

Yorkshire Peat Partnership Annual Report

April 2022 – March 2023



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HEADLINES


This is a progress report on the peatland restoration work completed in Yorkshire since 2009. Previous annual reports have included work in Forest of Bowland; this was, strictly speaking, carried out by Yorkshire Wildlife Trust rather than Yorkshire Peat Partnership.


Landscape-scale Action


Yorkshire Peat Partnership delivered a remarkable 42,868 ha* of peat restoration work by the end of March 2023 which is 45% of the estimated 94,220 ha* of peatland in our operational area.


Key highlights included:

 Securing £785,044 to cover core costs (e.g. staff, vehicles, equipment and office costs)


 Securing £3,184,32 of capital funds to carry out direct peatland restoration


 Completing foot surveys of 8,217 ha of the estimated 94,220 ha of peatland


 Carrying out Unmanned Aerial Vehicle (UAV) surveys of over 1,712 ha of peatland in Yorkshire.


 Completing restoration plans for 18,215 ha of peat units

We have delivered restoration works on **13,768 ha** of peat units in Yorkshire; **1,553 ha** on new restoration sites and **12,213 ha** on existing sites. To help restore these peatlands, we:

 Slowed the flow of water through 157 km of eroding grips and gullies with 32,144 dams and baffles

 Re-profiled 353 km of grips and gully edges and hags

 Re-vegetated 14 ha of bare peat, mineral soil and micro-erosion

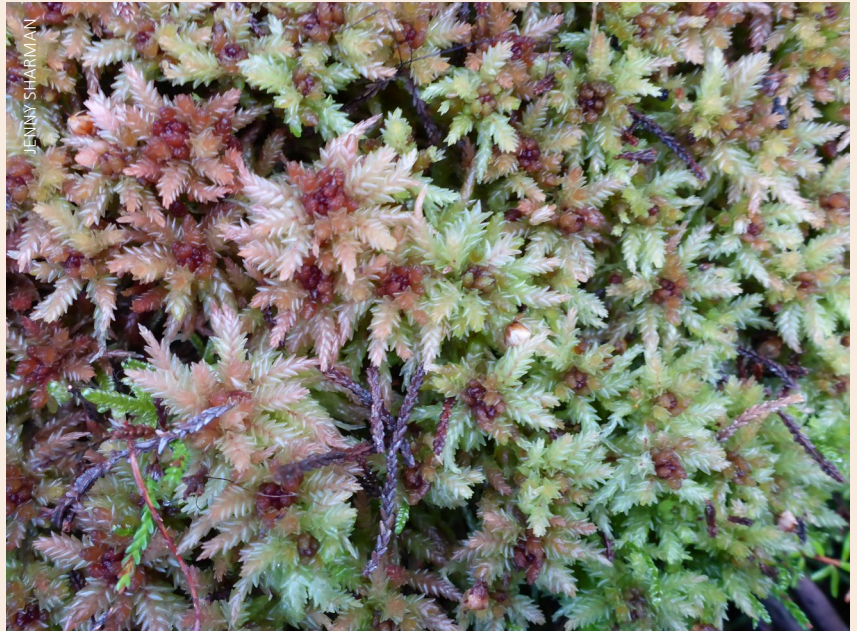
 Planted over 730,000 plug plants: 158,834 cottongrass; 167,162 crowberry; 413,978 sphagnum

*this is defined as upland management units containing peat.

1 YORKSHIRE PEAT PARTNERSHIP

1.1 What is Yorkshire Peat Partnership?

Yorkshire Peat Partnership began in 2009, as an umbrella organisation led by Yorkshire Wildlife Trust, to try to coordinate the restoration of the badly degraded blanket bog of northern Yorkshire. Since then, we have become the primary body coordinating the delivery of upland peatland restoration across the Yorkshire Dales National Park, the North York Moors National Park and Nidderdale Area of Outstanding Natural Beauty. We work closely with landowners, agents, gamekeepers, farmers and contractors to help restore Yorkshire's internationally important blanket bog.



1.2 Why are we needed?

Blanket bog is (in England) an upland peatland habitat, occurring from around 200m upwards, generally on flat or gently sloping ground where drainage is poor. Few plants are adapted to the acidic, infertile conditions found on the deepest peat, and sphagnum mosses and cottongrasses predominate.

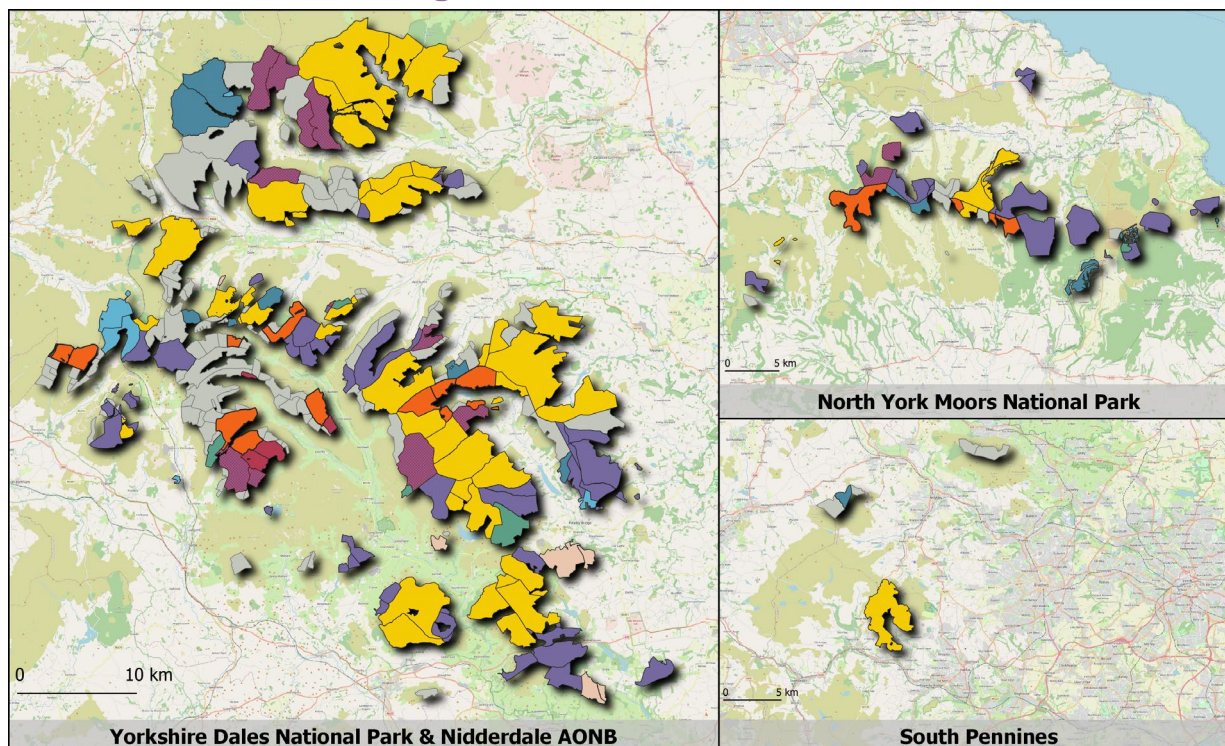
The UK has 13% of the world's blanket bog, and we estimate North Yorkshire holds around 94,000 ha - around 26% of England's total resource – storing over 27,000,000 tonnes of carbon. In addition to locking up millennia of carbon, healthy blanket bog helps to slow the flow of water from the uplands into rivers and streams, filters our drinking water and provides habitat for some amazing wildlife. Formed over thousands of years, it has taken just six decades to devastate Yorkshire's peatlands.

Most damage occurred between the 1950s and 1980s, when the government incentivised landowners to drain the land for “agricultural improvement”. Drainage channels – known as grips – were dug across vast tracts of blanket bog, which still criss-cross the landscape today. 80% of our blanket bog has been damaged in this way, leaving our peatlands brown and broken. We, along with our partners and funders, aim to restore this amazing habitat to fully functioning blanket bog that benefits both people and wildlife.

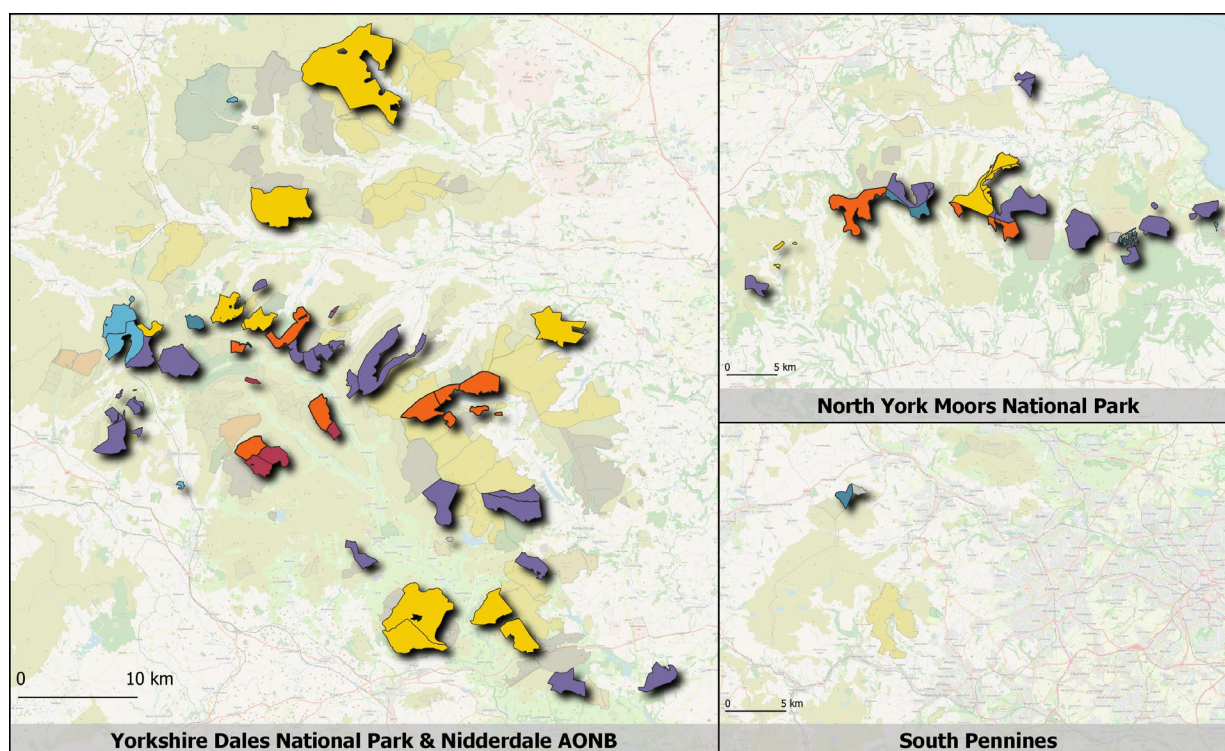
Yorkshire Peat Partnership is managed by Yorkshire Wildlife Trust in partnership with Yorkshire Water, Natural England, North York Moors National Park Authority, Yorkshire Dales National Park Authority the Environment Agency, Moorland Association, National Trust and Nidderdale AONB, and private landowners.

2 OUR WORK

2.1 Our work on the ground since 2009



2.2 Our work on the ground 2022/2023



2.3 Our work in numbers 2022/2023

UAV surveys

Region	Total surveyed area (ha)
Yorkshire Dales National Park	1066.62
North York Moors	646.01
Total: All regions	1712.63

Areas covered during walkover surveys

Region	Total surveyed area (ha)
Nidderdale AONB	1,964
North York Moors National Park	4,052
South Pennines	207
Yorkshire Dales National Park	2,880
Total: All regions	9,102



Restoration works 2022/2023

Outcome	Restoration technique				Region			Total: All regions
					Nidderdale AONB	North York Moors National Park	Yorkshire Dales National Park	
Hydrological restoration	Obstruction	Sediment traps	All dams	All dams/ baffles (km)	18.71	46.98	15.9	81.59
				All dams/ baffles (n)	1,873.00	4,437.00	2,403.00	8,713.00
			Sediment trap	Peat dams (km)	0.17	10.07	4.72	14.95
				Peat dams (n)	22	1,325.00	785	2,132.00
				Timber dams (km)	0.07	2.61	1.64	4.32
				Timber dams (n)	7	207	610	824
				Stone dams (km)	0	19.58	8.38	27.96
				Stone dams (n)	0	1,247.00	949	2,196.00
				Heather bale dams (km)	16.81	13.57	0.17	30.55
				Heather bale dams (n)	1,676.00	1,582.00	30	3,288.00
		Flow attenuation	Baffle	Timber baffles (km)	0	0	0.01	0.01
				Stone baffles (km)	0	1.14	0.29	1.44
				Stone baffles (n)	0	76	29	105
		Bunding	Cell bund	Heather bale cell bunds (n)	0	458	70	528
				Coir cell bunds (n)	0	0	2,719.00	2,719.00
	Stabilisation	Reprofiling	Reprofile	All reprofiling (km)	18.71	47.88	62.24	128.83
		Protecting	Toe protection	Stone toe protection (km)	0	0	0.04	0.04
			Peat surface coverage	Geo-textiles (ha)	0	0	0.48	0.48

Restoration works 2022/2023 (continued)

Outcome	Restoration technique				Region		Yorkshire Dales National Park	Total: All regions
					North York Moors National Park	Yorkshire Dales National Park		
Biodiversification	Revegetation	Revegetating	All revegetation	All revegetation (km)	0.03	0.27	13.58	13.88
				All revegetation (ha)	0.01	2.12	5.18	7.32
			Brash	Heather brash (ha)	5.47	2.12	9.95	17.54
			Seed	Dwarf-shrub seed (ha)	11.45	2.12	22.41	35.99
				Grass seed (ha)	11.45	2.12	7.08	20.66
		Conditioning	Fertiliser and lime	Lime (ha)	4.02	2.12	22.41	28.56
				Fertiliser (ha)	4.02	2.12	22.41	28.56
	Innoculation	Planting	Plugs	Eriophorum plugs (ha)	4.01	2.12	15.43	21.57
				Eriophorum plugs (n)	40,132.00	21,241.00	81,051.00	142,424.00
				Empetrum plugs (ha)	4.01	2.12	11.66	17.79
				Empetrum plugs (n)	40,132.00	21,241.00	50,350.00	111,723.00
				Sphagnum plugs (ha)	14.99	24.43	2.78	42.2
			Harvested clumps	Harvested sphagnum clumps (ha)	0	0	3.95	3.95
			Plugs	Sphagnum plugs (n)	149,920.00	244,268.00	23,820.00	418,008.00
			Harvested clumps	Harvested sphagnum clumps (n)	0	0	39,493.00	39,493.00

2.4 Funding

Yorkshire Peat Partnership is not-for-profit; all of our funding goes into covering our overheads, research and development, monitoring or capital restoration works.

Core revenue funding

Organisation	Amount £				TOTAL
	2009-19/20	20/21	21/22	22/23	
Yorkshire Wildlife Trust – legacies	84,557	-	-	-	84,557
Yorkshire Wildlife Trust – fund-raising	107,226	89,524	18,502	27,051	242,303
Yorkshire Wildlife Trust – consultancy	100,713	16,530	35,054		152,297
Yorkshire Wildlife Trust – in kind overheads	135,677	-	-		135,677
Yorkshire Wildlife Trust - People's Postcode Lottery Nature Based solutions fund	-	-	188,843	-	188,843
Yorkshire Wildlife Trust – corporate donor to Peatfix project	-	-	24,000	-	24,000
Yorkshire Dales National Park Authority	300,100	-	-	£5,000	305,100
North York Moors National Park Authority	93,146	-	-	-	93,146
Nidderdale AONB	1,000	-	-	-	1,000
North Pennines AONB	10,000	-	-	-	10,000
Environment Agency – direct	314,379	95,000	14,348	14,250	437,977
Environment Agency – via Pennine PeatLIFE	225,000	-	95,000	-	320,000
Environment Agency - Great North Bog Development	-	-	59,833	-	59,833
Natural England	588,845	-	-	-	588,845
DEFRA Peatland Fund – via YWT	66,666	33,333	13,703	-	113,702
DEFRA England Peat Strategy Pilot	45,083	-	-	-	45,083
Higher Level Scheme	248,864	-	-	-	248,864
Countryside Stewardship	154,231	90,977	97,227	73,536	415,971
Yorkshire Water – contracts	405,074	61,258	194,661	178,924	839,917
Yorkshire Water – via Pennine PeatLIFE	143,771	-	-	-	143,771
Peter de Haan Conservation Trust – via YWT	100,000	-	-	-	100,000
EU-LIFE – via Pennine PeatLIFE	-	121,902	119,630	70,025	311,557
Nature for Climate Fund – Restoration Grant Round 1	-	-	90,820	50,908	141,728
Nature for Climate Fund – Restoration Grant Round 2				37,189	37,189
Nature for Climate Fund – Discovery Grant				59,560	59,560
Nature for Climate Fund – Moor to Restore	-	-	-	44,363	44,363
Esmée Fairbairn – via YWT	-	-	110,000	176,000	286,000
Nidderdale FiPL	-	-	-	9598	9,598
Tees-Swale: Naturally Connected (Heritage Lottery Fund via NPAP)	-	-	-	23,640	23,640
Garfield Weston Foundation				15,000	15,000
TOTAL	3,124,332	508,524	1,061,621	785,044	5,479,521
Average per annum	284,030	-	-		391,394
Loans – Yorkshire Dales National Park Authority	2,107,341	-	-		-
Loans – The Wildlife Trusts	1,500,000	-	-		-

Capital funding

Organisation	Amount £				TOTAL
	2009-19/20	20/21	21/22	22/23	
Environment Agency – Water Framework Directive	643,410	-	80,652	-	724,062
Environment Agency – FCRM				6,583	6,583
Natural England – Water Framework Directive	166,239	-	-	-	166,239
Natural England Nature for Climate Fund - Restoration Grant Round 1	-	-	219,600	1,907,757	2,127,357
Natural England Nature for Climate Fund - Restoration Grant Round 2	-	-	-	137,840	137,840
Higher Level Scheme (administered by Natural England through individual land manager agreements)	11,417,822	77,076	-	-	11,494,898
Countryside Stewardship Scheme (administered by Natural England and Rural Payments Agency through individual land manager agreements)	176,219	573,551	1,250,563	-	2,000,333
Yorkshire Water – contracts	2,489,508	149,709	415,585	789,532	3,844,334
Yorkshire Water – via Pennine PeatLIFE	756,229	-	-	-	756,229
EU-LIFE – via Pennine PeatLIFE	38,588	799,341	140,437	19,736	998,102
DEFRA Peatland Fund -via YWT	1,621,850	1,811,373	98,106	-	3,531,329
Nidderdale FiPL	-	-	-	6,495	6,495
Yorkshire Dales FiPL	-	-	-	19,381	19,381
Garfield Weston Foundation	-	-	-	297,000	297,000
TOTAL	17,309,865	3,411,050	2,204,943	3,184,324	26,110,182
Average per annum	1,573,624	-	-		1,865,013

3 NEXT STEPS

Capacity has long been an issue in the peatland restoration sector. It is a very labour intensive endeavour and there is currently far more peatland to restore than there are people to restore it. In 2019, we had devised a two-week course to address that very issue; a pandemic intervened to prevent us delivering that course. Thanks to funding from Esmée Fairbairn Foundation, we are teaching our first students in 2023. This is an initially limited rollout; we will use feedback gathered from this year's cohort to refine and improve our tuition for an expanded programme in 2024.

Species reintroductions are a new and very exciting venture for us. We have secured funding to reintroduce an invertebrate species, which we'll be announcing later in 2023. This is a species that has declined in England though the loss of its lowland bog habitat and is now confined to a handful of sites in Cumbria and the Midlands. We're also working on plans to potentially reintroduce a Sphagnum species that was common in Yorkshire 200 years ago but is now missing from the bryophyte assemblage.

Lowland bog restoration is another new venture for us as we move down below the 300 m contour and east to the Vale of Pickering. We will be working



with colleagues in Yorkshire Derwent Catchment Partnership to understand the North Yorkshire lowland peat resource and engage farmers and land managers about the management options that will support their businesses whilst preventing carbon emissions from their land.

We continue to work with landowners and the IUCN UK Peatland Partnership to develop Peatland Code projects to unlock private finance opportunities and so achieve more with public money. Through the Great North Bog we are looking at ways of streamlining the process to make it easier for landowners to access private funds through a trusted and rigorous process.

Our engagement with the wider community across Yorkshire is taking a big step forward. The Give Peat a Chance exhibition spent several months at Cliffe Castle Museum in Keighley, reaching a brand new, much wider urban audience. We are now working with Denton Estate, in Nidderdale AONB, to give urban communities easier access to, and opportunities to understand (and love), upland peatland habitats. This is being made possible through Defra's Farming in Protected Landscapes funding, administered by Nidderdale AONB Partnership.



4 ACKNOWLEDGMENTS

The success of Yorkshire Peat Partnership is the result of the hard work of by a huge range of partners and could not have happened without them. Landowners, their agents, gamekeepers, farmers and tenants have helped deliver the restoration work on their land, often helping practically but also providing advocacy support and helping to unlock funding.

None of the work could have taken place without our major funders supporting both the capital work but also the hugely important core funds that enable Yorkshire Peat Partnership to function. We are hugely grateful to Natural England, the Environment Agency, Yorkshire Water, the Yorkshire Dales National Park Authority, the North York Moors National Park Authority, Peter de Haan Conservation Trust, Esmée Fairbairn Foundation & Yorkshire Wildlife Trust, Garfield Weston Foundation, Vp plc, People's Postcode Lottery and Defra.

We would also like to thank our Steering Group members for supporting and guiding our work.

A special mention goes to Yorkshire Wildlife Trust for hosting Yorkshire Peat Partnership and providing all the essential back-up services we couldn't have done without. The impact and cost of hosting YPP should not be under-estimated.

Last but not least none of this could have happened without the support of Yorkshire Wildlife Trust's hugely dedicated, hard-working peat team (Shanti Adamson, Roz Bardon, Joe Bodycote, Katie Bolton, Mark Brown, Josh Burge, Lucy Cardy, Pete Christopherson, Matt Cross, Aaron de Raat, Emily East, Liberty Firby-Fisk; Rhiannon Green, Sam Halliday, Joseph Haywood, Dom Hinchley, Astrid Hanlon, Les Hughes, Ceri Katz, Lucy Lee, Samantha Lewsey, Tessa Levens, Ollie Mackrill, Lyndon Marquis, Jessica McMaster, Chris Miller, Gautier Nicoli; Osborne, Manon Pue, Sophie Pyne, Jenny Sharman, Ellen Shields, Lizzie Slingsby, Alexandra Smith, Jackie Smith, Matt Snelling, Rosie Snowden, Emily Stewart-Rayner, Elizabeth Sullivan, Kane Szuman, Tim Thom, Beth Thomas, Kay Waites, Jamie Wharton, Laura Watson, Jo Welch) who have come and gone over the years but remain the heart, soul and spirit of Yorkshire Peat Partnership.