

Foray at Rushbeds Wood on March 20th, 2016

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A select group of five of us enjoyed a fine and dry if chilly morning here with a few signs of spring to encourage us: some primroses and some birdsong from local residents – too early for any migrants though it was good to see and hear a raven and a few buzzards. I digress

As expected at this time, agarics were few and far between and it appeared to be too early for *Calocybe gambosa* (St. George's mushroom) which we've often recorded here in April. We found just three agaric species: *Tubaria furfuracea* (Scurfy twiglet), *Flammulina velutipes* (Velvet shank) and 3 specimens of the miniscule *Mycena adscendens* (Frosty bonnet) on the underside of a log.



Several different species of brackets and the like were found, and it's worth including here some details about the three *Phellinus* species identified as none of them are common and in fact only one of them still remains in this genus. *Phellinus pomaceus* (Cushion bracket) is a regular at this site, being host specific to Blackthorn which abounds in some areas. We also found what we guessed at the time was the much more common *Phellinus ferreus* (but now *Fuscoporia ferrea* - Cinnamon porecrust) on a fallen branch, but Derek nobly took it back to check in case it was the very similar but rarer *P. ferruginosus* (but now *Fuscoporia ferruginosa* - Rusty porecrust). These two species are virtually identical in the field – both occurring on dying or fallen deciduous wood; they also pose particular difficulties when one tries to distinguish between them in the lab. Both have sharply pointed thick walled brown setae (hairs) in parts of their trama (tissue) but the rarer *F. ferruginosa* also has these setae at its base where the trama adjoins the wood (though absent here in the commoner species). It is a skilled task to obtain a suitably thin microscopic fragment from the correct part of this tough woody material in

order to ascertain the presence or absence of the setae (something I usually fail to achieve), but as can be seen by Derek's photo here proving that it was indeed the rarer of the two species, he succeeded with excellent results. He also provided me with a photo of the spores.

Above left: *Fuscoporia ferruginosa* on a deciduous stick; below this the dark thick-walled setae amongst the trama taken from the underside of the material (these cells are absent from this part of the fruitbody in the much commoner *F. ferrea*); at the bottom are the spores. (DJS)

The third *Phellinus* species we found was the rarest of the three with only 80 previous UK records and just a couple from VC24, though it was one of several species we listed which were new to the site today. Derek recognised and named it instantly since he had first come across it growing on a Willow tree next to his pond at home in Whitchurch. This was *Phellinus conchatus* (though now *Phellinopsis conchata* – no common name) – a species most often occurring on Willow as it was here but apparently also recorded on Birch, Poplar and Elm.



Phellinopsis conchata, found today but the photo is from material collected at Duck End House in 2003 (DJS)

Now on to the ascomycetes (spore-shooters). Our autumn foray lists are always predominantly made up of basidiomycetes (spore-droppers including mushrooms, toadstools, brackets, jellies etc) but in springtime the situation is reversed. Those of us who tend to overlook the multitude of small ‘ascos’ when the larger and showy ‘basidios’ are in evidence are forced at this time to start taking more interest in dots on sticks and the like – no bad thing because they are equally fascinating and indeed challenging. In fact of our list of around 50 species today the ascos and basidios are more or less equally divided, with three slime moulds completing the picture. None of the basidios were new to the site, but six of the ascos were, with one new to the county, also two of the slime moulds. So as is so often the case, although this is a well recorded site we are still adding to its known fungal diversity – not necessarily because new species are occurring here, but probably because of more diligent searching and improved identification skills of some of us!



This is a reliable site for finding the ever-popular *Sarcoscypha austriaca* (Scarlet elfcup), and though a bit late in the season we were not disappointed though we only found a couple of spots where it was still fruiting.

Sarcoscypha austriaca growing on a fallen rotting Willow stick. (DJS)

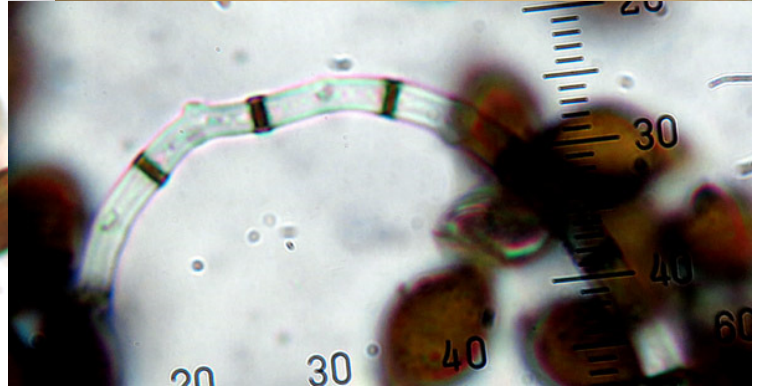
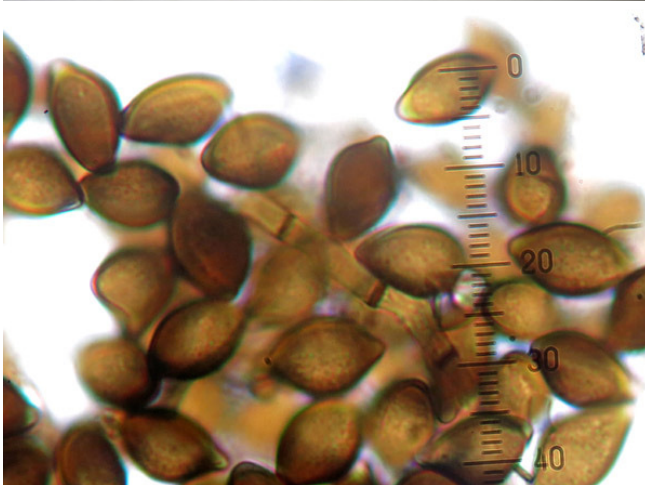
Also in spring we quite often find Morels here but despite looking in their known spots we failed to find any today. Another asco genus I connect with forays here is *Nectria* (Coral spot), and we duly found two species of *Nectria* but neither had been recorded here previously and both were spotted by the sharp-eyed Claudi. He first found the tiny red dots of *N. episphaeria* growing on *Diatrype stigma* on a small stick, and later on handed Derek a small damaged Willow twig with some much paler orange blobs attached. These Derek identified at home as *N. pseudopeziza*, a species with under 70 UK records and only one previous county record, so a nice find.



Nectria pseudopeziza on a damaged Willow twig (DJS)

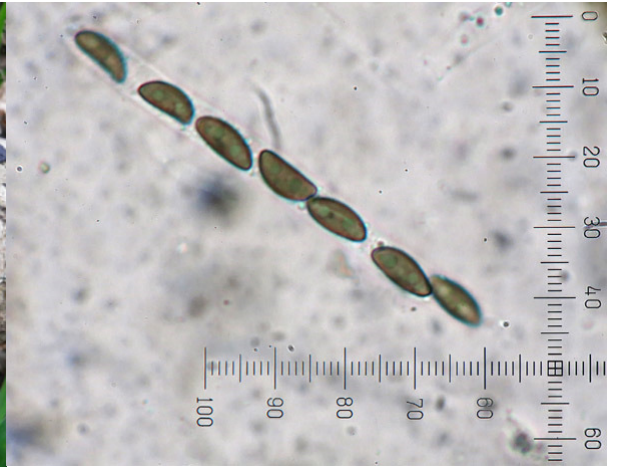


Claudi was on good form today and also handed Derek a dead stem of *Carex pendula* with some small black splodges which looked interesting. Derek worked on these as well and identified them as *Arthrinium sporophleum*, this species with 110 UK records but new to the county.



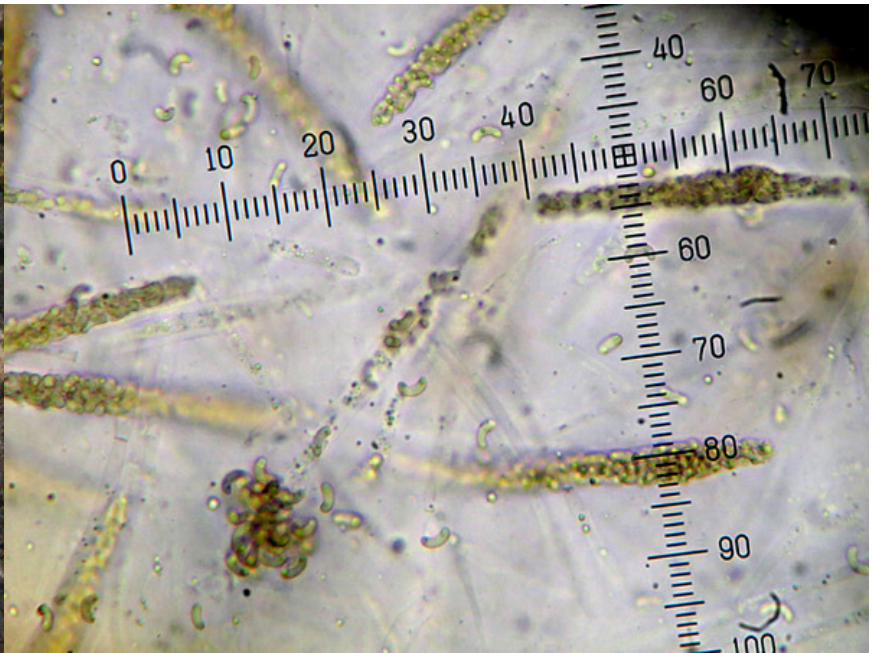
Above left the *Carex pendula* stick with black dots of *Arthrinium sporophleum*, and right a single dot magnified; below are views of the conidia (asexual spores) which in this species appear to be attached to a septate hyphal 'chain', clearly visible in both images. (DJS)

Moving on to slightly bigger dots on wood, Derek showed interest in a *Hypoxylon* species on Hazel which was clearly not *H. fuscum* (Hazel woodwart) and looked very similar to *H. multiforme* (Birch woodwart). In fact he discovered later that this was indeed *H. multiforme* which he learnt can occur on Hazel though is not often recorded on that host. I include his photos here as he has a particularly good example of a set of 8 spores still encapsulated inside the ascus – this a feature of the majority of ascomycetes and the reason why these fungi are so classified.



Hypoxylon multifforme, found today growing on Hazel, and its spores – here seen still inside the ascus before being expelled when mature (DJS)

We found specimens of two *Diatrypella* species, both quite common here – one grows on fallen Oak and the other on fallen Willow though if one cannot identify the wood they need microscopic work to split because they appear identical in the field. This genus is one which breaks the normal rule of having 8 spores per ascus and is described as ‘polysporous’, having many spores in each ascus. The spores are slightly sickle-shaped in *D. favacea* – the Willow species, and strongly sickle-shaped in *D. quercina* – the Oak species.



Diatrypella quercina, left showing fruitbodies both before and after dissection, and above the polysporous asci with spores mostly still inside, but a few strongly sickle-shaped spores have been ejected and can be seen above the no. 10 and 30. (DJS)

A couple more photos to share with you: Claudi sent me a photo of *Chaetosphaerella phaeostroma* (no common name but we tend to refer to it as Black velvet). This is a common species on fallen deciduous wood, and tends to vary in appearance according to its age. Two stages of development can be seen in Claudi’s photo below: the black velvet stage and also below this the more ‘bobbly’ stage. (Apologies for the lack of technical terms, but that’s how I remember it.)

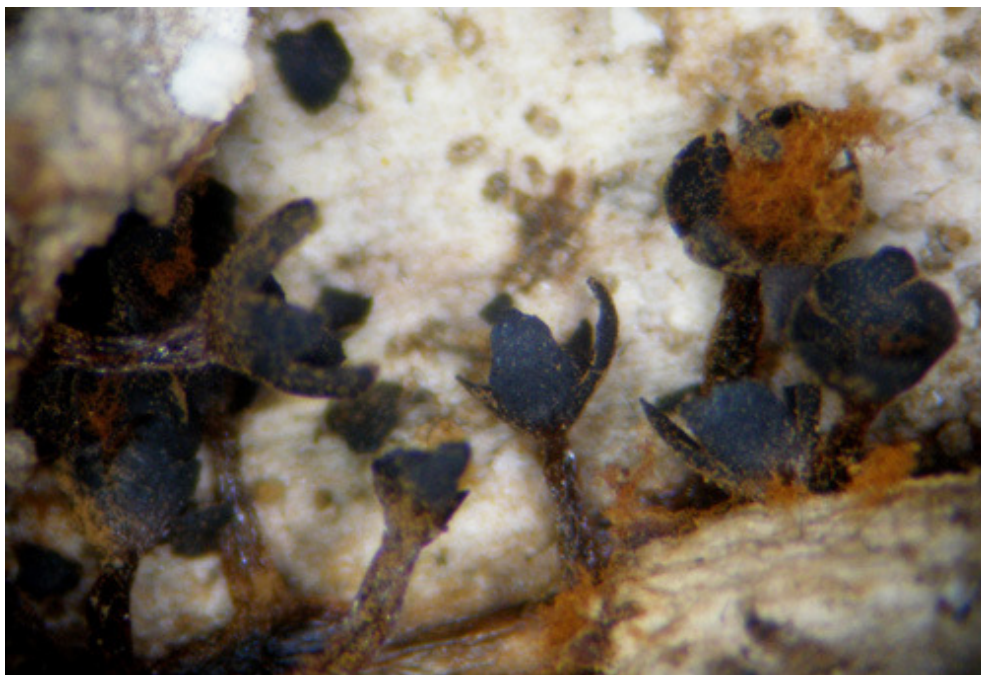


Chaetosphaerella phaeostroma (CS)

To finish with one of the three slime moulds we came across, this was *Metatrachia floriformis*, so named because as it matures each little black head breaks open rather like petals of a flower to reveal the dark orange elators ('fluff') which hold the spores. We actually have two for the price of one here because the orange poroid fungus seen at the base of the slime mould is *Physisporinus sanguinolentus* (Bleeding porecrust)



Metatrachia floriformis not yet mature, but see images below (CS)



Left: *Metatrachia floriformis* showing mature sporangia with the petal-like heads having broken open to reveal the orange fluffy elators which help to disperse the spores. Below is a microscopic view of the amazing long elators wrapped in spiral bands, and also a couple of round spores. (PC)



Many thanks to all attendees for their diligent searching, and also to Derek and Claudi for their excellent photos, without which this report would not have been possible.