Table 5. Summary of grazing marsh restoration activity (ongoing, planned and suggested through present research) in those Natural Areas a) with the greatest likelihood of success; and b) with the greatest relative gains in biodiversity

Legend:

PART 1

Natural Area Name:	Two groups of Natural Area chosen as outlined in section 5.4.4
Area of grazing marsh:	Area (ha) in Natural Area - derived from *Grazing Marsh GIS*
Pro Rata:	Area (ha) of grazing marsh restoration calculated as a proportion of the cHAP overall targets, and on the basis of the area of extant grazing marsh in this Natural Area relative to the total marsh area for the selected 23 Natural Areas.
Creation:	Grazing marsh to be created on ditched arable land – to an overall target of 2,500 ha
Rehabilitation:	Degraded grazing marsh to be rehabilitated – to an overall target of 10,000 ha.
Targeted:	Area of grazing marsh to be restored – calculated on a similar basis to ***Pro Rata*** values, but assuming all activity focused in either a) 10 Natural Areas with greatest likelihood of success; or b) 13 Areas with greatest relative gains in biodiversity
Creation:	As for ***Pro Rata***
Rehabilitation:	As for ***Pro Rata***
Creation Projects	Area (ha) of schemes
Likely:	Being implemented or likely to be initiated in medium term
Potential:	Desirable in long-term – but with no guarantee of realisation
Rehabilitation Projects	Area (ha) of schemes
Likely:	Being implemented or likely to be initiated in medium term
Potential:	Desirable in long-term – but with no guarantee of realisation

PART 2

Natural Area Name:	(As Part 1)
Shortfall/surplus:	Area (ha) required (negative) or exceeded (positive) to meet BAP targets under following scenarios:

A. On *Pro Rata* basis

- **Likely Creation**
- **Potential Creation**
- **Likely Rehabilitation**
- **Potential Rehabilitation**

B. Assuming targeted toward a) likely success; or b) biodiversity gain

- **Likely Creation**
- **Potential Creation**
- **Likely Rehabilitation**
- **Potential Rehabilitation**

Table 5. Part 1

Natural Area Name	Area (ha) of marsh	*Pro Rata*		Targeted		Creation Projects		Rehabilitation Projects	
		Creation	Rehabilitation	Creation	Rehabilitation	Likely	Potential	Likely	Potential
a. Natural Areas where restoration may have the greatest likelihood of success									
Cumbria Fells and Dales	8661	128	514	229	918				
Greater Thames Estuary	12787	190	758	339	1355		319	450	1333
North Norfolk	1848	27	110	49	196		135	35	
Romney Marshes	4770	71	283	126	505		100		
Somerset Levels and Moors	43430	644	2576	1150	4601	12.5		306	
South Downs	1343	20	80	36	142		[2050]		[2050]
Suffolk Coast	3216	48	190	85	341				15.4
The Broads	11579	172	687	307	1227		319	130	
The Fens	5046	75	300	137	535	160	372		
Vale of York and Mowbray	1710	25	101	45	181				
b. Natural Areas where restoration might realise the greatest gains in biodiversity									
Holderness	3110	46	184	105	419			?	
Humberhead Levels	6023	89	357	203	812	25	25		1000
Lancashire Plain	12210	181	724	411	1646				169
Lincolnshire Coast and Marshes	172	3	10	6	23	105		6	
London Basin	2674	40	159	90	360		50	50	50
Mosses and Meres	1915	28	114	65	258			197	
North Lincolnshire *etc*	28	0.4	2	1	4				
Severn and Avon Vales	13941	207	827	470	1879	50	30	20	
Solway Basin	9653	143	573	325	1301				
Thames and Avon Vales	6732	100	399	227	907	106	6	113	
Trent Valley and Rises	6846	102	406	231	923		300		306
West Anglian Plain	7202	106	427	243	971	47	2		474
Vale of Pickering	3693	55	219	124	498				

Table 5. Part 2

Natural Area Name	On *Pro Rata* Basis				Assuming targeting toward a) likely success or b) biodiversity gain			
	Creation		Rehabilitation		Creation		Rehabilitation	
	Likely	Potential	Likely	Potential	Likely	Potential	Likely	Potential
a. Natural Areas where restoration may have the greatest likelihood of success								
Cumbria Fells and Dales	-128	-128	-514	-514	-229	-229	-918	-918
Greater Thames Estuary	-190	+129	-308	+1025	-339	-20	-905	+428
North Norfolk	-27	+108	-75	-75	-49	+86	-161	-161
Romney Marshes	-71	+29	-283	-283	-126	-26	-505	-505
Somerset Levels and Moors	-631.5	-631.5	-2270	-2270	-1137.5	-1137.5	-4295	-4295
South Downs	-20	[+2030]	-80	[+1970]	-36	[+2014]	-142	[+1908]
Suffolk Coast and Heaths	-48	-48	-190	-174.6	-85	-85	-341	-352.6
The Broads	-172	+147	-557	-557	-307	+12	-1097	-1097
The Fens	+85	+457	-300	-300	+23	+395	-535	-535
Vale of York and Mowbray	-25	-25	-101	-101	-45	-45	-181	-181
b. Natural Areas where restoration might realise the greatest gains in biodiversity								
Holderness	-46	-46	-184?	-184?	-105	-105	-419?	-419
Humberhead Levels	-64	-39	-357	+643	-178	-153	-812	+188
Lancashire Plain	-181	-181	-724	-555	-411	-411	-1646	-1477
Lincolnshire Coast and Marshes	+102	+102	-4	-4	+99	+99	-17	-17
London Basin	-40	+10	-109	-59	-90	-40	-310	-260
Mosses and Meres	-28	-28	+83	+83	-65	-65	-61	-61
North Lincolnshire etc	-0.4	-0.4	-2	-2	-1	-1	-4	-4
Severn and Avon Vales	-157	-127	-807	-807	-420	-400	-1859	-1859
Solway Basin	-143	-143	-573	-573	-325	-325	-1301	-1301
Thames and Avon Vales	+6	+12	-286	-286	-111	-105	-794	-794
Trent Valley and Rises	-102	+198	-406	-100	-231	+69	-923	-617
West Anglian Plain	-59	-57	-427	+47	-196	-194	-971	-497
Vale of Pickering	-55	-55	-219	-219	-124	-124	-498	-498

Figures

Figure 1: *Natural Area biological attributes*: Wildfowl importance score and species richness.

A. **Wildfowl regional/national/international importance scores:** Sum of importance scores (regional: 1; national: 2; international: 3) for wintering wildfowl recorded within 1km of a Dargie site; expressed as national rank, summed across Natural Areas.

B. **Wildfowl species richness:** Total number of wetland bird species recorded in each 5km buffered Dargie site, averaged across Natural Area. [Other legend as 1A]

Figure 2: *Natural Area biological attributes*: Breeding wader density and invertebrate species richness. Results comprise the area-weighted means of attributes across Dargie polygons within each Natural Area.

A. **Breeding wader density**: Total number of pairs of breeding waders recorded in each 5km buffered Dargie site divided by its area (km^2), averaged across Natural Area.

B. **Invertebrate species richness**: Total number of (selected) insect species recorded in each 1km buffered Dargie site, averaged across Natural Area.

Figure 3: *Natural Area biological attributes*: Rare/scarce plant richness and mean quality score of potential species. [Other legend as 1A]

A. **Rare or scarce plant richness:** Total number of nationally rare or nationally scarce plants with 1km or 100m records within Dargie sites, averaged across Natural Areas.

B. **Potential plant species**: Average quality (as indicated in Mountford *et al.*, 1998c) of each Dargie site for all grazing marsh species that intersect the site, averaged across Natural Area.

Figure 4: *Somerset Levels and Moors* – values of selected biological attributes in Dargie polygons.

A. **Somerset Levels and Moors: rare and scarce plant richness of Dargie polygons**. [See Figure 3A]

B. **Somerset Levels and Moors: wildfowl species richness of Dargie polygons.** Species richness calculation based on 5km buffer around each Dargie polygon. [See Figure 1B]

Figure 5: *Romney Marshes* – values of selected biological attributes in Dargie polygons.

A. **Romney Marshes: Invertebrate species richness of Dargie polygons**. Species-richness calculation based on 1km buffer round each Dargie polygon. [See Figure 2B]

B. **Romney Marshes: Breeding wader density of Dargie polygons**. Density calculation based on 5km buffer around each Dargie polygon. [See Figure 2A]

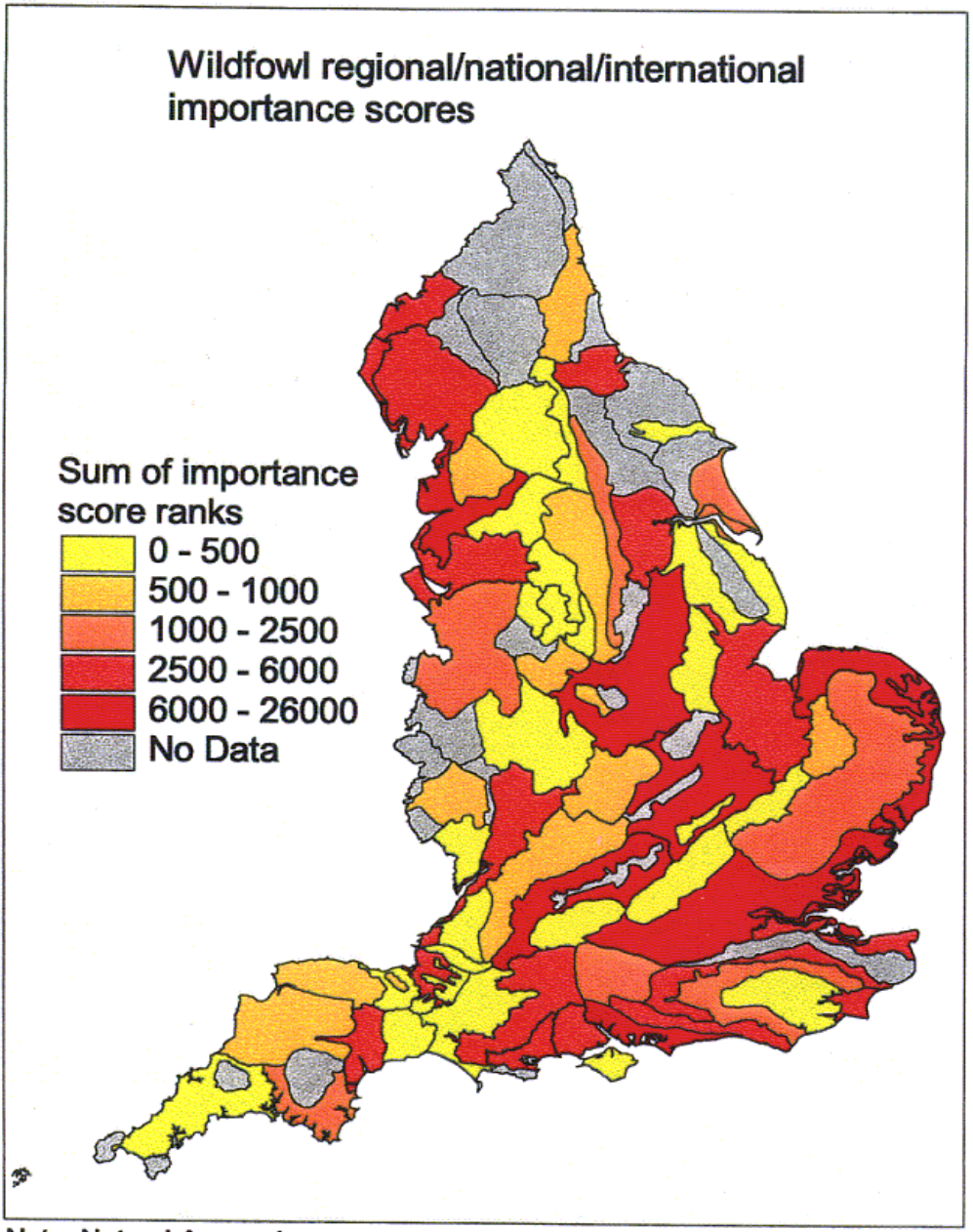
Figure 6: *The Fens* – areas satisfying "potential wet grassland" criteria.

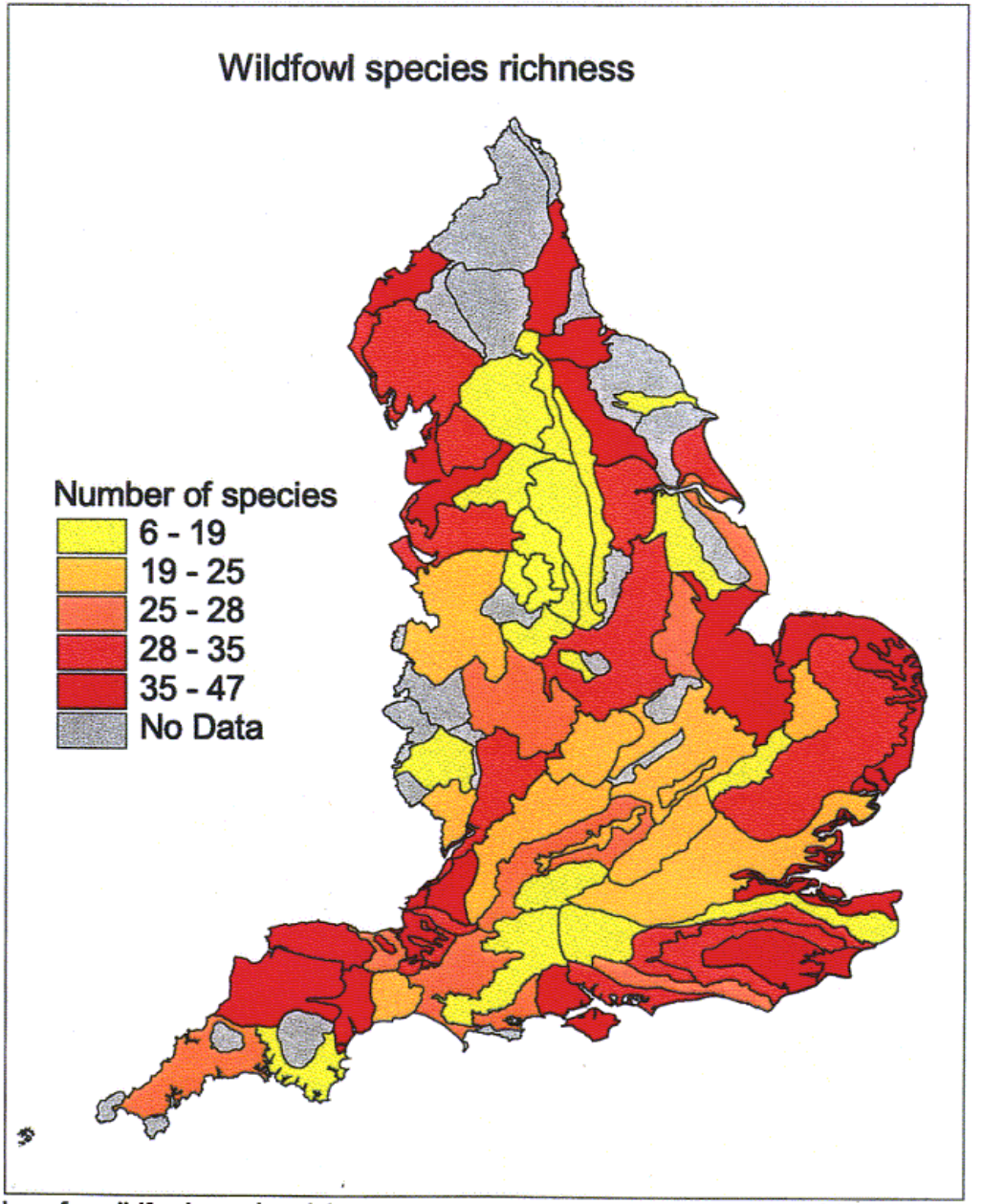
Criteria: below 5m AOD contour; liable to river flooding; *Land Cover Map* Class **6** (Mown/ grazed turf), **7** (Meadow/Verge/Semi-natural), **8** (Rough/Marsh grass), **18** (Tilled Land) and **19** (Ruderal Weed).

Figure 7: *Somerset Levels and Moor* - areas satisfying "potential wet grassland" criteria.

Other legend as Figure 6.

Natural Area biological attributes: wildfowl importance score and species richness

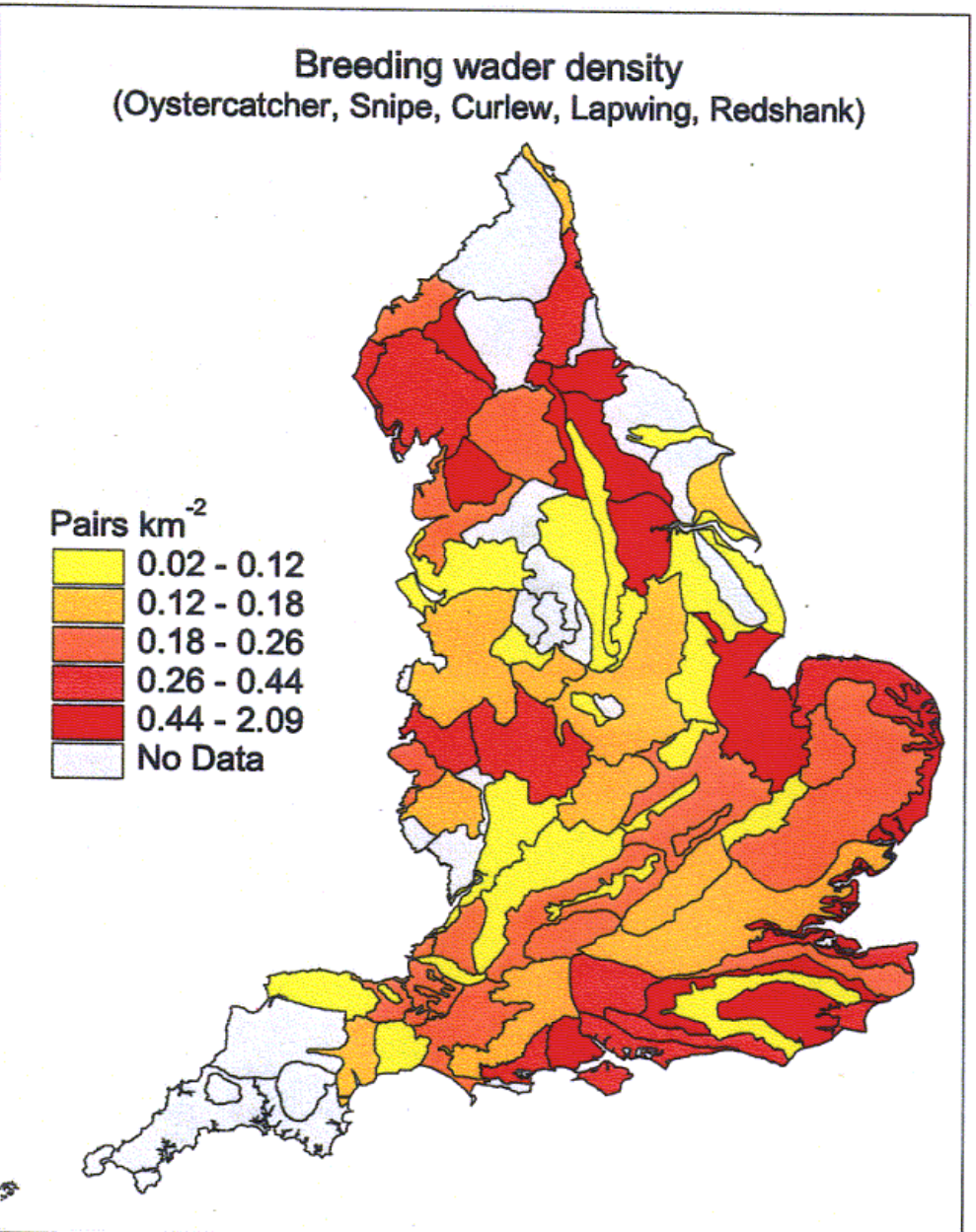


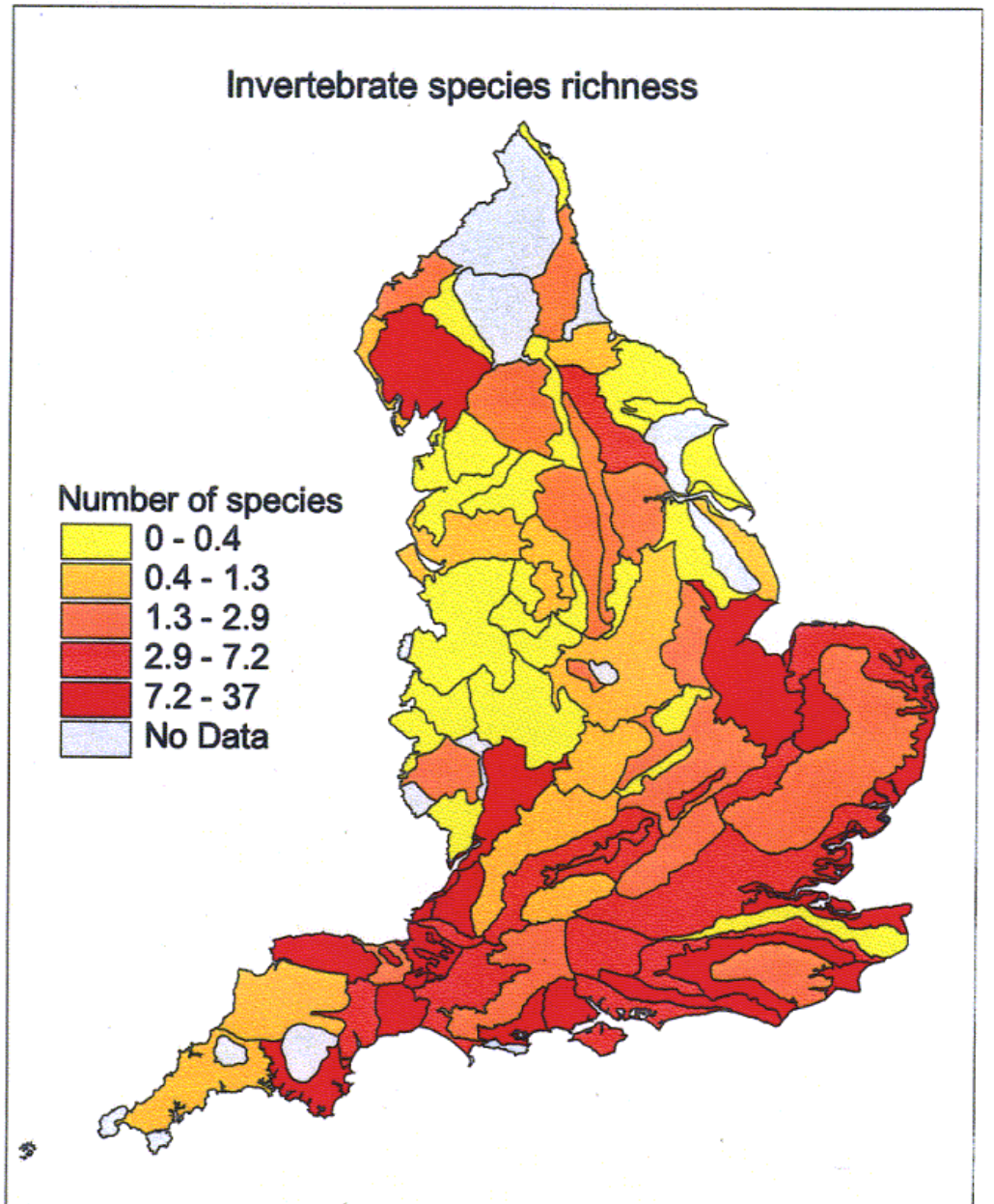


Note: Natural Area values are area weighted means or sums of Dargie polygon values for wildfowl species richness and rank importance scores respectively. (see section 4: appendix 1)

March 1999

Natural Area biological attributes: breeding wader density and invertebrate species richness





Note: results are area weighted means of attribute across Dargie polygons within each Natural Area (see section 4; appendix 1)

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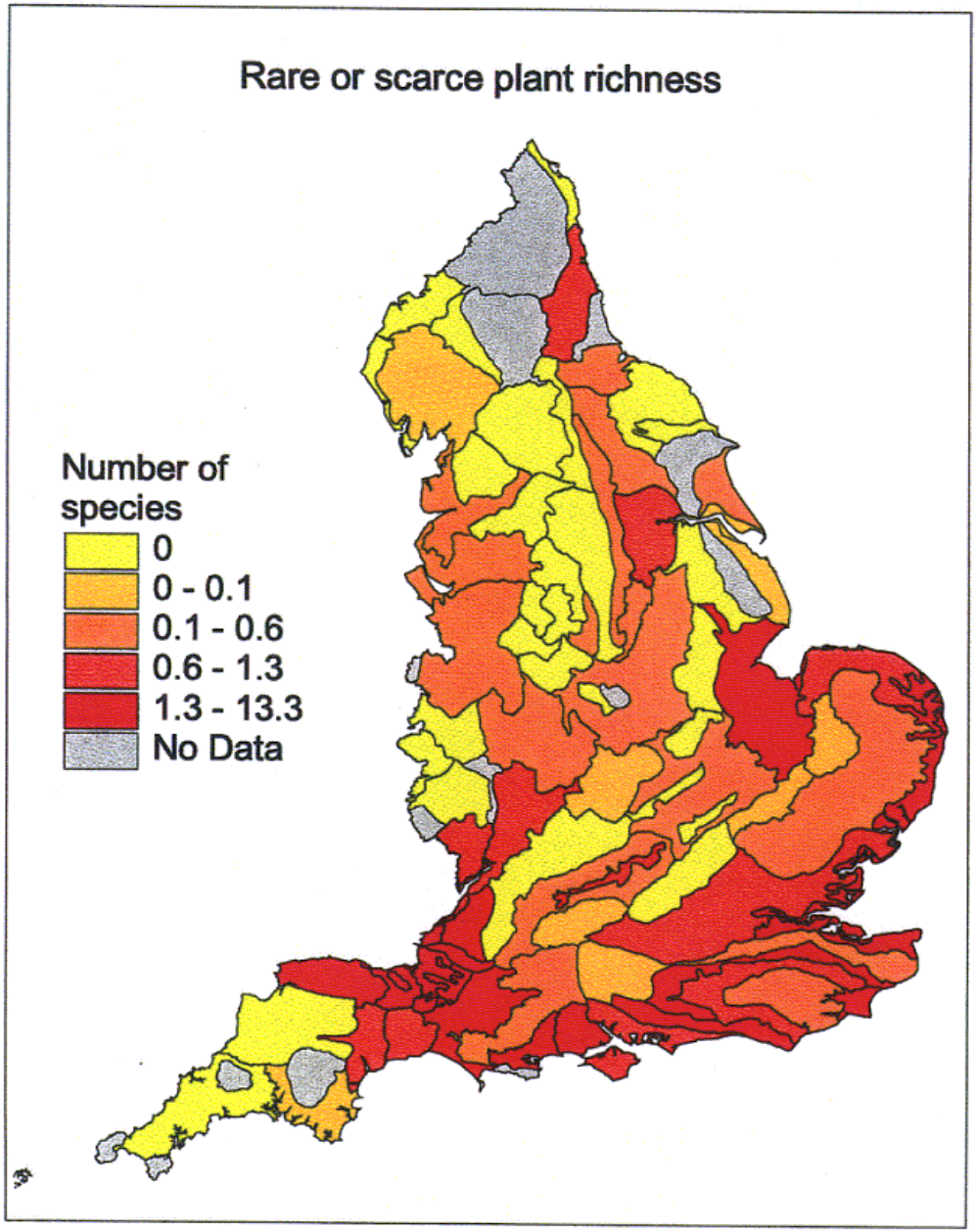
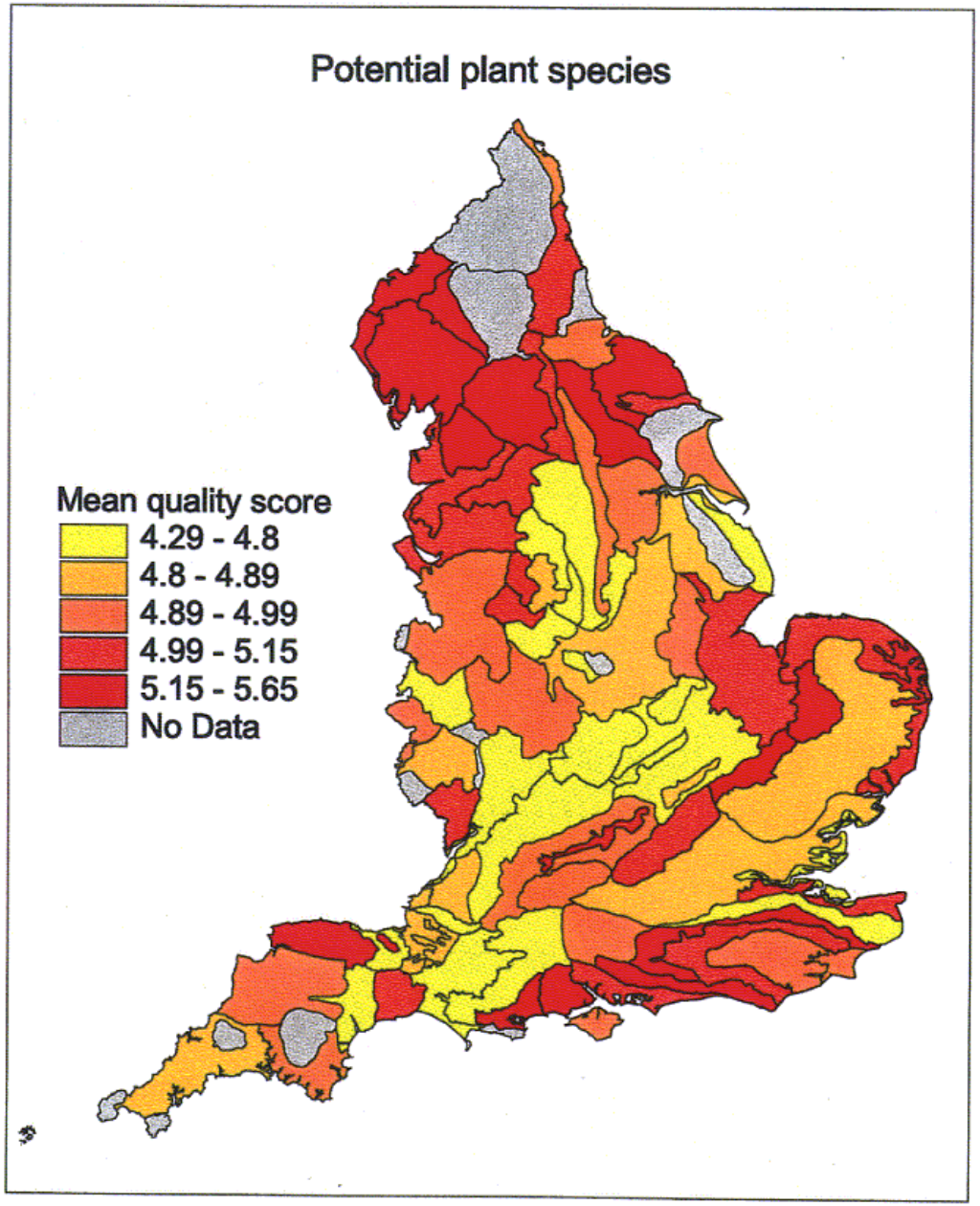
Natural Area biological attributes: rare/scarce plant richness and mean quality score of potential species

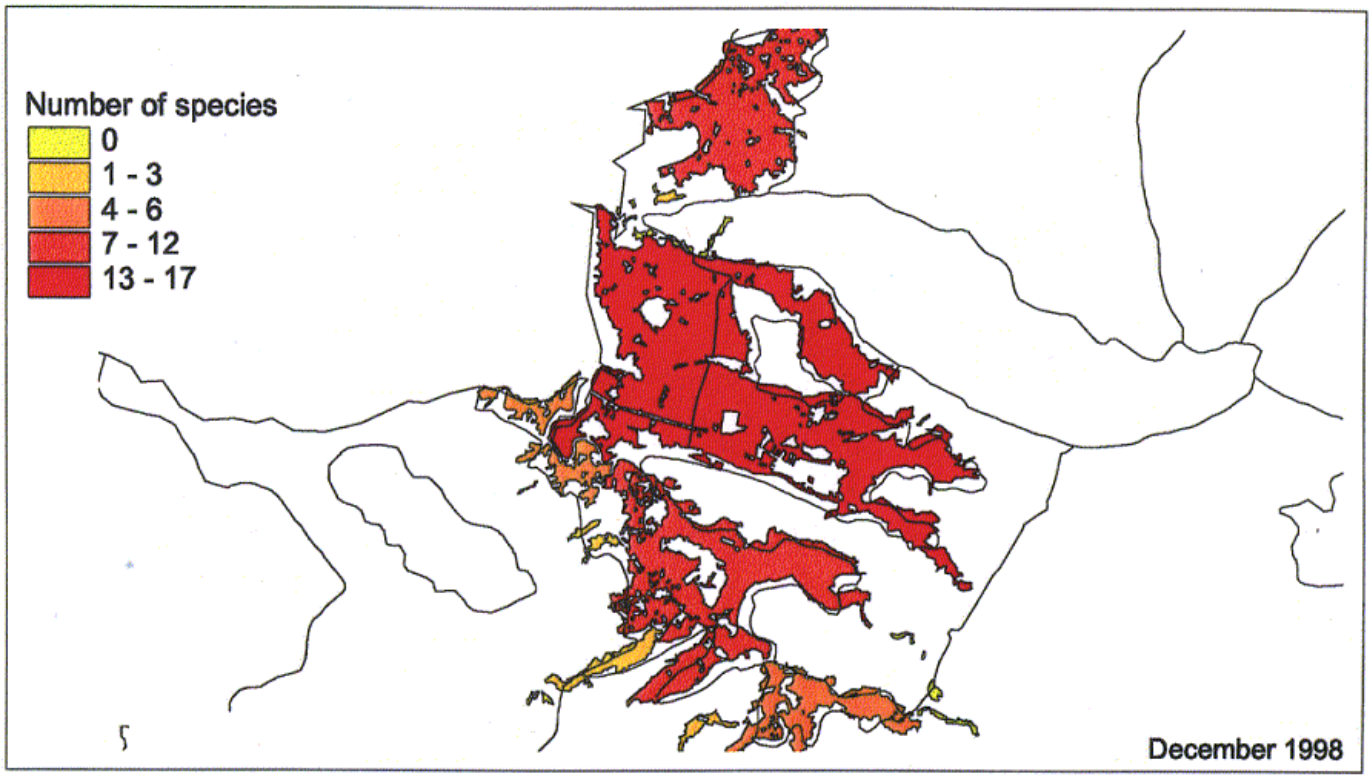




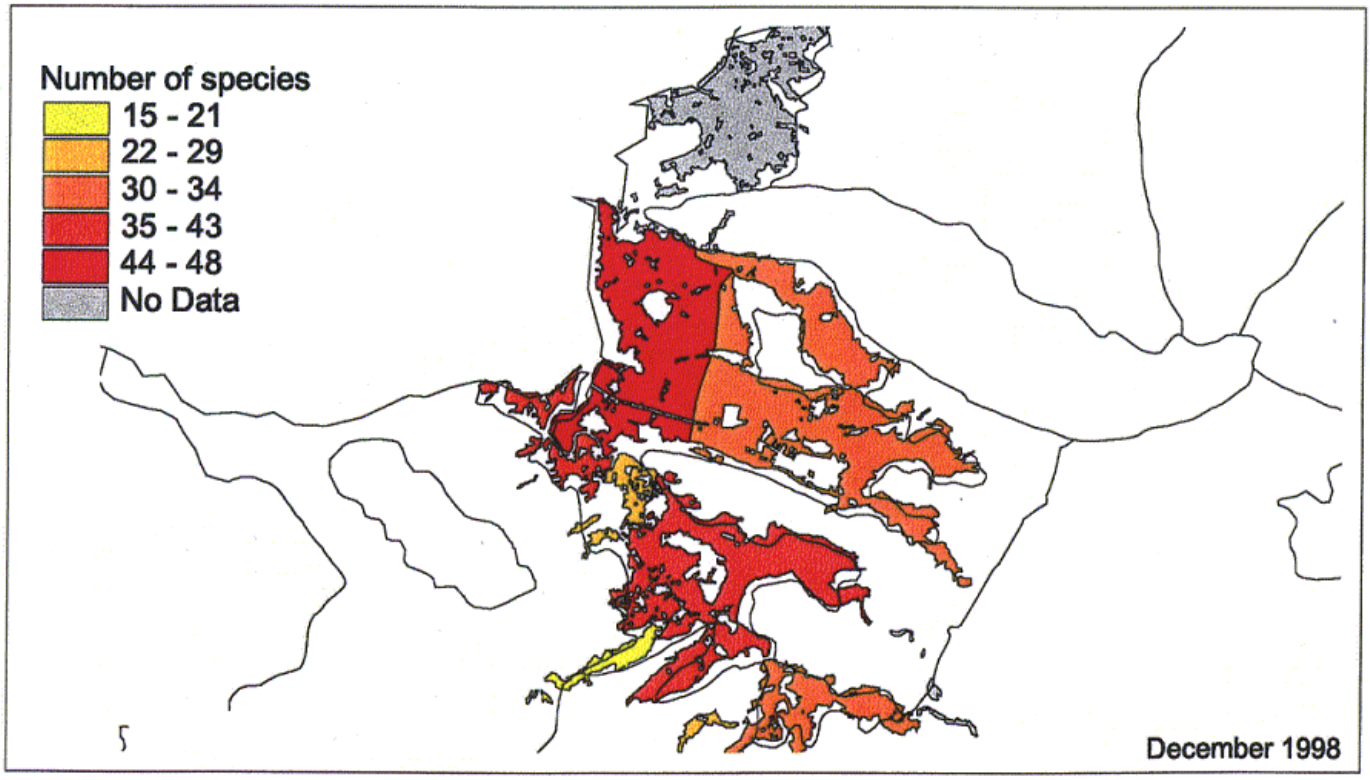
Note: results are area weighted means of attribute across Dargie polygons within each Natural Area (see section 4; appendix 1)

December 1998

Somerset Levels and Moors: rare and scarce plant richness of Dargie polygons



Somerset Levels and Moors: wildfowl species richness of Dargie polygons

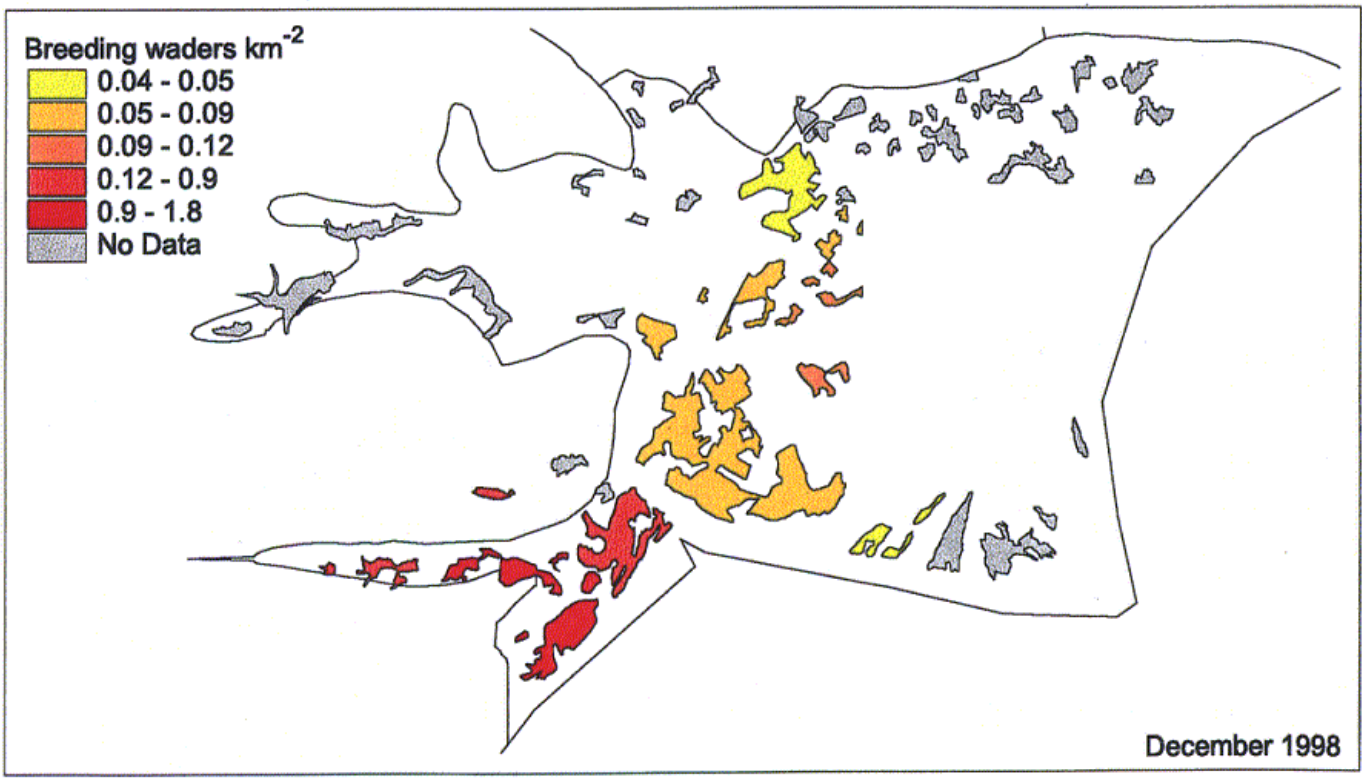


Note: species richness calculation based on 5km buffer around each Dargie polygon

Romney Marshes: invertebrate species richness of Dargie polygons

Note: species richness calculation based on 1km buffer around each Dargie polygon

Romney Marshes: breeding wader density of Dargie polygons



Note: density calculation based on 5km buffer around each Dargie polygon

Figure 6

Areas satisfying 'potential wet grassland' criteria in The Fens

Criteria: below 5m AOD contour; liable to river flooding; LCM classes 6, 7, 8, 18, 19

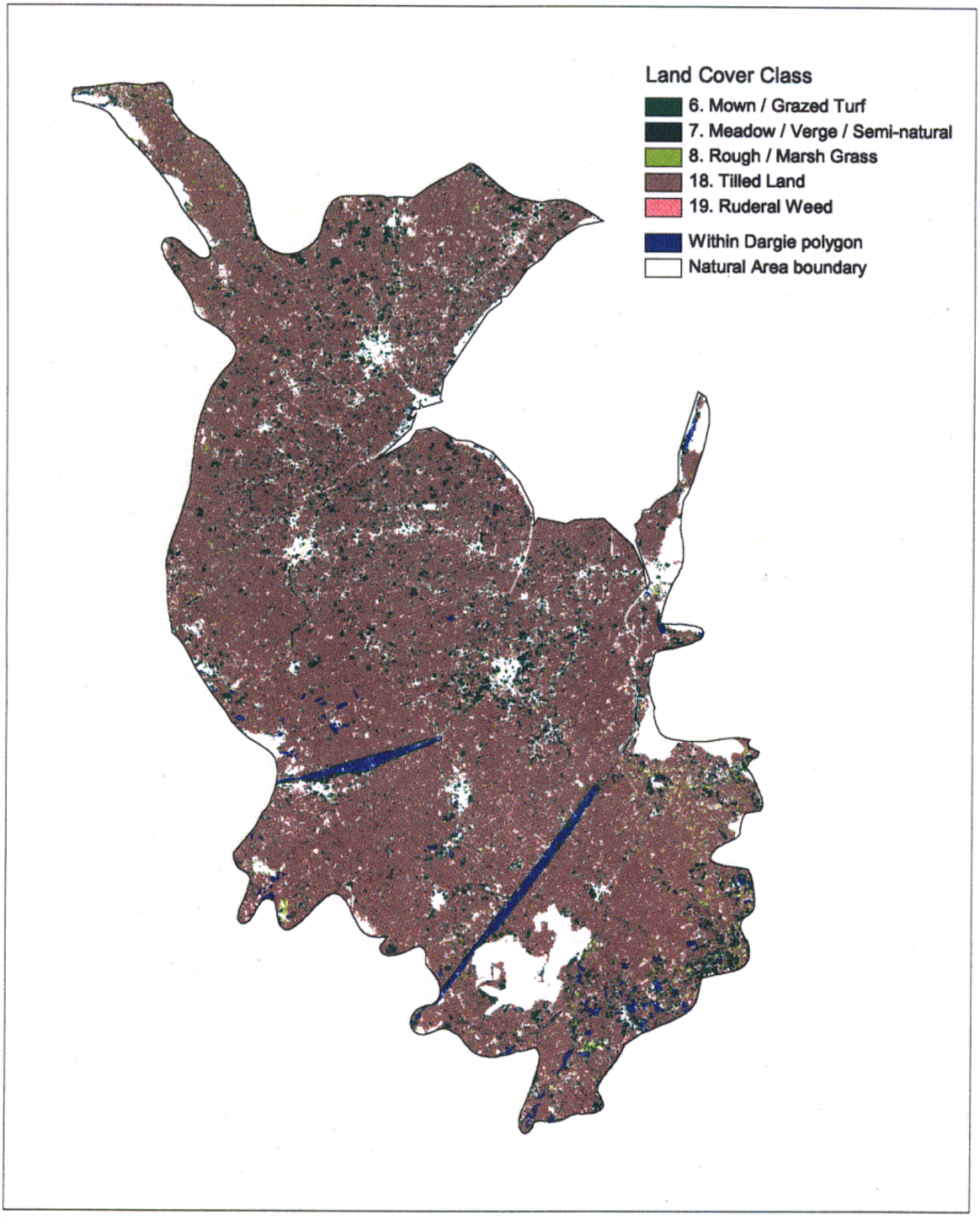


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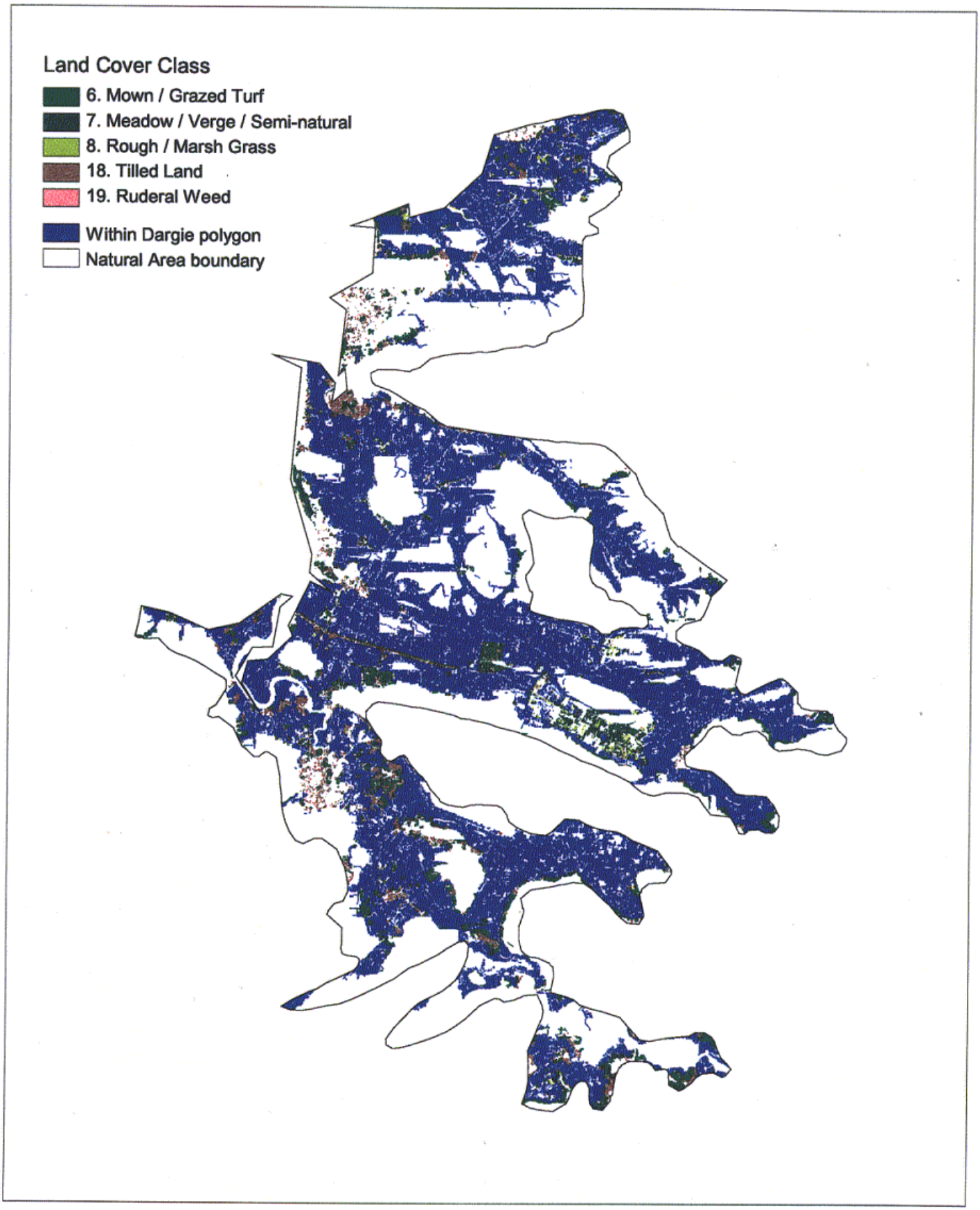
Figure 7

Areas satisfying 'potential wet grassland' criteria in The Somerset Levels

Criteria: below 5m AOD contour; liable to river flooding; LCM classes 6, 7, 8, 18, 19



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