

Fenn's, Whixall and Bettisfield Mosses NNR

THE BOG STANDARD

September 2019

Welcome to the first edition of the Bog Standard – our volunteers' newsletter. We hope to bring you quarterly editions with the aim of keeping you all up to speed with the great work that you all collectively do for the Mosses, including updates on monitoring and practical task days as well as keeping you updated as the BogLIFE project progresses.

Butterfly and Dragonfly Transects

There are two butterfly transects, A and C, that are carried out on the moss, which are walked once a week during spring and summer, following UK Butterfly Monitoring Society guidelines. A set route with a number of subsections is followed across the moss in good weather, and all butterflies seen are tallied up. As our site is important for dragon and damselflies, we also record those at the same time, as well as any other interesting species we see.



Transect C was only recently reinstated 4 years ago and has been walked by Stephen Barlow and Mike Sokolowski for most of that time. After covering Transect A for 25+ years, Estelle Hughes handed the baton over to Stephen a couple of years ago. Then during Mike's jaunt to Anglesey this year Rachel Irving has been leading Transect C. Additional volunteers Di Hill and Caroline Bevan have provided invaluable help on a regular basis, as well as the BogLIFE trainees. Extra pairs of eyes are always welcome so if you'd like to come along, as a one-off or more regularly, no experience necessary - just let us know.



The season got off to a flying(!) start with good numbers of Green Hairstreak and Brimstone butterflies and Large Red damselflies. Then unfortunately the prolonged period of heavy rain in June had a very negative effect on some of our important bog-specialist species, and we only saw low numbers of White-Faced Darter dragonflies, Large Heath butterflies, and Argent & Sable moths.

Thankfully the weather picked up though and we had record numbers of high summer

butterfly species such as Peacocks (248 on one section of the railway line!), Painted Ladies, Small Tortoiseshells and Red Admirals, as well as good counts of Common Hawker, Migrant Hawker and Black Darter dragonflies. We were also lucky enough to spot some rarer species including Silver-Washed Fritillary and Purple Hairstreak butterflies and Ruddy Darter dragonflies. We've spotted lots of other things too like Green Tiger beetles, Hobbies, Wheatears, and Slow-Worms, Transect A had to be re-routed due to a Curlew nest, and we nearly stepped on an Adder on transect C!

We hope to show you full results for the year in graphical form in the next newsletter! In the meantime if you'd like to hear more about the transects then please do get in touch.

Rachel Irving (Estate Worker), Mike Sokolowski (Assistant Project Officer) & Stephen Barlow (Natural England Volunteer)

Adders on the Moss

In the spring of 2018 the first organised surveying for adders in recent times commenced on the mosses. The method adopted consisted of the regular checking, by volunteers, of artificial refugia laid out on transect routes, and although the results obtained in this first season were disappointing it was a useful exercise in that it highlighted the need for a more widespread and flexible approach to the surveying methodology.



In the following autumn/winter, with little still known about the areas being used by the adders, concern was expressed that the large scale bunding works could unwittingly destroy potential adder hibernacula and, in the worst case scenario, the hibernating animals themselves. It was decided that all areas where work was imminent should be surveyed immediately so that potential hibernacula habitat could be identified, mapped and marked on site, and hence mitigating action could be taken wherever possible. This habitat surveying work was carried out jointly between volunteers and NE staff largely during the first few months of 2019 but it will continue, to some extent, until all the bunding operations have finished. Also, at this stage, advice was sought from ARG UK and they confirmed that they were in agreement with the mitigating actions being taken, and with our plans to undertake more extensive surveying for adders during the spring emergence period. With respect to this proposed widespread surveying, they suggested that we might benefit from some professional assistance, and soon after this NE were able to secure funding to employ Nigel Hand, a leading adder ecologist, to provide the desired help, advice and training for NE staff and volunteers.



Since then, fairly extensive surveying has been, and still is being, carried out across the mosses. The positive sightings made (including some associated with the transect refugia) have enabled us to identify and map several areas that are currently being used by adders. Also, many other areas that appear to be potentially suitable for one or more of the various stages in the

adder life cycle have been identified and mapped. So, although progress has been made, this is just the start of understanding more about the adder population on site. We have not yet been able to answer any of the more important questions relating to the status of the adder population(s) and it seems likely that it will take a number of years of surveying & monitoring to do so.

Frank Bell (Natural England Volunteer)

The Churring of Nightjars

To those unfamiliar with the Eurasian Nightjar, *Caprimulgus europaeus*, they're a summer visiting bird about the size of a Cuckoo, which catches flying insects at night. They nest on ground and are typically found on heath, moor and cleared woodland.

On the Moss, most Nightjar activity has been noted in the areas along the old railway line. However, it appears that relatively little was known about the numbers and location of those nesting territories of the Nightjars using the Moss. This is because they only become active from dusk onwards, and they go to roost at dawn for the rest of the day. Unfortunately on the Moss, night time in the summer is when the mosquitoes and biting midges are at their worst. The only chance of seeing them is at dawn and dusk, but luckily the churring song of males makes it possible to estimate the numbers of males on territory, where they chirr from perches much like other birds sing in the day. The churring is an odd almost electronic sound, in which the males can alter the pitch and the apparent direction it's coming from. The churring can last up to 10 minutes in a burst, but is often shorter.



In early June we had an organized Nightjar survey with NNR staff and volunteers working in pairs along the whole length of the old railway line. A number of males were heard churring but the results were inconclusive as it wasn't an ideal night, and on such nights the males chirr less frequently. It proved impossible to arrange another organized survey so I spent a number of evenings and all-night sessions over the next couple of months trying to learn

more about these fascinating birds, and the areas they were using. I heard up to 3 churring males at the same time in the area where the conifer plantation had been cleared, and up to 2 other males churring further south down the old railway line. Other silent birds were seen flying that weren't one of the males churring at the time, meaning they were likely females. As some of the "female" activity was in the same area on different nights, it was likely this was the location of at least one nest. My best estimate was at least 5 churring males, and at least several females. However, these were minimum figures as it was impossible on my own to cover the whole area in a single night.

After locating male Nightjars still churring into August it was decided to delay bunding work and change the scheduled forestry operations in the areas the Nightjars were using, as it likely meant they were still nesting.

All being well, there are plans to purchase a thermal imaging camera, so in forthcoming years it's hoped to be able to locating nests, make more accurate counts, and to learn more about Nightjar behaviour on the Moss.

Stephen Barlow (Natural England Volunteer)

Note; all the photos used in the articles above are ©Stephen Barlow. The following images are from NE staff unless stated otherwise.

Practical Volunteer Task Days

Over the past few months, our volunteers have been hard at work on a range of tasks from repairing fences and cutting back vegetation to improve access, to constructing and installing nest boxes around the NNR base. Our long standing volunteers have welcomed a number of new volunteers into the fold, as well as work placement students from colleges and universities, all of whom have thrown themselves into the work with enthusiasm and importantly, a good sense of humour!

With the nesting bird season now over, we are beginning a phase of habitat management works across the reserve. Our volunteers have already helped out with some meadow management works in a range of places including the Marlot and will shortly be continuing similar work along the railway line to control scrub encroachment and encourage wildflowers, improving the habitat for a wide range of wildlife from butterflies to adders. As we move further into autumn we can begin to look more at the woodland management tasks we have lined up including coppicing work, tree felling works and where appropriate some tree planting.



A huge thank you to all those who have been able to get involved. The site is a much better place for your

continued help and it is always a pleasure to work alongside you. Looking forward to continuing the great work with you all, and of course doing our bit to rid the world of chocolate biscuits!

Steve Dobbin (Reserve Manager and Volunteer Adviser)

Community Engagement – Public Events

An important part of the funding requirements for the BogLIFE Project is that we teach people about the benefits that the Marches Mosses bring. Benefits to the environment and to the individual; their role as a carbon sink and the beauty of the changing flora and fauna. We are very lucky to have the expertise of a number of our volunteers to guide visitors around our Moss and show off this wonderful habitat and the wildlife it has to offer.

Our schedule of events which are set at the beginning of the year, start with World Wetlands Day on the first Saturday of February and end with the Christmas Wreath Making event in December. In between we try to present themed events aimed at a variety of audiences with a range of knowledge levels. Over the last couple of years we have observed what works well, what works less well and what needs to change. Sometimes just doing 'more of the same' isn't enough and a refresh of the events schedule is being planned this autumn.

Keeping what works is fine, every first Sunday in May we have the Birds of the Mosses Walk and this is always fully booked. Although we advertise it as a chance to 'observe some of the bird species that thrive on the Mosses', we know everyone wants to see the Hobbies! They are not disappointed by these aerial acrobats. Following this, in June we have the Dragonflies and Damselflies event which is a great success and both attract amazing feedback.



Recently we had an evening and morning event – a Moth trapping and photography workshop. This activity would have taken place anyway, but by turning it into an event for the general public it reached a whole new audience. The feedback from the attendees was fantastic – *'We both really enjoyed the moth event at Whixall and wanted to say a special thank you to all involved. It was great.'* This was just one email I received after the event, and we are now discussing running a June 2020 moth trapping event in next year's events schedule.

As volunteers you are aware of the changing faces of the Mosses – what lives there, what passes through, what thrives and when. I would like you to share this knowledge, so if you

have any ideas for themed events based on the changing seasons and your knowledge of the Marches Mosses, please let me know your ideas.

Mike Crawshaw (Community Engagement Officer)

New Staff

Ellie and Grace completed their traineeship with us in August and have now handed over the baton to our new trainees Christian Pearce and Graham Borden (pictured left to right).



Christian

"I started out in retail but after volunteering for the Staffordshire Wildlife Trust I was inspired to take up study in Countryside Management. I completed a BA Hons Degree in the subject whilst carrying out further voluntary work for the Peak District National Park Authority and the RSPB. When I finished my degree I went onto seasonal ecological work upon leaving the retail sector. I have now been accepted here at the Moss and have been working for the last 2 months as a trainee which is a fantastic opportunity to work on this project with you all!

My other interests are playing bass as part of a band and nature conservation holidays and events - rather contrasting but a similar community vibe! "

Graham

"I recently graduated from the University of Liverpool with a degree in Zoology after returning to education as a mature student. The traineeship here grants me the opportunity to develop my skillset and gain experience within the conservation sector as I hope to progress to a ranger/warden position in the future. This position builds on my previous experience volunteering with the RSPB at Burton Mere wetlands. I love to be outdoors and spend my free time mountain biking, climbing, and hiking. Favourite colour is blue, I choose cider over beer, and my favourite meal is a good Sunday roast."

And just in case you missed the emails, we have been very fortunate to welcome back both Mike Sokolowski and Ellie Williams who have re-joined the team as Assistant Project Officers. They should need no introduction...!

Project Update

Forestry Harvesting to allow peatland to be restored to former Bog habitat

The majority of the conifer harvesting work to the north of the railway line has now been completed. Over 8000 tonnes of timber have now been extracted during the works, as the area is prepared for the subsequent rewetting through bunding works, scheduled for early next year. The remaining brash is due to be chipped and used by the contractors Clifford Jones as biofuel in their kilns with the aim being for 100% of the wood product extracted to be productively utilised.



Slowing the flow from the moss by Bunding



To date, around 125 hectares of degraded bog habitat has now been restored involving the creation of over 70 kilometres of linear peat cell bunds with contracts let for another 150 ha to be completed over the next year.

The bunding works have recently resumed following a break over the nesting bird season. The contract for this winter's bunding works has been won by Dinsdales who already know the intricacies of the site and have proven success in this specialist work. With one of the areas to be bunded being the old bombing range, specialist surveys will need to be carried out beforehand to ensure no 'unforeseen issues' arise!

Land Acquisition to expand the area of the moss able to be restored

The programme of land acquisition under the BogLIFE project is nearing completion with 160 acres (65 hectares) of peatland now purchased and added to the Fenn's and Whixall NNR for bog restoration works. This includes 16 acres (6.6 ha) of land surrounding the former scrap yard of unknown ownership which has been acquired as part of a Compulsory Purchase Order.

Upcoming works:

Trial to re-establish bog habitat on peatland fields on the edge of the moss: As part of a unique trial, several peatland fields to the East and West of the scrap yard are to have the top layer of turf removed to enable the re-introduction of bog moss plants with a view to once more re-establishing peat forming habitat on these areas.

Winter tree works to enable rewetting of the moss by peat bunding: There is a further round of tree removal works currently being planned around the site to enable further bog restoration by bunding to take place. Much of this will be carried out by contractors but we are also looking to identify more sensitive areas of the works which we plan to complete in house with help from both staff and volunteers.

Scrub control: Continuing on from last year, a number of sections across Fenn's Moss have been identified for scrub management with the contractors due to start towards the end of

September. In areas identified, trees above waist height are due to be removed so as to reduce vegetation succession whilst leaving some areas of shelter for wildlife.

If you would like to know more about any of the above, please feel free to contact us using the details listed at the end of the newsletter.

Steve Dobbin

Next time...

As in this edition, we'd like to involve both staff and volunteers in producing subsequent newsletters so if you would like to contribute or have suggestions for future editions then please let us know.

A number of staff and volunteers have already put forward suggestions for articles to include in the Christmas edition of the newsletter which is fantastic. Next time there will be an update on the Curlew monitoring project, the results of the hydro route monitoring, the bird transects, and more.



We'd like to say a huge thank you to all those who have contributed to this newsletter and of course to all of you who have volunteered with us. Keep up the great work, it is so important!

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The Marches Mosses BogsLIFE project is generously supported by the European Union LIFE Nature and Biodiversity Programme and the National Heritage Lottery Fund.