

2020 was a very good year for Fungi!!

We collected 713 records of 292 species, and found 18 species new to Ryedale, 2 of them were also new to VC62!

Despite Covid we still managed to visit 22 sites, and though a great many of the records were from our own garden (now numbering 93 species) and places close to home, it also made us look much more carefully and find out about groups like Rusts that I had previously studiously ignored. They are actually intriguing because they have complicated life cycles, producing different kinds of spores at different stages and often needing 2 hosts to complete their life cycle.



In the spring my neighbour found the most amazing bright rusty orange jelly clusters on his Juniper tree. This turned out to be a Rust called *Gymnosporangium sabinae* in what is called its Telial stage. This goes on to produce what is called an Aecidial stage which infects



Pear trees causing commonly known - Pear Rust! I know about that one because I had noticed the bright orange spots on our new pear tree leaves in 2019. Now I know why!

We also found the bright orange Rose Rust - *Phragmidium mucronatum* on the stems and leaves of Dog Roses round our garden pond and in local hedgerows



Then we found Pale Bramble Rust-*Kuehneola uredinis* which causes pale orange dusty slits on bramble stems. Both these rusts seem common but were not on our Ryedale list, presumably simply because no one had ever bothered looking and recording them before. Later we noticed Rusts on Poplar trees leaves near Nunnington. They were called *Melampsora rostrupii* and their alternate host is Dog's Mercury and we found that next stage too, on Oswaldkirk Hag. The next highlight of the year was finding so many Earth Tongues. These are small inconspicuous, black tongue shaped fungi, found in unimproved grassland. We found 3 species in Oswaldkirk: the Glutinous Earth Tongue - *Glutinoglossum glutinosum* and the Deceptive Earthtongue - *Geoglossum fallax* both on our mossy lawn and then at the top of the bank above Oswaldkirk , the Common Earth Tongue -*Geoglossum umbratile* on a mossy bank on the roadside verge .



At the end of November we went to Rosedale and did 3 walks round the old railway track. On the west side the number of Earth Tongues was unbelievable! We identified two different species *Geoglossum cookeanum* and *Trichoglossum hirsutum*. Geoglossums are Ascomycetes, distinguished microscopically by the differences between their spores and cells called Paraphyses found between the spore bearing Asci. I can't show you all the differences here but when we are released from Lockdown I will show you the amazing microscope photos my husband John, has taken.



I can't show you **all** the bright and beautiful fungi we found this year either, but I have to tell you about 3 more.

The first is *Cortinarius sanguineus* - The Blood Red Web Cap. This is a beautiful fungus was added to our list in 2019 when we found one miserable specimen in Birchwood Bilsdale. This year it was found in profusion in a patch of old oak woodland at Hawnby Hazel Heads. The second was *Gloeophyllum abietinum* which was found growing on the picnic table in Oswaldkirk Playground. I think this is not only new to Ryedale but also to VC62 and there are only 20 records in UK. I will need to look again this year to confirm it really IS this species and not the more common *Gloeophyllum sepiarum* - the Conifer Mazegill



but its lamellae are very much thicker. Lastly, we found several shiny, toffee coloured, wavy edged fungi growing out of our raised bed boards at the bottom of the garden. Their gills were an odd blueish brown. As it lay on my kitchen surface the stem started going bluish as well and





this turned out to be potent psychedelic mushroom *Psilocybe cyanescens* - The Blueleg Brownie. An introduced species from N. America this is new to Ryedale and VC62. Many thanks to members who came on the foray to Birchwood or who sent me records and photos this year and I hope to see many of you at our proposed foray to Hazel Heads in October 2021.