

**GRAMPIAN
FUNGUS
GROUP**

NEWSLETTER No.9

Dec. 2005

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.

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Editorial

Lots going on in field mycology over the past year including an update of the Drugs Act that has caused some concern amongst mycologists since it took effect in July (see below). One of my roles is to attend a forum for lower plants and fungi in Scotland hosted by PLINKS (Plantlife Link Scotland) and, after much hard work by all concerned, a strategy for the conservation of lower plants and fungi is about to be published early in the New Year. Central to this strategy is the need to persuade the Royal Botanic Garden Edinburgh to replace Roy Watling's post of senior macromycete taxonomist there. It has been vacant for nearly 8 years now and it is essential to underpin all the planned research, recording and educational works with a trained taxonomist. This so-called 'taxonomic impediment' is an issue for all groups, not just the fungi, and there are worryingly few universities in the UK that teach taxonomy any more. Anybody would think that we knew it all already – half an hour into mycology and you realise that this is not true!!

2005 turned out to be a poor fruiting year and many of the forays had relatively short lists of fungi as a result. Nevertheless it got off to a good start in the spring with *Sarcocypha austriaca* (Scarlet Elfcup) being reported on several occasions in the Glasgow area – 65 cups being recorded at Maudslie Wood in February. Ascomycetes continued to flourish and in March an area of thinned plantation on Mar Lodge Estate produced more than 100 cups of *Pseudoplectania nigrella* (Ebony Cup). This latter species has only been recorded at four locations in Scotland and the other site in Aberdeenshire is perilously close to a road and vulnerable to both salt and snowplough!

2006 will be the tenth year of foraying for the GFG and we thought that it would be appropriate to mark the occasion by venturing a little further a field for our weekend foray and arrange a trip to the University of Aberdeen's field study centre at Bettyhill in Sutherland. Further details will be sent out with the Diary Dates but it should be a fascinating place to visit.

Liz Holden

Membership

Just a reminder that **annual subscriptions are due on January 1st** for 2006. 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 48 paid up members at Nov 12th; the following is a list of those who have already paid their 2006 subscription.

N.B. – if your name is not on the list below and you wish to remain a member, please send your cheques before you forget!!

Mary and Denis Bain
Brian Cornock
Dave Genney
Geoff and Maggie Hadley
Walter and Lorna Henrickson
Liz and Peter Holden
Louise Simpson
Rosemary Smith

Diary Dates

A full list of forays and events will be sent out in the spring. Here are a few dates for your diary however, the first being our spring foray which will take place on **Sunday April 30th**, meeting at 10.30am, Blackhall Plantation near Banchory. A long weekend based at the University of Aberdeen study centre, Bettyhill near Caithness is proposed - **Sept. 21 – 24th** details about location and accommodation will follow with the Diary Dates.

The date of the next AGM was agreed, this being **Sat. Nov. 11th** starting at 2.00pm, venue to be confirmed.

GFG - Foray, Meetings, and AGM Reports 2005

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. May 1st We were delighted to welcome Geoff Gadd (President of the BMS) and his wife on this first foray of 2005 to Quithel Wood. Sadly the weather was not so welcoming and by lunchtime most of the group were wet and cold! The highlight of the day was relocating the crust fungus *Scytinostroma portentosum* (see picture page) on the underside of a hung willow. This inconspicuous wood decomposing fungus smells strongly of naphthalene (moth balls) and this is the first known site for the fungus in Scotland. *Encoelia furfuracea* (Spring Hazelcup) and *Pleurotus pulmonarius* (Pale Oyster) were also recorded.

Sat. August 6th Despite a reasonably wet summer, the ground underfoot was very dry and the pine and birch woods on the west side of Craig Leek were disappointing. Beautiful material of *Pluteus atromarginatus* with a dark gill edge was retrieved from the inside of a hollow stump and *Russula integra* was relatively common under the pine. The group enjoyed a wonderful walk with fine views over the Dee and Braemar at lunchtime.

Sat. August 13th Only four of us were able to make this foray to the riverside woodland at Crathie. Mature juniper, birch and aspen growing on river gravels make this an interesting site and we were

rewarded by good material of *Russula perlargonium* – smelling strongly of pelargonium as the name suggests, after being enclosed in a tub for a couple of hours. *Leccinum aurantiacum* also put on a fine show under the aspens: it will be well worth returning in a more fruitful year.

Sat. August 20th The first Saturday of the BMS Autumn Foray based at Glenmore Forest Lodge, included provision for local group members to come along and see what goes on. This meant the opportunity to meet new people and foray in the extensive forests of Speyside. The weather was stunning and some interesting fungi were recorded including *Inocybe jacobii* which is a tiny member of the genus that seems to specialise in sandy areas with young pine.

Sun August 21st Marysia took our display along to the Treefest held for the first time at Duthie Park rather than Craibstone. The new venue meant that the event was accessible to a large number of people and Marysia reported a great deal of interest in her display.

Sat. Sept 3rd Eight members of the group spent a very pleasant day in the grounds of Delgatie Castle, Turriff. The Castle is one of the oldest in Grampian, dating back almost 1,000 years so I had high hopes of some interesting fungi, but apart from a pristine group of *Phaeolepiota aurea* (Golden Bootleg) there were very few fungi. Only one *Hygrocybe* could be found on the lawns so difficult to know if it is just a poor area or if the season is just late this year.

In the adjoining wood of Delgaty owned by the Forestry Commission there weren't many fungi either, but we all enjoyed the walk and the company. We finished the day with a cuppa in the Castle tearoom, voted as the 17th best in Britain, but maybe not too many should know that as the tiny room couldn't possibly hold more than two dozen people! Rosemary Smith

Sat. / Sun. Sept 10 / 11th Culbin weekend. The group returned to Sluie Woods and had an interesting time in the mature pine plantation. A range of interesting species were recorded including *Cortinarius armillatus* (Red Banded Webcap), *C. bolaris* (Dappled Webcap) and *Sparassis crispa* (Wood Cauliflower). A lab. was set up in the classroom at Cloddymoss and those that wished were able to spend the evening looking at the more difficult to determine collections.

On Sunday the group met at Wellhill car park and spent the morning checking out the 'Wellhill Hotspot' and the duckpond for any signs of *Laccaria maritima* (Sand Deceiver). No sign of the latter but the former produced its usual complement of tooth fungi and other interesting mycorrhizal fungi. After lunch Buckie Loch was the visited – this area had turned up several interesting species in the past but conditions were very dry and rather disappointing.

Sat. Sept 17th This was the group's first visit to the south side of Bennachie and we were particularly interested in the areas of old oak woodland there. Again the dry conditions did not do the site justice although a good range of birch and beech associates were found as well as *Bulgaria inquinans* (Black Bulgar) and *Fistulina hepatica* (Beefsteak Fungus) growing on the oak.

Sun. Sept 25th A good turnout of forayers for this visit to the Crannach near Ballater, including Richard Simpson who is a documentary photographer working on the way people spend their leisure time. Richard stayed until lunchtime and has sent us a CD of his results. Contact Liz if anybody would like to see the photos. Crannach remains our only known site for *Meruliopsis taxicola* and it was still growing on the same dead pine branch. The tooth fungi were not fruiting on this visit in keeping with other sites in the area and all fruitbodies were generally scarce. Beautiful material of *Lactarius spinosulus* (Lilacscale Milkcap) was however found – a rarely recorded associate of birch.

Sun. Oct. 2nd Windyhills was generally very dry but did produce interesting material of an oddly coloured *Leotia lubrica* (Jellybabies). Instead of the usual yellow colour of head and stipe, these collections varied from very dark blackish green to bright green and several that seemed to be somewhere between yellow and green both in the head and stipe. In the text 'British Ascomycetes' by Dennis, the dark green Jellybabies are given distinct taxonomic rank and named *Leotia atrovirens* see picture page. Given the range of colours present, I e-mailed the ascomycete expert, Brian Spooner at Kew for his opinion. Brian suggests that it is usually accepted as a variety of *L. lubrica* however the mycologist Baral thinks that it is *L. lubrica* that has been parasitised by another organism. Another conundrum for mycologists to resolve!

Sat. Oct 8th Seven hardy souls braved the very wet start to the foray at Haddo. Although not in their usual numbers there were more fungi than we have had in earlier forays this season.

Our very first one was *Hygrocybe calyptriformis*, a good start, and we later added ten more *Hygrocybes* to our list. *H. ovina* was up in some numbers with very large fruitbodies, showing exactly where the name ovina came from!!! There were a good number of *H. punicea* and *H. coccinea* but nowhere near as many as last year.

No signs of *Squamanita pearsonii* this time and only a couple of *Cystoderma amianthinum*. *Scleroderma bovista* was present and has extremely hairy, globose spores with a beautiful reticulum. *Agaricus cupreobrunneus* was growing in a little group; it reddened on cutting, had an appendiculate margin and a clavate stipe.

The rain eased off by the time we had lunch, shared with a host of midges, and then the sun came out and the next two hours were beautiful which enabled us to largely dry out before returning to our cars.

Sun. Oct 16th Tyrebagger. Although fruitbodies were not abundant two interesting species were recorded. *Thelephora penicillata* and *Paecilomyces (Saria) farinosus*. The former species is related to *T. terrestris* the Earthfan, growing in similar situations but recorded far less frequently. The latter species grows on dead Lepidoptera pupae and forms small club-like structures with white heads that become almost fluffy. Breitenbach & Kranzlin (Vol. 1) suggest that this might be the conidial stage of the more familiar *Cordyceps militaris* (Scarlet Caterpillarclub).

Sat Nov 12th AGM and Slide Show. Thirteen members were present and nine apologies sent.

Denis Bain presented the accounts and reported that there were 48 paid up members at the time of the AGM. 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 although this will be reviewed again next year.

Two items have been bought out of group funds in 2005, the book 'Microfungi on Land Plants' and 'Mycokey' a CD synoptic key to genera.

Liz Holden then reported on the various forays and surveys in which members had been involved.

The existing officers agreed to stand for another twelve months although Geoff Hadley announced that he will be standing down as Chairman at the end of 2006.

During discussion about next years foray sites, the idea of a long weekend based at Bettyhill in Sutherland, the University of Aberdeen's field study centre, was suggested. Dave Genney agreed to look into this.

Liz Holden reported on the implications for field mycology of the amended Drugs Act, which came into effect in July 2005. Liz is currently trying to draw up guidelines that will clarify the situation. See article below.

Liz also reported on the production of a strategy for the 'conservation of lower plants and fungi in Scotland'. See article below.

Following a tea break, thanks are due to Mary Bain, Liz Holden and Dave Genney for sharing their photographs.

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

A full set of minutes is available on request.

Survey Reports 2005

GFG Survey of Kincardine District Plantations for the Forestry Authority

For a report on Tyrebagger see foray reports above.

Monitoring Biodiversity Action Plan Species (BAPS)

Inverey Wood 2005 was a very poor year for tooth fungi, similar to 2003 in that again Culbin was the only site in the Highlands to produce fruitbodies in any numbers. One record of *Hydnellum ferrugineum* (Mealy Tooth) was the only tooth fungus to fruit at Inverey. Sietse Van der Linde has taken soil samples from the site as a part of his research project and it will be interesting to see whether the mycelia can be detected even although the organism is not fruiting.

Tulostoma niveum (White Stalkball) produced a good number of fruitbodies this year. As in previous years the bulk of the colonies were in the core area on the SE slopes of Craig Leek with the number of new colonies continuing to rise. It is hoped to get some expert statistical help with the analysis of the data collected so far. One question that it would be interesting to ask is whether or not the data can suggest the number of fruitbodies that should be recorded at any visit to be sure that the fungus is not declining.

British Mycological Society (BMS) News

British Mycological Society Recording Network (BMSRN) News

Next Group Leaders meeting to be held June 16-18th 2006 at Alston Hall near Preston.

BMS Autumn Foray 2005 Cairngorms National Park

As mentioned in the foray reports above, the BMS held its annual Autumn Foray on Speyside in 2005. 58 mycologists were housed mainly in the excellent facilities of Glenmore Lodge with labs set up in the main gym and two other meeting rooms. Whilst most of those present were from different parts of the UK, folk had come from all over Europe. This amount of expertise and enthusiasm under one roof always makes for a great learning experience, an incredible number of fungal records and good crack in the bar at the end of the evening. Several local group members from the Grampian and Edinburgh groups came along for the first weekend to get a taste of what was going on. Records from the event are still being collated but we already know that two Biodiversity Action Plan species new to Scotland have been recorded as a result of the foray. *Piptoporus quercinus* (Oak Polypore), a bracket that specialises on veteran oak trees was recorded at a lunch stop on the way up to Glenmore. *Armillaria ectypa* (Marsh Honey Fungus) was recorded in very wet conditions at Insh Marshes during the foray itself. BMS Forays are a great way to learn about mycology and a wonderful way to find out more about fungal distribution.

Changes to the Drugs Act and its possible implications for field mycology.

Many of you will have been aware of the changes introduced by the Drugs Act 2005 through the extensive media interest that it aroused. This new legislation, which came into effect in July 2005, has amended the 1971 Misuse of Drugs Act to provide that all magic mushrooms, regardless of whether they constitute a preparation or a product, constitute a Class A drug if they contain psilocin or ester of psilocin. This has effectively closed a previous loophole that enabled an estimated 400 establishments to sell fresh (mostly imported) magic mushrooms to the public.

Landowners were concerned as to whether they could be charged with being in possession of a Class A drug because they happened to have 'Magic Mushrooms' growing on their lawn or in their fields. The Home Office were quick to stress that where the mushrooms are growing uncultivated the landowner is not acting unlawfully by possessing them in this way.

The implications for field mycology are more complex as became apparent when the provisional list of British fungi thought to contain the stated chemicals was circulated (see below). Many of these species could easily be collected during foray activity and taken home for determination with a microscope, as field identification is not possible. Several field mycologists raised these concerns and the British Mycological Society have been in contact with the Home Office to try and clarify just where forayers stand if they find that they, or a member of their foray group, have inadvertently collected a species on the list.

Reference to the Home Office Circular 36 / 2005 clearly suggests that a person is not committing an offence of possession if he or she picks magic mushrooms with the intention of disposal (i.e. destruction OR delivery to a person who can lawfully take custody of them e.g. licensed staff at RBGE or a police officer) as soon as is reasonably practicable following determination and holds them in accordance with that purpose.

For practical purposes it would seem that ordinary foray collecting would only cause somebody to be in breach of the legislation if an individual was to take material home, identify it as a known species containing psilocin and then keep it without labelling it clearly for disposal at the earliest convenience. If anybody wishes to maintain a herbarium with these species kept within it for reference purposes they would have to apply for a license at a current cost of £31.00p.a. A set of draft guidelines is being drawn up and are currently with the Home Office for their comment.

It is unfortunate that the mycological community were not consulted about the legislation and that their activities were not taken into account when the legislation was drawn up. Hopefully the situation

will be clarified if a set of guidelines can be agreed upon.

Preliminary list of British Fungi reported to contain psilocybin/psilocin.

N.B. This list may be incomplete and should be treated as provisional (Brian Spooner Aug. 2005). Based on: Rättsch, A. (2005). *The Encyclopedia of Psychoactive Plants. Ethnopharmacology and its Applications*. Park Street Press.

Confirmed

Conocybe cyanopus
Conocybe velutipes (= kuehneriana)
[Galerina steglichii hothouse alien]
Gymnopilus junonius
Gymnopilus liquiritiae
[Gymnopilus purpuratus hothouse alien]
Inocybe corydalina
Inocybe haemacta
Panaeolina foenicisecii
Panaeolus acuminatus
Panaeolus fimicola
Panaeolus olivaceus
Panaeolus papilionaceus
Panaeolus subbalteatus
Pluteus salicinus
Psilocybe coprophila
Psilocybe crobula
Psilocybe cyanescens
Psilocybe inquilina
Psilocybe merdaria
Psilocybe montana (incl. physaloides)
Psilocybe semilanceata
Psilocybe strictipes
[Psilocybe stuntzii hothouse alien]
Stropharia aeruginosa
Stropharia caerulea / cyanea
Stropharia percevalii
Stropharia pseudocyanea
Stropharia semiglobata
Stropharia squamosa
Stropharia thrausta

Possible but not confirmed

Hygrocybe psittacina
Mycena amicta
Panaeolus semiovatus
Pluteus cervinus
Pluteus ephebeus (= villosus/pearsonii)
Psathyrella candolleana
Rickenella fibula
Rickenella swartzii
Stropharia coronilla

How long a blade?

With so much concern about what is legal and what is not, this is precisely the question that was asked by one local group leader. The answer – well ~ according to the police, any knife with a blade longer than a three inches would technically be considered an offensive weapon! Better get the old tape measures out



Scytinostroma portentosa (Mothball Crust) with its strong smell of mothballs, this fungus was first recorded growing on this hung willow at Quithel in 2001. This is the first known Scottish location.



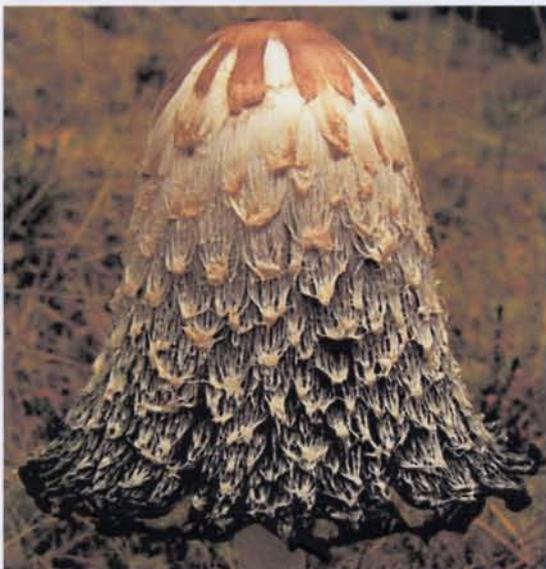
Boletus cf edulis (Penny Bun) this oddly coloured bolete was growing at 700m with *Arctostaphylos uva-ursi* (Bearberry) and seems to key out to *B. edulis* although the colour of the cap and stipe are certainly unusual.



Hygrophorus camarophyllus (Arched Woodwax) growing with *Arctostaphylos uva-ursi* at 700m, this fungus has not been recorded in the UK since 1902 and is associated with conifers in Europe where it is more frequent.



Leotia lubrica or *atrovirens*? Dennis (British Ascomycetes, 1981) lists the dark green version of Jellybabies as a separate species, *L. atrovirens*. Current thinking suggests that it is a colour variant. It was recorded twice in Scotland during 2005.



Coprinus comatus (Shaggy Inkcap) not an uncommon species, it is always an interesting photographic subject with its dramatic shaggy cap and deliquescent habit.



Lactarius chrysorrheus (Yellowdrop Milkcap) growing with oak. As the name suggests, the chrome yellow milk is very distinctive.

Contributions from GFG Members and Friends

Arctostaphylos uva-ursi (Bearberry) and some fungal associates

One of the surveys that I was involved in last season was looking at an area of ground given over to the regeneration of woodland. The idea is to record biodiversity at the start of the project and then compare this baseline with future visits as the regeneration progresses – hopefully the biodiversity will increase. This particular visit had taken me high up into the foothills of the Cairngorm mountains to look at fungal biodiversity. At 700m it is unlikely that forest will ever seriously establish itself and at the top of the hill the sparse and wind clipped vegetation was dominated with the low growing shrub *Arctostaphylos uva-ursi*, Bearberry.

Wandering around, I began to find fungi in this apparently inhospitable habitat. First of all was a group of fungi that I did not recognise – looking like *Clitocybe clavipes* (Club Foot) without the swollen base. Next up was a bolete, very close to *Boletus edulis* (Penny Bun) but with a beautiful orange brown cap (a colour variant? – Roy Watling has suggested checking against *B. edulis* var. *clavipes* see picture page). As I wondered around I also located *Cortinarius stillatitius* (Purple Stocking Webcap) and *Suillus luteus* (Slippery Jack).

This being the day before the start of the BMS Autumn Foray, there were several folk around who were interested in my finds. Seppo Huhtinen, a Finnish mycologist, was sure that my unknown fungus was in fact *Hygrophorus camarophyllus* (Arched Woodwax) see picture page – a fungus that is very common in Finland and regularly eaten there! A quick look at the long basidia and the divergent gill trama under the microscope confirmed his identification. A look in the new Basidiomycete Checklist suggested that this was not at all a common fungus in the UK, it is described there as not being recorded since 1902 and requiring re-examination.

During the course of the BMS foray, several mycologists ventured out into the Bearberry heath and two further interesting records were made – *Leccinum vulpinum* (Foxy Bolete) and *Cortinarius claricolor*, which, if confirmed, would be the first vouchered material of this species in Britain. All of these species are known to be mycorrhizal associates of conifers.

Bearberry grows extensively in the Highlands, often intermixed with *Calluna vulgaris* (Heather) on upland moors. Interestingly in some areas of North America and Canada it forms a common under story plant in coniferous woodland and research there has confirmed that it can act as a refugia for conifer associating fungi. Although not commonly found underneath pine in Scotland, Roy Watling has commented several times that he has found pine

associating fungi growing happily amongst Bearberry with no sign of pine for literally miles. These have included pine mycorrhizal BAP species *Hydnellum caeruleum* (Blue Tooth).

Spooner and Roberts in their excellent 2005 New Naturalist book 'Fungi', point out that it has been known for some time that Bearberry supports a number of commonplace ectomycorrhizal fungi (where the fungal hyphae form a sheath around the root cells but do not penetrate the cell walls), which, for some unknown reason, when associating with Bearberry, grow in a different way known as being ectendomycorrhizal. This latter growth form is such that the hyphae both grow around the plant cells to form a sheath but also penetrate the cortical cells.

Arctostaphylos heath would appear to host many mycorrhizal species that could transfer onto regenerating pine. It is interesting to speculate that the presence of Bearberry might speed up the regeneration of pine and increase the range of fungal species that the trees can associate with. It is certainly a habitat that should not be ignored for its fungal community and there is clearly more to be learned about its ecology.

Liz Holden

Kindrogan Field Studies Centre

Kindrogan Field Centre has for many years hosted courses on fungi with Roy Watling, Alan Silverside and Paul Nichol all involved. Over the last 10 years or so, Alan Outen has been running a very successful course for 'improvers' and introduced many folk to mycology including our own Rosemary! Alan has decided that he is no longer able to undertake this work and I was delighted to be asked to take over the slot. For the first year I will be running a 'Fungi for Beginners' long weekend (August 18 – 23rd). If all goes well, I hope to run an improvers course too in 2007, hopefully both a little later in the season. If anybody was interested in attending, the contact details for Kindrogan are given below.

Liz Holden

Bad year for fungi?

Over the past couple of years, I've been fortunate enough to work on a study plot in Culbin Forest. As a sideline to my monthly visits, I recorded the position of all the large fruitbodies in a 20 x 20 m area.

The results demonstrate just how variable fungal fruiting is! As you can see from the two figures, 2005 was a fairly poor fruiting year compared to 2004. I think that this is in agreement with what other field mycologists have told me, but I'd be interested to hear if you think it's been a good year at some sites or for some species?

So, does this mean there were less fungi this year, or does it just mean less fungi fruited? I've read a few scientific papers recently that have used DNA as a way to detect fungi belowground in relation to their fruitbodies. Along with info from my own research,

it seems that some fungi persist in the soil without fruiting, whereas other species are ephemeral and not detected in soil soon after fruiting.

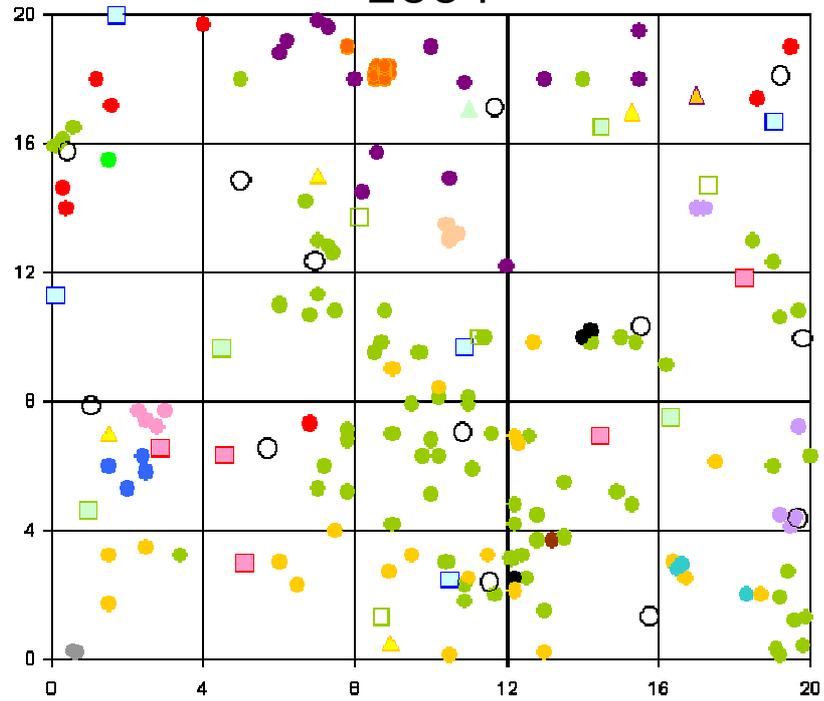
On a similar note, I found some interesting *Phellodon tomentosus* fruitbodies this year. They were interesting because of where I found them... in a big hole! I had dug a five-foot deep pit as part of an undergraduate research project in Culbin Forest in autumn 2004, just next to the 20 x 20 m plot described above, and covered it with wooden boards. When I removed the boards this autumn, I was fairly surprised to find these strange looking *Phellodons* fruiting directly out of the sand about one foot down the side of the pit (see photo). Liz, Sietse (a PhD student studying tooth fungi) and I have surveyed Culbin fairly intensively over the past few years and I'm relatively confident in saying *Phellodon* hasn't fruited within a mile of the pit in at least three years!

Tooth fungi are of conservation concern in Europe because of a decline in their fruitbodies thought to be caused by loss of their habitat and increased nutrient deposition. Because of this, they have their very own grouped Biodiversity Action Plan (see <http://www.ukbap.org.uk/UKPlans.aspx?ID=338> for more info). It looks more and more likely that, at least some of the tooth fungi, are denizens of deep, mineral soil, so part of the reason that we don't find them may be because they only fruit when these mineral soils are exposed. This has obvious issues for how we monitor changes in the distribution of these fungi. Hopefully, Sietse's project at Aberdeen University and The Macaulay Institute, which is using DNA extraction to detect tooth fungi in soil, will provide us with some important information as to where to go from here...

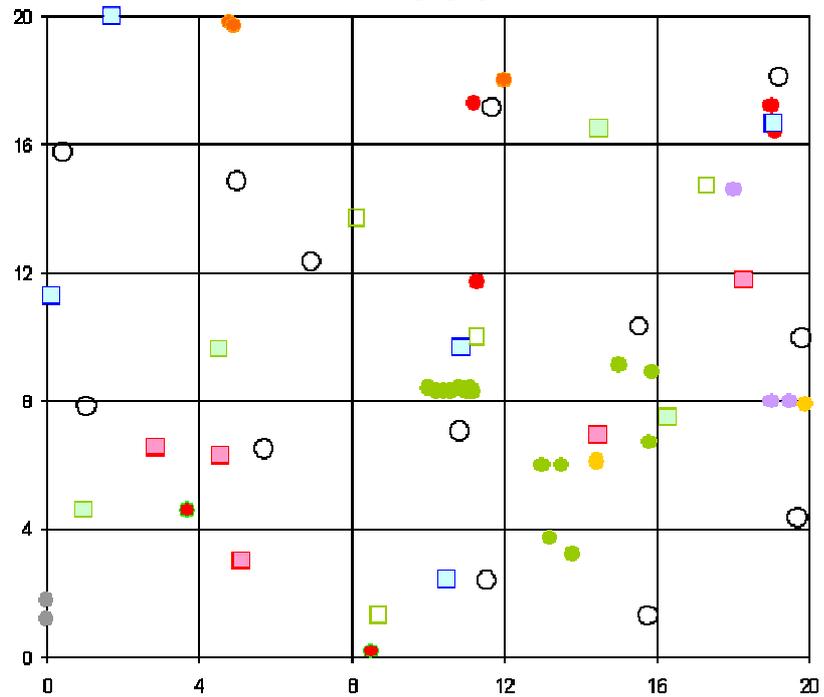
Dave Genney

- ▲ *Calocera* sp.
- ▲ *Collybia maculata*
- *Cortinarius cf. vibratilis*
- *Cortinarius semisanguis*
- *Cortinarius cf. alboviolaceus*
- *Cortinarius A*
- *Cortinarius B*
- *Cortinarius C*
- *Lactarius rufus*
- *Suillus variegatus*
- *Suillus bovinus*
- *Suillus luteus*
- *Russula emetica*
- *Russula cf. sardonia*
- *Russula aeruginea*
- *Tricholoma* sp.
- ▲ *Tricholomopsis rutilans*
- Tree location
- Substrate
- Temporal
- Fine scale I
- Finescale II

2004



2005



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.

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 is available from Liz Holden, cost £3.50.

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 Gill Butterfill, 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, Silverdale, Raikeswood Crescent, Skipton, North Yorkshire, BD23 1ND.

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. Pentland Books also offer an excellent service and reasonable prices.

Association of British Fungus Groups produces a quarterly journal containing a range of material of interest to field mycologists. Annual subscription 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 870150.

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 page of photographs could not have been produced without the help of Mary and Denis Bain. Helen Taylor took *Leotia lubrica* var. *atrovirens*, Dave Genney took *Coprinus comatus* and Liz Holden took *Scytinostroma portentosum*, *Hygrophorus camarophyllus*, *Boletus cf edulis* and *Lactarius chrysorheus*.

Grampian Fungus Group – books and equipment Dec 2005

The following is a list of the books and other equipment that the GFG can supply / lend to its members.

The books and chemicals are stored by Liz Holden and can be obtained by ringing or emailing Liz, preferably just before a meeting or foray. Books can be posted if the recipient doesn't mind reimbursing Liz in 'stamp' form but chemicals and glass wear will have to be collected.

The microscopes are stored by Mary and Denis Bain and can either be collected by arrangement or handed over at forays or meetings.

Grampian Fungus Group Library

Microfungi on Land Plants (1997) a fascinating and comprehensive guide – a real eye opener to the smaller fungi all around us. The fungi are listed under their host plant and can often be recognised from the macroscopic descriptions.

MycKey – 1.0 (2003) this is a computer-based key that is run from a CD. It is great fun to use, with one key designed for complete beginners and another for more experienced mycologists. The keys cover 500 genera.

Nordic Macromycetes Vol. 2 (1992). A set of keys (in English) for Polyporales, Boletales, Agaricales and Russulales – not intended for beginners this is really what you need when you start identifying fungi with a microscope.

Keys to Agarics and Boleti (1978). A set of keys (in English) for Polyporales, Boletales, Agaricales and Russulales) – as above but a little older – still a very useful text.

Mushrooms of Britain and Europe (1999). A pocket sized photographic field guide by Regis Courtecuisse in the Collins Wildlife Trust Guide series, published by HarperCollins

Waxcap-Grassland Fungi – Keys to Hygrocybe, Camarophyllopsis, Dermoloma and grassland Leptonia species in Britain (1996) Alick Henrici – a set of photocopied keys using microscopic characters

A key to the genera of the Agarics and Boleti (1950) AA Pearson. Rather out of date but still a useful key to genus using microscopic characters

Guides for the Amateur Mycologist 2. Guide to Identification with a microscope (1994) JVR Marriott Full of useful information about working with a microscope

Flora of British Fungi Colour Identification Chart (1969) A colour chart, referred to in some British texts.

The Mitchell Beazley pocket guide to Mushrooms and Toadstools (1982) DN Pegler – a small fieldguide arranged by habitat.

Chatto Nature Guides British and European Mushrooms and Fungi (1977) A. Neuner – not very many species included but some very nice photographs

Fungi of Britain and Europe (1989) Stephan Buczacki – pocket field guide illustrated with drawings – a good range of species included
Colour Guide to familiar Mushrooms (1978)

M.Svrcek – a pocket field guide illustrated with nice drawings although not many species included

Mushrooms (1996) M. Svrcek a pocket field guide – illustrated with photographs – a much better range of species

The new field guide to fungi (1978) E. Soothill and A Fairhurst – reasonable amount of text and species although photographs are rather disappointing

A handbook of Mushrooms undated A. Pilat. Not very many species included: illustrated with drawings

Les Champignons de France (1946) A. Maublanc. Not very many species included: illustrated with rather nice drawings

Fungi (1998) P. Starosta and C Epinat A photographic essay – coffee table book

Colour Encyclopedia of Mushrooms and Toadstools (1979) G. Kibby – a photographic essay – coffee table book

The Wonderful world of Mushrooms and other fungi (1977) H. Pursey – a photographic essay – coffee table book

I Funghi A collection of cards – each card illustrating a species (text in Italian)

Photographing Nature: Fungi (1975) H. Angel – lots of information about how to photograph fungi – a bit out of date?

How the Mushroom Got its Spots (2002) An Explainers' Guide to Fungi. British Mycological Society and Biotechnology & Biological Sciences Research Council

Fungus Fred goes Foraying (2002) Maggie Hadley. British Mycological Society

The Fungi Name Trail (2003) A key to commoner fungi. Field Studies Council / British Mycological Society

Recommended English Names for Fungi (2003) The Plantlife Bookstore

Collecting and Recording Fungi (2004) Guidance Notes. British Mycological Society.

Identification of the Larger Fungi (1973) R. Watling. Don't be misled by the date – this is a first class introduction to working with macro fungi and well worth a read.

Grampian Fungus Group Microscopes

1 x Wessex compound binocular microscope with built in light source and mechanical stage

3 x Watson compound monocular microscopes with built in light source and mechanical stage

Equipment - mostly for working with microscopes

NB the chemicals come with health and safety information and are supplied in appropriate dispensers. There is a charge of £1.00 a bottle.

Glass microscope slides

Glass cover slips

Melzers Reagent

10% Ammonia solution

10% Potassium hydroxide solution

Congo Red in ammoniacal solution

Ferrous crystals

1 x Bell-Howell slide projector and transit case.

Accepts carousels.