North Eastern Fungus Study Group

Newsletter No120 Spring 2026

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NEXT ISSUE: The deadline for articles for the Summer newsletter is 21st August 2026
All contributions will be gratefully received!

Forthcoming Events

Meet for events at 10:30am ready for an 11am start unless otherwise stated. Forays can last into the afternoon so bring a packed lunch. Good footware essential as paths can be rough and wet.

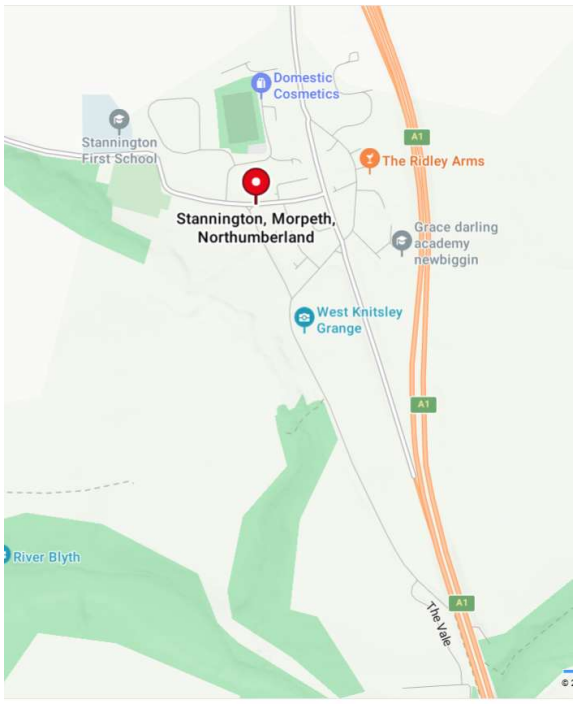
Sun 10th May Plessey Woods Stannington Vale, Stannington, Northumberland – Leader Lydia Koelmans

Dogs under owner's control welcome

This semi-natural ancient woodland, which flanks the River Blyth, is delightful in the Spring, supporting a wide variety of wild flowers including bluebells.
Given the ancient site, and the range of plants, a wide variety of fungi is likely too.
The woodland path we will follow is level, and easy walking without stiles. There may be muddy patches depending on weather. The route is linear.

Park in spacious Car Park of Ridley Arms, Stannington, near Morpeth. There are toilets available here. GR: NZ214794 - Postcode: NE61 6EL - What3Words: restrict.tasks.fetching

DIRECTIONS: From the south, take the A1, exit at slip road for Stannington, then third exit at roundabout: Ridley Arms is on your right.
From the north, take the A1, then exit towards Stannington and Netherton Park. At roundabout, take 4th exit. At roundabout, take 1st exit. At roundabout, take 1st exit: Ridley Arms is on your left.
To get to the woodland, we first walk a short distance south beside the busy A1, before crossing the road to enter Plessey Woods.



Lydia Koelmans 07759781721

Sun 31st May - Lockwood Beck Reservoir - Leader Alan Simkins

Grid Ref--NZ669140--Postcode--TS12 3LG--What 3 Words--moisture.troll.conned

Once you have arrived at the east side of Guisborough from whichever roads follow the A171 road towards Whitby for about 4 miles. Access into the site is on the right side of the A171--opposite the minor road to Stanghow and Lingdale [and the various buildings under construction to service the polyhalite transport from Whitby to Teesport]. The recommended driving procedure is NOT to attempt the right turn to the site at this dangerous junction - BUT to drive a further 300 yards or so and turn right on to the moor road to Castleton, turn round there and drive back on the A171 and turn left into the site. The car park is large if a bit potholey. A rudimentary toilet is on site.

The foray route is about one and a half miles following footpaths around the reservoir-terrain is flat but boggy in places depending on the weather. No dogs.

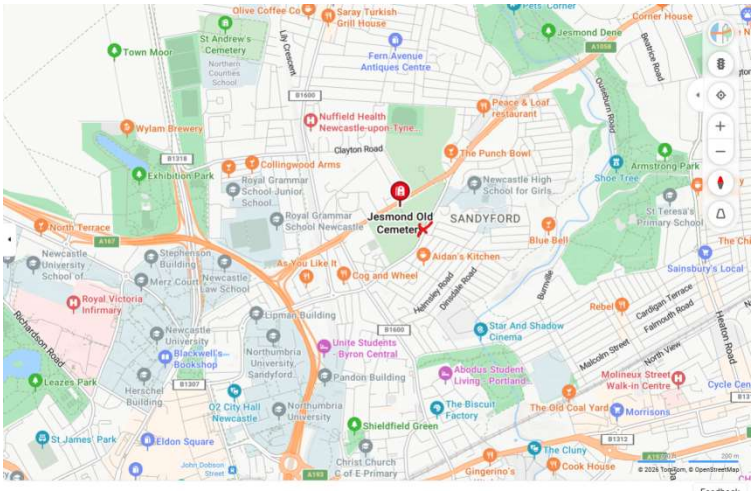
Alan Simkins

Sat 13th June Jesmond Old Cemetery, Newcastle – Leader Mike Cruse

Love Your Burial Ground Week with Churches Count on Nature 2026

The dates for 2026 will be Saturday 6th to Sunday 14th June and we look forward to burial grounds across the country joining us to discover and share the range of wildlife found within.For over 16 years we have been encouraging all who help to look after churchyards, chapel yards and cemeteries to celebrate these fantastic places in the lovely month of June. Churches Count on Nature is part of Love Your Burial Ground Week, focusing on the brilliant wildlife to be found in churchyards and chapel yards. It is a joint initiative promoted by Caring for God's Acre, the Church of England, the Church in Wales and A Rocha UK. National Cemeteries Week is hosted by the National Federation of Cemetery Friends.

We have arranged to look at the fungus at Jesmond Old Cemetery . Other wildlife groups will also be there recording . Car park is off Sandyford Road , marked with a red X on the map below . No dogs please . Grid Ref :- NZ 258 655 Postcode :- NE2 1BN what3words :- dash.stove.pass



Mike Cruse 07748276183

Sun 28th June Poss Spennymoor area - Details by e-mail.

Sat 25th July Summer Social – Snods Edge - Details by e-mail

Sat 3rd Oct UK Fungus Day – Details by e-mail

With Alpine Garden Society at Hexham

Why bother with DNA?

We all know of DNA, if not from school and college but regularly from the news, in forensics and in criminal investigations – real or as entertainment. To identify organisms, including fungi, DNA is the unique and definitive signature. Sequence a fungus DNA and we have a guaranteed identification.
Sadly, it isn't quite so assured but can be a good step on the way and helpful in confirming between different options you might get from observations.
The most important feature of a fungus's DNA is its unique sequence. This series of nucleotide bases is the information of genes. These are, generally, identical or very similar between many species and, as such, not suitable for distinguishing one species from another. However, there are other sections of DNA which don't code for genes, and which do vary greatly as species evolve. These are the target of DNA identification as they will be consistent for samples of each species but different between species.
For fungi this section is the ITS region of the ribosomal DNA which has been sequenced for many fungi and listed in databases for comparison with the DNA of a sample you are investigating.
Of course, obtaining a DNA sequence requires some laboratory work, specifically molecular biology procedures but today is relatively routine. Isolate DNA from a sample of tissue, purify and multiply the ITS region by the PCR process and sequence the result. Specific enzymes and attachment primers to identify the DNA region are required for the multiplication but routine protocols are available for easy processing.
Once the DNA is multiplied to a suitable concentration it is sequenced by specialist chromatography and provided as a listing of nucleotides – A, T, C and G. This is distinctive for the species as the example below for *Agaricus bisporus* can show.

>KT_A+_ITS4
CCTGATTTGAGGTCAGCATTCAAGAAATTGTCCTTAGACGATTAGAAGCTGAACATCAGAAAGCAATCCCCTCGCCAGTGTAGATAAGTTATCACACTTGTGGCAGATCG
CAGACGATTCCGCTAATGCATTTCAGAGGAGCTGACCCCAAGTAAGGAGCCAGCAAACCTCCACAATCCAAGCTCTCCTTTACAACAAAGTATTGGAGAGTTGAGAATAT
AATGACACTCAAACAGGCATGCTCCTCGGAATACCAAGGAGCGCAAGATGCGTTCAAAGATTCGATGATTCACTGAATTCTGCAATTCACATTACTTATCGCATTTCGCTG
CGTTCTTCATCGATGCGAGAGCCAAGAGATCCGTTGCTGAAAGTTGTATAATAATTTTCATAGGCATAGCCCATGTAAAGACATTCAATGACATTCTAAGAGTATAATGAA
TAACATAGACTCTAACAGGAAAAAGATTCCATGGCCAAGGTAAAGGACAGCACTGTTTTCACACTGCAAGTCCTTACATCCAGCAAAGAGCTGATAGGCTGACCACTTCCT
CCAATACCTGAAAAAGACTACAAAAGGTGCACAGGTGGATGAAAATGAAGTCCAGACAGGCGTGCACATACTCCGAAGAGCCAGCTACAACCCATCTAGAAAACATA
ATTCAATAATGATCCTTCC

To confirm this identification yourself, copy the sequence including the >KT_A+_ITS4 header, open the BLAST database link (below), paste into the "Enter Query Sequence" box and click "Blast". A list of identifications will show matching sequences in the database.
https://blast.ncbi.nlm.nih.gov/Blast.cgi?PROGRAM=blastn&PAGE_TYPE=BlastSearch&LINK_LOC=blasthome
Overall DNA identification is an easy operation and relatively rapid. As such is there any need to conduct our standard observations and microscopy?
And, of course, yes there is. Not only for satisfaction of employing skills and providing an initial identification but because DNA identification isn't perfect – either in operation or in its databases. In particular the following limitations can occur:

1. The DNA doesn't have an inherent name tag. Matches shown by the data bases will be based on mycologists' identification from other means, observation, physiology and microscopy. These are critical but may not always be correct depending on the skill of the mycologist. As such it is important to compare your sequence to the range of matches present in the data base. Occasional misidentifications may confuse your match but ideally most should be of the same species and so give confidence with the naming. Look also for the % similarity – ideally greater than 97% is needed for a confident identification.

2. Some species have overlaps in their ITS sequence and so show variable identifications. In some cases, additional genes may need to be sequenced and compared.

3. Sequences may mutate and differ from different locations, particularly internationally.

4. Contamination in isolating the DNA may include other species, particularly moulds or yeasts. Similarly, if the tissue has been handled extensively or gloves aren't worn in processing, human tissue may be sequenced resulting in an embarrassing mismatch.

Despite these constraints DNA offers plenty of opportunity to expand mycological knowledge. In addition to providing identification of a specific fungus more advanced analyses allow all the DNA of a mixed sample to be profiled. Such metagenomics is valuable to view the range of species in soil or other environments or over time so that comparisons can be made in the absence of fruit bodies.
Overall DNA identification has many advantages particularly speed of processing large numbers of samples and giving a potentially definitive comparison. It can also provide options for further analysis and comparisons when small sequence differences may occur and indicate variability within a species. It isn't perfect but can be a rewarding confirmation of your hard work peering into the lens and the microscope.

Keith Thomas

The Mysterious World of Africas Fungi

'Without them there is no life': the race to understand the mysterious world of Africa's fungi | Fungi | The Guardian

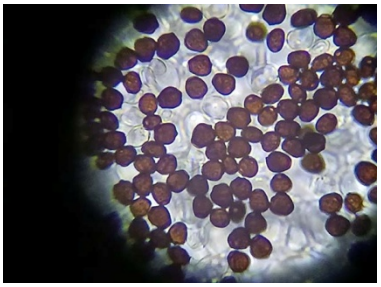
Jon Bemrose

Wildfire – NY Moors

Late last summer a wild fire, on un-managed moorland, devestated 25sq km of the North Yorkshire Moors National Park.The fire eventually ran out of steam when it arrived at the Whitby to Scarborough road. Fortunately massive fire breaks had been bulldozed in front of the fire at Sneaton forest/ Maybecks, with only a small strip of Larch going up in flames.

It was at this 100m strip of burnt pine where i first noticed masses of Anthracobia macrocysta appearing, thousands of small orange cups, we also spotted some lovely dark purple Peziza species too. This ascomycete caused a lot of head scratching, DNA analysis whittled it down to 2 species and due to its fine spore ornamentation we were all in agreement that it was Geoscypha tenacella.

A small stand of Scots pine, called Crow wood, had been destroyed by the fire and i was asked to monitor this site and record the fungi species which appeared on the burnt remains of the trees and the brash on the floor. Daldinia fissa was found on some burnt gorse, closely followed by Coprinellus angulatus , with its distinctive Mitre shaped spores. early spring a mass emergence of Geopyxis carbonaria was noted alongside hundreds more Peziza cups.Two experienced mycologists joined me at the site and samples of the fungi were taken for microscopy , the results showed that we had both Geoscypha violacea and Plicaria endocarpoides on site, with another Anthrocobia species : A melaloma.An unassuming pale capped gilled fungi was also appearing on the burnt ground and this was identified as Pholiota highlandensis, another burn site specialist. Amongst the burnt heather Mycena megaspora and Mycena galopus (var nigra) were found but it is probable that these would be found before the fire !I'm visiting the site once a fortnight but by mid April the area was drying out very rapidly and no new fungi were seen on my last visit.Hopefully given some rain in late summer, more exciting species of fungi will appear at this unique site.



Bishops Mitre Inkcap

Anthracobia sp

Geoscypha violacea

Graham Featherstone

From Your Chairperson

Hello everyone

I am writing this on April 23rd St Georges Day and what a lovely fine sunny day it has been. Whilst walking the dogs this morning without the usual three layers of clothes and gloves! I was delighted to spot a super patch of Calocybe gambosa, it's the first time outside of a foray that I have found them. A barbed wire fence kept me from taking a photo to share or picking any, but I am hopeful that I might now find more and try some for the pot!

Apparently, you can easily propagate St Georges mushrooms in the garden just by leaving a few bits of any trimmings discarded from culinary use on the lawn!

Next year marks the 30th Anniversary of the NEFSG, which Alan Legg founded in November 1997 and we welcome any ideas on how we could celebrate this milestone.

Other things in the planning pipeline are-

- A 2027 Callender with more of Paul Forster's lovely Photographs
- New Logo for the group and updated website (ongoing)
- Purchase of loupes and a microscope
- August to December Foray Programme
- A UK Fungus Day Event Sat 3rd October 11-3 pm where we will be putting on a display of Fungi in conjunction with the Alpine Garden show at Hexham Mart, Tyne Green, Hexham
- Cortinarius Study Day 11th Oct, Linden Hall Hotel

I hope that you are enjoying the change in Foray programme and the chance to get out and about as a group before the main season for Fungi arrives.

I haven't been to many yet due to health issues but thoroughly enjoyed those I did manage to get to, especially Tyne Waters Meet where we found these fabulous Morels and the elusive Anemone Cup.

The committee would love to hear your views on the North and South forays, how this is working or not for you? and have any suggestions for main season locations.

Finally remember to save Saturday, July 25th for the summer social at Snod's Edge—it promises an excellent line up of speakers, displays and activities along with the delicious food, and great company.

Cat Gillie (Chairperson)
(07834 658562)
cat.gillie@btinternet.com

N.E.F.S.G.

Summer Social

Saturday 25th July

10.30am-3.30pm

Snod's Edge Village Hall, Shotley Bridge, Consett, Co. Durham, DH8 9TJ

- Talk; '***Why the fungarium at Kew is not boring***' by **Cameron Diekonigin**
- Talk; '***Mildews***' by **Lydia Koelmanns**
- **Display; '6 Facts about magic mushrooms'** by **Cameron Diekonigin**
- Display; '***The secrets of Mycelium***'
- Display; '***Fungi in literature***'
- Display; '***Dyeing with fungi & lichen***' by **Sheila Lillie**
- Display; '***Fermentation***' by **Dr. Keith Thomas**
- Refreshments available all day
- Lunch, with time to chat
- Short foray in local woods
- Games & prizes
- Book sale

Everyone welcome!

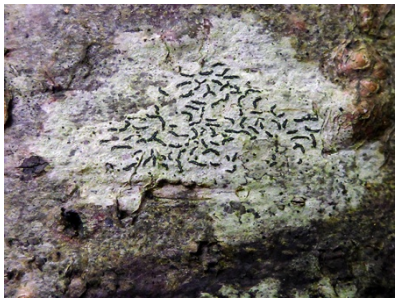
More events may be added....

Lichen Lookout

We had a good day for our walk around Flatts Wood at Barnard Castle recording 80 species of fungi and 40 species of lichen. Below are some of the less common ones.

Arthonia spadicea

Pertusaria hymenea



Graphis scripta

Dimerella pineti

Cliostomum griffithii

Opegrapha vulgata