Fungus Survey of Oxfordshire

Newsletter 2019

Russula graveolens, Nettlebed Common, 2018

NOTES from our PRESIDENT

Prof. Richard Fortey FRS

2018 was a difficult year for the FSO. After an exceptionally long and dry spell in the summer the autumnal burst of fruiting bodies never really arrived. Normally reliable woodland sites were short of the usual mycorrhizal genera like *Russula* and *Lactarius*, which seem to have decided to take a year off. Even *L. blennius* under beech was less prolific than usual. *Boletus* and its allies were scarcer than for several years, and some cantharelloids like *Craterellus* were notable only by their absence. Maybe we can anticipate more fungus seasons like this if climate change accelerates: let us hope not. Probably the most diverse foray was that in the woods above Nettlebed on October 28, when the complex *xerampelina* group of Russulas turned up in some numbers, and the total tally of species surpassed eighty, including some pretty *Helvella* spp. Thanks to everyone in our group bringing what specimens they could, National Fungus Day at Nuneham Courtney on 7 October was successful once again, even though the fungi growing in the Arboretum itself were very meagre on the day. Surely 2019 will be more propitious. There were, however, a few compensations. The hot weather may have encouraged some more exotic species to appear on fallen trunks, where more moisture is stored. These include some species that are not on our consolidated FSO list for the county. In my own wood at the end of August the large, soft bracket *Inonotus cuticularis* appeared at the end of August on a beech log.

It is unmistakable under the microscope. We are accustomed to finding the superficially similar *I. hispidus* on ash, and this species will probably become even more common when ash dieback (one unwelcome fungus) spreads still further. Although the last records of *I. cuticularis* from Oxfordshire were at Blenheim Park in the middle of the last century, there are many more recent finds in Hampshire and Bucks, so it is likely to have been passed over. *Panus conchatus* (which often appears in lists as *Lentinus torulosus*) was identified by Marion Warland in 1994 from Stonor Park, which is the only Oxon record I can find in the last century until it turned up in a beech wood on a fallen stump at Grey's Court in August, 2018.

Dried *Panus conchatus* from Greys Court *Aug 2018 Photo RF.*

When fresh it has a typical purple flush, and its leathery fruit body dries well, as seen in the specimen photographed here. On 1 September I discovered the rare and beautiful bolete *Gyrodon lividum* at Dry Sandford BBOWT reserve growing under alder, as it always does. Judy Webb sees it in the Lye Valley, Oxford, but it had not been recorded from Dry Sandford previously. These discoveries provided some balm for a disappointing year.

Editors note.

Alan Hills started the tradition of producing an Annual FSO Newsletter back in 2005. Judy Webb took over production for a short time and then I took up the reigns in 2007 helped by my Chzeck colleague Marketa Samalova. Now more than 10 years later I think it is time for someone else to take over and Caroline Jackson-Houlston has very kindly agreed. I thank all those who have contributed articles and photos to past Newsletters and, not least, to Rod and Wendy MacEachrane who each year have printed off the Newsletter and programme.

Painting opposite is by Caroline Jackson-Houlston of Russ*sula graveolens* from Nettlebed Common, 2018 A tricky species to identify because of the wide range of colour forms.

Molly Dewey

Gyrodon lividum at Dry Sandford, 1 Sept 2018 RF

Sometimes it happens to even the most experienced mycologist that a rarity identified too quickly proves to be something less recherché. I was very excited to discover a white, coarsely scaly *Amanita* in Harpsden woods in October, which looked exactly like the exceedingly rare *A. vittadinii*. Even Geoffrey Kibby, the expert on the genus, was convinced. However, a proper assessment at Kew showed that this find was rather an anomalous example of *A. echinocephala* –still a relatively uncommon species, but not a sensation.

A. echinocephala Harpsden Wood, *2018 RF*.

To temper my disappointment a subsequent message from Martyn Ainsworth at Kew alerted me to some new research on a specimen I had collected in 2008 in the willow carr at Shiplake College near Henley-on-Thames. I had identified this gilled lignicolous fungus as the generously named *Hohenbuehelia atrocoerulea*, a species sufficiently unusual for me to send a voucher to Kew, where it was eventually studied for its DNA. The molecules revealed it to be *H. cinerea* – a species wrongly synonymized with *H. atrocoerulea* in CBIB, and one with very few British collections. I was not to know of this case of mistaken identity until modern science came to the rescue. In sum, these examples are a case of "some you win, some you lose." If there is a moral to this story it is the importance of drying anything unusual before it becomes beyond retrieval. It may take a decade for anyone to get around to studying the voucher, but the results can be unexpected and even important.

2018 FORAY ROUND UP NEWS

Judy Webb

We managed 10 forays in 2018 (two had to be cancelled due to lack of fungi). The records we make are mainly the fruiting bodies of toadstools or brackets and these need enough water to form and emerge. In dry conditions fruitbodies cannot form. This of course does not mean the fungus species is absent, merely that it may wait a year or two for suitable damp conditions to fruit and show its presence. It seems to me that the mycorrhizal species associated with trees in woodland and the waxcaps of grassland have had a particularly bad year in 2018 due to the heat and drought. Deadwood species have not shown such a reduction in fruiting bodies, perhaps because rotting logs retain more water than soil. 'A really good fungus year' with over a 100 species per foray seems a thing of the past and on-going climate change to hotter and drier conditions is the culprit.

Spring saw us going to Shirburn hill again in April. Dry conditions had already set in and so only 10 species were found, the highlight being 20 Weather Earthstars *Geastrum corollinum* found after a lot of crawling about under the box wood. The second spring foray was to Stow Wood where 27 common species were found, mostly on dead wood or leaf litter.

September found us in the new site of Buscot Park. This is an attractive park with a large number of different species of trees, so it looked very promising for mycorrhizal species. However as the soil was so dry only one mycorrhizal *Russula* species was found and a lot of searching over a wide area produced 9 species on dead wood or trunks. On the way out Richard Fortey noticed an oak tree with the most enormous *Perenniopora fraxinea* bracket fungus on it, bringing the total up to 10 species.

Abraham's Wood on Boar's Hill was again exceptionally dry, but with a deal of searching we found 16 fungi, 15 common species on dead wood and a giant puffball.

The 7th October saw us running our public engagement/educational event at Harcourt Arboretum for National Fungus Day and a joint foray with the

Ashmolean Natural History Society of Oxfordshire. Once again Richard Fortey gave an excellent talk about fungi to visitors and he, Caroline Jackson-Houlston and I took groups round the site to show the species present. This event benefitted from an attractive display table of fungi collected from other sites by group members and literature supplied by the BMS attracted much interest. There were lots of visitors, including families with children. The final fungus list for the site totalled 40 species, lower than the 48 last year and much lower than we have had in previous years, of course due to dry conditions.

Waterperry Wood in October gave us the moderate number of 27 common species, but the following foray at Foxcombe Wood gave us 47 species with some very interesting ones. This wood is a mixture of coniferous and deciduous trees on acid soil on a north west facing slope. The soil had retained moisture in the litter and humus, enabling much better fruiting of mycorrhizal species and the moist leaf litter gave no less than 7 *Mycena* species. The star of the show was however a big clump of cauliflower fungus *Sparassis crispa* at the base of a conifer tree trunk, a species that seems very rarely found in this county.

Nettlebed Common late in October (and joint with TVFG) was the one foray to buck the trend. With moister conditions in the soil and a good number of pairs of eyes searching, the grand total of 84 species was seen. Mycorrhizal species of *Russula, Amanita, Lactarius* and *Tricholoma* were present in good numbers along with deadwood and litter species.

The November foray to Broughton Castle grasslands and lawns was again a hard search to find the 41 species we managed. The grasslands were so poor in species that we spent much longer in the wooded areas than before, gathering a good list of common deadwood species. The lawns of the house provided the most interesting and uncommon species – a couple of caps of a sort of muddy brown toadstool called *Rhodocybe popinalis.* This is more usually seen in sand dune systems. Perhaps the lawn had been dressed with sand sometime in the past.

Rhodocybe popinalis Broughton Castle, Nov 2018. JW

The last foray of the year was our old hunting ground of North Leigh Common. Despite dry conditions requiring extensive hard searching, we managed 24 species, including the usual fly agaric *Amanita muscaria* and one of the biggest field blewit/blue leg *Lepista saeva* toadstools that I have ever seen.

This is my last update as Recorder, although of course I remain a member of the group. Thanks again to Wendy MacEachrane for carrying on with data entry into our MycoRec database in 2018.

N. LEIGH COMMON FORAY

Wendy MacEachrane

Our final foray of the autumn season was to North Leigh Common on the 25th November 2018. This was a short foray as our AGM followed. The weather during the previous week had been wet and also on two occasions we had had a frost and so despite having found a number of fungi on the recce the previous week I was uncertain as to what we might find. In the event it was better than expected.

North Leigh Common is listed by DEFRA as an area of common land comprising about 50 acres. It would have escaped enclosure in the 18th/19th centuries when of much of the local land was enclosed. Nowadays it is administered by West Oxfordshire District Council. Our group has surveyed there on eleven different occasions so has been a key site for us.

The common has lowland heath, wooded areas and wetland. There are gorse bushes in abundance and recently heather plants have appeared where the undergrowth has been cleared. There is a large area of short grass near to the car park which in most years wax caps and clubs are found growing. This year has been an exception probably due to the very dry summer that we have experienced. Much of the remainder of the site is wooded with a rare area, for West Oxfordshire, of wet woodland to the far end. The tree species are mainly birch, hawthorn and a few oaks. The birch groves usually produce magnificent displays of the iconic mushroom, fly agaric (Amanita muscaria), in autumn, as well as a number of other fungi usually associated with birch (Lactarius turpis and Lactarius tabidus). To the left-hand side of the car park is an area of trees and scrub containing the remains of a number of clay pits which were used to supply clay to the brick and tile making industry in Long Hanborough. This area, which has recently been cleared of scrub, still has very uneven ground and becomes boggy after heavy rain.

The geology is mostly Oxford clay and Great oolite with sandy deposits which make the soil slightly acidic; unusual for the area.

Since our group began recording in 1987 a wide variety of fungi have been found here including lilac bonnet

(Mycena pura), Jellybaby (Leoita lubrica), Field blewitt (Lepista saeva) and the Brown Birch Bolete (Leccinum scabrum) to name just a few.

In the autumn the bracken dies down and the leaves fall making a carpet underfoot but also making it harder to spot the mushrooms unless they are the bright red fly agaric. The winter also holds a few surprises Scutellinia, late wood blewitts (Lepista nuda) and also reveals Birch polypore (Piptoporus betulinus).

FOXCOMBE WOOD Oct 2018

John Killick

In 2018 we found no earth stars and only a handful of clouded agarics, but with 20 pairs of eyes, a fine day and the list compiled by Judy Webb we got 47 species to which five more were later added – perhaps 2018's best result. The porcelain fungus had rotted and many fungi were in small numbers (far fewer sulphur tuft, one stinkhorn, two shaggy parasols) but there were two fine Sparassis (cauliflower fungus) on conifers near the entrance, the unusual Microtyphula (pipe club fungus) in leaf litter, and the blue green aniseed toadstool again impressed our nostrils. We had seven Mycena (bonnets); the most impressive exhibit was clumps of Pholiota squarrosa (Shaggy Scalycap) at the foot of three aged cherry trees.

HIGH PARK BIODIVERSITY SURVEY- Progress report 2018

Molly Dewey

2018 was the second year of the four-year survey project of the biodiversity in High Park, (part of Blenheim Park that is closed to the public), led by Aljos Farjon from Kew. The following FSO members participated: Richard Fortey, Molly Dewey, Wendy MacEachrane, Caroline Jackson-Houston and Max Peterson. Martyn Ainsworth, Brian Spooner and Alick Henrici from Kew also participated. Access during the autumn was more restricted in 2018 than in 2017 due to the release of a new breed of pheasants. The complete data are stored in Excel files held by participants and the Project Leader, Aljos Farjon. Aljos tells us that these data will in due course be shared with members of the FSO, Blenheim Palace and TVERC.

Four visits were made to High Park in 2018: 7 June, 26 July, 10 August and 26 September, The August and September visits had to be limited to the road verges, but the earlier visits enjoyed wider access. In the early summer forays we recorded a number of saprotrophic fungi associated with (ancient) oaks. In a previous list of 16 key indicator species associated with ancient oaks Martyn Ainsworth's (RBG Kew) recorded only 2 species for High Park but now 8 further species have been added. Among these is the rare Oak Polypore (*Buglossoporus quercinus*) that was found on 11 ancient oak trees. Martyn has mapped and numbered these trees, so that we can determine if additional trees with this fungus are found in future surveys. It was decided that the fungal surveys would in future focus on all those species associated with oaks, but if other fungal species can be identified in the field they will be recorded. The total number of species recorded by the end of 2018 stands at 262. Small samples of soil near ancient oaks were also taken by a Kew scientist to test if mycorrhizal fungi could be detected by DNA analysis; this still awaits further work before we can conclude if this method will help in the surveys or not.

FSO-RECORDING

Caroline Jackson-Houlston

FSO members were very sorry to learn that Judy Webb, our stalwart field recorder for many years has decided to step down. She will leave a big gap. Though we have seen her as a mycologist, and sometimes as an entomologist, she has an extraordinary range of wildlife and conservation interests in terms of both recording and practical conservation. Former biology teacher at Milham Ford School, she was instrumental in rescuing the site's orchids and fungi from development and getting it gazetted as a nature park. She has worked as forensic consultant on pollen and insects and been a volunteer species recorder for Natural England and other groups, winning an award from Natural England in 2013. Important local wetland sites such as Cothill Fen and the Lye Valley have benefitted from her energetic maintenance work. With so many interests, this 'wildlife wonder woman', as the *Oxford Mail* has termed her, is keen to move on to spend more time on conservation campaigning. We would like to offer her heartfelt thanks for all her contributions over the years, and wish her well with new commitments.

FSO-FUTURE ORGANISATION

Prof Richard Fortey

Judy Webb has decided to relinquish her role as Recorder for the FSO. She has performed splendid work for the group and has earned a rest. We thank her sincerely for all she has done for us and wish her well in her future. Molly Dewey is also approaching the end of her long tenure as Secretary, which is our organisational hub. For a while it was difficult to see the way forward. However, it has been decided that the job of Recorder can be shared by several members of the Committee, and to that end in March Stuart Skeates kindly gave five of us a tutorial in placing our records on the new FRDBI. Julia Huggins has kindly offered to take over from Molly in a year's time, but will 'shadow' her for the next year to get an idea of what is involved. So now it looks as if we can look forward to our Survey continuing, and building upon the discoveries we have made since 1987.