North Eastern Fungus Study Group

Newsletter No 98 - Autumn 2020

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NEXT ISSUE: The deadline for articles for the Winter newsletter is 20th February 2021
All contributions will be gratefully received!

Your Chair is alive, well, and thinking of 2021

The Covid 19 plague continues to cause uncertainty looking forward to 2021. Your committee has started to discuss matters of interest to members under the following headings:

Our AGM—This is held at Rainton Meadows [Durham Wildlife Trust H.Q.] in February each year. It is not yet possible to decide when/if/how the AGM will take place in 2021—in part due to the Covid 19 situation—but also that Rainton Meadows does not currently have a room available for booking[this is expected to change back to normal in the early part of 2021]. I have discussed this with Durham Wildlife Trust staff and have provisionally agreed 2 possible dates for our AGM—February 20th and April 10th with the greater likelihood being the latter date. The situation will be monitored.

Procedural Items at the AGM-- These are to approve the report of the Chair, the report of the Treasurer, and to elect the officers for the year. If the AGM cannot be held as normal in 2021 then as a fallback these procedural matters can be handled by email circulation to all members, and proposers/seconders emailing back [something I have successfully achieved recently with another group I chair.] . Another option would be a ZOOM approach but I cannot access this on my old computer so am personally not keen on this.

2021 Foray Programme—Another important matter for the AGM is to confirm this. My proposal is to roll forward into 2021 most of the 2020 forays which were cancelled. I will be in touch with 2020 foray leaders to check if they are content to lead their foray in 2021 and which date is suitable.

There will be a need for some new foray sites to be included in the programme so I encourage all in NEFSG to email me with a foray location you would like to put forward. For members new to

foray leadership practical support from experienced foray leaders can be made available. Regarding the timescale for concluding the 2021 foray programme I hope to achieve this with the committee during February 2021 with inputs as above, with or without a normal AGM.

Finally there is at present silence on the subject of a visit to our colleagues in Germany in 2021.

Clearly we and they are focussed on overcoming the plague that is Covid 19.

I wish you all a pleasant festive season [!], and hope that you have the Christmas you wish for, and that we all emerge into a fit, healthy, active and fungusfull 2021.

Yours fungusfully,

Alan Simkins

[email—alansimkins687@btinternet.com]

Fungal entomology

Have you ever wondered why it is that even when you pick a (button) fungi you find it is already being gobbled up by tiny white maggots with black heads even when you know that the specimen has just emerged overnight. Are there insects in existence that give birth to live young?. After trawling the internet for an identification of an insect that I came across in summer this year I believe that I have found the answer! The insects were feeding on the flowers of Angelica sylvestris and bramble in early August and in close up view a very striking insect and was easily identified as a species of fungus gnat of which apparently there are several.

I settled for Sciara hemerobioides and found that it can search out the underground mycelium of fungi and lay its eggs on or near enough for the young grub to locate their food source and continue their life cycle.
As nearly any agaric or bolete that one puts down to prepare a spore print plays host to these wee grubs it makes one realise what a potentially huge role such a tiny fly and their subterranean larva may play in the complicated web of fungal ecology. Food for thought!

Doug.

An Update on Ash Dieback Research – Daily Telegraph 10.10.2020

Research published in the *Journal of Ecology* offers cause for mild optimism.
From 2012 to 2018, researchers monitored the progress of the disease in an area of about 23 square kilometres in Northern France, around the village of Champenoux near the city of Nancy. The area included a couple of large tracts of woodland, together with areas of agricultural land with scattered hedges and small woods, plus the village itself.

In the large woods, ash was usually present at low density, along with oak and hornbeam, while many of the small woods were pure ash. Ash dieback was first reported in France in 2008, and observed for the first time in the study area in 2010. By 2012, two years later, ash dieback was observed throughout the study area, with three quarters of trees showing symptoms. Clearly, the disease had no trouble spreading among the many ash trees present, which is hardly surprising, given the extremely effective airborne dispersal of its spores. But the researchers were surprised by what happened next. Many trees went on to develop severe symptoms, with large amounts of canopy dieback, but almost all of these badly affected trees were in woodlands, and serious stem cankers in particular were largely confined to woodland trees. Trees out in the open, many of them in hedgerows, generally did not develop serious symptoms.
The question is why not? A small part of the answer was the presence of other ash trees, those close to many other ash trees tended to develop more serious symptoms than those mixed up with other trees. But a much more important factor appears to be climate.
The ash dieback fungus is known to prefer cool, damp conditions, and the researchers temperature measurements showed that canopies of isolated trees were warmer, and probably drier, than those in woodlands. Humidity was also implicated in another thing they found: a small river runs through the study area and, other things being equal, trees nearer the river tended to develop more severe symptoms.

Maybe your're thinking this is all very well, but isn't France a bit warmer than here, so does any of this apply to Britain? True enough, but other research in cooler climates points in the same direction. Studies in Estonia had already shown that woodland-edge trees suffered less severe symptoms than trees in the interior of woodlands. Add all this to the well-known finding that small trees are more badly affected by ash dieback than large ones, and it looks like that big ash tree in your garden, or your local park, is still likely to be around for quite a while yet.

Purple reign - The majestic Jubilee Waxcap (*Gliophorus reginae*)

We were alerted to this lovely specimen by a relative myco-neophyte, Claire Bending, who found it on her farm the North York Moors and thought it could be *Gliophorus reginae*.

This species was originally identified in West Wales and Central England (along with another small orange-brown waxcap) using DNA barcoding [1]. The authors named the species *reginae* meaning "of a queen", for it's royal purple colour and to celebrate the diamond jubilee of Queen Elizabeth II in 2012.

Useful field characters include the viscid purple cap and relatively stout stem with white, pink or yellow colours. *G.reginae* can resemble *G. psittacinus*, but some characters such as pileal colour and radial splitting are more characteristic of *Porpolomopsis (=Hygrocybe) calyptriformis*. It is also described as a relatively late fruiter which can continue producing fruitbodies in January, long after other waxcaps have finished.

If you wish to see this and an abundance of other grassland species, Claire has kindly invited the NEFSG to run a foray on her farm in the future.

References

[1] Ainworth, Canon and Dentinger (2013) MycoKeys 7:45-62
https://www.researchgate.net/publication/262726218_DNA_barcoding_and_morphological_studies_reveal_two_new_species_of_waxcap_mushrooms_Hygrophoraceae_in_Britain

[2] The species has been previously also been found further north, in the Coquet Valley, by Shaun Hackett https://www.northumberlandnationalpark.org.uk/waxcap-discovery/

John Robinson.

***Tubifera ferruginosa*19-10-2020**

Lockwood beck Reservoir. NZ668137 Redcar and Cleveland.

On The 19th of October my wife and I decided to have a mini Foray around the above location.
As we entered the woods situated at the South West side of the Reservoir we came across a well decayed coniferous trunk probably a spruce specie It was on this trunk that we had at least eight clumps of *Tubifera ferruginosa* all in Plasmodium stage, ranging from 10mm to 30 mm in length , 20mm wide the Sporecarp 1cm tall.

The Hypothallus is quite obvious in image two and three just below the sporocarp
This is the first time I have encountered this species of Myxomycetes at this location. The status is common throughout the British Isles.

I returned a day later to find that most of the lumps had started to mature the sporocarp had darkened. The lumps still retaining their structure, but losing the orange colour, replaced by a light chocolate brown.

As we walked back to the car park, I noticed another Myxomycetes I thought at first it was *Mucilago crustacea* , but have not had any luck in a positive id. Any suggestions from the group would be welcomed.

Ref: The Myxomycetes of Britain and Ireland. An Identification Handbook. Bruce Ing

The Complete Encyclopaedia of Mushrooms. Gerritj.Keizer

Paul Forster

Mushrooms: The Art, Design And Future Of Fungi

If the links below don't work (Ctrl click) copy and paste the full link below

Images of Somerset House Mushroom ART Exhibition

bing.com/images

https://www.bing.com/images/search?q=somerset+house+mushroom+art+exhibition&qvbt=somerset+house+mushrooms+art+exhibition&FORM=IGRE

More images of fungi in Art can be found below,

Images of Fungi in Art

bing.com/images

https:\\www.bing.com/images/search?q=fungi+in+art&qpvt=fungi+in+art&FORM=IGRE

For a more esoteric view , try

Very sporish! Why are so many artists mad about mushrooms ...

https://www.theguardian.com/artanddesign/2020/feb/02/very-sporish..

Or;

The beauty and the morbid: fungi as source of inspiration ...

https://fungalbiolbiotech.biomedcentral.com/articles/10.1186/s40694-016-0028-4

Finally , want to buy some Fungi Art try,

Fungi art | Etsy

https://www.etsy.com/uk/market/fungi_art

Mike Cruse

Upland Lichens

The Cumbria Lichen and Bryophyte group produced this interesting write up on Upland Lichens.

https://cumbrialichensbryophytes.org.uk/2020/10/25/upland-lichens/

Christine Whitehead

FUNGI GLOSSARIES

1.A good illustrated one .

Glossary (MushroomExpert.Com)

https://www.mushroomexpert.com/glossary.html

2.Includes a good pictorial section for shapes and some mushroom characteristics . Also access to A-Z of species .

Glossary - University of Saskatchewan

https://www.usask.ca/biology/fungi/glossary.html

3.More technical ,for entries after F click on relevant letter .

Palaeos Fungi: Glossary A-F

palaeos.com/fungi/glossary/glossaryA.html

4.Also contains a species index at the bottom of the page .

California Fungi -- Glossary

www.mykoweb.com/CAF/glossary.html

5.A simpler version ?

Glossary of mycological (fungi) terminology

https://www.first-nature.com/fungi/~glossary.php

6.Improve your fungal vocabulary .

Glossary | CrustFungi.Com

https://crustfungi.com/html/sidebar/glossary.html

Mike Cruse

Guepiniopsis buccina - a real rarity to keep a look-out for!

The Trusts hold just six records on CATE2 of this seemingly rare species, widely scattered from the north of England southwards. It has been far less frequently recorded than *Guepinia helvelloides*.

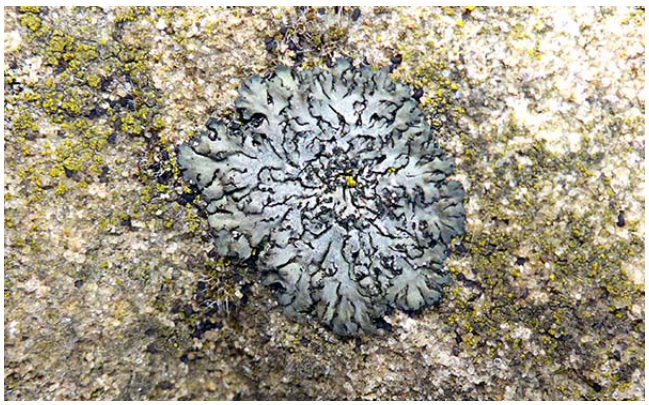
It appears to occur predominantly in beechwoods but it has also been recorded in association with oak. It grows either singly or in clusters on rotted hardwood and bark, in woodlands and parklands, at altitudes up to about 200 m. and it develops its pretty orange-yellow sporophores between August and October.

A member of the Dacrymycetaceae, it was first identified in 1801 and labelled as Peziza buccina, but the name was then revised in 1958. The very small (6-8mm dia.) stalked sporophores are either top-shaped, cup-shaped or flattened at their apices, and the fertile surface lines the upper or inner side of the cup. Although in fresh specimens, the outer surface appears smooth, it can take on a distinctly ridged and more orange appearance when dried.

From its appearance, the species can be readily confused with a small Ascomycete 'cup' fungus, so microscopy is important.

Microscopically, the spores are slightly curved ellipsoid, 12-15 x 5-6 microns, clamp connections are absent and basidia are Y-shaped. The stalk is lined with a palisade of cortical hairs, which are thick-walled with cylindrical or club-shaped tips.

Lichen Lookout



Phaeophyscia orbicularis

A neat little lichen found on nutrient rich trees, wood, basic rocks and concrete. Up to 3cm diameter the thallus can be pale grey to dark brown. When wet it becomes a bright green. Dark grey soridia along the margins of the thallus. Apothecia not often seen. Dark rhizines protrude from beneath the thallus.

Physcia caesia

Similar to Phaeophyscia orbicularis but does not turn green when wetted. Thallus up to 7cm diameter. Bluish grey. Distincive balls of grey soralia on the lobes of the thallus. Commonly found on nutrient rich rocks and fences.

Physcia airpolia

Another neat lichen found on nutrient rich fences, twigs and branches. Thallus can be up to 8cm in diameter. Often has lots of large dark apothecia (3mm) that are sometimes pruinose.

Affiliated to The Fungus Conservation Trust

Affiliated to the British Mycological Society

A Friend of Durham Wildlife Trust