

Fungus Survey of Oxfordshire Newsletter 2017



Lower surface of *Plicatura crispa* Harpsden Wood 2016

Notes from our President

Prof. Richard Fortey FRS



Rare finds from the county

The FSO has been recording fungal finds for decades, and our species lists mostly comprise ‘old friends’ – fungi that crop up on nearly every foray. I wonder if there has ever been a woodland foray that fails to record *Russula nigricans* and *Hypholoma fasciculare*, or a late autumn one without *Clitocybe nebularis*? Items from a much longer list are recorded on one or two occasions almost every year, or are well known in particular habitats. There is hardly ever a foray in the Chiltern Hills that fails to find the orange bleeding *Mycena croca* on fallen twigs, or the stately magpie, *Coprinus picaceus*, among beech litter. Yet *M. crocata* is a rarity elsewhere: for example, it is known from a single find in the New Forest. So when we describe species as ‘rare’ in our collections, we have to bear in mind that it may be common elsewhere in Britain. Rarity is often a relative term.

However, there are some species that are rare by any standards. A good indication of rarity is provided by the list given in the *Fungus Record Database for Britain and Ireland* (FRDBI), or, for basidiomycetes, Henrici and Legon’s comprehensive account of mushrooms and their allies (CBIB). Very few records nationally are a good indication that we have a ‘find’. This is particularly the case if the fungus in question is large and conspicuous. Such a species is unlikely to have escaped the attention of generations of forayers. In 2016 several genuinely unusual species turned up in Oxfordshire that are worth describing in a little more detail than a simple entry on the year’s database.

The spring foray this year was on 16 April in the south of the county, at Shirburn Hill, near Watlington. This locality is on the steep scarp slope of the chalk as it looks down on Aylesbury Plain to the north. Nearby Watlington Hill is a much-visited site, famous for waxcaps and species associated closely with rockrose (*Helianthemum*). At Shirburn Hill, however, an ancient box grove hugs the hillside – there is no box on Watlington Hill. My wife had become involved with the Chiltern Box Woodland Project (organised by the Chiltern Conservation Board) a few years ago, and discovered the Shirburn box grove as one of a very few places where large spreads of box trees were probably truly native. In other sites with plenty of box like country estates the tree was usually planted as game cover in the eighteenth century. It seemed like an interesting site for a foray, and so it proved to be.

Getting inside the box forest was quite a challenge. Box grows so densely that the branches go to the ground at the edge of the grove, where natural layering occurs. Once we pushed in, the interior was quite spooky. Box lets in virtually no light so that almost nothing grows on the wood floor. Trunks are spaced out within so it is possible to walk through in search of fungi. Most dead box twigs carry a conspicuous pink resupinate *Peniophora proxima* that is confined to this host. It was not long before the equally restricted box rust (*Puccinia buxi*) was also found. However, the discovery by Julia Huggins of some small earthstars in good condition nestling on the wood floor was more surprising. Although several names were suggested, none seemed to fit exactly so several specimens were collected for further work. Judy Webb first noticed that as the specimens dried out the ‘arms’ on the earthstar curled back over the spore sac. It was one of the “weather earthstars”. I tried leaving my specimen to dry out and the same thing happened. Moistened, and they opened out again. The handbook on British puffballs and earthstars was consulted, and after some email jostling Judy and I settled on *Gaeastrum corollinum*. This rare earthstar is red listed and a BAP species - not to mention a first for the county – and the last collection on FRDBI was ten years ago. It was a real find. Now it is safely curated in the national collections in Kew, where our identification was duly confirmed.



Geastrum corollinum- open *G. corollinum* -closed

Another specimen was collected outside the wood: on a sample of sheep droppings. I had been raising fungi from dung as part of the research for my book *The Wood for the Trees* (published in May), so I knew the techniques involved. The fungi all require a microscope for their determination, and some of the spores of the ascomycetes are spectacular. In a week or so tiny pale waxy fruitbodies had appeared. One of them had purple ascospores that could be seen even under a binocular microscope; under high magnification they show a strong ornamentation. I have a big book on dung fungi by F. Doveri *Fungi Fimicoli Italici* to consult, and I got a good match with *Ascobolus hawaiiensis* – which as its name implies, was first described from Hawaii! This was also an Oxon first – but probably only because nobody looked for it, as there are records elsewhere where people have – so it is not really a ‘rarity’. But a small turbinate discomycete on the same piece of dung had very different, large spores with an appendage at each end. The best I could do was *Theothisus cinereus*, and there were so few records of this species on FRDBI that I sent it to Paul Cannon at Kew, probably the only time I will get a message back that says “thank you for the poo.” Paul agreed with me at first, but when he looked more critically he found the Shirburn species was a better match for *Theothisus holmskjoldii*. And might have been a ‘first’ for Britain had he not found one earlier collection in Kew that had also been identified as *T. cinereus*. I think we might add it as a rarity without blushing.

The third case history is from the other end of the year, in November, in Harpsden Wood near Henley. *Plicatura crispa* grew in considerable numbers as pretty stalked brackets on a fallen branch of wild cherry, *Prunus avium*. With its wrinkled hymenium and yellow tints this was identifiable at once, and again an Oxfordshire first. Cherry may even be a new substrate for it. However, it *does* have British records on FRDBI, but all from the north of England and Scotland (with apparently one persistent occurrence near Winchester). Even the efficient New Forest surveyors had not reported it. However, when I mentioned this discovery at a mycological meeting I was told that this particular species had been expanding its range. It is a possibility that it will get less rare in the next ten years or so. So although I can add it to this story of Oxfordshire rarities in 2016 it is possible our successors in 2036 (and let us hope there are some) will wonder what the fuss was all about.

Foray roundup news 2016

Judy Webb

We managed 11 forays in 2016. Shirburn Hill on the Chilterns in April led by Richard Fortey proved a

spectacular start to the year’s recording with not only the very rare Weather Earthstar *Geastrum corollinum* found under the box wood, but 10 species from sheep and rabbit dung, which included one rare one. The Weather Earthstar is so called because in dry conditions the ‘rays’ curl in over the central spore sac like a closed fist, in moist conditions these rays absorb moisture from the air and spread out and recurve to give the typical star-like or flower-like appearance. The 10 dung fungi mostly resulted from dung cultured at home after the foray by Richard. The rarest of these, checked by experts at Kew, turned out to be *Theothisus holmskjoldii* with only 2 GB records in the FRDBI. The specimens of Weather Earthstar and a mount of this dung species on a slide were sent to Kew for accession into the fungarium.

June was unusually cold and wet, but this was followed by a hot and dry rest of the summer and a dry autumn. Conditions were still rather dry and warm at Worton Wood in September, where the tufa-forming springs in this wet deciduous wood ensured conditions moist enough for a few species but almost nothing was found in the drier areas. This site was however remarkable for the large number (10) of Death Caps *Amanita phalloides* seen together in a group near oak trees very close to the road.

October began with our foray to Ashdown Park (National Trust). Very dry conditions limited the range found but we were impressed by the large *Ganoderma* and hoof fungus *Fomes fomentarius* brackets and massive clumps of giant polypore *Meripilus giganteus* on some very old beech trees. The attractive cups of the bird’s nest fungus *Cyathus striatus* were spotted on a dead branch. Perhaps the most uncommon thing found was the bearded milk cap *Lactarius mairei*, mycorrhizal with oak trees very fluffy, looking for all the world like a person having a ‘bad hair day’.

National Fungus Day fell on the 9th of October and we were once again at Harcourt Arboretum for a joint foray with the Ashmolean Natural History Society of Oxfordshire. This was aimed at education/public engagement and as before, a table set up with a good range of labelled fungi supplied by group members and literature supplied by the BMS attracted much interest. The foray round the grounds of the Arboretum suffered from the dry conditions and we had to have the expert guidance of an Arboretum employee and do a lot of diligent searching. There were lots of visitors, including children.



The foray led by Richard Fortey to Lambridge Woods (beechwoods) found lots of species even near the car park (see Caroline’s article for the painting of the little webcap *Cortinarius flexipes* var *flexipes* seen here) but the highlights were walking farther into the wood to the portions now owned by Richard. Many Beech mycorrhizal species were found including the edible cep *Boletus edulis* and no less

than 12 species of *Russula*. I was particularly pleased to see and feel a new one for me, the red-pink rosy brittle gill, *Russula lepida/rosea* which Richard explained has a distinctive very firm hard texture, like raw apple.

It was nice to hear of Richard's 'new for county' record of the small gilled bracket fungus *Plicatura crispa* from nearby Harpsden Wood.

At the end of October, the oak-dominated garden of Nuthatch, adjacent to Bagley wood, should have been rich in oak-specific mycorrhizal species, but the exceptionally dry conditions with cracked soil meant lots of searching was necessary for very few caps. The most interesting to me was the little yellow peppery bolete *Chalciporus piperatus*.

The Wroxton Park survey was notable for the uncommon white bracket fungus on dead wood known as *Spongipellis spumeus*. Foray to a new site Caversfield was memorable for the colourful troop of bright blue-green verdigris agarics, *Stropharia aeruginosa* on wood chip.

Dry conditions continued and plagued our foray to the rich chalk grassland site of Chalkhills in the Chilterns. Here the grassland is normally rich in waxcaps, but hardly any fungal species of any type were found in this habitat, most of our list came from the damper conditions in woodland and especially on dead wood. Lovely views and autumn colour though!

Into November, Whitecross Green wood was our last foray of the year. This is always a nice site to visit, but again it was very hard work to find any fungi. There were none on the grassy rides and woodland edges produced all records. For me the two most interesting species were the Herald of the winter *Hygrophorus hypothejus* and the tiny Conifercone cap *Baeospora myosura*.

2016 will not go down in the record books as anything but a poor year for fungi on the whole, it is surprising we achieved the lists that are now on the website – do take a look.



Judy with magnificent specimen of *Meripulus giganteus* at base of Ash Tree -Ashdown Woods Foray October 2nd 2016 Photo: Molly Dewey

Notes from Caroline Jackson-Houston

1. Odd Spot—recent trip to Chile

Below is an inkcap growing out of a mat of *Azorella* or *Laretia* in volcanic scree way above the tree-line in Chile (over 10,000 feet). Winter temperatures go down to about –

20°C, there may be no rain for months in the year, and there is always summer baking. Only mycorrhizal associations would seem to explain the ability of plants to grow in such hostile conditions. An article by M. Angélica Casanova-Katny suggests that mat-forming perennials such as *Azorella* benefit host species of other plants growing within their cushions, which are associated with high levels of fungal presence—in spite of the challenging conditions (Casanova-Katny, M.A., *et al*, *Mycorrhiza* (2011) 21: 613. doi:10.1007/s00572-011-0367



2. Time for more active precautionary conservation?

Though a patchy season overall, 2016 was good for mycorrhizal woodland fungi, especially *Russula* and *Cortinarius*. *C. anomalus* cropped up in most of the old Chiltern beechwoods I visited, both in a typical slender form and also in a more robust variant (identified for me at a Buckinghamshire Open Day). This seems to occur at Harpsden, the woods north of the Henley road at Nettlebed, Lackmore Woods, on our Lambridge visit (joint with Thames Valley on October 15th) to our President's wood, and in my own wood near Princes Risborough. Near the car park at Lambridge we also found a perfect fresh colony of the delightful *Cortinarius flexipes* var. *flexipes*, just emerging from the moss and looking like purple pixie hats. Going back four days later to complete their portrait *in situ*, they were all gone, so I had to nurse my two specimens very carefully to persuade them to mature:



Cortinarius flexipes var. *flexipes*- C J-H

Four days of reasonable weather is a rather short time for all of the profusely fruiting patch to mature and rot away without trace, leading to speculation about whether they had been picked. Indiscriminate gathering is an increasing problem apparent in fungal hot-spots across the country. It is rife in the area of the Woodland Trust reserve at Harpsden, which has completely open access and no conservation advice signs. Recent experience there suggests at least two sorts of gatherer other than scientific mycologists: the uninformed, who pick everything in the hope of locating a

recognisable edible species, and the knowledgeable, often from central Europe or Russia, who regard a very wide range of fungi as edible. Either of these kinds of visitor may be collecting commercially on behalf of restaurants. On the request of Barbara Young, the Trust's new Chair, CJH has prepared a synoptic list of macrofungi recorded at Harpsden, with help from Richard Fortey, and members of the Thames Valley Fungus group, as well as FSO records. Harpsden has a fungal flora of 476 species, including some that are very scarce, or spectacular, or both. Indeed, one road bend is nicknamed 'Cortinarius corner'. This information is intended to support Baroness Young's project of encouraging the Trust to adopt a higher educational profile about woodland conservation generally, and about fungi specifically.

The problem of inappropriate collecting has also impinged on CJH, who has just bought a small wood in Buckinghamshire, where we hope to hold a joint meeting with the Bucks group in 2017. This has no road frontage and no public rights of way to it or across it, but it has been raided at least twice by someone who cut off large numbers of fungi at ground level and left them turned over on stumps, and took almost all the available Chanterelles. To add insult to injury, someone trod on a fine mature specimen of *Russula virescens*, a beautiful green and white Brittlegill, which CJH had never seen before. The picture will therefore have to wait till a future issue.

There is insufficient evidence about what effect regular heavy picking has on fungal populations, but a rethink in favour of precautionary moderation (as the BMS is trying to encourage) certainly seems timely, especially since nitrogen deposition from car exhausts is now an endemic threat because of the way it alters the chemical balance of the soil.

3. 'Lost' fungi in Oxfordshire

It's ironic that the BMS has put out a request for records of *Entoloma bloxamii*, the big blue pinkgill long thought to be a star species of Watlington Hill and Aston Rowant. This has a red-data conservation premium on its head, but in Who-Do-You-Think-You-Are?-type scoop, it has recently been shown to have a twin that is identical at the macroscopic level but with different DNA. Ironically, this new species may be rarer, but has no protection. What is more, the two may grow together, generating a conservation dilemma for the mycologist and especially for our Recorder, Judy Webb.



Entoloma bloxamii Watlington Hill, 21.10.2006 C J-H

4. Below is a picture of *Lepiota ignivolvata* from the Harcourt Arboretum. It was picked before it was handed to Judy, so we don't have a context. It's scarce.



Lepiota ignivolvata C J-H Harcourt Arboretum Oct. 2016

Editor's Note

Molly Dewey

Our Website, thanks to Peter Davis, continues to be noticed by members of the public particularly newcomers to Oxfordshire. Please do look at our web site and send me more photos of fungi taken in Oxfordshire- with details of site and date – it helps to make the website more interesting.

We were fortunate in September to have the opportunity to buy, for the group, the Six volumes of Fungi of Switzerland from John Rowland that had belonged to his brother. John was keen that they go to an active field mycology group. I am sure FSO members will make good use of the books. Keith Cohen is presently the custodian.