Eynsham Park Woodland 29 September 2024

The second foray of the Autumn season brought together a group of 13, enthusiastic to see what today's survey had in store. Prior to setting off, the group met the estate gamekeeper, Richard, who kindly helped facilitate our survey on this private woodland. Richard is very familiar with these woods, and he helped point us in the right direction. As we entered the woods, members began to spot fungi all around us. These included two of the most commonly spotted *Calocera*.



Figure 1. FSO members heading off into the woods to begin the survey. Photo taken by DK.



Figure 2. (A) Calocera cornea (Small Staghorn) (B) Calocera viscoca (Yellow Staghorn)

Photos by CH.



The genus Calocera, more broadly referred to as "Stagshorns," are a jelly-like fungus. While often confused with coral fungi (e.g. Ramaria), Calocera are distinct taxonomically from coral fungi. This is demonstrated through their varying textures. Calocera tend to be softer and jelly-like whereas coral fungi are much tougher in texture. The two Calocera fungi we spotted were Calocera viscosa (Yellow Stagshorn) and Calocera cornea (Small Stagshorn). C. viscosa is much larger than C. cornea, and it often grows in clumps with characteristic branching "antlers" (Figure 2B). Contrastingly, C. cornea does not branch and often appears to be pointy.

While we stood admiring the *Calocera fungi,* Liz brought over the third of many colourful species we would spot on the survey. This species was the beautiful *Tricholomopsis rutilans* (Plums and Custard). Its name is quite fitting as the plum-purple cap contrasts with its custard-yellow gills.



Figure 3. Tricholomopsis rutilans (Plums and Custard). A by JM, B by DK.



Figure 4. Mycena rosea (Rosy Bonnet). Photo by JM.

We also had the opportunity to observe other pink & purple species on this survey, including *Mycena rosea* (Rosy Bonnet). The *Mycena rosea* specimen showed a vibrant pink umbonate cap alongside a radish smell, which is characteristic of this species. However, *Mycena rosea* is often confused with *Mycena pura*. These two species are similar in many ways, with one of the only distinguishing characteristics being that *Mycena rosea* tends to be more rosy-pink shades while pura is more lilac, hence their names. However, these two species are frequent topics of debate among mycologists, with some considering them the same species due to their many shared characteristics. Nevertheless, we make the distinction between *M. rosea* and *M. pura*.

Yet another purple species we spotted was *Laccaria amethystina* (Amethyst Deceiver). This species stands out against the brown woodland, lying in leaf litter below nearby conifers. However, it is easy to miss due to its small size. Forming ectomycorrhizal relationships with trees, this was one of the many ectomycorrhizal fungi found on the survey.



Figure 5. Laccaria amethystina (Amethyst Deceiver). Photos by JM.

Other ectomycorrhizal fungi discovered during our survey included *Lactarius hepaticus* (Liver Milkcap), associated with conifer. It has a distinctive reddishbrown cap that is smooth with occasional grooves. Additionally, Richard pointed out *Paxillus involutus* (Brown Rollrim) to the group. The name of this species is quite fitting, as it has a distinct brown cap with rolled edges. It often associates with conifers and birch; in this case, it's likely it was associated with the former as we were in coniferous woodland.



Figure 6. Lactarius hepaticus (Liver Milkcap).

Photo by JM





Figure 7. Paxillus Involutus (Brown Rollrim). Photos by JM

We also observed the ubiquitous *Hypholoma fasciculare* (Sulphur Tuft), and it truly doesn't feel like a survey if we don't spot this species at least once!



Figure 8. Hypholoma fasciculare (Sulphur Tuft). Photo A by CH, B-C by DK.





We had the opportunity to observe two blackening species at the early stage of their life cycle. The first species was Hygrocybe conica var. nigrescens (Blackening Waxcap). While typically found in grassland, we had the opportunity to observe this waxcap in leaf litter near conifers. At a young age, this colourful mushroom possesses a bright red-orange cap with a yellow-green stipe. However, after a few days, it begins to dry out and becomes black, often lasting in this state for weeks. It is often referred to as "Witch's Hat," for reasons I am sure you can assume. This species is one of the many that have been reclassified taxonomically over the years. Once considered a distinct species from *Hygrocybe conica*, it is now believed to be a blackening variant of Hygrocybe conica. It is thought that there are more variants of this waxcap out there that have not yet been identified.







Figure 10. Russula nigricans (Blackening Brittlegill) Photo by JM.

The second blackening species we observed was *Russula nigricans* (Blackening Brittlegill). Not commonly

found in its young form, we had the opportunity to find this mushroom prior to its characteristic blackening. At a young age, it had brittle, widely spaced gills that often turn orange-brown when handled. This bruising often turns black over a period of approximately 20 minutes. As this species ages, it dries up and appears like a mummified mushroom, persisting in this state for many months.

There was no lack of bonnet mushrooms throughout this survey. While often difficult to identify without microscopy, we observed a few species that have distinct characteristics that allow for identification in the field. The first of these species was *Mycena sanguinulenta* (Bleeding Bonnet). This species exudes a dark red fluid when broken, making it appear like it is bleeding. M. sanguinulenta is occasionally confused with the other bleeding bonnet, Mycena haematopus (Burgundydrop Bonnet). However, *M. saquinulenta* grows mainly under conifers and is much smaller and slender than *M. haematopus*. This can be observed in the photos captured during the survey (Figure 11).



Figure 11. Mycena sanguinulenta (Bleeding Bonnet)

Photos by JM





Figure 12. Mycena vitlis (Snapping Bonnet) Photos by JM

The other distinct *Mycena* found on this survey was *Mycena vitilis* (Snapping Bonnet). While appearing relatively similar to many of the grey-brown bonnet mushrooms, identifying this species requires a sense that is not commonly used for fungi identification: hearing! When broken, *M. vitilis* demonstrates a characteristic snapping sound. While there were a handful of fungi that we were unable to identify, it would be a shame to not include some photos of these species captured beautifully by our photographers.



While *Mycena* are a frequent find on surveys, we found a less-common species belonging to the genus *Helvella* during our survey. Regrettably, the exact species is unknown. Despite it appearing somewhat similar in shape to mushrooms, the species in the *Helvella* genus are distinct from basidiomycetes ("typical" mushrooms), as they are classified in a completely different division of the fungal kingdom called Ascomycota. They do not possess gills and instead have a spore-bearing surface referred to as the "hymenium." The species we discovered also had a deeply grooved, grey stipe with a waxy, firm texture.



Figure 14. Helvella sp. Photo by JM

Despite my previous statement that basidiomycetes frequently represent your "typical" mushrooms, there are many species in this division that diverge from the norm. One of these includes *Scleroderma citrinum* (Common Earthball). While earthballs are frequently confused with puffballs, earthballs contain tears in their flesh that allow them to release their spores (see Figure 15). Contrastingly, puffballs have much smaller openings that allow them to distribute their spores.



Figure 15. Scleroderma citrinum (Common Earthball) Photo by CH

One species that was spotted throughout the survey was *Rhodocollybia butyracea* (Butter Cap). However, this species has vast variations in its cap colour (see figure 16), leading to multiple IDs throughout our survey.



Figure 16. Rhodocollybia butracea (Butter Cap) Photo A by CH, B-C by JM

Another find on this survey was the ubiquitous *Xylaria hypoxylon* (Candlesnuff Fungus). When younger, this species is found with a grey-white powdery coating on its tips. This powder is, in fact, a coating of asexual spores, called "conidia," that gradually disperse over time. Once fully dispersed, the specimen appears fully black, which can be seen in this spookylooking specimen we found at Eynsham Wood.



Figure 17. Xylaria hypoxylon (Candlesnuff Fungus)

Photo A by JM Photo B by DK





Figure 18. Tubaria furfuracea (Scurfy Twiglet) Photo by JM

Near the *Xylaria hypoxylon* was a very young *Tubaria furfuracea* (Scurfy Twiglet). The word "scurfy" often refers to a flaking of the skin, somewhat like dandruff. In this case, it refers to the remnants of the partial veil that cover the outer edge of the cap and stipe. These were quite prominent in the young specimen found on the survey. It is also distinguished from similar species in the *Tubaria* genus due to its white cotton-like mycelium at the base. Also spotted during the survey was Amanita citrina (False Deathcap) in various stages of maturity. A great lesson for beginners, these specimens demonstrated how this species displays distinct differences from the true deathcap (Amanita phalloides). The persisting universal veil could be seen covering parts of the younger specimens and persisting as dirtywhite fragments on the mature, flat cap.



Figure 19. Amanita citrina (False Deathcap) Photos by DK



Another educational find on this survey was *Hydrophoropsis aurantiaca* (False Chanterelle), which is often confused with the true chanterelle, *Cantharellus cibarius*. The most prominent feature that distinguishes these species is that *H. aurantiaca* has true gills with forking, while *C. cibarius* has folds. This can be seen clearly in Figure 20.







Figure 20. Hydrophoropsis aurantiaca (False Chanterelle) Photos by JM

Despite much of this report containing descriptions of larger fungal species, it would be a shame to not highlight some of the smaller, but equally important, species that were spotted during the survey. The first is *Marasmiellus ramealis* (Twig Parachute), found in large quantities over coniferous twigs. This species is a part of the genus *Marasmiellus* as they bear similarities to the genus *Marasmius* (which contains the parachute mushrooms); however, *Marasmiellus* is comprised of much smaller specimens. In Figure 21, you can see how the caps are distinctly convex at a young age, flattening out with maturity.



Figure 21. Marasmiellus ramealis (Twig Parachute) Photo by JM

The final small species that was observed on the survey is *Mycena adscendens* (Frosty Bonnet). This miniature species, typically 0.25 – 0.75 cm in diameter, is often overlooked. However, it is a beautiful specimen that has a cap that appears to be dusted with sugar-like granules.



Figure 22. Mycena adscendens (Frosty Bonnet) Photo by JM

Text by Julia Morneau

Thank you to our photographers: Julia Morneau (JM), Christopher Hopkins (CH), and Denis Kennedy (DK).