MOORS FOR THE FUTURE PARTNERSHIP



A Year in Review 2017-2018

Protecting the uplands for the benefit of us all





Crystallising the benefits in our 15th anniversary year



David Chapman

Chair of Moors for the Future Partnership and Deputy Chair of the Peak District National Park Authority.

Our 15th year was characterised by new partnerships and journeys, taking our work from our base in the Peak District and South Pennines across borders to the West Pennine Moors, and County Antrim in Northern Ireland.

Communication is at the heart of our work – raising awareness of the benefits of blanket bog is one of the three objectives on which the partnership was founded. This year we spoke boldly about the Partnership's plans for the future. Though we have achieved much in our first 15 years, there is still much to be done to ensure these landscapes are in good condition and resilient in the face of challenges such as climate change. Our vision for the future is set out in 'Our plan for water in the upper catchments of the South Pennines until 2030'. This demonstrates how the utility companies can continue to support the Partnership by investing in the uplands under Ofwat's Price Review PR19. It follows on from our work with water companies, including Severn Trent and Yorkshire Water, who we have assisted in the development of their plans for the catchments.

I had the pleasure of welcoming High Peak MP, Ruth George, and our very own Blanket Bog Patron, Bella Hardy, to help us celebrate our 15th anniversary with the launch for our Bogtastic Van. Local schoolchildren from Edale village school (which I attended as a child), were among the first to climb on board the van to experience the sights, sounds and the more fragrant smells of the blanket bogs of the Peak District and South Pennines. The van will bring a moorland experience to people in villages, towns and cities, to inspire, inform and educate them on the benefits of blanket bogs and the importance of protecting them.

Together with the Chair of the IUCN UK Peatland Programme, Rob Stoneman, I welcomed 300 delegates and over 200 members of the public to BogFest – our joint celebration and conference on the uplands and peatlands of the UK and beyond. BogFest brought together some of the best minds in peatland conservation to debate, discuss, dance and even doodle about the uplands. I was proud to be part of the team who accepted a Park Protector Award from the Campaign for National Parks on behalf of our amazing Community Science volunteers who put in an incredible 5,200 hours – that's around 750 days – during the year.

We were visited by representatives from the Estonian Ministry of the Environment, an adviser to the Secretary of State for the Environment, the Heather Trust, as well as the Environment Agency and Natural England teams. Our joint work with the University of Manchester was presented at the European Geosciences Union General Assembly.

In addition to all of the hard work you will read about in the case studies that follow, we prevented peat lost by protecting a third of a kilometre of bare peat, blocking thirteen kilometres of gullies and drainage channels, and much more. We took almost 6,000 water table measurements and spoke to over 4,000 people about the benefits of the uplands and the work that this Partnership has achieved to protect it.

This year has truly been a partnership effort with RSPB Dove Stone, National Trust High Peak and



Marsden Moor Estate teams, Pennine Prospects, Severn Trent Water, United Utilities, and Yorkshire Water Services working alongside our staff team and contractors on our MoorLIFE 2020 project. Partners for new projects have also joined us, including the National Trust at Stubbins and Holcombe moor in the West Pennine Moors Site of Special Scientific Interest (SSSI).

We have been supported as ever with advice from Natural England, and are grateful to continue to receive core funding from the Environment Agency and our other core funders. Through this partnership, the pioneering Peak District National Park Authority works beyond the national park boundary in a joined-up approach to the challenges of what is often referred to as the most degraded landscape in Europe.

Last but not least, we could not achieve anything without the landowners and tenants who allow us to work on their land. All of the achievements of the past year are a joint effort, so please take a moment to share in the successes of this partnership that extends beyond boundaries to protect this landscape for the benefit of us all.



The year in review

The Partnership was awarded £3 million from Defra's Peatland Restoration Fund to restore damaged blanket bog in six areas spanning the South West Peak, South Pennines and West Pennine Moors. This project aims to reduce carbon losses by an estimated 4,500 tonnes per year, making a positive contribution to the Government's 25 Year Environment Plan.

Other new projects included the decommissioning and restoration of Moss Rake Quarry, and Mend our Mountains fundraisers for path renewal at Cut Gate and the Great Ridge, where we will be involved in managing the work if the fundraising is successful.

Preparations were put in place for the first Breeding Bird Survey since 2004, funded by Natural England. Match funding from the Moorland Association, National Trust, RSPB, Severn Trent, United Utilities and Yorkshire Water will make the results from this survey fly.

We worked beyond our usual boundaries in Northern Ireland with the RSPB, participating in an EU-funded project aimed at Co-operation Across Borders for Biodiversity. The team acted in an advisory role to NI Water and the RSPB to help the delivery team undertake blanket bog and raised bog restoration work.

Heritage Lottery Fund granted an extension to the Community Science Project, allowing extra time to embed citizen science into all of our work, and ensure a strong legacy for this award-winning venture. A three-year project on the Moscar Estate in the Peak District came to a close. The project included refurbishing a popular footpath through precious blanket bog alongside bare peat restoration, sphagnum reintroduction and associated monitoring. We continued work funded through Natural England Higher Level Stewardship schemes at Grindsbrook on the ever-popular Kinder Scout, and concluded work on Turncliffe Common in the South West Peak.

We celebrated our 15th anniversary with the launch of the Bogtastic Van, kick-starting its journey to bring the beauty and benefits of blanket bogs to the people of the Peak District, South Pennines and beyond.



Read more highlights of the year in the following pages.



The Cut Gate 'Bog of Doom'



Epic partnership effort results in agreed guidance on managing blanket bog



(L-R) Matt Buckler, Moors for the Future Partnership; Mark Owen, Natural land; Amanda Anderson, Moorland Association

A new toolkit aimed at land managers to help increase understanding of the ways and means to improve the condition of blanket bog was published in September 2017. Blanket Bog: Land Management Guidance was designed with ease of use in mind. From the flow diagrams to the water resistant cover, it is at its best when used in conversations on site.

This toolkit has its roots in the Blanket Bog Restoration Strategy and is the result of work by the Uplands Management Group to gain a shared understanding and agreement on the management of blanket bog.

The guidance follows on from events known as Bogathon and Sphagathon, where members of the Uplands Management Group came together in a series of visits across the country. These sessions provided an opportunity for dialogue between landowners, managers and conservation organisations about the practicalities of managing blanket bog.We worked with the Uplands Management Group to produce the Blanket Bog: Land Management Guidance. Questions raised at the events were included in an FAQ document. Design and printing of the guidance was made possible as part of our EU LIFE-funded MoorLIFE 2020 project.

The guide was launched at BogFest 2017 by Amanda Anderson, Director of the Moorland Association and Mark Owen, Lead Conservation and Land Management Advisor at Natural England. Over 800 packs have been distributed to land managers and Natural England officers and it is a vital tool in our conversations with landowners. It is also available on our website:

www.moorsforthefuture.org.uk/blanket-bog-landmanagement-guidance

Getting ahead of the curve – new field labs established to track blanket bog vegetation changes

Seven new field labs have been set up under the MoorLIFE 2020 project, with plans to keep them active long after the project finishes. The data from these monitoring sites will add to 15 years of evidence collected by the Partnership to inform our future conservation works.

Each site has been chosen because it is typical of one of the six states of blanket bog outlined in the Blanket Bog: Land Management Guidance. The research will help to inform good practice in moving from heather or grass-dominated condition (states 3 and 4) towards active blanket bog, which is sphagnum-rich and actively forming peat (state 6).

There are three groups of sites across the Peak District National Park and South Pennines. Two cotton grass-dominated sites and three heather-dominated sites have been set up in the Upper Derwent. There are a further two molinia-dominated (purple moor grass) sites in the South Pennines, near Calderdale.

The field labs are being used to provide evidence for our techniques to reduce species domination, including sphagnum reintroduction and gully blocking. Control plots, where no work takes place, will act as a baseline for each group and allow us to measure the effectiveness of the trials.

The monitoring is using some of the Partnership's most reliable data collection techniques. Dipwells, vegetation surveys and v-notch weirs have all been installed by teams of staff and volunteers, to record and measure the results of our sphagnum planting and its effect on the landscape over time.



This addition to our monitoring sites will help us measure and improve the benefits of our work. It will help increase our understanding on what steps are needed to continue to protect the internationally important landscape of the South Pennines Special Area of Conservation and enhance the multiple benefits to society that it provides.



DIY science at the sphagnum factory

Tucked away in a hidden corner of the Peak District National Park, a pair of disused reservoirs is the new home to a prototype sphagnum moss factory. The innovative project is investigating the use of floating rafts to grow our own sphagnum moss.

Partners in this trial include the RSPB who has provided the sphagnum and United Utilities, who own the reservoirs where the tests are taking place.

A range of designs are being trialled, using everyday materials including insulation board, wood, and even a hammock. A layer of wicking matting creates a suitably wet surface, which is covered in a mulch of straw, cut bracken or heather. Each raft is framed with drainpipes as a protection from waves. The rafts were crafted with the help of volunteers from RSPB Dove Stone.

An initial source of sphagnum was needed to start the process. This was collected from sustainable sites managed by the RSPB, and applied in clumps to the rafts. The trials are focusing on growing hummock-forming species like S. magellanicum, papillosum and capillifolium. These varieties are rare in the Peak District. They are the best peat-building species and the most valuable for the restoration work.

We are monitoring how well the sphagnum grows to determine whether this is a viable way of growing a sustainable, cost effective source of sphagnum. We

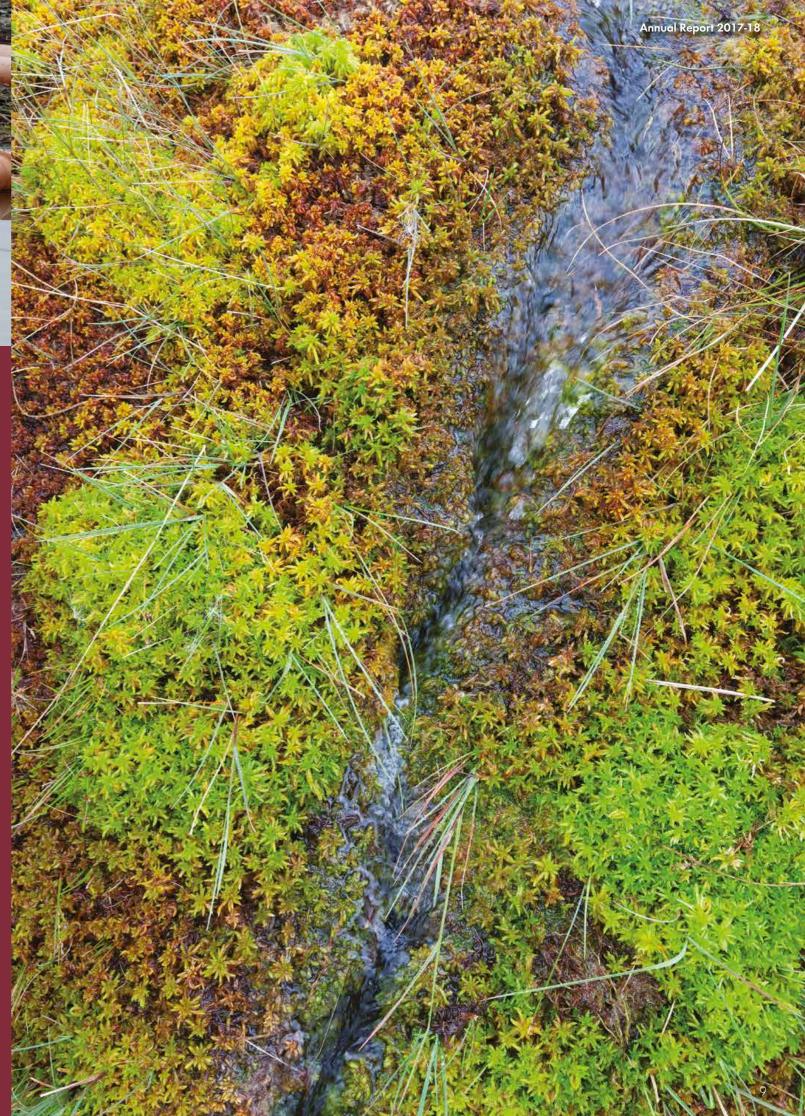


RSPB staff and volunteers plant sphagnum before launching a raft $\ensuremath{\mathbb{C}}$ Jon Bird

are also monitoring any changes in the water quality in the reservoirs, as there is a hypothesis that the crop could improve it.

There have been teething problems. The rafts proved popular with passing Canada geese, but their droppings can smother the tiny mosses. Despite the setbacks, the results are looking promising – sphagnum is growing on all the rafts.

If we can show it is possible to grow sphagnum in this way, production could be scaled up. We estimate that we could farm enough sphagnum to plant at least 50 hectares of blanket bog per year from these two small reservoirs.





Working together on new guidance to reduce devastating flood risk

The Boxing Day floods of 2015 were a stark demonstration of the destructive potential of high rainfall. Many places were affected, and it was no surprise that Calderdale in West Yorkshire was one of them. With its open expanse of moorland and blanket bog, steep-sided valleys, Todmorden and Hebden Bridge have a history of flooding.

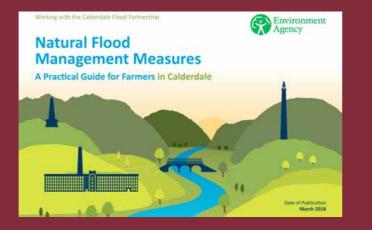
In 2015, the scale of the flooding took people by surprise. At 3pm on the Saturday, the water level in the River Calder was at 5.65 metres - more than 3.5 metres higher than usual.

People were trapped on the upper floors of buildings, their possessions floating below on a river of contaminated water. Over 3,500 homes and businesses were affected, and the economic impact on the area was estimated to be around £170 million.

The Environmental Agency's 2017 Calderdale flood action plan was born from this storm as the basis of an integrated approach to reducing the risk of such events happening again.

As part of this plan, the Environment Agency asked us to produce a Natural Flood Management guide. The guide gives farmers in Calderdale simple, clear advice about making changes to land management that could help to reduce the risk of flooding - known as Natural Flood Management.

The guide we produced was based on previous guidance created by the Yorkshire Dales National Park Authority, tailored for the Calderdale Valley but designed to act as a template for other upland catchments. Natural England, Calderdale Metropolitan Borough Council, the Forestry Commission and the National Farmers' Union were all involved in the work, making this a team effort.



The guide sets out the benefits and costs of a host of interventions. The production of this guide is a starting point for landowners and managers to find out if natural flood risk management can work for them, and highlights the benefits of collaborating with other organisations to achieve a common aim.

The guide is available here: http://eyeoncalderdale.com/Media/Default/NFM/ calderdale nfm guide.pdf

How award winning Community **Scientists are caring for Peak District moors**

Moorland citizen scientists are a rare breed. They scribble notes on waterproof paper, as their fingers and eyelashes freeze and the howling wind whips away body heat in minutes. They take measurements, photographs and conduct surveys in the baking sun in places where there are no trees and no shade.

The scientists in question are a coalition of volunteers who have come together in the Peak District National Park and South Pennines, under the banner of our Heritage Lottery funded Community Science Project.

Since 2014 Community Science volunteers have been logging sightings of animals and plants in the area which might act as indicators of climate change. Species recorded have included the bilberry bumblebee, the green hairstreak butterfly and the UK's largest wading bird, the curlew.

They have provided context by recording the climate itself on eight moorland environmental monitoring sites. Volunteers have also used their monthly site visits to record other non-biological information such as the water table (how close to the surface the water sits) – which is a good indication of the condition of blanket bog, where wetter means better.



In October 2017 the efforts of our Community Science volunteers were recognised nationally, when they won the Campaign for National Parks' prestigious Park Protector award, which was presented to representatives of the Community Science Project at a parliamentary reception in London by Lord Gardiner the minister for National Parks.

Their dedication to conservation efforts in the Peak District was rewarded with a £2,000 prize, which we have put towards additional monitoring equipment.



Protecting the Peak District landscape for generations to come

Works to restore over 450 metres of the ancient bridleway known as Cutthroat Track got underway in January. A renewed sustainable trackway will prevent encroachment into the precious moorland habitat, home to rare wildlife including the mountain hare and curlew.

The ancient trail, with its gruesome name dating back to 1635, is popular with walkers, horse riders and cyclists. Over time, the track has been eroded, especially after heavy rainfall. Sections of the path were muddy, large stretches were badly degraded and needed some tender loving care.

With funding from Derbyshire County Council and Natural England, works included airlifting 50 tonnes



Consultations took place with many different stakeholders

of stone, remodelling of the path surface and around two years of preparation and consultation.

Bronze Age settlers from 4,500 years ago lived and farmed on moorland around this popular Peak District trail. Archaeological studies over the past 25 years have led to the discovery of a Bronze Age field system, cairn field and settlement. In order to make sure we were not disturbing new traces from these ancient times, every bucketful of earth moved during the works was checked by a Peak District National Park Authority archaeologist.

Earth from the path surface was dug out, turned and laid back to provide a more sustainable route and improve drainage. Local stone was used to create water bars to divert the waterway and help prevent erosion of the path after heavy rain.

Moorland seeds and shrubs were planted to increase plant cover, which will provide a food source for wildlife, and act as a textured blanket to stop sediment and water running off the hills as quickly when it rains. This will reduce the risk of flooding and water treatment costs.

Perhaps in 4,500 years' time people will discover the work that was undertaken by the Partnership to protect this iconic Peak District landscape.



Annual Report 2017-18





The Peak District village of Edale played host to 300 guests for an upland-themed conference in September. For three days, the blanket bogs at the heart of England were on the world map, as international speakers and guests gathered in a marquee to hear the latest news on peatlands at BogFest.

Hosted jointly with the IUCN UK Peatland Programme, the three-day celebration took place at the foot of Kinder Scout, at venues within walking and viewing distance of the majestic blanket bogs on the plateaus above.

BogFest blended peatland science, policy, land management and communications with music, art and festival-style street food, to bring the sights, sounds, and smells of the local landscape to life.

With 85 speakers from across Europe in 45 sessions and site visits, guests were spoilt for choice. At the uplands question time, panel members including Angela Smith MP, Co-Chair of the All Party Parliamentary Water Group, were quizzed on everything from support for upland farming, to climate change and birds of prey. A natural flood management session was chaired by Emma Howard Boyd, Chair of the Environment Agency (pictured right), with talks on EA-funded initiatives from around the country.

Members of the public joined in on a fell race across the moors organised by the Dark Peak Fell Runners, at 'boggy doodles' art walks, a poetry evening, a sphagnum moss history talk, and guided moorland walks.

They also learnt about permaculture, peat-free compost and gardening at a landscape-scale, at a gardeners' question time session with a range of experts. The acclaimed film High Water Common Ground, which showcases community action in the face of flooding, was also screened to conference guests. Evening entertainment came from Edale-born Bella Hardy, BBC Radio Two Folk Singer of the Year 2014, and a ceilidh.

Richard Lindsay, Head of Environmental and Conservation Research at the University of East London presented us with a 'blancmange blanket bog' to show the potential for native woodlands to help prevent bog burst. Yorkshire Peat Partnership joined our unmanned aerial vehicle (UAV) team for a UAV skill-share session in a packed village hall.

From the many conversations and connections that took place at BogFest, the Peak District and South Pennines gained its first Blanket Bog Patron, Bella Hardy. BogFest was the first peatland-themed festival, but is unlikely to be the last.









The year in numbers

Income Expenditure	£2,946,718 £3,037,895	MATCH FUNDING £868,325	GRANTS £2,078,393 70.5%
Our great funding spans multiple years which means the income in a given year may be earmarked for successive financial years		29.5%	
		SOUR	CES OF INCOME

Partners and funders

Core partners

Environment Agency
National Trust
Peak District National Park Authority
Pennine Prospects
RSPB
Severn Trent Water
United Utilities
Yorkshire Water Services

Project funders Environment Agency EU LIFE Programme Heritage Lottery Fund National Trust Natural England Pennine Prospects

Our work in numbers



- Derbyshire County Council Peak District National Park Authority
- Private Landowners RSPB United Utilities Woodland Trust



MANCHESTER

12

Kilometers



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South Pennine Moors Special Area of Conservation

- Events hosted or attended by the Partnership
- Monitoring

Conservation works

Conservation works carried out by National Trust

Conservation works carried out by RSPB

SHEFFIELD



HUDDERSFIELD *

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CONTRIBUTING PARTNERS















The work of the partnership is delivered by the Moors for the Future staff team through the Peak District National Park Authority as the lead and accountable body. We also receive financial support from our partners Environment Agency, National Trust, Pennine Prospects, RSPB, Severn Trent Water, United Utilities, Yorkshire Water, and support and advice from Natural England and representatives of the moorland owner and farming community including the NFU and Moorland Association.

www.moorsforthefuture.org.uk

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