MOOR SPACE

A joint partnership publication for the Humberhead Peatlands National Nature Reserve.







LIFE Moor Space project update

Thank you for joining us in issue 14 of Moor Space. We have had a really wet winter on the Humberhead Peatlands NNR, but regardless we've been making good progress in a number of areas of the project.

We have been successful in purchasing additional land within the Thorne Moors SAC (Special Area of Conservation) boundary and will be added to the Humberhead Peatlands NNR designation. This additional land will help to improve our hydrological control in the Goole Moor area as well as actively restoring more peatland.

We have also been meeting with landowners/land managers on and off the moors to discuss how land is managed and how we can all work together to ensure both the moors benefit from restoration efforts and land off the moors continues to be viable for farming.





The team are spending much of their time preparing for the coming year, workshops and training sessions which will run over spring/summer. Details of events can be found in the events section of this newsletter, works on site will take place in the autumn. We also want to work with volunteers in September to plant sphagnum mosses in areas of bare peat, helping to accelerate re-vegetation.

In other news we have been working with the Humber and Ouse Draining Board who have been successful in an application for funding from two pilot schemes focused on lowland agricultural peat. As part of these applications we will see some additional hydrological control structures installed on Thorne Moors alongside real time water monitoring equipment.

There are now two short videos covering our works as part of the LIFE Moor Space project, you can watch them on our Youtube channel **@lifemoorspace**.



Trees and peatlands

Trees and woodlands are a very hot topic in the UK.

Our natural woodlands are all but gone and they
are an extremely important habitat for multiple species,
as well as many other social and environmental benefits.

On peatlands however the opposite is true, often trees
are invasive and damaging to the site and its natural
species.

If peatlands were in their natural state, woodland would find it nearly impossible to grow as the water levels would be too high for them to thrive, however, around 80% of the UK's peatlands have been historically drained and are severely degraded, allowing trees to move in and establish. Particularly on most of the sites within the Humberhead Levels this tends to be silver birch.

In order for peatlands to thrive we aim to maintain the water levels ideally within the range of about 20cm below ground to 20cm above, keeping the peat in a waterlogged and anaerobic state. The peat needs to be wet to prevent degradation through the process





of oxidation. Water prevents oxygen from getting to the peat and oxidising with the carbon, creating carbon dioxide which is released into the atmosphere contributing further to climate change. The process further degrades the peat, meaning that it is storing less carbon and not pulling it from the atmosphere, instead it has become a carbon source. Figures from the IUCN (International Union for Conservation of Nature) suggest that the UK's degraded peatlands contribute 4% annually to the UK's Greenhouse Gas Emissions!

So how do trees factor into all this? Trees essentially act as water pumps drawing water up from the soil/peat through evapotranspiration, pulling water in through their roots using it to grow or losing it through evaporation from their leaves. The canopy itself is also thought to reduce the rainfall that actually reaches the bog surface by about 40%. The summer months enhancing this process through warmer weather and less rainfall. The rapid drying of the peat, particularly over the warmer months, releases much of the carbon dioxide which has been stored for millennia.

If we are looking at it solely from a carbon perspective you might ask "but don't trees also store carbon", yes of course however they aren't as effective. Globally peatlands cover just 3% of the total land surface, but account for 30% of the carbon storage, which is twice the amount of all the world's forests combined! Ultimately trees remove carbon from the long-standing reservoir in peat, which has been secure for millennia under natural conditions, to a more reactive store of wood, which regardless of its end use will be converted back to CO2 within years to decades. As opposed to the peatland ecosystem which will continue to sequester carbon indefinitely.

It should be noted again that woodlands are important places to both people and wildlife, so for everyone to achieve the best outcome the plan is to maintain areas of peat already without woodland cover, remove as much lowly productive woodlands from peatlands while simultaneously securing new areas for woodland on non-peat soils. The right tree in the right place is a wonderful sight but that place is not peatlands.

Peatlands are precious and provide a rare habitat for very specialised species and our removal of trees from peatlands restores spaces for these species. They are valuable spaces from which we can obtain clean water, can act as a buffer for flooding events, preserving historic records, be home to unique fauna and flora and provide a fantastic open habitat for people to enjoy, however, the focus on carbon of late has enabled us to access funding for us to protect and enhance these unique spaces for nature.



Harriet Santon *Land Management Officer*

Belton Moor works

Belton Moor is an area to the north of Hatfield Moors which despite having good peat, has struggled with scrub because of the dry environment. To combat this, in March 2023 we did 38ha of scrub clearance removing the vast majority of the scrub and trees leaving small patches of trees round the outside of the site, scrub and perching posts for the important nightjar community that call Belton Moor home. (picture on left side)

We have now just completed phase two of the restoration which is to create peat bunding over the entirety of the 38ha to lock into the good peat beneath and keep the area wet. This has worked extremely well and not only will this water keep the peat wet but will also deter the scrub from growing back, both of which helping towards the goal of restoration.

Next winter we are hoping to complete phase three which will be to introduce peat forming sphagnum onto most of the site now it's wetter, encouraging the vital vegetation to thrive which will be the key to restoration.



Sarah Pullein Nature for Climate (NFC) Project Officer





Sphagnum planting on Goole Moor

Seemingly endless rain over the winter period of 2023/24 has made Thorne Moors look less like a bog and more like a large lake with some of our access tracks looking more like canals! The Met Office recorded the equaleighth wettest December for the UK in 2023 and the fourth wettest for the North of England.

So, there has been a lot of rain which has kept our fire risk low but may have drowned out any new vegetation that established in this past summer.

A true double-edged sword.

With proactive plans in place for hydrological management in 2024, the LIFE Moor Space project will undertake the first of two sphagnum planting sessions in September. 10,000 plugs of sphagnum will be planted on Goole Moor as part of the initial phase with the intention of starting to cover areas of bare peat across the moor. As a protected site we're careful to only use species of sphagnum native to the moors to protect the ecosystem and maintain a natural habitat as much as possible. Initially, the species in our plugs will be:



Sphagnum capillifolium, Sphagnum fimbriatum, Sphagnum palustre, Sphagnum papillosum and Sphagnum subnitens.

We are sourcing sphagnum plugs from a propagating company so there is no need to worry about whether we are taking sphagnum from one site for the benefit of another. Specially grown sphagnum plugs will be delivered to the moors and a team of project staff and volunteers will take on the task of planting.

What is so special about sphagnum mosses?

Sphagnum mosses have the capacity to hold water up to 20 times their own weight and stay wet long after the surrounding soil has dried out. In fact, sphagnums natural absorbency and antiseptic qualities meant it was used to treat wounds in the First World War when there was a shortage of bandages. Sphagnum is a peatland engineer and by forming thick, spongy carpets across the surface, sphagnum moss alters the conditions of the bog to an acidic pH. Then, as the top layer of moss grows, the vegetation underneath is preserved from decay in the wet, acidic conditions and overtime becomes compressed to form peat. The process of forming peat locks away carbon that has been sequestered from the atmosphere through the photosynthesis processes of sphagnum and the anaerobic conditions that prevent decay also prevent the release of this carbon back into the atmosphere. This brilliant species is actively helping to combat climate change.

The species is diverse with about 30 different types of sphagnum in the United Kingdom and more than 300 species globally.

On a larger scale, healthy peatlands with brilliant carpets of sphagnum support a massive range of species including curlew, the carnivorous sundew, European nightjar and many more.

We will be supporting our sphagnum planting with newly installed dams and weirs, along with proactive use of the water pump, that will help to achieve and maintain water levels appropriate for sphagnum establishment and prevent plants from being submerged for long periods of time which ultimately leads to failure.

If you fancy helping out and learning how to plant sphagnum on moorlands, please get in touch using the contacts in this newsletter.



Lewys Wheeler *LIFE Moor Space Technical Officer*



Tis the season to be very - careful

Even though it feels like it's hardly stopped raining since Storm Babet soaked us all last October, we're coming up to the time of year when wildfires can be a big risk to our moorland, both in the uplands and at places like Thorne and Hatfield Moors. If the weather turns dryer over the next few weeks, the dead vegetation from last year's growing season can dry out rapidly and become tinder dry, even if there's still floods and puddles nearby. Because we're a peatland and peat itself is a fuel, the Humberhead

Peatlands are considered one of the most potentially flammable nature reserves in England. Many readers may remember the devastation caused by a large wildfire in 2020 on Hatfield Moors, and the dead trees are still an obvious feature four years later. Wildfire prevention has become a major part of how we manage the peatlands today, and we would ask every visitor to be similarly mindful of the risks.

Almost every wildfire that starts in Britain is ignited either deliberately or inadvertently by people. We do not use fire as a management tool on Thorne or Hatfield Moors, so all the fires in the past have started due to BBQs, cigarette ends not being extinguished or possibly as a result of litter being left – that's unless some have been started deliberately by arsonists. We're helping to prevent accidental fire starting by wardening at times of high risk, by clearing litter, and by strimming dry vegetation near viewing platforms and benches. We've put in a network of firebreaks on Hatfield Moors and are still creating some more on Thorne Moors, so if a fire does start it should not spread over such large areas. We work with the local Fire and Rescue Services to ensure a speedy and effective response to spreading wildfires.

When you visit the nature reserve, please do play your part too and follow the Countryside Code (see www.nationaltrail.co.uk/en_GB/countrysidecode/). Look for the Wildfire Risk signs at the entrances and if you see flames dial 999 and please give us a ring on our Emergency Phone Number 07516 150432 as well.



Julian Small Senior Reserve Manager

Walks and Events Coming Up

For more information or to book where stated call 07766 420290

NNR WEEK Evening Walks

Mon 20 May 6.30pm - on Hatfield Moors

4-5 miles at a good pace but taking in the warmth and special light on an early summer's evening. No need to book

Fri 31 May 6.30pm - on Thorne Moors

4-5 miles at stroller pace just enjoying the space and freedom the Moors gives and the uplifting moods it evokes.

Both walks are part of National Nature Reserves Week, 20 to 31 May 2024 www.NNRweek.com. No need to book



Ramblers Wellbeing Guided Walks

Wednesdays – of varying lengths meeting at the Boston Park car park, Hatfield Moors. First & third Weds of the month 9.30am. Second and fourth Weds of the month at 2pm. No need to book.

General/Seasonal/Themed Walks

NNR WEEK Fri 24 May 10am

- Guided Walk on Hatfield Moors

For anyone who has never walked the Moors before and just wants a new experience in the security of a guide and with like-minded walkers. This walk will be pitched to who turns up and could cover strider or stroller walkers. Approx. 2.5 miles.

No booking required but please call number above if you would like to know more about arrangements. Part of National Nature Reserves Week.

NNR WEEK Sat 25 May 10am

- Canine Walk on Hatfield Moors in partnership with RSPCA

We'll be hosting this annual walk but with a stand in the car park all day for dog walkers to come and chat to NNR staff about walking dogs on the Moors, Open Access restrictions and responsible recreation – treats available for dog and owner. Booking for the walk via RSPCA.

T 01302 719790 E sarah.jenkins@rspcadrb.org.uk

Part of National Nature Reserves Week.

NNR WEEK Sun 26 May 2pm - Heath Walk on Hatfield Moors

Cotton grass seed heads should be showing and a walk on the old peat milling fields will widen the senses as you get a feel for the vast open space and big sky and horizon on this walk. Approx. 3 miles. No need to book.

Part of National Nature Reserves Week.

NNR WEEK Tues 28 May 1.30pm to 3pm

- Large Heath Butterfly ID Workshop

The large heath is only found in certain places but it likes Thorne Moors – led by an expert from Butterfly Conservation, develop the skills to participate in Natural England's annual survey on Thorne Moors. This is a two-part course with the second practical session (dependant on weather) at another date in June. Email lewys.wheeler@naturalengland.org.uk if you would like to sign up for the course.

Part of National Nature Reserves Week.

Thurs 13 June 9pm – Nightjar Guided Walk on Hatfield Moors To hear and hopefully catch sight of the NNR's star turn of the bird population - the rare and night-flying migrant

nightjar. Approx. 3 miles. Booking essential.

TBC - Bat Walk on Hatfield Moors

Please get in touch if interested in this walk. Starting from Ten Acre Lake car park on an evening in late summer. Bat detectors will be provided. Led by licenced bat walk experts. Approx 2 miles. Booking essential.

Sat 12 October 10am

- Fungus Identification on Hatfield Moors

Approx. 2 miles with an expert to point out the many different and fascinating shapes, colours, myths and legends.

Booking essential.

Sun 20 October 10.15am to 3.30pm

- Water Colour Day on Hatfield Moors

Led by Ann Wildgust, BA Hons, an experienced artist who will offer support to artists of all grades. All materials will be provided. This is an inside event but depending on weather part maybe taken outside of the NNR office building.

Places are limited so booking essential.

Sat 16 Nov 10.00am – Autumn Colours Walk on Thorne Moors

Approx. 5 miles to see the seasonal change as we head into winter on an informative walk with a chance to see deer.

No need to book.

Sun 1 Dec 10am – Volunteer Taster Day on Hatfield Moors

Fancy becoming an NNR volunteer in your spare time? Come along and see what the Sunday volunteers get involved in and see what many hands work can achieve. Coffee and cake provided. Booking essential.

2025

Thurs 9 March 10.30am – Spring Walk on Thorne Moors
Birds are singing and buds are breaking so join us for a strider
walk of approx. 4 miles and experience the season change.
No need to book.

School Holiday Family Events 2024

Tues 6 August 10.30am to 1pm

- Sensory Garden Activities with Wind Chime Making
Help us keep our lovely garden in shape with a bit of a tidy
session and then make some willow craft – wind chimes
to take away for your own garden. Toilets and inside space
available if required due to weather. Booking essential.

Mon 12 August 1.30pm (approx. 1.5 hours) – Family Walk With a bug hunt session along the way. Equipment provided – see what creatures are around on warm sunny days. An activity can be held inside if inclement weather. Booking essential.

Thurs 22 August 11am to 2pm

- Make a Green Emblem of the Moors

Could be a person or animal or bird, whatever comes to mind (but life size to make an impact) after a story telling session about the Moors and what we find on Hatfield on a root-around. Group activity for families. Bring a picnic for a break in between activities. Toilets and inside space available if required due to weather. **Booking essential**.

Tues 29 October 10am to 12 noon – Make a Mini Bog-in-a-Box and take part in the Bug Olympics

Join us for fun between the above times with the wacky Bug Olympics and put together your own mini version of Hatfield Moors to take away with you. **No need to book**.

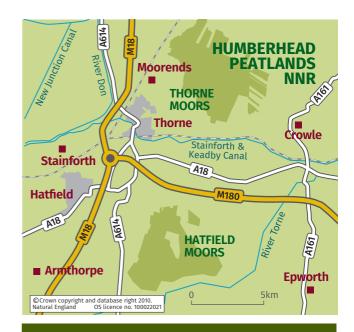
Summer Trail

Why not come along throughout the Summer school holidays and complete the Pink route Summer Holiday Trail. Starts at Boston Park car park with all you need to take part independently.

Halloween Trail

Will be out along the Yellow route from 26th October to 3 November. Starts at Boston Park car park with all you need to take part independently.

All events are free but donations welcome. Unless stated otherwise, all **Hatfield events are to meet at Boston Park car park, DN7 6BF** and all **Thorne events are to meet at Recreation Ground car park, Moorends – end of Grange Road, DN8 4NA.**



How do I get to Humberhead Peatlands NNR?

The closest towns to the NNR are Goole, Thorne, Doncaster, Scunthorpe, Crowle and Hatfield.

By public transport

Rail stations – Thorne North and South. Contact South Yorkshire Transport on **01709 515151**.

Moorends is served by bus from Thorne. Contact Doncaster Tourist Information on **01302 734309**.

Crowle is served by rail and bus. Contact Brigg Tourist Information on **01652 657053**.

Hatfield Woodhouse and Wroot villages are served by a limited bus service.

To receive future issues of Moor Space

contact us at humberhead.peatlands@naturalengland.org.uk

How do I contribute to Moor Space?

We'd like you to tell us what you think – your concerns and also what you enjoy about the Moors so we can focus on the right subjects in each issue and seek out the most useful information for you the reader. We welcome other points of view, providing they are constructive and supported by facts. Contact as above marking for the attention of the Moor Space Editor.

Contacts

Moor Space is produced and edited by Natural England as part of the LIFE Moor Space project.

Restoring the Humberhead Peatlands – LIFE Moor Space LIFE/20/ NAT/UK 000697. Funding from the European Union's LIFE Nature and Biodiversity Programme to restore degraded raised bog within the Thorne Moors SAC. Natural England are working in partnership with Lincolnshire Wildlife Trust to deliver this project.

Contact: humberhead.peatlands@naturalengland.org.uk

Lincolnshire Wildlife Trust – Owns land on Crowle Moor and manages it as a Nature Reserve.

Contact: 01507 526667 * info@lincstrust.co.uk

Natural England – Natural England owns land on Thorne Moors, Goole Moors and Hatfield Moors. It is all part of the Humberhead Peatlands National Nature Reserve.

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Contact Senior Reserve Manager: 07770 408259. www.gov.uk/natural-england

Other organisations

North Lincolnshire Council – Own and manage land on Crowle Moor and maintain access to this and other land nearby.

Contact: 01724 729000 * environmenteam@northlincs.gov.uk

Doncaster Metropolitan Borough Council – Publicises access to and around the Moors.

Contact: 01302 736000 * publicrightsofway@doncaster.gov.uk

NNR Emergency contact number 07516 150432.

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