

Nature Net Zero

Part 1: Carbon in semi-natural habitats

Appendices 1 to 5: Detailed data

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Appendices

Appendix 1: Baseline Habitats and their Relationship with Peat

Table 1. Priority habitat areas and percentage share of all priority habitats.

Priority Habitat	Area (ha)	Priority Habitat (%)
Blanket bog	235,641	11.80
Calaminarian grassland	296	0.01
Coastal and floodplain grazing marsh	220,571	11.04
Coastal saltmarsh	36,341	1.82
Coastal sand dunes	10,525	0.53
Coastal vegetated shingle	4,016	0.20
Deciduous woodland	759,522	38.02
Limestone pavement	1,167	0.06
Lowland calcareous grassland	65,662	3.29
Lowland dry acid grassland	17,723	0.89
Lowland fens	19,934	1.00
Lowland heathland	54,461	2.73
Lowland meadows	27,143	1.36
Lowland raised bog	12,445	0.62

Priority Habitat	Area (ha)	Priority Habitat (%)
Maritime cliff and slope	13,074	0.65
Mountain heaths and willow scrub	1,502	0.0
Mudflats	66,216	3.31
Purple moor grass and rush pastures	10,647	0.53
Reedbeds	4,283	0.21
Saline lagoons	1,359	0.07
Traditional orchard	18,544	0.93
Upland calcareous grassland	9,617	0.48
Upland flushes, fens and swamps	12,883	0.64
Upland hay meadow	2,581	0.13
Upland heathland	230,086	11.52
Wood pasture and parkland	161,298	8.07

Table 2. Non-priority habitat areas and percentage share of all non-priority habitats.

Non-Priority Habitat	Area (ha)	Non-Priority Habitat (%)
Fragmented heath	8,898	2.12
Good quality semi-improved grassland	73,055	17.37
Grass moorland	141,857	33.72
No main habitat but additional habitats present	196,822	46.79

Table 3. Priority habitats and underlain peat area.

Habitat	Deep Peat (ha)	Shallow Peat (ha)	Peaty Pockets (ha)	No Peat (ha)	Total Area (ha)
Blanket bog	212,482	17,476	1,840	3,844	235,641
Calaminarian grassland	4	67	11	215	296
Coastal and floodplain grazing marsh	40,875	124	15,067	164,506	220,571
Coastal saltmarsh	1,300		36	35,005	36,341
Coastal sand dunes	61	4	235	10,226	10,525
Coastal vegetated shingle	0	13	1	4,002	4,016
Deciduous woodland	15,936	9,088	22,473	712,025	759,522
Limestone pavement	60	32	59	1,016	1,167

Habitat	Deep Peat (ha)	Shallow Peat (ha)	Peaty Pockets (ha)	No Peat (ha)	Total Area (ha)
Lowland calcareous grassland	197	263	563	64,639	65,662
Lowland dry acid grassland	621	991	1,250	14,861	17,723
Lowland fens	6,054	1,286	2,418	10,176	19,934
Lowland heathland	975	4,767	14,035	34,685	54,461
Lowland meadows	2,343	547	1,604	22,649	27,143
Lowland raised bog	11,762	210	37	435	12,445
Maritime cliff and slope	12	191	509	12,362	13,074
Mountain heaths and willow scrub	446	1,040	12	5	1,502
Mudflats	45	0	1	66,169	66,216

Habitat	Deep Peat (ha)	Shallow Peat (ha)	Peaty Pockets (ha)	No Peat (ha)	Total Area (ha)
Purple moor grass and rush pastures	2,175	1,317	831	6,324	10,647
Reedbeds	1,167	2	75	3,040	4,283
Saline lagoons	34		1	1,323	1,359
Traditional orchard	100	16	156	18,271	18,544
Upland calcareous grassland	615	1,190	759	7,053	9,617
Upland flushes, fens and swamps	4,108	5,456	260	3,059	12,883
Upland hay meadow	45	454	40	2,043	2,581
Upland heathland	52,259	130,356	15,577	31,894	230,086
Wood pasture and parkland	538	321	4,251	156,188	161,298

Table 4. Non-priority habitats and underlain peat area.

Habitat	Deep Peat (ha)	Shallow Peat (ha)	Peaty Pockets (ha)	No Peat (ha)	Total Area (ha)
Fragmented heath	2,523	4,789	315	1,272	8,898
Good quality semi-improved grassland	1,947	2,328	2,087	66,693	73,055
Grass moorland	34,652	64,356	4,743	38,107	141,857
No main habitat but additional habitats present	7,223	7,792	6,450	175,358	196,822

Table 5. Priority habitat and underlain peat coverage.

Habitat	Deep Peat (%)	Shallow Peat (%)	Deep <i>and</i> Shallow Peat (%)	Peaty Pockets (%)	No Peat (%)
Blanket bog	90.17%	7.42%	97.59%	0.78%	1.63%
Calaminarian grassland	1.21%	22.50%	23.71%	3.55%	72.74%
Coastal and floodplain grazing marsh	18.53%	0.06%	18.59%	6.83%	74.58%
Coastal saltmarsh	3.58%	0.00%	3.58%	0.10%	96.32%
Coastal sand dunes	0.58%	0.03%	0.61%	2.24%	97.15%
Coastal vegetated shingle	0.01%	0.32%	0.32%	0.02%	99.65%
Deciduous woodland	2.10%	1.20%	3.29%	2.96%	93.75%
Limestone pavement	5.11%	2.78%	7.89%	5.05%	87.06%

Habitat	Deep Peat (%)	Shallow Peat (%)	Deep <i>and</i> Shallow Peat (%)	Peaty Pockets (%)	No Peat (%)
Lowland calcareous grassland	0.30%	0.40%	0.70%	0.86%	98.44%
Lowland dry acid grassland	3.50%	5.59%	9.09%	7.06%	83.85%
Lowland fens	30.37%	6.45%	36.82%	12.13%	51.05%
Lowland heathland	1.79%	8.75%	10.54%	25.77%	63.69%
Lowland meadows	8.63%	2.02%	10.65%	5.91%	83.44%
Lowland raised bog	94.52%	1.69%	96.21%	0.30%	3.50%
Maritime cliff and slope	0.09%	1.46%	1.55%	3.90%	94.56%
Mountain heaths and willow scrub	29.69%	69.21%	98.91%	0.77%	0.33%
Mudflats	0.07%	0.00%	0.07%	0.00%	99.93%

Habitat	Deep Peat (%)	Shallow Peat (%)	Deep and Shallow Peat (%)	Peaty Pockets (%)	No Peat (%)
Purple moor grass and rush pastures	20.43%	12.37%	32.80%	7.80%	59.40%
Reedbeds	27.24%	0.04%	27.27%	1.75%	70.98%
Saline lagoons	2.52%	0.00%	2.52%	0.10%	97.38%
Traditional orchard	0.54%	0.09%	0.63%	0.84%	98.53%
Upland calcareous grassland	6.39%	12.38%	18.77%	7.89%	73.33%
Upland flushes, fens and swamps	31.89%	42.35%	74.24%	2.02%	23.74%
Upland hay meadow	1.72%	17.58%	19.30%	1.56%	79.14%
Upland heathland	22.71%	56.66%	79.37%	6.77%	13.86%
Wood pasture and parkland	0.33%	0.20%	0.53%	2.64%	96.83%

Table 6. Non-priority habitat and underlain peat coverage.

Habitat	Deep Peat (%)	Shallow Peat (%)	Deep <i>and</i> Shallow Peat (%)	Peaty Pockets (%)	No Peat (%)
Fragmented heath	28.35%	53.81%	82.16%	3.54%	14.29%
Good quality semi-improved grassland	2.67%	3.19%	5.85%	2.86%	91.29%
Grass moorland	24.43%	45.37%	69.79%	3.34%	26.86%
No main habitat but additional habitats present	3.67%	3.96%	7.63%	3.28%	89.09%

Appendix 2: Carbon Storage and Sequestration in Habitats

Table 7. Priority habitat carbon storage estimates, per hectare.

Habitat	Lower Estimate t C ha ⁻¹	Upper Estimate t C ha ⁻¹	Typical Estimate t C ha ⁻¹	Confidence (High, Medium, Low)
Blanket bog	354	619	525	M
Calaminarian grassland	No data	No data	No data	N/A
Coastal and floodplain grazing marsh	109	109	109	L
Coastal saltmarsh	113	713	393	M/H
Coastal sand dunes	5.6	23	14.5	L
Coastal vegetated shingle	No data	No data	No data	N/A
Deciduous woodland (30yr)	130	377	255	M/H
Deciduous woodland (100yr)	149	517	354	M/H

Habitat	Lower Estimate t C ha ⁻¹	Upper Estimate t C ha ⁻¹	Typical Estimate t C ha ⁻¹	Confidence (High, Medium, Low)
Limestone pavement	No data	No data	No data	N/A
Lowland calcareous grassland	69	69	69	L
Lowland dry acid grassland	87	87	87	M
Lowland fens	76	259	168	L
Lowland heathland	90	112	100	M
Lowland meadows	33	69	60	M
Lowland raised bog	810	2530	1610	L
Maritime cliff and slope	87	87	87	L
Mountain heaths and willow scrub	90	112	100	L
Mudflats	13	356	132	L

Habitat	Lower Estimate t C ha ⁻¹	Upper Estimate t C ha ⁻¹	Typical Estimate t C ha ⁻¹	Confidence (High, Medium, Low)
Purple moor grass and rush pastures	87	87	87	L
Reedbeds	76	259	168	L
Saline lagoons	No data	No data	No data	N/A
Traditional orchard	56	341	95	L
Upland calcareous grassland	69	69	69	L
Upland flushes, fens and swamps	251	268	259	L
Upland hay meadow	33	69	60	M
Upland heathland	90	112	100	M
Wood pasture and parkland	56	341	95	L

Table 8. Non-priority habitat carbon storage estimate, per hectare.

Habitat	Lower Estimate t C ha⁻¹	Upper Estimate t C ha⁻¹	Typical Estimate t C ha⁻¹	Confidence (High, Medium, Low)
Fragmented heath	87	87	87	L
Good quality semi-improved grassland	33	69	60	L
Grass moorland	87	87	87	L
No main habitat but additional habitats present	69	69	69	L

Table 9. Priority habitat carbon sequestration estimates, per hectare.

Habitat	Lower Estimate t CO₂e y⁻¹ ha⁻¹	Upper Estimate t CO₂e y⁻¹ ha⁻¹	Typical Estimate t CO₂e y⁻¹ ha⁻¹	Confidence (High, Medium, Low)
Blanket bog	18.86	0.32	3.42	M
Calaminarian grassland	No data	No data	No data	N/A
Coastal and floodplain grazing marsh	No data	No data	No data	N/A
Coastal saltmarsh	-2.35	-8.03	-5.19	L
Coastal sand dunes	-2.13	-2.68	-2.18	L
Coastal vegetated shingle	No data	No data	No data	N/A
Deciduous woodland (30yr)	-2.5	-25.5	-14.5	M
Deciduous woodland (100yr)	-2	-13	-7	M
Limestone pavement	No data	No data	No data	N/A

Habitat	Lower Estimate t CO ₂ e y ⁻¹ ha ⁻¹	Upper Estimate t CO ₂ e y ⁻¹ ha ⁻¹	Typical Estimate t CO ₂ e y ⁻¹ ha ⁻¹	Confidence (High, Medium, Low)
Lowland calcareous grassland	0	0	0	L
Lowland dry acid grassland	0	0	0	L
Lowland fens	3.31	-0.36	3.31	M
Lowland heathland	0.054	0.054	0.054	L
Lowland meadows	0	0	0	L
Lowland raised bog	18.86	0.32	3.42	M
Maritime cliff and slope	No data	No data	No data	N/A
Mountain heaths and willow scrub	0.054	0.054	0.054	L
Mudflats	3.45	-0.4	1.98	L

Habitat	Lower Estimate t CO ₂ e y ⁻¹ ha ⁻¹	Upper Estimate t CO ₂ e y ⁻¹ ha ⁻¹	Typical Estimate t CO ₂ e y ⁻¹ ha ⁻¹	Confidence (High, Medium, Low)
Purple moor grass and rush pastures	0	0	0	L
Reedbeds	No data	No data	No data	N/A
Saline lagoons	No data	No data	No data	N/A
Traditional orchard	1.65	-5.89	-2.89	L
Upland calcareous grassland	0	0	0	L
Upland flushes, fens and swamps	18.86	0.32	3.42	L
Upland hay meadow	0	0	0	L
Upland heathland	0.054	0.054	0.054	L
Wood pasture and parkland	No data	No data	No data	N/A

Table 10. Non-priority habitat carbon sequestration estimates, per hectare.

Habitat	Lower Estimate t CO₂e y⁻¹ ha⁻¹	Upper Estimate t CO₂e y⁻¹ ha⁻¹	Typical Estimate t CO₂e y⁻¹ ha⁻¹	Confidence (High, Medium, Low)
Fragmented heath	0	0	0	L
Good quality semi-improved grassland	0	0	0	L
Grass moorland	0	0	0	L
No main habitat but additional habitats present	No data	No data	No data	N/A

Table 11. Priority habitat carbon storage estimate, per hectare, with a consideration for peat.

Habitat	Value over Deep Peat t C ha⁻¹	Value over Shallow Peat t C ha⁻¹	Value over Peaty Pockets t C ha⁻¹	Value not over Peat t C ha⁻¹
Blanket bog	525	132	132	100
Lowland fens	1971	168	168	168
Lowland heathland	525	132	100	100
Lowland raised bog	1610	1610	1610	1610
Reedbeds	1971	168	168	168
Upland flushes, fens and swamps	525	259	132	100
Upland heathland	525	132	132	100
Blanket bog	525	132	132	100

Table 12. Total carbon storage estimates for each individual priority habitat.

Habitat	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical t C when considering Peat
Blanket bog	83,417,020	145,861,965	123,711,683	114,486,899
Calaminarian grassland	0	0	0	0
Coastal and floodplain grazing marsh	24,042,248	24,042,248	24,042,248	24,042,248
Coastal saltmarsh	4,106,560	25,911,306	14,282,108	14,282,108
Coastal sand dunes	58,942	242,083	152,617	152,617
Coastal vegetated shingle	0	0	0	0
Deciduous woodland	105,953,295	339,506,259	231,274,398	231,274,398
Limestone pavement	0	0	0	0
Lowland calcareous grassland	4,530,712	4,530,712	4,530,712	4,530,712

Habitat	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical t C when considering Peat
Lowland dry acid grassland	1,541,913	1,541,913	1,541,913	1,541,913
Lowland fens	1,514,989	5,162,923	3,348,923	14,264,103
Lowland heathland	4,901,493	6,099,636	5,446,103	6,013,157
Lowland meadows	895,715	1,872,858	1,628,572	1,628,572
Lowland raised bog	10,080,167	31,484,967	20,035,888	20,035,888
Maritime cliff and slope	1,137,430	1,137,430	1,137,430	1,137,430
Mountain heaths and willow scrub	135,217	168,270	150,241	150,241
Mudflats	860,804	23,572,791	8,740,473	8,740,473
Purple moor grass and rush pastures	926,257	926,257	926,257	926,257
Reedbeds	325,514	1,109,317	719,557	2,822,873

Habitat	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical t C when considering Peat
Saline lagoons	0	0	0	0
Traditional orchard	1,038,468	6,323,527	1,761,686	1,761,686
Upland calcareous grassland	663,583	663,583	663,583	663,583
Upland flushes, fens and swamps	3,233,513	3,452,516	3,336,573	3,909,941
Upland hay meadow	85,179	178,102	154,871	154,871
Upland heathland	20,707,751	25,769,646	23,008,613	49,888,704
Wood pasture and parkland	9,032,701	55,002,696	15,323,332	15,323,332

Table 13. Total carbon storage share per priority habitat.

Habitat	Total Lower t C (%)	Total Upper t C (%)	Total Typical t C (%)	Total Typical t C when considering Peat (%)
Blanket bog	29.54%	20.26%	25.46%	22.11%
Calaminarian grassland	0.00%	0.00%	0.00%	0.00%
Coastal and floodplain grazing marsh	8.51%	3.34%	4.95%	4.64%
Coastal saltmarsh	1.45%	3.60%	2.94%	2.76%
Coastal sand dunes	0.02%	0.03%	0.03%	0.03%
Coastal vegetated shingle	0.00%	0.00%	0.00%	0.00%
Deciduous woodland	37.52%	47.15%	47.60%	44.67%
Limestone pavement	0.00%	0.00%	0.00%	0.00%
Lowland calcareous grassland	1.60%	0.63%	0.93%	0.88%

Habitat	Total Lower t C (%)	Total Upper t C (%)	Total Typical t C (%)	Total Typical t C when considering Peat (%)
Lowland dry acid grassland	0.55%	0.21%	0.32%	0.30%
Lowland fens	1.68%	2.87%	0.69%	2.76%
Lowland heathland	1.74%	0.85%	1.12%	1.16%
Lowland meadows	0.32%	0.26%	0.34%	0.31%
Lowland raised bog	3.57%	4.37%	4.12%	3.87%
Maritime cliff and slope	0.40%	0.16%	0.23%	0.22%
Mountain heaths and willow scrub	0.05%	0.02%	0.03%	0.03%
Mudflats	0.30%	3.27%	1.80%	1.69%
Purple moor grass and rush pastures	0.33%	0.13%	0.19%	0.18%
Reedbeds	0.12%	0.15%	0.15%	0.55%

Habitat	Total Lower t C (%)	Total Upper t C (%)	Total Typical t C (%)	Total Typical t C when considering Peat (%)
Saline lagoons	0.00%	0.00%	0.00%	0.00%
Traditional orchard	0.37%	0.88%	0.36%	0.34%
Upland calcareous grassland	0.23%	0.09%	0.14%	0.13%
Upland flushes, fens and swamps	1.14%	0.48%	0.69%	0.76%
Upland hay meadow	0.03%	0.02%	0.03%	0.03%
Upland heathland	7.33%	3.58%	4.74%	9.64%
Wood pasture and parkland	3.20%	7.64%	3.15%	2.96%

Table 14. Total carbon storage estimates for each individual non-priority habitat.

Habitat	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical t C when considering Peat
Fragmented heath	774,167	783,066	774,167	774,167
Good quality semi-improved grassland	2,410,823	5,040,811	4,383,314	4,383,314
Grass moorland	12,341,602	12,341,602	12,341,602	12,341,602
No main habitat but additional habitats present	13,580,749	13,580,749	13,580,749	13,580,749

Table 15. Total carbon sequestration estimates for priority habitats with a sequestration value. Negative values indicate carbon sequestration, positive values indicate net emissions of carbon released into the atmosphere.

Habitat	Total Lower Estimate t CO₂e y⁻¹	Total Upper Estimate t CO₂e y⁻¹	Total Typical Estimate t CO₂e y⁻¹
Blanket bog	4,444,195	75,405	805,893
Coastal saltmarsh	-85,402	-291,820	-188,611
Coastal sand dunes	-22,419	-28,208	-22,945
Deciduous woodland	-1,708,924	-14,620,795	-8,164,860
Lowland calcareous grassland	0	0	0
Lowland dry acid grassland	0	0	0
Lowland fens	65,982	-7,176	65,982
Lowland heathland	2,723	2,723	2,941
Lowland meadows	0	0	0

Habitat	Total Lower Estimate t CO ₂ e y ⁻¹	Total Upper Estimate t CO ₂ e y ⁻¹	Total Typical Estimate t CO ₂ e y ⁻¹
Lowland raised bog	234,706	3,982	42,561
Mountain heaths and willow scrub	75	75	81
Mudflats	228,444	-26,486	131,107
Purple moor grass and rush pastures	0	0	0
Traditional orchard	30,598	-109,225	-53,592
Upland calcareous grassland	0	0	0
Upland flushes, fens and swamps	242,964	4,122	44,058
Upland hay meadow	0	0	0
Upland heathland	11,504	11,504	12,425

Appendix 3: Habitat Carbon in Ecologically Designated Sites

Table 16. Carbon storage estimates from priority habitats in ecologically designated sites.

Designation	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Sites of Special Scientific Interest (SSSI)	116,484,103	259,068,251	189,983,111	215,119,551
Ramsar Sites	12,405,952	59,435,731	32,162,450	37,991,092
Special Protection Areas (SPA)	71,470,381	160,494,098	116,500,105	134,444,149
Special Areas of Conservation (SAC)	88,140,472	187,717,537	140,199,977	158,017,934
National Nature Reserves (NNR)	12,798,853	38,662,499	24,983,587	29,667,493

Table 17. Carbon sequestration estimates from priority habitats in ecologically designated sites. Negative values indicate carbon sequestration, positive values indicate net emissions of carbon released into the atmosphere.

Designation	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Sites of Special Scientific Interest (SSSI)	3,410,133	-2,140,976	-447,039
Ramsar Sites	136,173	-508,447	-157,680
Special Protection Areas (SPA)	2,475,922	-613,414	195,456
Special Areas of Conservation (SAC)	2,990,300	-886,288	111,108
National Nature Reserves (NNR)	281,252	-307,772	-92,378

Appendix 4: Habitat Carbon in Landscape Designations

Table 18. Carbon storage estimates from priority habitats in landscape designations.

Designation	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
National Parks	75,457,527	144,507,539	113,553,834	125,618,082
National Landscapes	73,588,996	176,706,707	125,879,636	133,540,927

Table 19. Carbon sequestration estimates from priority habitats in landscape designations. Negative values indicate carbon sequestration, positive values indicate net emissions of carbon released into the atmosphere.

Designation	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
National Parks	2,152,162	-1,634,544	-491,885
National Landscapes	1,436,921	-3,387,951	-1,546,757

Table 20. Carbon storage estimates from priority habitats in England's National Parks.

National Park	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Dartmoor	7,955,076	14,578,258	11,928,626	12,340,048
Exmoor	2,856,960	5,448,654	4,272,566	4,796,637
Lake District	10,273,556	19,899,928	15,311,336	16,780,747
New Forest	3,517,961	9,427,649	6,241,515	6,290,875
North York Moors	5,432,098	9,464,153	7,485,066	10,447,191
Northumberland	6,083,867	11,126,550	8,885,113	10,298,693
Peak District	12,059,372	21,475,376	17,687,460	19,271,902
South Downs	4,947,189	14,835,424	9,637,743	9,887,209
The Broads	1,787,033	3,050,461	2,420,094	5,444,824
Yorkshire Dales	20,544,416	35,201,086	29,684,316	30,059,956

Table 21. Carbon sequestration estimates from priority habitats in England's National Parks. Negative values indicate carbon sequestration, positive values indicate net emissions of carbon released into the atmosphere.

National Park	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Dartmoor	303,227	-120,700	-12,535
Exmoor	42,016	-94,108	-42,937
Lake District	280,524	-255,649	-86,705
New Forest	-24,048	-252,051	-135,588
North York Moors	-4,323	-171,915	-92,527
Northumberland	195,691	-17,853	24,797
Peak District	478,886	-113,919	21,823
South Downs	-58,851	-516,529	-287,092
The Broads	396	-46,185	-20,183
Yorkshire Dales	938,644	-45,637	139,063

Table 22. Carbon storage estimates from priority habitats in England's National Landscapes.

National Landscape	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Arnside & Silverdale	344,504	1,933,928	1,010,840	1,283,856
Blackdown Hills	552,807	1,715,836	1,156,936	1,156,936
Cannock Chase	237,608	592,320	411,365	411,365
Chichester Harbour	124,024	1,084,364	491,916	491,916
Chilterns	2,273,441	7,311,514	4,760,874	4,760,778
Cornwall	2,095,419	4,554,448	3,293,225	3,766,426
Cotswolds	3,473,366	11,351,082	6,893,652	6,893,652
Cranborne Chase & West Wiltshire Downs	1,813,477	5,305,271	3,439,996	3,439,996
Dedham Vale	220,917	540,786	365,129	365,129
Dorset	1,988,563	5,460,944	3,625,656	3,737,759
East Devon	598,821	1,509,676	1,030,660	1,030,660
Forest Of Bowland	5,578,223	9,782,964	8,116,963	9,832,976
High Weald	4,651,200	14,570,275	9,588,308	9,588,308
Howardian Hills	274,965	942,569	561,694	561,694
Isle Of Wight	471,167	1,431,641	904,935	935,279

National Landscape	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Isles Of Scilly	59,332	84,582	68,966	77,688
Kent Downs	2,411,044	7,873,992	4,980,135	4,980,135
Lincolnshire Wolds	391,340	1,242,538	805,535	805,535
Malvern Hills	344,055	1,057,713	676,569	676,569
Mendip Hills	410,798	1,023,123	723,764	726,180
Nidderdale	4,532,218	7,968,689	6,529,211	8,008,116
Norfolk Coast	1,071,889	5,037,185	2,811,407	2,827,835
North Devon	318,756	778,434	558,810	561,842
North Pennines	29,112,521	49,753,114	42,169,600	45,064,403
North Wessex Downs	2,585,610	8,027,040	5,121,596	5,121,596
Northumberland Coast	146,079	1,502,550	647,594	647,594
Quantock Hills	354,141	904,548	616,976	636,976
Shropshire Hills	1,240,549	3,183,704	2,185,845	2,180,740
Solway Coast	1,502,803	5,094,241	3,176,049	3,176,567
South Devon	496,837	1,609,495	983,143	983,143
Suffolk Coast & Heaths	1,206,576	4,125,304	2,477,309	3,114,295

National Landscape	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Surrey Hills	1,857,170	6,158,548	3,779,505	3,779,510
Tamar Valley	385,472	1,614,680	922,380	922,380
Wye Valley	463,303	1,579,610	993,093	993,093

Table 23. Carbon sequestration estimates from priority habitats in England's National Landscapes. Negative values indicate carbon sequestration, positive values indicate net emissions of carbon released into the atmosphere.

National Landscape	Total Lower Sequestration t CO ₂ e y ⁻¹	Total Lower Sequestration t CO ₂ e y ⁻¹	Total Lower Sequestration t CO ₂ e y ⁻¹
Arnside & Silverdale	4,572	-32,180	-12,576
Blackdown Hills	-7,525	-68,610	-37,968
Cannock Chase	-2,080	-18,491	-10,265
Chichester Harbour	5,730	-6,503	529
Chilterns	-32,459	-281,855	-157,266
Cornwall	3,753	-103,281	-53,300
Cotswolds	-41,785	-367,152	-204,789
Cranborne Chase & West Wiltshire Downs	-20,760	-178,369	-99,592
Dedham Vale	-1,775	-15,755	-8,772

National Landscape	Total Lower Sequestration t CO₂e y⁻¹	Total Lower Sequestration t CO₂e y⁻¹	Total Lower Sequestration t CO₂e y⁻¹
Dorset	-12,437	-149,129	-79,342
East Devon	-5,040	-46,169	-25,642
Forest Of Bowland	219,671	-50,072	11,850
High Weald	-64,366	-558,561	-311,721
Howardian Hills	-3,245	-29,884	-16,451
Isle Of Wight	-3,911	-40,059	-21,756
Isles Of Scilly	-50	-334	-165
Kent Downs	-32,719	-286,836	-160,039
Lincolnshire Wolds	-5,248	-46,181	-25,690
Malvern Hills	-3,988	-37,314	-20,774
Mendip Hills	-3,817	-34,284	-19,082
Nidderdale	153,874	-43,063	4,276
Norfolk Coast	-6,613	-85,085	-44,419
North Devon	-4,937	-28,406	-16,503
North Pennines	1,357,710	-16,827	226,146
North Wessex Downs	-32,073	-278,971	-155,443
Northumberland Coast	7,598	-9,105	912

National Landscape	Total Lower Sequestration t CO₂e y⁻¹	Total Lower Sequestration t CO₂e y⁻¹	Total Lower Sequestration t CO₂e y⁻¹
Quantock Hills	-2,947	-27,228	-15,082
Shropshire Hills	-7,079	-101,289	-55,676
Solway Coast	12,286	-25,327	-12,910
South Devon	-1,989	-42,501	-21,979
Suffolk Coast & Heaths	619	-71,207	-33,697
Surrey Hills	-23,471	-205,990	-114,500
Tamar Valley	-2,170	-42,914	-22,245
Wye Valley	-6,409	-59,018	-32,828

Appendix 5: Habitat Carbon in National Character Areas

Table 24. Carbon storage estimates from priority habitats in England's National Character Areas.

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Arden	1,327,642	4,435,673	2,768,429	2,768,620
Avon Vales	513,829	1,760,950	1,037,869	1,037,869
Bedfordshire and Cambridgeshire Claylands	1,697,976	5,360,291	3,337,178	3,347,687
Bedfordshire Greensand Ridge	491,500	1,662,904	998,100	1,007,745
Berkshire and Marlborough Downs	1,257,966	3,864,609	2,429,304	2,429,304
Black Mountains and Golden Valley	539,209	1,569,627	1,001,874	1,078,682
Blackdowns	1,224,332	3,604,986	2,408,267	2,408,267
Blackmore Vale and Vale of Wardour	832,387	2,760,136	1,707,536	1,707,536
Bodmin Moor	667,907	1,159,985	938,520	1,376,140
Border Moors and Forests	7,741,172	15,730,183	12,061,970	14,822,977
Bowland Fells	4,680,794	7,820,796	6,643,374	8,277,081
Bowland Fringe and Pendle Hill	1,115,868	2,458,020	1,829,431	1,941,930

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Bristol, Avon Valleys and Ridges	867,985	2,795,434	1,762,065	1,808,096
Cannock Chase and Cank Wood	880,336	2,518,379	1,663,679	1,748,228
Carmenellis	121,419	347,733	242,115	244,583
Central Lincolnshire Vale	621,688	1,894,926	1,262,299	1,262,299
Central North Norfolk	975,944	2,991,359	1,923,819	2,074,436
Charnwood	314,993	981,645	637,077	637,077
Cheshire Sandstone Ridge	236,129	733,585	482,433	553,773
Cheviot Fringe	361,522	1,012,461	672,932	724,949
Cheviots	2,376,078	3,913,032	3,328,603	3,725,681
Chilterns	3,290,628	10,685,833	6,819,982	6,819,886
Clun and North West Herefordshire Hills	766,744	2,427,049	1,502,412	1,503,575
Cornish Killas	2,584,539	7,812,024	5,207,599	5,258,821
Cotswolds	4,184,337	13,907,674	8,304,370	8,304,370
Cumbria High Fells	7,724,314	13,601,982	10,838,992	11,970,252

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Dark Peak	10,272,440	18,147,935	14,988,362	16,755,694
Dartmoor	7,802,866	14,176,042	11,644,610	12,048,766
Derbyshire Peak Fringe and Lower Derwent	482,759	1,495,647	983,578	999,965
Devon Redlands	1,347,206	3,574,716	2,300,592	2,304,235
Dorset Downs and Cranborne Chase	1,856,003	5,026,204	3,333,963	3,333,963
Dorset Heaths	1,704,404	3,978,340	2,854,034	2,980,393
Dunsmore and Feldon	511,069	1,683,461	1,040,188	1,040,188
Durham Coalfield Pennine Fringe	659,586	2,019,961	1,329,612	1,349,259
Durham Magnesian Limestone Plateau	325,500	996,135	669,314	669,314
East Anglian Chalk	597,915	1,708,011	1,132,732	1,284,509
Eden Valley	563,316	1,649,417	1,088,982	1,136,432
Exmoor	3,525,891	7,461,876	5,619,871	6,146,014
Forest of Dean and Lower Wye	964,077	3,125,516	2,063,195	2,063,195

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Greater Thames Estuary	2,134,884	5,432,493	3,662,176	3,662,176
Hampshire Downs	2,622,430	8,424,812	5,286,177	5,923,941
Hensbarrow	256,916	723,173	503,884	508,608
Herefordshire Lowlands	855,229	3,341,695	1,707,115	1,711,591
Herefordshire Plateau	395,934	1,486,882	823,313	823,313
High Leicestershire	323,087	1,063,060	680,300	680,300
High Weald	5,221,995	16,774,789	11,015,542	11,015,542
Holderness	448,355	936,039	679,778	794,326
Howardian Hills	289,982	973,094	585,313	585,313
Howgill Fells	311,230	551,855	461,283	337,915
Humber Estuary	235,371	793,946	499,808	499,808
Humberhead Levels	4,187,620	12,018,237	7,915,392	8,027,011
Inner London	312,647	1,163,947	643,693	643,693
Isle of Porland	21,392	24,497	23,058	23,058
Isle of Wight	742,182	2,172,893	1,409,496	1,448,859

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Isles of Scilly	57,284	82,349	66,834	75,423
Kesteven Uplands	661,125	2,317,786	1,370,401	1,370,401
Lashire and Amounderness Plain	1,813,324	4,932,120	3,237,332	3,272,027
Lashire Coal Measures	493,139	1,604,918	1,058,628	1,091,523
Lashire Valleys	656,037	1,840,873	1,253,875	1,250,513
Leicestershire and Nottinghamshire Wolds	487,385	1,754,447	992,889	992,889
Leicestershire and South Derbyshire Coalfield	198,435	666,061	419,622	419,622
Leicestershire Vales	249,262	870,295	512,949	512,949
Lincolnshire Coast and Marshes	605,398	1,736,343	1,116,511	1,116,511
Lincolnshire Wolds	556,609	1,845,672	1,156,653	1,156,653
Low Weald	3,457,572	11,053,987	7,273,885	7,273,885
Lundy	30,894	34,836	32,751	32,751

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Malvern Hills	301,098	963,582	607,966	607,966
Manchester Conurbation	305,713	991,817	647,202	653,009
Manchester Pennine Fringe	481,194	1,521,719	1,025,062	1,030,865
Marshwood and Powerstock Vales	202,392	563,164	383,676	383,676
Mease/Sence Lowlands	177,516	551,551	366,979	366,979
Melbourne Parklands	167,632	603,519	351,312	351,312
Mendip Hills	556,403	1,503,272	1,027,235	1,029,651
Mersey Valley	820,816	2,746,978	1,751,820	1,797,090
Merseyside Conurbation	202,411	701,034	422,762	424,048
Mid Norfolk	830,874	2,424,938	1,586,990	2,235,038
Mid Northumberland	380,232	1,274,006	783,288	784,292
Mid Severn Sandstone Plateau	1,300,608	4,436,543	2,732,083	2,732,083
Mid Somerset Hills	766,455	1,726,822	1,170,756	1,180,009
Midvale Ridge	506,534	1,790,828	1,030,577	1,040,952

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Morecambe Bay Limestones	2,105,193	6,000,786	3,940,602	4,356,214
Morecambe Coast and Lune Estuary	448,845	1,187,568	798,973	811,768
Needwood and South Derbyshire Claylands	719,411	2,047,968	1,251,732	1,388,057
New Forest	3,897,907	10,061,165	6,763,634	6,812,993
North Downs	3,378,674	10,958,403	7,010,987	7,010,987
North East Norfolk and Flegg	126,130	385,489	263,395	323,284
North Kent Plain	1,208,187	3,841,464	2,497,612	2,658,690
North Norfolk Coast	339,053	1,543,123	899,532	899,532
North Northumberland Coastal Plain	203,302	654,561	414,400	426,122
North Pennines	29,418,070	50,452,098	42,691,115	45,567,863
North West Norfolk	813,017	2,520,077	1,619,383	1,773,934
North York Moors and Cleveland Hills	5,707,760	10,300,399	8,050,695	11,012,832
Northamptonshire Uplands	529,327	1,888,024	1,055,068	1,055,068

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Northamptonshire Vales	583,912	1,741,653	1,090,468	1,090,468
Northern Lincolnshire Edge with Coversands	324,266	965,483	637,065	637,065
Northern Thames Basin	3,100,420	10,296,291	6,448,301	6,448,301
Northumberland Sandstone Hills	2,412,283	4,393,534	3,420,845	3,245,423
Nottinghamshire, Derbyshire and Yorkshire Coalfield	1,850,715	6,122,089	3,927,560	3,931,474
Orton Fells	502,882	889,972	648,970	677,964
Oswestry Uplands	120,263	439,684	246,561	246,561
Pennine Dales Fringe	856,367	2,801,964	1,699,137	1,749,208
Pevensey Levels	478,060	510,840	494,503	494,503
Potteries and Churnet Valley	698,438	2,102,913	1,392,678	1,392,988
Quantock Hills	312,785	769,132	537,556	557,556
Rockingham Forest	867,404	2,981,643	1,819,913	1,819,913
Romney Marshes	506,010	691,435	597,829	597,829

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Salisbury Plain and West Wiltshire Downs	2,985,224	5,852,168	4,383,123	4,383,939
Sefton Coast	104,042	315,853	204,969	205,505
Severn and Avon Vales	2,798,210	6,735,161	4,378,341	4,418,375
Sherwood	1,010,621	3,829,074	2,007,081	2,007,081
Shropshire Hills	1,397,449	3,817,668	2,554,187	2,554,365
Shropshire, Cheshire and Staffordshire Plain	3,170,912	10,487,358	6,288,872	6,622,633
Solway Basin	4,031,160	11,616,634	7,579,369	7,623,361
Somerset Levels and Moors	4,561,827	5,895,903	5,195,121	6,777,984
South Coast Plain	560,282	1,500,328	987,996	1,005,030
South Cumbria Low Fells	1,930,835	4,657,766	3,313,266	3,429,565
South Devon	1,530,004	4,604,573	3,009,091	3,020,713
South Downs	2,731,583	7,835,048	5,201,600	5,201,600
South East Northumberland Coastal Plain	296,876	915,409	607,981	608,620

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
South Hampshire Lowlands	912,417	2,662,807	1,786,392	1,794,211
South Herefordshire and Over Severn	594,445	2,121,997	1,248,249	1,248,249
South Norfolk and High Suffolk Claylands	1,478,142	4,567,613	2,880,684	3,450,645
South Purbeck	260,862	541,750	383,493	383,493
South Suffolk and North Essex Clayland	2,692,832	8,570,283	5,461,018	5,471,959
South West Peak	1,767,706	3,339,675	2,675,544	2,752,472
Southern Lincolnshire Edge	275,895	917,353	557,141	557,141
Southern Magnesian Limestone	1,475,403	4,885,871	3,051,315	3,087,148
Southern Pennines	8,329,100	15,280,352	12,595,165	14,338,951
Suffolk Coast and Heaths	1,647,196	4,373,941	2,935,472	3,585,187
Tees Lowlands	530,705	1,639,840	1,060,488	1,067,419
Teme Valley	351,044	1,223,739	748,403	748,403

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Thames Basin Heaths	3,538,789	11,282,086	6,827,518	6,906,548
Thames Basin Lowlands	575,582	2,011,759	1,219,728	1,219,728
Thames Valley	1,746,204	6,140,817	3,496,287	3,496,702
The Brecks	2,070,629	5,002,083	3,528,205	4,288,832
The Broads	2,056,554	3,661,984	2,877,959	5,932,191
The Culm	3,544,605	10,445,268	7,097,412	7,103,337
The Fens	1,896,012	5,072,173	3,387,723	4,821,715
The Lizard	397,281	782,424	583,347	583,347
Trent and Belvoir Vales	974,444	3,040,950	1,932,193	1,932,800
Trent Valley Washlands	436,087	961,507	687,202	687,202
Tyne and Wear Lowlands	475,280	1,576,396	997,116	997,116
Tyne Gap and Hadrian's Wall	646,413	1,715,424	1,170,759	1,241,368
Upper Thames Clay Vales	1,643,038	4,508,768	2,890,567	2,890,819
Vale of Mowbray	263,245	807,689	515,064	515,064
Vale of Pickering	535,434	800,754	659,708	717,825

National Character Area	Total Lower t C	Total Upper t C	Total Typical t C	Total Typical Considering Peat t C
Vale of Taunton and Quantock Fringes	496,004	1,322,029	852,241	852,241
Vale of York	547,797	1,444,105	965,782	965,910
Wealden Greensand	4,108,298	13,364,550	8,276,169	8,292,637
West Cumbria Coastal Plain	882,491	2,327,453	1,566,282	1,653,476
West Penwith	365,601	619,647	495,724	552,152
Weymouth Lowlands	122,264	303,649	218,022	218,022
White Peak	676,104	1,564,687	1,151,850	1,155,399
Wirral	282,499	1,227,169	730,923	730,923
Yardley-Whittlewood Ridge	528,389	1,875,289	1,116,355	1,117,658
Yeovil Scarplands	622,775	1,936,441	1,169,276	1,169,276
Yorkshire Dales	24,557,447	41,814,514	35,304,002	37,686,644
Yorkshire Southern Pennine Fringe	760,700	2,389,976	1,615,577	1,685,943
Yorkshire Wolds	756,556	2,244,493	1,472,420	1,472,420

Table 25. Carbon sequestration estimates from priority habitats England's National Character Areas. Negative values indicate carbon sequestration, positive values indicate net emissions of carbon released into the atmosphere.

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Arden	-18,091.66	-158,145.29	-88,168.96
Avon Vales	-6,298.72	-54,938.03	-30,641.42
Bedfordshire and Cambridgeshire Claylands	-17,038.38	-172,781.47	-94,255.06
Bedfordshire Greensand Ridge	-6,140.16	-53,591.50	-29,843.23
Berkshire and Marlborough Downs	-14,377.80	-126,363.57	-70,259.97
Black Mountains and Golden Valley	4,629.56	-42,017.00	-21,814.70
Blackdowns	-14,472.54	-132,195.50	-73,263.01
Blackmore Vale and Vale of Wardour	-10,708.55	-94,478.61	-52,544.04
Bodmin Moor	12,285.83	-17,445.25	-7,118.50
Border Moors and Forests	280,059.40	-16,165.13	39,955.97
Bowland Fells	206,513.73	-8,312.57	31,639.77
Bowland Fringe and Pendle Hill	11,336.10	-57,984.68	-28,692.90

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Bristol, Avon Valleys and Ridges	-10,830.48	-97,450.63	-54,244.39
Cannock Chase and Cank Wood	-9,690.83	-85,080.45	-47,315.59
Carnmenellis	-1,611.26	-13,890.19	-7,751.92
Central Lincolnshire Vale	-8,424.87	-72,589.85	-40,512.81
Central North Norfolk	-11,370.40	-102,633.07	-56,724.09
Charnwood	-3,980.63	-35,111.86	-19,491.94
Cheshire Sandstone Ridge	-2,549.69	-26,092.18	-14,270.73
Cheviot Fringe	307.22	-26,511.40	-14,004.01
Cheviots	91,711.05	-4,015.61	13,754.12
Chilterns	-45,107.45	-394,916.55	-220,218.57
Clun and North West Herefordshire Hills	-8,221.75	-79,167.23	-44,024.18
Cornish Killas	-35,048.30	-289,964.47	-161,975.93
Cotswolds	-49,839.15	-435,862.76	-243,069.26
Cumbria High Fells	251,644.32	-121,609.85	-20,417.52
Dark Peak	419,748.20	-75,409.11	32,318.18

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Dartmoor	304,869.31	-105,892.38	-4,252.24
Derbyshire Peak Fringe and Lower Derwent	-5,100.09	-54,640.14	-30,235.17
Devon Redlands	-9,318.80	-98,188.43	-53,513.14
Dorset Downs and Cranborne Chase	-18,667.16	-161,969.16	-90,256.93
Dorset Heaths	-9,506.49	-103,446.07	-54,786.08
Dunsmore and Feldon	-6,544.04	-57,627.86	-32,118.10
Durham Coalfield Pennine Fringe	-8,594.47	-74,302.35	-41,426.69
Durham Magnesian Limestone Plateau	-4,472.41	-38,791.08	-21,559.95
East Anglian Chalk	-6,193.15	-58,581.06	-32,247.55
Eden Valley	-5,874.22	-56,753.88	-31,376.43
Exmoor	31,367.81	-170,718.94	-86,349.80
Forest of Dean and Lower Wye	-14,056.37	-125,837.90	-70,099.65
Greater Thames Estuary	-10,889.76	-60,843.86	-35,666.31
Hampshire Downs	-31,610.93	-286,862.89	-158,281.52
Hensbarrow	-1,690.02	-24,817.73	-12,662.19

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Herefordshire Lowlands	-6,824.55	-87,388.00	-48,206.21
Herefordshire Plateau	-3,937.91	-46,592.37	-25,761.67
High Leicestershire	-4,598.67	-39,896.90	-22,251.88
High Weald	-75,548.07	-657,968.41	-367,026.23
Holderness	-2,529.33	-24,601.97	-13,418.35
Howardian Hills	-3,366.66	-30,886.15	-17,013.88
Howgill Fells	14,096.52	-1,873.97	1,478.39
Humber Estuary	-1,920.75	-11,831.51	-6,684.21
Humberhead Levels	58,427.05	-88,256.68	-36,576.25
Inner London	-3,826.54	-33,424.84	-18,630.38
Isle of Porland	-22.72	-194.35	-108.53
Isle of Wight	-7,565.05	-67,831.52	-37,517.05
Isles of Scilly	-51.70	-335.81	-165.75
Kesteven Uplands	-8,526.44	-74,811.17	-41,578.31
Lashire and Amounderness Plain	-5,506.59	-71,795.19	-40,591.66

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Lashire Coal Measures	-4,362.78	-55,933.82	-30,099.53
Lashire Valleys	-5,496.75	-64,798.95	-35,539.78
Leicestershire and Nottinghamshire Wolds	-5,907.36	-51,760.08	-28,805.58
Leicestershire and South Derbyshire Coalfield	-2,765.88	-24,348.46	-13,521.73
Leicestershire Vales	-3,159.17	-27,844.36	-15,479.14
Lincolnshire Coast and Marshes	-6,322.94	-36,105.78	-21,098.81
Lincolnshire Wolds	-7,531.87	-65,758.40	-36,621.35
Low Weald	-49,812.18	-435,527.62	-242,934.37
Lundy	28.24	3.73	28.73
Malvern Hills	-3,706.15	-34,496.03	-19,208.39
Manchester Conurbation	-4,285.08	-38,305.71	-21,207.94
Manchester Pennine Fringe	-6,394.47	-60,622.00	-33,136.35
Marshwood and Powerstock Vales	-1,888.33	-18,823.95	-10,302.41

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Mease/Sence Lowlands	-2,347.10	-21,229.06	-11,731.85
Melbourne Parklands	-2,221.03	-19,347.94	-10,781.06
Mendip Hills	-5,935.48	-52,451.78	-29,222.87
Mersey Valley	981.21	-51,702.51	-26,888.49
Merseyside Conurbation	-2,913.03	-23,748.09	-13,299.07
Mid Norfolk	-7,638.46	-78,723.65	-42,402.56
Mid Northumberland	-4,015.48	-40,586.04	-22,536.73
Mid Severn Sandstone Plateau	-17,498.35	-156,077.51	-86,927.52
Mid Somerset Hills	-145.85	-32,713.24	-17,622.01
Midvale Ridge	-6,012.95	-53,731.71	-29,806.91
Morecambe Bay Limestones	7,325.98	-93,184.79	-47,198.16
Morecambe Coast and Lune Estuary	-3,194.74	-14,837.87	-9,006.43
Needwood and South Derbyshire Claylands	-5,633.90	-53,374.78	-29,275.28
New Forest	-28,461.20	-282,413.00	-153,103.23

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
North Downs	-46,699.52	-407,690.13	-227,483.70
North East Norfolk and Flegg	-1,901.76	-15,685.82	-8,671.17
North Kent Plain	-14,981.98	-139,467.53	-76,571.70
North Norfolk Coast	-5,233.30	-17,397.54	-11,153.38
North Northumberland Coastal Plain	-4,354.49	-20,344.71	-12,097.18
North Pennines	1,366,618.59	-30,081.67	220,641.23
North West Norfolk	-9,751.44	-87,900.18	-48,626.27
North York Moors and Cleveland Hills	-8,318.34	-205,248.03	-111,008.09
Northamptonshire Uplands	-6,057.47	-53,194.87	-29,653.10
Northamptonshire Vales	-5,699.17	-52,975.04	-29,193.45
Northern Lincolnshire Edge with Coversands	-3,991.19	-34,856.94	-19,417.21
Northern Thames Basin	-42,307.61	-368,080.81	-205,329.63
Northumberland Sandstone Hills	52,810.17	-29,474.57	-6,469.51

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Nottinghamshire, Derbyshire and Yorkshire Coalfield	-26,510.94	-231,871.32	-129,003.45
Orton Fells	3,639.81	-8,776.74	-3,754.01
Oswestry Uplands	-1,469.59	-12,832.90	-7,140.09
Pennine Dales Fringe	-8,490.99	-85,672.36	-46,708.53
Pevensey Levels	-176.18	-1,785.86	-982.70
Potteries and Churnet Valley	-8,890.30	-77,407.15	-43,114.04
Quantock Hills	-2,685.79	-23,794.32	-13,242.14
Rockingham Forest	-11,973.43	-103,615.31	-57,786.86
Romney Marshes	-1,226.14	-8,696.88	-4,945.57
Salisbury Plain and West Wiltshire Downs	-18,081.47	-156,074.02	-87,043.30
Sefton Coast	-4,161.82	-10,096.55	-6,787.19
Severn and Avon Vales	-13,456.25	-160,082.55	-88,492.58
Sherwood	-10,955.67	-94,844.20	-52,876.11
Shropshire Hills	-9,900.92	-124,723.84	-68,766.99

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
Shropshire, Cheshire and Staffordshire Plain	-17,591.55	-269,487.46	-146,748.75
Solway Basin	39,791.99	-75,856.22	-35,216.42
Somerset Levels and Moors	4,210.86	-23,840.91	-9,595.33
South Coast Plain	-4,535.73	-40,271.41	-22,220.14
South Cumbria Low Fells	29,075.20	-123,409.65	-60,915.70
South Devon	-18,044.66	-162,988.90	-90,762.72
South Downs	-32,150.96	-276,343.03	-154,276.26
South East Northumberland Coastal Plain	-3,736.25	-32,590.19	-18,253.95
South Hampshire Lowlands	-11,257.23	-97,232.06	-54,223.16
South Herefordshire and Over Severn	-7,063.52	-72,685.41	-40,346.04
South Norfolk and High Suffolk Claylands	-15,944.27	-149,566.09	-82,195.57
South Purbeck	-1,418.33	-12,506.75	-6,948.15

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
South Suffolk and North Essex Clayland	-35,024.21	-307,570.54	-171,411.93
South West Peak	65,192.50	-32,197.61	-5,916.55
Southern Lincolnshire Edge	-3,502.37	-30,370.29	-16,948.00
Southern Magnesian Limestone	-18,359.15	-169,451.39	-93,219.98
Southern Pennines	372,596.18	-78,690.26	23,538.41
Suffolk Coast and Heaths	-13,551.75	-112,606.61	-62,721.70
Tees Lowlands	-7,375.37	-58,514.84	-32,839.18
Teme Valley	-4,285.53	-46,098.92	-25,555.31
Thames Basin Heaths	-37,762.85	-339,762.62	-187,958.60
Thames Basin Lowlands	-7,887.52	-69,461.21	-38,608.47
Thames Valley	-20,318.03	-179,015.39	-99,685.23
The Brecks	-17,015.12	-158,138.46	-86,830.40
The Broads	-4,279.56	-72,520.06	-35,739.67
The Culm	-46,454.37	-406,965.24	-226,977.70
The Fens	-9,836.20	-81,641.02	-44,472.34

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
The Lizard	-1,844.75	-17,638.46	-9,669.65
Trent and Belvoir Vales	-11,821.43	-105,455.63	-58,698.34
Trent Valley Washlands	-2,692.58	-26,579.73	-14,437.12
Tyne and Wear Lowlands	-6,465.95	-57,028.81	-31,773.74
Tyne Gap and Hadrian's Wall	8,302.71	-37,962.49	-18,524.64
Upper Thames Clay Vales	-14,372.98	-127,669.48	-71,036.40
Vale of Mowbray	-2,841.90	-27,070.54	-14,829.11
Vale of Pickering	-1,129.13	-12,912.89	-6,867.23
Vale of Taunton and Quantock Fringes	-3,907.80	-39,141.71	-21,704.55
Vale of York	-4,801.12	-44,359.22	-24,469.60
Wealden Greensand	-49,893.64	-448,802.57	-248,949.05
West Cumbria Coastal Plain	-3,164.22	-36,556.51	-20,857.27
West Penwith	-1,327.03	-12,377.59	-6,820.44
Weymouth Lowlands	-1,106.76	-9,354.86	-5,234.50

National Character Area	Total Lower Sequestration t CO₂e y⁻¹	Total Upper Sequestration t CO₂e y⁻¹	Total Typical Sequestration t CO₂e y⁻¹
White Peak	-5,864.40	-52,511.11	-29,242.70
Wirral	-4,353.47	-22,063.29	-13,157.37
Yardley-Whittlewood Ridge	-7,228.79	-62,938.74	-35,062.84
Yeovil Scarplands	-5,059.72	-58,023.52	-31,701.79
Yorkshire Dales	1,084,172.87	-54,459.21	160,186.36
Yorkshire Southern Pennine Fringe	-11,080.01	-97,963.91	-54,603.42
Yorkshire Wolds	-9,252.72	-80,043.15	-44,633.56

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