Foray at Whitecross Green - March 16th, 2014

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It's not often we foray in really sunny warm weather, but today was one of those days. Eight of us explored this long thin strip of mixed woodland, part of the ancient Bernwood Forest and renowned for its flora and butterflies (indeed it was a pleasure to see Brimstone, Peacock and Comma all enjoying the spring sunshine). Primroses were everywhere and even a few chiffchaffs were heard. We were here for the fungi, however ……

***Psathyrella spadiceogrisea* (above) - young specimens still with somewhat pale gills belying the much darker purple brown spore colour when mature. (Photo © CS)**

The site was still damp underfoot despite a dry and warm week before our visit, and just a few more gilled fungi were about compared to on our last two forays. Several specimens of *Psathyrella spadiceogrisea* (Spring brittlestem) were found in the mossy litter, also a singleton specimen with a distinct ring on the stem turned out to be *Pholiotina aporos* (this a small genus closely related to *Conocybe* but having a ring on the stem). Both these species are springtime fruiters, but it was a complete surprise to find an unseasonal singleton *Agaricus* looking very like *A. campestris* (Field mushroom), especially as it was growing within the wood rather than in the field quite nearby. Derek kindly took a look at it for me the next day as I'm not very successful with this tricky genus, and concluded that it was not *A. campestris* but was near to though not definitely *A. bitorquis*, so we've left it off the final list. (By the way, I'm saving the most interesting gilled species we found till last!)

***Pholiotina aporos* (left) – appearing from above to be superficially similar to the *Psathyrella,* but once the rusty gills (not visible here) and the ring on the stem are noticed the genus is in no doubt. There are about 20 species of *Pholiotina*, recently split from *Conocybe* and most having a distinct ring. This one is distinguished by the early season occurrence and also spores which lack a germ pore (thus the name), only clearly visible when the spores are magnified x 1000! (Photo © CS)**

***Phellinus pomaceus* (below) (Photo © CS)**

The majority of what we found was growing on the plentiful fallen wood, both deciduous and pine, and of the several little samples of resupinate corticioids (flat and mostly whitish, a bit like splashes of paint) that Joanna and I took home to work on, a few were identified - the rest were consigned to the bin (they are often not at all easy and can take a long time to key out satisfactorily). Several bracket-types were nameable in the field, and it was not surprising to find *Hymenochaete corrugata* (Glue fungus) on the Hazel as we'd seen in it profusion on our previous foray at Finemere Wood (photo in that report). There were also several particularly striking examples of the host

specific *Phellinus pomaceus* (Cushion bracket) on the sizeable living Blackthorn trunks along the far perimeter of the site.

Another Blackthorn trunk with impressive specimens of *Phellinus pomaceus* at Whitecross Green today. (Photo © CS)

One bracket on a fallen pine branch which puzzled us to start with was a rather atypical example of *Trichaptum abietinum* (Purplepore bracket) spreading almost resupinate with very little sign of forming the usual smallish brackets. We discussed whether this might not be *Chondrostereum purpureum* (Silverleaf fungus), but I felt sure that the Pine substrate virtually eliminated that species which occurs (almost exclusively) on deciduous wood. Also looking closely at Claudi's photo (right) it is possible to see the typical poroid surface of the *Trichaptum* whereas the *Chondrostereum* (like all *Stereum* species) would be smooth underneath.

***Trichaptum abietinum* (right) growing resupinate on a fallen pine branch. Despite the species name implying a species growing on Fir, it occurs commonly on both pine and fir, also on spruce and larch. (Photo © CS)**

We found several species of *Stereum*, two of which redden readily when moistened and then scratched. On pine there was S. *sanguinolentum* (Bleeding conifer crust), and seen right on Hazel there was *S. rugosum* (Bleeding broadleaf crust). One can see here the smooth surface (never poroid) which typifies this genus, and which I mentioned above when discussing *Trichaptum*. Incidentally there's a third reddening *Stereum* species on deciduous wood, *S. gausapatum*. Not always easy to distinguish from *S. rugosum*, it is not as common and occurs exclusively on Oak, also it tends to be darker and when in good condition sports a curly crinkly margin.

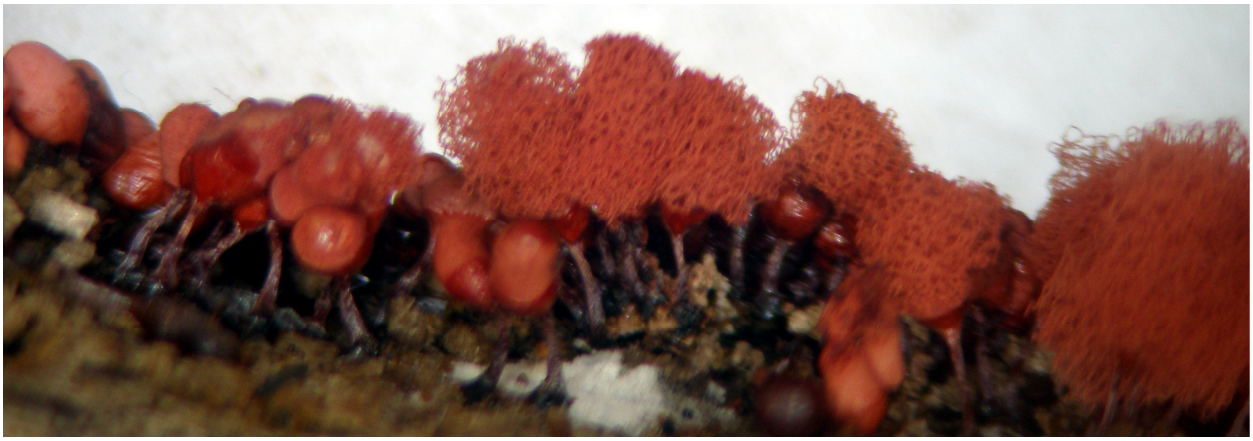
***Stereum rugosum* on Hazel – a very dry specimen but with some lick and bruising with my nail, it quite quickly reddened. (Photo © NS)**

Sarcoscypha austriaca **(above) (Photo © NS)**
Hypoxylon howeanum **(below) (Photo © CS)**

Of the ascomycetes (spore shooters) *Sarcoscypha austriaca* (Scarlet elfcup) was fruiting - though not in profusion - in the far section of the site, an area of still surviving ancient deciduous woodland though now apparently rather overrun by deer. (I know I included a photo of this in the Finemere report, but it wasn't the greatest specimen and I thought Nick's lovely photo well worth showing here.) We also found two species of *Diatrype* (one having the tiny red dots of another asco *Nectria episphaeria* growing on it) and four of *Hypoxylon*, one worth mentioning because it is possibly often overlooked being extremely similar to the much more common species *H. fragiforme* (Beech woodwart). There being no Beech on site I knew this was likely to be *H. howeanum*, a species found on various broadleaved trees, particularly Oak and Hazel (as here), but not known on Beech. A quick check is always needed to make sure the spores are too small for *H. fragiforme* to confirm the identification.

Several myxomycetes (slime moulds) were of interest: two species of *Trichia* (a photo of the common *T. varia* included here), also *Metatrichia floriformis* which we found at Finemere Wood as well (a photo was included in that report), and the pretty *Arcyria denudata* looking like mini pink loofas (a slightly out-of-focus photo of mine from a previous collection included here).

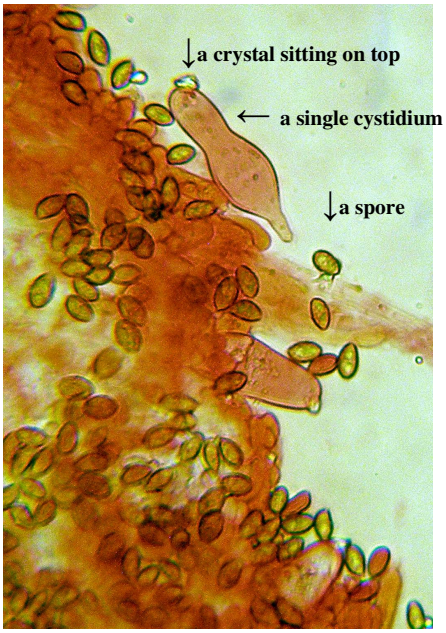
Trichia varia **(right - photo © NS) and** ***Arcyria denudata*** **(below - photo © PC), both showing the immature and mature stages, the latter being essential for identification.**

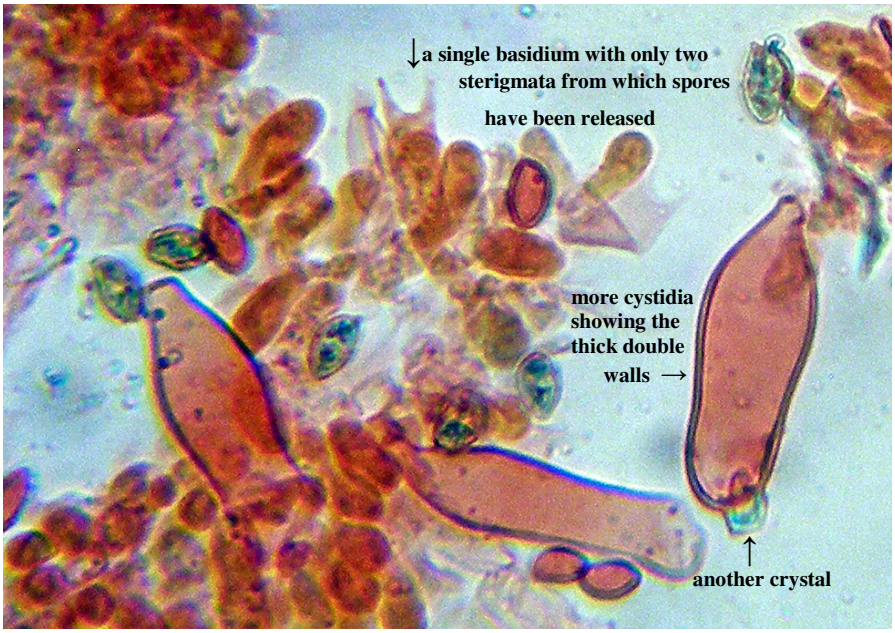


We managed a modest list of 46 species, of which 15 were new to the site, also one which I've left till last as it was quite a rarity. I mentioned earlier a gilled fungi which I found really interesting, this was a tiny LBJ (little brown job) growing on a small piece of damp woody debris and only 5mm across which John Tyler handed me rather apologetically as he suspected it would probably be a challenge to identify. In the event, once I'd had a look at the gill edge with a microscope it was remarkably quick. I felt fairly sure from the general macroscopic appearance that this was a *Galerina* (basically *Mycena*-like but rusty brown with rusty brown gills and spores as well – *Mycena* would have whitish gills and also white spores). However, I found the cystidia (cells on the gill edge) were atypical for *Galerina*, being thick-walled, rather large and very surprisingly having crystals sitting on the top of some of them. This at first made me think I had to be incorrect in my assumption of genus, but thought I'd at least check that the *Galerina* key led me to a dead end before trying elsewhere. To give you an idea of the task, there are roughly about 50 British species of *Galerina*, all of which bar perhaps one need to be identified using microscopic characters and the necessity to wade through a fairly complicated dichotomous key – one that consists of a series of numbered couplets, each couplet offering an alternative set of details to choose from, and thereby leading either to a name or on the next couplet. To my surprise and delight the second couplet contained the encouraging phrase 'Cheilo- and pleurocystidia as metuloids, thick-walled and ± topped with crystals'. Even better, this led to the choice of just two species in the ensuing couplet, split by spore size and ornamentation, also by a chemical reaction which admittedly I didn't try because luckily the spore details were enough to point me to *Galerina nana* with a reference to a full description elsewhere in the key. (The alternative led to a species in a different genus, so it was apparent that *G. nana* is unique in the genus in having this type of cystidia more akin to those found in *Inocybe.*) I was not familiar with the name but crossed my fingers that John's tiny specimen would fit the full description satisfactorily. I found that the size was on the small side and the season given was autumn, but was not unduly concerned because the general description was spot on until I read that the basidia (spore-producing cells on the gill, normally with 4 spores on each) should be mainly 2-spored. My attention having been drawn to the unusual cystidia I'd not checked out the basidia, so went back to my slide preparation and was relieved to find the basidia were indeed 2-spored. Furthermore the list of given various habitats was headed by '… often connected to buried particles of wood' – that, I felt, ticked the final box.

As I was using a key to Nordic species (considered one of the most reliable) the next thing to see was if the species had been recorded in Britain, and I found just 59 records on the national database, of which several in the last 10 years had been made by well respected recorders and dated between March and May. So a rare find and new to the county and one that made my day. (Apologies for the somewhat lengthy account but I thought it might be of interest to members to have a bit more insight into what goes on once we whip your collections from under your noses and take them home to work on. This was a relatively short procedure compared to some!)

Above two views of the tiny *Galerina nana* with cap only 5mm across, and below two microphotos. (photos ©PC)





The left photo was magnified x 400, and the right to show the basidium was magnified x 1000. The colour is artificial, stained in congo red to allow the cell walls to be clearly visible.

My thanks to John for his astute collecting, to Claudi and Nick for their excellent photos, and to Joanna for leading us round so expertly and also for identifying afterwards. Our next foray is to nearby Rushbeds Wood on Sunday April 14th.

See the complete list for details.

Photos: CS = Claudi Soler; NS = Nick Standing; PC = Penny Cullington