West Oxfordshire Field Club

www.thefieldclub.org.uk

Newsletter No. 114 Spring 2022

EDITORIAL

There is something romantic, perhaps poetic, about the sight of an old barn or crumbling thatched cottage overrun by nature again, with birds nesting in the ivy and a tangle of briars and clematis sprawling over the stonework. In time a forceful ash tree may finally penetrate the roof and initiate a new cycle of "unbuilding". Nature's own way of re-wilding our urban desert, perhaps. Wildlife is always looking for opportunities – from the bluetits nesting in the crack between my house and the next to the pesky wasps that repeatedly build in the outlet flue of my gas boiler. Even the moss on the roof houses countless invertebrates, much sought after by birds. Sadly, all this no match for the rate at which the urban environment is invading the green countryside. For humans to repair the damage takes a lot of effort. It is not enough to have incentives for planting trees if they are not linked to maintaining them to maturity, or even to watering them until they are independent, no use seeding a meadow without implementing a suitable grazing regime to maintain it.

The rewards are great. Even a small, new green area can attract a wide array of plants and animals. It takes only a few minutes for a closer look at nature, even in small green area. Through the close-up lens, even that of your own eye, there is much to delight and amaze. Take a close look at the delicacy of a laceing fly – that tiny, proud, erect, proud head with its long, alert antennae and the huge, almost transparent wings that flutter at an amazing speed. Or take a furry beefly hovering so erratically yet managing to insert its long proboscis into a flower to sup. This year's outings have included a number of special trips to look at wildlife in close-up, from the tiny mosses at Whitehill Wood to the insect collections of the University's Entomology Department, the fungi at Boars Hill and the tiny water creatures at Pinkhill. These activities all depend on the help of many people, from our outside walks leaders to our own club members who are willing to give of their time and expertise. A big thank you to them all.

Jill Bailey

YOUR NEWSLETTER

With COVID restrictions lifting, we can now plan further ahead for talks and walks. The website gives the latest programme details, and includes a blog of members' observations, all the glorious technicolour, as well as an archive of past programmes and newsletters. But for those who are not online, we are still producing our usual programme card, which includes a list of committee members who can be contacted for further information.

REPORTS OF FIELD MEETINGS

Pond dipping at Pinkhill, nr Farmoor, 10 October 2021

On Sunday 19 September, Jeremy Biggs, the director of the Freshwater Habitats Trust, led eighteen people on a pond dipping walk at Pinkhill meadow ponds near Farmoor Reservoir. Jeremy, wearing pond dipping waders, gave us a very interesting talk on the creation, management and importance of the ponds. However, the real excitement started when he boldly walked into one of the ponds, plunged in his net and swept it through the water in a figure of eight shape. He then tipped the contents into a white tray and we all gathered around.

At first the water only looked dirty but then tiny flecks began to dart and wiggle, and little legs and tissue thin wings started to show. Then we saw the mini-beasts like the larvae of dragonflies and so a mysterious world started to emerge and we were all enthralled. Everyone then had a go for themselves. The pond was teeming with life and we experienced a simple and rewarding way to get closer to nature.

Jonathan Noel

Dry Sandford Pit geology walk, 13 October 2021

On Sunday 3 October, our group of eight was blessed with a warm, dry and sunny morning following the deluge of the previous day. The paths were, however, quite dry – perhaps there's a clue in the name! We were under the expert guidance of Lesley Dunlop, who introduced us to the wonders of the Corallian succession in this former sand quarry, which is a SSSI and BBOWT reserve.

The several exposures we examined in the quarry face were composed of interbedded limestones, sandstones and marls (a limey clay). We learned that these were deposited in conditions similar to those on the Bahamas Banks today, i.e. a high energy environment with shallow offshore islands in a shallow warm sea.

An information board gave an idea of what lived in the sea at the time – ammonites, coral reefs, sea urchins, and a particularly strong shelled bi-valve, *Trigonia*, which was able to withstand the buffeting of the waves and is consequently well preserved and gives its name to the Upper and Lower Trigonia Rock beds whose importance gives the quarry its status as a geological SSSI.

The limestones were laid down slowly in relatively undisturbed offshore waters, whereas the sandstones were deposited in shallower conditions and over a shorter period of time. We were shown s rounded iron hardened blocks of sandstone a metre or so wide called Doggers which had been left by the quarrymen. Several layers were composed almost entirely of fossils which had been sifted together by currents after they had died. Such layers, not unsurprisingly, are called 'death assemblages'. Jonathan was happy to climb up and demonstrate some of the most noteworthy details of this rock face.

Intriguing pH tests were carried out on the water of two small ponds. Both results – 5.78 and 5.4 – showed more acidity than expected in a limestone rich area. This, we concluded, was because the water in these ponds had its origin in the sandstone layers.

All in all a fascinating morning's excursion.

John Baker

Grassland Fungus Foray at Boars Hill, 31 October 2021

The day started with heavy rain and strong winds, but by the time I reached our meeting point at Boars Hill it had turned into a beautiful autumn day. Sixteen brave souls also ventured out and we met our leader for the foray, Peter Creed.

We all parked along Berkeley Road and walked into the adjacent large field on Boars Hill. This land is owned by Oxford Preservation Trust and is famous because the views of Oxford from here are stunning. The land hasn't been damaged by fertiliser or ploughing and is managed by grazing. This unimproved grassland site contains a good variety of grassland fungi.

We saw five different species of Waxcaps in this field (Snowy, Blackening, Parrot, Butter and Honey Waxcaps). My favourite was the Parrot Waxcap (*Gliophorus psittacinus*) with its glistening slimy emerald green cap as seen in the fresh young specimens. The stem is yellow at the base and the top half is green, as it matures the green colours fade to yellow.

Butter Waxcap

Meadow Coral

The Blackening Waxcaps (*Hygrocybe conica*) emerge with orange or scarlet caps which blacken with age and exposure to air. This was probably the most common waxcap in the field and we saw it in different stages of colour. Other fungi in the field included Spindle Coral (*Clavulinopsis fusiformis*) which are part of a large group of fungi with neither gills or pores. The spores develop on the outside of the fruiting body and are dispersed by wind or rain on maturity.

Parrot Waxcap

We then drove a short distance to Matthew Arnold field near Jarn Mound. Here we saw a Vermillion Waxcap (*Hygrocybe miniata*) which was identified due to its cap being covered in fine scales; it's very similar to Spangle and Scarlet Waxcaps. A little further on we saw an Oily Waxcap (*Hygrocybe quieta*) which had an orange yellow cap and a similar coloured stem.
We then left the field and entered deciduous woodland. Here under some oaks we saw a mature Chestnut Bolete (*Gyroporous castaneus*). This is locally rare and Peter was very pleased to see it. Other highlights included seeing a Meadow Waxcap, an Earthy Powdercap, a Fools Funnel, and a Brown Puffball. Altogether we saw 28 different species of fungi.
A full species list can be found on our website.

Jonathan Noel, photographs by Roger Newman

Gibbets Close Farm, 7 November 2021

On the sunny but chilly morning of Sunday 7 November 2021, eighteen Field Club members gathered for a tour of Gibbets Close Farm, led by Neil Clennell from the Wychwood Forest Trust. The Gibbets Close site has been gifted as a legacy to the Wychwood Forest Trust. It is an area of approximately 50 acres, surrounded on three sides by roads or urban expansion, while the far side, to the east, is open towards Eynsham. The land has been permanent grassland for several decades, from which hay has been taken annually followed by aftermath grazing.

The tour took us over rough grassland edged by hedgerows in which mature trees such as ash and oak are growing. Hay has not been taken, nor has the land been grazed for a year, and already young oak saplings are sprouting across the area. Vegetation in other areas suggest that the land retains moisture, while in the lower area there is a pond.


The pond at Gibbets Close

The future of this site is yet to be decided. Negotiations regarding its immediate future are ongoing. Progress will be recorded on the Wychwood Forest Trust website. Neil discussed the merits of allowing the land to regenerate naturally, with the possibility that within ten years natural woodland, as well as scrub, would provide a beneficial habitat for many species of wildlife(*). Trefoils, knapweed and some grasses have been noted, but a botanical survey would be welcomed. Wildlife seen included kestrel, chaffinch, meadow pipits and roe deer. A barn owl was disturbed earlier in the morning. A BTO survey would be appreciated.

Neil was thanked for an interesting and stimulating tour which was enjoyed by us all.

Julia Reid

Visit to the Entomology Department, Museum of Natural History, Oxford, 16 December 2021

On Monday 6 December, fourteen Field Club members enjoyed a fascinating tour of the Entomology Department of the Museum of Natural History in Oxford.

Initially, we were given a brief introduction to the Hope for the Future Project, the aim of which is to share and protect the Museum's unique and irreplaceable British insect collection. The collection is named after its founder, the Reverend F W Hope, who established the collections and their global reputation in the late 19th century. The collection is second in size to that of the Natural History Museum, London, with an estimated five million specimens.
A new gallery is currently under construction which will house some of the Museum's enormous collection of insects. These collections

are in the process of being prepared for transfer so we were shown only a selected sample from the collection.

We were given a tour of two areas of the department. James guided us through historical collections and archives, showing us specimens from Charles Darwin's Australian collection, A R Wallis's Malay Archipelago insects and C W Dale's butterflies. The large copper butterfly in the latter collection is now extinct in the British Isles, demonstrating the importance of these collections in providing a unique historical record. Additionally, they give information on any genetic variations over time, as well as recording the distribution of insects. Some of the cases donated to the museum showed evidence of carpet beetle attack. To combat this, cases are frozen at minus twenty degrees for two weeks prior to opening. Naphthalene is no longer used as a preservative.

The second part of the tour looked at samples from the British collection. We were shown a case of Purple Emperor butterflies, Death's Head Hawkmoths, beetles and insects so minute it was hard to focus on them. We even learned how to distinguish a male cranefly from a female! (mating craneflies, picture on left)

Ryan and Louis, who showed us the collection are passionate about their work and their enthusiasm was contagious. I believe we all really enjoyed our visit and would like to return. We'd like to thank James, Ryan and Louis for taking their time to talk to us and show us some – but only a tiny fraction – of the collection's specimens, and Hayleigh for arranging our visit.

Julia Reid, December 2021

Mosses and Liverworts at Whitehill Wood, 27 March 2022

On the dry, early spring morning of 27 March, nineteen members gathered by the entrance to Whitehill Wood, near Stonesfield, to hear Peter Creed's introduction to mosses and liverworts.

Peter told us about the two main types of moss: acrocarps which are tufted mosses and grow from a central point often forming circular cushions, and pleurocarps which have longer shoots and are more tendril-like, often with branches.

Whitehill Wood, Jonathan Noel

We then followed the path between the river Evenlode on the left and a steep bank of woodland plants and trees on the right, stopping at intervals to look at some common species of moss, noting the differences between the two types, and between mosses and liverworts.

Lots of early spring flowers were seen including Wood Anemone, Moschatel (aka Town Hall Clocks), Lesser Celandine, and Common Dog-violet. Many of us were hoping to see the small Yellow Star of Bethlehem and we were in luck as about ten in total were seen. The star-like flowers of this plant are yellow with a green stripe on the outside of the six petals; it has a single blade-like leaf that rises directly from its base.

In a few places, mainly on the river side of the path, we saw a number of Toothworts. These are strange flowers which lack chlorophyll and so are completely unable to photosynthesize. They survive by being parasitic on the roots of Hazel and other trees. They have small pad-like suckers which attach to the roots of the host plant. These dissolve the tissue until the main feeding parts of the root are reached. The sap is then diverted from the root to the Toothwort.


Yellow Star of Bethlehem, John Cobb


Toothwort, J. Noel

The most common plant in the wood is Dog's Mercury – it carpets large parts of the woodland floor. It has a bad reputation as it's poisonous and inhibits the growth of other plants. I hadn't previously given it much thought. Peter explained that the plant is dioecious, which is a botanical term meaning there are separate male and female plants. This is unusual as most plants have both male and female flowers on them. We saw the different types of flowers on the Dog's Mercury; on male plants they resemble yellow catkins and on females the plant develops small paired fleshy fruits. The spread of Dog's Mercury by seed is very slow and the reason it is so abundant is that it spreads mostly by rhizomes, creating large single-sex patches on the woodland floor.

Signs of various mammals were visible: tracks in the mud made by Muntjac and Roe Deer, and Badgers; fox scat and an otter slide and spraint, and also nibbled nuts. Our return was via Stonesfield Common where we enjoyed the views before heading back to our cars. A very informative and enjoyable morning spent with other budding bryologists. A full species list can be found on our website.

Jonathan Noel

Greenham Common Reptiles, 10 April 2022

On this sunny Sunday morning fourteen of us met Neil Clennell, Chief Executive of the Wychwood Forest Trust and herpetologist, near Greenham Common to look for reptiles. Neil was absolutely confident – and rightly so – that we would easily find adders.


Menage a trois – 1 female adder and 2 males

We joined Neil in what is now a business park but which was formerly part of the RAF, and later, United States Air Force base, infamous for the ground launched cruise missiles. The base was closed in 1992 and the airfield dismantled; it is now an SSSI, open to the public for recreational activities. The southern edge is not an SSSI, and consists largely of concrete rubble left over from the clearance of the air base. A perfect habitat for adders and other reptiles!

The Greenham Common site is apparently one of the best in England for finding adders. They have become increasingly scarce throughout the country due to habitat disruption, over-assiduous land management and the introduction of pheasants who will peck snakes and possibly kill their young. Disruption of adder habitat can be catastrophic, particularly if summer feeding grounds are separated from hibernation sites (hibernacula) through road building or housing. Although protected under the Wildlife and Countryside Act, adders and other reptiles are still very much affected by such disruption.

Much research has been undertaken to try to discover genetic links in adders from different sites in England. It would appear that there are similarities between those in the south of England but those similarities disappear the further north one goes. Different methods have been used to collect DNA. The current method is to collect it from the cloaca with a cotton wool bud. Further research uses minute radio tracking devices, taped to the snake, which eventually fall off when the snake sheds its skin.

Cold-tolerant Adders are the only snakes found in the Arctic circle. Even so, they appreciate warmth and the Greenham site is ideal for them as the waste concrete warms up quickly and allows for basking while at the same time offering plenty of cover. Hibernation occurs from around October to March. After about three weeks of warm weather the males become more active and start competing with each other for females, wrestling rather than biting as the venom would be fatal.

Females give birth around two months after mating. Adders are viviparous, giving birth to live young which have developed inside the body of the parent. Some females may only breed once in a lifetime, depending on the habitat and access to food.

As we walked around the site, Neil was able to point out several adders, warming themselves on the concrete. The sexes are different: the males having paler background colouring and stronger patterning whereas females tend to be browner with less distinct markings. There is a theory that the predominant black markings along the head and back may be an evolutionary advantage as the black attracts warmth from the sun and hence warms the spinal column.

Wearing a thick leather glove, and with the help of a stick with a hook at the end, Neil managed to pick up one of the males so that we could have a closer look. Quite lively at first, it soon calmed down but would raise its head and flick its tongue at us. Nobody wanted to stroke it.

On our return to the car park, Neil showed us a slow-worm, which he found under a metal sheet. Other wildlife noted were brimstone butterflies, four bumble bee species, a bee-fly, and chiffchaffs and a blackcap were heard. Everyone enjoyed a really interesting few hours with Neil who was thanked for his time and expertise. The warm sunshine made our visit particularly enjoyable too!

Julia Reid, 11 April 2022