



Crack-willow
(Withey)

Friends of The Withey Beds

Autumn 2017

Local Nature Reserve (LNR) Update

The small family of Dexter cattle returned to The Withey Beds in June. They were a little later than usual this year due to the late arrival of a calf that should have been born in May but refused to make an appearance until the weather warmed up! As there is still plenty of vegetation for them to munch on the cows will remain at The Withey Beds a while longer but will probably return home in October.

Back in August someone managed to open the vehicle barrier to the LNR on Moor Lane and dumped a lot of waste at the top of the track. It looked like they might have been coming back to dump more rubbish but the site was secured before they made a return visit. The Council investigated the matter and, fortunately, tracked down the origins of the illegally tipped waste and took the appropriate action. It just shows that we need to remain vigilant as unscrupulous people are always on the look out for somewhere they can get up to no good.

We have also recently been informed that the pill box has been vandalised on a number of occasions. We were aware that a breeze block in one of the gun slits had been dislodged but the lintels on the roof have also been damaged over the years. If you are aware of any new vandalism please let the council know, via enquiries@threerivers.gov.uk, so that it can be reported to the necessary people.

As usual the Friends held their ever-popular guided walk to The Withey Beds, via the Batchworth Lock Centre and the lovely fishing lakes of the Watford Piscators. Earlier in the year the Friends had put down some reptile mats which are essentially sheets of black corrugated shed roofing material. Cold blooded animals, such as snakes and slow worms, will use these sheets to warm up before they go off hunting for the day. We managed to see a grass snake and slow worm during the walk and were fortunate to have the Council's Park Ranger on the walk who is allowed to handle these reptiles. As such we all got a close look at a grass snake – something I am sure many of the youngsters (and adults!) on the walk will remember for a long time.

Polite Plea! If you receive the newsletter in the post we would be really grateful if you would consider receiving the newsletter by email instead. Not only would this save the team walking many miles hand delivering the newsletters but it would help reduce the use of paper and its impact on the environment. If you are happy to receive the newsletter by email please send your email address to friendsofwitheybeds@gmail.com

Nature News by Anna Maret

Mallard, teal and gadwall frequented the ponds during the summer months and there have been water beetles, pond skaters and hoverflies in and around the water but by the end of August little water remained.

Plants noted include woody nightshade, purple loosestrife, marsh woundwort, gipsywort, fleabane, cuckooflower with less comfrey and more thistles since the introduction of the cattle.

Slow worms and grass snakes have been found, also common shrew, fox and muntjac.

Buzzards are regularly reported, and whitethroat, chiffchaff, blackcap and garden warbler were common during the breeding season. Lesser spotted woodpeckers were occasionally heard and seen earlier; great spotted and green woodpeckers are common. One cuckoo was reported and two grey wagtails hunted for insects at the far scrape for a while, as did a green sandpiper in April.

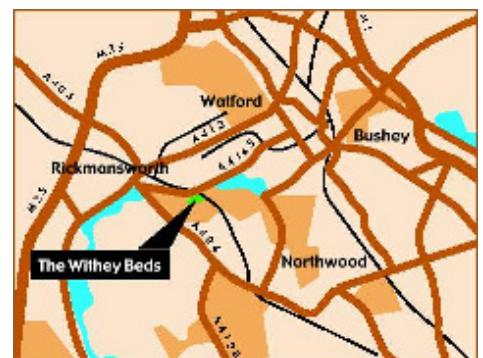
Butterflies seen have been green-veined white, peacock, red admiral, speckled wood, orange-tip and small tortoiseshell.

Membership subscriptions are overdue. If you have not yet renewed for last year please contact the Membership Secretary at 14 Sandy Lodge Road, Rickmansworth, WD3 1LJ with your £5.00 or the completed Standing Order form. The Friends would be grateful if you could pay by Standing Order as it makes administration easier. You can contact the Membership Secretary at friendsofwitheybeds@gmail.com

WHERE IS THE WITHEY BEDS LOCAL NATURE RESERVE?

As you travel along Moor Lane, from Rickmansworth, the entrance to The Withey Beds is on your right - about 150m after the entrance to the Moor Park estate (where the security guards sit in a small building).

The LNR entrance has a green vehicle barrier and kissing gate. If you go over the River Colne on to Tolpits Lane, then you have gone too far.



Mosses and Lichens

If you go down in the woods today you're sure of a big surprise! Well you might have a small surprise if you stop to look at the wonderful world of mosses and lichens that inhabit The Withey Beds, especially those in the wet woodland where the wet ground combined with the shelter and shade of the trees provides ideal conditions for mosses and lichens.

You may think once you've seen one moss or lichen that you've seen them all but there are more than 800 species of moss and 1,800 of lichen in the British Isles. Mosses and lichens are relatively simple organisms but both hide a series of complex relationships and processes.

Lichens, for example, aren't just one organism but a mix of fungi and algae or cyanobacteria living symbiotically to the benefit of each organism – one can not survive without the other. The algae or cyanobacteria photosynthesise to each other's benefit whilst the fungi harvest nutrients and water.

Lichens are slow growing but can live for decades. They can also live in extreme environments such as deserts and the Arctic. Lichens can tolerate very low water levels and even go without any water for some time only to quickly absorb any moisture as soon as it becomes available.

Lichens are sensitive to air pollution and were used to monitor pollutants, such as sulphur dioxide, for many years. They have also been used for food and drink as well as to make dyes, perfumes and medicines throughout the centuries.

Mosses have a variety of uses and roles such as breaking down substrata to release nutrients which more complex plants can utilise. Mosses also reduce soil erosion, filter water and have a role in the (highly unsustainable) peat industry. Even more importantly mosses store vast amounts of carbon which would otherwise be released in to the atmosphere and greatly increase the impact of climate change.

Mosses provide important habitats for a variety of invertebrates. They make such good homes because their structures not only trap air and water but also provide insulation from temperature and humidity changes. As mosses can dry out quickly many of the invertebrates that live in them have adapted to the repeated drying and remoistening through a process known as cryptobiosis; a latent metabolic state induced by the removal of water from an animal by evaporation.

Tardigrades are just one of the moss-dwelling organisms that use cryptobiosis and they are truly fascinating. They are around 1mm in length with eight legs and eight corresponding sets of claws and are often referred to as water bears. They can survive in the most hostile of environments, from the Antarctic to space. When tardigrades are exposed to drying out they batten down the hatches by tucking in their head and legs to form something known as a tun. They then produce glycerol, which acts like antifreeze, as well as secreting a simple sugar which forms a protective cocoon. Tardigrades also reduce their metabolic rate by 99.9%. They can survive like this for more than a century. Whilst in this tun form they can survive being boiled, being put under extreme pressure as well as being exposed to cosmic radiation. Unsurprisingly, scientists have been trying to replicate this process to help preserve fragile human tissues.



Ordinary Moss, a common moss in the UK



A Tardigrade



Antler Lichen, found throughout the UK

As you can see mosses and lichens aren't as simple as they look. You could try discovering for yourself what creatures they hide if you have access to a microscope – all you have to do is collect a bit of moss after some rain, give it a good squeeze and then put some of the liquid on to a slide under the microscope. However, if you don't have access to a microscope, then simply enjoy the structure, abundance and diversity of the many mosses and lichens that can be seen on your next walk around The Withey Beds.