

# Fungus Survey of Oxfordshire Newsletter 2018



*Trichoglossum\_hirsutum*, Shirburn Hill, Caroline Jackson-Houlston

## Notes from our President

### Prof. Richard Fortey FRS

Even by the temperamental standards of the fungus kingdom, 2017 was a curious year. An early dry summer period followed by rain in early August seems to have provoked an unusually precocious fruiting of mycorrhizal woodland mushrooms. There were numerous *Russula* and *Lactarius* species in our local beech woodland, and even a few *Cortinarius*. By mid September most of them had vanished, never to reappear. This is not good 'planning' as far as formal forays for the FSO are concerned, as they are usually predicated on the productive season climaxing some time between late September and early November. This year we largely missed the season. It may seem unfortunate, but we cannot make nature conform to our diaries.

There was, however, some compensation. Grassland fungi did rather well in a few sites. I have never seen *Agaricus macrosporus* attain such prodigious size as at Crowsley Park in early October, where *Entoloma* also made a good showing, including *E. exile*, which I had never seen before. Although the customary *Amanitas* altogether failed to show up in Harpsden Wood, I did rediscover *Clitopilus cystidiatus* exactly where I had made its first British record more than a decade previously. Macroscopically it looks similar to the familiar *C. prunulus* other than having a greyish cast to the cap surface, but its infertile gill edge gives it away under the microscope very quickly.

I would like to focus on one particular foray on November 4 at Shirburn Hill, near Watlington. We already discovered the virtues of this site last year, when *Geastrum corollinum* was discovered on a Spring foray in the extensive box-wood on the hillside. 2017 provided more excitement. After logging the regular mycorrhizal associates with rock rose (*Helianthemum*) on the steep hillsides, including *Cortinarius epsomiensis* and *Tricholoma hemisulphureum*, it soon became apparent that this was a good year for earth tongues (*Geoglossum*), of which three species were discovered. Some grew on the thyme-covered anthills that are a feature of the site. Mycenae were also common there. But one particular excitement was the discovery of nice specimens of *Hydropus floccipes*, a rare species looking a little like *Dermoloma*, but with dramatically different microscopic characters. Another interesting find was the discomycete *Geopora arenicola*, which, as its name implies, is more commonly known from sandy environments. Perhaps the good drainage of an anthill mimics that of a dune slack. A dark *Otidea* species favoured the same site. *G. arenicola* is also known from Judy Webb's 'patch' at Aston Rowant nearby.

However, the real excitement once again centred on the box-wood. 2017 saw it produce no less than six different earth star (*Geastrum*) species. A census of the wood was provided to the Survey by Mark Joy, a visitor from Norfolk and earth star enthusiast. Mark spent five hours on his hands and knees crawling over the inhospitable surface of the ground beneath the box trees. The dense canopy of box discourages almost all plant growth (and people). But seems to encourage earth stars, to wit: *Geastrum triplex*, *G. fimbriatum* (=sessile), *G. striatum*, *G. pectinatum*, *G. coronatum*, and *G. corollinum*. These are listed approximately in their national order of decreasing abundance. The last two named are only known from this site in Oxfordshire as far as I can discover. Although widespread, most of the records of *G. coronatum* are from East Anglia, particularly Norfolk, which introduces a sandy theme into the discussion again. Some species are abundant under the box; Mark reported almost 150 specimens of *G. fimbriatum*, which may be some sort of record. There were more than a dozen 'weather earth stars' *G. corollinum*. Altogether this makes this possibly the best earth star 'hot spot' in Britain. It is certainly of national conservation importance. This leads to the interesting question of why a little-explored habitat – native box wood – on a steep slope in Oxfordshire should so extraordinarily favour one of our more charismatic genera. I have a few suggestions. In the first place it seems that box does not have reported macrofungal mycorrhizal associates. There is no *Russula*, bolete or *Amanita* confined to it. This may allow more scope for saprobes like *Geastrum*. Second, the ground under box 'forest' becomes particularly dry in the summer months, especially on the thin soil on top of the chalk, which may discourage species that prefer deep, moist litter. Only the heaviest rain broaches the dense canopy of box, but presumably when it does so the leaf cover helps retain the moisture below it for a sufficient time to allow mycelial growth, especially in the absence of competing vegetation. The conditions may not be unlike those that pertain in very light, sandy soils, such as in parts of East Anglia. I doubt whether fungi 'care' that box is toxic to many animals. Taken together, these special characteristics of native box woodland provide an exceptional habitat for earth stars, and one which we should continue to monitor with due diligence.



*Geastrum pectinatum* : Baked Earth  
Photo: Mark Joy 8.11.2017 Shirburn Hill

## Foray roundup news from our Recorder

We managed 9 forays in 2017 (two had to be cancelled due to weather or lack of fungi) and one joint foray with Bucks Fungus Group (Keepers Wood, not reported here) and one joint with Thames Valley Fungus Group. As you will read, it was the year of the earthstars.

Spring saw us going to Watlington hill at the end of April. Here the chalk grassland produced little as we were experiencing yet another dry warm spring, however a range of small fungi were in the woodland areas, all on dead beech wood. The most interesting find by Richard was an unusual species of encrusting fungus in the genus *Ceriporia* possibly a rarely recorded species but as yet unconfirmed by Kew experts.

A dry and very warm early summer up to mid-July was followed by rainy conditions in late July and August. As is usual when this happens, boletes respond quickly; species were up and finished fruiting before the start of our planned forays in September. September turned dry again.

Our first September foray to Wytham Wood (focused on the old beech wood area at the top of the hill) suffered from a sparsity of fungi despite the August rain but diligent searching by a good number of people produced a reasonable list which enabled useful learning experiences for beginners joining us. It was nice to see two *Hygrophorus* sp. mycorrhizal with beech and plus the solitary amanita *Amanita echinocephala*. Both collared earthstar and rosy earthstar were a foretaste of the 'good earthstar year' which enabled so many records in subsequent forays.

Our second visit the private grounds of Caversfield Park produced a small range of fungi, the most interesting to me from under yew was the strongly pear-scented fibrecap *Inocybe pyriodora*. Just outside of the park in the grounds of a small church I was pleased to see for the first time a specimen of the spectacularly blackening blushing dapperling toadstool *Leucoagaricus badhamii*.

At the end of September the foray to Pinsley Wood suffered from dry conditions and produced therefore a small list of some soil and litter mycorrhizal species but most were on dead wood. Continuing the earthstar theme, collared earthstar *Geastrum triplex* was recorded here for the first time.

The 8<sup>th</sup> October saw us running our event at Harcourt Arboretum for National Fungus Day, a joint foray with the

Ashmolean Natural History Society of Oxfordshire. I was present but too unwell with a cough to talk, so I'm very grateful to Richard Fortey for talking to the visitors about fungi and to he and Caroline Jackson-Houlston for taking groups round the site to show the species present. This was aimed at an education/public engagement and as before, a table set up with a good range of labelled fungi supplied by group members and literature and free grow your own fungi kits supplied by the BMS, attracted much interest. There were lots of visitors, including children. In all, upwards of about 50 people stopped to look at our display and join the Foray. The final list of species found totalled 48, lower than we might expect because of previous dry conditions.

Later in October we visited Aston Rowant NNR beechwoods and chalk grassland for a very productive session, but again not as good as in wetter years. A good total of 80 species were found when all records from the beech woodlands were combined with the short ancient chalk grassland with many anthills. One of the most impressive finds for me was the extremely large ring of the scaly re-staining uncommon mushroom *Agaricus benesii* in short turf on top of Beacon Hill. A big group of collared earthstars (a 'constellation'?) was found at this site later in the year.

Into November, Shirburn Hill on the Chilterns was a joint foray with Thames Valley Fungus Group and it was as spectacular as last year in a foray led by Richard Fortey. Firstly the grassland had 7 species of waxcaps, 3 species of earth tongues a rare earth cup *Geopora arenicola* as well as an uncommon little toadstool identified by Richard Fortey as *Hydropus floccipes*. Then there was the box-wood. This time 6 species of earthstars species were identified growing in the litter with the extra help of visitor Mark Joy (collared, weather, crowned, striated, sessile, beaked) two of which are rare. See the full discussion by Richard. On dead yew bark in the box wood the orange-pink encrusting fungus *Gloeoporus taxicola* was a new one for me. These Chiltern ancient grasslands and woodlands really are a hot spot for fungi.



*Hydropus floccipes* from Shirburn hill by RF

The foray year ended at Sherwood lodge woodland garden adjacent to Bagley wood where 46 species of fungi were found. Nothing rare, but I certainly wish my garden would support so many fungi! It was sad to see that the one hundred and fifty year-old Turkey Oak (*Quercus cirris*),

with the spectacular large uncommon lacquered bracket fungus *Ganoderma resinaceum*, had been felled for health and safety reasons.



The cut stump showed how a large area of the trunk diameter had been rotted, weakening it and making the whole tree unstable. The brackets that remained on the stump were interesting as they clearly showed a distinctive feature of this species which is that the top surface of the bracket is soft, one can clearly dent it with a finger.



Photos: Molly Dewey

A general personal observation is that Ash die back (Chalara) seems to be progressing fast in the area. I've seen it in the Lye Valley and it is confirmed for Wytham Woods. One of my notable personal records is finding what looks a Devil's bolete *Boletus satanus* on a grassy road verge under a birch tree in Oxford in October. This has yet to be verified, but it was spectacular, whatever it turns out to be.



*Boletus satanus* under Birch Tree, Headington, October, 2017 Photo: Judy Webb

Judy Webb

## High Park Blenheim

High Park, the private section of Blenheim Park, which was never landscaped, is apparently the best site for ancient oaks in all of England. The area is interesting because, except for a public right of way, (a narrow road, running through the middle of the area) members of the public have never been allowed access. FSO members have carried out fungal

Forays in other parts of the Blenheim Estate but permission to survey the High Park section has always been denied. However, Aljos Farjon, from Kew, has now gained special permission from the Blenheim Estate managers to do a four-year in-depth biodiversity survey of the area. From the start, Aljos was keen to involve small groups of specialists in various fields and in so doing, invited members of the FSO to help with a Fungal Survey. The Blenheim Estate limits the number of participants per visit to 4 or 5 and, in the beginning, because of concern for young released Pheasants, visits were restricted to the spring, the last being June 14<sup>th</sup>. This rule was later relaxed and we were able to continue to visit through the autumn.



First visit April 7, 2017 to High Park.-all impressed with the girth of the ancient oaks. Photo: Jackie Fortey. Left to right, Keith Cohen, John Killick, Molly Dewey, Aljos Farjon, and Richard Fortey,

In all, we managed, as a group, to visit five times: April 7, June 14<sup>th</sup>, September 28<sup>th</sup>, November 1<sup>st</sup> and November 29<sup>th</sup>. Participants included Richard Fortey, Caroline Jackson-Houlston, Wendy MacEachrane, Keith Cohen, John Killick, Molly Dewey and Penny Cullington from the Bucks group. Martyn Ainsworth, from Kew, joined us for most of our visits as did Aljos and, Alec Henrici joined us on the last visit which, a cold day at the end of November, see photo.



Photo by Molly Dewey. Left to right : Alec Henrici, Aljos Farjon, Martyn Ainsworth.

Due to an unusually dry Spring, relatively few fruiting bodies were found in April and June but we were rewarded on our first visit with the find of a Scarlet Elf Cup *Sarcoscypha austriaca* in one damp patch by Willows.

The total list by the end of the year stood at 237 species + varieties among which were several notable and/or rare fungi. A probable new record for Oxfordshire, *Ceriporia metamorphosa*, was found on dead oak wood by Martyn Ainsworth on June 14<sup>th</sup>. Another new record for the county,

the Webcap (*Cortinarius azureovelatus*), was found by Wendy on 28 September, photographed, and confirmed by DNA sequencing at RBG Kew. A third possible new record for the county is *Jaapia ochroleuca*. Of 16 species of oak saprotroph indicators for SSSI selection guidelines, listed by Martyn for the ‘most important sites for ancient oaks in England’ (Ainsworth in Farjon, 2017), 10 have now been found in High Park, seven more than the three listed in that book prior to our surveys of 2017.

Molly Dewey

## Fungi on your Bus Route

Increasingly, the British climate appears to be developing two autumns as well as two springs. If you are experiencing toadstool-deprivation because the main season is still six weeks away, Oxford itself can provide a quick and easily accessible fix in August. Our Recorder gives details of one good find in her piece in this Newsletter and other boletes occurred in great numbers in Headington. Sites containing relict park grassland are particularly productive. These include verges or central reservation on Old Road, London Road and Morrell Avenue. All of them have mature trees, including oaks and pines on Old Road and lime trees on London Road and Morrell Avenue. Although lime species do not spring to mind as the best site for mycorrhizal fungi, the ones near the English Faculty Library off St Cross Road annually produced *Boletus luridus* (Lurid Bolete; see below) until they were felled a few years ago. However, these chunky fungi survive and fruit regularly in Old Road, where one can also find The Miller (*Clitopilus prunulus*) and various smaller species such as *Hebeloma*. Old Road, with its oak, hosts *Boletus radicans* (Rooting Bolete) and *Xerocomcomellus porosporus*, the Sepia Bolete, both with fawnish caps that crack open. London Road, near Oxford Brookes University, also has boletes, and *Amanita echinocephala* (Solitary Amanita). The downside of being a verge fungus, though, is that the Council mowers will indiscriminately mow off your fruitbodies, even if they don’t fall victim to the peculiar British propensity for kicking them to death. View them while you may—but these were all seen last August and seem to respond reliably to late summer rain.



C J-H

## Joint meeting with Bucks Fungus Group

This meeting was held in the supposedly main part of what turned out to be the worst season I’ve known in thirty years. The site was Monkton Wood, near Princes Risborough, an estate woodland being split up into small parcels for individual ownership. CJH bought Keepers Wood, semi-natural beech woodland, in 2016. In that year it and its many neighbours produced an abundance of fungi (e.g. 30 Dog’s Stinkhorn in one square metre), some of them quite unusual, so I proposed this joint meeting. I opened the prospect of a survey to the other owners, and a couple of them said yes, which was manageable. However, when I issued the reminder another twelve said they were interested, which was not feasible on one day, so I did the other 13 on later visits, and found almost nothing—an average of about 6 species per site.

However, on October 28<sup>th</sup> there were eyes and expertise in abundance from the FSO and the BFG, led by Penny Cullington. We looked at Keepers Wood and Hermits Wood, the only other one where the owner said he’d like to be there on the day for the survey. The species totals for fungi were respectively 29 and 33. The full results are on the Bucks website, as the wood is in Buckinghamshire, but there were a few species of interest, with some overlap between sites but not an exact repetition, as there are more conifers in Hermits. Hermits produced *Coprinellus xanthothrix*. Keepers hosted two rare species sparingly recorded for Buckinghamshire by Penny, *Galerina nana* (69 records in UK), and *Psathyrella olympiana* (only 24 records in UK). Many thanks to Penny and all her team for their time and skill.

Caroline Jackson-Houlston

### Editor’s Note

Many thanks to Peter Davis for maintaining our Website and to Rod and Wendy McEachrane for help in printing this Newsletter and Foray Programme.

I have been looking up records of sites that we have visited since the start of FSO in 1987. We have visited a total of 100 different sites, had 276 Forays and averaged 8.9 Forays per year. The sites most frequently visited have been the University Arboretum at Nuneham Courtney (12 times), North Leigh Common and Pinsley Wood (each 11 times) and Wytham Wood (9 times). It will be interesting to look through our data. It is worth noting the National Fungal Data Base at Kew has a new and easier system (FDRBI-2) for entry of records and we hope that in time our backlog of records can be also be entered en bloc.

Molly Dewey