



BMS Fungus Group Leaders' Meeting 14-16 June 2024

The 2024 Group Leaders' Meeting (GLM) was held once again at Northen College in Barnsley. The two-day event was attended by 36 people, including representatives from 22 local fungus groups.

After dinner on Friday evening Peter Smith gave an informative talk on **fungus photography**, full of useful hints and tips on taking better photographs and illustrated with many of his own wonderful images.

On Saturday morning, John Robinson kicked off proceedings with a presentation on **buying microscopes**. He provided an overview of microscope components, including the different types of lens available, and summarised the pros and cons of buying new vs used microscopes. Second-hand microscopes are obviously cheaper than new, and a range of well-made models are available, but they can be damaged and it may be difficult to source replacement parts. It's important to buy from someone trustworthy who will accept returns. During discussion, several people noted the importance of using oil immersion for mycology and the value of taking good photos of microscopic features.

Geoffrey Kibby was up next, talking about **identification of *Cortinarius***. Despite *Cortinarius* being a notoriously difficult genus, Geoffrey was clear that with practice many specimens can be identified with reasonable confidence using recent literature. It was suggested that the BMS could organise a workshop on *Cortinarius*.

The following session focused on **fungus recording**. Sam Amy (UK Centre for Ecology and Hydrology) gave a presentation on using databases and recording programmes. She noted the confusion caused by having two national fungus databases (FRDBI run by the BMS and CATE2 run by the Fungus Conservation Trust). Increasingly, people are also recording fungi on multi-taxa platforms such as iRecord. FRDBI records on the National Biodiversity Network (NBN) are currently labelled as 'unconfirmed' which may lead users to question their reliability. This kicked off a lively debate as to whether it was possible or desirable for the BMS to implement a verification system for records held on FRDBI. Stuart Skeates returned to this topic on the following day, proposing a pragmatic solution whereby group leaders could undertake light-touch verification of records made by their local group in much the same way as they do at present. In addition, experts could also volunteer to verify records of particular species groups. This would enable records to be marked as 'accepted' on the NBN.

Following Sam's presentation, Stuart led a short discussion session. It was suggested that FRDBI should enable records based on sequenced specimens to be clearly marked and allow links to GenBank. The importance of allowing decision-makers to have easy access to fungus records was emphasised, but this in itself is not sufficient as people may not be able to interpret the records without expert input.

We regrouped after lunch to hear Helen Baker talk about **DNA barcoding**. Helen gave a very clear account of the process of DNA barcoding and how the Grampian Fungus Group has used a Bento Lab to aid the identification of *Russula* and other basidiomycetes. Discussion then focused on how the BMS could help fungus groups to get more involved in barcoding. Financial help from the BMS to enable groups to buy Bento Labs and associated equipment was raised by several people. Another key issue is training, whether through in-person workshops or online videos – covering not just the process of DNA extraction and



sequencing but also interpretation of data. Other points raised included the difficulty of accessing scientific literature, the possibility of university labs providing access to facilities, and concerns regarding single-use plastics.

Geoffrey Kibby is stepping down as editor of *Field Mycology* at the end of the year. Clare Blencowe and Marcus Yeo summarised plans to manage the transition to new editorial arrangements. Comments received in advance of the GLM indicated that many people valued receiving the publication in paper form and generally liked the current format and mix of articles but would welcome additional material aimed at beginners. During the subsequent discussion, various suggestions were made for the content of *Field Mycology* (see Annex 1). These will be considered by the working group that is considering the future of *Field Mycology*.

Mark Ramsdale, Chair of the BMS Fungal Education and Outreach Committee (FEO), talked about mycological **resources for newcomers**. He made a number of suggestions for material that could be made available on the BMS website, including 'how to' guides (e.g. videos), a compendium of book reviews, links to podcasts and films about fungi, and profiles of the most frequently recorded 100 fungi on the FRDBI. He also described the success of recent UK Fungus Days and urged local groups to get involved in the UK Fungus Day (5 October 2024) by running forays.

After dinner, Cameron Diekonigin brought the day to a close with an entertaining account of his **travels in Italy** during a family holiday. Live fungi were very thin on the ground during a spell of hot, dry weather but a visit to a truffle festival at Alba more than compensated for this.

First off on Sunday was Matt Wainhouse from Natural England who summarised **national conservation initiatives**. He outlined the legislative and policy background for fungal conservation in England and encouraged local groups to contribute to the development of Local Nature Recovery Strategies, very few (possibly none!) of which currently cover fungi. He noted the paucity of funding for fungal conservation – preparation of fungal Red Lists would help to attract more resources. Discussion among attendees generated a lot of helpful suggestions (summarised in Annex 2) for actions that could be taken to improve fungal conservation at local and national levels. Priorities for the BMS include improving access to, and interpretation of, fungal records, developing stronger relationships with conservation bodies, and finding ways to exert greater influence over decisions that affect fungal conservation.

Mal Greaves gave a presentation on **identification of earthtongues** (*Geoglossum* and related genera). He summarised the main features crucial for identification of the roughly 50 species found in the UK and demonstrated a key he had developed which includes descriptions and images of each species.

Rosie Woods and Isabella Miles-Bunch talked about the **Kew fungarium**. Founded by M.J. Berkeley in 1879, the fungarium now holds 1.3 million specimens, including approximately 50,000 type specimens. Rosie and Isabella brought the fungarium to life by talking about favourite specimens chosen by some of the mycologists working at Kew. They also outlined the process by which BMS members can donate rare or interesting specimens to the fungarium, and the information that needs to accompany each specimen.

Marcus Yeo closed the meeting with a discussion on how the BMS could better support local fungus groups and more generally improve field mycology. Several suggestions had already



arisen during the meeting, and more were made during discussion (see Annex 3). These will be discussed at the next meeting of the Field Mycology and Conservation Committee in July.

Marcus Yeo,
Chair, Field Mycology and Conservation Committee

Annex 1. Points raised during discussion on *Field Mycology*

Include more articles on:

- Ascomycetes
- Hints and tips for beginners (a lot of material for beginners is already available elsewhere and may be better placed on a website)
- Profiles of well-known mycologists
- Mycological history
- Articles on commoner species (not just rarities)
- Conservation
- Fungal foes in the garden
- Culturing fungi
- Guide to mycological literature
- Review of the previous year's field season
- Which fungi to look out for at different times of the year
- Foray reports
- Fungi found in specific habitats or on specific hosts
- Book reviews
- International conservation action
- Retain Alick Henrici's regular column

Should *Field Mycology* be open access or available to BMS members only? Each option has pros and cons. In general, members need to receive some benefits from the BMS.

Profile the different audiences for *Field Mycology* and consider what they want from the publication.

Annex 2. Points raised during discussion on fungal conservation

Pressures and threats

- Habitat destruction (e.g. through development)
- Poor management decisions and actions (e.g. under-management leading to scrub invasion but also over-management)
- Apathy towards fungi
- Ignorance (e.g. grants for tree planting on grassland; fungi not recognised in most SSSI citations)
- Lack of data to inform decision making



- Agricultural industrial practices (e.g. nitrogen pollution)
- Insufficient attention to sites other than grasslands
- Climate change
- Invasive species
- Atmospheric pollution
- Commercial foraging
- Fungicides in water

What actions are needed?

- More recording – better data and evidence
- Improve data sharing and interpretation (at local and national levels)
- Better information on population levels and threat levels
- Better training for mycologists
- Guidance for government, planners, NGOs and others
- Guides to fungus-friendly habitat management
- Add fungi to more SSSI citations
- Increase popularity of fungi, e.g. better education
- Changes to legislation
- Develop fungi Red Lists
- Get fungal experts involved in Local Nature Recovery Strategies
- Strengthen partnerships between BMS and national conservation agencies
- Does the BMS need a Conservation Officer?

What are local priorities for conservation?

- Identify sites with high fungal diversity (some may be potential SSSIs)
- Create a local strategy
- Targeted survey by local groups
- Engage local communities (e.g. through social media)
- Raise awareness of local ancient woodlands and other habitats
- Influence planning proposals
- Educate local fungus groups
- Promote guidance on good management
- Joint forays/meetings with other wildlife groups
- Utilise technology (e.g. use QR codes to access data on sites)

Who can we influence?

- Natural England, NatureScot, etc
- Wildlife Trusts and other NGOs (local and national)
- Local government, including planners
- Politicians at all levels
- Land owners and managers
- Researchers and academics
- Teachers and schools
- Public (e.g. through UK Fungus Day)
- Ecological consultants (provide training)



British Mycological
Society promoting fungal science

Annex 3. Possible actions for the BMS

Support local groups in undertaking DNA sequencing – training, advice, funding.

Develop a proposal for verification of fungus records.

Lots of ideas for content of *Field Mycology*.

Organise workshops, e.g. *Cortinarius*.

Promote resources for beginners on BMS website, e.g. microscopy.

Build stronger partnerships with conservation agencies.

Make progress on Red Listing.

Encourage interaction between local groups, e.g. attending each other's forays.

Consider incentives to encourage more members of local groups to join the BMS (e.g. money-off vouchers for group leaders to distribute; group membership).

Consider how more young people could be encouraged to join the BMS.

Ensure new BMS members are notified of relevant local groups and their activities.