



Fenn's, Whixall & Bettisfield Mosses

National Nature Reserve



ABOUT THE MOSSES

This is a place of great tranquillity, a wild landscape with big skies and unique wildlife. Spend a few hours on the Mosses and you leave behind the rush and hurry of contemporary life and its multiple demands and distractions. Here you can experience the ever-changing cycle of the seasons, discover a mosaic of plants, listen to birdsong and get a sense of deep history.

It is an ancient landscape, shaped by the retreat of glaciers at the end of the last Ice Age, over 10,000 years ago. Pools and hollows were left as the ice

melted and the slowly warming climate allowed the return of vegetation. Over the next few thousand years mosses and other plants lived, died and became pickled in this watery place, gradually becoming the miraculous peatbog we see today.

In the past, such places were regarded as barren wasteland and would often be drained to try and turn them into productive farmland. Peat extraction for the horticultural trade and for garden compost also caused widespread destruction of this fragile habitat in the 20th century, along with commercial forestry planting. A staggering 96% of the UK's lowland raised bogs have been destroyed or damaged.



Bogs under threat

For centuries, people cut peat by hand at Fenn's Whixall & Bettisfield Mosses. It was in the 1980s though, that this precious place came close to being destroyed with the introduction of industrial-scale extraction, using heavy machinery. A passionately fought campaign by conservationists succeeded at the eleventh hour and in 1990 the land was purchased and designated a National Nature Reserve (NNR) the following year. Peat cutting stopped and the process of restoration began.

Today, the Mosses once again ooze with water and wildlife. Recent years have seen an extension to the NNR with further peat bog restoration and several neighbouring fields providing a buffer to help protect its fragile ecosystem. The value of the Mosses is recognised by their designation as a Ramsar wetland site of international importance. Peatlands cover just 3% of the earth's surface and looking after them is vital.

The Mosses bogs cover some 948 hectares in northern Shropshire and north-east Wales, making them the third-largest surviving raised bog in the UK.

Sundew



© Stephen Barlow

Bog plants

The Mosses earned their name (commonly used in northern England and Scotland to describe peat bogs) from the plant that covers them in a wet, spongy mosaic of starry vegetation. These bog mosses are called Sphagnum and are very diverse; 21 different species are found here, growing in shades of yellow, green and red.

Cotton grass is one of the most distinctive plants of the Mosses; its seed heads form silky, white plumes that blow in the breeze.

Bog cranberry



© Paul Harris



© Stephen Barlow

Lesser bladderwort



© Stephen Barlow

Keep an eye on the ground in summer and you might spot the carnivorous round-leaved sundew. The glistening droplets of sticky 'dew' along the tiny tendrils that fringe its leaves attract insects and when an unfortunate creature lands on its surface, the two sides of the leaf slowly close around it. The liquid that lured the victim to its death contains digestive enzymes that dissolve the insect, enabling the plant to absorb its nutrients.

In May and June look out for the flowers of lesser bladderwort, another insectivorous plant and bog rosemary, a straggly little shrub with beautiful, pink bell-like flowers. Late summer brings golden-yellow spikes of bog asphodel.

Insects (and a big spider)

The Mosses provide habitat for thousands of different insects and other invertebrates. Thirty species of dragonfly and damselfly live here, including the rare white-faced darter. This is one of just a handful of places in England where it can still be found. The large heath butterfly is another scarce bog specialist. Its caterpillars live in hare's-tail cotton grass tussocks, while the adult butterflies nectar on cross-leaved heath growing on the mosses.



White-faced darter

© Stephen Barlow

A rich variety of moths flourish on the Mosses. More than 700 species have been recorded here, including argent and sable, Manchester treble-bar, purple-bordered gold and the emperor moth.



Large heath

© Stephen Barlow



Purple-bordered gold

© Stephen Barlow



Emperor moth

© Stephen Barlow



Raft spider

© Allan Heath



Hobby

© Stephen Barlow

Around the pools you might see one of the UK's most awesome spiders. With a leg-span of up to three inches, the raft spider is eye-catching. It sits at the edge of pools with its front legs touching the water's surface to feel for the vibrations of potential prey. When it senses movement, the spider runs across the water to catch the insect. Sometimes the predator can become prey and when threatened, the raft spider dives under water to get away.

Furry and scaly

Otters are occasionally spotted on the Llangollen Canal, while polecat, field vole and common shrew live on the Mosses. The richer outflow ditches are a stronghold for water voles. Slow worms and lizards may also be seen, along with adders, which are now a species of conservation concern in the UK.



Adder

© Stephen Barlow

A haven for birds

As water levels have been restored, birdlife has increased on the Mosses, with 187 species recorded. Wetland birds such as curlew, lapwing, snipe, teal and shoveler breed on the Mosses and it is a favoured hunting ground for barn owl, tawny owl and short-eared owls, scanning the ground for voles and other small mammals. Spring brings cuckoos and a chorus of warblers. Birds of prey, such as hobbies (in summer) and marsh harriers (on passage in spring and autumn) can sometimes be seen.



Short-eared owl

© Stephen Barlow



Reed bunting

© Stephen Barlow



Curlew

© Stephen Barlow

KEY

- Parking
- Parking (limited)
- Disabled Parking
- Disabled Mooring Point
- Viewfinder point
- Bench
- National Nature Reserve
- History Trail 4.6km
- Bettisfield Moss Trail 2km
- Mammoth Tower Trail 2.25km
- Green Trail 2.4km
- Purple Trail 3.6km
- Orange Trail 2.8km
- Bridleways
- Public Footpaths
- Shropshire Way
- Wales England border
- Promoted routes

- Dogs welcome under effective control off leads on bridleways and public footpaths
- Everywhere else, please keep dogs on leads at all times



500m
1200ft

Climate guardians

The value of peat bogs as carbon stores is massive. Globally, around a quarter of all soil carbon is locked up in peat – so long as it stays wet. Damaged or drained bogs emit vast amounts of carbon; worldwide this amounts to at least two billion tonnes of carbon dioxide annually. The industrial extraction of peat for garden compost has caused immense damage to bogs around the world. Restoring and looking after peat bogs is crucial in the fight against climate change. Visit the Mammoth Tower to find out more about this.

Flood control

The Mosses' ability to soak up vast amounts of water helps to reduce flood risk during times of heavy rainfall. Water is released slowly from the bog, trickling away over days, so lessening the likelihood of flash flooding nearby.



VISITING THE MOSSES

You can explore the Mosses along several clearly marked trails (see map). The paths are flat but can be uneven and boggy at times. Please note trail diversions may be in place occasionally so please follow signs as appropriate. Individual trail maps and information leaflets can be downloaded from themeresandmosses.co.uk.



Mammoth Tower trail

This takes you from Morris' Bridge car park along the Llangollen Canal towpath for about 1.5km. The 5-metre tower provides a spectacular view of the Mosses and the chance to look across into the branches of trees at the edge of the bog, where small birds are often feeding. There is plenty to look at from ground level too.

The Mosses trails

The three trails (purple, orange & green) can be combined to create a 7km circular trail with options for shorter walks and can be joined either at Morris' Bridge or the Marl Allotment at Roundthorn Bridge on the canal. The routes are marked by a series of arrowed posts.



Green trail

This 1.5km trail includes a series of panels that evoke the life of the bog, both past and present, from the woolly mammoths that once roamed here to the scrapyard that threatened to pollute the bog, now restored for nature. Follow the signs from the canal towpath at Morris' Bridge car park to join this trail.

History trail

Find out about the history of the Mosses, from pre-historic times to the modern era, including the discovery of ancient bog bodies and how the Mosses were used by the military during the two World Wars. It is a signed, circular route of 4.6 km.

Park at The Shed Yard (be sure to close the gate behind you on the farm track) or Manor House NNR base.

Bettisfield Moss trail

Follow the signed, 2km-circular trail to enjoy this now-thriving landscape, where cotton grass blooms for most of the year.

Park at the World's End car park at the end of Moss Lane.

Charles Sinker bird hide

You can watch wildfowl on the pools all year round at this Shropshire Wildlife Trust bird hide. It's especially interesting to see over-wintering ducks such as teal and wigeon, or waders including greenshank and little ringed plovers that regularly drop by in spring and autumn on their way to and from their breeding grounds. A spoonbill once stayed for a few days.



© Helen Shackleton

The fields around the edge of the bog are known as the 'lagg'. Nutrients from the underlying mineral soils are absorbed into the water, supporting fen vegetation with a greater diversity of species than the main bog. This a precious remnant – lagg habitats have disappeared from nearly all British bogs.

Access is by foot from the Morris' Bridge car park – walk over the bridge to the hide. There are two blue badge parking spaces next to the hide.

To obtain the code to enter the hide scan this QR code and provide the requested information.



You might also like to visit...

Wem Moss

This bog, owned by Shropshire Wildlife Trust, survives almost intact. It holds some of the oldest and deepest peat on the Mosses, reaching over six metres in parts. There is no marked trail but you can park in an unofficial layby near the start of the track/bridleway along the road signed to Fenn's & Whixall NNR from Northwood **postcode SY13 2LT** (**What3Words:** heightens.kipper.seaside) and walk out to the Moss from there.

The natural environment can be hazardous. Please:

- Wear stout footwear or wellingtons and be prepared for the weather.
- Bring insect repellent in summer as biting insects can be abundant.
- Keep to the way-marked routes. The Mosses are riddled with deep, flooded and partially vegetated ditches.
- Do not walk through any flooded tracks.
- Watch out for adders. You're unlikely to see one and even less likely to be bitten but keep your eyes open, just in case. If bitten keep calm and seek medical attention.
- Smoking is banned on the Mosses at any time of the year – fire causes great damage to the bog and its wildlife.
- Watch out for metalwork, projecting roots and branches, tree stumps, holes and tussocks.
- Horse riding and cycling are not safe on the peat tracks.
- Do not collect plants or animals



Toilets

These (including a disabled access toilet) are often available during office hours at the Manor House NNR base, but it is essential to check prior to any visit to confirm availability.

Refreshments

The café at Whixall Marina is just a mile from Morris' Bridge car park.

Dogs

While on the Mosses, we ask owners to keep their dogs on short leads to minimise disturbance to wildlife and to reduce their chance of encountering an adder.

Please remember to pick up your dog's poo and put it in the bins provided.

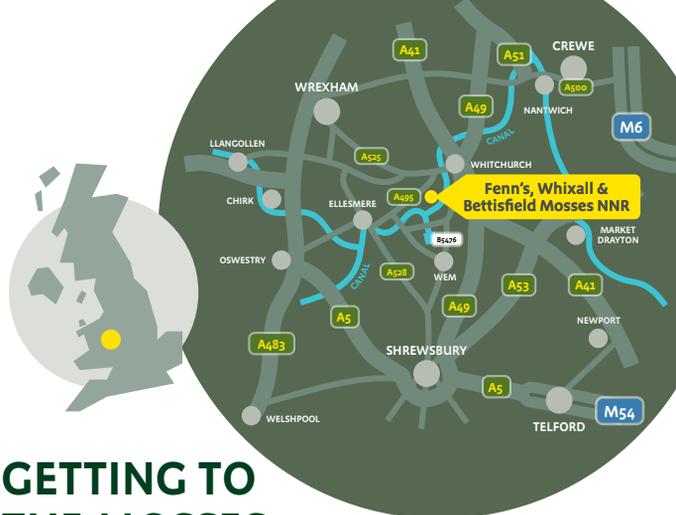
All-ability access

The Charles Sinker bird hide offers all-ability access. It has two blue badge parking spaces and wheelchair-friendly viewing opportunities inside, with a low window overlooking the pools.

The Mosses trails are flat but unsurfaced and can be uneven and boggy. The canal towpath is flat but unsurfaced and has a slight camber in places.

For canal boat users there is disabled mooring close to the Mammoth Tower.

Detailed information about accessibility can be found at themeresandmosses.co.uk.



GETTING TO THE MOSSSES

By car

There are several car parks around the edges of the Mosses, with the primary site at Morris' Bridge.

Locations of car parks

What3Words	Postcodes
Morris' Bridge update.sleep.rhino	SY13 2RT
Roundthorn Bridge layers.parading.falters	SY13 2PH
Shed Yard crouching.scramble.happier	SY13 2PD
Manor House overlaps.changed.private	SY13 2PD
World's End leave.text.spoils	SY13 2QE

By public transport

The nearest railway station is at Prees, 4 miles from the reserve. There are no direct bus services between Prees and Whixall. The nearest bus stop is at Coton, 2 miles from the reserve.

By cycle or on foot

The reserve is near route 45 of the Sustrans National Cycle Network and Regional Cycle route 31 www.shropshirecycling.co.uk

By canal boat

Boats can be moored along the Llangollen Canal near Morris' Bridge and at Whixall Marina on the Prees Branch of the canal.



For further information please contact
the NNR team

Natural England

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www.themeresandmosses.co.uk

www.gov.uk/natural-England.

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