



North Eastern Fungus Study Group

Newsletter No 107 - Winter 2022

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NEXT ISSUE: The deadline for articles for the Spring newsletter is 24th April 2023
All contributions will be gratefully received!



Forthcoming Events - Meet at 10:30am for an 11am start unless otherwise stated.

Sun April 23rd Jo Scott Lichen/fungi – Slit Wood/ Middlehope Beck
Westgate, Weardale. Lichens and fungi in the woods, along the beck and
mineworkings

Meet in the layby at GR: NY906 380. There is also street parking if the layby is
full. Tel No: 07413939729.



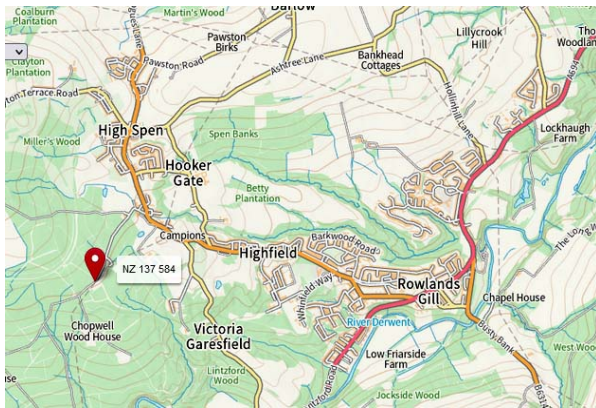
Sun May 21st Mike Cruse Chopwell Wood, Rowlands Gill

Mixed woodland , a popular foray site in the past . We may explore the less frequented parts .

Signposted A694 Consett from the A1 , at Rowlands Gill take the B6315 up to Hookergate near High Spen (Brown tourist signs for the Wood) . Meet at the main large car park ½ mile from the entrance. If parking under the pylons , (optional) , you may experience a tingling sensation when touching your car !

Grid Ref:- NZ 137 584 post code :- NE39 2AG

mikecruse@live.com [tel:- 01661823229](tel:01661823229) mob:- 07748276183 (on the day only)



Sat July 1st NEFSG Lunch The Green Tree, Tudhoe Village



Marasmius hudsonii on dead holly leaf



I first found this species on fallen leaves of holly in Normans Riding Wood on 26th October 2022.

I took this picture from leaves of the same bush on 15th February 2023 and it shows the fresh fruiting bodies and some of the stalks of the original growth still persisting after almost 4 months.

A fascinating and beautiful species which is new to the wood.

Doug McCutcheon

SCARLET BERRY TRUFFLE

Paurocotylis pila

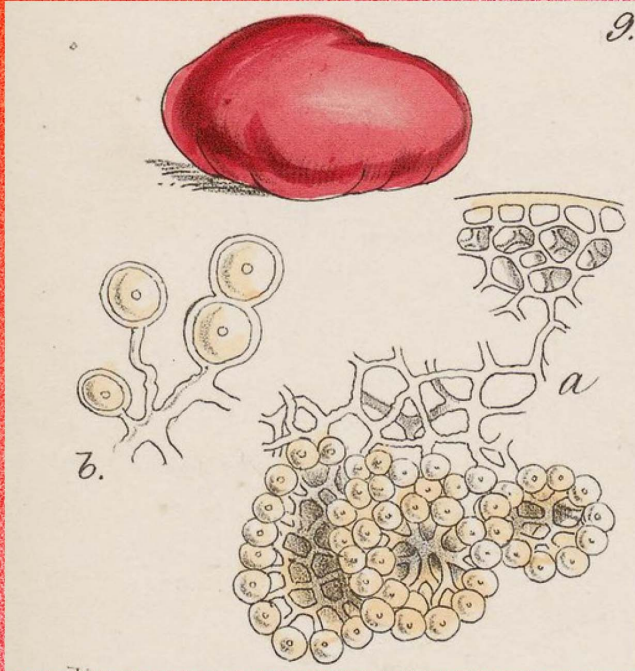


Dominic Burns found this amazing little fungus in SE Northumberland. This fungus, originally from New Zealand, was first recorded in Britain, Nottingham, in 1973. Dennis speculated on its introduction,

"“The only suggestive circumstance reported as a possible indication of the method of introduction is that a New Zealand rowing team used the water sports centre for a few weeks during summer 1973”

Although there was an exotic garden several hundred yards away, which may have been another source of arrival.

Paurocotylus pila was first described in 'Botany of the Antarctic Voyage, II, Flora Novæ-Zelandiæ, 2, Flowerless Plants (1855)', from which the following illustration was taken.



The fungus wasn't recorded again in Britain until 1990, when it was spotted in West Yorkshire.

Caroline Hobart describes UK habitats as, "mossy covered soil, under or close to trees with berries, Rowan, Elder (*Sambucus nigra*),

Rosa sp, Yew (*Taxus baccata*), and Hawthorn (*Crataegus monogyna*); in allotments or gardens, and often near nettles (*Urtica dioica*) suggesting rich soil." Dominic found his specimens in his allotment, under Gooseberry! The presence of berry trees is significant. In its native country, the fungus grows beneath fruiting Podocarpus trees. Like many, colourful truffle species in New Zealand, this fungus sits on the soil surface, differing from our hypogeous



Podocarpus totara

(underground), species which rely on scent to attract mammals.

Historically New Zealand had virtually no mammals.

Therefore, the truffles have

relied on other means of spore dispersal. In this case, birds. The fossilised coprolites of Moa, (an extinct group of flightless birds) have been analysed and been found to contain lots of fungi. This would explain why the truffles have little or no smell, (birds don't have a good sense of smell), but why the fungus is bright (to attract birds and mimic fallen fruit). There is evidence that NZ truffles are reverting 'back' to a non-truffle state following the extinction of many species that would have eaten the berries/truffles. There is not much research into mycophagy, (eating of mushrooms), by birds, but it is possibly more common than we would assume.

Certainly, these bright fruit bodies would be attractive to birds in the thrush family here in the UK. we can speculate that this is now the main method of spore dispersal in the UK.

Sally Pattison.

Harwood Forest



A western neighbouring landowner asked the Forestry Commission if he could clear roughly a square of Harwood Forest centred at NZ014925 as he wanted to own a flow or bog. Permission was granted. The trees were felled and burnt leaving little but fire ash.

I was asked by the FC to visit the site. Access to the site is difficult. On 11 Jan 2014 I parked my car at the side of a forest road SW of the area then walked along a ride. When I reached the site I met up with three people who had been involved in the clearing work. The

site was not a bog. It was heathland covered by up to 10cm of dry peat. I was asked what the fungus was which almost covered the cleared area. I took a piece of peat with the fungus on top. At home I determined the fungus as *Thelebolus terrestris*. I sent a sample to Kew and my determination was correct. At that time the fungus was the first record to the UK in the 1900s. I informed the FC and the landowner. I was asked by the landowner if I could visit the site at a later date. The meeting was for publicity purposes. The people who I met earlier on the site told me the fungus grew on deer urine. I disagreed as how could 9ha be covered in deer urine. My view was it was associated with the nitrogen or potash generated by burning the trees.

From the photograph see how the National Park got involved and made false claims. The site was not a wildfire. They did not find the fungus nor was it in a bog. Their visit was after I identified the fungus and there was no moss on the site when I visited the site twice.

Gordon Simpson

BBC News Tyne and Wear 2 March 2014

Northumberland rare fungus find a 'tiny miracle'

The fungus is known to grow on burnt conifer litter, wood and peat.

Northumberland National Park Authority discovered the *Thelebolus terrestris*, in a bog near Rothbury.

Normally at home in the forests of Russia, Scandinavia and Canada, it is believed to be the first recorded sighting in Britain this century.

A spokesman for the authority said the find was a "tiny miracle".

The fungus, which grows on moss as a cluster of tiny orange pinheads, was found during a regular peatlands site visit on a bog at Greenleighton.

The authority was visiting the site to see how the habitat was recovering after it was partially burnt in a wildfire in 2012.

The fungus needs a very specialised habitat involving burnt wood and deer urine.

Fungi specialist Gordon Simpson said: "There is no doubt in my mind that the sudden enrichment of the area due to the potash from the wildfire made the habitat suitable for this fungus.

There are only five records in the British Mycological Society database from 1871 to 2007.



Thelebolus terrestris

NEW FUNGI SPECIES IN EUROPE IN 2022

A spiny fungus named after Queen Elizabeth, the world's largest giant waterlily from the wetlands of Bolivia, and a herb threatened with extinction by pigeon droppings are among more than 100 plants and fungi recorded as being new to science in 2022 by the Royal Botanic Gardens, Kew. Many of the discoveries are extremely rare. Two in five plants globally are estimated to be at risk of extinction.



Scientists at Kew said their efforts to name new species, working with partners, was part of a global effort to protect the planet's biodiversity and also help humanity. On average 2000 new species of plants and fungi are named each year, revealing the complexity of the tree of life as well as potential new sources of food, medicines, and further innovation.

“It's easy to think we have a picture-perfect understanding of the natural world and all its plants and fungi, but as these annual lists show us time and time again, we've only scratched the surface of discovery” said Dr. Martin Cheek, the senior research leader in Kew's Africa team. “We cannot put a stop to the biodiversity crisis unless we know exactly what it is we are saving and where.”

The fungal discoveries include:

Hydnum reginae [Queen's hedgehog]—a lumpy white fungus with soft spines beneath the cap instead of gills, which DNA analysis has revealed to be a distinct European species and not the North American fungus [*Hydnum albidum*] it was once assumed to be. This fungus was found in the ancient beech woodland of White Down, Surrey and is the only specimen found in Britain so far. Scientists describe it as having an “ill-defined but pleasant ,slightly sweet odour” and “mild, soapy then slowly slightly bitter flavour”. [See photo below].

Cyanoboletus mediterraneensis—a new species of Mediterranean bolete, the fungus was found in northern Israel and Sardinia, Italy . *Cyanoboletus* is a fungal genus in the family Boletaceae, named from ancient Greek “cyano” [blue] referring to the deep blue bruising reaction of the fruitbodies.

See photo below]. Some NEFSG members will remember the more common member of this genus, *Cyanoboletus pulverulentus*, found growing under a lime tree at our Featherstone Castle foray in 2022.



Amanita groenlandica—an arctic species originally described from Greenland and circumpolar in its distribution, with Scandinavia its previously recorded most southerly location—found in the Cairngorms. It is described as a large [5-9 cms cap diameter] with white flesh, cap colour pale straw or greyish yellow when young with bright yellow to brown colours when mature. Universal veil remnants may be seen on the cap surface—usually found in small groups or solitary under willow and birch.

Acrodonium antarcticum—a fungus originally described from Antarctica—also found in the Cairngorms.

These last 2 discoveries came from a project [Rare Plants and Wild Connections] managed by Plantlife with other partners and volunteers. 219 soil samples were collected at various altitudes from 55 of the 58 Munro's in the Cairngorms last summer. DNA was extracted from the soil and sequenced by scientists at the James Hutton Institute, resulting in over 17000 records of 2748 fungal species in just 3 months.

These rare fungi, previously found poles apart, both favour the unique cold habitat and climate of Scotland's Cairngorms. This internationally important landscape, which due to its elevation and distance from the sea, experiences an exceptionally cold and snowy climate, supports the best examples of arctic-alpine vegetation in the UK. Many of Scotland's alpine species are living on the edge of their natural range with nowhere else left to go—in a landscape warming fast so these are species most at risk of extinction in the UK. In harsh environments like these fungi have a crucial role in helping arctic/alpine plants obtain essential nutrients needed to survive—yet little is known about them so these discoveries come at a crucial time.

Alan Simkins

PHYCOMYCES BLAKESLEEANUS

The attached photographs [courtesy of the RHS Garden magazine] is of a fungus which may be found in some of our gardens—its habitat is dung. It is not particular about what type of dung. It is widespread around the world, is a saprophyte, and may be seen on animal droppings in the woods, or might be encountered growing below birdfeeders in gardens—but it is also found on non-dungy

decaying matter. It can be found throughout the year. Some anonymous person has given it the non-binomial name of Hairy Poop Mould!

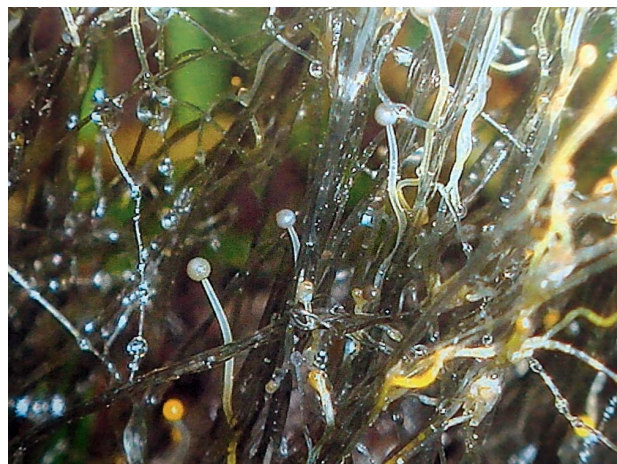
Phycomyces blakesleeanus is a filamentous fungus in the Order Mucorales of the phylum Zygomycota.

One special character of this fungus is that it is very sensitive to other signals from the environment [e.g. wind, touch, gravity, and the presence of nearby objects]. Research shows that it exhibits an avoidance response, in which the growing sporangiophore avoids solid objects in its path, bending away from them without touching them, and then continuing to grow upwards again.

This is believed to result from an unidentified “avoidance gas” that is emitted by the growing zone of the sporangiophore. This gas would concentrate in the airspace between the *Phycomyces* and the object. This higher concentration would be detected by the side of the sporangiophore's growing zone, which would grow faster, causing the sporangiophore to bend away.

Probably many other fungi have similar properties—but *Phycomyces blakesleeanus* seems to have a more advanced “crystal matrix” than others [for details go to www.nytimes.com 2018/04/27 science- fungus-gravity-bacteria].

Phycomyces blakesleeanus has also served as a model for research on the regulation of the biosynthesis of the pigment beta-carotene in fungi. The production of beta-carotene from natural sources, including fungi, is being developed as a safe alternative to the use of chemically synthesised pigments by the food industry.



References

Phycomyces blakesleeanus—Wikipedia

Phycomyces and the biology of light and color. *FEMS Microbiology Review*, Volume 25, Issue 5 December 2001 Pages 503-512

Alan Simkins

90th Birthday celebration for Gordon Simpson

I would like to thank all the members who attended the AGM and especially those who helped me celebrate my 90th birthday, which really was at the end of January. I still have two more celebration meetings arranged for me. I am an honorary and sometimes a founder member of lots of societies. The NEFSG celebrations also covered my 60 years of studying fungi started in National Nature Week in 1963. I was asked by the Yorkshire Naturalists Union if I could help in planning a meeting in Newton Dale, west of the 3 spheres on the Whitby to Pickering roadside. At this meeting I met Willis G Bramley, a retired farmer from Fairburn Ings who had retired to Pickering. He was very impressed with the fungi in Newton Dale Forest and often visited the forest with me. Fairburn Ings is now a lake due to colliery subsidence and owned by the Yorkshire Wildlife Trust.



Leptotrochila prunellae

On a February walk through Deepdale, Barnard Castle, I collected some Self-heal, *prunella vulgaris*, leaves with 'black spots' on. Turned out easy to ID (Ellis + Ellis) from the distinctive radiating black hyphal staining with central black/brown 1-2mm grouped apothecia all easily visible with a hand lens. The ascospores were a bit harder to find as immature at the time, (now seen). The big surprise was when I checked it out on the internet - oh not much shown about it - 'only known from 20 sites in GB + Ireland', (UK fungi) and all either in the Scottish Highlands, (Nethybridge), or South Wales, (Assynt).



is in Yorkshire.

As it's a Yorkshire site I passed it on to Chris Yeates via iRecord. Apparently, it is on the list as being somewhere in Yorkshire at some-time in the past but the record can't be found - so mine is confirmation + photo + microscopy that it

Mine was growing in a damp area, + Bugle and Golden Saxifrage, on a woodland path-side at the bottom of a valley. The spots are on the older, lower leaves. So, look out for Self-heal + spots in this habitat in early Spring - there **must** be more around!

Jill Cunningham

Clavarias on the Durham coast.

I'm based at the National Trust's White Lea Farm on the Durham coast and on the 27th October 2022, if not before, I was delighted to find six groups of a white Clavaria whilst exploring the adjacent Thorpe Lea Farm East for fungi. Using a combination of my grassland fungi book (Wood and Dunkelman) and the Collins guide (Sterry and Hughes) I quickly came to the conclusion that they must be White Spindles *Clavaria fragilis*, a new species for me (most are at the moment!). I



wasn't entirely happy as the 'clubs' weren't brittle and the largest were up to 5cm tall and over 1cm wide, but I reasoned that nature is variable! Further to this on 31st October I found what I considered the same Clavaria to be locally common in two fields at White Lea Farm, and then (rare) in a 3rd field on 3rd November.

Continuing my learning journey this autumn I attended the Waxcap refresher day of the Yorkshire Waxcap Project in

Bransdale on the 14th November, where we found a small clump of White Spindles, which I duly photographed. These didn't remind me too much of the ones I'd seen on my patch earlier, but it was just one clump and there was so much else to see on that day that I didn't interrogate anyone on the identification.

On the 26th November the NEFSG came up to my patch and amongst other things found a single Pointed Club *Clavaria acuta* on the northern slope of Beacon Hill. When Mike posted me the collated records from the foray I forwarded them to Steve Hindle as he is the National Trust's grassland fungi specialist and I wanted to make sure that Beacon Hill was 'on the map' for its fungal interest. You never know when some bright spark might come along and think it would be a great place to plant lots of trees! At the same time I decided to raise a query over the identification of my white Clavaria, especially since *Clavaria falcata* was also recorded on the Beacon Hill foray, but I didn't see it and couldn't find out much about it online. I sent Steve some photos of the Thorpe Lea East Clavaria.



Steve quickly came back to me and suggested that my Clavaria were probably *Clavaria tenuipes*, Skinnyfoot Club. He related that "They have wide tips and narrow bases. *Clavaria fragilis* tends to be more clustered with tapering tips." *C. tenuipes* of course isn't in the books I'm using!



For information he also mentioned that "I only found Skinnyfoot Club for the first time in 2022 but I saw a lot of it. I went over to Nostell

Priory to run some training and it was everywhere. Maybe it prefers a less acidic habitat to my local conditions. It's



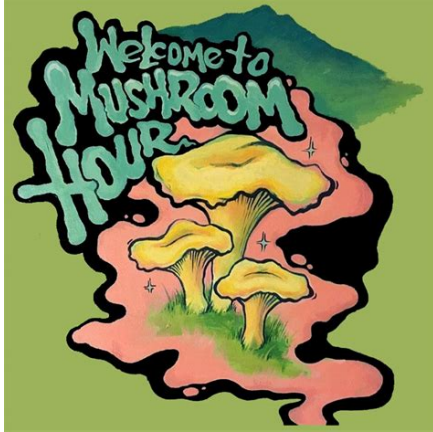
generally robust and not fragile like White Spindles.”The fields at Thorpe Lea Farm East were

turned over to hay meadows from arable in 2004 and are generally very poor for fungi. Steve mentioned that the Nostell Priory fields were also reclaimed agricultural fields. By way of comparison the White Lea Farm fields in which the Club were found have been permanent pasture for much longer, but are still generally species-poor for fungi.

David Miller

The Mushroom Hour Podcast

If you like fungi and you like podcasts, then your planets have aligned..



The Mushroom Hour podcast

As the name suggests, episodes are around an hour long and cover topics as diverse as wild foraging, ecology, biotechnology, bioluminescence, cultivation, anthropology, ethnobotany and counter-culture.

Guests include academics and amateurs from many areas, so there are a wide range of perspectives. The host is from the US but there are a few people from the UK interviewed too.

If you have never listened to a podcast, then there are several free phone apps available (e.g. Podbean for Android) where you can find a lot of free content.

John Robinson

Items from the web .

Flora, Fauna, and ... Funga? The Case for a Third 'F.'

<https://undark.org/2021/08/09/flora-fauna-and-funga>

Best fungi books | BBC Wildlife | Discover Wildlife

<https://www.discoverwildlife.com/plant-facts/fungi/fungi-books>

Mike Cruze

AGM Minutes

North East Fungus Study Group

Minutes of the AGM held at Rainton Meadows on 18th February 2023 at 11.00a.m.

Present: Gordon Simpson, Alan Simkins (Chair), Keith Tulip, Gordon Beakes, Val Standen (Sec), Jill Cunningham, Jo Scott, Doug McCutcheon, Cath Gillie, Rachel Richard, Sally Pattison, Ron Pattinson (Treasurer), Mike Cruse, Daphne Aplin, Lesley Hodgson, Gabriel Recknagel, Cameron Milby, Richard Thompson, John and Rhona Sutherland, Dominique Colback, David Miller, Lydia Koelmans, Peter Holmes.

Apologies: John Robinson Paul Foster

Minutes of last AGM: The minutes were read and approved (proposed – Doug McCutcheon, seconded Keith Tulip).

Matters arising: No issues were raised

Report of the Chairman:

Welcome to 2023 – my last full year as chairman (subject to your decision on item 7 of the agenda)

2. Forays in 2022 were well attended and several had fungi lists of over 100 species, including some rarities as mentioned in the post-foray reports circulated by Mike. I make special mention of the October weekend at Morpeth celebrating UK Fungus Day. Master(?) minded by Sally the Saturday public exhibition was a spectacular success – with help coming from several NEFSG members and the Newcastle Fungal Group. Also noteworthy and successful was the visit in September to the Cairgorms (near Aviemore) by some 8 members (an early reconnaissance for the 2025 visit with our German mycological friends). Some Scotch was learned by yours truly – but since forgotten. It was pleasing to see some new members at several of the forays. Thanks are given again to those members who proposed sites for forays. Please keep doing so.

3. It was pleasing to see members improving their microscopy skills at a series of workshops at Etal in north Northumberland from March to August 2022 – organised by Sheila Lillie and Sally Pattison as a joint initiative with the Borders Fungus Group.

Committee members (Val, Ron, Jo, Mike, John, Jill, Sally) have all performed admirably again.

Val has decided to retire as secretary and from the committee – and I here record my thanks to her for her years of service.

The chairman's report was accepted (proposed by John Sutherland, seconded by Ron Pattinson).

Treasurer's report: Ron circulated a summary of the accounts up to December 31st 2022. He reported that membership remained high and funds in hand similar to previous years.

The treasurer's report was accepted (proposed by Jo Scott, seconded by Richard Thompson).

Election of Officers: Jill Cunningham was persuaded to replace Val Standen who as stepped down as secretary. Alan as chairman and Ron as Treasurer agreed to continue their roles. Cath Gillie agreed to re-join the committee.

These nominations were accepted (proposed by Doug McCutcheon, seconded by Rhona Sutherland).

Foray Programme 2023: A wide range of leaders will be leading forays in 2023 including those for the UK Fungus Day events on October 8/9th

Cath Gillie reported that she had made enquiries about booking the Witham Room in Witham Hall in Barnard Castle in order to hold another event similar to 2022. There will be the possibility of joining the Craft Fair which takes place in another room the same day. The cost of hiring the room is £35 per hour. 11 people offered to help on stalls for the Saturday but only 5 people for both days.

After some discussion it was decided to plan for the Saturday in the Hall with forays to nearby Flatts Wood and

then for a foray to Deepdale Woods on Sunday rather than 2 days inside. Sally agreed to be the leader of an email group of organisers to include volunteers on the day later on.

Mike pointed out the weekends where Saturday and Sunday forays were geographically close and also that 'pop-up' forays could be arranged at short notice .

German Visit October 10-15th 2023. Cath reported that the best option is probably to fly from Newcastle airport. She will circulate the 11 people booked as soon as she receives confirmation of transport from Suze of MAK. Then she could book flights (but would need passport numbers etc.) or people could book their own seat on the agreed flight.

AOB: Dom Colback asked if members who had had to withdraw from active participation in the group forays etc. could still receive emails. There was general agreement that this should be the case.

Use of funds. Purchase of books, subsidies for workshops, expenses incurred for NEFSG events should continue. Other suggestions for use of funds welcome.

Microscope Workshop. These will be in Gosforth between April and may. Gordon Beakes offered to help.

Newsletter. Send articles and/or photographs to Jo Scott.

2025 visit by Germans MAK. Alan reported on a visit made to Cairngorms last year to recce. foray sites. The Grant Arms Hotel at Grantown on Spey was decided on as a suitable centre close to several foray sites. AS to follow up an offer of complimentary accommodation.

Dumfries and Galloway. Dom mentioned this area as in need of more recording work.

DONM: AS to book room.

PROVISIONAL NEFSG FORAY LIST 2023

(Subject to change of dates and venues)

Sun April 23 rd	Jo Scott Lichen/fungi Slit Wood Westgate, Weardale
Sun May 21 st	Mike Cruse Chopwell
Sat July 1 st	NEFSG Lunch The Green Tree, Tudhoe Village
Sat Aug 19 th	Doug McCutcheon Normans Riding Wood , Winlaton
Sat Sep 2 nd	Joint foray with BFG Howick
Sun Sep 3 rd	Mike Cruse Stobswood
Sat Sep 9 th	Lydia Koelmans Longhorsley Moor
Sun Sep 17 th	Alan Simkins Low Barns
Sat Sep 23 rd	Jenny Connor Dalton Moor Farm , Seaham
Sat Sep 30 th	Ricard Thompson Thrunton Woods
Sun Oct 1 st	Doug McCutcheon West Hills Farm , Rothbury
Sat Oct 7 th	UKFD venue tba
Sun Oct 8 th	UKFD linked foray tba

Tue Oct 10th – Sun Oct 15th Germany trip , Grasellenbach

Sun Oct 22 nd	Cath Gillie Rokeby , Barnard Castle
Sat Oct 28 th	Rachel Richards , Cockfield Fell
Sun Oct 29 th	Lydia Koelmans Swarland
Sat Nov 4 th	Alan Simkins Bransdale
Sun Nov 5 th	Rhona Sutherland NYMNP area tba
Sun Nov 12 th	Lesley Hodgson Baal Hill , Wolsingham

Microscopy Workshop

There are still a few places left on the microscope workshop. April 29th, May 6th, 13th and 27th

There are 4 classes available, covering different topics. You do not need to book a place at all of the classes. However, what ALL of the classes have in common is that they will give you the opportunity to practice with the equipment under guidance, learn how to identify features down a lens, and introduce you to specialised vocabulary and easy keys. You may not have an interest in some areas of mycology that we are offering but, if you are just starting on your microscopy journey, it is really worth coming along to as many as you can to really give you the confidence to work on your own.

Contact Sally Pattison for booking and details: sallypattison@hotmail.co.uk

Lichen Lookout

Lichens found on twigs.



Fuscidea lightfootii

Small bright green very granular thallus. Usually more or less circular. Dark brown/Black apothecia.



Arthonia radiata

Grey/white thallus found on smooth barked trees. Distinctive star shaped black apothecia.



Hypogymnia tubulosa

Blue/grey swollen lobes. Soridiate lobes look like tubes with soridia at the tips.