



North Eastern Fungus Study Group

Newsletter No 95 - Winter 2019

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NEXT ISSUE: The deadline for articles for the Spring newsletter is 27th April 2020
All contributions will be gratefully received!



Forthcoming Events

Please arrive for forays at 10:30 for an **11am start** unless otherwise stated.

Sunday April 19th Teesdale Lichens Jo Scott

Please meet in the Bowlees Visitor Centre car park at GR NY 907 282
Nearest post code DL12 0XF.



Tel:07413939729

Sunday May 17th

Bickerton

Mike Cruse/Shawn Hackett

Bickerton Wood is a planted broadleaf woodland with an interesting flora situated on the south side of the Coquet Valley about 3.5 miles west of Rothbury. Parking is about 100m east of the hamlet of Bickerton across a small bridge and into the field immediately on the right. Grid Ref :- NT 997 003 Nearest Postcode :- NE65 7NG

mikecruse@live.com Tel :- 01661 823229 Mob:- (On the day only) 07486 992923



Saturday July 25th LUNCH at the King's Lodge Hotel, Flass Vale, Durham

This year will be held at the King's Lodge Hotel, Waddington Street, Durham, DH1 4BG on July 25th. Arrive 11.30am for a pre-prandial drink then lunch at 12.00 followed by a walk/foray around Flass Vale.

Please let me know if you will be coming. The menu will be circulated nearer the time so that we can pre-order our meal.

Val Standen (Valerie.standen@hotmail.co.uk)

Sunday 16th August

Beanley

Sally Pattison

Beanley Woods is a privately owned Ancient Woodland near Powburn.

Due to there being a shortage of parking at the entrance of the woodland. Mike and Doug think it is best to meet at a nearby garage and car share from there. Therefore, I would ask everyone to arrive no later than 10.45am so that we can get to Beanley for starting the foray at 11am.

The meeting point is at Hedgley Garage, just past Powburn, on the A697. There is a café, with toilets etc at the garage.

The grid reference of the entrance to Beanley Woods should anyone arrive late is NU089171.

My mobile number is 07852 787 082 should anyone need it.



*Sunday August 23 rd	Auckland Deer Park	Alan Simkins
Sunday September 6 th	Bickerton	Mike Cruse / Shaun Hackett
Sunday September 13 th	Tudhoe	Mike Cruse (with DWT)
Saturday September 19 th	Hartford Hall	Sally Pattison
Sunday September 20 th	Kirkdale Minster	Alan Simkins
Saturday September 26 th	Crook	Louise Watson
Sunday September 27 th	High Plains	Mike Cruse
Saturday October 3 rd	Sutton Bank	Christine Meek
Sunday October 4 th	Rushpool Hall	Alan Simkins
Saturday October 10 th	Hadrian's Wall	Shaun Hackett
Sunday October 11 th	Lordstones	Alan Simkins
Saturday October 17 th	Letah Wood	Gordon Beakes
Sunday October 25 th	Mulgrave Castle	Mike Cruse / Paul Forster
(With Whitby Nats and Cleveland Nats)		
Sunday November 1 st	Hawnby	Rhona Sutherland

Sunday November 8th
Sunday November 15th

Errington Wood
Sidwood

Alan Simkins
Mike Cruse

* may be moved to October 4th if permission for Rushpool Hall not obtained.



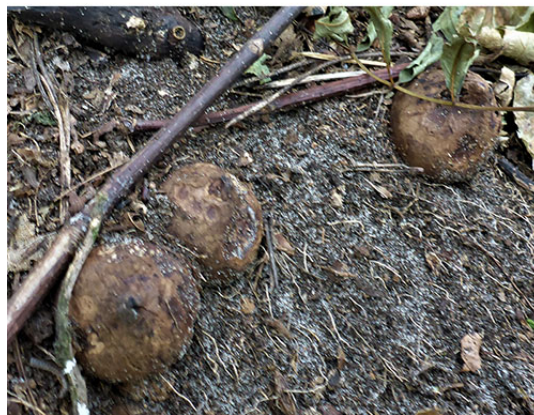
COLLARED EARTHSTAR (GEASTRUM TRIPLEX) - Mike Cruse

On our foray at Bamburgh with the BFG on the 15/09/19 we found in the wood adjoining the dunes, for the second consecutive year , a large collection of G.triplex. I brought 2 home to 'hatch' in the garden. Here are 11 sequential photo's of their development with dates attached.

Collared Earthstar (Geastrum triplex) Bamburgh



Emerging earthstars, 2 of which brought back to my garden



Collared Earthstar in garden



1.10.2019



2.10.2019



3.10.2019



5.10.2019



7.10.2019



8.10.2019



10.10.2019



14.10.2019



17.10.2019



18.10.2019



‘The brooks they brake in foam upon the bank’¹: Examining Peg Powler’s Suds

Keith Tulip



Collecting foam at Allen Banks
(photo: Kaye Kossick)

Peg Powler, whose suds are the foam or froth found floating on the surface of eddying pools, is an evil sprite, a diminished river goddess of the River Tees who, after luring her victims, drags them into her subaqueous haunts and drowns them (Brockie 1886).

So why have I been risking life and soul to collect the foam?

The froth is acting as a spore trap (Ingold 1967), concentrating the spores of aquatic hyphomycetes

on submerged decaying leaves (Ingold 1942). The spores are mostly tetradiate, or long and sigmoid, allowing them to entangle and anchor in leaves as they are tumbled along by the current. It is mostly possible to identify to species on spore form alone.

Terence Ingold was the first to describe these aquatic fungal spores, which, in his honour, are often referred to as ‘Ingoldian fungi’. He was a Professor at Birkbeck College, London, and twice president of the British Mycological Society. He retired in 1972, but continued to work as a mycologist. Having published 174 papers before his 80th birthday, he continued, publishing over another hundred papers into his nineties. He died at Wooler, Northumberland aged 104. (Webster 2010)

In the 1967 paper, Ingold recommends collecting the foam into a sealable container and letting it disintegrate into a liquid. However, he notes that the spores will start to germinate on contact with a solid surface, rendering identification impossible. Germination is prevented by adding formal acetic alcohol at the time of collection. At home, the spores will settle to the bottom of a narrow container and a drop can be removed for examination with a pipette. Spores I collected four months ago were retrieved from the bottom of a test tube and successfully identified for this article.

However, collecting can be much easier. I have found that foam taken from the top of a frothy mass and placed into a container with no liquid present does not disintegrate but dries into a web of strands, and germination is not initiated. A sample of a strand can be placed directly



The perils of collecting
(Rackham 1919)

¹ In mist was merged the moor, mist clung to every hill,
Each wore a cap of cloud, and cloak of mist so dank;
Bubbling, the brooks they brake in foam upon the bank ...
(*Sir Gawain and The Green Knight*, trans. Weston (1999))



Hesleyside Hall, November
2019

tentative identifications

left, from top

Heliscina campanulata

Clavariopsis aquatica

Lemonniera centrosphaera

Tumularia aquatica

right

Culicidospora grvida

Anguillospora furtiva

onto a slide and examined in a drop of liquid. Descals (1997) notes that 'foam that breaks down quickly in the jar will have trapped few conidia' and supports not liquefying the foam. Ingold (1975) also describes collecting the leaves themselves from the beds of streams. They should have

been there for some time and should normally be dark brown, softening and even beginning to skeletonize. Growths of hyphomycetes can be seen under low power, especially around the petiole.

The spores are generally large and can be made more visible by adding a drop of lactophenol cotton blue to the slide. They can then just be seen when scanning a slide at x100. Some might prefer to try cotton blue in lactic acid to avoid the toxicity of phenol. It is usually not necessary to use an oil immersion lens.

There are various aids to identification. Ingold published detailed descriptions of sixteen species on alder leaves in his 1942 paper, but for a long time, the definitive guide was his 1975 booklet for the Freshwater Biological Association. A preliminary pictorial key from a BMS workshop is available (Descals 1989) and a detailed binomial key was published by Gulis *et al* (2005).

I hope this brief introduction will encourage you to gather foam while you may. The Border Fungus Group is hoping to run a workshop on aquatic hyphomycetes later in the year, and the practice will come in useful.

But for safety in collecting, befriend a good witch:

‘She ran out with the frying pan swinging like a bat. The screaming monster, leaping out of the water met the pan coming the other way with a clang ... The creature hung there for a moment, a few teeth and bits of green weed splashing into the water, then slid down and sank with some massive bubbles’

The Wee Free Men, Terry Pratchett (2012)

It is known well,
To those who dwell
By the banks of the River Tees ...
The threat of Hell
Lies beneath the swell
That’ll make your warm blood freeze ...
Sara Dennis (2016)

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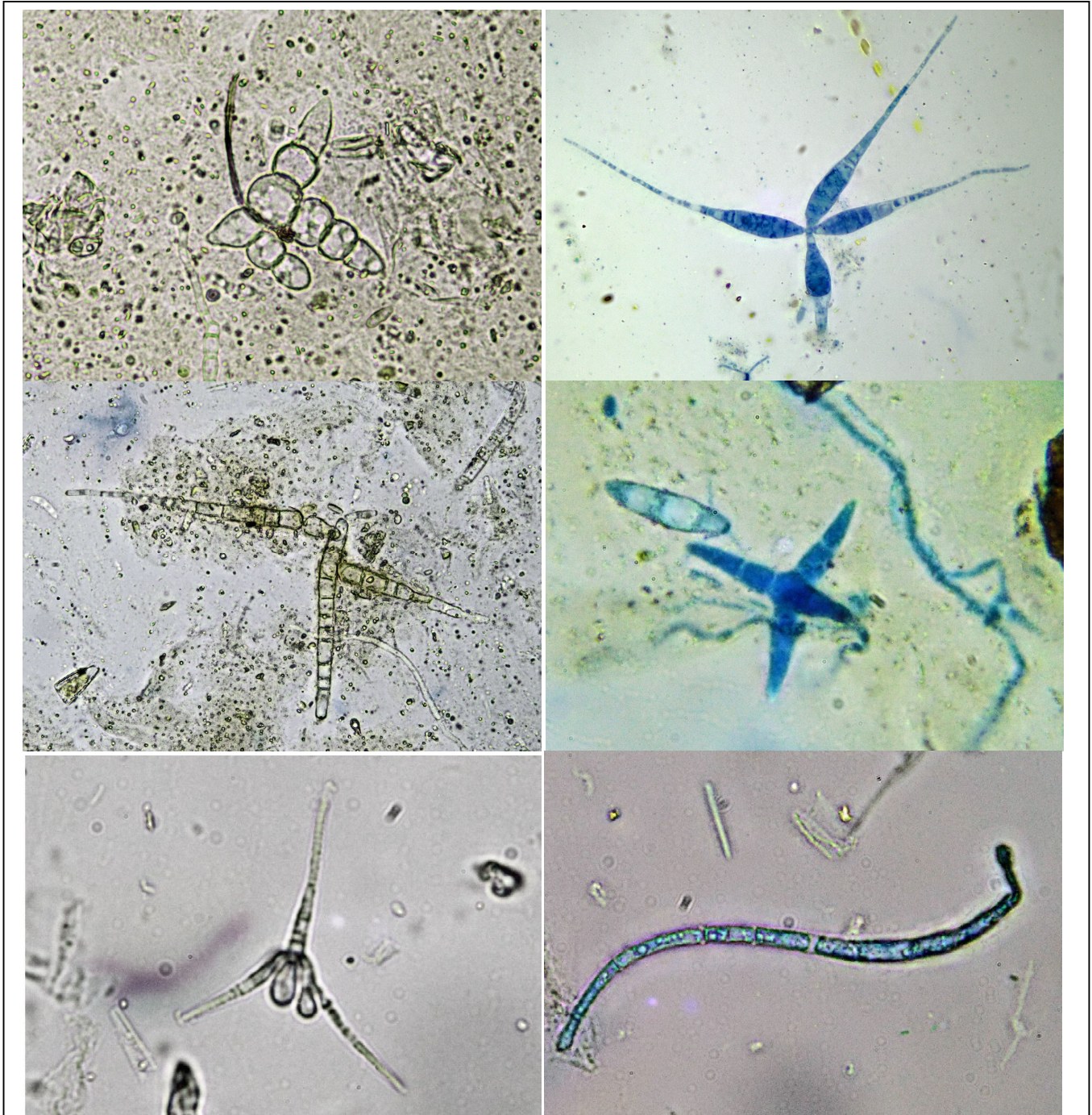
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Suppliers

Brunel Microscopes Ltd, URL: <http://www.brunelmicroscopessecure.co.uk/index.html> for Formal Acetic Alcohol, Lactophenol Cotton Blue
 Microscience Ltd, URL: <https://micro-science.co.uk/product-category/accessories/stains-reagents/> for Lactophenol Cotton Blue, Cotton Blue in Lactic Acid



left to right: Allen Banks, April 2018 - *Tripospermum myrti*, *Flabellospora acuminata*, *Tricladium splendens*. Tyne Watersmeet, April 2019 - *Lemonniera terrestris*. Otterburn Castle, July 2019 - *Tetracladium marchalianum*, *Mycocentrospora acerina*.

LAKE DISTRICT STAY 2019 , FRIDAY 26th - TUESDAY 29th OCTOBER

Our invitation to the Mannheim Fungus Group (MAK) to foray with us in the Lakes was a great success . Gordon B. Captured some images of the stay in his 4 collage . The participants were, at Brathay Hall

Bernd Behrens

Gordon Beakes

Petra Behrens

Mike Cruse

Dagmar Godert

Paul Forster

Wilfried Godert

Cath Gillie

Regina Hubers

Dave Gillie

Klaus Mittmann

Doug McCutcheon

Bernhard Otto

Alan Simkins

Elke Otto

Gordon Simpson

Angelica Reinl

Valerie Standen

Klaus Reinl

John Sutherland

Rhona Sutherland

Whilst, Keith Tulip , Kaye Kossick , Ron Pattinson and Lynne stayed in Ambleside and joined us for forays on the Saturday and Sunday. Dom Colback joined us for the foray on the Monday. Special thanks to Cath and Alan for all their hard work in organising a successful stay .





MICROSCOPE STUDY AT BRATHAY HALL



LABELLING SPECIMENS AT BRATHAY HALL



PRESENTS FOR OUR GUESTS



RYDAL WATER



TARN HOWS



ARMITT MUSEUM AMBLESIDE

Before entering the museum Keith discovered a Golden Bootleg (*Phaeolepiota aurea*) on the grass outside , a fitting tribute to the wonderful Beatrix Potter works we found inside .



© Courtesy of the Armit Trust



Lepiota friesii by Beatrix Potter, September 1895. Collected at Wray Castle, near Ambleside

In order to make sense of Beatrix Potter's foray into the world of fungi it is necessary to know a little about this mysterious group of organisms. This is a very simple explanation intended only as background to her story.

The branch of science involved in the study of fungi is called Mycology, and those who study fungi are mycologists.

We commonly associate the term *fungi* with mushrooms, toadstools, bracket fungi, elf-cups and the like, but these are only the ones we see in the fields and woods. There are also rusts and moulds that grow on plants, dry and wet rot, yeasts and many more microscopic fungi whose spores fill the air around us. There may be over 1,500,000 different species of fungi and they inhabit every environment from arctic to deserts. They range in size from the microscopic to the enormous. In the United States a honey fungus vegetative (underground) system was shown to stretch for 5.6km.

Fungi are vital to the ecological balance on the earth. Without them nothing would rot, every tree fallen since the beginning of time would still be lying around. They are important as a food source, and as destructive of food sources. Without yeast there would be no bread or wine. But they can be incredibly destructive. Dry rot is a major blight, and Dutch elm disease is a fungal infection that wiped out most of the elms in Europe and North America. They are also the cause of diseases in humans and animals. Therefore understanding them is very important. But because they were traditionally associated with magic and witchcraft their study was neglected compared with that of plants.

In Beatrix Potter's time fungi were looked upon as primitive forms of plant life, but it is now known that they are closer to animals and therefore have their own kingdom in the classification of all living things.

The principle difference between fungi and plants is that fungi cannot use the energy of sunlight to create the chemical energy to meet their needs for growth (photosynthesis). Instead they feed directly from plant and animal matter by using enzymes to break complex compounds into simpler forms and absorb the resultant liquid directly into their cells.

The exception to this is the group of organisms called *lichens* which are formed by a relationship between a *fungus* and an *alga*. The *alga* can synthesise light and the dual organism feeds off these energy rich compounds in a *symbiotic* relationship.

Fungi have several ways of reproducing and many can reproduce in more than one way. The commonest method is by the production of spores. The basic vegetative state of fungi is a mass of cells in strands of *hyphae* called the *mycelium*. These lie underground or in some other substrate such as a log or tree. Sexual reproduction occurs by the fusing of cells from opposite mating types of *mycelium*, of any compatible individual, or in some cases themselves. The fused cells have two nuclei and they grow into the fruiting body which we recognise as mushrooms. These contain the spores which are distributed in a variety of ways. Fungi can also reproduce by the fragmentation of the *mycelium* or through the formation of *conidial spores* (moulds).

Fungi reproduce when a single spore lands in a suitable environment. It germinates to form a *hypha*, a filament tube of cells which can grow to several centimetres. The *hypha* branch to form *hyphae* which continue to branch to form the *mycelium*.

Much about this huge range of strange organisms remains unknown and mycology is still a Cinderella science. But this is the world to which Beatrix was drawn.

Beatrix in Science - the Scientist

Sometime during 1895 a change occurred in Beatrix. Rather than simply collecting, identifying and recording her fungi, a pursuit known as taxonomy, she developed a curiosity about germination. Why do some fungi appear in the same place every year and others seemingly appear out of nowhere?

To answer these questions she started to examine specimens under a microscope.

In a letter to McIntosh she noted that she had collected young forms of *Boletus Granulatus* and that they were 'very slimy and had yellowish milky drops on the spores and stem.' Could these spores germinate she wondered? How did they live over the winter and in what form did they reappear? Although German scientists were investigating the germination of the larger fungi, few British mycologists at the time had given the question much attention as they were principally interested in taxonomy. Research on germination tended to be focussed on the micro fungi because of their economic importance.

Beatrix realised that she needed access to the botanists at the Royal Botanic Gardens at Kew to find out what work was being carried out elsewhere, because apart from her liaison with McIntosh she was working in a vacuum. The Royal Botanic Gardens at Kew and the Natural History Museum in London, were, and still are, important biological institutions. Kew Gardens was established to collect and collate the plant life of the Empire, and specifically to look for economic opportunities to transplant economically valuable plants from one part of the Empire to another. The classic example of this is the introduction of rubber plants from the Americas into Sri Lanka and Malaysia. This was one of the achievements of the then Director of Kew, the splendidly named William Thiselton-Dyer. He also happened to be an acquaintance of Sir Henry Roscoe, Beatrix' favourite Uncle Harry, who was in a position to provide an introduction.



© Courtesy of the Ascom Trust

Absidia (Mucoraceae), Beatrix Potter 1897. Pencil, pen and ink wash

Journal 27th February 1896

(Uncle Harry - with the gout) began to look much pulled down. He was very amusing, partly from the circumstance of having his teeth pulled out. Says he will give me a note for Mr Thiselton-Dyer.

It took till May for Uncle Harry to make good his word. But on Tuesday 19th May 1896 he swept her off to Kew Gardens. Here they met Thiselton-Dyer who largely ignored her. Of him she wrote, he 'puffed his cigarette, vituperated the weather...discussed vaingloriously upon his Establishment...and his hyacinths...' and related anecdotes 'too statistical to recall without a notebook...'

They were also introduced to George Massee the senior mycologist who showed kindness to her and said he liked her drawings. She met Massee again on 13th June when he showed her fungi, he was attempting to grow. She noted in her Journal,

'I opine that he has passed several stages of development into a fungus himself - I am occasionally conscious of a similar transformation.'

That summer was spent at Sawrey in the Lakes in a house overlooking Esthwaite. By this time Beatrix was focussed on the germination issue.

Journal Monday 31st August

Had further ideas about fungi. It stands to reason all such as grow on fresh manure for a few weeks in summer must have some other form to take them over the winter months.... I think further, that is how *Chlorosplenium* gets from log to log without cups to spore. I think that may be why different boleti have different moulds, not parasitical, but their own spore. I think that all the higher fungi have their own mould.

It does not follow that all could be grown, but probably in every instance that can be got to sprout, they could with luck and patience. If it is concluded that these moulds are each individual, there are enormously more moulds than have been specified.



© Courtesy of the Ascom Trust

Mucor. Beatrix Potter, pencil, pen and ink wash

She was now working on the germination of spores on glass slides so that she could observe and record the process. Microscopic fungi germinate only too well, the higher fungi are much more difficult to spawn, but Beatrix was achieving it. She was excited about her results and recorded in her journal that 'She couldn't wait to get back to London to tell Uncle Harry'. He decided that they should send a 'fishing' letter to Massee at Kew to find out whether others were working on the same problem. The brief response fobbed her off by pointing Beatrix towards a twelve volume treatise in German by the noted mycologist Oscar Brefeld. Next day she went to Kew and concluded that Massee was not as advanced as she. Beatrix wrote up her work, had it typed, and took it together with her drawings to Thiselton-Dyer on Thursday 3rd December with a covering letter, probably dictated by Uncle Harry.

Dear Sir,

Sir H. Roscoe sent me to ask whether you would be kind enough to look at some of fungus drawings which he is interested in.

I do not quite like to give the paper to Mr Massee because I am afraid I have rather contradicted him. Uncle Harry is satisfied with my way of working but we wish very much that someone would take it up at Kew to try it, if they do not believe my drawings. Mr Massee took objection to my slides, but the things exist, and will all be done by the Germans. It is rather a long paper to ask you to be kind enough to read.

I remain, Sir, yours sincerely,
Beatrix Potter

However, her nerve failed her and she fled without delivering the paper. She returned the next Monday and met Thiselton-Dyer who said he had no time to look at her drawings and referred her to Cambridge University. She then went round to visit Massee whom, she noted, was ineffectually trying to grow *Bulgaria Inquinans* (a common cup fungi growing on deciduous wood). She gave him a slice of velupites (Velvet shank, another cup fungi) to try with. Massee was now beginning to appreciate Beatrix' work.

She recorded that he had also come around to her view on lichens. A German scientist, Schwendenor, had proposed that they were dual fungi/algae organisms and other German scientists suggested that the relationship was symbiotic (they both benefited from the arrangement). But at this time British scientists ridiculed the notion because they couldn't accept the idea of symbiosis. They believed the relationship had to be parasitic. Beatrix had germinated a lichen (*Cladonia*) and supported the symbiotic argument. In this respect work, and thinking, was ahead of the British botanical establishment.

OPHIOCORDYCEPS DITMARI - Mike Cruse



On a cold day in December Paul and I travelled to Scotland to foray with the BFG at Bowmont Forest , 3 miles south of Kelso . Mainly pine , the ground everywhere was littered with an abundance of Pinecone Cap (*Strobilurus tenacellus*) with the odd Sprucecone Cap (*Strobilurus esculentus*) and Conifercone Cap (*Baeospora myosura*) thrown in . It meant distinguishing other small brown fungi was difficult , but fortunately Kay from Berwick was more discerning than the rest of us making a significant find , only the 4th record on Cate 2 . A Cordyceps (*Ophiocordyceps ditmarii*) on a fly cadaver , which Paul photographed superbly . Coincidentally the next find was another Cordyceps, the Scarlet Caterpillarclub (*Cordyceps militaris*) , rather more common .

WINTER FORAYS - Jo Scott

A few of the southern members met Alan Simkins to look for winter fungi in local woodland

Lockwood Beck - 12 December

There was a threat of snow but luckily it didn't arrive when a few of us met to have a look around Lockwood Beck to see what winter fungus was about. We ended up with a good list on a very nice morning. We re-discovered Paul Forsters *SparassisCrispa* the Cauliflower fungus mentioned in the last newsletter.

Linthorpe Cemetry, Acklam, Middlesbrough - 20 January

Linthorpe Cemetry is a local nature reserve with lots of big trees and grassy places. *Auricularia mesenterica* Tripe Fungus and a group of very large *Pleurotus ostreatus* the Oyster Mushroom were included in a list of 38 species. Some of the tiny ones kept Jill busy!

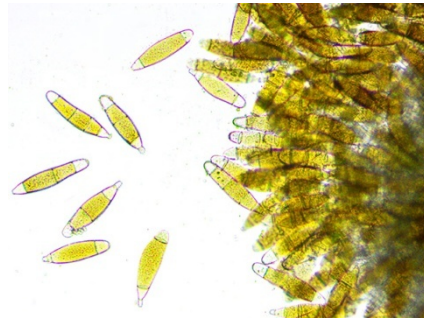
Billingham Beck Valley - 11 February

Only four of us braved the strong winds for a visit to the country park but we were lucky, sheltered from the winds, in sunshine we had a lovely morning. There was some debate about finding a *Trametes ochracea* on a stump on the way back to the car park. *Bactridium flavum* gave Jill and I the opportunity to do some microscope work and there was a lot of *Cyathus striatus* the Fluted birds nest fungi among the moss on fallen branches. A few lichens were recorded including a nice *Parmotrema perlatum* on a fallen branch.

Full lists of the species found are on the website on the Members Noticeboard.



Bactridium flavum



Cyathus striatus

Minutes of a committee meeting held at 11.00 am at Stockton, November 30th, 2019

1- Present - Alan Simkins (chairman), Jo Scott (editor), Mike Cruse, Ron Pattison (treasurer), Val Standen (secretary).

2 - Apologies - John Robinson

3- Minutes of committee meeting 25th May 2019 - the minutes were read and approved.

4- Matters arising not on this agenda - no other matters.

Books. Alan raised the issue of how to dispose of Books on Fungi received from Tom Kirby and Alan Bunn. After discussion it was decided that Alan would prepare a list of books to be circulated at the next AGM. It was suggested that the more expensive books e.g. Funga Nordica might be auctioned at the AGM.

Lake District expenses: VAL offered to finalise re-imbusement for expenses incurred providing lunches for the German visit weekend.

CATE2 records: Mike's offer of help for Sally Pattinson to enter records into CATE2 still ongoing.

Insurance: £128 paid to Michael Jordan includes 4 copies of the magazine The Forayer to be given to foray leaders.

Mid-Yorkshire group: MIKE will pass on any relevant information.

Extra committee member: no suggestions received for a member to represent the south of the area.

5. Finance: RON will table a statement of income and expenditure at the AGM. He will update the membership list when members pay their subscription. Members will be reminded about subs before the end of February. The updated list will be circulated.

6. Newsletter: Jo will send the newsletter next week.

7. 2020 forays: The preliminary list of forays for 2020 was circulated although some changes expected.

8. January indoor meeting: Sally Pattinson has offered to organise a meeting with Sheila Lillie at her home on Feb 1st and therefore this will be the winter indoor meeting.

9. AGM: to be held at Rainton Meadows on 15th February. Gordon Beakes has offered to give a slide show. ALAN to contact to confirm.

Mike to explain CATE2???

Weather permitting we will foray at Rainton after the meeting.

10 HLF bid by Durham Wildlife Trust: No further communication received.

11. AOB: Alan sent reports of public surveys to Northumbria Water via the Tees Valley Wildlife Trust. Alan to investigate the possibility of site surveys with Alex Lister of Northumberland WT.

Alan raised the question of surveys of the North York Moors prior to possible release of beavers but no knowledge of whereabouts.

Social lunch - mid July i.e. Sat 11th or 18th. VAL to arrange somewhere near Durham.

DONM: May 2nd at Durham.

North East Fungus Study Group AGM minutes

Minutes of the 23rd AGM held at Rainton Meadows on 15th February 2020 at 11.00a.m.

Present:

Alan Simkins (Chair), Keith Tulip, Gordon Beakes, Val Standen (Sec), Jill Cunningham, Jo Scott, Doug McCutcheon, Cath Gillie, Rachel Richards, Sally Pattison, Ron Pattinson (Treasurer), Mike Cruse, Paul Foster, Daphne Aplin.

Apologies: John and Rhona Sutherland, Mal Greaves, John Robinson.

Minutes of last AGM: The minutes were read and approved (proposed - Doug, seconded Gordon).

Matters arising: Ron reported that we now pay £132 to the FCT and Michael Jordan for public liability insurance. It is the equivalent to 4 membership subscriptions and one of these 'floating' memberships is carried by the leader of each foray.

Chairman's report:

Welcome to 2020 – NEFSG YEAR 23

Firstly, I sadly record the passing away of two of our members (Tom Kirby and Gwen Humble) in the early months of 2019 – and also that another member (Aubrey Colling) now resides in a supportive home. Several NEFSG members attended the funeral services of Tom and Gwen. All are sorely missed.

Membership of NEFSG remains strong and whilst some memberships have lapsed, new members have arrived. The 2019 foray programme was extensive and well-supported I only draw attention to one – the Hadrian's Wall Foray at Walltown which was the first of an at least annual foray at sites near the Wall focussing on waxcaps, with support from the Northumberland National Park staff.

For the organisation of these forays thanks given again to members who propose them. Please keep coming forward with site suggestions. Your Treasurer has been busy reorganising bank accounts, insurance matters, and membership lists and is commended for his efforts. Val at Durham and Jo at Stockton kindly hosted our two committee meetings in 2019. John continued his maintenance of our website and Jo continued to coordinate our newsletters. Finally in a successful innovation Sally Pattison (with technical support from Sheila Lillie) organised a microscopy day at Bebside earlier this month which several members attended – and learned things.

Of course our big event of 2019 was Brathay Hall in Cumbria where we entertained our German myko-colleagues over a long weekend in October. The programme of activities went like clockwork and I particularly thank Rhona and John (Armitt Museum), Val and Cath (Lunches etc.) and Gordon who persuaded the British Mycological Society to grant aid the cost of the meeting room – well done all.

Finally it is good to report that our contacts with other "environmental" groups continue, notably the Tees Valley Wildlife Trust, Durham Wildlife Trust, and Cleveland Naturalists. Some effort has been expended to initiate similar links with Northumberland Wildlife Trust commencing in 2020. Last, and by no means least, we have combined with the Borders Fungus Group (BFG) on several forays during the year and several NEFSG members have joined BFG microscopy workshops to their individual benefit.

Treasurer's report: Ron reported the situation for the year ending 2019. There were 50 members including some honorary members. Of the £1390 in the bank after membership subscriptions were received, £792 was spent on the joint meeting with MAK members at Brathay last October. 35 members have paid subscriptions for the current year and there is £796 in the current account. Ron reported that Easy Funding had paid £90 and anyone wishing to contribute to this useful amount should consult the last Newsletter for details of how to do this online.

Election of officers: None of the current officers had resigned and no other nominations had been received and it was proposed that the current officers should be re-elected. (proposed Jill, seconded Doug).

2020 Forays:

Sunday April 19 th	Bowlees	Jo Scott
Sunday May 17 th	Bickerton	Mike Cruse / Shaun Hackett

Saturday July 25th LUNCH at the King's Lodge Hotel, Flass Vale, Durham

Sunday August 16 th	Beanley	Sally Pattison
*Sunday August 23 rd	Auckland Deer Park	Alan Simkins
Sunday September 6 th	Bickerton	Mike Cruse / Shaun Hackett
Sunday September 13 th	Tudhoe	Mike Cruse (with DWT)
Saturday September 19 th	Hartford Hall	Sally Pattison
Sunday September 20 th	Kirkdale Minster	Alan Simkins
Saturday September 26 th	Crook	Louise Watson
Sunday September 27 th	High Plains	Mike Cruse
Saturday October 3 rd	Sutton Bank	Christine Meek
Sunday October 4 th	Rushpool Hall	Alan Simkins
Saturday October 10 th	Hadrian's Wall	Shaun Hackett
Sunday October 11 th	Lordstones	Alan Simkins
Saturday October 17 th	Letah Wood	Gordon Beakes
Sunday October 25 th	Mulgrave Castle	Mike Cruse / Paul Forster
(With Whitby Nats and Cleveland Nats)		
Sunday November 1 st	Hawnby	Rhona Sutherland
Sunday November 8 th	Errington Wood	Alan Simkins
Sunday November 15 th	Sidwood	Mike Cruse

* may be moved to October 4th if permission for Rushpool Hall not obtained.

Dom suggested Mike check with Forestry Commission that no work taking place at Sidwood that day and OK to visit.

The Borders group meetings are not advertised ahead as they are subject to change. Alan emphasised the importance of making and keeping contacts with other groups such as the Borders group. Mike has contacts with this group (and with Mid-Yorkshire) and will continue to circulate information when he is given it,.

Date of next meeting: Alan to book Rainton for February 2021.

Two leafy lichens to look for on tree trunks and branches.



Platismatia glauca

An attractive, large frilly lichen that grows on acidic bark, fence posts and sometimes on rocks. Isidiate* or soridiate* Green/Grey sometimes tinged brown above. Under surface white but can be black towards the centre.

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

* Isidia - are tiny columnar asexual reproductive structures, made up of both fungal hyphae and algae.



Parmotrema perlatum

A smart blue grey foliose lichen with a few black marginal cilia (eyelashes). Smooth above. The underside is black fading to tan towards the margins. Found on trees and rocks.