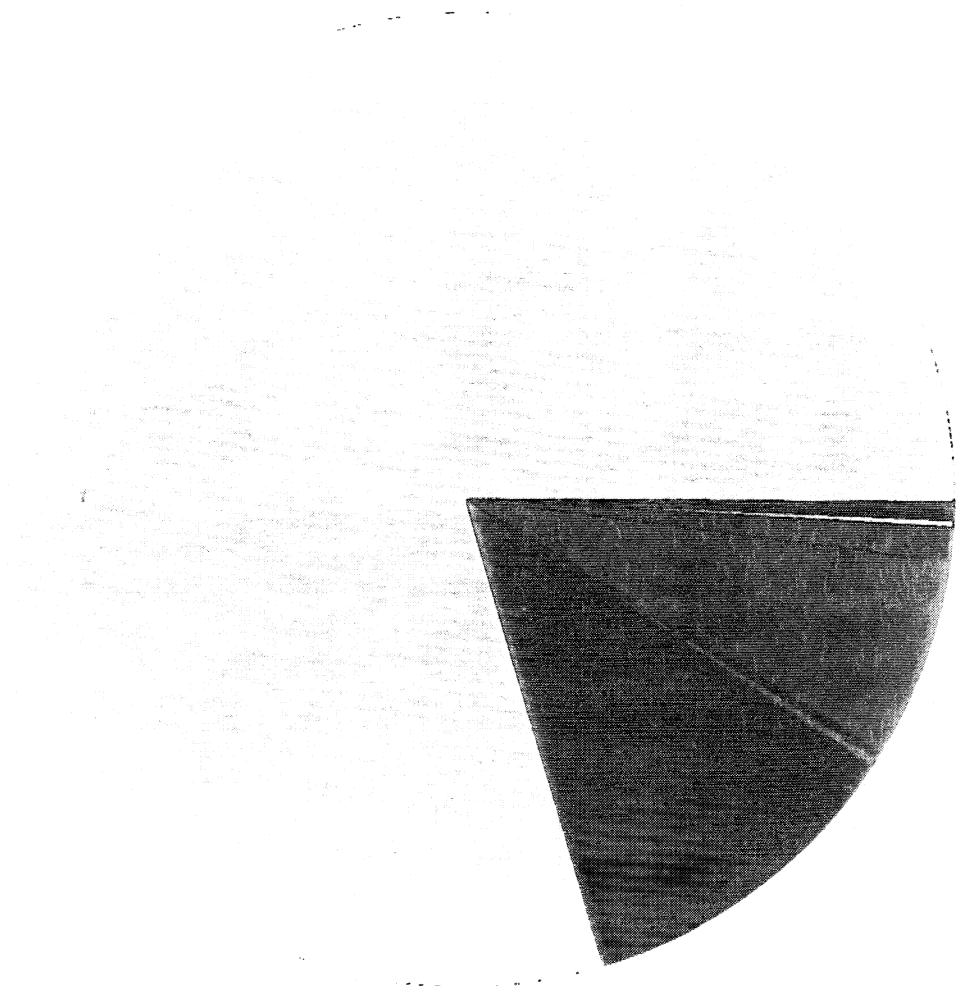
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		344.37	0.37
	Broad leaved plantation		2.07	0.00
	Conifers & mixed		409.37	0.44
	Dense scrub		30.4	0.03
GRASSLAND	Unimproved acidic		1175.6	1.25
	Unimproved neutral		20.5	0.02
	Unimproved calcareous		17.12	0.02
	Semi-improved & improved		6172.94	6.59
	Marshy grassland		187.73	0.20
TALL HERB & FERN	Continuous Bracken		294.08	0.31
HEATHLAND	Dry dwarf shrub heath		589.48	0.63
	Wet dwarf shrub heath		162.8	0.17
MIRE	Bog (all types)		14.31	0.02
	Valley/Basin mire		61.97	0.07
OPEN WATER	Standing water		14.1	0.02
ROCK EXPOSURE	Natural (limestone pavement)		9.34	0.01
MISCELLANEOUS	Urban & Amenity		28.2	0.03
	Quarry		2.57	0.00
UNCOLOURED	SSSI		9704.18	10.35
	Remainder of Natural Area		74486.19	79.47
TOTALS			93730	100.00

FIG 1

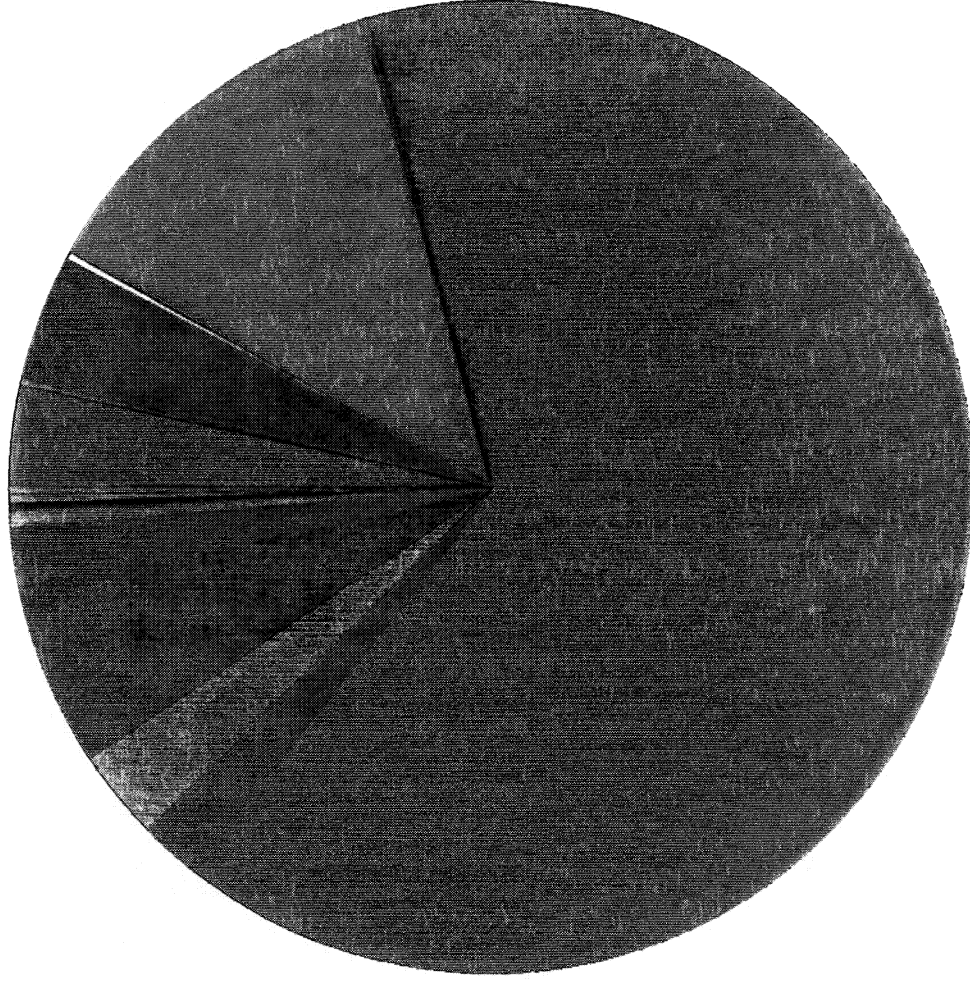
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		344.37	3.61
	Broad leaved plantation		2.07	0.02
	Conifers & mixed		409.37	4.29
	Dense scrub		30.4	0.32
GRASSLAND	Unimproved acidic		1175.6	12.33
	Unimproved neutral		20.5	0.21
	Unimproved calcareous		17.12	0.18
	Semi-improved & improved		6172.94	64.73
	Marshy grassland		187.73	1.97
TALL HERB & FERN	Continuous Bracken		294.08	3.08
HEATHLAND	Dry dwarf shrub heath		589.48	6.18
	Wet dwarf shrub heath		162.8	1.71
MIRE	Bog (all types)		14.31	0.15
	Valley/Basin mire		61.97	0.65
OPEN WATER	Standing water		14.1	0.15
ROCK EXPOSURE	Natural (limestone pavement)		9.34	0.10
MISCELLANEOUS	Urban & Amenity		28.2	0.30
	Quarry		2.57	0.03
TOTALS			9536.63	100.00

FIG 2

Upland Resource Consolidation Survey Phase II



Upland Resource Consolidation Survey Phase II



Natural Area 7 : Eden Vale

Fig 2

Upland Resource Consolidation Survey Phase II

Natural Area 8 : Lake District

Area = 249,800 Ha

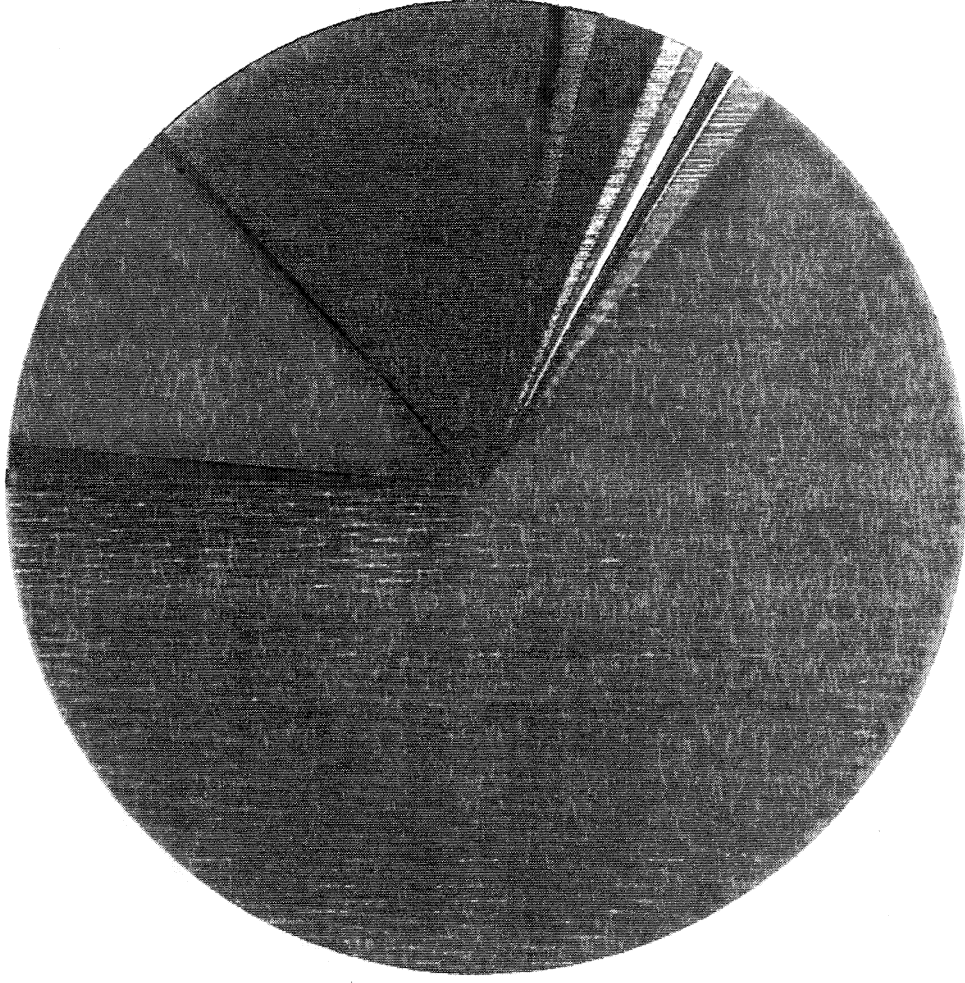
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		1810.89	0.72
	Broad leaved plantation		6.06	0.00
	Conifers & mixed		1755.80	0.70
	Dense scrub		55.62	0.02
GRASSLAND	Unimproved acidic		28182.71	11.28
	Unimproved neutral		370.14	0.15
	Unimproved calcareous		457.03	0.18
	Semi-improved & improved		35953.40	14.35
	Marshy grassland		1131.28	0.45
TALL HERB & FERN	Continuous Bracken		3132.63	1.25
HEATHLAND	Dry dwarf shrub heath		4101.09	1.64
	Wet dwarf shrub heath		864.96	0.35
MIRE	Bog (all types)		2094.48	0.84
	Valley/Basin mire		1611.02	0.64
SWAMP & MARGINAL	Swamp		7.63	0.00
OPEN WATER	Standing water		1244.70	0.50
ROCK EXPOSURE	Natural (limestone pavement)		640.61	0.26
MISCELLANEOUS	Urban & Amenity		493.87	0.20
	Quarry		184.20	0.07
UNCOLOURED	ESA		790.05	0.32
	SSS		2875.30	1.15
	Remainder of Natural Area		182166.61	64.91
TOTALS			249800.00	100.00

FIG 3

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		1810.89	2.16
	Broad leaved plantation		6.06	0.01
	Conifers & mixed		1755.80	2.09
	Dense scrub		55.62	0.07
GRASSLAND	Unimproved acidic		28182.71	33.56
	Unimproved neutral		370.14	0.44
	Unimproved calcareous		457.03	0.54
	Semi-improved & improved		35953.40	42.69
	Marshy grassland		1131.28	1.35
TALL HERB & FERN	Continuous Bracken		3132.63	3.73
HEATHLAND	Dry dwarf shrub heath		4101.09	4.88
	Wet dwarf shrub heath		864.96	1.03
MIRE	Bog (all types)		2094.48	2.49
	Valley/Basin mire		1611.02	1.92
SWAMP & MARGINAL	Swamp		7.63	0.01
OPEN WATER	Standing water		1244.70	1.48
ROCK EXPOSURE	Natural (limestone pavement)		640.61	0.76
MISCELLANEOUS	Urban & Amenity		493.87	0.59
	Quarry		184.20	0.20
TOTALS			83978.14	100.00

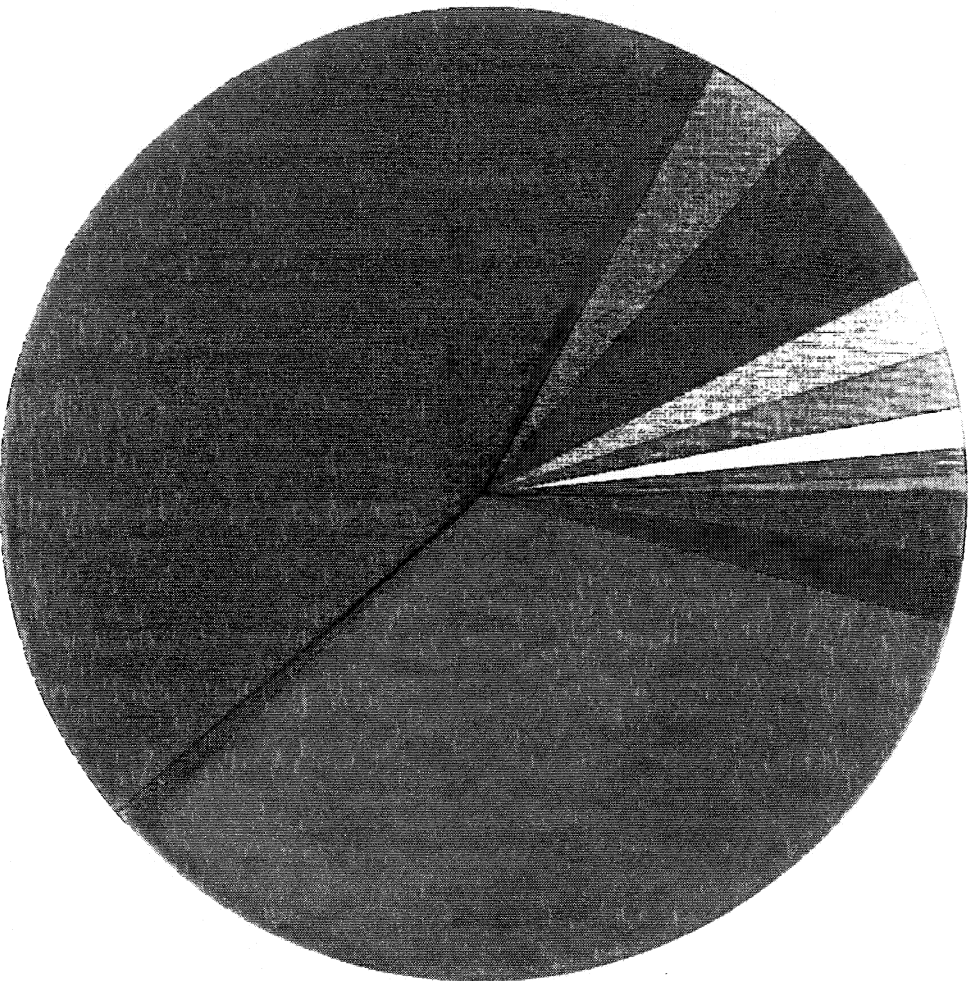
FIG 4

Upland Resource Consolidation Survey Phase II



Natural Area 8: Lake District

Upland Resource Consolidation Survey Phase II



Natural Area 8: Lake District

Fig 4

Upland Resource Consolidation Survey Phase II

Natural Area 10 : Morecambe Bay Limestones

Area = 68,680 Ha

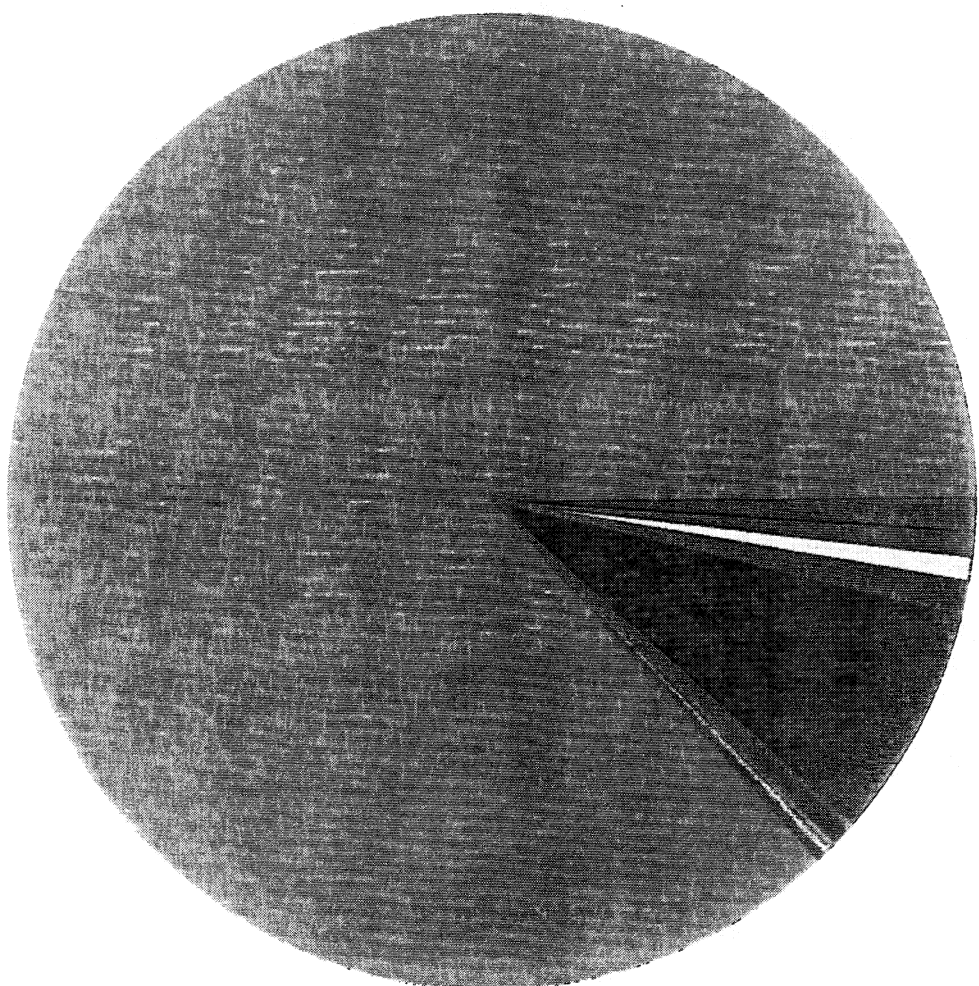
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		822.19	1.20
	Conifers & mixed		550.75	0.80
	Dense scrub		35.69	0.05
GRASSLAND	Unimproved acidic		619.30	0.90
	Unimproved neutral		3.01	0.00
	Unimproved calcareous		736.72	1.07
	Semi-improved & improved		5404.05	7.87
	Marshy grassland		71.70	0.10
TALL HERB & FERN	Continuous bracken		394.97	0.58
HEATHLAND	Dry dwarf shrub heath		138.57	0.20
	Wet dwarf shrub heath		111.50	0.16
MIRE	Bog (all types)		36.78	0.05
OPEN WATER	Standing water		118.82	0.17
ROCK EXPOSURE	Natural (limestone pavement)		25.86	0.04
MISCELLANEOUS	Urban & Amenity		33.84	0.05
	Quarry		11.10	0.02
UNCOLOURED	Natural Area outside SDA		59452.96	86.57
TOTALS			68680.00	100.00

FIG 5

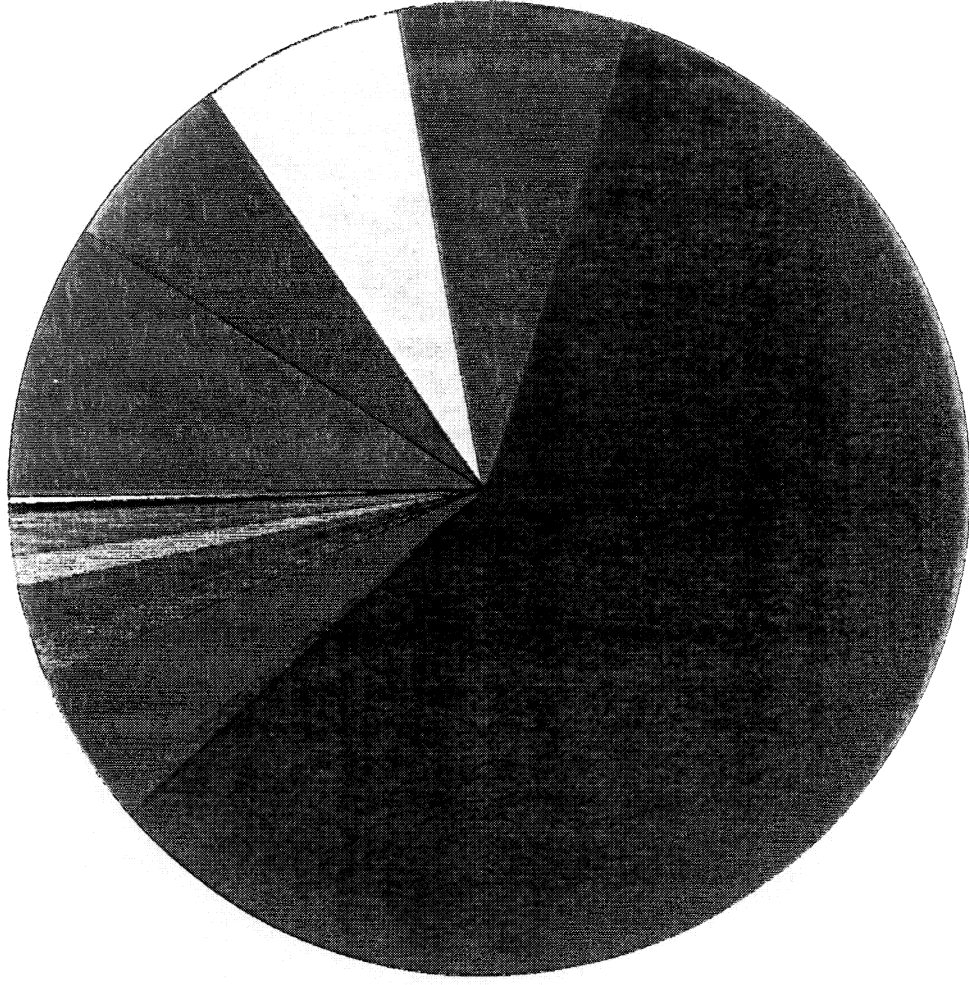
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		822.19	8.91
	Conifers & mixed		550.75	5.97
	Dense scrub		35.69	0.39
GRASSLAND	Unimproved acidic		619.30	6.71
	Unimproved neutral		3.01	0.03
	Unimproved calcareous		736.72	7.98
	Semi-improved & improved		5404.05	58.57
	Marshy grassland		71.70	0.78
TALL HERB & FERN	Continuous bracken		394.97	4.28
HEATHLAND	Dry dwarf shrub heath		138.57	1.50
	Wet dwarf shrub heath		111.50	1.21
MIRE	Bog (all types)		36.78	0.40
SWAMP \ MARGINAL	Valley/Basin mire		112.17	1.22
OPEN WATER	Standing water		118.82	1.29
ROCK EXPOSURE	Natural (limestone pavement)		25.86	0.28
MISCELLANEOUS	Urban & Amenity		33.84	0.37
	Quarry		11.10	0.12
TOTALS			9227.02	100.00

FIG 6

Upland Resource Consolidation Survey Phase II



Upland Resource Consolidation Survey Phase II



Natural Area 10: Morecambe Bay Limestone

Fig b

Upland Resource Consolidation Survey Phase II

Natural Area 11 : Yorkshire Dales

Area = 222,400 Ha

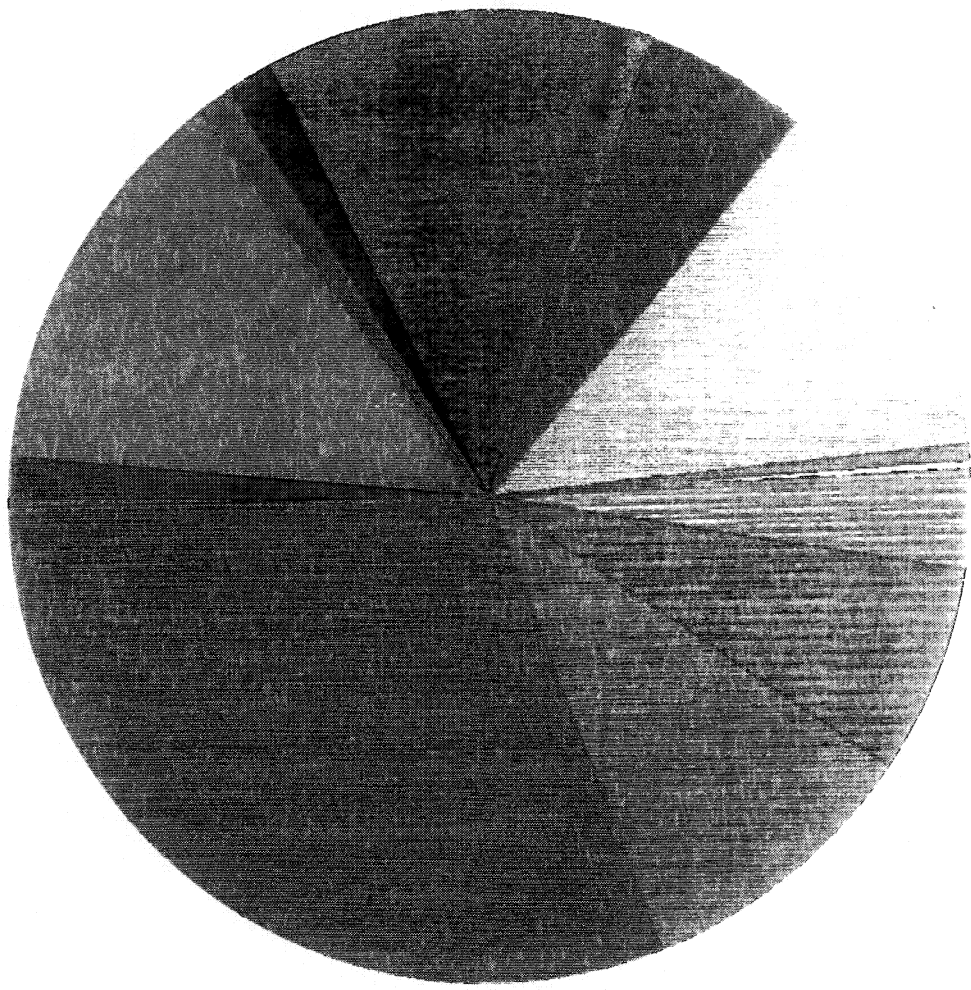
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		632.78	0.28
	Broad leaved plantation		64.59	0.04
	Conifers & mixed		3140.14	1.41
	Dense scrub		10.66	0.00
GRASSLAND	Unimproved acidic		29946.64	13.47
	Unimproved neutral		2404.62	1.08
	Unimproved calcareous		3496.71	1.57
	Semi-improved & improved		25726.77	11.57
	Marshy grassland		1376.35	0.62
TALL HERB & FERN	Continuous Bracken		1805.93	0.81
HEATHLAND	Dry dwarf shrub heath		10996.32	4.94
	Wet dwarf shrub heath		1740.36	0.78
MIRE	Bog (all types)		27126.66	12.20
	Valley/Basin mire		1435.91	0.65
SWAMP \ MARGINAL	Swamp		2.08	0.00
OPEN WATER	Standing water		146.26	0.07
ROCK EXPOSURE	Natural (limestone pavement)		321.29	0.14
	Artificial (Metalliferous spoil)		235.35	0.11
MISCELLANEOUS	Urban & Amenity		331.26	0.15
	No Access		1.93	0.00
	Not Surveyed		6463.96	2.91
	Quarry		142.28	0.06
UNCOLOURED	ESA		15423.09	6.93
	SSSI		21692.50	9.75
	Remainder of Natural Area		67712.74	30.45
TOTALS			222400.00	100.00

FIG 7

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		632.78	0.54
	Broad leaved plantation		64.59	0.07
	Conifers & mixed		3140.14	2.67
	Dense scrub		10.66	0.01
GRASSLAND	Unimproved acidic		29946.64	25.47
	Unimproved neutral		2404.62	2.05
	Unimproved calcareous		3496.71	2.97
	Semi-improved & improved		25726.77	21.86
	Marshy grassland		1376.35	1.17
TALL HERB & FERN	Continuous Bracken		1805.93	1.54
HEATHLAND	Dry dwarf shrub heath		10996.32	9.35
	Wet dwarf shrub heath		1740.36	1.48
MIRE	Bog (all types)		27126.66	23.07
	Valley/Basin mire		1435.91	1.22
SWAMP \ MARGINAL	Swamp		2.08	0.00
OPEN WATER	Standing water		146.26	0.13
ROCK EXPOSURE	Natural (limestone pavement)		321.29	0.27
	Artificial (Metalliferous spoil)		235.35	0.20
MISCELLANEOUS	Urban & Amenity		331.26	0.28
	No Access		1.93	0.00
	Not Surveyed		6463.96	5.50
	Quarry		142.28	0.12
TOTALS			117571.67	100.00

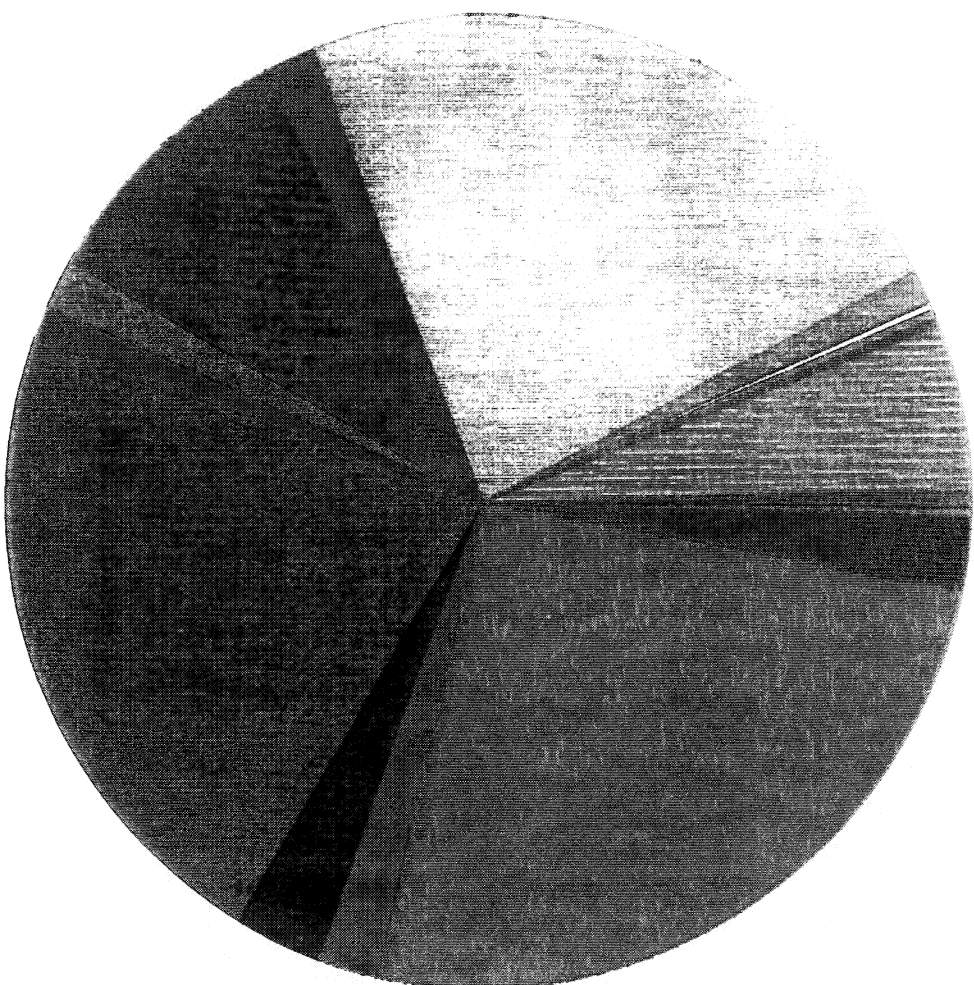
FIG 8

Upland Resource Consolidation Survey Phase II



Natural Area 11: Yorkshire Dales

Upland Resource Consolidation Survey Phase II



Natural Area 11 : Yorkshire Dales

Fig 8

Natural Area 12: Southern Pennines

Area = 389,500 Ha

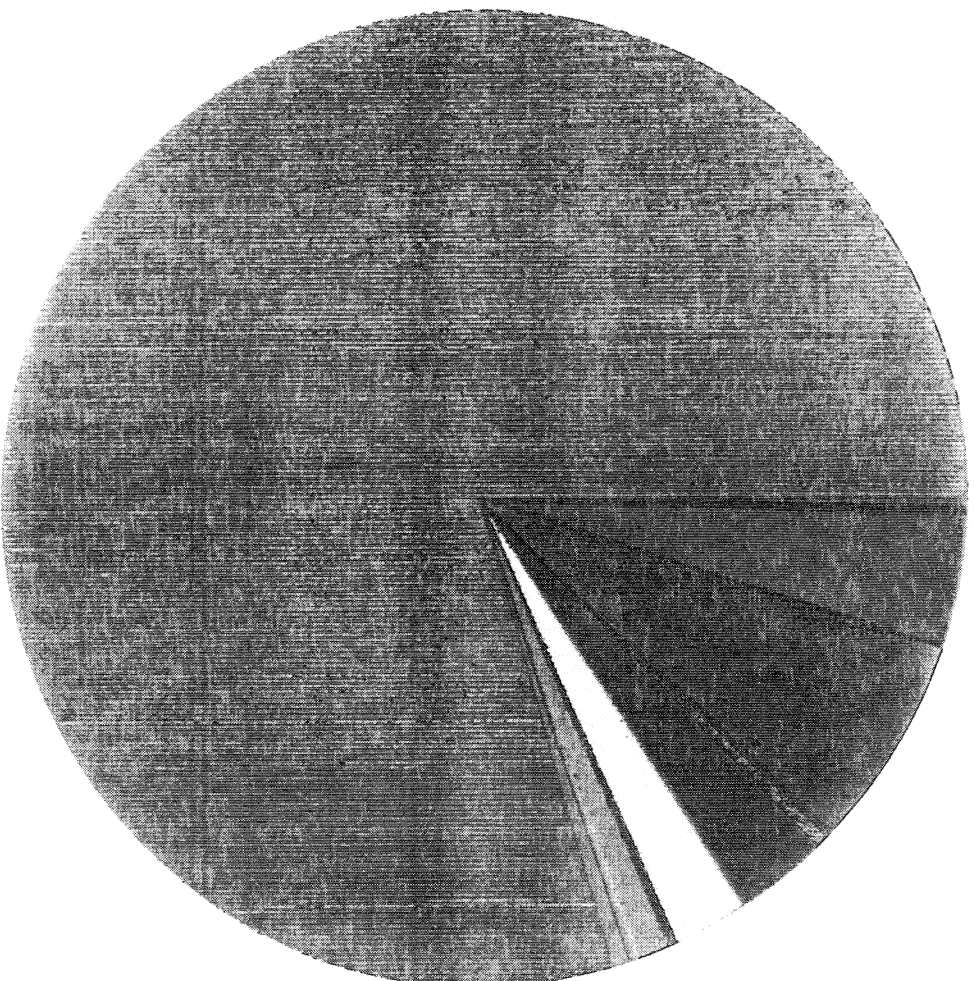
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		1282.73	0.33
	Broad leaved plantation		97.23	0.02
	Conifers & mixed		1523.67	0.39
	Dense scrub		13.24	0.00
GRASSLAND	Unimproved acidic		16929.57	4.35
	Unimproved neutral		91.73	0.02
	Unimproved calcareous		251.58	0.06
	Semi-improved & improved		28805.82	6.83
	Marshy grassland		1350.16	0.35
TALL HERB & FERN	Continuous Bracken		1873.43	0.48
HEATHLAND	Dry dwarf shrub heath		10889.83	2.74
	Wet dwarf shrub heath		1396.91	0.36
MIRE	Bog (all types)		9786.90	2.51
	Valley/Basin mire		353.29	0.09
OPEN WATER	Standing water		1053.76	0.27
ROCK EXPOSURE	Natural (limestone pavement)		13.15	0.00
	Artificial (Metaliferous spoil)		40.23	0.01
MISCELLANEOUS	Urban & Amenity		3773.69	0.97
	No Access		14.04	0.00
	Not Surveyed		733.12	0.19
	Quarry		96.82	0.03
UNCOLOURED	ESA		2720.09	0.70
	Natural Area outside SDA		308847.21	79.29
TOTALS			389500	100.00

FIG 9

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		1282.73	1.65
	Broad leaved plantation		97.23	0.12
	Conifers & mixed		1523.67	1.96
	Dense scrub		13.24	0.02
GRASSLAND	Unimproved acidic		16929.57	21.72
	Unimproved neutral		91.73	0.12
	Unimproved calcareous		251.58	0.32
	Semi-improved & improved		28805.82	34.14
	Marshy grassland		1350.16	1.73
TALL HERB & FERN	Continuous Bracken		1873.43	2.40
HEATHLAND	Dry dwarf shrub heath		10889.83	13.69
	Wet dwarf shrub heath		1396.91	1.79
MIRE	Bog (all types)		9786.90	12.53
	Valley/Basin mire		353.29	0.45
OPEN WATER	Standing water		1053.76	1.35
ROCK EXPOSURE	Natural (limestone pavement)		13.15	0.02
	Artificial (Metaliferous spoil)		40.23	0.05
MISCELLANEOUS	Urban & Amenity		3773.69	4.84
	No Access		14.04	0.02
	Not Surveyed		733.12	0.94
	Quarry		96.82	0.13
TOTALS			77932.70	100.00

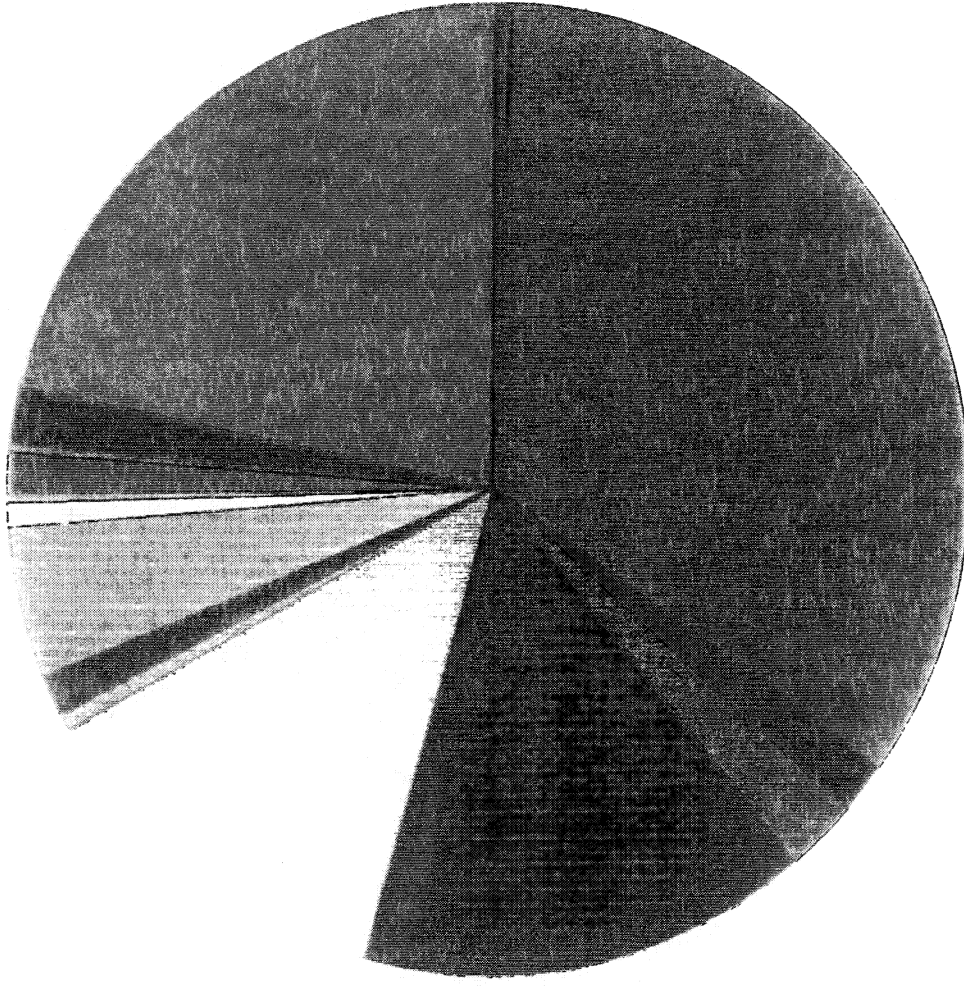
FIG 10

Upland Resource Consolidation Survey Phase II



Natural Area 12: The Southern Pinnacles

Fig 9



Natural Area 12: The Southern Pennines

Fig 10

Upland Resource Consolidation Survey Phase II

Natural Area 13 : Vale of York

Area = 521.900 Ha

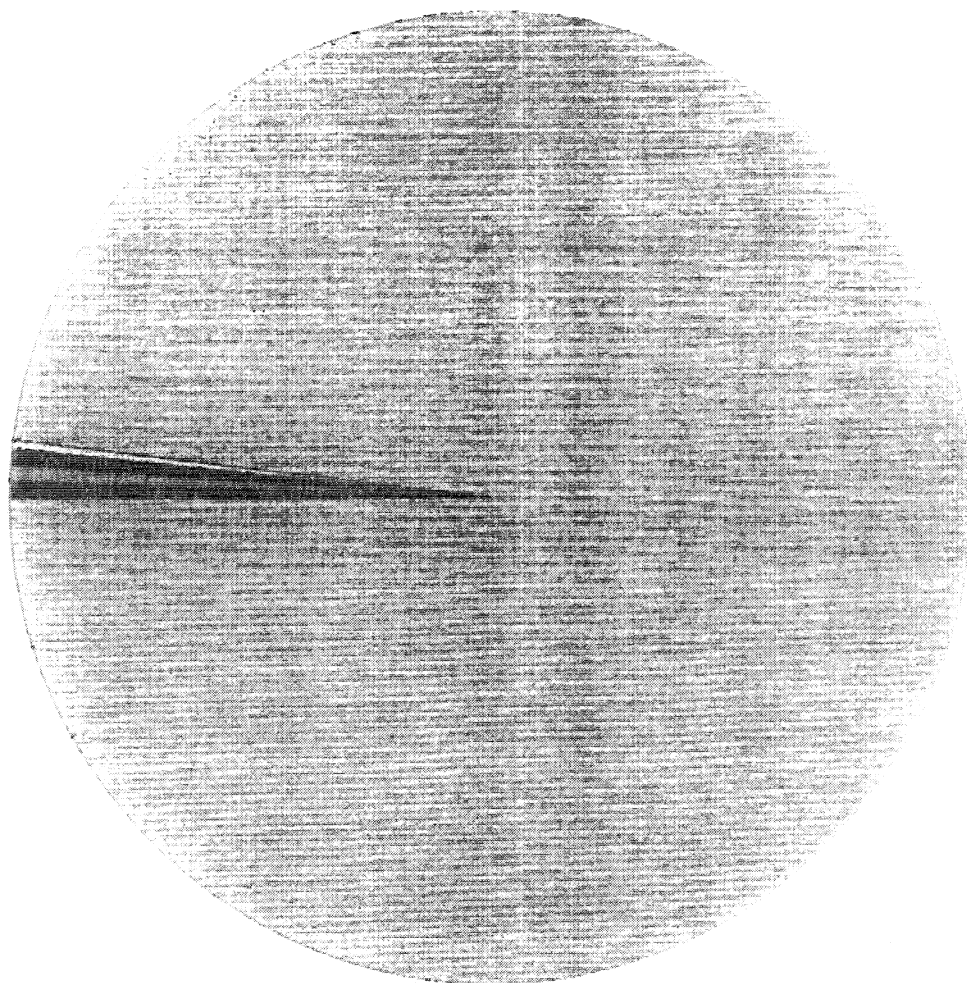
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi natural		85.86	0.02
	Conifers & mixed		179.30	0.03
GRASSLAND	Unimproved acidic		535.57	0.10
	Unimproved neutral		54.70	0.01
	Unimproved calcareous		182.09	0.03
	Semi-improved & improved		2469.68	0.47
	Continuous Bracken		227.13	0.04
TALL HERB & FERN	Dry dwarf shrub heath		2787.51	0.53
HEATHLAND	Bog (all types)		1452.69	0.28
MIRE	Valley/Basin mire		37.42	0.01
ROCK EXPOSURE	Artificial (Metaliferous spoil)		44.38	0.01
MISCELLANEOUS	Not surveyed		1452.42	0.28
UNCOLOURED	ESA		1329.37	0.25
	Natural Area outside SDA		511061.88	97.92
TOTALS			521900	100.00

FIG 11

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi natural		85.86	0.90
	Conifers & mixed		179.30	1.89
GRASSLAND	Unimproved acidic		535.57	5.63
	Unimproved neutral		54.70	0.58
	Unimproved calcareous		182.09	1.91
	Semi-improved & improved		2469.68	25.97
	Continuous Bracken		227.13	2.39
TALL HERB & FERN	Dry dwarf shrub heath		2787.51	29.32
HEATHLAND	Bog (all types)		1452.69	15.28
MIRE	Valley/Basin mire		37.42	0.39
ROCK EXPOSURE	Artificial (Metaliferous spoil)		44.38	0.47
MISCELLANEOUS	Not surveyed		1452.42	15.27
TOTALS			9508.75	100.00

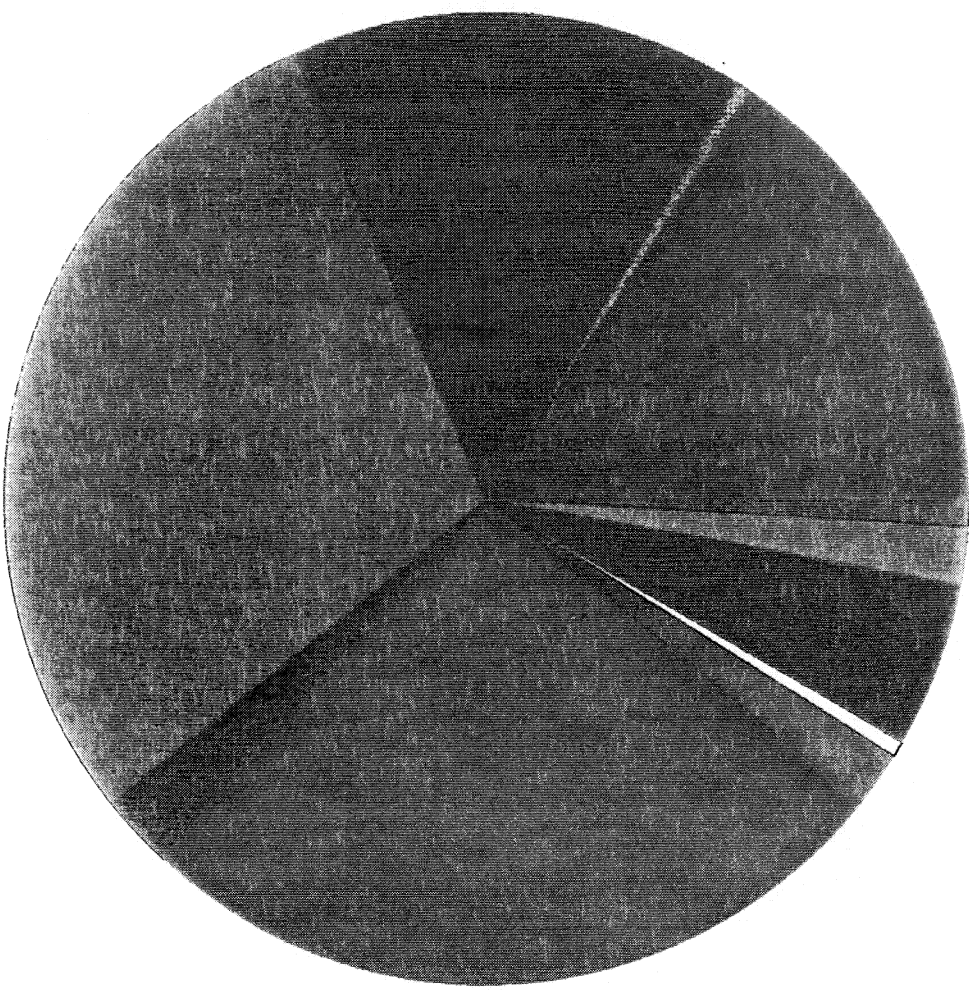
FIG 12

Upland Resource Consolidation Survey Phase II



Natural Area 13: Vale of York

Upland Resource Consolidation Survey Phase II



Natural Area 13: Vale of York

Fig 12

Upland Resource Consolidation Survey Phase II

Natural Area 19: Coal Measures

Area = 166,800 Ha

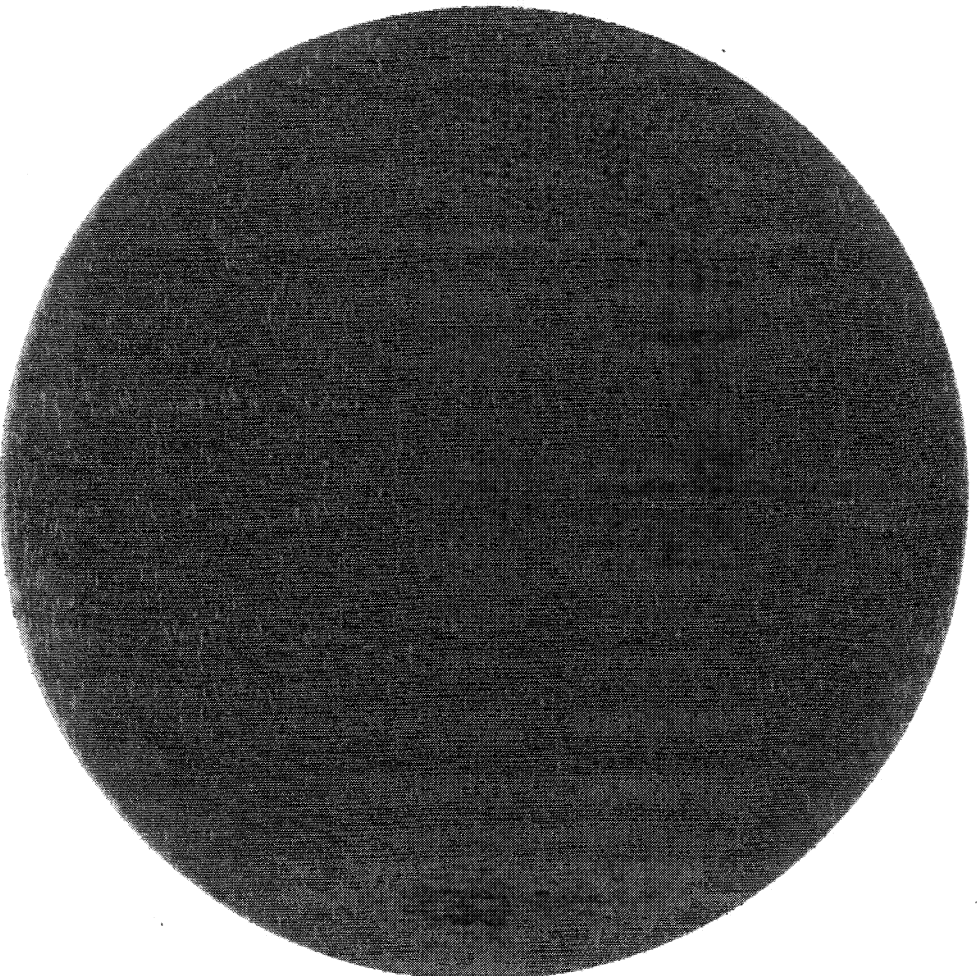
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		233.62	0.14
	Broad leaved plantation		13.44	0.01
	Conifers & mixed		6.32	0.00
	Dense scrub		1.57	0.00
GRASSLAND	Unimproved acidic		81.49	0.05
	Semi-improved & improved		2325.83	1.39
HEATHLAND	Dry dwarf shrub heath		60.03	0.04
SWAMP / MARGINAL	Standing Water		12.83	0.01
MISCELLANEOUS	Urban & Amenity		1509.84	0.97
	Quarry		63.06	0.04
UNCOLOURED	Natural Area outside SDA		162391.97	97.36
TOTALS			166800	100.00

FIG 13

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		233.62	5.30
	Broad leaved plantation		13.44	0.30
	Conifers & mixed		6.32	0.14
	Dense scrub		1.57	0.04
GRASSLAND	Unimproved acidic		81.49	1.85
	Semi-improved & improved		2325.83	52.76
HEATHLAND	Dry dwarf shrub heath		60.03	1.36
SWAMP / MARGINAL	Standing Water		12.83	0.29
MISCELLANEOUS	Urban & Amenity		1509.84	36.52
	Quarry		63.06	1.43
TOTALS			4408.03	100.00

FIG14

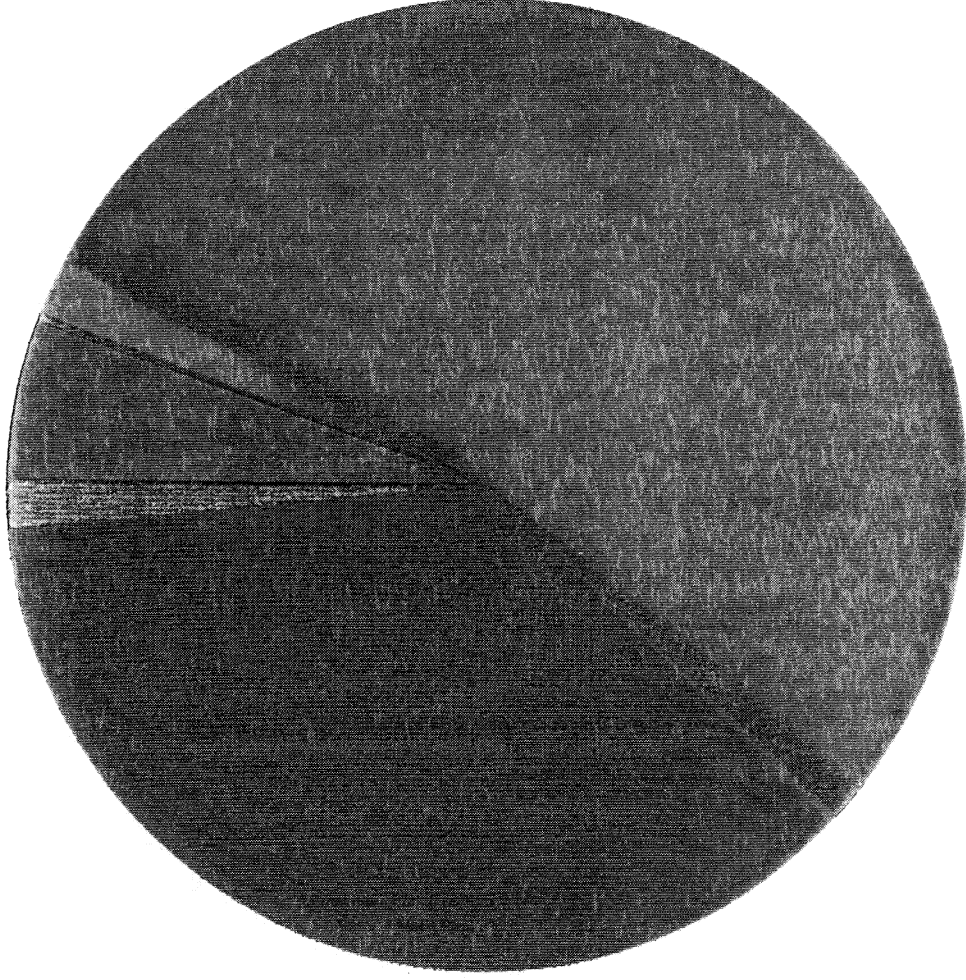
Upland Resource Consolidation Survey Phase II



Natural Area 19: Coal Measures

Fig 13

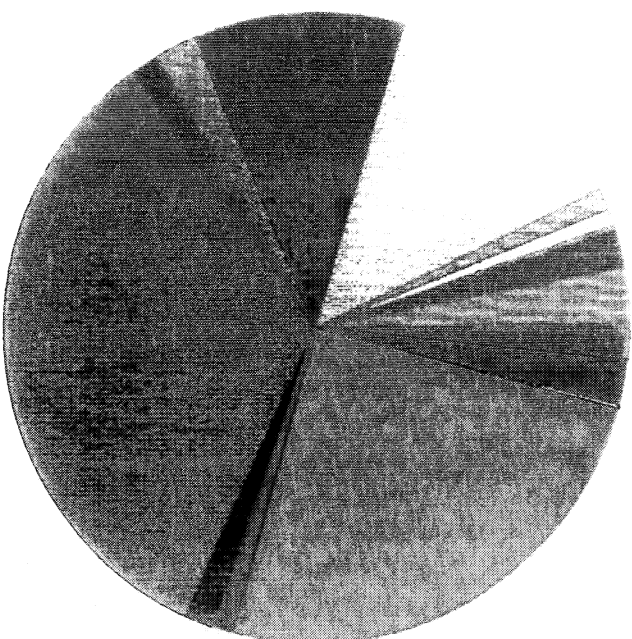
Upland Resource Consolidation Survey Phase II



Natural Area 19: Coal Measures

Upland Resource Consolidation Survey Phase II

HABITAT	KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi natural	5484.97	1.67
	Broad leaved plantation	204.19	0.06
	Conifers & mixed	7950.66	2.42
GRASSLAND	Dense scrub	152.48	0.05
	Ummproved acidic	82654.383	25.12
	Ummproved neutral	3027.84	0.92
	Ummproved calcareous	5218.92	1.59
	Semi improved & improved	109431.73	33.26
	Marshy grassland	4317.73	1.31
TALL HERB & FERN	Continuous Bracken	7994.77	2.43
HEATHLAND	Dry dwarf shrub heath	30835.29	9.37
	Wet dwarf shrub heath	4709.16	1.43
MIRE	Bog (all types)	43402.03	13.19
	Valley/Basin mire	3716.58	1.13
SWAMP \ MARGINAL	Swamp	9.91	0.00
OPEN WATER	Shallow water	2583.97	0.79
ROCK EXPOSURE	Natural (limestone pavement)	1052.91	0.32
	Artificial (Metalliferous spoil)	419.96	0.10
MISCELLANEOUS	Urban & Arterial	6270.70	1.91
	No Access	15.99	0.00
	Not Surveyed	9146.08	2.78
	Quarry	488.86	0.15
TOTALS		328988.42	100.00



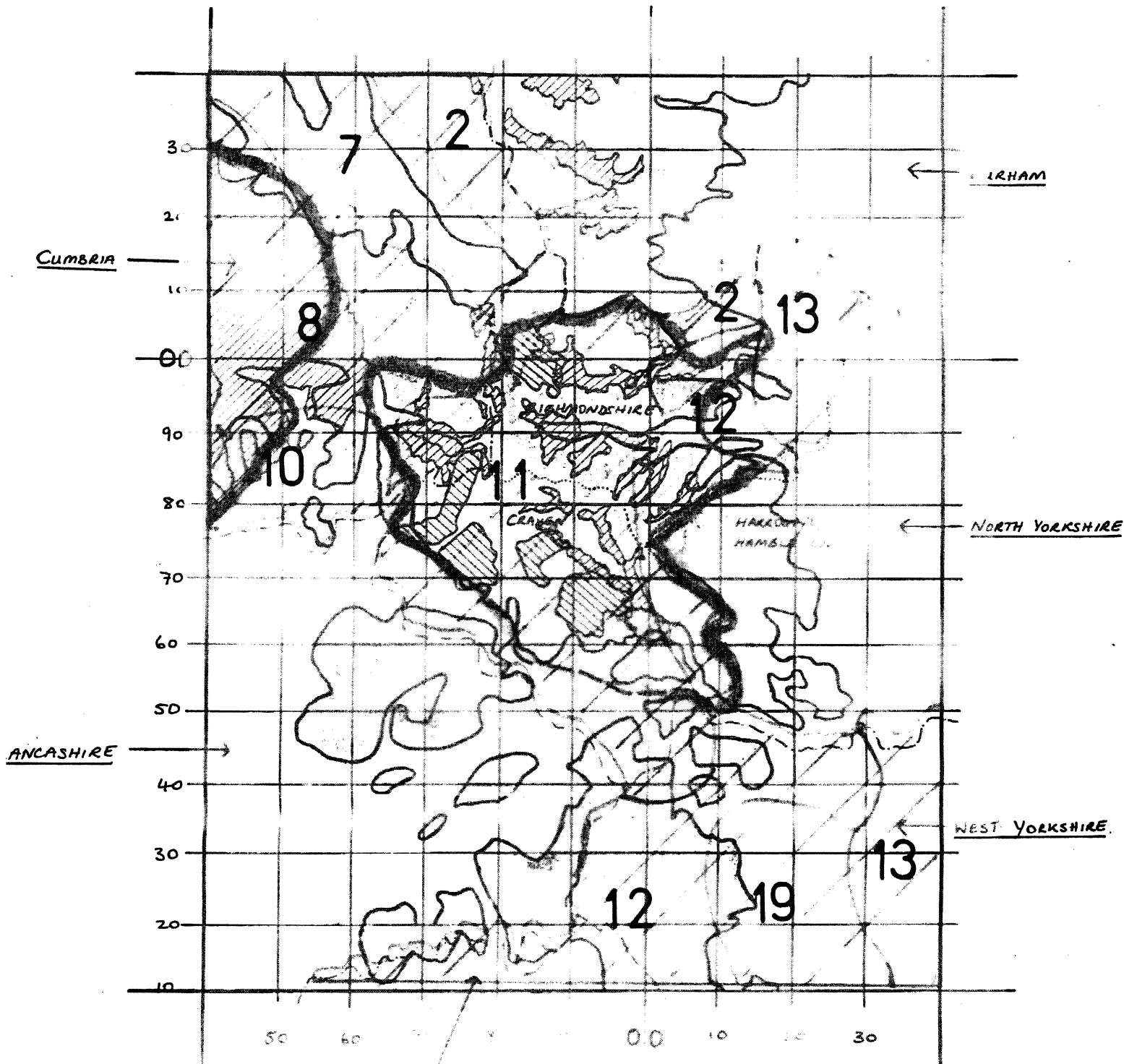
Total Area Surveyed

Fig 15

APPENDIX 1 **URSC II** **Data Source Table**

County	Data Format	Coverage	Location of Information	Digitised
Lancashire	Standard Phase I colour coding	Complete	Lancashire County Council	Yes
Greater Manchester	Standard Phase I anotated and coloured	Complete	G M Countryside Unit	No
West Yorkshire	Standard Phase I	Complete	<i>EAS</i>	No
North Yorkshire . YDNP (Richmondshire & Craven)	Standard Phase I	Incomplete	YDNP, Grassington	No
. Craven outside YDNP	Standard Phase I	Complete	EN, Leyburn	No
. Harrogate & Hambleton	Standard Phase I	Incomplete	EN, York	No
East Cumbria . LDNP + outside LDNP	Standard Phase I	*Incomplete	EN, Blackwell	No
South Cumbria	Standard Phase I	Complete	EN, Blackwell & Grassington	No
Durham	Standard Phase I	Complete	EN, Newcastle	No

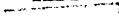
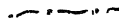
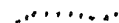






* YDNP Large areas of the Park are not surveyed due to difficulties in gaining access. Additionally, some SSSIs which have not been digitised by EN have not been mapped in YDNP and LDNP.



APPENDIX 2

URSC II Study Area Coverage

KEY

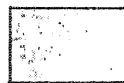
-  SDA boundary
-  County boundary
-  District boundary
-  YDNP boundary
-  LDNP boundary
-  SSSI boundary
-  ESA boundary
-  Area mapped
-  Natural Area Boundary

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT

PROPOSED HABITAT CODINGS

Woodland

semi-natural b/l



Green

plantation b/l



Green

conifers & mixed



True Green

Dense scrub

Green

Grassland and Marsh

Unimproved

Acid



Orange

Neutral



Orange

Calcareous



Orange

Marshy grassland



Purple

Semi-improved, improved and arable



Orange

Tall Herb and Fern

Continuous bracken



Terracotta

Heathland

Dry dwarf shrub heath and mosaics



Yellow ochre

Wet dwarf shrub heath and mosaics

Purple/
Yellow ochre

Montane heath



Yellow ochre

Mire

Bog (all types)



Purple

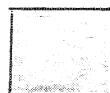
Valley/Basin mire



Magenta

Swamp, Marginal and Inundation

Swamp



Sky blue

Open Water

Standing Water



Indigo blue

Rock Exposure/Waste

Natural (e.g. limestone pavement)



Scarlet red

Artificial (e.g. Metalliferous spoil)



Scarlet red

Miscellaneous

All other land



Black

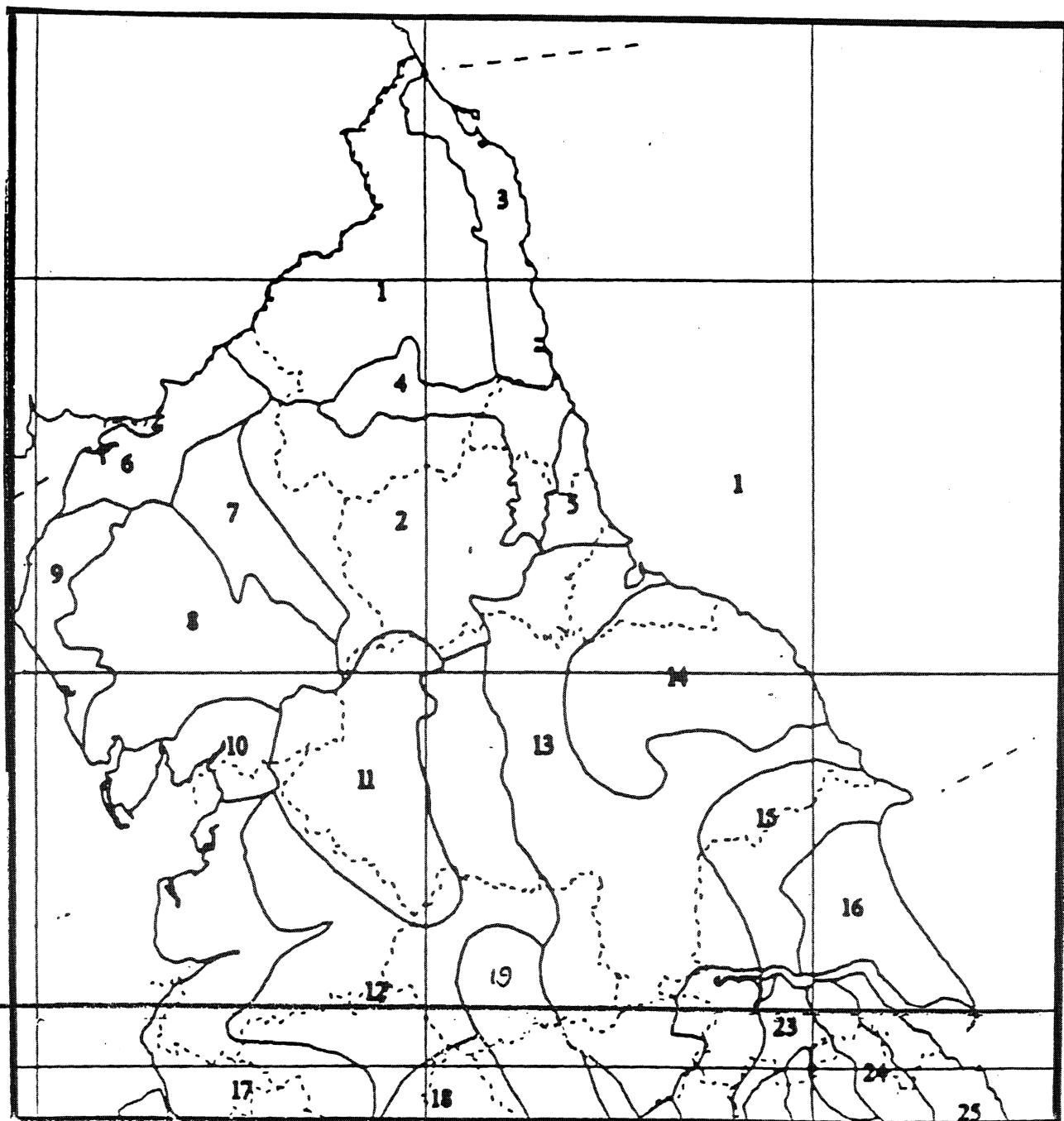
No access



White

KEY

- County boundary
- ~~~~~ Natural Area boundary
- 2 Northern Pennines
- 7 Eden Vale
- 8 Lake District
- 10 Morecambe Bay Limestones
- 11 Yorkshire Dales
- 12 Southern Pennines
- 13 Vale of York
- 19 Coal Measures



OS
412

PHASE III
Border Uplands,
Northern Pennines,
Tyne Vale

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT III
EXTENSION TO PROJECT II

1 INTRODUCTION

- 1.1** The *Ecological Advisory Service (EAS)* was awarded an extension contract in January 1994 by English Nature (EN) to continue the work which had been carried out in the Upland Resource Survey Consolidation II (URSC II). This extension contract was to collate existing vegetation data for a further 1,000 km² of the uplands of Durham and Northumberland, in order to produce summary results.
- 1.2** As in URSC II, the Severely Disadvantaged Area (SDA) boundary was used to define the area to be mapped.

2 METHODOLOGY

Data Sources

- 2.1 The first stage of the project identified and evaluated the available data sources for the area covered by the SDA boundary. This was done by contacting the following organisation:

English Nature, North-East Regional Office, Newcastle

Durham County Council

Northumberland County Council

Durham Wildlife Trust

- 2.2 Staff at EN confirmed that Phase I habitat data were held covering part of the SDA in the counties of Durham and Northumberland. It was also ascertained that the same areal coverage was held by Durham Wildlife Trust and Durham County Council. A decision was then made as to which areas were to be mapped, based on the availability of data and the size of the area (1,000 km²) to be studied in this extension to the contract.

- 2.3 Reference to Appendix 4 gives details of sites included in the Northern Pennine Dales Environmentally Sensitive Area (ESA) for which digitised data are already held by the Agricultural Development and Advisory Service. EN already hold NVC based information for Sites of Special Scientific Interest and the North Pennines Upland Survey in digitised format. A decision was made, therefore, not to map any of these areas in the project.

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT III

- 2.9** The summary statistics which form part of this report have been drawn from the digitised data produced by Bullen & Partners. The tables and pie charts have been produced using the Microsoft Excel program.

3 RESULTS

3.1 The project mapped parts of three Natural Areas (1, 2 and 4) - see Appendix 3, and the statistics present:

- a) the area habitat categories as a percentage of the total Natural Area
- b) the area habitat categories collated by the *EAS*.

These statistics are contained within Figs 1-6 and are summarised in Fig 7 for the total area collated as part of the Phase III Extension Contract. Examination of Fig 7 indicates that the total area collated was 105,212.18 ha (126,067.48 - 20,855.3 not surveyed)- ie 1,052.1 km².

3.2 The item 'not surveyed' refers to areas for which no Phase I habitat data were available on the source maps held by EN, or areas covered by the North Pennines Upland Survey for which data are already held in digitised format.

Upland Resource Consolidation Survey Phase III

Natural Area 1 : Border Uplands

Area = 239,500 Ha

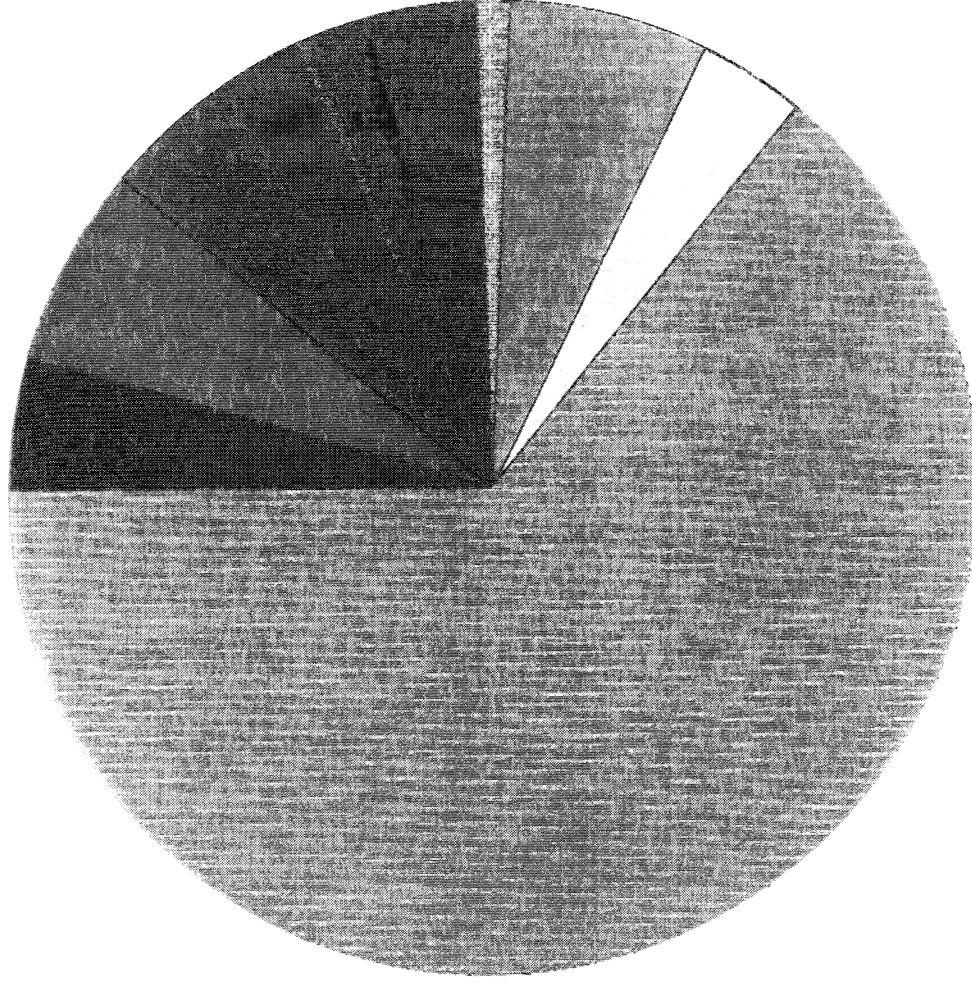
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		645.16	0.27
	Broad leaved plantation		15.11	0.01
	Conifers & mixed		10318.09	4.31
	Dense scrub		8.36	0.00
GRASSLAND	Unimproved acidic		16010.00	6.68
	Unimproved neutral		177.26	0.07
	Unimproved calcareous		15.62	0.01
	Semi-improved & improved		10093.99	4.21
	Marshy grassland		6752.29	2.82
TALL HERB & FERN	Continuous bracken		1686.92	0.70
HEATHLAND	Dry dwarf shrub heath		4519.48	1.89
	Wet dwarf shrub heath		8645.20	3.61
MIRE	Bog (all types)		2608.54	1.09
	Valley/Basin mire		56.02	0.02
OPEN WATER	Standing water		134.92	0.06
ROCK EXPOSURE	Natural (limestone pavement)		31.35	0.01
MISCELLANEOUS	Urban & Amenity		71.41	0.03
	N.Pennines upland survey		15809.98	6.64
	Quarry		4.77	0.00
UNCOLOURED	SSSI		8149.78	3.40
	Natural area outside SDA		153845.75	64.15
TOTALS			239500.00	100.00

FIG 1

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		645.16	0.83
	Broad leaved plantation		15.11	0.02
	Conifers & mixed		10318.09	13.28
	Dense scrub		8.36	0.01
GRASSLAND	Unimproved acidic		16010.00	20.60
	Unimproved neutral		177.26	0.23
	Unimproved calcareous		15.62	0.02
	Semi-improved & improved		10093.99	12.99
	Marshy grassland		6752.29	8.69
TALL HERB & FERN	Continuous bracken		1686.92	2.17
HEATHLAND	Dry dwarf shrub heath		4519.48	5.82
	Wet dwarf shrub heath		8645.20	11.13
MIRE	Bog (all types)		2608.54	3.36
	Valley/Basin mire		56.02	0.07
OPEN WATER	Standing water		134.92	0.17
ROCK EXPOSURE	Natural (limestone pavement)		31.35	0.04
MISCELLANEOUS	Urban & Amenity		71.41	0.09
	N.Pennines upland survey		15909.98	20.47
	Quarry		4.77	0.01
TOTALS			77704.47	100.00

FIG 2

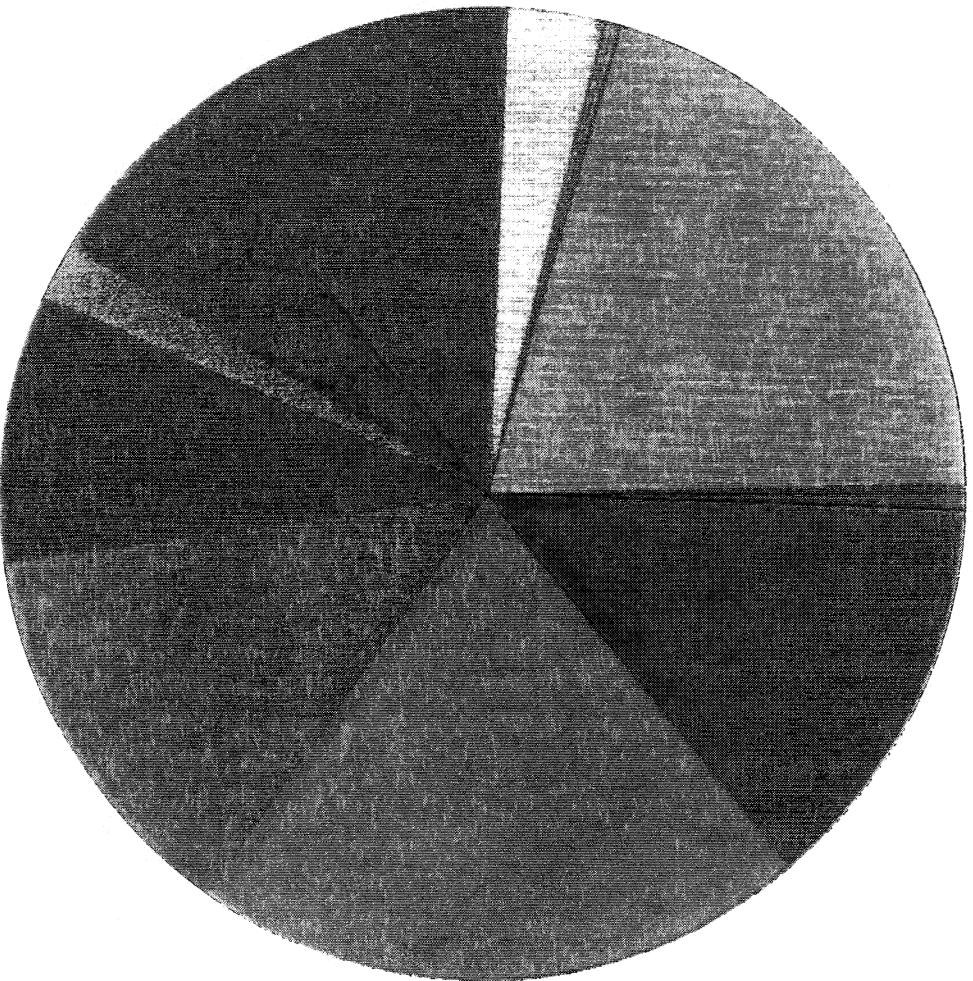
Upland Resource Consolidation Survey Phase III



Natural Area 1 : The Border Uplands

Fig 1

Upland Resource Consolidation Survey Phase III



Natural Area 1 : The Border Uplands

Fig 2

Upland Resource Consolidation Survey Phase III

Natural Area : 2 Northern Pennines

Area = 336,000 Ha

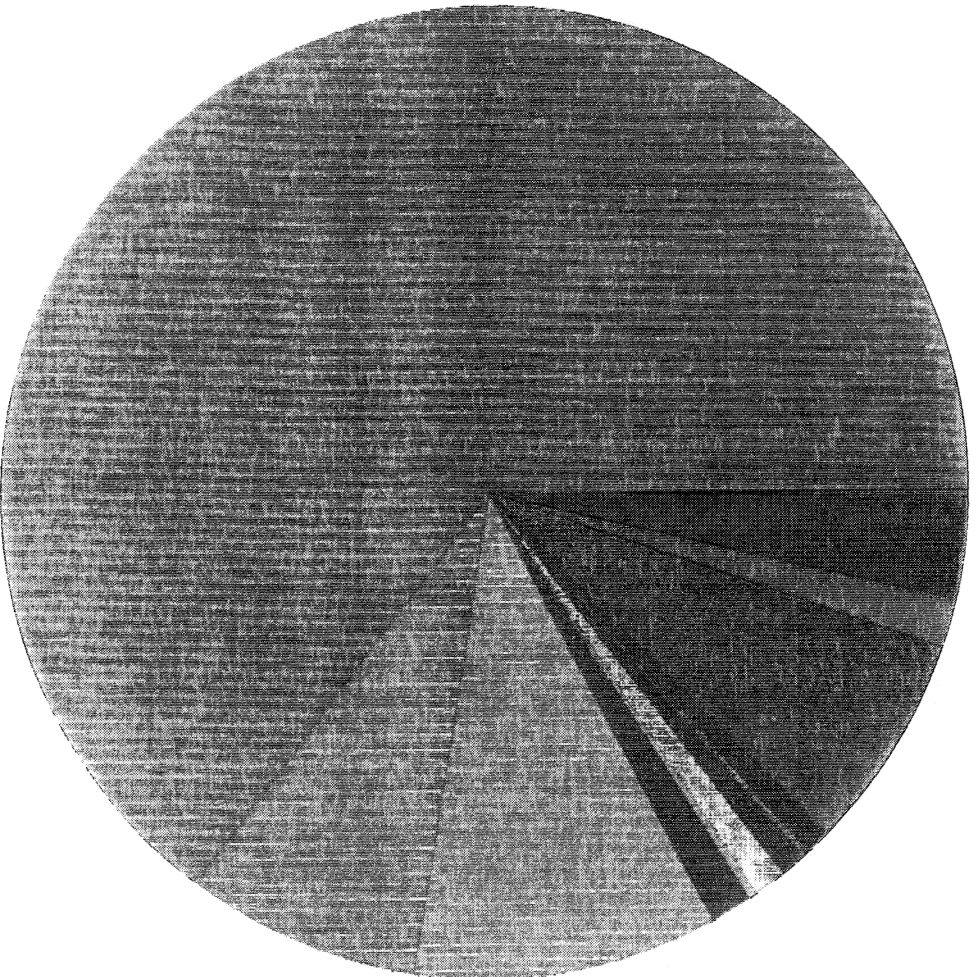
HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		1109.98	0.33
	Broad leaved plantation		130.21	0.04
	Conifers & mixed		11590.10	3.45
	Dense scrub		30.29	0.01
GRASSLAND	Unimproved acidic		5553.22	1.65
	Unimproved neutral		88.53	0.03
	Unimproved calcareous		78.79	0.02
	Semi-improved & improved		23625.95	7.03
	Marshy grassland		3063.64	0.91
TALL HERB & FERN	Continuous bracken		480.81	0.14
HEATHLAND	Dry dwarf shrub heath		2584.99	0.77
	Wet dwarf shrub heath		637.00	0.19
MIRE	Bog (all types)		3826.32	1.14
	Valley/Basin mire		158.78	0.05
OPEN WATER	Standing water		48.13	0.01
ROCK EXPOSURE	Natural (limestone pavement)		42.67	0.01
	Artificial (metalliferous spoil)		1.32	0.00
MISCELLANEOUS	Urban & Amenity		365.78	0.11
	N.Pennines upland survey		4579.34	1.36
	Quarry		421.40	0.13
UNCOLOURED	ESA		34007.43	10.12
	SSSI		26980.00	8.03
	Remainder of Natural area		216565.32	64.48
TOTALS			336000.00	100.00

FIG 3

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		1109.98	1.90
	Broad leaved plantation		130.21	0.22
	Conifers & mixed		11590.10	19.84
	Dense scrub		30.29	0.05
GRASSLAND	Unimproved acidic		5553.22	9.51
	Unimproved neutral		88.53	0.15
	Unimproved calcareous		78.79	0.13
	Semi-improved & improved		23625.95	40.44
	Marshy grassland		3063.64	5.24
TALL HERB & FERN	Continuous bracken		480.81	0.82
HEATHLAND	Dry dwarf shrub heath		2584.99	4.43
	Wet dwarf shrub heath		637.00	1.09
MIRE	Bog (all types)		3826.32	6.55
	Valley/Basin mire		158.78	0.27
OPEN WATER	Standing water		48.13	0.08
ROCK EXPOSURE	Natural (limestone pavement)		42.67	0.07
	Artificial (metalliferous spoil)		1.32	0.00
MISCELLANEOUS	Urban & Amenity		365.78	0.63
	N.Pennines upland survey		4579.34	7.84
	Quarry		421.40	0.72
TOTALS			58417.25	100.00

FIG 4

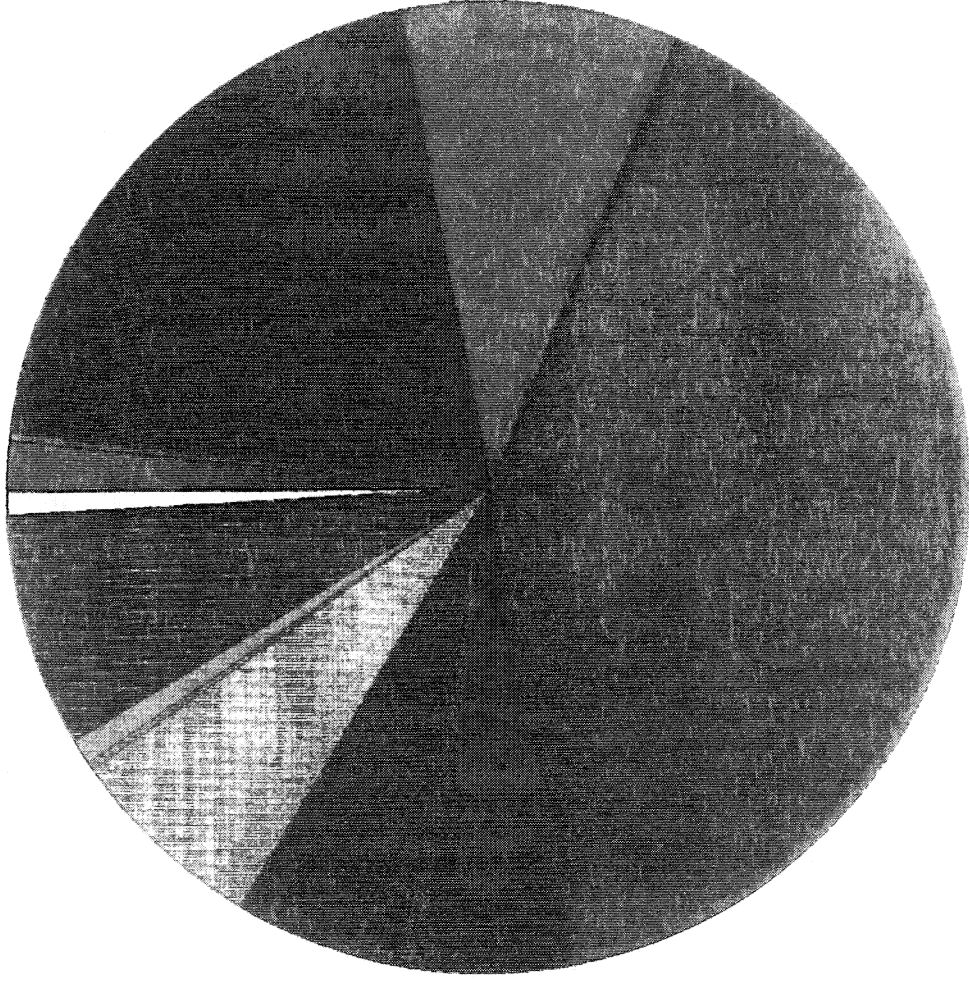
Upland Resource Consolidation Survey Phase III



Natural Area 2: The Northern Pennines

Fig 3

Upland Resource Consolidation Survey Phase III



Natural Area 2: The Northern Pennines

Fig 4

Upland Resource Consolidation Survey Phase III

Natural Area : 4 Tyne Vale

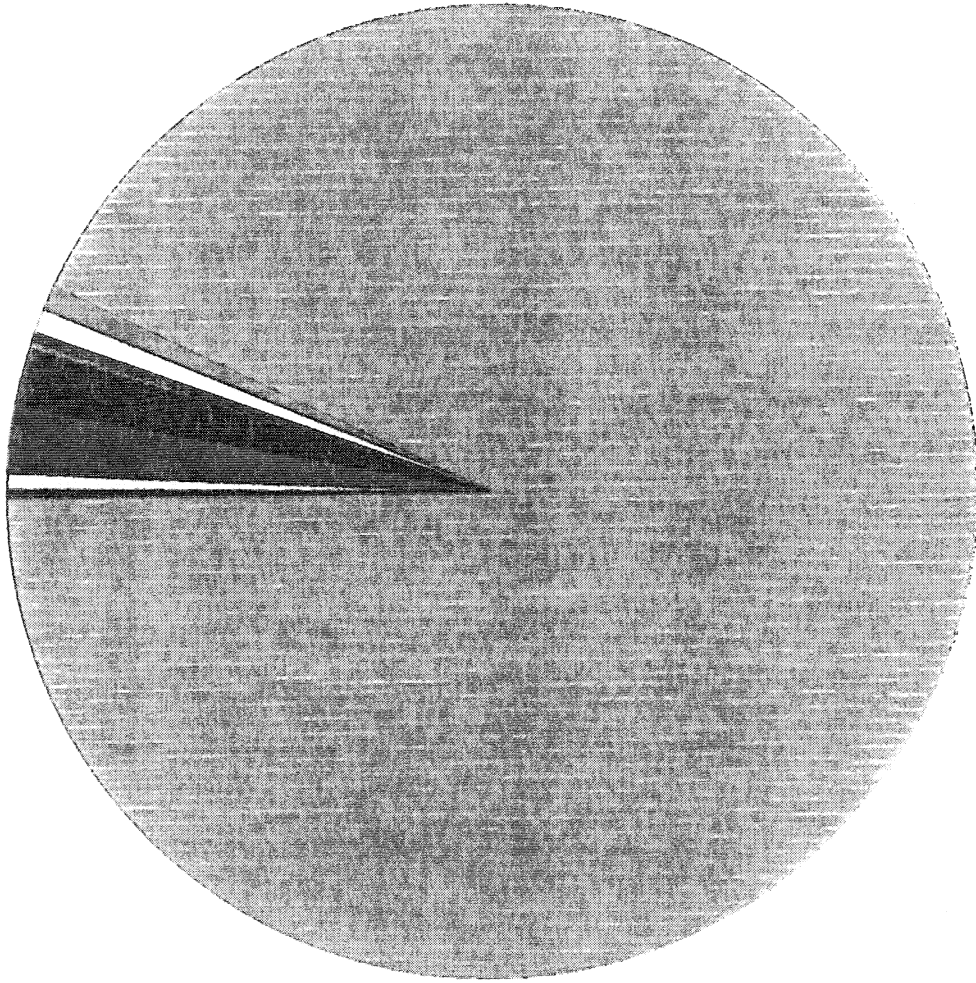
Area = 103,600 Ha

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		21.25	0.02
	Broad leaved plantation		2.44	0.00
	Conifers & mixed		412.49	0.40
GRASSLAND	Unimproved acidic		586.66	0.57
	Unimproved neutral		2.12	0.00
	Semi-improved & improved		2348.53	2.27
	Marshy grassland		1892.72	1.83
TALL HERB & FERN	Continuous bracken		23.97	0.02
HEATHLAND	Dry dwarf shrub heath		113.26	0.11
	Wet dwarf shrub heath		263.00	0.25
MIRE	Bog (all types)		209.81	0.20
	Valley/Basin mire		0.28	0.00
OPEN WATER	Standing water		72.44	0.07
ROCK EXPOSURE	Natural (limestone pavement)		3.27	0.00
MISCELLANEOUS	Urban & Amenity		3.07	0.00
	N.Pennines upland survey		862.55	0.83
UNCOLOURED	ESA		853.38	0.82
	Remainder of Natural area		95928.76	92.60
TOTALS			103600.00	100.00

FIG 5

HABITAT		KEY	AREA (Ha)	% Area
WOODLAND	Broad leaved semi-natural		21.25	0.31
	Broad leaved plantation		2.44	0.04
	Conifers & mixed		412.49	6.05
GRASSLAND	Unimproved acidic		586.66	8.60
	Unimproved neutral		2.12	0.03
	Semi-improved & improved		2348.53	34.45
	Marshy grassland		1892.72	27.76
TALL HERB & FERN	Continuous bracken		23.97	0.35
HEATHLAND	Dry dwarf shrub heath		113.26	1.66
	Wet dwarf shrub heath		263.00	3.86
MIRE	Bog (all types)		209.81	3.08
	Valley/Basin mire		0.28	0.00
	Standing water		72.44	1.06
ROCK EXPOSURE	Natural (limestone pavement)		3.27	0.05
MISCELLANEOUS	Urban & Amenity		3.07	0.05
	N.Pennines upland survey		862.55	12.65
TOTALS			6817.86	100.00

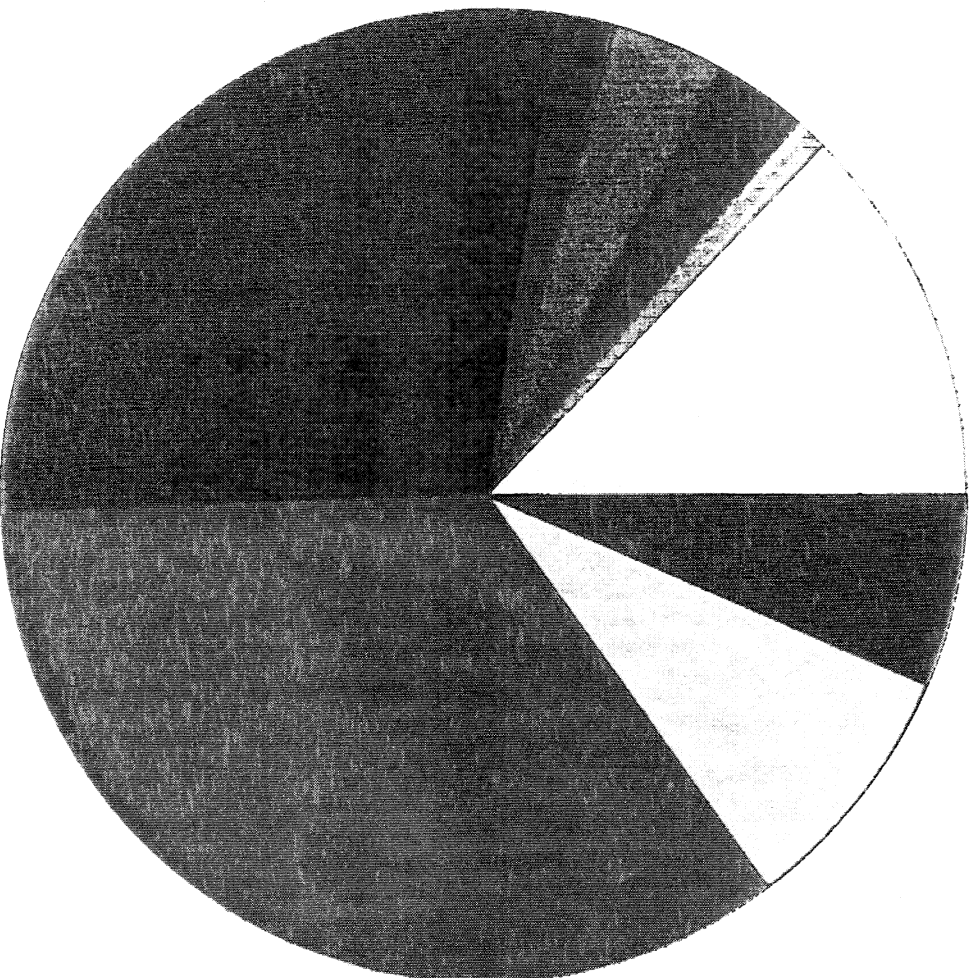
FIG 6



Natural Area 4 : Tyne Vale

Fig 5

Upland Resource Consolidation Survey Phase III



Natural Area 4 : Type Value

Fig 6

Upland Resource Consolidation Survey Phase III

Total area surveyed as part of the Phase III contract

HABITAT	KEY	AREA (Ha)	% Area
WOODLAND			
Broad leaved semi-natural		1503.67	1.19
Broad leaved plantation		146.95	0.12
Conifers & mixed		21935.37	17.40
Dense scrub		33.55	0.03
GRASSLAND			
Unimproved acidic		18988.58	13.46
Unimproved neutral		184.96	0.15
Unimproved calcareous		16.74	0.01
Semi-improved & improved		31194.93	24.74
Mareh grassland		11508.13	9.13
Continuous bracken		1935.09	1.53
Dry dwarf shrub heath		5725.27	4.54
Wet dwarf shrub heath		9112.61	7.23
Bog (all types)		3734.37	2.96
Valley/Basin mire		63.71	0.05
OPEN WATER			
Standing water		254.89	0.20
ROCK EXPOSURE			
Natural (limestone pavement)		34.62	0.03
Artificial (metalliferous spoil)		1.32	0.00
MISCELLANEOUS			
Urban & Amenity		440.27	0.35
N. Pennines upland survey		20855.3	16.54
Quarry		419.15	0.33
TOTALS		126087.48	100.00

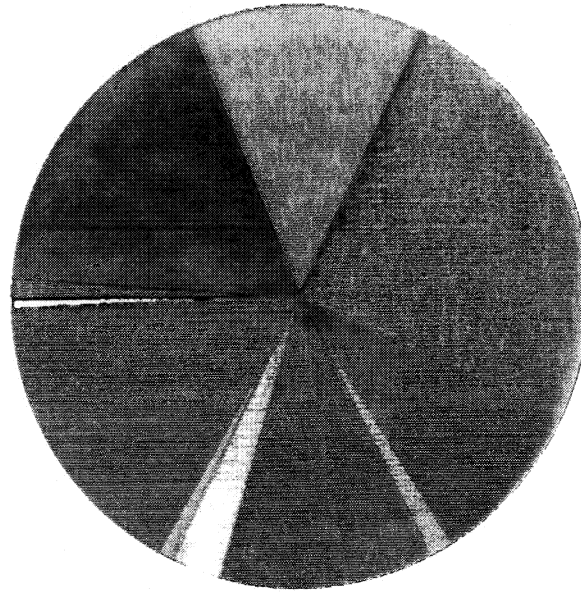


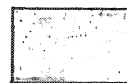
FIG 7

UPLAND RESOURCE SURVEY CONSOLIDATION PROJECT

PROPOSED HABITAT CODINGS

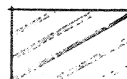
Woodland

semi-natural b/l



Green

plantation b/l



Green

conifers & mixed



True Green

Dense scrub

Green

Grassland and Marsh

Unimproved

Acid



Orange

Neutral



Orange

Calcareous



Orange

Marshy grassland



Purple

Semi-improved, improved and arable



Orange

Tall Herb and Fern

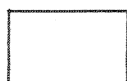
Continuous bracken



Terracotta

Heathland

Dry dwarf shrub heath and mosaics

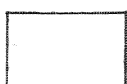


Yellow ochre

Wet dwarf shrub heath and mosaics

Purple/
Yellow ochre

Montane heath



Yellow ochre

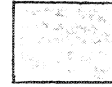
Mire

Bog (all types)



Purple

Valley/Basin mire



Magenta

Swamp, Marginal and Inundation

Swamp



Sky blue

Open Water

Standing Water



Indigo blue

Rock Exposure/Waste

Natural (e.g. limestone pavement)



Scarlet red

Artificial (e.g. Metalliferous spoil)



Scarlet red

Miscellaneous

All other land

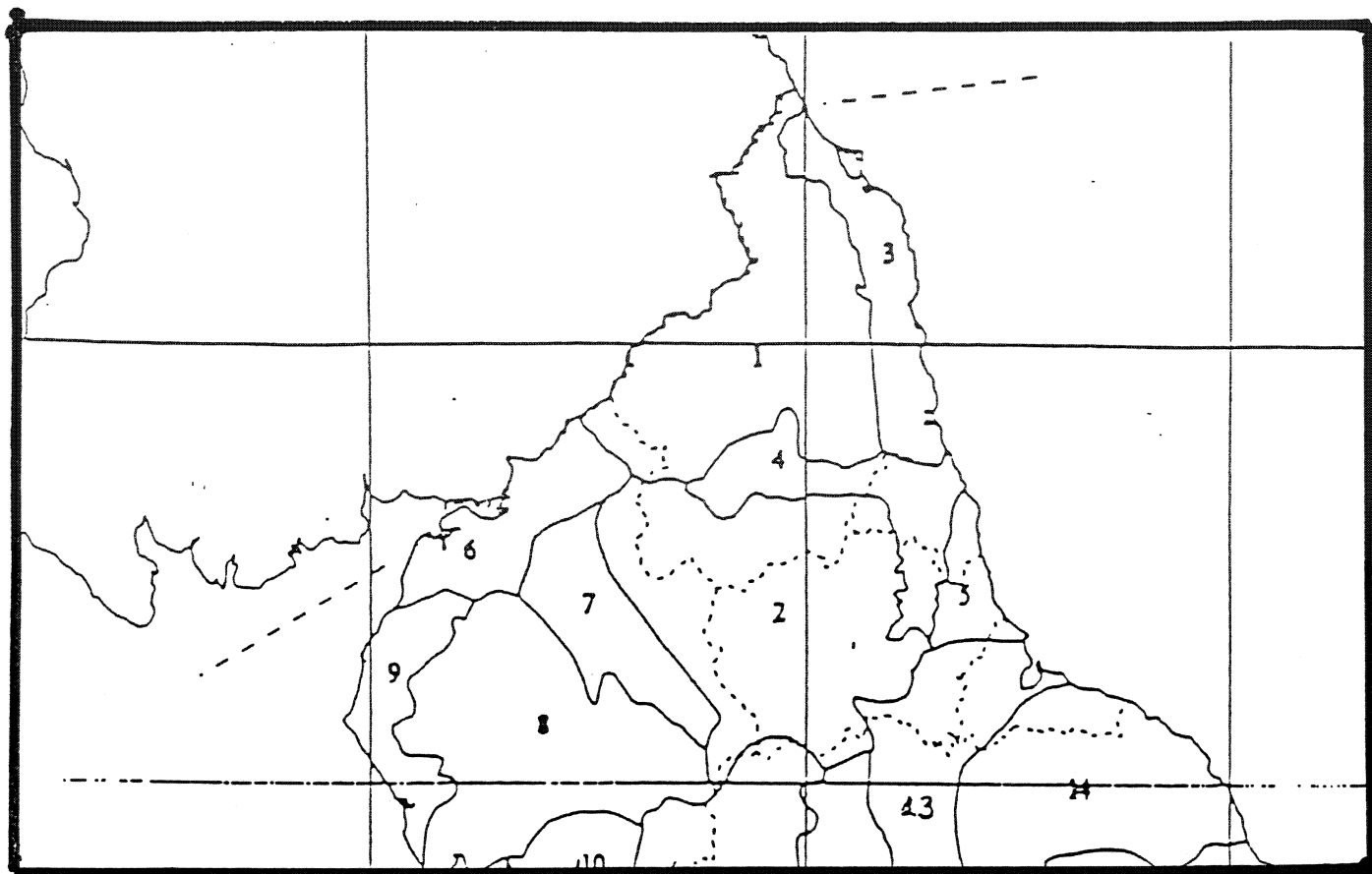


Black

No access



White



APPENDIX 3

URSC III Natural Areas - Northern England

KEY

- County boundary
- Natural Area boundary
- 1 Border Uplands
- 2 Northern Pennines
- 3 Northumberland Coastal Plain
- 4 Tyne Vale
- 5 Durham Magnesian Limestone
- 13 Vale of York

APPENDIX 4

Environmentally Sensitive Areas (ESAs), Sites of Special Scientific Interest (SSSIs) and North Pennines Upland Survey Areas already digitised

ESA (Pennine Dales - Northern)

Baldersdale and Lunedale
East Allendale
Rookhope
South Tyne with Nent Valley
Teesdale
Weardale
West Allendale

SSSI

Harbottle Moors
Kielderhead
Moorhouse and Cross Fell
Simonside Hills
The Cheviot
Upper Teesdale

North Pennines Upland Survey

Bollihope Common
Burnhope
Middlehope Moor
Muggleswick Common
Nookton Fell
Pikestone Fell
Stanhope Common
Waskerley Park
Westernhope Moor
Wolsingham Park Moor

APPENDIX 5

ACKNOWLEDGEMENTS

This contract has been undertaken with the involvement of a large number of people in a wide range of organisations without whose support it would have been impossible to complete.

English Nature at Peterborough

Jayne Manley
Catherine Smith

English Nature GIS Unit

Jonathon Budd
Graham Mortimer
Marcus Polley

English Nature Regional Staff

Wakefield

Denise Ramsay

York

Sarah Woolven
Alan Drewitt

Leyburn

Peter Welsh
Ben Mercer

Blackwell

Allan Stewart
Simon Webb

Newcastle

John Barrett
Rachel Tiplady
Pippa Merricks
Margaret Holmes

Yorkshire Dales National Park

Clive Kirkbride
Mark Owen
Geoff Garrett

Greater Manchester Countryside Unit

Ann Greatex

Lancashire County Council

Mary Whittaker

Bury Borough Council

Chris Wilkinson

ADAS Cartography: Gloucester

Malcolm Dalby

ADAS: Leeds

David Askew