Grampian Fungus Group

Newsletter No.16

Dec. 2012

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

2012 has been the year of the workshop for the GFG starting off with a well attended and very enjoyable March weekend workshop on corticioid fungi which Dave Savage has written about below. This was followed in July with a microscope workshop and a further weekend session on grassland fungi was held at the end of September (see R. Marriott below).

The usual foray programme was sustained with support from Toni Watt and Andy Taylor who led several forays that I couldn't get to - very many thanks for helping out. I think that it is hugely beneficial to have different leaders and if there is anybody else who would like to suggest a venue and offer to be the leader for the day, please do get in touch.

The British Mycological Society (BMS) held their biennial recording group leaders meeting at the end of June and a brief report is included below. It is always interesting to hear what is going on in other parts of the UK and although it meant a long drive down to Hereford it was definitely worthwhile.

A good batch of species new to Scotland are reported by friends and members across Scotland and the highlight from our forays was the location of a new site for the endemic species *Boletopsis perplexa* (Black Falsebolete) - well done to Denis for finding that during our Inver foray.

Do take the time to read Bill Burn's excellent article below 'What's in a name?'. It contains fascinating information about some of the characters that have fungi named after them - many thanks for this Bill. Can I make that a plea to all of you for more short articles for the next newsletter! Happy New Year,

Liz Holden

Membership

Just a reminder that **annual subscriptions are due on January 1st** for 2013. The 2012 AGM agreed to maintain the subscription at £5.00 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 or house address, please let Denis know so that he can update the records**.

Grampian Fungus Group: Members

There were 35 paid up members at Dec. 4 2012, the following is a list of those who have already paid their 2013 subscription.
N.B. if your name is not on the list below and you wish to remain a member, please send your cheque before you forget!!

Lizzie Bacon
Ben Mellor
Glenn Roberts

Diary Dates

A full list of forays and events will be sent out in the spring. One date for your diary is our spring foray / AGM taking place on **Sunday April 28th**, meeting at 10.30am. Location details will follow in the spring.

GFG - Foray Reports 2012

The full species lists for the forays will be placed on the Scottish Fungi website in the spring (click on the following link http://sites.google.com/site/scottishfungi/local-groups/grampian-fungus-group and scroll down to the bottom – 2011 lists are already there as a subpage); the following comments are just to give a flavour of each event. Distribution data are taken from the Fungal Records Database of Britain and Ireland (FRDBI), a database that is managed by the BMS.

March 9 - 11 2012 Corticioid Workshop

See report below

Sun. April 29th Spring Foray and AGM

The morning foray took us to the new venue of Loch of Skene and we were soon happily splashing around in the wonderful old willow and alder trees that surround the Loch. Here we found lovely material of *Phellinus igniarius* and *Diatrype bullata* on the willow *and Inonotus radiatus*, *Plicatura crispa* and a fine example of the spring slime mould *Enteridium lycoperdon* on dead standing alder. Of particular interest was a greyish corticioid on fallen alder (?) wood which turned out to be only the third Scottish record of *Phlebiopsis ravenelii*. Drier areas of pine supported the spring fruiting *Strobilurus tenacellus* on old fallen cones; this and *Kuehneromyces mutabilis* were the only agarics of the day.

Fig. 1: Diatrype bullata (Liz Holden)

Many thanks to the National Trust for Scotland, which hosted the AGM again. Full minutes are

available to members on request, the following being a brief overview:

Seven members attended with one apology.

Our events continue to be advertised on calendars on both the Scottish Fungi website and the yahoo chatroom. Click on the link: http://sites.google.com/site/scottishfungi/local-groups/grampian-fungus-group.

The Treasurer's report indicated that there were 31 members at the time of the AGM. The meeting agreed to maintain the subscription at £5.00.

A copy of David Boertmann's reprinted monograph '*Hygrocybe'* has been bought and is now available for members to borrow. It was agreed to use funds to buy a small stereo microscope for use at workshops.

Liz Holden thanked those members who had offered to lead forays during 2012.

Sun. July 8th

Five of us spent the day getting to grips with fungal microscopy. Unfortunately the new stereo microscope did not arrive until after this event but it got a good airing at later workshops.

Sat. August 25th

This was a morning foray at Morrone hoping to focus on boletoid fungi and followed by an afternoon with keys and microscopes.

A look in some short sward grassland by the Duck Pond presented us with *Entoloma griseocyaneum* and *Russula pascua* - the latter a pale, mild species with a green reaction to a ferrous crystal and growing here with *Salix repens*. We then took a different route than normal and explored the birch woods just above the tarred road. These gave us a good range of species including *Cortinarius triumphans* and *C. rubicundulus* - the latter bruising chrome yellow and on the British red list. Nice material of *Tricholoma sejunctum* was found and also the wonderful bright red cap and ochre spores of *Russula pseudointegra*.

Sadly boletes were thin on the ground but we did have some nice *Leccinums* to key out and a good range of species from the other main genera 'some that we prepared earlier!' .

Fig. 2: Cortinarius rubicundulus (Liz Holden)

Sun. Sept 2nd

We explored a different part of Inver wood on this foray and looked under the mature pine along the bank of the Dee. This area has been highlighted by Forestry Commission Ranger and GFG member Louise Simpson, as an area with tooth fungi present that is vulnerable to disturbance from forestry operations. We wanted to try and locate fruiting populations so that their presence can be highlighted when work is taking place. We enjoyed a very successful day finding several populations of *Hydnellum ferrugineum* and *Sarcodon squamosus*. We also found red list species *Tricholoma pessundatum* and *Cudonia circinans* both conifer species. Highlight of the day was when Denis asked me to look at a rather grotty looking fungus near the river bank. At first I thought that it was one of the blackening *Russula* species but on turning it over we could see some very well grazed, but distinct pores. Denis had found a new site and 10K square for the rare endemic pine associate - *Boletopsis perplexa*. Interestingly it didn't fruit at its other Deeside location and hasn't been seen there since 2004. It might actually be more widespread below ground and just not picked up because it rarely fruits.

Fig. 3: Boletopsis perplexa (Mary Bain)

Sat. Sept. 8th
7 folk attended the foray on this beautiful sunny day.


Fig. 4: Forayers at Crathes (Toni Watt)

Fungi found - lots of *Russulas* – including a lovely marzipan scented yellow one - unable to identify to species. Highlights – a large clump of *Agaricus augustus*, the Prince, by the main drive into Crathes -- huge sturdy mushrooms. Also lovely fresh, yellow fruiting bodies of *Phaeoleous schweinitzii* under an old larch tree. Another treat was Richard Marriott introducing us to the smell of walnut leaves – absolutely lovely scent when rubbed between your fingers.

Toni Watt

Sat. Sept. 15th
A small group of us set out to explore Hazelhead Country Park in Aberdeen. Fungi were few and far between but there was enough to interest the beginners that came along. Great to see new faces.

Andy Taylor

Sun. Sept 23rd
Bellwood in Aboyne provided us with its usual interesting array of species including several from areas of very wet ground such as sphagnum specialist *Arrhenia onisca*. Our lunch spot coincided with some fine material of *Cordyceps ophioglossoides* which, following excavation, proved to be growing on the false truffle, *Elaphomyces granulatus*. *Cortinarius camphoratus* is a red data conifer species with an extraordinarily pungent smell variously described as 'old socks' or 'goats cheese'! At least it is recognisable in the field! Material of the deadly *Cortinarius rubellus* was found late on in the day - although many species didn't fruit well in 2012, this particular one turned up at several sites.

Fri. Sept 28th – Sun. Sept. 30th
Grassland fungi workshop based at Mar Lodge – see report below.

Fri. Oct. 5th - Sun. Oct. 7th
This weekend was a joint foray to Dumfries and Galloway, an under recorded area where there are several folk who enjoy fungi but who wanted some encouragement with recording. A whole week of activities had taken place before we got there, with public forays and a competition to find the largest fungus (won by a truly monumental bolete!). Several sites were visited by the visiting recorders on both the Saturday and Sunday and participants were able to take their collections back to the excellent eco mill-conversion accommodation (many thanks to Dick Peebles for finding this for us) for further study.

Saturday highlights included material of the hollow truffle-like structure, *Hydnotrya cubispora* (see 2011 Newsletter for a write up of the collection made last year) a rarely recorded species found under mature spruce. We also enjoyed wonderful material of *Pseudocraterellus undulatus*, *Cortinarius torvus* and *Thelephora penicilliata* all under mature beech trees backed by conifer plantation. The last site was the lovely oak wood of Carstramon. Amongst the many delights (including *Auriscalpium vulgare* on a cone of one of the very few pine trees in the wood) was a bright pink resupinate growing on fallen beech twigs. Once this was under the microscope, the lack of encrusted cystidia and presence of large amyloid spores took us away from the suggested *Peniophora* and into *Aleurodiscus*. Although this latter genus seemed a good fit, none of the texts that we had with us could key out a species and it wasn't until the following week that Liz tracked it down *A. wakefieldiae* (named for the Kew mycologist Elsie Wakefield) a rarely recorded species that seems to like this south western corner of Scotland. See the website 'Scottish Fungi' fungus of the month November 2012 for further detail about this species.


Fig. 5. Aleurodiscus wakefieldiae (Liz Holden)

After a cold start, Sunday saw us settle down to foray at Ken Dee Marshes. 2012 was not a good year for fungal fruiting in the central highlands but at one point during this foray, we couldn't put our feet down for the most wonderful display of fruiting bodies in a damp

broadleaf woodland - a real boost for deprived mycologists! Lovely material of *Pleurotus dryinus*, *Russula virescens* and *Boletus pulverulentus* just added to a most enjoyable weekend.

Sun. Oct 14th

Highlights of the Castle Fraser foray included a patch of several individual *Mutinus caninus* at a new site on the estate to where they had been seen on a previous foray.

Fig. 6: Mutinus caninus (Toni Watt)

The remains of a ring of Golden Bootleg fungus, *Phaeolepiota aurea* in an overgrown area by the gardeners compost area were found. As usual for Castle Fraser forays the weather did not let us down, it poured with rain at lunchtime but did not spoil an enjoyable foray.

Fig. 7: Phaeolepiota aurea (Toni Watt)

Toni Watt

British Mycological Society (BMS) News

Biennial group leaders meeting, Hereford June 29th - July 1st 2012: informal notes from Liz Holden

Friday June 29th

The meeting opened at 8.15 pm with a welcome from the BMSRN Co-ordinator Sheila Spence.

Fungi in 'The Garden'. Dr. Rosetta Plummer of the National Botanic Garden of Wales gave a lively and entertaining talk about the Garden and its work. With a mission statement 'conservation: education: inspiration' Dr. Plummer emphasised the importance of using good stories to raise interest and awareness. The Garden is currently hosting the exhibition 'From Another Kingdom' a major fungal exhibition on tour from RBGE where it was first displayed during the International Mycological Congress (IMC9) in 2010.

Alongside this exhibition the Garden is planning a 'Wales Fungus Day' to take place on Sunday Oct 14th 2012. Lots of fun and educational activities planned alongside a big recording effort around the Garden and other linked activities taking place across Wales.

Saturday June 30th

Sheila Spence formally opened the meeting with a list of apologies including Dr. Geoff Robson (President elect) who sent a written message of support that Sheila read out.

Stuart Skeates (Chair of BMS Field Mycology and Conservation Committee) and Professor Lynne Boddy (Cardiff University) then lead an introductory session reporting on how the changes within the Society were taking effect; how the recently created three interest groupings (fungal biology and research; education and outreach; field mycology and conservation) are maintaining links and who is sitting on what committee.

The current contract with publishers Elsevier is up for renewal in 2015 and, given the changes in online publishing, is unlikely to prove as lucrative for the Society in the future. Lynne reviewed recent activities that the Society has undertaken including IMC9 and follow up 'Fun Days' at RBGE based around the exhibition 'From Another Kingdom'; the Big Nature Day based in the Natural History Museum and a number of television and radio slots for fungi. She also mentioned the next Autumn Open Meeting to be held at Kew 'Wood Decay Fungi' on Nov. 17th 2012. See the BMS website for more information on all of these items: http://www.britmycolsoc.org.uk/ . Norman Porrett, the BMS Administrator is also happy to

answer enquiries about the BMS and can be contacted on norman@britmycolsoc.info .

Stuart outlined a number of other activities that the Society has been involved in such as working with PLINKUK; providing comment to the Law Commission Review (England and Wales) that is looking at simplifying existing legislation regarding the protection of organisms and contributing to a review by the National Poisons Information Service (NPIS) – apparently mycologists in Northern Ireland are taking on any fungal identifications required by NPIS.

Why the country conservation agencies need you – a presentation put together by Dave Genney (Scottish Natural Heritage) given by Nev Kilkenny (Dave's train never made it past the Scottish Border – train chaos everywhere over the weekend!).

The importance of having up to date and reliable data available for all organisms in one place via the National Biodiversity Network (NBN) was stressed. The NBN is well used by conservation agencies and planners to inform their management and development strategies - these are busy people who do not have time to trawl through all the national databases held by the different interest groups.

A number of examples of how the availability of fungal records generated by local recording groups and other individuals undertaking research or other survey work have informed the decision making processes of conservation agencies, were given:

- Informing planning and development projects such as a recent dualling of the A9 between Perth and Inverness where some experimental fungal mitigation work has taken place.
- Site selection - two recent additions of grassland fungi to citations of existing SSSIs in Scotland following the publication of criteria through JNCC – informed by the BMS grassland survey and subsequent country based surveys;
- Species conservation assessments for example UKBAP species
- Surveillance and monitoring
- Research projects – for example tooth fungi and waxcaps
- Informing management advice – for example the management leaflets produced by PLINKS
- Raising awareness

The 'Scottish Fungi' website https://sites.google.com/site/scottishfungi/ was profiled. This and the use of a Yahoo Chatroom group has proved very useful in bringing together interested individuals from far flung corners of Scotland. With so few field mycologists and long distances between them, the internet has proved a very useful tool and generated many new records for the FRDBI.

Conservation happenings – Bruce Ing (BMS Conservation Officer)
Bruce gave an overview of the activities that he has been busy with:

- Quinquenial review of scheduled species – should there be more fungi on Schedule 8?
- Responding to the proposal to sell off national forests
- Contributing to debate about the criteria to be used for the inclusion of fungi in SSSIs
- Law Commission Review (see above)
- Establishing the 'Common Fungi Project'. It is hoped that there will be more records forthcoming this year. See the following link for more info http://www.britmycolsoc.org.uk/mycology/have-you-seen-this-fungus/

Phytophthora problems – Kenny Izzard (FERA)
The focus of the talk was on *Phytophthora ramorum* and *P. kernoviae*. Not actually fungi at all these organisms are closely related to brown algae. They are of particular concern as unlike Dutch Elm Diseases, which relied on one vector, there are innumerable *Phytophthora* vectors, and thus enormous potential for damage. In general the warmer, wetter areas of the country are most at risk as water is an important factor in the reproductive strategy. No fungicides are recommended, currently the only option is to dig out infected plants / trees and burn them. Debarked wood of infected trees can be used (processed through licensed mills) as although infected, the wood is not infectious – the spores are found in the leaves.

Total eradication is unlikely and it was felt that effort to prevent new *Phytophthora* species entering the UK would be important although difficult to enforce. Interventions have to be balanced against the impact on people's livelihoods. Raising awareness of the situation and good practice to prevent further spread are a start in tackling the problem.

Royal Botanic Gardens, Kew: update and news – Bryn Dentinger (newly appointed Head of Mycology, Kew – congratulations!)
Bryn outlined who was currently in post in Kew mycology – they will shortly be looking to fill the Senior Researcher post and also a fixed term research assistant post.

Several major events have taken place in recent years, including the CABI agreement and the move of the department to the Jodrell buildings with new fungarium facilities.

Bryn went through the research projects recently finished or being undertaken by existing staff, which include a number overseas in Camaroon, Belize and Greater Antilles, Sarawak, and Borneo. Closer to home, is the waxtongue project, ongoing updates of CBIB, investigation of cryptic species within the UK tooth fungi, refinding several species previously thought to be extinct through targeted survey and ongoing work to tighten up DNA bar coding as an identification tool with a view to it becoming part of the standard procedure for the acquisition of material.

For the future, the team hope to give the fungarium a public interface using digital technology and enabling metadata from the collections to be more accessible for analysis. The fungarium is also a potential treasure trove of genomic data, which it is hoped to utilise. Restoration ecology following natural or man-made devastation is also likely to occupy Kew's time in the future.

FRDBI updates – Paul Kirk (database manager)
Paul explained to the meeting that he is becoming increasingly busy with work matters and that there is now a need to find help to upload the backlog of records. This is ongoing with several volunteers already standing by.

The suggestion that Kew might be interested in eventually taking on the day-to-day management and hosting of both the FRDBI and the CBIB met with a favourable response from Bryn Dentinger.

There was also a suggestion from several individuals that in the meantime, the Society should seriously consider setting up a paid contract to address other outstanding issues, such as the interface with the NBN and finding a way to maintain an up to date and compatible species dictionary. Also to further develop an on (and off) line user friendly 'recorder interface' that can take advantage of recent advances in digital mapping technology.

Question and Answer discussion - Stuart Skeates
FRDBI – Stuart gave an excellent presentation to stimulate discussion about what recorders need in their recorder interface and underlying database. There are already several ideas under investigation.

Stuart also gave an update on the current situation regarding red lists. New criteria for inclusion of species on any red list are now in place. Martyn Ainsworth (Kew) is currently evaluating all rarely recorded fungal species against these new criteria.

Sunday July 1st
The Silene Rust puzzle – Dinah Griffin
Dinah reported on behalf of Gill Brand who has been the driving force behind the recent survey of rusts on *Silene* species. Thanks were given to all the contributors with 737 records received. The project could do with a better coverage of Scotland and recorders here should continue to send records to Gill. Gill's excellent newsletter updates can be found on the Scottish field mycology (yahoo) chatroom http://uk.groups.yahoo.com/group/scottish_field_mycology/ in the 'files' section.

Rare fungi project – Justin Smith
Justin reported on a desk study that he has undertaken using existing fungal records to try and establish criteria to identify sites that have outstanding diversity of chosen species suites or viable populations of Schedule 8 species. The intended outcome is to increase the representation of fungi in the SSSI system of England and Wales.

He has assessed 'waxcap', 'tooth fungus' and 'thermophilous bolete' sites. Criteria do exist for the waxcap sites but new criteria were developed for the latter two. Based on this work, a long list of 43 sites has been sent to Natural England.

Any other business – Sheila Spence
David Harries was formally elected as the next Recording Network co-ordinator. He will take up the role at the start of 2013.

Suggestions for content and venue for the next meeting (2014) were made.

Sheila Spence was thanked for her work as co-ordinator and congratulated on organising an excellent meeting in 2012.

Contributions from GFG Members and Friends

Corticioid Workshop March 9 - 11 2012

A motley assortment of men, women and a dog are rolling into the Stable Block courtyard on a Friday afternoon. Liz has organised another Mar Lodge weekend. But this one is very different. It is mid March, and the target fungi are those white patches on rotting wood. The ones we all avoid! Twelve folk, all with little idea of what to do, have travelled from the four corners to join Liz and Roy Watling for the weekend.

After allowing us to gossip with old friends and get to know new ones, Liz introduces us to the Corticoid group of fungi, and makes sure we all have our copies of a draft key that we have the author's (K-H Larsson) permission to use. Microscopy is a must with these fungi. Liz

outlined her sample preparation techniques, and recommended we look for cystidia first, as they are usually easy to find and often distinctive, and to leave basidia until last.

Fig. 8: Jaapia ochroleuca - only known from 9 sites in the UK, this typically unassuming corticioid was recorded after the workshop (Dave Savage)

On Saturday, a chance for a first try under the microscope. Then Roy leads us on a short walk to show us how easy it is to find and collect Corticoid fungi. Look under any rotting logs, piles of branches, heaps of discarded bark, and remember to look into the cracks of that rotting stump. He explains what field characteristics need to be noted, such as texture, how firmly attached, whether on bark or decorticated wood, etcetera. He emphasises how helpful it is to know what type of tree the specimen comes from (could be challenging with decorticated wood in a mixed woodland. Perhaps monoculture plantations have their good points!) Roy advises that some collections will have lost their key characteristics due to age or predation and cannot be identified. Others will be too young, but if the wood they are on can be taken home and left under the hedge or in the compost heap for a couple of weeks they should mature. Then comes the real chance to look for their amazing micro structures. Learning that an eight spored basidia looks like a crown, just what a halocystidia looks like, and just how easily the cap of star shaped crystals can be lost from asterocystidia by over enthusiastic sample squashing.

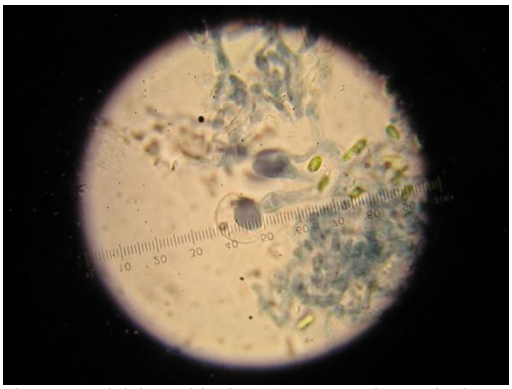

Fig.9. Resinicium bicolor - not much to look at macroscopically but lovely halocystidia under the microscope(Dave Savage)

Roy and Liz are trying to be in six places at once to help us with both the microscopy and keys.

Bunk house catering is notoriously basic, ranging from cold baked beans to a microwave meal. Not with Liz as organiser. Saturday evening we were treated to a 3-course gourmet banquet, complete with champagne (to celebrate Roy's recent award from the RSPB), much thanks to Robert as head chef. And of course the bottle washers.

Sunday morning Roy took us through Larsson's key using two very different specimens, using the camera and projector so we could all see the micro details as Liz prepared the specimens. Between them they showed us what to do when you make the wrong choice in a key, just how hard it can be to find basidia in some specimens, and the value of correct wood identification.

Eventually the time comes when the desire to learn more is trumped by the need to be elsewhere, and we depart in ones and twos. Everyone seems to have enjoyed the weekend, and cannot have helped but learn a lot about a surprisingly interesting and varied group of fungi. Although I'm not quite sure what the dog learnt.

Dave Savage

Grassland fungi workshop Mar Lodge Sept 28 - 30 2012

Eight folk including our leader Liz attended the Waxcap Grassland weekend based at Mar lodge.

On Saturday morning we set off for the field after an introductory talk by Liz on " CHEG D " fungi. The weather turned out fine after a rather cold blast of wind when we arrived at our first destination Strone Baddach. This is an intriguing ridge off Glen Clunie, clearly more base rich as can be seen by its grassy nature compared with the surrounding heather; and one that some of us had been meaning to visit for several years. It proved to be very rewarding. We were soon finding waxcaps on the lower slopes. The first species found were *Hygrocybe coccinea* and some yellow and orange species such as *H. insipida* and *H. chlorophana*. We pressed on up the hill where we found fewer species but some interesting ones *Hygrocybe punicea, H.flavipes* and a single specimen of *H. irrigata.* Most species were identified clearly in the field but there were characters to be checked under the microscope back at Mar Lodge.

The latter part of the afternoon was spent back at Mar lodge checking IDs. We were taken through the macroscopic keys in Boertmann's

book and also a quick tabular key. The need to check both branches of a key sometimes became very clear and also the advantages of using characters only seen under the microscopes. The grand total for the day was 16 species of waxcap in all.

After an excellent supper prepared by Liz most folk continued checking the day's haul.

Sunday was a brilliant sunny autumn day. We investigated two fields near the old Youth Hostel beside the Dee. The first somewhat unpreposessing field turned out to be remarkably good and we found our first Spindles and Earth tongues. We saw the clear colour difference in the field between the Apricot Club (*Clavulinopsis luteoalba*) and one of the more common yellow species, Yellow Club (*Clavulinopsis helvola*). We also found a probable *H. ceracea* which needed microscope confirmation – looking for the very narrow spores. After a slow wander through the Scot's pine plantation we visited another less rewarding field (a former site for *Clavaria zollingeri*) where CHEG fungi were thin on the ground.

Then back eastward along the bank of the Dee through the plantation to our last relatively ungrazed field. Along the edge nearest the river it was unimproved and had a more interesting flora; in the shorter turf we could see old flowering stems of *Euphrasia*, *Gentiana* spp and *Thymus*. Here we saw *H. coccinea* and *H. quieta*. The most abundant species, however, was *H. fornicata*. This looked whiter than it sometimes appears – like large *H. virginea* but without the decurrent gills. Fortunately there was a specimen of *H. virginea* as well and back at the lodge the value of microscopic characters was shown again with the difference between the more regular gill trama of *H. fornicata* compared with the irregular branched gill trama of *H. virginea* clearly seen..

The afternoon concluded with a demo by Liz of how to use microscope techniques to ID *Geoglossum* and *Clavaria* spp. And so we dispersed home through the warm sunshine after a very rewarding and enjoyable study weekend where we all learned a lot and honed our ID skills.

Considering the vagaries of this year's weather the final CHEG total was excellent:
C – *Clavaria* 3
H – *Hygrocybe* -17 (+ 1 variety),
E –*Entoloma* - 1
G- Geoglossum - 1

Fig 10: Hygrocybe fornicata (Liz Holden)

Richard Marriott

Rare and interesting species from Kindrogan 2012

'Identifying fungi' is an annual course hosted by Kindrogan Field Study Centre. The course is for anybody with an interest in identifying fungi and wanting to take it a little further than the pocket guide stage, particularly anybody wanting to make a start with a microscope. Liz does the teaching and generally doesn't have much time for detailed identifications but as ever, some interesting species were recorded.

The rarely recorded conifer associate *Phaeocollybia lugubris* with its cartilaginous and almost rooting stipe was recorded in the plantation woodland of Kindrogan itself - a new species for this well recorded site.

The two favourite sites of Faskally and Birks of Aberfeldy also produced, amongst their many specialities, a species new to each. The former produced a collection of *Inocybe bongardii* var. *pisciodora* and the latter a small white truffle that bruised red brown and turned out to have wonderful spores (as the specific name suggests) *Octavianina asterosperma*. This has only two other recent Scottish records also under beech.

Fig. 11: Inocybe bongardii var. *pisciodora (Liz Holden)*

The course will run from Sept.6th – 13th in 2013 and further information is available on www.field-studies-council.org .

Liz Holden

What's in a name?

As we all know, investigating the names of fungal species is a fun way of brushing up on your Latin vocab. Some of them show considerable imagination (which often baffles me) while others range from the poetic to plain and simple 'tell it like it is'. For example, *semiglobata* - 'like half a sphere' probably didn't take a lot of thinking about (and could be applied to a large proportion of Kingdom Fungi). *Brevisporus* – 'with short spores' – belongs in that category too, I think.

On the other hand, *scrobiculata* – 'pock-marked', *turpis* – 'disgusting', *virescens* – 'turning green', *aeruginea* –'copper-coloured' all show a bit more care and attention to detail as well as some feeling for the subject matter. There's more of a poetic flavour to words like *umbrinolutea* – 'yellowish-brown', *rubescens* – 'reddening', *speciosissimus* – 'most beautiful', *alboviolaceus* – 'white and violet'. At least, there is in the Latin form. One of my favourites is *atrotomentosa* – 'dark and velvety'; I'm sure that must have popped up in every Roman advert for Guinness. However, be on your guard against *faux amis* (that's French). Take, for example, *fornicata* – rather disappointingly, it has nothing whatsoever to do with furtive fumblings in the undergrowth; it actually means 'vaulted' (concave on the inside, convex outside) or 'shell-shaped'. You should also be aware that not all scientific names are Latin. Some are Greek; some are even Graeco-Latin.

However, I digress. What actually started me off on this tack was a recent encounter with *Hygrocybe reidii*. Classical scholars amongst you will recognise at once that *reidii* is not a Latin word. Is this just someone trying to make a name for himself? Well, in the case of Derek Reid this is certainly not so. The waxcap in question was named in his honour by the French mycologist who first described the species, Robert Kuehner (of genus *Kuehneromyces* fame). Derek Reid (1927-2006) was widely considered the finest professional mycologist of his generation, whose career was crowned by promotion to Head of Mycology at Kew Gardens in 1974 and who had no fewer than eight species of fungi named after him. He was a constant inspiration to others and played a major role in the growth of field mycology in Britain during the 20th century. He travelled extensively in five continents, discovering many new species, and published nearly 200 scientific papers, many of which were illustrated by his own accomplished coloured drawings. There is a delightful thumbnail sketch of him, taken from his obituary by Peter Marren, - "In the 1970s he seemed to blossom, covering his prematurely bald pate with a luxuriant, lop-sided wig and wearing an eye-watering tie chosen from his large collection. He had quick wits and a mischievous sense of humour. Late in life he discovered an unlikely taste for bingo".

I have never seen *Tricholoma batschii*, but I think Batsch deserves a mention if only because he gave us *atrotomentosus* (though, as we have already seen, it subsequently underwent a gender change). August Johann Georg Karl Batsch (1761-1802) seems to have spent much, if not all, of his life in his birthplace, Jena, in Germany. He studied at the university there, obtained a doctorate in natural sciences, went on to a second doctorate in medicine, later teaching medicine at the university and eventually became Professor of Philosophy. He described new species of ferns, bryophytes and seed plants as well as being a recognised authority on mushrooms. He discovered almost 200 new species of mushrooms, including *Clitocybe nebularis*, *Calocera cornea*, *Paxillus involutus* and its erstwhile sibling, and his book *Elenchus Fungorum* (Discussion of Fungi) is still highly rated today. An impressive list of achievements for a man who died at the age of only 40, after a short illness.

Hydnellum peckii is always a highlight on any foray, especially if it is in good condition. It was first described scientifically by American mycologist, Howard James Banker (who was to acquire a whole family, *Bankeraceae*), who named it in honour of Charles Horton Peck (1833-1917). Peck was a somewhat controversial figure, especially in his own day. He worked for the New York State Museum for over 50 years, publishing extensively in the Museum's Bulletin and Annual Reports. Peck described more than 2700 new species and varieties of North American fungi during his long career, an astonishing achievement. He often worked in the field to describe and sketch new and interesting specimens while they were still in fresh condition and even did microscopy in the field by carrying a portable microscope. Not having access to chemical analysis, apparently he used to nibble unknown mushrooms to determine whether or not they had poisonous effects! However, in the late 1870s and early 1880s, Peck's species came under fire from British mycologists, as they had no way of getting hold of the NY State bulletins (in which he published his descriptions), and Peck did not lend out specimens from the NY state herbarium. Many of the concerns raised would eventually contribute to the present-day requirements of valid and effective publication of names, but it seems that at the time Peck paid no attention whatever to the complaints.

Inocybe patouillardii (aka *I. erubescens*) is one of the most poisonous of the genus and has

been known to cause death. I'm not sure if everyone would consider it complimentary to be remembered in this way, though perhaps Narcisse Theophile Patouillard (1854-1926), having been a practising pharmacist for over forty years, would take it in his stride. Patouillard is highly regarded for his taxonomical work in mycology, and during his career he published more than 250 works, describing more than 1100 new species. He was a leading authority on tropical mycology. Over 100 of his publications involved studies of mushrooms from diverse locations, such as Brazil, Java, Guadeloupe, Mexico, New Caledonia and Tunisia. In 1920 he became an honorary member of the British Mycological Society.

Ever wondered about the connection between *Phaeolus schweinitzii* and Count Nicolas von Zinzendorf of Silesia, founder of the Moravian Church? He was the great-grandfather of David Lewis von Schweinitz (1780-1834). Von Schweinitz was born in Pennsylvania and was educated by the Moravian Brethren. As a young man, he travelled to Germany and entered a theological seminary. After graduation he was eventually ordained deacon and returned to the USA in 1812, taking up a post as a church administrator in Salem, N.C. Although his clerical vocation was his life's work, he also developed a career in botany and mycology and is widely regarded as a founder of American mycology. His extensive herbarium of fungi and plants, together with his published works, established him as the foremost authority of cryptogamia of his time. In his 1832 *Synopsis Fungorum in America Borealis* alone he described over 3000 species of fungi, more than half of which were species new to science. He was also an accomplished illustrator and created watercolour prints and drawings of botanical subjects that supplemented his descriptive work. At his death, his personal herbarium of nearly 23,000 specimens was bequeathed to the Academy of Natural Sciences of Philadelphia.

Cortinarius bulliardii is named in honour of Jean Baptiste Francois (Pierre) Bulliard (1742-1793). 'Pierre' is in brackets because it was apparently only a nickname, though nobody knows how or why he acquired it. He studied medicine in various locations, eventually setting up in practice in Paris. Botanist as well as mycologist, Bulliard's contribution to mycology is particularly significant. He discovered, named and described many of the best-known mushrooms, including the wonderfully edible Cep or Penny Bun, *Boletus edulis*. Bulliard died in Paris on 26th September 1793; the circumstances of his death are shrouded in mystery. One report suggests that he died as a result of an accident while he was out hunting, though the timing of his death has also given rise to speculation that he may have been a victim of the French Revolution. We'll never know.

Suillus grevillei as well as being an attractive bolete is also a good excuse for introducing a Scottish mycologist. Robert Kaye Greville (1794-1866) was also a bryologist and botanist and an accomplished artist and illustrator of natural history. The son of a rector, he was actually born in Bishop Auckland and raised in Derbyshire. He was interested in plants from an early age and, although he originally studied medicine, being of independent means he abandoned it to concentrate on natural history. After he married he settled in Edinburgh and in 1823 he began the publication of the monthly journal, *Scottish cryptogamic flora,* illustrated with his own drawn and coloured plates. In 1834 he made a tour of Sutherland and again toured in Scotland in 1837, each time collecting specimens for the Botanical Society of Edinburgh. Greville was an active opponent of slavery and he served as an anti-slavery delegate from Edinburgh to the then Colonial Office. He was also an advocate of temperance, publishing *Facts illustrative of the drunkenness of Scotland with observations on the responsibility of the clergy, magistrates, and other influential bodies* (1834). Greville was also a Secretary of the Sabbath Alliance and was vocal against the 'legalised desecration' of Sundays by the Post Office, railway companies, and public houses! It's one thing to have a fungus named after you but in 1828 he received an additional tribute when Mount Greville in Queensland was named in his honour by a fellow botanist, Allan Cunningham. Mount Greville became part of an Australian National park in 1948 and is within Moogerah Peaks National Park. Few mycologists can claim such an honour.

This has been, of necessity, a very brief and random selection of 'names'. The practice of naming names is an acknowledgement of the achievements and contributions of individuals by their fellow scientists and they deserve our attention. So next time you come across a 'name' while foraying, don't just record it – look it up. A useful starting point is Wikipedia's 'List of Mycologists' at http://en.wikipedia.org/wiki/List_of_mycologists - this contains some 200 names, many of them with links to other web-pages. Once you have a name, you can ramble around the Internet mycelium to your heart's content, there's some fascinating material to unearth. You may sometimes come up against a frustrating dead-end, but along the way you can stumble upon all sorts of absorbing stuff. It can be addictive.

Bill Burns

Front page photo

Phellodon niger (s.l.) photographed in Inverey Wood by Mary Bain.

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 third edition is available from Liz Holden, cost £5.50.

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, Library, British Mycological Society, Wolfson Wing, Jodrell Laboratory, Royal Botanic Gardens, Kew, 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 available on the BMS website

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 field mycologists. Annual subscription 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.

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 six 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
Micro Instruments Ltd., 18, Hanborough Park, Long Hanborough, Witney, Oxen OX29 8LH 01993 883595. This company sell compound and stereo microscopes with good optics at very reasonable prices.
Quekett Microscopical Club – the club magazine often has second hand microscopes for sale and accepts 'items wanted' adverts too.

Scottish Field Mycology – Yahoo Chatroom

The Scottish field mycology chat room is a wonderful facility for exchanging information and ideas. You can also use a spreadsheet posted on it to enter records – simply sign in and click on 'databases'. Do check it out and consider joining if you are not already a member.

Scottish_field_mycology@yahoogroups.co.uk
http://uk.groups.yahoo.com/group/scottish_field_mycology
Click on the button 'join this group' and follow the instructions. There is no cost to become a member.

Grampian Fungus Group – books and equipment at Dec 2012

The books, microscopes and chemicals are stored by Liz Holden and can be obtained by ringing or emailing Liz, preferably just before a meeting or foray.
The following is a list of the books and other equipment that the GFG can supply / lend to its members.

Grampian Fungus Group Library

The Genus Hygrocybe (2010) by David Boertmann. This is the second edition of this very user friendly guide to the waxcaps. Goodkeys, photos, descriptions and English text.
Boletus (2005) one of the Fungi Europaei series, this book contains keys in English with many beautiful photographs of fruit bodies and line drawings of microscopic features.
Funga Nordica (2008) the updated keys building on those published in Nordic Macromycetes below. All in English and if you have a microscope, well worth trying.
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.
MycoKey – 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 field guide 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

A 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 mislead by the date – this is a first class introduction to working with macro fungi and well worth a read.

Grampian Fungus Group Microscopes and miscellaneous equipment

Microscopes - 1x Norvex binocular stereo microscope with built in LED illumination.
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
Melzer's 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.