FUNGI WALK at RUSHBEDS WOOD ON 24TH AUGUST 2019

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This was our first event of the 2019 Autumn season – arranged at the last minute in the hope of some interesting fruiting as a result of quite recent rain though the day was very warm and sunny. A good turnout – 12 attendees including one brave new member – enjoyed an excellent light-hearted morning and enough fungi to keep us busy. We've not visited the site in late summer / early autumn for quite a few years though we fairly often come here in springtime, so it's no surprise that of our list of 42 species just under half were new to the wood (according to our records), with one new to the county. The underlying clay here tends to keeps things moist for longer than in many of our regular Chiltern sites where the very recent warm conditions had no doubt discouraged any fruiting which had started.

In the car park there was a good collection of fresh ***Scleroderma verrucosum*** (Scaly Earthball) coming up - an encouraging sign early on that things fungal might be moving here. Derek dutifully checked the spores later at home to confirm the determination: this species can be, in the field, extremely similar to the slightly less common *S. areolatum* (Leopard Earthball), though I was fairly confident from the markings of today's collection that this would be the former. See the two inserts below where the difference in markings between the two species appears quite obvious, but this is by no means always the case, believe me.

Left above, today's collection of *Scleroderma verrucosum.* Below left is a close-up of the largest of that collection showing the scaly surface, and below right is a view of *Scleroderma areolatum* for comparison (the photo taken elsewhere). (PC)

Heading off onto the old tramway I soon picked up an *Inocybe* (Fibrecap) which I named from its appearance as the fairly common *I. rimosa* (Split Fibrecap). Wrong! Many of this large and tricky genus can have a cap with splits developing in the outer half, and it was not until checking it at home that I realised quite how wrong I was. This singleton had strongly nodulose spores and these together with other microscopic characters and much time perusing various keys and literature led me to decide that it was *Inocybe salicis*, new to the county and one I've rarely encountered due to its preference for damp humid habitats and association with Willow, Alder (possibly Birch) – conditions not frequently met with in the county. I'd noted the nearby large Oak but have little doubt that there must also have been one of these other tree species lurking nearby. Not the most photogenic example of a fungus, but nevertheless worth including here to show the typical characters of the genus.

Above: macro & micro views of *Inocybe salicis* – new to the county today. (PC)

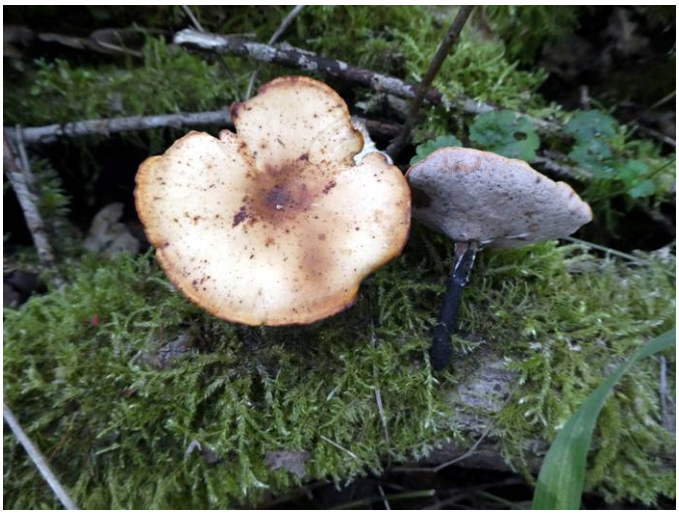
Continuing along this track Bob soon noticed a good collection of a gilled mushroom which had me at first non-plussed and then tantalised because I then recognised it but just couldn't recall the name. Derek, of course came straight out with ***Rhodocybe gemina*** (Tan Pinkgill), an uncommon fungus which seems to fruit well some years but not at all in others. We've recorded it here previously, in 2009 (apparently at this same spot) and at just three other sites in the county. We then found several more collections further along, so this is one to look out for elsewhere as maybe it's 'having a good year'.

Above, the unusual *Rhodocybe gemina* growing beside the tramway path today. (NF)

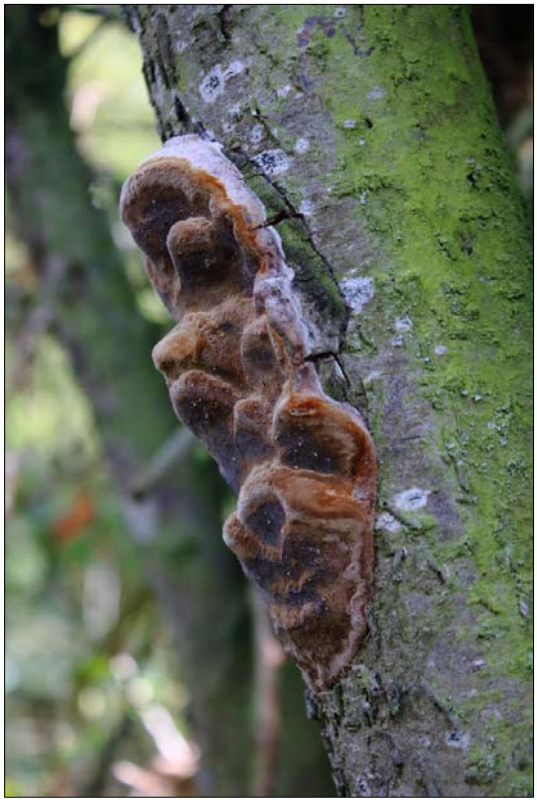
Other things of interest we found in this area: Several people collected softish white lumps of bracket from fallen deciduous branches. I tentatively named these ***Postia tephroleuca*** (Greyling Bracket) and later confirmed this at home. Justin found two small fruitbodies of ***Mycena galopus*** (Milking Bonnet) which was even easier than usual to identify as the white juice in the stem which gives rise to both the Latin and common name of the species was already visible as little droplets – no need to snap it and squeeze as one usually does.

Left, *Mycena galopus* displaying the reason for its name. (JM-D)

A nice clump of fruitbodies of ***Polyporus leptocephalus*** (Blackfoot Polypore) was noticed on a fallen Willow branch, this again displaying well the reason for its common name. Not far away was a real eye-catcher and certainly the brightest organism we saw: ***Fuligo septica* var. *flava*** has no official common name, being a Myxomycete (Slime Mould) and not a fungus at all though closely related. However, Scrambled Eggs comes to mind as being fairly suitable though the shade of yellow is not quite right!



Above left: the Slime mould *Fuligo septica* var. *flava* (PG), and right *Polyporus leptocephalus* (PC)



Before turning the corner at the end of the track and exploring the wide ride which divides this reserve, we first checked that the Blackthorn by the gate here was still sporting the unusual bracket ***Phellinus pomaceus*** (Cushion Bracket) This fungus is host specific to both native and cultivated species of *Prunus* though seems to prefer mature trees which the Blackthorns at Rushbeds provide; they also notably host the eggs of Hairstreak butterflies: both Black and Brown Hairstreaks occur here.

Left, *Phellinus pomaceus* fruiting prolifically on the mature Blackthorn - a regular fungus on our lists for the site. (JW)

Our next challenging fungus was soon presented: The group of fungi originally included in *Boletus* (i.e. having a cap and stem like many other mushrooms but with fine often soft and fleshy pores underneath in place of gills) having now been split into at least 20 different genera as a result of molecular analysis, the job of identification for the amateur mycologist – far from being made any easier – has now become something of a nightmare. Gone are the days when such mushrooms having a soft brownish cap with some reddish splits in the surface, dirty yellowish pores which tend to go blue when pressed, and some red on the stem could be named *Boletus chrysenteron* (Red-cracked Bolete)! Fungi lists abounded with this name until it was realised that there existed many more species for which it could be mistaken Suddenly *B. chrysenteron* was something of a mystery and we became somewhat cautious in naming the many examples of this type of fungus which tend to crop up on our walks.

Bob found one of these mushrooms today, followed shortly by Margaret, under Willow and Oak near the main ride. As we then had a nice collection of fruitbodies which appeared to have some distinctive characters I promised to have a go and identify them as best I could. At the time I was put in mind of a species which grows with Willow and Alder in damp riverside areas, *Xerocomellus ripariellus*, but eliminated this at home due to its reddish cap (actually as Derek suggested at the time!) which our collection lacked. However, what it did have of note was pores that didn't blue when pressed, also yellow cap flesh and stem flesh which hardly blued at all, and this together with the clear red stem with 'fine red punctae' (tiny dots) in the lower half and its occurrence under Oak (though more often under Beech) led me via various descriptions to ***Xerocomellus pruinatus*** (Matt Bolete). This in fact is one Bolete we often record and think we can comfortably recognise in the field especially if young when the dark reddish brown cap is at its most typically pruinose (velvety). Once it matures the cap fades and it is much harder to separate from the several other possibilities, namely *Xerocomellus chrysenteron, cisalpinus, porosporus, bubalinus, engelii, rubellus,* also *Xerocomus subtomentosus, ferrugineus* - all these and more have much the same range of characters. You begin to see the problem?! Microscopic characters can often help when such mycological issues arise, but there's little to separate between the species in this case and as there's often overlap between the macrocharacters given in descriptions even the experienced now tend to back away from committing themselves to species level – now you know why. An exception is *Xerocomellus porosporus* (Sepia Bolete) which we collected several times today: both Derek and I independently checked the spores which unlike all other similar Boletes are 'truncate' (as if shortened by snipping off the top) rather than rounded. Here at least is a definite difference one can see with a microscope and that together with the tendency to develop a sepia to blackish lower stem is enough to secure an identification.

As for my determination of *X. pruinatus* today, I'm happy that it fits well with the majority of descriptions and have learnt to look for the characteristic red lower stem punctae, also that though it can quite often blue a bit in the pores and stem (as does *X. chrysenteron*!) no blueing as in this case apparently indicates *X. pruinatus.* This is a species found commonly under both Beech and Oak

whereas *X. chrysenteron* is less usually under Beech, according to some never under Oak and most common under Pine. I rest my case!

Above, our collection of *Xerocomellus pruinatus* showing pores with hardly any blue staining and a lower stem with fine red 'punctae', both apparently good characters to separate it from other very similar species. (Left PC & right JM-D)

Another genus initially easy enough to recognise but which causes similar problems when identifying to species level is *Russula* (Brittlegill). Rushbeds is not a wood I connect with this genus, maybe because of the lack of our visits in early autumn – their best time. Today we found quite a few, however, though several collections were challenging and time-consuming at home and not all were named, those that were all being new to our lists for the site. One darkish green singleton took no time at home once I rubbed a crystal of iron salts on the stem. Though the majority of species turn pale to dirty salmon where rubbed, a few species have notably different reactions: strong bright rust (on the gills as well), slightly greenish-grey, or dark dirty green – all very useful signs. Amongst the several green-capped species there's only one which sports the strong bright rust reaction with a crystal: ***Russula heterophylla*** (Greasy Green Brittlegill).

Left, *Russula heterophylla*, photoed later at home to show the typical and diagnostic reaction to being rubbed with a crystal of iron salts. (PC)

A collection which took me considerably longer to identify proved to be ***Russula brunneoviolacea*** – no common name since it is not that often recorded though our records show that we've found it in three other Bucks woods including nearby Wotton Estate. It grows mainly with Oak (as it was here), has a deep brownish vinaceous cap from which the skin peels off to beyond halfway (see the RH specimen) and deep cream gills giving quite a dark sporeprint for the genus. If you have a copy of Roger Phillips' book there's a good illustration here (p 102 old version, p 29

Above, the unusual *Russula brunneoviolacea* found under Oak. (PC)

new version).

One more which took me some time to sort out: ***Russula velenovskyi*** (Coral Brittlegill) quite often appears on our lists and once you get familiar with its distinctive cap colour it's not difficult to recognise. We picked up one early on today which I happily named at the time, but much later a collection of the genus having bright red caps, some with cream patches, was found: these puzzled me considerably. Several common red-capped species could quickly be eliminated as this had to be something which grew under Oak; however, it lacked the deep orange gill colour of the similar *R. pseudointegra* - an Oak associate, it also peeled readily which eliminated two other contenders *(R. luteotacta* and *R. persicina*). It was not until I took a sporeprint and studied the spores and cap skin under the microscope that I realised that this was just another collection of *R. velenovskyi* but in a colour form unfamiliar to me. Checking various sources of illustrations and descriptions confirmed that this was quite possible, so it was disappointing not to have another species to add to the list but at least I'd learnt something new.

Above, an example of *Russula velenovsky* having the typical distinctive coral red cap (from Oakley Wood 2014, CVS). Right, today's collection of the same species having bright cherry red caps. (PC)

To finish with, two Inkcaps worthy of mention - both growing on living trees rather than on the ground. The first, the common ***Coprinellus disseminatus*** (Fairy Inkcap), had us all fooled as it was growing '*Mycena*-like' at eye-level on a Hawthorn in a tight cluster. (We found it again later in its more familiar guise in woody debris at the path edge). The second, ***Coprinellus saccharinus*** (closely related to the much more common *C. micaceus* – not seen today) was new to the site though quite often recorded at nearby Wotton Estate.

Left above, *Coprinellus disseminatus* growing atypically on a branch at eye-level; below *Coprinellus saccharinus* also at eye-level on an Oak trunk. (JM-D)

My thanks to all attendees: everyone contributed to a very enjoyable morning. What a promising start to the autumn season. Thanks also to the photographers for generously providing me with the ammunition to illustrate the report. See the separate list for more details of what we found.

Photographers: CVS = Claudi Soler; JM-D = Jackie McKenzie-Dodds; JW = Justin Warhurst; NF = Neil Fletcher; PC = Penny Cullington; PG = Paul Goby.