FUNGI WALK at HODGEMOOR WOOD, September 9th 2017

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This was our first outing of the autumn season and it proved a most successful event with not only a really good number of attendees but also an impressive number of species for this early in the season. We were 19 strong, and it was most encouraging that amongst that number were 7 new members who proved to be great finders and were quickly picking up knowledge as we went round. It was a bright sunny morning and conditions were good if a bit on the dry side.

Hodgemoor is a well recorded site so it was no surprise that of our list of exactly 100 species only a handful were new to the site today, but as always we found an interesting and varied range of species to get us back into the groove of recognising old friends – both fungal and human, puzzling over mysteries and dredging up Latin names after the long break since last autumn. I've often noticed in the past that when other local areas begin fruiting in early autumn Hodgemoor seems reluctant to get going. This year things kicked off in the Chilterns exceptionally early and it appeared that Hodgemoor was no exception: there was plenty to keep us busy and with so many people searching I found I was scribbling away with no time for photos and as often happens we covered only a small part of the route I'd planned.

Above, *Inocybe griseolilacina* (CS) and right, *Cystoderma amianthinum* (PC, taken at this site but in 2010)

The grassland patch near the carpark was soon providing interest: here we found an attractive *Inocybe* (if you like little brown mushrooms!) with lilac tones in the stem and a frilly cap margin: ***Inocybe griseolilacina*** (Lilacleg Fibrecap), one of a very large and challenging genus of very similar LBJs (Little Brown Jobs). Another pretty little species, a grassland specialist, was ***Cystoderma amianthinum*** (Earthy Powdercap) – similar to the genus *Lepiota* (known as Dapperlings) this species sports a pale brown dusty cap, white free gills and a stem with a ring. Everyone always enjoys seeing ***Hygrocybe psittacina*** (Parrot Waxcap) and there were suitable Oohs and Aahs when the first of several specimens was found, displaying its bright green colours and slimy cap and stem.

Left, *Hygrocybe psittacina* (PC, taken at nearby Penn Wood in 2005)

New to the site from this area was a member of the Boletes found by Bill growing in grass under Birch and Beech. I was unsure at the time which species this might be (this group often proves tricky to name with any certainty), but checking it at home the flat brownish-red very cracked cap, large yellowish pores which bruised slightly blue and the

striate stem with yellow flesh inside led me to ***Xerocomus armeniacus*** - no common name and with only 36 national records, the last back in 2008, but all from the south of England and mostly under Oak (which may well have been present here but I failed to register it). The genus name *Xerocomus* is generally accepted as the correct one for this group of rather soft-fleshed Boletes but many books (and also FRDBI – our national fungus database) retain them under *Boletus*. Whichever name is appropriate, this was a nice find but sadly we have no photo of it to share with you. It is only the second time it's been found in the county, the first being nine years ago from Stockgrove Park near the Bedfordshire border.

Above, *Otidea bufonia* (PC, taken here in 2013)

Also in this grassy area Bill and Margaret found a large patch of dark brown cup fungi which I recognised as ***Otidea bufonia*** (Toad's Ear), confirmed later at home by Derek. We watched with interest as the ripe fruitbodies 'smoked' with spores in the breeze. Further on we came across another sizeable fruiting of this species in a patch used in the past for dumping charcoal burning waste - many good species turn up here and you can see the charcoal remnants in my photo taken here previously. There are two main genera of largish cup fungi which initially look pretty similar: *Peziza* and *Otidea*. In the field the difference to look for to tell them apart is the split down one side of the cup, always present in *Otidea* but absent in *Peziza*; with a microscope there are more differences which separate these two genera.

Beech and Oak predominate in this wood and our list includes many common species of fungi which associate specifically with one or other of these tree species, either attached to submerged roots or on live or fallen wood according to species. The two genera *Russula* (Brittlegills) and *Lactarius* (Milkcaps) form a large and important group of mycorrhizal mushrooms known as the Russulales and we saw many examples of both these genera today growing under either Beech or Oak. (Try Googling mycorrhizal for an explanation if you're unsure of its meaning.) Species belonging to both genera are relatively easy to recognise as such because of their unique field characteristics, *Russula* species mostly having brightly coloured caps and pale cream gills which break easily when touched, *Lactarius* mostly having brownish caps with paler gills which exude 'milk' when damaged. Why are they grouped together as the Russulales? The main characteristic they share (apart from both being important mycorrhizal mushrooms) is their spores which (a) when viewed in mass turn black when a drop of iodine is added, and (b) are similarly 'ornamented' with crests, warts or spines. In recent years DNA work has played an important part in furthering our understanding of fungal relationships and though in some cases it has shown traditional groupings of genera incorrect, it has confirmed that the Russulales are a closely linked group and has even added some apparently completed unrelated brackets to this group which do, however, have similar spores.

I digress – apologies! As can be seen from the detailed list for the day, the 20 different species of Russulales we recorded were mostly associating with either Beech or Oak, the exceptions being ***Russula betularum*** (Birch Brittlegill), ***Lactarius tabidus*** (Birch Milkcap), ***L. turpis*** (Ugly Milkcap) and ***L. vietus*** (Grey Milkcap), all of which are host specific to Birch. The remainder we found occur under a mix of different trees though most frequently under Beech or Oak, but

host specific to Beech were ***Russula fellea*** (Geranium Brittlegill), ***R. nobilis*** (Beechwood Sickener, in many books as *R. mairei*), ***Lactarius blennius*** (Beech Milkcap), and to Oak were ***Lactarius quietus*** (Oakbug Milkcap) and ***L. chrysorrheus*** (Yellowdrop Milkcap).

Left, *Russula fellea*, host specific with Beech with Claudi's insert showing the ornamented spores, and below it *Lactarius vietus*, host specific with Birch and showing the copious milk droplets on the gills. (CS)

Following on in this same vein, we found several species of *Tricholoma* – another important mycorrhizal genus. Host specific to Beech were ***Tricholoma ustale*** (Burnt Knight) and ***T. sciodes*** (Beech Knight), also the very smelly ***T. sulphureum*** (Sulphur Knight) which is mostly but not exclusively found under Beech. Host specific to Birch we found ***Tricholoma fulvum*** (Birch Knight) and also from a different mycorrhyzal genus ***Leccinum Scabrum*** (Brown Birch Bolete) and ***L. variicolor*** (Mottled Bolete).

It follows from all this how important and helpful to identification it can be to make a note what trees are present when you find a fungus.

***Hygrophorus penarius*, new to the site today (CS)**

Of particular merit were a couple of special finds, the first of which did not ring a bell with either Derek or me but the pale and sticky cap and general 'jizz' suggested to Claudi that it might be ***Hygrophorus penarius*** (Matt Woodwax). Derek confirmed Claudi's identification at home, making this a new record for the site. A rare species with only 35 British records, it is listed as vulnerable on the Red Data list. In fact about half of those records come from the Chiltern area, made either by BFG or our neighbouring group, the Fungus Survey of Oxfordshire. Congratulations to Claudi for recognising it, and also to new member Anne for collecting it – it was growing between a couple of Beech roots being yet another example of a mycorrhizal species specific to Beech.

Another new member, Stefan, made our second special find which was new to the site and furthermore he creditably recognised the significant features of the small specimen. He handed it to me with the observation that it was just like a Bolete but had gills underneath. It took me a few minutes to get the brain into gear to locate a name but having found this unusual species a while ago at Bradenham Woods I eventually came up with *Phylloporus rhodoxanthus*, a species which is

***Phylloporus pelletieri*, a rare species new to the county (CS)**

exactly what Stefan described: a Bolete with gills instead of pores – a contradiction in terms, you might think, but now proven by molecular studies to be very close to *Xerocomus subtomentosus* (a typical Bolete having pores). DNA testing has also now shown that *Phylloporus rhodoxanthus* is solely an American species, from where it was first described, and that European collections (which differ subtly) are at present known as ***Phylloporus pelletieri*** (Golden Gilled Bolete). Derek comments that UK specimens should be retained and accompanied by careful notes: it is not impossible that the American species will prove to be present here also. We have 122 British records of *P. pelletieri* which is also listed as a BAP species; this particular find goes down as new to the county because my Bradenham collection dates from before the days of our recording database and therefore never made it to FRDBI.

That's enough words from me. Below are more of Claudi's excellent photos from the day – I'm most grateful to him for sharing them with us, and thank you also to all attendees who made this walk so enjoyable, and particularly to Vivienne and John who both later reminded me of species I'd forgotten to make a note of on the day and thus pushed our list up to three figures! If you think I've missed crediting you with collecting any particular species, please let me know: it may be that someone else showed it to me first or it may be that I omitted to write it down! We hope to see you all again soon, and do remember you can bring along any of your finds from elsewhere which Derek and I will be happy to look at before we set out.

Left, *Gymnopus confluens* (Clustered Toughshank) showing its distinctive very crowded gills and powdered stem, and in contrast above, *Pleurotus cornucopiae* (Branching Oyster) showing its rather widely spaced and distinctly decurrent gills with only a short stem. (CS)

Inocybe hirtella **has no common English name but an apt one would be Marzipan Fibrecap. It is a typical LBJ with no really distinctive field characters other than its smell of almonds, marzipan or the old-fashioned child's glue Gripfix! (CS)**

Cortinarius hemitrichus **(Frosty Webcap) one of few members of this enormous genus which with experience is recognisable in the field. It is host specific with Birch and the cap has a pruinose or slightly hairy appearance in the outer half with a distinct umbo (bump) in the centre. (The translation of hemitrichus is half hairy. (CS)**

A large and very slimy example of a *Phallus impudicus* (Stinkhorn) 'egg' cut in half to show the inner developing fungus before it swells and emerges into the somewhat stinking fruitbody sought after by flies. (VD)