



North Eastern Fungus Study Group

Newsletter No 94 - Autumn 2019

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NEXT ISSUE: The deadline for articles for the Winter newsletter is 24th February 2020
All contributions will be gratefully received!



Membership Fees

Subs are due in January and are £8.00 single and £10 family membership. Please will you try to pay promptly.

To pay subs make a bank transfer to the NEFSG using a reference that refers to your name:

Account: 47876768
Sort code: 30:96:26

For those of you who pay by standing order please note the change of account details.

Or, you can send a cheque, made payable to NEFSG to:

Ron Pattinson (Treasurer)
5 Hartside Crescent,
Cramlington,
Northumberland
NE23 3UY



Forthcoming Events

Saturday 1st February - Microscope Meeting

Sally, with Shiela of the Borders Fungus Group, is offering a microscope meeting at her house near Blyth. It will be day long, collecting fungus from a chosen substrate and return to Sally's house to key out with the group. Those without microscopes are welcome too and can share with others. More details will follow early in the New year.

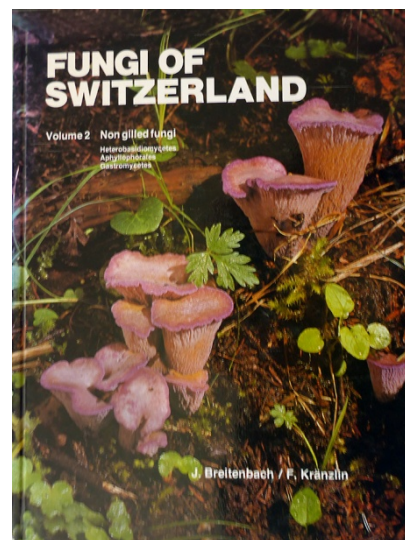
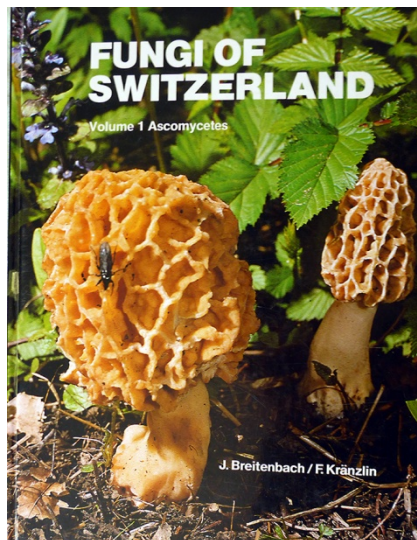
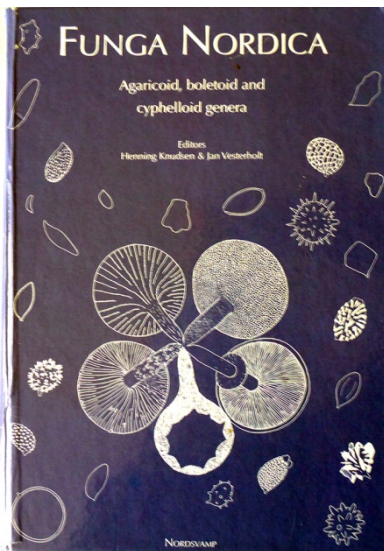
Saturday 15th February 2020 - Annual General Meeting

The AGM will take place at Rainton Meadows Visitor Centre at 11am. Bring lunch. Weather permitting the group will take a short walk around the reserve after lunch.

Alan has three of Tom Kirby's good fungus books and is going to auction them at the AGM.

Funga Nordica - Agaricoid, boletoid and cyphelloid genera.

Fungi of Switzerland. Vol 1 Ascomycetes and Vol 2 Non-gilled fungi.



Saturday February 22nd - Etal Northumberland a joint foray with the Borders Fungus Group.

Details to follow.

Easy Fundraising

You're going to shop on line this Christmas- right? Well, did you know that over 4,000 retailers are ready and willing to give up to 10% of the value of your purchase to the funds of the NEFSG?

These are big name companies such as Amazon, Apple, Argos, Curry's, PC World, House of Fraser, Booking.com, Travelodge, Virgin Atlantic to name just a few.

Such companies are happy to make percentage donations to charities and causes such as ours.

Yes, it's true. This initiative was suggested by Sally and we have now received £242 over the last two years into the NEFSG coffers via the seven members who have already signed up for easy funding.

The process is simple. You create an account with Easy Fundraising and select north eastern fungus study group which is already registered with the system. When you shop online via easy fundraising a percentage of your purchase price is sent directly to our account.

Here are the steps.

To create account:

Type 'easyfundraising.org.uk' into your search engine/browser.

Go to 'search for a cause'

Type in 'north eastern fungus study group'

Then register by supplying your name, e-mail address and give a password.

You should now have created an account.

To go online shopping:

Type 'easyfundraising.org.uk' into your search engine/browser.

The system knows you are registered and asks you to 'search for you favourite retailer'.

It then takes you directly to the retailer you have chosen.

Simply browse through their website as you would usually.

When you complete your purchase the system automatically gives a donation to the NEFSG.

And, that's it.

Happy on-line Christmas shopping from your funds loving Treasurer!

Ron Pattinson

Cauliflower Fungus *SparassisCrispa* - Paul Forster

On the 25th of October 2012 I was taken to Lockwood Beck Reservoir, (7.24 km from Guisborough NZ671140), to see a fine example of the Cauliflower Fungus or Wood Cauliflower *SparassisCrispa*. The substrata was the root of pine as this seems to be the preferred.
25-10-2012



This Fungi is much prized on the continent for its Edibility. One Mushroom was found in the south of France which weighed nearly thirty Kilos. They have been shown to have anti-tumour properties, and to contain chemicals which may stimulate the immune system. (Wild food uk).

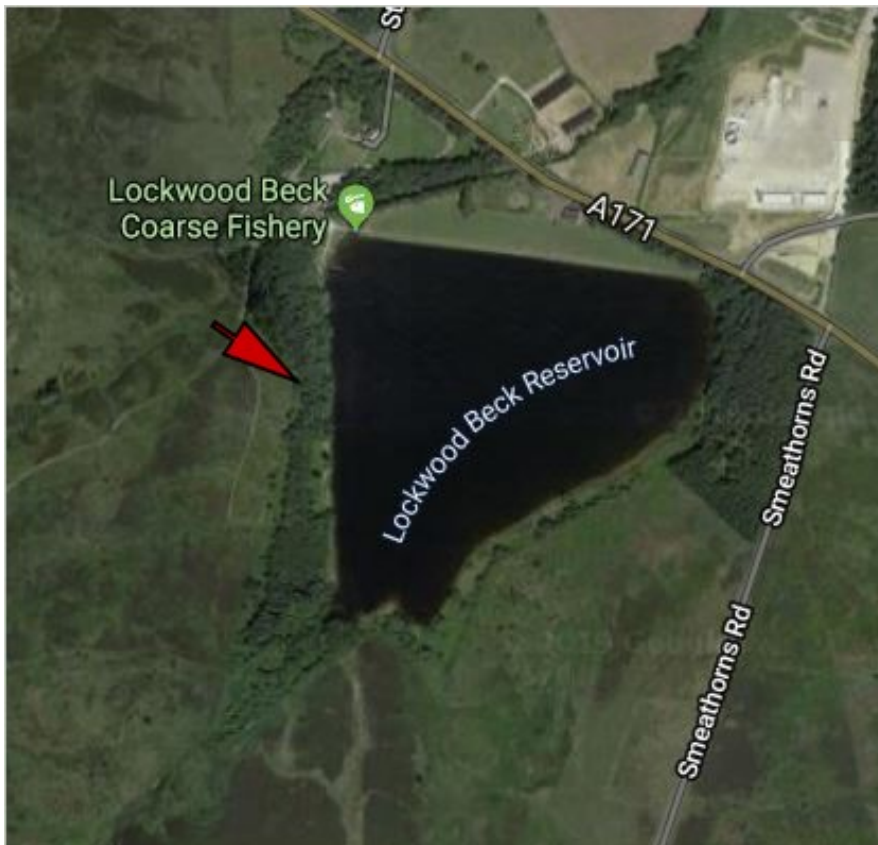


13-10-2019



On the 13-10 2019 my wife and I visited Lockwood beck as it has been a particular good year on this site for fungi. We came across this particular fine specimen situated on the top of a fallen pine, as against been on the ground. It is only the second time in the uk I have seen *Sparassiscrispa* . The specimen was located in more or less the same place as the 2012 specimen.

Approximate location of *Sparassiscrispa*



Bransdale photos - Jill Cunningham



1 - Moss Oysterling - *arrhenia retiruga* - found on feather moss growing on Birch trunk. Cap 0.5-1cm, gills absent. Spores white, teardrop shape, 5.75-8 μm x 5-6.5 μm . I also find this on my lawn moss every year, late autumn to Spring.



2+3 - *resupinatus trichotis* - 'hairy smoked Oysterling' - found on fallen Sycamore/Oak? branch. Cap 0.7-1.5cm dark grey brown with grey black tufts of hair on central hump. Gills as cap colour. Flesh dark gelatinous. Spores white, subspherical, 5-6.5 x 4-5.5 μm . Also found at Hardwick Hall near Sedgfield 2 years ago, late in the year.



Some interesting web sites - Mike Cruse

Mushroom Madness - YouTube

<https://www.youtube.com/watch?v=UvTvaxVySIE>

The hundred most beautiful mushrooms Gebracht door #Theo ...

<https://www.youtube.com/watch?v=iJVVz0ywXGk>

Stunning timelapse of bioluminescent mushrooms! - YouTube

<https://www.youtube.com/watch?v=s6dEyNL3ygl>

Fantastic Fungi - YouTube

<https://www.youtube.com/watch?v=YMzVDP7SEDA>

Mushroom Bloom Timelapse Set to Trippy Music - YouTube

<https://www.youtube.com/watch?v=b-nJ0ROGD14>

TALES FROM BRATHAY or TOLY POLY WHATSIT ? Mike Cruse

Last year on our explorative stay at Brathay Hall, Ambleside prior to this years with our friends from the Mannheim Fungus Group (MAK) Rachel discovered a Cordyceps which we thought was *Cordyceps longisegmentis* aka *Elaphocordyceps longisegmentis* aka *Tolypocladium longisegmentatum*.



I tried to find it again , unfortunately our foray on the Saturday coincided with the unmissable Rugby World Cup Semi -Final , England beating the All Blacks so magnificently. Thus I set off some 1hr + behind the group. I never did catch up or see much fungi , although heading back through the fields by the shores of Lake Windermere , having given up finding them, I encountered splendid Waxcaps A particularly fetching Ballerina and many glorious Parrots.



Returning later on Saturday afternoon from our trip to see Beatrix Potter's fungi illustrations at the Armitt Museum in Ambleside I had a brief look around the woods with little success. Tuesday, day of departure, with glorious weather I decided to stay on and have a last look in Brathay woods to try and find the elusive Cordyceps . Wandering about the woods with no soul about nothing seemed to tally with last years discovery site of the Cordyceps. Pushing on, meandering about , discovering parts that had not been visited, I got into an area with fabulous mosses that demanded photographing.



I went from one mossy hummock to another and turning around there in front of me in the moss at the foot of a Douglas Fir was the elusive Cordyceps.



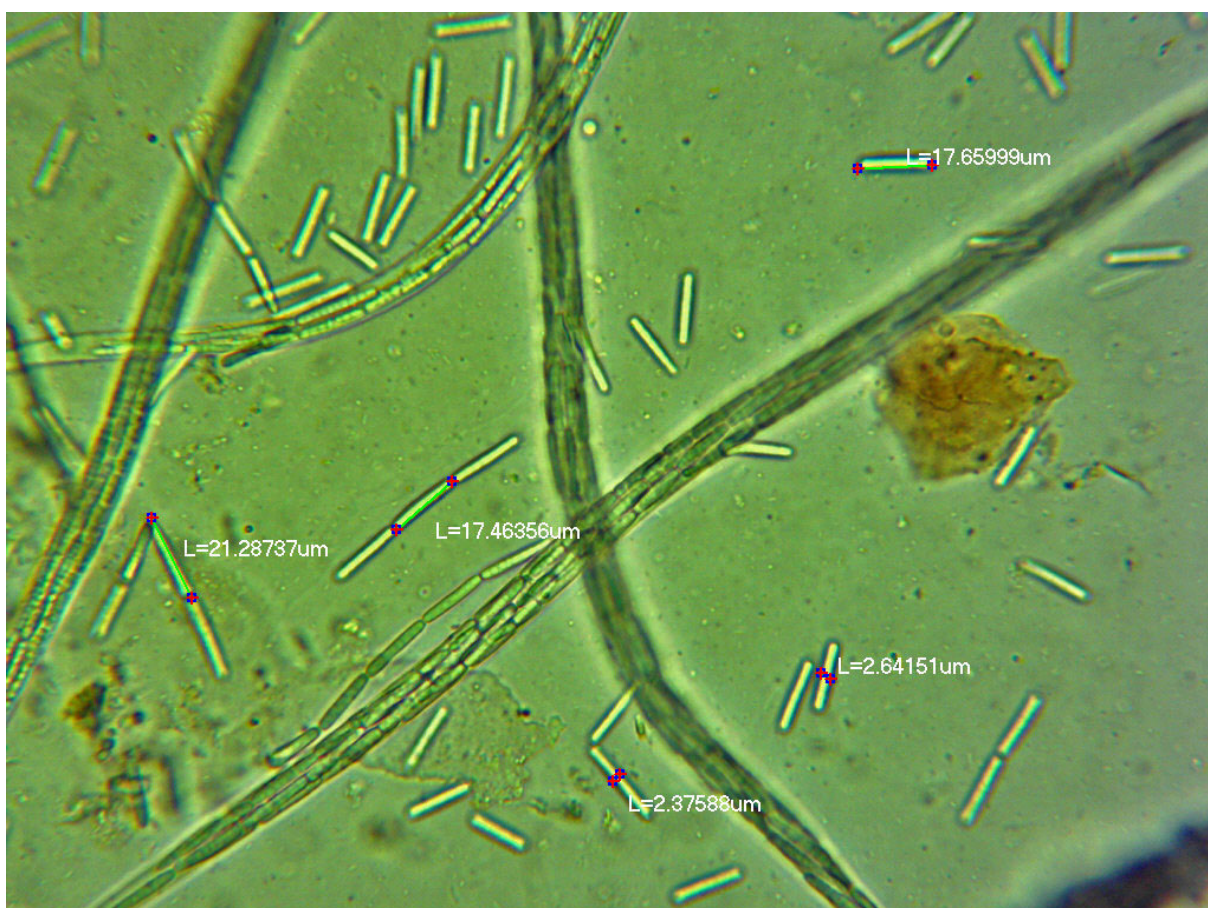


Definitely not in the same area as last year. Doug did the microscopy work back in the North East and found the spore size matched *Cordyceps capitata* rather than *longisegmentis*.

Tolypocladium longisegmentum at Indiana Mushrooms

indianamushrooms.com/tolypocladium_longisegmentum.html

Herewith attached my Id of your specimen which I made *Tolypocladium capitatum* with a spore range of 15-22.5 microns X 2.5 and growing on *Elaphomyces granulatus*. Photo of the asci and spores attached.



However, Rachel's specimen may still have been,

longi.....segment.....is !!

Brathay Week-end Menu - sent by Gordon Simpson

I have never seen such an introduction to a menu so it could be unique and of interest to members that did not attend the Brathay Hall event.



When giant fungi (or lichens?) ruled the world - the latest discovery about *Prototaxites*

When the first fossils were found in 1859 of giant columnar growths, dating from the Late Silurian to Late Devonian - approximately 420 - 370 million years ago they were so similar to tree trunks that they were named *Prototaxites* (*Taxus* are our living Yew trees). The fossil columns were up to 8.8m tall and 1.37m in diameter and have been found at numerous sites around the world.

It soon became obvious however that they were not trees; life on land at that time consisted mainly of algae; primitive liverworts and a few small, early plants. Theories were put forward that they might be giant algae, fungi or lichens.

In a paper in *Geology* (C.K. Boyce *et al.*, 2007) the different carbon isotopes in the fossils were analysed and found to be very different from those found in photosynthetic plants of the same period but were instead what would be expected from non-photosynthetic fungi (see Kibby, 2008 for more details of this research). The characteristic concentric circles seen in cross-sections of the fossils suggested sporadic growth spurts by means of additional external layers, somewhat analogous to the annual growth layers of pores in many polypores today. Also, the internal tubular structures were of two sorts, thick-walled 'skeletal' tubes and thinner-walled filaments. These thinner tubes have perforate septa, a character associated with red algae and fungi. Root-like structures have been interpreted as extensive rhizomorphs to both support the organism and to possibly transport nutrients across large distances.

More recently a theory was advanced (Graham *et al.*, 2010) that they might actually be formed of mats of liverworts rolled up into columns by wind or water, many however found the idea hard to believe.

But now, in a paper by Honegger *et al.*, 2018, a specimen from the Rhynie chert in Scotland with the surface structures almost intact was examined using a laser-scanning confocal microscope and autofluorescence techniques. The surface layer was revealed to consist of a layer of polyspored asci being inoperculate, opening with a split and lacking basal croziers.

So *Prototaxites* appears to be an enormous, basal ascomycete fungus. Just how the fungus supported its huge size and how it obtained sufficient nutrition remain mysteries still to be solved. It is possible that it may have formed an association with photosynthetic algae or cyanobacteria although this remains unproven.

What is clear is that the world at this very early period was dominated by these huge and as yet still enigmatic organisms.
(taken from the BMS Journal)

fungus profiles

Phellinus conchatus

Doug Fairweather photo



Scientific name:	Phellinus conchatus (Pers.) Quél.	Family:	Hymenochaetaceae
When and where:	throughout the year, on living and dead broadleaf trees, typically willow	How often:	frequent
General view:	a semi-resupinate sporophore in patches of several centimeters, attached lightly to the substrate, on vertical surfaces; slightly imbricate bracket-like.		
Dimensions:	variable width, projecting 1-3 (5) cm.		
Detail:	semi-resupinate sporophore, dull rust to light brown pore surface with greyish tinges; undulating nodose to semi-pileate; marginal zone narrow, smooth, sterile;		
Microscopy:	spores sub-globose, smooth, pallid yellow, thick-walled, 4-5.5.x 4-5 microns. Cystidia not seen; hyphal system dimitic.		

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Lichen Lookout

Two very neat lichens to look out for. You may need a hand lense to see the detail.



Physcia airpolia

A very neat lichen commonly found on wooden fences and trees. The thallus is made up of neat blue-grey lobes often with large black or dark brown apothecia in the centre.

* Soridia - are powdery asexual reproductive structures made up of fungal hyphae wrapped around a cyanobacteria or green algae.



Physcia caesia

Another common neat lichen found on rocks and sometimes wood. A blue-grey thallus of narrow lobes is dotted with tiny balls of grey soridia in the centre of the lobes.