

**GRAMPIAN
FUNGUS
GROUP**

NEWSLETTER No.6

Dec. 2002

Grampian Fungus Group: Aims

- To record the fungi of North East Scotland.
- To encourage an interest in the importance of fungi in everyday life, wherever possible.
- To develop a greater understanding of fungi through forays, talks and workshops open to members of the Group.
- To increase the awareness of fungi through contact with local members of both professional and amateur groups which have environmental interests.
- To promote the conservation of fungi and of threatened habitats of rare fungi.

Committee Members

Chairperson

Dr. Geoff Hadley

Group Leader, Foray Organiser, Newsletter Editor

Mrs. Liz Holden

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Secretary, Recorder

Mrs. Rosemary Smith

Treasurer, Membership Secretary

Mr. Dennis Bain

Editorial

2002 has been another fascinating and exciting year for the fungi in NE Scotland. Denis Bain located the second known British site for the tooth fungus *Bankera violascens*, growing with spruce in a forestry plantation. The first site was on Speyside in a similar situation but unfortunately, before FE could be notified, the spruce trees were felled as part of a project to remove exotic trees and encourage the regeneration of native pine woods. The irony of this situation was not lost on anyone but unfortunately the fungus has not appeared since the removal of the spruce there. The Deeside fungus is also growing in an area earmarked for native pine regeneration but since this *Bankera* is a rare fungus even in European spruce woods, FE are keen to maintain this colony. Another tooth fungus *Sarcodon scabrosus* turned up for the first time in Inverey Wood – just a few metres from the site of last year's *Boletopsis leucomelaena* (the latter didn't show in 2002) and again one wonders just what is going on under the ground in this hotspot of rarely recorded fungi.

The weekend foray workshop was a great success (full report below) and turned up its own crop of unusual fungi, starting off with Susan Rae spotting *Mutinus caninus* growing in the compost heap of a Braemar B&B! The 'Dog's Stinkhorn' does not seem to be common in this part of Britain and was the subject of much interest. Susan had also brought along a club fungus that she had found growing in her lawn; Alick Henrici has since confirmed that this is *Clavaria incarnata*, probably a new record for Scotland. Peter Fayers then discovered *Pulveroboletus lignicola* growing on *Phaeolus schweinitzii* a fungus new to the GFG.

Just to finish the season off nicely, Rosemary Smith and Mary and Denis Bain set out to refind a fungus that had caused some identification problems last year. To their delight it was fruiting again on the fixed dunes at Forvie and this time a specimen was sent to Brian Spooner at Kew who confirmed it as *Calocybe obscurissima* - another new record for Scotland. A new site for *Boletinus cavipes*, rarely recorded in Scotland and growing with larch was the icing on the cake for Rosemary.

Finding rare fungi is, of course, hugely exciting but it is important not to forget to enjoy and record the more common species in our area. Changes in the fruiting patterns of common fungi can be very useful in picking up changes in the wider environment and all too often, because they are common, nobody bothers to record them. See under 'Contributions...' for a brief overview of recording – do have a read.

Last but not least, on a practical note, thanks to a modest surplus in our bank account this year the group now owns a copy of Nordic Macromycetes Vol. 2, which is a series of keys, in English, covering many of our agarics and boletes and also Courtecuisse and Duhem's Collins Field Guide. These books are both available for members to

borrow, as is our microscope. Anybody wishing to do so should contact either Denis or myself to make arrangements to pick them up.

Liz Holden

Membership

Just a reminder that **annual subscriptions are due on January 1st** for 2003. The subscriptions have been kept at £3.00 and cheques should be made out to the Grampian Fungus Group and sent to Denis Bain at the address above.

N.B. if you have recently changed your email address or house address, please could you let Denis know so that we can update our records.

Grampian Fungus Group: Members

There were 34 paid up members on October 12th; the following is a list of those who have already paid their 2003 subscription. Note – if your name is not on the list below and you wish to remain a member, please send your cheques off before you forget!!

Mary and Denis Bain
Bill Burns
Ann Burns
Keith Cohen
Norman Defoe
Lorna and Walter Henrickson
Liz and Peter Holden
John Ingle
Susan Rae
Catriona Reid
Louise Simpson
Rosemary Smith
Marysia Stamm
Hedda Weitz

Diary Dates

A full list of forays and events will be sent out in the spring. Here are a few dates for you diary however, the first being our spring foray which will take place on **Sunday May 4th**, meeting at 1.30pm. The proposed venue is Mar Lodge and we will meet in the Stable Yard. Go through Braemar village taking the minor road out toward Linn of Dee. After approx 4 miles turn right over the white bridge (opposite small lodge at bottom of brae) into the grounds of Mar Lodge. The Stable Block should be in front of you – with a clock tower and an archway – head for the archway!

Sat June 14th Microscope workshop, Dept of Soil Sciences, University of Aberdeen.

Sat/Sun Sept 13/14th NB change of date for the Speyside weekend

The date of the next AGM was agreed, this being **Sat. Nov. 1st**, starting at 2.00pm in the Dept of Plant and Soil Sciences, University of Aberdeen.

GFG - Foray, Workshop and AGM Reports 2002

The full species lists for the forays will follow in the spring; the following comments are just to give a flavour of each event:

Sun April 28th Unfortunately we had chosen one of the colder and wetter days of the spring for the first meeting of 2002. A good number of brave souls turned out (11 adults and three children) and we found a good selection of decomposer fungi including *Perrotia flammea*, a site speciality. *Gyromitra esculenta* was in its usual spot growing under pine. The children's field key certainly got a good field trial in the rain!

Sat Aug 24th the GFG were invited to have a look at two sites on the Leys Estate near Banchory. After an introduction to the Estate by the Ranger, Thys Simpson, 17 of us, including Alan Outen en route to his Kindrogan teaching week, walked around the Loch of Leys before lunch. We thoroughly enjoyed exploring the happily unmanaged broadleaved scrub around the edge of the loch. Interesting finds included *Oxyporus populinus* on willow and rowan and *Rhytisma salicina* on willow leaves. This latter is a relative of the 'Tar Spot', *Rhytisma acerina*, which is much more common and found on sycamore leaves. After lunch we set off for Red Moss of Candyglirach, an area of bog with a nice patch of damp birch at one end. Despite a good search, the only bog specialists that we found were *Tephrocybe palustre* (it was interesting to see the patches of dead sphagnum moss around some of the fruit bodies – this fungus is thought to be parasitic on sphagnum mosses). The birch was very productive – not only of a good range of woodland fungi but also of small and very persistent midges – another feature of a damp season and produced in very good numbers!

Sun Sept 1st lunch at the Inver Hotel made a pleasant start for some of the 14 intrepid forays at the Forest Enterprise plantation of Inver. We were delighted to be joined by Claudia Wegner and her friend Nigel Ross. Claudia was over on a holiday from Austria and is very interested in the genus *Cortinarius*. Inver is one of the Deeside sites for *Cortinarius violaceus* (a birch specialist) but unfortunately it was taking a year off and didn't produce any fruit bodies this year. Rather disappointed by this non-show we headed off to the back of the wood where there are mature stands of pine and spruce – this site has produced interesting pine wood fungi in the past and the intention of Forest Enterprise was to gradually remove all non native trees and allow the site to revert to native pine. A good selection of species were again collected, including *Tricholoma pessundatum* and *Phellodon melaleucus* but the find of the day was saved until right at the end when Denis Bain produced a tooth fungus that was obviously a *Bankera* but with a distinctly violaceous tinge and,

more importantly growing under the spruce. The fungus was fruiting on a bank by the trackside and in good numbers. It has since been confirmed as *Bankera violascens* and that has only been found once before in the UK, on Speyside. Sadly the Speyside colony seems to have disappeared as the associated spruce was inadvertently felled as part of the management plan there to remove exotic trees and encourage native pine! Not wanting to repeat this on Deeside, Forest Enterprise were immediately contacted and I am delighted to say that they are very interested in maintaining the fungus, even though this will mean rewriting part of the management plan!

Sun Sept 1st Ann Miller kindly put up our display boards at the Aberdeen Treefest Family Fun Day at Craibstone. The rest of us were all busy on the previously arranged foray at Inver! Many thanks Ann – much appreciated.

Sun Sept 8th After finding such a wonderful selection of fungi at St. Cyrus last year we decided to return in 2002, and for no obvious reason there was not nearly as much material around. Group members forayed in the northern end before lunch and then headed down to the visitor centre for lunch. The afternoon was more productive and interesting finds included *Gymnopilus junonius* on a stranded stump and two quite different pink spored genera *Volvariella gloiocephala* and *Pluteus griseopus* both growing in the mobile dune area.

Sat Sept 14th As for the last two years GFG members met in the morning at Culbin Forest. This year we were again in the eastern end but specifically looking for a rare member of the 'Deceiver' family – *Laccaria maritima*. Culbin is the only known British site for this fungus and it was last located in 1999 by Lynn Davy and Adrian Newton when we were in the forest recording tooth fungi. Sadly, it didn't turn up either on this visit or on a second later visit made specifically to search for it. We did however identify four other members of the genus – *Laccaria laccata*, *L. proxima*, *L. tortilis* and *L. pumila* so it made for interesting comparisons with the key!

After lunch group members continued foraying in the middle part of the forest whilst Liz met a large group of people for the public foray and had a very enjoyable expedition along the track from Cloddymoss. At the end of the public foray both groups came together to compare notes. Having access to the study room at Cloddymoss meant that we could put up our display boards which gave a nice focus for the end of the foray.

Sun Sept 15th 2002 has been a very patchy year for fungi in this area. The foray at the Bin forest, Huntly started with nothing except one squashed piece of Orange Peel, *Aleuria aurantia*, from the cars to the woodland, but as soon as we stepped under the spruce and other trees I was astounded at the sheer volume of fruit bodies. The first impression was a sea of white from many dozens of fresh puffballs, *Lycoperdon perlatum*, looking

almost luminous in the poor light. There were large numbers of *Lactarius deterrimus*, *Amanita muscaria*, *Russula subfoetens* and lesser numbers of nearly fifty other species. I had intended to do the usual half-mile walk but there were so many fungi for the 15 of us to talk about that we spent the whole ninety minutes on the first 100 metres. Then a brisk walk back along another path produced almost nothing. (Report by Rosemary Smith.)

Thurs Sept 19th – Sun Sept 22nd Mar Lodge Foray / Workshop weekend. Report below

Sat Sept 28th Glen Tanar is always a fascinating site to visit with its mixture of semi natural pine woodland, old unimproved grassland, riverine woodland and spruce plantation. We spent a full day here and found an interesting range of fungi including *Tricholoma flavovirens* with the pine, *Hygrocybe punicea* in the grassland, *Naucoria escharoides* growing with alder along the riverside and *Spathularia flavida* and *Ramaria abietina* with the spruce.

Sun Sept 29th The annual foray at Aden Park was attended by approx. 20 people. There were very few fungi under the birch trees but the spruces, beech and grassland produced over 50 species. The unimproved grassland did not have nearly such a variety as former years but it was good to find one *Hygrocybe calytriformis* although six were found there last year for the first time. The Porcelain Fungus, *Oudemansiella mucida*, was much admired and everybody seemed to have enjoyed the afternoon. (Report by Rosemary Smith)

Mon Sept 30th – Fri Oct 4th Five different primary schools from the NE of Scotland attended the interactive day 'The Good, The Bad and The Fungi' developed by the Ranger Services and members of the GFG. In total, 126 children each spent a day finding out about fungi in the grounds of Aden Country Park. The feedback was again very positive and a further week is planned for 2003.

Sat Oct 5th Buchan Science Festival. Aden Ranger Pam Ross took the more portable elements of the above activity day to this family day in Peterhead and had a great deal of fun introducing fungi to a different group of people here.

Sat/Sun Oct 5/6th 'Autumn Bounty' Weekend at Drum Castle. The GFG were invited back to this event and it gave us another opportunity to put up the display. Thanks must go to Denis and Mary Bain and Marysia Stamm for talking to the public at this event.

Sun Oct 6th I lead a foray for the Moray Coast Rangers at Quarrel Wood, Elgin on which 15 people attended. The first half of the walk was rather dry and unproductive and then we walked up to the top of the hill with good numbers of fungi on the way, especially *Lactarius vietus*. Right at the top there is a very old henge which was interesting to see and along side it is a path with larch trees on either side.

Here I found four fruitbodies of *Boletinus cavipes* which is very uncommon in Britain and there are possibly only two other records in Scotland. (Report by Rosemary Smith).

Sun Oct 6th Liz led a public foray for Forest Enterprise at Bellabeg in the afternoon. Fungi were rather thin on the ground but enough were found to make the foray interesting and enjoyable. *Tricholoma pessundatum* was fruiting on the trackside under the pines and it seems likely that this plantation stands on the site of native pine woodland.

Sat Oct 12th Despite the rain there was a good turn out of members for this last foray of the year. Toni Watt, the ranger at Castle Fraser, accompanied us and was hoping to show us *Phaeolepiota aurea* which she had found there last year. With the usual perversity of fungi, *Phaeolepiota* was nowhere to be seen but Toni found it again at Portlethen later in the month - nobody else in the group has ever found it!! Never mind, we enjoyed a good selection of fungi from a good selection of habitats at Castle Fraser.

Sat Nov 2nd AGM and Slide Show. Thirteen members were present and nine apologies sent.

Denis Bain presented the accounts and reported that there were 34 paid up members by October. This number of subscriptions enables the group to cover its main costs of printing and posting the newsletter and also maintaining its insurance premium. It was agreed to hold the subscription at £3.00. Liz Holden then reported on the various forays and surveys in which members had been involved. The detail of this report is reproduced in this and the following sections of the newsletter.

Norman Defoe proposed that the standing officers be re-elected and as the officers were happy to continue the proposal was agreed.

Foray venues were discussed.

During the tea break everybody had the opportunity to have a look at the bioluminescent mycelia that Hedda Weitz is working on at the University. It was just amazing to see how bright these organisms are in a dark room situation; also to compare different fungal luminescence with each other and that of bacteria. Hedda has written a very interesting piece further on in the magazine explaining a bit more about her work in this area.

Following a tea break, members contributed some of their photographs. Many thanks to Mary Bain and John Ingle for sharing their photographs. Liz has 'gone digital' this year and the possibility of a power point presentation of photographs might be looked into for next year.

A full set of minutes is available on request.

Thanks are once again due to Geoff Hadley who organised the venue and to Mary and Denis who provided tea.

Survey Reports 2001

GFG Survey of Kincardine District Plantations for the Forestry Authority

This is an ongoing informal survey that is generating species lists and highlighting, for the Kincardine District, unusual finds and sites with a good diversity of species. In 2002 we visited Inver Wood and our exploits there are documented above. The *Cortinarius violaceus* did not fruit there this year.

Monitoring Biodiversity Action Plan Species (BAPS)

As a result of survey work undertaken in previous years, there is now considerable interest in monitoring some of the rarer species to try and find out more about the periodicity of fruiting. The National Trust for Scotland has been particularly supportive of this work with projects to look at the 'tooth' fungi and *Boletopsis leucomelaena* on Mar Lodge and the communities of waxcap fungi growing on old lawn grasslands at Haddo House and Hill of Tarvit. At Mar Lodge the *Boletopsis* did not fruit in 2002 but a new species of 'tooth' fungus *Sarcodon scabrosus* did.

The waxcap communities on the lawns have been mapped in some detail, particularly the *Hygrocybe calyptriformis* at Haddo – nearly 100 fruit bodies again this year. The mapping will be repeated next year and that, we hope, will give us a reasonable amount of 'baseline' data to work with. It will be very interesting to try and find out what effect different management schemes on this kind of amenity grassland, have on the fruiting of the fungi. This year has also seen the mapping of the *Tulostoma niveum* at its second British site near Braemar. With the help of digital camera and GPS (Global Positioning System) it should be possible to relocate the fruiting sites of the *Tulostoma*. Hopefully, future monitoring work will then establish whether the colonies are expanding, contracting or just holding their own.

Waxcaps in Northern Ireland

This autumn has seen myself doing some work for Environmental Heritage Service, the equivalent organisation to Scottish Natural Heritage in Northern Ireland; looking at waxcap grasslands in much the same way as was done in Scotland recently. This first year, of what is intended to be a three-year project, saw me working through some of the 10K squares in the area around Newry and the Mountains of Mourne. This is a landscape of small green fields, bounded with dry stone walls. The reason for the green made itself very obvious during both the weeks we were there – even the locals were saying that it was the wettest October in 15 years!! Navigating the network of tiny, country lanes (each

one with a name but not necessarily a junction sign) was challenge in itself and one or two of the fords that we encountered had us reaching for snorkels and water wings! The folk that we met on our travels were charming although I think that a lot of people are now convinced that mycologists are not entirely sane. The fungi were also around in the rain but much of the grassland has been improved in this area and hill tops and churchyards proved to be the most rewarding places to search. Several new sites for *Hygrocybe calyptriformis* were located and *Clavaria straminea* also turned up; I am looking forward to next year although hopefully it will be a little drier. Special thanks to Rosemary Smith and Megan Holden who accompanied me on the two trips.

Liz Holden

British Mycological Society

News

British Mycological Recording Network – Group leaders meeting at Keele Nov. 29th – Dec 1st 2002.

Liz attended this meeting on behalf of the GFG this year along with the representatives of 16 additional groups from across the UK. This was a particularly positive meeting with lots of lively discussion.

BMS Website: David Moore (BMS Membership Secretary and Webmaster) told us of plans to develop the BMS Website (britmycolsoc.org.uk) which include putting local group newsletters and the abstracting service, previously presented in the BMS Newsletter, onto the web. He showed us a range of fungal models that the BMS now own and which are suitable for use in displays and talks. He is also working on a range of themed posters and is looking for good mycological ideas that would be both interesting and informative.

'**The Good, The Bad and The Fungi**' a presentation was given to the meeting by Liz Holden outlining the work that has been ongoing in NE Scotland to get this programme of interactive learning for primary school children off the ground. There was a great deal of interest in the idea that, with a little training, non-mycological educators could quite confidently spend a whole day out in the field teaching children about fungi. It is hoped that the whole package will be available shortly.

Guide to Recording: Richard Iliffe reported that the newly revised BMS publication 'Guide to Recording' is nearly ready for printing and should be available in the New Year.

Field Mycologist: Derek Schafer (BMS Foray Secretary) reported on behalf of Geoffrey Kibby that this magazine has now completed its third year and had achieved its financial target of being self-supporting. Everybody was reminded that articles are always welcome – particularly from a beginner's perspective. The magazine has been well received in the rest of Europe and North America and

everybody hopes that its popularity will continue to grow. (Editor's note: if you don't already subscribe to this, it really is worth it - £16.00 for four parts per year – subscription either through a bookseller, subscription agent or the publisher Cambridge University Press, The Edinburgh Building, Shaftesbury Rd, Cambridge, CB2 2RU.)

Conservation: Shelley Evans (BMS Conservation Officer) reported on her work with Plantlife and the International Mycological Congress to promote the conservation of fungi in a European and global context. Closer to home, the 'Pink Waxcap Survey' has been promoted and will run for a second year in 2003. (Anybody who would like a copy of this should contact Liz). Work is progressing towards compiling an 'official' list of vernacular names for a certain number of fungi and the British Red Data list is nearly finalised.

British Basidiomycete Check-list: Peter Roberts from The Royal Botanic Gardens Kew updated the meeting on this 3 year project which is now nearing completion. It will be available in book form, in association with the BMS Fungal Records Database on the web (hopefully by the end of 2003) and probably as a CD as well.

Spore measuring demonstration: Richard Shotbolt demonstrated a new technique for measuring spores using an inexpensive digital camera and a lap top computer. The programme that he uses is available on CD and Liz can provide contact details to anybody who is interested.

BMS Membership: Henry Beker outlined to the meeting the recent discussions that had been ongoing in BMS Council about the nature of the society. The past subscription structure had encouraged people to join as Associate Members with no voting powers. Full membership of the society should now be available to anybody with an interest in mycology and with the full membership will come voting powers and the right to stand for elected Council places. Everybody is encouraged to join the BMS – it really is doing a lot for all aspects of mycology right now.

BMS Fungal Portal: Henry Beker also introduced this project to the meeting. The concept is that of an internet web portal that would offer information on all aspects of fungi – molecular, microscopic and macroscopic. It will contain all the information that anyone could want to know about fungi, including keys, records and pictures - a huge and ever expanding project! The project is still at a developmental stage and funding is being sought but watch this space for news on its progress.

BMS Fungal Records Database: Paul Kirk reported that some work was needed to tidy up existing records on the database – action that would assist both current users and also be appropriate when thinking ahead to the Fungal Portal project. The time and effort that Paul puts into the database is much appreciated by everybody

Liz Holden is to take over being the co-ordinator of the Recording Network at the end of 2002. Many thanks to Shelley Evans who has worked so hard in this role over the last few years.

BMS Spring Foray May 17 – 24th 2003

The 2003 foray is based at Kindrogan Field Centre this year. If anybody is interested in attending, contact Liz for further information

Contributions from GFG Members and Friends

Editor's note. I am aware that most of the content of the GFG Newsletter is written by myself. Whilst I don't mind doing this and I know how difficult it is to find the time and inclination to put pen to paper or finger to keyboard, I do think that every publication benefits from containing different points of view. This is a group journal, so **please** do pass on any little snippets of information, experiences or observations that you make or come across. Liz

Naturally bioluminescent fungi

Hedda J. Weitz

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The natural phenomenon of bioluminescence is the emission of visible light by living organisms mediated by an enzyme-catalysed ('luciferase') reaction of molecular oxygen with a substrate ('luciferin'). Bioluminescent organisms are diverse and widely distributed in nature, examples including bacteria, dinoflagellates, squid, algae, fish, insects and fungi. At the University of Aberdeen, bioluminescent bacteria have been used for the past 10 years as biological sensors (biosensors) to detect toxic compounds. This is possible as the bioluminescent bacteria emit light when they are metabolically active; however, light output decreases when a toxic compound impairs metabolic activity. A wide range of toxic compounds, such as heavy metals and organics, can be detected with these bacterial biosensors, and they have been used, for example, to monitor the bioremediation (i.e. biological cleanup) of contaminated sites. About 5 years ago, novel bioluminescence-based yeast and nematode biosensors were developed to complement the existing bacterial biosensors. As part of this development of novel biosensors, I then started developing bioluminescence-based, filamentous fungal biosensors using naturally bioluminescent fungi.

Relatively little research has been carried out on naturally bioluminescent fungi. There are currently thought to be more than 40 species of bioluminescent fungi within 9 genera, all of which are basidiomycetes, examples including *Armillaria mellea*, *Mycena citricolor* and *Omphalotus olearius*. *Panellus stipticus* is unusual in that luminescence is

exhibited only by the North American strains of *P. stipticus* and not by the Eurasian strains. Luminescence may occur in both mycelia and fruiting bodies, as for example in *P. stipticus* and *O. olearius*, or only in mycelia and young rhizomorphs as in *A. mellea*. Bioluminescent fungi emit a greenish light but it is not known whether the biochemistry of the bioluminescence system of fungi is the same as that of other known systems. Numerous reasons for the occurrence of bioluminescence in fungi have been suggested. One hypothesis suggests that the role of luminescence is to attract invertebrates to assist fungal spore dispersal. Other possible reasons for luminescence include the attraction of predators of fungivores and as a warning signal to nocturnal fungivores. There is some limited evidence to support these hypotheses but overall they remain unproven. Luminescence may not confer a significant selective advantage as there are both luminescent and non-luminescent strains of the same species, and species that only have luminescent mycelia. Another hypothesis suggests that bioluminescence is a by-product of a biochemical reaction and has no ecological value. Light production has been calculated not to be a significant energetic burden, and bioluminescent fungi may be releasing light (not heat) as an energy by-product of enzyme-mediated oxidation reactions.

A great deal of additional research still needs to be carried in order to explain the mechanism and significance of the phenomenon of fungal bioluminescence. If you are interested in reading more about naturally bioluminescent fungi, a short review 'Luminous fungi' was published by P.J. Herring in the *Mycologist* 8, 181-183 (1994).

Hedda Weitz

Mar Lodge Foray / Workshop 2002

The GFG took the plunge in 2002 and decided to organise a foray / workshop. The completion of the conversion of part of the old Stable Block at Mar Lodge into a comfortable, self catering bunkhouse made the perfect accommodation base and the next door meeting room proved big enough to house nearly 20 of us, all busy making spore prints, looking down microscopes and puzzling over keys. Some of us preferred the delights of B&B in Braemar but the kitchen proved big enough for all of us to prepare our evening meals and swap stories over the dining room table. It was a delight not to have to rush off after a foray but to have the encouragement of others when trying to identify the catch! We were determined not to spend too much time out in the field as the temptation is always to collect more fungi than you can sensibly deal with. So we aimed for a morning in the field, an afternoon in the lab and then the evening for slide shows, talks and general relaxing.

On the first evening, slides of a selection of Deeside fungi were shown and I gave a brief talk on how to collect and prepare fungi for identification. For those interested in working with the microscopes, I outlined some of the characters that it is useful to be able to find and some advice on how to find them!

Susan Rae had brought along two interesting fungi – one from her own garden lawn and the other from beside a compost heap in a B&B in Braemar! The first I had never seen before – it was a small, flesh coloured fairy club fungus and I tentatively keyed it out to *Clavaria incarnata*. Alick Henrici has since confirmed this and thinks that it is a new record for Scotland! The second fungus I had seen before but only one other time in Scotland and this was *Mutinus caninus* 'The Dog's Stinkhorn'. This is a close relative of the more common 'Stinkhorn' (*Phallus impudicus*); after much admiration it had to be banned from the lab on account of the smell...

Friday morning found us all raring to go by 9.30 so we set off to look at unimproved grassland by the Dee. Waxcaps seem to have had a generally poor year and they were certainly not numerous in the Braemar area. Nevertheless we did find nine waxcaps and a range of fungi growing with the birch and aspen along the riverbank. We moved on into the pine woodland behind Inverey Youth Hostel and amongst the usual pine fungi, Peter Fayers discovered *Pulveroboletus lignicola* growing on an old fruit body of *Phaeolus schweinitzii*. *Pulveroboletus* has small ellipsoid spores and bright yellow pores that tend to bruise rust colour with age; it is rarely recorded in Scotland. To finish off an excellent morning, when we sat down for a picnic lunch, Denis and Mary Bain discovered that they were nearly parked on top of *Clavaria rosea* – a delightful, bright pink fairy club, a second and new site for this fungus on Mar Lodge. Although the invitation was there for people to continue foraging if they wished, I think that we all returned to the lab to have a closer look at what we had found. The *Leccinum* collections began to grow under the watchful eye of Keith Cohen. By the end of the weekend we had enough material of nine *Leccinum* species to be able to make useful comparisons between them.

My microscope was connected up to a large TV screen and this proved invaluable for showing a group of people whatever it was you were looking for down the microscope. The only problem was keeping up with all the questions and interest and wanting to be in lots of different places all at the same time.

On the Friday evening we took a stroll up to Mar Lodge itself and had a look inside the Duke of Fife's 'Stag Ballroom'. The evening was rounded off with an excellent slide show of the fungi in the Caithness area given by Dave Savage – our furthest away member!

Saturday morning saw us meeting in Braemar for a foray in the Morrone Birkwood NNR. This site produced an enormous amount of material – no problems with how to spend Saturday afternoon then! We just about managed to find the time to fit in an evening talk on recording (some of this is included in the piece on recording below) before mushroom meltdown took us off to bed.

Suddenly it was Sunday morning and our last foray. We decided to blow the cobwebs away with a walk around some of the Mar Lodge policies. A collection from Rosemary Smith of a small, yellow omphaloid fungus growing on conifer wood caused

some excitement when it seemed to key out to *Omphalina strombodes*. Alick Henrici has pointed out that this should have clamps so when I get a minute I will check the dried material again – it might be the more common *Omphalina grossula*. The success of the workshop must surely lie with all of the folk who attended it; I know that I enjoyed myself and would really like to run another one...maybe not in 2003 though!

Liz Holden

Of LBAPS and lost sites for *Cytidia salicina*

Whilst excavating a pile of papers in the corner of my desk last spring I came across the consultation copy of the Cairngorms Local Biodiversity Action Plan (LBAP). This plan and others like it, across the UK, originate in the 1992 Earth Summit in Rio when governments across the world pledged to take urgent action to secure the future of the Earth. The Scottish Biodiversity Group was set up in 1996 and defines an LBAP as 'a process rather than a plan in the conventional sense' (this definition is very appropriate when considering fungi as there is still so much work to be done). It is a mechanism that seeks to ensure that nationally and locally important species and habitats are conserved and enhanced in a given area through local action. Anyway, it was with a guilty start on my part that this document came to light as I had been asked to comment on its 'fungal' content some time before. At least, I thought, somebody has actually considered including fungi! The Cairngorms have some outstanding mycological habitat – unimproved grasslands, montane plateaux and not least the Caledonian pine forest and when I took a closer look, I realised just how much was missing from the document. Working with Ern and Val Emmett, who are mycologists on Speyside, we set about trying to sort out the fungal component of the plan.

One of the fungi that we included in the plan was *Cytidia salicina* – found on Speyside in 1876 and 1900. Until located in Kielder Forest in Sept 1999 (See Field Mycologist Vol. 1(2)), the old Speyside records were the only known British material. Seeing this in print in the LBAP document, finally launched in Dec. 2002, prompted Ern and myself to spend a day ignoring other urgent matters like the rapid approach of report deadlines and the onset of Christmas, and set off to search some likely spots and see if we could refind the *Cytidia*. It is a fungus of particular habits, liking the underside of dead or old attached willow branches, which narrowed our search considerably. It is also almost unmistakable as it is bright red and looks not unlike blobs of red paint. We set off on a frosty and misty December morning straight into a wonderful bit of wet, willow wilderness and within minutes cries of 'Here it is!' could be heard floating down the glen! We suspect that this is the same site as the original records and it is amazing to think that this might have been fruiting away happily for over 100 years just unobserved.

It seems to me that the LBAP has already done a great service to mycology in the Cairngorm area; we can only hope that the LBAP process will be a useful prompt for further mycological work here and in other areas. Christmas certainly came early on Speyside!

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Recording and related matters

As I mentioned in the Editorial, it is tremendous to find rare and unusual fungi but we should not lose sight of the importance of recording those species that occur commonly and with which we are all familiar. Sometimes important changes in habitat or climate can be picked up by the changes in the distribution of common organisms – but only if there is baseline data to make comparisons with. At the moment many areas in the north east of Scotland do not have records of even common fungi such as the Fly Agaric or Common Stink Horn. We are particularly lucky in having a local recording centre based in Aberdeen (NESBReC or the North East of Scotland Biological Recording Centre) and, where we have permission to do so, the records from our forays and other activities are passed onto the NESBReC data base where the information can be taken into account in future planning and management situations across the region. The map included was generated by NESBReC and represents their fungal records (admittedly missing GFG records from 2001/2 – which hopefully I will get around to transferring this spring) clearly demonstrating how sparse fungal records are. GFG records also go onto the BMS database, helping to build up a picture of species distribution across the UK. The more records that we can offer these data bases, the more meaningful will be any analyses of the data and even one or two records are useful if they come with the correct information. You don't have to be an expert to make a real difference to our knowledge of fungi by contributing records.

To try and encourage a few more of you to send in records of fungi, I have included a recording sheet and if you think that this is an aspect of mycology that you would like to pursue, do contact Liz Holden (address inside front cover) who is willing to answer your questions and give out further information. There are sheets available to explain how to take a six-figure grid reference and also to explain the BMS policy concerning database issues such as the Data Protection Act and Intellectual Property Rights. These latter issues might sound alarming but are straightforward once explained and they do need to be addressed. Records soon mount up and if everybody in the group just sent half a dozen each that would be nearly 200 records. It would be excellent to see a lot more dots on our map!

Liz Holden

Useful Fungal Information

The information given below is not exhaustive. If you know of any other relevant contacts, please let Liz know.

Books and Other Publications

There is a wide range of material available for all levels of mycological interest - the only limit really being one's purse! Many books for beginners are available in good book stores but there are other sources that are useful to know about, especially as one progresses beyond the limits of beginners guides. I think that a list of recommended books might be appropriate in a later issue of our newsletter.

Paul Nichol has produced an excellent simple key to genus called 'An Initial Guide to the Identification of Mushrooms and Toadstools'. The new, improved second edition, cost £3.00, is available from Liz Holden or direct from Paul at Strawberry Howe, 14, Horncastle Rd., Woodall Spa, Lincs. LN10 6UZ

The BMS have produced an excellent range of 'Guides For The Amateur Mycologist'.

The titles at present are 'Guide for the Beginner'; 'Guide to Identification with a Microscope'; 'Guide to Recording Fungi'; 'Guide for the Kitchen Collector, Preservation and Cooking of Fungi'; 'Downy Mildews, Powdery Mildews, Smuts and Rusts'. Each costs £2.00. Individuals can order directly from Mrs. Valerie Barkham, c/o The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB. (There is also a set of 16 postcards of larger fungi costing £3.00 plus 50p post available from the same address).

The BMS also publish **KEYS** which is a series of papers containing a range of keys and checklists details of which are available from Liz Holden. There are now eleven issues of this publication and the cost for a full set is £17.25 plus £2.55 post. They are available from Archie McAdam, 11, Raikes Avenue Skipton, North Yorkshire, BD23 1LP.

Many of the more advanced books and sets of identification keys are available from Retail Postal Book Sales Department, **The Richmond Publishing Co. Ltd.**, PO Box 963, Slough SL2 3RS. It is certainly worth comparing their catalogue with those of other natural history book specialists such as Subbuteo and the Natural History Book Service.

Association of British Fungus Groups produces a quarterly journal containing a range of material of interest to amateur mycologists. The subscription is £8.00 per annum and is available from Michael Jordan, Harveys, Alston, Nr. Axminster, Devon EX13 7LG.

Residential Courses on Fungi

A number of field centres run courses on various aspects of mycology: -

Kindrogan Field Centre, Enochdu, Blairgowrie, Perthshire PH10 7PG Tel:01250 881286.

The Field Studies Council, Head Office, Preston Montford, Montford Bridge, Shrewsbury, Shropshire SY4 1HW Tel: 01743 850674. The FSC has centres located across England and Wales.

Losehill Hall, Peak District National Park Centre, Castleton, Hope Valley, Derbyshire, S33 8WB Tel: 01433 620373

Other Items of Mycological Interest

For those who wish to take their mycology a little more seriously and tackle some of the more advanced identification keys, a microscope is essential. The following three companies are those that I know of who will send out catalogues with products suitable for our needs:

Meiji Techno UK Ltd. Hillside, Axbridge, Somerset, BS26 2AN Tel: 01934 733 655 E-mail: enquiries@meijitechno.co.uk Web Sites: www.meijitechno.co.uk www.microscopes.co.uk

Brunel Microscopes Ltd. Unit 12 Enterprise Centre, Bumpers Way, Bumpers Industrial Estate, Chippenham, Wilts. SN14 6QA Tel: 01294 462655

Optical Vision Ltd., Unit 2b, Woolpit Business Park, Woolpit, Bury St. Edmunds, Suffolk IP30 9RT Tel: 01359 244200

Mycologue - a catalogue of accessories for mushroom collectors available from 47, Spencer Rise, London NW5 1AR

Quekett Microscopical Club - the club magazine often has second hand microscopes for sale and accepts 'items wanted' adverts too.

Photographs

The photographs that appear on the next page in this edition of the newsletter could not have been produced without the help of Mary and Denis Bain. Mary took all of the photographs apart from the *Taphrina pruni* and the *Hypocreopsis rhododendri* that were taken by Liz Holden.



Bankera violascens: the location of this rare tooth fungus under spruce on Deeside has raised some interesting questions about the management of exotic tree species.



Taphrina pruni: a parasitic ascomycete causing 'pocket plums' on Prunus species. The asci form a layer over the distorted fruit surface. Photographed in June.



Hypocreopsis rhododendri: this is a BAP fungus of western oceanic hazel woodland, so we are unlikely to see it in the north east of Scotland. Its common name of 'hazel gloves' is very descriptive of the finger like lobes of the fruit body.



Mutinus caninus: the 'dog's stink horn' is a close relative of the common 'stink horn' *Phallus impudicus*. This equally smelly fungus appeared on a Braemar compost heap this year.



Pulveroboletus lignicola: this unusual bolete was growing on *Phaeolus schweinitzii* in pine woodland. Of 65 records given on the BMS database, five are from Scotland and ten are associating with *Phaeolus*.



Calocybe obscurissima: growing in large rings on fixed sand dunes on the east coast, this identification has been determined by Brian Spooner, and is a first record for Scotland.