2011 BMS Council

BMS Council and Committee Members 2011

President: Prof. Naresh Magan
Vice-President: Dr. Stuart Skeates
President Elect: Dr. Geoff Robson
Treasurer: Prof. Geoff M Gadd
Secretary: Position vacant
Publications Officer: Dr. Pieter van West
International Initiatives Adviser: Prof. AJ Whalley
Fungal Biology Research Committee representatives: Dr. Simon Avery; Nick Read
Fungal Education and Outreach Committee: Dr. Paul S. Dyer; Ms. Carol Hobart
Field Mycology and Conservation: Dr. David Minter; Prof. Bruce Ing

Fungal Biology Research Committee

- Dr. Simon Avery (Chair) retiring 31.12. 2012
- Dr. Elaine Bignell retiring 31.12. 2013
- Dr. Mark Ramsdale retiring 31.12. 2013
- Prof. Nick Read retiring 31.12. 2013
- Dr. Pieter van West retiring 31.12. 2013
- Dr. Peter Crittenden retiring 31.12. 2011
- Dr. Fordyce Davidson retiring 31.12. 2011
- Dr. David Minter (FMC link) retiring 31.12. 2011

Fungal Education and Outreach Committee

- Dr. Paul S. Dyer (Chair and FBR link) retiring 31.12. 2013
- Dr. Matt Fisher retiring 31.12. 2011
- Dr. Ali Ashby retiring 31.12. 2013
- Ms. Carol Hobart (FMC link) retiring 31.12. 2012
- Dr. Sue Assinder retiring 31.12. 2013
- Dr. Kay Yeoman retiring 31.12. 2013
- KS4 representative still needed

Field Mycology and Conservation Committee

- Dr. Stuart Skeates (Chair and website) retiring 31.12. 2011
- Prof. Bruce Ing (Conservation) retiring 31.12. 2012
- Dr. Paul Kirk (Database) retiring 31.12. 2012
- Ms. Carol Hobart (Events and FEO link) retiring 31.12. 2012
- Dr. Dave Minter (FBR Link) retiring 31.12. 2011
- Dr. Derek Shafer (membership database and accounts) retiring 31.12. 2011
- Mrs. Sheila Spence (Recorders network co-ordinator) retiring 31.12. 2013

Contacts

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Treasurer: treasurer@britmycolsoc.info
Mycologist News: mycologistnews@britmycolsoc.info
BMS Administrator: Admin@britmycolsoc.info
BMS Membership: Membership@britmycolsoc.info
Welcome to the last Mycologist News for 2010

The snow is starting to fall as the temperature plummets. Winter draws on! As we head towards Christmas it’s my sad duty to announce that Allie Brown, the Membership Assistant, has left the BMS office for pastures new and while we’ll miss her a lot, we wish her well in her new job. Current BMS President Lynne Boddy steps down at years end and we welcome Prof Naresh Magan as our new BMS President. I’m sure you’ll all join me in thanking Lynne Boddy for all her terrific work over the last two years, especially with implementation of the structural changes within the BMS Council and Committees.

IMC 9, held in August in the beautiful city of Edinburgh, was a huge success and raised the profile of the BMS immensely amongst the international mycological community. The various activities organised to run alongside IMC9 were also well received and attended, especially the huge fungal exhibition hosted at the Royal Botanical Gardens Edinburgh. The fungal weekend activities involving children and adults will surely help enthuse the budding fungal enthusiasts of the future.

As we head into 2011 we are sure we’ll get a whole bunch of articles from our readership after a very productive autumn. The various fungus groups affiliated with the BMS tell us they’ve had a record season for all specimens. If you have any pictures you would like to reach a wider audience, please send them in and we’ll do our best to get the most striking images published in the Newsletter.

So a Merry Christmas, Happy Hanukah and a Wonderful New Year to all our readers.

The Office Staff

Deadline for article submission into next issue: 12 February 2011
Reflections of the President

It is always slightly worrying to look back on what one set out to accomplish several years before, as almost inevitably achievements fall short of hopes and aspirations. In the 2009 issue of Mycologist News I saw the main priority for the Society as being “to ensure harmony within the Society and to set it on a course for the future that will allow us all to participate in our many and varied activities without fear or threat of undue interference from members who have different interests from our own”. After many full and frank debates of the strategy group and Council, a questionnaire and a consultation document was sent out and was responded to by many members. After this the Society voted to change the constitution to allow a new operating structure at a special general meeting of the Society early in 2010. As you are all aware the BMS now has a smaller Council but one that is designed to ensure equal representation of all the interests of the Society (full details in the IMC9 special issue of Mycologist News July 2010 available online www.britmycolsoc.org.uk). Detailed activities are planned by the three committees - Fungal Biology Research (FBR), Fungal Education and Outreach (FEO) and Field Mycology and Conservation (FMC) - each of which comprises 7 elected members. So far this is working well, but it is just the beginning. It is down to each and every one of us to ensure that the committees are stocked with plenty of ideas for activities and that these activities, be they scientific, general or field meetings, workshops or public engagement, are well supported. In this way we can fulfil the Society aim of promoting fungal science.

The second major aim that I put forward was that we must strive much harder not only to educate our research students but also to make the general public aware of the huge significance of fungi to our every day lives and to the functioning of the ecosystems of planet Earth. As I pointed out in the first issue of Mycologist News 2009, this means that we need to educate children of all ages through junior school, senior school and university education and we need to educate the educators. We must reach adults in general or field meetings, workshops or public engagement, are well supported. In this way we can fulfil the Society aim of promoting fungal science.

Under the guiding hand of Tony Whalley (International advisor) we have begun to interact much more with our overseas members and other mycological societies. For example, we joined forces with the Mycological Society of Japan to organise a session on “Inventory and database of Fungi” at the Asian Mycological Congress in Taichung, Taiwan, 2009 (see Mycologist News) Issue 1, 2010. Indeed, I started writing this while flying to Thailand to liaise, together with Nick Read, with the Thai Mycological Society over IMC10.

We gave several talks in universities in Bangkok and at a conference on Biodiversity and Resources in Chiang Rai. We were followed a couple of weeks later by Geoff Gadd, Geoff Robson and Tony Whalley (full report to follow in Mycologist News, 2011). FMC have also had very successful overseas forays, including Sampeyre, Italy in October 2010. I was privileged to attend the latter and was hugely impressed by the countries represented (Australia, Belgium, China, France, Israel, Italy and the UK). Both the Chinese and Italian Mycological Societies presented BMS with several books now housed in the library at Kew (listed below) and a silk embroidery of mushrooms.

Of course, our major interaction with overseas mycologists was at the phenomenally successful 9th International Mycological Congress in Edinburgh this year (see later in this issue for a report). The science was superb, and this was backed up by equally high quality organisation and entertainment. It is difficult to find the words necessary to praise the main organiser Nick Read, the organising committee, the scientific themed chairs and committees and literally hundreds who contributed to making this the mycological event of the decade. Other extremely successful mycological meetings were “The Fungal Cell” in Dundee, September 2009, and “The Ecology of Fungal Fruiting” and “New approaches to the study of fungi in the field” in Kew in November 2009 and 2010 respectively.

Our science is reported in our four journals. Mycological Research changed its name to Fungal Biology in 2010, broadening its content. Field Mycology continues to serve the Field Community well with good high quality photographs, reports on exciting finds, conservation issues, keys etc. The younger journals, Fungal Biology Reviews and Fungal Ecology are now becoming established, the latter receiving its first impact factor this year after less than three years from its inception.

At the start of my tenure as president in 2009 I wrote “the new BMS website is well under way and should soon start to meet [communication] needs. This sounded very straightforward, but proved to be far from the case as the web designers went under. However, thanks to the unstinting efforts of Stuart Skeates, a new website company was commissioned, and we now have a modern functional website, which
Membership subscriptions and Journal price to members 2011

Council, at its meeting in June 2010, agreed to the cost of subscription and journals for 2011 indicated in the table below. These prices mostly represent a 5% increase on last year. Elsevier will be charging the Society 5% more for all of the BMS journals, and this cost is being passed on to members directly. Member’s copies of Fungal Biology Reviews and Field Mycology have been considerably subsidised since their inception. The Society really cannot afford to do this forever and so the cost of these journals will rise by rather more than the other journals until the Society is charging the membership what it actually has to pay the publishers for these journals. Council believes that these prices represent excellent value for money, not least with electronic access to all of the journals for £26.50, and membership fees considerably lower than other equivalent societies.

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years, the constructive suggestions from a wide range of membership have allowed us to formulate the plans to take the Society into an exciting future. *Excelsior*!

Lynne Boddy, Cardiff, November 2010

List of books presented to the BMS at the Sampeyre foray:

- Pagin di Micologia ISSN: 1122-8911.
- Itartuffira ricerca divulgazione by Carlo Vittadini.
- Contributo ad cognitonem coprinorum.
- Revista di Micologia.
- Alla Coperta di Funghi la flora Micologia Cuneese. AMBAC “CUMINO”.
- Funghi in Provincia di Cuneo. Provincia di Cuneo L-ambiente ideale.
Around 1600 delegates from over 80 countries attended IMC9. Of these about 330 gave oral presentations in Symposia, Special Interest Groups and the Nomenclature sessions. Further, there were about 1200 poster presentations.

Conference content: IMC 9 covered a wide range of scientific themes including Cell biology, biochemistry and physiology, Fungal pathogenesis and disease control, Evolution, diversity and systematics, Environment, ecology and interactions and Genomics, genetics and molecular biology. This diverse subject content clearly places mycological research in an international context and demonstrates the value of mycology to the wider scientific community. There was also a parallel fungal nomenclature session to attend. From my perspective, all the sessions were clearly pushing the frontiers of research knowledge and I was impressed to see the most up to date research techniques being used to study fungi. This is evidence that mycological research is appreciated and funded by research council’s world-wide and we should attempt to keep it this way. Overall, there was something for everyone at this conference and the major difficulty was choosing which session to attend.

Organisation: The conference was held in 2 venues - the Edinburgh International Conference Centre (EICC) and the Usher Hall. The venues were less than 5 minutes walk apart and the path between them was clearly and suitably marked with subtly placed fruiting bodies (from memory Amanita muscaria). I particularly enjoyed being led between the venues on the opening night of the conference by a piper in full regalia. The outside of the EICC was covered with large IMC9 banners thus making fungi even more visible to the general population of Edinburgh. At this point I’d like to take the opportunity to congratulate the excellent staff in the 2 venues. They were constantly asked numerous questions and directed delegates to all meeting rooms, lunches and sessions with great care. They were, without exception, extremely friendly and helpful. Well done and thanks for getting me to the right stairs, escalators and to sessions on time. Overall, the sessions ran very smoothly and despite the size of the conference, I felt welcome and didn’t get lost once.

Opening ceremony: John Taylor (University of California, Berkeley) delivered the keynote talk in the opening evening ceremony. Dressed in a kilt he gave a wide-ranging talk using specific examples from a variety of research topics including pathogen/host interactions and fungal evolution. Somehow these topics were interwoven with selected poems and it all made perfect sense. Excellent. My main take home message from this keynote session was for mycological researchers to ‘THINK BIG’ – try to publish in high impact journals and relate fungal studies to fundamental research topics such as evolution. I was left in no doubt that fungi have a lot to offer. Looking around the audience I was really buoyed by the number of people attending the conference and left the session with some future research ideas and determined to think big.

Plenary sessions were a great way to kick off each day and were timed so that all conference delegates could attend. Without exception I felt that the plenary speakers delivered excellent overviews and offered a glimpse of the future of mycological research using the latest technologies.

The first plenary session on ‘Organelle transport in fungi’ (Gero Steinberg, Exeter University) included some remarkable video footage of various organelles clearly moving along microtubules inside hyphae and related this movement to motor vehicle traffic. I particularly enjoyed Dave Hibbett’s (Clark University, USA) talk on the use of molecular techniques to assist fungal taxonomy and the presentation increased my appreciation of the fungal tree of life studies to improve our knowledge of fungal diversity.
Joseph Heitman (Duke University, USA) gave us a tour of microbial pathogens in the fungal kingdom; Nick Talbot (Exeter University, UK) gave an intriguing talk on the molecular biology of the rice blast fungus; Alistair Fitter (York University, UK) spoke about the nutritional and evolutionary ecology of mycorrhizal fungi; and the plenary sessions were finished by Nancy Keller (University of Wisconsin at Madison, USA) who covered fungal secondary metabolism and ‘unlocking the fungal treasure box’. Overall, an excellent topic selection which demonstrated the wide ranging importance of fungi to humans and the environment. A source of inspiration to all.

After the morning plenary sessions delegates made their way to more specialist sessions that were held in both venues.

Sessions: Special interest groups (SIGS) were held prior to the official conference start. These were sessions that had originally been proposed as conference symposia, but which had not been selected because the Congress was restricted to 45 Symposia. The SIG sessions were well-attended, extremely informative and enabled excellent discussion.

The wide variety of sessions offered during the main conference was excellent and were so well attended that some were standing room only. It is impossible to cover all the different sessions but to give a flavour of the diversity available some of the titles of sessions included: Tropical mycology; Secondary metabolism; Fungal-Plant interface in mycorrhizal and lichen associations Genomics of fungal-plant symbioses; Cytoskeleton and motors; Systems biology, functional genomics to molecular networks and systems; Fungal tree of Life - linking genomes to physiology and morphology; Living on the edge; Fungi at the extremes; Fungi and global change; The fungal nucleus; Future strategies for the control of fungal diseases.

From my perspective it was good to see that the emerging ‘omics’ technologies were becoming well-established in mycological research and appeared to be making advances. The power of these new technologies to deliver fundamental advances in revealing the true extent of fungal diversity and activity in ecosystems, understand and combat fungal diseases of humans and plants, deliver new insights into cell function, assist development of new fungal commercial applications was made clear. The future challenge is to make sense of this wealth of new information and use the ‘omics’ technologies to answer fundamental research questions.

Poster sessions: a large number of high quality posters were on display and these were attended by conference delegates at specially allotted times during the conference. I had the pleasure of judging some of these posters and meeting the people who had spent a lot of time doing the research and producing the posters. I was struck by the researchers enthusiasm, dedication and skill.

From Another Kingdom: during the conference delegates were given the chance to visit the Royal Botanic Garden Edinburgh to see the exhibition ‘From Another Kingdom: The Amazing World of Fungi’. I’m always slightly dubious of such exhibitions but I found this to be an excellently thought out and well planned exhibit with enough to keep both kids, curious adults and more experienced mycologists interested. The exhibition is arranged so that you feel you are entering a slightly different world and the visitor is introduced to the fungi and led around their diversity and relevance to the environment and humanity. I thought there is a good mix of explanation and interactivity with an interesting video of fungal spoilage happening before your eyes. I may be a bit biased but I think the exhibition has (and will continue) created more general public interest in fungi. Well done to all involved.

The Conference Party on the last night of the Congress had been widely hailed by Nick Read as ‘the conference party to end all conference parties’. By all accounts it did and excellent entertainment and gastronomic delights were had. About 700 delegates attended the party. The party goers were entertained by four bands, ceilidh dancing, karaoke, salsa dancing, whisky tasting, magic and food from all over the world that was provided at different locations around the EICC.
The BMS at IMC 9: The BMS had an excellent stand at the conference and were well placed to receive membership enquiries and discuss the Societies research journals. Thanks to Stuart Skeates who manned the BMS stand and represented the society admirably. I did spend a few hours on the stand and was enthused by the number of people interested in BMS membership and the Societies activities. The BMS produced a special edition of the newsletter that was placed in the delegate conference packs.

Thanks to all who were involved in organising IMC9 especially to Nick Read (who led the way), the steering committee, the scientific theme chairs and committees, the Elsevier team who were especially good and the symposium and SIG chairs for timekeeping and keeping the questions going. Also, a big thanks to the excellent efforts and professional attitude of the speakers and poster presenters. It is clear an enormous amount of time and energy went into this venture and it can only help to improve the international standing of mycology. The BMS can be proud of the support it offered to the event and it was great to see the high level of involvement of BMS members at the conference.

It is impossible to cover everything and everyone at such a large event. I can only say I enjoyed the science, I learned a lot, I developed some new research ideas, met some old colleagues and found some new ones. All in all – a great event, one to be remembered and also please remember to ‘THINK BIG!’

Ian Singleton

All photographs within the article © Nick Read.

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Review of:
Fungus Poems - Growing the art of science

ISBN 978-0-9566018-5-8,
£11.50 (including UK postage),
available from www.poemcatcher.com

This is an anthology of short poems written by delegates of IMC9 between the 1st and 6th August 2010. The “poem catcher” wandered around all of the venues with a net in which he invited people to place their poems about fungi. The book comprises almost 90 short poems almost exclusively about fungi. Most are in English, though a few are in other languages. They are mostly written by mycologists, though a few were written by the children of mycologists! It is a fun book and worth a read by anyone interested in fungi. To give you a flavour of the contents reproduced below is Lynne Boddy’s personal favourite (though there were quite a lot of contenders for that). It is an “Ode to a Microbe” reproduced by kind permission of Sarah Gurr.

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Ode to a Microbe

Our microbe is so very small
We cannot make him out at all
But many sanguine savants hope
To see him through the microscope

Upon his walls a pattern stands
Composed of many disparate bands
Of interwoven beta glucans.

So push and pull and probe and poke
Our nanoscale research bespoke
Send image to the digitiser
And chuck in data from ELISA

Atomic Force Microscopy
Gives imagery for all to see!
A truly Systems Strategy
…and fundable by BBSRC.

Architecture much conjecture
Surely time for end of a lecture?
A year ago Funding Central was launched, a website giving you free access to thousands of funding and finance opportunities plus a wealth of tools and resources to support your organisation in developing sustainable income strategies. Last year 17,000 people registered and completed over 65,000 funding searches. To register visit www.fundingcentral.org.uk/

Funding Central is a free smart website for charities, voluntary organisations and social enterprises - providing free access to thousands of funding and finance opportunities, plus a wealth of tools and resources supporting organisations to develop sustainable income strategies appropriate to their needs.

Funding Central is managed by the National Council for Voluntary Organisations in partnership with j4b Software and Publishing and is funded by the Office for Civil Society. It covers national funding and finance opportunities for voluntary and community organisations operating in England from European, national, regional and local government and charitable sources.

About the Office for Civil Society
www.cabinetoffice.gov.uk/voluntary-sector.aspx
The website is funded by the Office for Civil Society (OCS). The OCS is part of the Cabinet Office and leads work across government to support the environment for a thriving civil society (voluntary and community groups, social enterprises, charities, cooperatives and mutuals), enabling campaign for change, deliver public services, promote social enterprise and strengthen communities.

About NCVO
www.ncvo-vol.org.uk/
The National Council for Voluntary Organisations (NCVO) is a registered charity (charity number 225922) which gives voice and support to civil society, at the heart of which is a thriving and dynamic voluntary and community sector.
NCVO believes passionately in the voluntary and community sector. This is a sector with the power to transform the lives of people and communities for the better.

NCVO has over 7,500 members representing the full size and scope of civil society organisations in England. Our members include large national household name charities, medium sized and regional organisations and, plus an increasing number of small, local “grass roots” community groups.

NCVO’s work is aimed at improving the level and quality of benefits delivered to people and communities. The voice and support NCVO provides enables voluntary and community organisations to operate from a position of strength and builds their capacity to provide effective support and better services to millions. NCVO’s services are open to members and non-members alike.

NCVO supports organisations via a range of tools, including bespoke projects, publications, events, and consultation networks, meeting regularly to discuss current issues and ensure NCVO addresses the sector’s needs in a targeted, relevant and cost-effective way. Key topics include Governance & Leadership, Funding & Finance and increasingly Campaigning and Strategic Planning.

About j4b Software and Publishing
www.j4b.com/Default.aspx
j4b Software and Publishing provides technology, research and information management services to the public and private sectors. Based in the North West of England, it employs over 40 staff with offices in Ireland, the Netherlands and the USA.

j4b is the market leader in providing high quality funding information to civil society, helping them to access relevant, accurate and timely information about the funding streams that can help them further their mission and goals. j4b has developed numerous award-winning websites and tools that support fund seeking, innovation and knowledge transfer for clients at all levels of government, for local agencies and authorities, and for organisations across the sector (e.g. the Big Chip, Sage/Daily Telegraph award for information websites).

j4b is part of the IDOX group which provides specialist information and knowledge management software products and content to the public sector.

Supplied by Dave Shorten, Cotswold Fungus Group
The exhibition was officially opened on Friday 30 July 2010 at an evening reception, held at the John Hope Gateway at the Royal Botanic Garden with speeches from Ian Edwards (Head of Exhibitions and Events), Nick Read, and Lynne Boddy. Following the opening, the exhibition saw a steady flow of visitors; however it was felt that a more visual display at the entrance to the exhibition was needed to draw in the crowds. A pathway of fly agaric images on the floor now lead visitors from the entrance of the John Hope Gateway centre to the exhibition entrance where visitors are greeted with the words ‘Amazing Fungi’ in flashing red and white spotted lights above the entrance. As a result of these alterations, the exhibition had over 12,000 visitors during the following month.

Entering through a dark tunnel the visitor first encounters giant mushrooms and then the opportunity to view bioluminescent fungi through viewing slots in the wall. Within this area there is a delightful display of BMS models depicting the diversity of macromycete fruit bodies and a model showing how the fruit body is, in fact, merely the tip of the iceberg with mycelium forming the main bulk of each fungus. The visitor is also drawn to some beautiful time lapse of fruit bodies emerging from substrata. There is also an interactive light up quiz where the visitor must decide which fungi are edible and which ones are poisonous – this type of interactive display goes down well with children and was highlighted in an extremely complimentary article by Catriona Thomson in the Scotsman Magazine (16 October 2010). Progressing through to the next area takes you to the ‘fungi in literature’ section with a heavy emphasis on Lewis Carols ‘Alice in Wonderland’ and giving the visitor the impression of being underground. Looking up the visitor sees Alice peering down at them through a hole at the ‘wonderland’ below. Raymond Briggs ‘Fungus the Bogeyman’ also makes an appearance. Adjacent is a section on psychedelic mushrooms and their role in Shamanistic culture with corresponding visual imagery and psychedelic sound and lighting effects. Moving on past a model of the Liberty Caps (Psilocybe semilanceata) the theme changes to highlight the role of fungal secondary metabolites in industry and is marked by a large colourful SEM of the budding yeast Saccharomyces cerevisiae. The visitor then enters an area which concentrates on the role of fungi in food production, with a wide screen time lapse video of budding yeast used in bread and alcohol production, a demonstration of a wine brewing kit and a demonstration of the effect of adding yeast to bread flour in bread making. This section also covers the production of medicinal and health products by fungi and the impact of fungi in disease and medicine. An interactive light up display highlights where certain fungi affect the human body and cause disease. The discovery of penicillin by Alexander Fleming and its subsequent use in medicine features strongly. The visitor is then taken through a glass panelled tunnel filled with leaf litter as the theme moves on to explore the pivotal role played by fungi in the functioning of planet earth – with emphasis on the role of mycorrhizas in plant growth and ecology and the saprotrophic fungi as primary decomposers of waste on our planet. The role of fungi as decomposers is highlighted in a wonderful time lapse movie of the decay of vegetables that are left to rot in a garden trug, having visitors absolutely riveted to the spot! All of this is viewed through the window of a ‘rotting’ shed, infested by and sprouting fruit bodies of the dry rot fungus Serpula lacrymans – an unwelcome fungal ‘rotter’. A video clip showing leaf cutter ants working within their fungus garden; a model depicting the cross-section through a lichen showing both fungal and plant partner; and a view of a pinus seedling growing in a clear microcosm and revealing the extent of the mycorrhizal network supporting its growth, are all examples of the beneficial role that fungi play in our environment. A section then highlights fungi as plant pathogens. Hand held audio guides add to the whole multimedia experience, with not only adults but children often taking time to listen!

The exhibition has been accompanied by an extensive programme of talks, tours and films, drop-in events and courses. These have included a film screening of “Know your mushrooms” a documentary focussing on the Telluride mushroom festival, Café Scientifique on mushrooms and myths with the speaker Andy Letcher author of “Shroom – a cultural history of the magic mushroom”, “Fungi the good the bad and the ugly” by
Lynne Boddy, and “Scotland’s hidden kingdom” by Andy Taylor. Drop-in events have included “Glow in the dark fungi” and “The secret sounds of spores” run by Patrick Hickey, “Yeasts - friends or foes?” run by members of the University of Aberdeen, “Show and tell – fungi in the garden” led by Stephan Helfer, “Sketching mushrooms” with the aid of Claire Dalby, “Exploring the lichens” with Chris Ellis, “Aspergillus and Candida – fungus in the air and our guts” run by the National Aspergillosis Centre and the “Fungi fun” weekend run by the BMS.

“Fungi fun” organised by Ali Ashby and assisted by Patrick Hickey, Mike Richardson and Lynne Boddy with very welcome help from the staff at RBGE, particularly Amy McDonald and Max Coleman, was an extravaganza held on the afternoons of Saturday 16 and Sunday 17 October.

Both children and adults had great fun with a range of craft and science based activities. The ‘fungus treasure hunt’ was a family based activity involving solving clues to find fungus models that were hidden in the gardens. The overall winner of the hunt, who correctly solved the clues and then a symbol puzzle which lead to the identification of a mystery fungus, was awarded the ‘From Another Kingdom’ book and everyone who took part in the hunt received a bar of chocolate! (after all - fungi help to make the flavour of chocolate!). Thanks to Kay Yeoman for helping to plan how to run the treasure hunt.

Mike Richardson’s exhibit of ‘Dungy Fungi’ was a fascinating display of fungi fruiting on rabbit droppings that captivated the interest of children and adults alike. Roy Watling led two hugely enjoyable forays around the gardens and Neville Kilkenny brought in a range of freshly picked fruit bodies that Roy kindly identified and presented for people to observe. A carousel of craft activities for younger children included ‘Badge making’ using templates from ‘Fungi 4 Schools’ and which everyone enjoyed, even teenagers!

Using Amanita and Yeast mask templates from ‘Planet Science’ some beautifully coloured mushroom masks were produced. Using BMS models for guidance and ideas, children and adults enjoyed making some wonderfully imaginative plasticine fruit bodies that sprung up on the ‘make your favourite mushroom’ bench.

Patrick Hickey did a marvellous job running the ‘how the mushroom got its spots’ balloon activity where the life cycle of Amanita muscaria was described using Patrick’s wonderful photographs and some real life specimens and then using a balloon, toilet roll and a water sprayer, he demonstrated how this famous mushroom got its spots.

In the mushroom detective activity, which was a fungal science based activity, children were encouraged to use both stereo and high powered light microscopes to view mushroom gills, spikes, pores and fungal spores. Spore prints were made onto black and white card, showing how important spore colour is in identifying a fruit body. Each child was given a ‘mushroom spots book’, that has a worksheet describing how to perform a spore print, and a piece of A5 (black/white) card to allow them to try a spore print at home.

The woodland collage activity encouraged children to use leaves and pine cones collected in the gardens to create their very own woodland scene. Drawing fungi using felt pens or using craft materials to create their very own fungus. A fantastic drawing of the imaginary ‘KePhibio Deziasus’ mushroom was made by Nathan - apparently this deadly fungus has-heat sensing spores! A combination of power point presentation loops and time-lapse video clips, along with BMS posters and pull ups, revealed the importance of fungi to those interested in the science of fungi.
Tony and Margaret Whalley were delighted to host Professor Yi-jian Yao (Chinese Academy of Sciences, Beijing, PR China) and his wife Jing and Dr Khwanruan (Boo) Papong (Mahasarakham University, Thailand) following the Edinburgh meeting. Mr Ahmed Khalil (Cairo, Egypt) who is completing his Ph.D studies at Liverpool John Moores also joined in. Yi-jian discussed the recent developments in his institute and a future joint BMS symposium/workshop.

Boo is currently on study leave at the Field Museum in Chicago and took advantage of a trip to Anglesey to collect and photograph lichens, her speciality. Yi-jian is now back in Beijing and Boo will return to Thailand from Chicago in November. They all enjoyed IMC9 and are looking forward to future collaboration and IMC10 to be held in Bangkok.

Tony Whalley

Overall the event was a great success with some very positive comments from the feedback forms filled in by the general public including:

“Keep it up! So important!”

“Lots of information – excellent walk!”

“Friendly, helpful staff. Very informative and even my teenager loved the kids stuff.”

“Fully interactive, experts on hand for info, fun stuff to make – really well organised! Impressed!”

“Enthusiastic, knowledgeable staff.”

“Enjoyable for the whole family.”

“Original ideas for activities. Very informative.”

“People know their stuff, very helpful with questions. Friendly approach.”

The event was described by one of the RBGE staff as “an absolutely fantastic model of what public engagement should be”.

A huge thanks must go to everyone who helped to make the ‘fungi fun’ event such a great success.

A huge thanks also to everyone involved in putting on the exhibition and events, including: BMS members of the exhibition steering team – Lynne Boddy, Paul Dyer, Stephan Helfer, Patrick Hickey, Dave Minter and Nick Read; RBGE staff; Henry Tribe curator of the BMS models; BMS office staff for sourcing event materials. Ali Ashby and her team of helpers mentioned above.

Lynne Boddy & Ali Ashby

All photographs used within this article © A. Ashby and P. Hickey
Saturday 27th November 2010 saw a superb meeting organised by Martin Bidartondo at the Jodrell lecture theatre at Kew. The day began with a superb presentation by Kabir Peay (Stanford, USA) who reported on fascinating theories and work on spore dispersal. People used to argue that there are no dispersal barriers to fungi. However, though fungal spores are ubiquitous in the environment and capable of long distance spread there is mounting genetic evidence of dispersal barriers. Concentrating on some ectomycorrhizal species he mentioned, for example, spore heat resistance, spore longevity and dispersal vectors as important aspects of the spore bank in soil and the aerial spore load of *Rhizopogon* (false truffle). James Woodhall, from the Food and Environmental Research Agency in York, revealed the latest techniques for detecting fungi in the environment. The aim is to move towards early detection, i.e. detecting a pathogen before it infects a crop, so that farmers etc. can make decisions on whether or not to plant a particular crop. He showed some intriguing onsite test kits for pathogens, which were based on pregnancy testing kit technology. Maarja Öpik (Tartu, Estonia) described some of her pioneering fungal molecular biogeography work. Her emphasis was on the arbuscular mycorrhizal *Glomeromycota*. Currently there are about 1200 species predicted in Europe and 2000 predicted globally.

After lunch there were three intriguing short talks from Kew researchers. Firstly, Filipa Cox told us of her work surveying the below ground community in 12 forest plots in the UK and Germany, using molecular approaches. As nitrogen content of soil increases the estimated species richness declines. She revealed some nitrophobes e.g. *Piloderma* spp. and some nitrophiles e.g. *Russula ochroleuca* and *Thelephora/Tomentella* spp. Bryn Dentinger told us about the amazing orchid genus *Dracula* that produces petals that mimic fungal fruit bodies! They not only look like mushrooms but they also smell like mushrooms, producing similar volatiles. They are pollinated by drosophilids many of which feed on fungi. He also explained the importance of DNA bar-coding using ITS sequences. Richard Waterman revealed that co-occurring orchids in South Africa all have different mycorrhizal species associated with them, and that orchid diversity is dependant on the diversity of the pollinating bees and of mycorrhizal fungi associated with their roots.

Björn Lindahl (Uppsala, Sweden) approached the question “what can DNA tell us about what fungi do in soil?” One warning that came out was that soil cores brought into the laboratory for analysis can be fundamentally very different to non-disturbed soil. Otso Ovaskainen (Helsinki, Finland), is a mathematician and fungal ecologist untangling the metapopulation biology of wood. He and his group have performed a crucial study relating fruit body occurrence to mycelial abundance in logs, and they have revealed some striking differences between specialist and generalist wood decay fungi. Finally, Lynne Boddy gave a presidential address entitled “rotten research” focussing largely on wood decay fungi. As the day had already run over time she kept this short to move rapidly into the annual general meeting.

The whole day was a superb mix of field mycology and ecological studies which employed molecular approaches throughout. The speakers were riveting and presented their work without frightening us all with the complexities of these modern versatile techniques. There were slight problems with the microphone, but that aside the day was very much enjoyed by an audience of around 90 people.

Lynne Boddy
The British Mycological Society aims to promote all aspects of fungal biology, including academic research, conservation and field mycology, and education through schools, universities and with the general public.

We are not a rich society. We are funded largely by income from our journals. With changes to modern publishing it is by no means certain that our income stream will continue at its present level, so to continue with our activities we need other sources of income. Ideally we would like greater income than we have now so that we can not only continue with our current level of activity but extend further, particularly to bring an understanding of the huge importance of fungi to the general public and in encouraging young mycologists to pursue mycology-related careers and to embark on field mycology and fungal conservation.

When making your Will, naturally your family and friends will come first. However, if after this you feel there are funds left to support the work of the British Mycological Society, please consider leaving a legacy. As the BMS has charitable status, gifts can be exempt from tax so bequeathing money to the BMS in your Will can reduce inheritance tax.

If you have not already made a Will, then you may wish to do so via a solicitor who will give sound advice for a fee. The Law Society has an online solicitor finder at www.lawsociety.org.uk. The Society of Trust and Estate Practitioners also lists solicitors who specialise in drafting Wills on their website at www.step.org.uk.

If you have already made a Will, but would now like to leave a legacy to the British Mycological Society, this can easily be done by adding a codicil to your existing Will. This is simply a supplement to the will that can include new instructions and delete old ones without going to the trouble of making a whole new Will.

There are two main types of legacy donations that can be made to the BMS: a pecuniary and a residuary legacy. A pecuniary legacy is a gift of a fixed sum of money. A residuary legacy gifts what is left of your estate after all other legacies, taxes, liabilities and administration costs have been paid. A suitable form of words that you could incorporate into your Will, to ensure that your wishes are followed, is given below for pecuniary and residuary legacies.

**Pecuniary legacy (gift of a fixed sum of money)**

I give the sum of £….. to the British Mycological Society (Registered Charity Number 276503) registered address British Mycological Society, City View House, 5 Union Street, Ardwick, Manchester, M12 4JD, and the receipt of the Honorary Treasurer or other proper officer for the time being of the British Mycological Society shall be a complete discharge to my executors.

**Residuary legacy (gift of residue of your estate after everything else has been paid)**

I give all [or you could specify a percentage] of the residue of my real and personal estate to the British Mycological Society (Registered Charity Number 276503) registered address British Mycological Society, City View House, 5 Union Street, Ardwick, Manchester, M12 4JD, and the receipt of the Honorary Treasurer or the proper officer for the time being of the British Mycological Society shall be a complete discharge to my executors.
Everybody is an education expert – at least that’s what many people think: after all we are all ‘customers’ of education systems and processes at some point in our lives. The reality, however, is that education policy and practice is enormously diverse and equally complex, ranging from engaging young primary school children through to vocational and academic qualifications. There are a multitude of acronyms and a confusing array of institutions involved.

The Society of Biology is an active participant in education issues. As well as influencing policy, we also have a key role in helping with interpretation of the jargon that so often surrounds education debates. With that in mind, the Society will be holding a seminar this autumn to help any of our members who are not experts, get under the skin of education policy and how exams are set and assessed, perhaps helping to answer the hotly debated issue as to whether exams really are getting easier.

It is a good time to create momentum around education. Michael Gove, our Minister for Education has already indicated a likely shift to more ‘traditional’ A Levels, with the abolition of AS exams along the way. The exam regulator OFQUAL has rejected the examining boards’ proposals for new specifications for the GCSE examinations and the Qualifications & Curriculum Development Authority (QCDA) is to be abolished. These are significant changes that need to be monitored and influenced.

During the course of this year, the Society has been working with our Member Organisations to create a strong voice for biology, working both independently and with the other sciences, especially through SCORE (Science Community Representing Education). There has been real progress with the proposed new specifications for biology progressing much further than some of the other disciplines. In the past, some have positioned biology as the easy option, especially amongst the sciences. But the evidence shows exactly the opposite. According to a range of independent measures, biology scores as one of the hardest A levels. In terms of relative grading, it is two grades ‘harder’ than some other disciplines. But we need to be careful to ensure biology stays relevant and focused on skills, not just knowledge. Practical training has always been under threat. It is more complicated in biology than many of the other sciences and certainly at university level, becomes extremely expensive. As the new coalition Government starts to review spending cuts across the public sector, the Society will be campaigning hard to ensure biology doesn’t lose out. It would be all too easy for Government and the university sector to move away from hands on practical skills in the laboratory and in the field in favour of the cheaper option of demonstrations or videos. For that reason, practical skills will continue to be a focus of our work at all levels. The Practical Biology website has proved increasingly valuable to biology teachers and we now need to ensure it grows and becomes sustainable.

As well as influencing formal education policy all learned societies must help show that the sciences are exciting as well as contributing significantly to our society and the economy. How often have we heard that it was an inspirational teacher that attracted someone into the study of biology? In a world of limited resources, we must make sure that teachers continue to be strongly supported with continual professional development available and resources easily accessible to help them make the current curriculum as engaging as possible, providing opportunities for study outside of core material to enrich learning. The Society of Biology will be pushing this independently, and through SCORE, and working closely with other institutions such as the National Science Learning Centre to ensure material is as widely available as possible.

Having succeeded in engaging students in studying biology, there is a further challenge of ensuring they maintain their association with the subject. To do that we need interesting and relevant careers material to help make choices. With this in mind, the Society is pulling together new resources for careers but will aim not to reinvent the wheel. Our Member Organisations have a wealth of material which needs to be drawn together and made available to all biologists, not just those in particular disciplines.

Dr Mark Downs, July 2010
At a special meeting at the Royal Botanic Garden, Edinburgh, on 6 August 2010, the International Society for Fungal Conservation was established. Amazingly, it appears this may be the first society in the world to be explicitly and exclusively dedicated to fungal conservation. A Steering Committee has been appointed to draft the constitution, and work is now under way to take this new Society to a fully functional condition. There are already members from over 40 different countries.

A domain name has been registered, and a very preliminary and simple website has been set up, providing basic information about the Society [www.fungal-conservation.org]. Up to the point when the constitution is ratified, all those joining the Society will qualify as Founder Members. People with a positive interest in fungal conservation are warmly invited to join the Society. Further information can be obtained from David Minter [d.minter@cabi.org] who is co-ordinating the Steering Committee.

David Minter

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BMS Berkeley Award Winner 2010

Dr Alexandra Brand

The recipient of this year’s Berkeley Award was confirmed at Council and the AGM on Fri/Sat 26/27 November 2010.

On hearing the news Alex’s emailed response was “I was very honoured to receive your email this morning telling me about the Berkeley Award. It means a great deal to me because the BMS has played such an important role in developing my science career. From an early stage, I have benefitted from its provision of an encouraging but rigorous forum in which to present posters and talks, generous support for summer studentships and of course the opportunity to meet and network with key national and international mycologists…..I very much look forward to giving the Berkeley lecture at Exeter in September”.

A more detailed report about Alex’s career and work will appear in a future issue of Mycologist News.

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Newsletter Articles

Do you have any items you would like to see published in the Newsletter which would be of interest to members?

We would love to receive short reports of any activities, upcoming events, items of interest, etc.

Please send items to the office or email to: mycologistnews@britmycolsoc.info
Fungi on the Radio in November

Fungi have had a really decent crack of the whip on the BBC lately and, for a change, what the guest scientists said was correct and convincing. Unfortunately, they frequently invite the wrong people to share their limited expertise and, in consequence, broadcast out-of-date information or, sometimes, utter balderdash.

The second half of a late November airing of Saving Species http://www.bbc.co.uk/programmes/b00w1y8m#synopsis (the first half was good too) was devoted to waxcaps and fungus conservation.

... and Sunday (28 Nov) morning’s The Living World http://www.bbc.co.uk/programmes/b00w6phn#synopsis was once again sheer delight, with Lionel Kelleway chuckling (as he does, infectiously) crammed inside an ancient oak with National Trust's Ancient Tree advisor Brian Muelaner and Cardiff mycologist Prof. Lynne Boddy.

Similarly, the desperate need for fungal conservation (i.e. of habitats) got a good plug. You could tell from what they said that both of these interviewees knew their subject intimately. We can entirely forgive Lynne for dealing only with ectomycorrhizas, for quite correctly it was they that were central to the ancient tree subject of the programme.

Now we need programmes to cover all mycorrhizas in a similar (competent) way, which includes an entire fungal phylum (the Glomeromycota) members of which associate with roughly 75-80% of all plant species, facilitated the land habit for plants ~450 million years ago and underpin all terrestrial habitats (no slight boasts). I'll copy this to a couple of producers at the BBC Nat. Hist. unit as 'bait'. Perhaps if they have a look at the SLEF website at http://www.slef.org.uk/bluebells.html, Aunty's representatives might be inspired to visit Isleornsay, Isle of Skye and witness/record our own slightly unconventional mycorrhizal research.

Rare Clathrus ruber (Red Cage) found in Gower


Hericium erinaceus (Bearded Tooth) discovered in Surrey woods


Come back of Fomes fomentarius (Hoof Fungus) in Norfolk

See BBC News (http://www.bbc.co.uk/news/uk-england-norfolk-11600352) for full article on this uncommon and localised specie. Article dated 22 Oct 2010.

Emerging Fungal Threat to Historical Film Archives


Italian Mushrooms Claim Lives

European Food Safety Authority’s (EFSA) Scientific Panel on Dietetic Products, Nutrition and Allergies (NDA) published on 30 July 2010 an Opinion on the safety of *Lentinus edodes* extract (Lentinex®) as a Novel Food ingredient.

It is intended to be used in a wide-range of products: Dietary supplements; Yogurts; Soft drinks; Cooked and processed foods; and Baked goods.

The proposed daily intake of 2.5ml Lentinex® containing 1mg lentinan (beta-glucan) per ml corresponds to 41.7 μg/kg bw per day for a 60kg person.

The Panel concluded that the novel food Lentinex® is safe as a food ingredient at the proposed conditions of use and the proposed levels of intake.

Dave Shorten


The Microbiology in Schools Advisory Committee (MiSAC), which is sponsored by the BMS, holds an annual schools’ competition on a range of microbiological topics. The competition, aimed at two age ranges in secondary schools (11-14 and 14-16), is sponsored on a 3-year rotation by MiSAC’s main sponsors; BMS, the Society for Applied Microbiology (SfAM) and the Society for General Microbiology (SGM). The 2010 competition, on the topic of food safety and barbeques, was sponsored by SfAM. In 2011 BMS will sponsor the competition based on fungi. This is one of the ways in which BMS and MiSAC endeavour to increase the awareness of fungi in schools.

The requirement of the 22nd Annual Microbiology in Schools Advisory Committee (MiSAC) Competition was to design a storyboard for a television advertisement to promote food safety at barbecues. Special sponsorship for the competition, including £1,000 in prize money for the winning entrants and their schools, was generously provided this year by the Society for Applied Microbiology (SfAM).

The topic was chosen with the aim of developing an appreciation and understanding of the simple steps that can be taken to prevent food poisoning by microbes such as *Salmonella* and *Campylobacter* through correctly storing food, cooking it properly and preventing cross-contamination from uncooked to cooked foods. As usual entries were invited in two age groups, i.e. 11-14 years (Key Stage 3) and 14-16 years (Key Stage 4). Almost 300 entries were received involving more than 400 students from nearly 50 schools and colleges drawn from England, Wales, Scotland and Northern Ireland; an entry from a Ministry of Defence school in Cyprus maintained the international appeal of the competition.

The judging panel consisted of SfAM representatives Professor Martin Adams of Surrey University, Lucy Harper, the society’s Communications Manager, and Dr Anthony Hilton of Aston University and winner of the SfAM Communications Award 2009, together with the Chairman and other members of MiSAC. The facilities were generously provided at its headquarters in Reading by the Society for General Microbiology whose staff also bore the onerous administrative task of receiving and processing the entries.

Although the concept of this year’s competition was challenging, the high quality and creative approach of the entries in both age groups was very impressive and imaginative, and many entrants clearly relished the opportunity to express their artistic talents. There was an excellent level of adherence to the overall entry rule of submitting an A3-size storyboard containing six panels, and a good grasp of what makes an effective storyboard, perhaps aided by the guidance provided for entrants. The judges looked particularly for originality, eye-catching design, a title that immediately indicated the purpose of the storyboard, a clear sequence to the panels that maintained viewers’ attention, sound factual and scientific content including mention of specific microbes involved in food poisoning, an appropriate approach to communicating science to a television audience, and use of the entrant’s own words.

In addition to the winners in 1st, 2nd and 3rd places in both age groups receiving money prizes, they and those awarded commendations were given a memory stick loaded with Micropod podcasts from SfAM. Also all students who participated were given a certificate of entry, a much appreciated feature of the competition, and their school received some microbiology teaching resources and a summary report on the competition.

Next year’s competition, sponsored by the British Mycological Society, will be on ‘famous fungi’.

Margaret Whalley

BMS and Treasurer of MiSAC
Cell-cell fusion is a highly regulated and complex cellular event that is essential for development and homeostasis in higher eukaryotes. Chemoattraction between cells followed by cell fusion is essential for processes such as fertilization, formation of muscle fibres, as well as bone formation through osteoclasts, which form through macrophage fusion. The task of my summer project was to study the role of mitogen activated (MAP) kinases during self fusion in the eukaryotic model fungus *Neurospora crassa*.

*Neurospora crassa* is a filamentous ascomycete fungus which forms an interconnected colony network through hyphal fusion. It is easy and fast to grow in the laboratory, and has a haploid life cycle that allows easy genetical analysis of recessive traits, hence making it a convenient model organism. *Neurospora* was the first filamentous fungus to have its genome sequenced and published in Nature in April 2003.

To test the involvement of MAP kinases in hyphal fusion, I analysed the ability to fuse in MAPK gene deletion (knock-out, KO) mutants. The first part involved subculturing the original KO strains obtained from the Fungal Genetics Stock Center (Kansas, USA) on solid Vogel’s medium (VM) containing hygromycin as a selection marker to prepare stock cultures.

Hyphal fusion was investigated by live cell imaging. Firstly, the strains were grown on VM for 16 hours at 35°C before sections of agar were excised and inverted on a glass slide with a drop of liquid VM underneath. Subsequently they were examined on a Nikon Eclipse inverted microscope using differential interference (DIC) optics. Secondly, in a similar sample set up using liquid VM, the rate of cell-cell fusion within populations of individual spores was quantified. Together, these analyses showed that removal of the MAP kinase under investigation lead to a significant reduction in cell fusion, but did not completely prevent it. This suggested that this protein is most likely involved in the regulation of cell fusion, but is not essential and thus parts of its function can be compensated by other proteins.

As the used KO mutants have been generated in a high-throughput approach with a certain error rate, all strains were genetically verified by polymerase chain reaction (PCR), to confirm correct position of the KO cassette and absence of the deleted gene from the genome. For this, genomic DNA was extracted from mycelium grown in liquid VM overnight by phenol/chloroform extraction. PCRs were set up with primer pairs binding within and outside of the KO cassette to indicate the presence or absence of the target gene open reading frame (ORF). Additional PCRs verified successful backcrossing of the KO strain with wild type which eliminates unwanted mutations. PCR products were analysed by gel electrophoresis and showed that all strains displaying impairments in cell fusion were the correct KOs.

Once the expected genetic identity of the strains was confirmed, we attempted to rescue observed phenotypic defects – including the fusion defect - by re-introducing the deleted gene as fusion construct with GFP. Fusion proteins were generated by amplifying the gene locus from cDNA and cloning it in-frame to GFP into a *N. crassa* expression vector using the In-Fusion PCR cloning technique. *E. coli* were heat shock transformed with the new plasmid and selected on ampicillin containing medium. Plasmid DNA from growing clones was extracted by miniprep and analysed by restriction digest and gel electrophoresis. Seemingly correct constructs were subsequently sequenced in order to confirm correct in-frame cloning. Verified plasmids were transformed into competent conidia of *Neurospora* by electroporation. The transformants were selected on VM plates containing 400μg/ml of Ignite®. Fluorescent colonies were picked and pre-cultured on VM for subsequent phenotypic analysis. Reintroduction of the fluorescently labelled protein restored the observed phenotypic defects, indicating that the GFP fusion construct was functional. My work established some basic knowledge and generated useful strains from which future studies will focus on elucidating the precise role and intracellular dynamics of this MAP kinase during the fusion process.

This summer project enabled me to get a taste of scientific work, in terms of collecting known facts from the literature and designing experiments to test novel hypotheses. It wasn’t always straightforward and required a lot of patience, especially from my lab supervisor Alex Lichius, who spent hours trying to teach me good laboratory practice, accurate record keeping and experimental optimization. I very much enjoyed my experience. I also would like to thank my co-supervisor Prof. Nick Read, all the lab members for general support during the project and the British Mycological Society for sponsoring me.
The BMS provided me with a bursary which funded a ten week research project in Dr. Simon Avery's lab at the University of Nottingham. I performed this during the summer ‘break’ between the 2nd and 3rd year of my undergraduate degree course here. The project involved the isolation and growth of wild phylloplane yeasts, from habitats contaminated or not with discharge from a coking plant. The yeast isolates were then stressed with sulphur dioxide in the lab to test the hypothesis that there would be a difference in heterogeneity between strains isolated from polluted and non-polluted sites.

Cultures of yeasts and other organisms exhibit a trait termed phenotypic heterogeneity. Such heterogeneity describes variation among individuals within populations of genetically-uniform cells. This variation may be traceable as differential resistance when populations are exposed to stressors, and can arise from differential expression of stress resistance genes. It is thought that heterogeneity has an evolutionary benefit allowing sub-populations to survive changes in environmental conditions. It was predicted that the degree of heterogeneity exhibited by organisms from sites with different base levels of natural stressors such as sulphur dioxide should differ. This project aimed to test that prediction. The approach was to culture wild yeasts isolated from contaminated or non-contaminated sites in the presence of different concentrations of stressor, enabling a comparison of their heterogeneities.

I isolated yeasts from the phylloplane. Aseptically, I collected leaf samples of different tree species from Corus Steelworks in Scunthorpe, one site close to the coke ovens and another site further away from the plant. These samples where taken back to the lab where I made leaf washings and leaf pressings on agar plates. After incubation, a substantial micro flora grew on these plates, with the non-polluted samples having a greater diversity of microorganisms, especially bacteria and filamentous fungi. *Aureobasidium pullulans* and *Sporobolomyces* sp. were identified in the samples from both sites, allowing intra-species comparisons of heterogeneity to be made. I grew isolates of *Sporobolomyces* at different concentrations of sulphur dioxide (sodium metabisulphite) stress and I constructed dose response curves from the resultant data. The gradients of such dose response curves relate to heterogeneity: the shallower the kill gradient the greater the heterogeneity, i.e. the broader the dose range over which killing occurs. The preliminary results gave evidence that there is a difference in heterogeneity between yeasts isolated from the polluted and non-polluted sites. The isolates I prepared provide a resource for the lab that can now be screened more extensively to provide a robust test of the hypothesis.

This research project has given me the chance to improve vastly on many skills essential for conducting lab work, especially techniques fundamental in the field of fungal biology and microbiology. Significantly, I have been able to gain experience in a fungal biology lab working alongside skilled and dedicated scientists, from whom I have been able to learn valuable lab skills and increased motivation for scientific research. The BMS bursary has given me this opportunity, which will undoubtedly be of great help in future career decisions. I have thoroughly enjoyed the project over the past 10 weeks, and wish to thank the BMS, Dr. Simon Avery and all others involved in my supervision especially Dr. Sara Holland.

Joshua Coley
Cyberliber Update

Cyberliber, the digital library for mycology and one of the websites coming from the Cybertruffle server [www.cybertruffle.org.uk/cyberliber] has expanded its coverage of mycological literature very significantly over the past few months. Well over 300,000 scanned images of pages of mycological literature are now freely and openly available, with the recent addition of Transactions of the British Mycological Society and Fungal Diversity.

There is a new option to search the Cyberliber cumulative index for fungal names by typing in the Latin name of the desired fungus. This results in a report being displayed showing bibliographic references where that fungus name, and each of its known synonyms occur. There are hyperlinks to view the page where the relevant page image is available.

The website has now also begun collaboration with the Stan Hughes Mycological Library of the National Botanic Garden of Wales, with the long-term aim of making as much as possible of that wonderful mycological resource available openly online.

David Minter

Thai Children’s Trust Food Campaign

Growing their way to one meal a day

Ensuring that the children at 60 schools for Burmese refugees in Western Thailand have one decent meal a day is a challenge for the UK-based Thai Children’s Trust. With funding pressures and the dwindling exchange rate between the pound and the Thai baht, getting enough nutritious foods into the children’s diet has become a problem.

To combat this, the charity is calling for donations to enable the Burmese refugee children they support to build their own mushroom sheds so that the children and staff have a sustainable, cheap and nutritious food source.

Their campaign is backed by celebrity gardener Joe Swift, who has already seen at first hand the commitment of one school in Hackney, East London which has raised the £400 for one shed several times over.

Joe says:
“Mushrooms are a nutritious and delicious food source and one of the best sources of vital minerals like protein, riboflavin and phosphorous to help the kids grow big and strong. Mushrooms are easy to grow and produce food all year round, making them ideal for the children in Thailand.”

Andrew Scadding, Director of the Thai Children’s Trust says:
“We would love to be able to feed refugee children as much of the freshest, highest quality food we can but this is just not possible at the moment. So we have looked at how we can provide a year round source of good, wholesome food. With their nutritious value and the ease with which they can be grown, they are ideal for us."

“This is just the first step in our plans to make the schools and orphanages self-sufficient. Next on the list are catfish tanks and chicken coops, but one step at a time!”

To donate to the campaign, please contact Ruth Flanagan on 020 7602 6203 or donations can be made online at:
http://www.thaichildrenstrust.org.uk/projects/Refugee/mushroom-appeal
Terence Ingold, who died on 31st May, 2010, five weeks short of his 105th birthday, was a distinguished mycologist, author, University professor and administrator. He was the oldest member of the B.M.S., twice President (1953 and 1971) and was elected an Honorary Member in 1969. He was President of the First International Mycological Congress in Exeter in 1971. He was also a corresponding member of the Mycological Society of America. On his 80th birthday the Linnean Society of London published a Festschrift (Dick et al, 1985) including an appreciation by a former student and colleague (Plunkett, 1985).

He was born in Blackrock, Dublin on 3 July, 1905 the son of a schools inspector. He attended school’s at Bangor, Co. Down and Queen’s University, Belfast, graduating with First Class Honours in 1926. He was awarded a one-year scholarship at the Royal College of Science in London (now part of Imperial College). He returned to a studentship and demonstratorship at Queen’s (1927-9). In 1929 he was appointed to a lectureship in Botany at Reading University. At Reading, along with Lillian Hawker, a research student, he was encouraged by Walter Buddin to attend B.M.S. day fungus forays, which were also attended by experts such as John Ramsbottom and Elsie Wakefield. In 1934 he and Lillian mapped the distribution of the larger fungi in the Mortimer region. He was at Reading for seven years, and then moved to University College, Leicester, as Lecturer-in-Charge of the Botany Department. It was here that he developed his interest in aquatic Hyphomycetes. In 1944 he was appointed as Professor of Botany at Birkbeck College, London, succeeding Dame Helen Gwynne-Vaughan, herself a mycologist. He held the chair at Birkbeck for 28 years, retiring at the age of 67 in 1972. During his early years there, while Britain was still at war, Birkbeck College was at Fetter Lane, in war-damaged premises, occasionally inconvenienced by German V2 rockets (“doodle bugs”) but after the war it was re-housed in completed new buildings in Malet Street, next door to the University of London Senate House.

At the University he served in many senior academic positions, and was especially influential as a member and Vice-Chairman of the Inter-University Council on Higher Education Overseas. In this capacity he made numerous visits, especially to former British colonies in Africa and Jamaica, to advise their governments on the setting up of University institutions there. Some of these were colleges which had been in special relations with London University, preparing students for the award of external London degrees. He also helped to set up the New University of Ulster at Coleraine and the University of Kent at Canterbury. After retiring he led a Commission from the World Bank to advise on the feasibility of making grants to support the development of higher agricultural education in S. India. For his overseas work he was awarded the C.M.G. in 1970. He was also awarded Honorary Doctorates from the Universities of Ibadan, Exeter and Kent.
Terence Ingold was an excellent teacher, demonstrator, lecturer and writer, with a great influence on mycology. He was especially helpful to “beginners”, students and amateur mycologists in the field, attending fungus forays which he often led. His publications include four books on spore discharge and dispersal in fungi and other cryptogams: Spore Discharge in Land Plants (1939), Dispersal in Fungi (1953), Spore Liberation (1965) and Fungal Spores. Their Liberation and Dispersal (1971). A more general text-book, The Biology of Fungi (1961), was written from memory during boat trips to and from Canada in 1959. His publications and lectures were copiously illustrated by elegant line drawings. He has inspired many younger mycologists, some of whom have taken up influential positions in the subject. At Birkbeck College he built up an M.Sc. course in mycology.

Ingold’s research was notable for its breadth. One recurrent theme was spore discharge. He was greatly influenced by the publications of A.H.R. Buller, especially by the seven-volume work Researches on Fungi. His first mycological research paper was on the periodicity of spore discharge in the coprophilous pyrenomycete Podospora in 1928. The work was done at home with a simple microscope. His interest in periodicity of spore discharge continued later with work on discharge from perithecial stromata of Daldinia. Discharge from Sordaria was ingeniously studied using a spinning Perspex disk placed over perithecia. There were also studies on discharge in Basidiobolus, Conidiobolus (Entomophthorales), Ascocholus, Epichloe, Acrepernum, and Loramyces (Ascomycetes). His studies on Basidiomycetes included Sphaerobolus, Itersonilia, Tilletiopsis, Bensingtonia, jelly fungi, smut fungi and polypores. He also worked on resistance to freezing of agaric sporophores, retraction septa, cytoplasmic flow and the homing reaction in which hyphae grow chemotactically towards sexually compatible oidia.

He will probably be best remembered for his work on the conidia of aquatic fungi. Whilst searching for chytrids in a stream near his home north of Leicester he examined an accumulation of foam and was astonished to find that it contained fungal spores of large size and unusual shape, mostly branched or worm-like. He traced their source to submerged decaying tree leaves. In 1942 he published a classical paper in the Transactions of the British Mycological Society entitled Aquatic Hyphomycetes of decaying alder leaves in which he described 16 species belonging to 13 genera, many of them new, emphasising the importance of spore development. This paper opened up a whole new field of mycological and ecological work. These fungi are found the world over in tree-lined babbling brooks and the concentration of their spores may reach several thousands per litre after leaf fall. Over 300 species are known, many described by Ingold himself. In his honour they are referred to as Ingoldian fungi. The accumulation of their spores in stream foam which can be preserved and their characteristic spore shapes, readily recognised, enables their distribution to be easily studied. Ingold often took the opportunity, especially when travelling abroad, to preserve foam from which he would later make drawings illustrating its spore content. The conidia belong to several different groups of unrelated Ascomycetes and Basidiomycetes and Entomophthorales indicating parallel evolution of spore shape and habitat. Their sexual states (teleomorphs) fruit on wood and leaves which have been submerged in streams. The two basic conidial spore shapes are adaptations to trapping in rapid water flow. Great interest has followed the discovery that these fungi subject the leaves to “processing”, increasing their protein content and softening the tissues, making the leaves more palatable to aquatic invertebrates which grow more rapidly when fed on colonized leaves and feed preferentially on them. They are thus an essential link in the food chain from the leaves of riparian trees to aquatic invertebrates and fish. Ingold’s interest in aquatic fungi extended to Ascomycetes on which he published several papers.

In his “retirement” Terence continued active research using simple facilities at home for 20 years and published about 100 papers. He isolated from a jelly fungus a culture of an unusual basidiomycete, Itersonilia perplexans, which produces basidia bearing a single large spore. He recognised that this fungus had the potential for solving a long-standing puzzle, the mechanism of basidiospore discharge. Following Buller, he had suggested that the surface tension energy of Buller’s drop (a drop which appears at the hilar appendix of a basidiospore immediately before discharge) might in some way be harnessed in the discharge process. Photographic studies by others showed that there is another drop which appears on the adaxial face of the basidiospore. The drops are hygroscopic and, as they enlarge by absorbing water vapour, they coalesce, causing a momentum which brings about discharge – the surface tension catapult mechanism. Other research at home included extensive studies of the germination of the ustilospores of smut fungi.

Terence Ingold was held in high esteem by mycological societies and other organizations. He was awarded the de Bary medal by the International Mycological Association in 1996. In 1998 he received the Millennium Botanical Award and Botanical Congress Gold medal from the International Botanical Congress. A modest, warm, friendly man, Terence was devoted to his family. His wife Nora whom he married in 1933, died in 1995. They had four children, two of whom are professors. He is survived by them, five grandchildren and two great grandchildren.

References

John Webster
Obituary

Camilla Lovatt

It is with great sadness we report that after a long and courageous battle with cancer, Camilla Lovatt died on 22nd September 2010.

Camilla’s passion for fungi was sparked by her interest in painting and they featured as a subject of many of her illustrations. She later became a founding member of Staffordshire Fungus Group (SFG) in 1994 and began as Events Secretary. She went on to chair the group from August 1996 to March 2009 when she stepped down from the role for health reasons. Camilla continued as an active member of the SFG’s Committee and was able to attend its spring foray this year.

Camilla was for many years the driving force behind SFG and was actively responsible for developing the social activities of the group. She devoted a tremendous amount of hard work and effort to the group and her contribution to the County’s record of fungi was enormous, leaving a lasting legacy.

In addition to organising and leading forays, she gave many talks to interested groups, beautifully illustrated from her extensive collection of slides.

Camilla’s interest and skill in photographing fungi provided many of the images found on SFG’s website.

In addition to the more formal aspects of her involvement with SFG, for many years Camilla also hosted very popular social events at her home, many members have especially fond memories of the annual Christmas/New Year gathering where everyone brought something to eat but it had to include mushrooms or look like a mushroom.

Camilla’s knowledge of and fascination for fungi were always in evidence at forays and her enthusiasm for the subject knew no bounds.

Newcomers to the group were always made to feel very welcome and Camilla always took the trouble to explain the identifying characteristics of the various fungi found. Members of the group sometimes refer to the ‘Camilla Kiss Test’ which is a way of determining the ‘stickiness’ of a fungus by touching it to the lips.

Camilla will be sadly missed, not only for her skill, knowledge and hard work but also for her vitality, warmth and friendship.

www.staffsfungi.org.uk
Autumn Field Meeting: Exeter

10th September - 17th September 2011
Local Organiser: Dr David Farley
Guest Tutor: Dr Peter Roberts

The autumn meeting will be based in Exeter alongside the BMS scientific meeting. Autumn Forays have been held in Exeter in 1901, 1947 and 1978 so this will be an opportunity to revisit some of the previously recorded sites and compare data.

Devon supports an outstandingly rich and varied natural environment due in part to the relatively unpolluted atmosphere, mild climate and the varied geology. This combination provides ideal and rare conditions in which a diverse range of plant and animal species can thrive. Habitat distribution and character varies hugely across the County. The nearby upland National Park, Dartmoor, has large areas of heath, bog and mire, acidic grassland and steep river valley slopes blanketed in oak woodland. Local sites bordering the Exe are damp and even in early September have the potential to yield good mycological data.

Accommodation will be at the University of Exeter on the Streatham Campus in Pennsylvania Court. We will eat in nearby Lopes Hall and have a workroom in the old dining room in Hope Hall. This campus is set in 300 acres of woodland and landscaped gardens and is recognised as probably the most beautiful and interesting botanical garden of any British University.

Accommodation has been provisionally booked for 30 individuals and participants have the option of shared or single rooms all are ensuite and are serviced daily (the university can accommodate additional bookings). Options will be available to join the Scientific meeting for the main dinner and it is hoped that this meeting will provide the opportunity for both sectors of the society to meet socially and participate in our respective meetings.

Cost: £380 single en suite with breakfast and 3 course evening meal. (£20 discount for BMS members)
Workroom and/or Forays (without accommodation) £70.00 (£20 discount for BMS members)

Chemicals will be available.
Field Meeting 2011

BMS supporting the Groups in The Forest of Dean
Starting To Identify Fungi Workshop, and
Identifying Fungi with the Aid of a Microscope

The Forest of Dean
Starting To Identify Fungi:
Sat 24th Sept – Tues 27th Sept 2011 (3 nights)

Identifying fungi with the aid of a microscope:
Weds 28th - Sat 1st Oct 2011 (3 nights)

The Forest of Dean has been the site of mycological interest for many years and has seen several workshops but none specifically for beginners who are members of our Local Groups Network.

The "Starting to identify fungi workshop" will focus on macroscopic features, sorting out genera and an introduction to the benefits of using the microscope for better identification to species level.

"Identifying fungi with the aid of a microscope" will focus on more advanced identification skills, use of specialist keys and microscopic technique. The workshop will be arranged as a low key affair and will have two tutors. The workroom will be based in a house in Parkend which is situated in the centre of the forest enabling many sites to be within walking distance of the workrooms. There will be sufficient space for up to 9 places in the workroom ensuring individual attention and help for those requiring assistance with microscope technique.

Prices are based on shared ensuite 4* accommodation in 1 Hazledene, Parkend with the garden room used as a lab. This workshop is designed for beginner and intermediate level and will be led by Carol Hobart and Derek Schafer.

The cost of each workshop is £100, which includes shared ensuite, B&B + packed lunch and coffees (evening meal taken in local pub at extra cost).

Offsite Singles might be possible at approx £145.

A Full week (both workshops) in 1 Hazledene is possible but there is no tutored session during the turn around period priced @ £230.

Dune/Nutrient Deficient Grassland Workshop:
Snowdonia National Park Centre, Plas Tan y Bwlch, North Wales

7th October - 14th October 2011
National Park Centre, Plas Tan y Bwlch, N. Wales
Organiser: Carol Hobart
Event Tutor: Dr Eef Arnolds

The upland meeting will be based in the Snowdonia National Park Centre at Plas Tan y Bwlch, North Wales. Following the successful Inocybe workshop in 2009 and many request to continue work on this genus, it has been decided to use this week to study the Dune and Grassland flora of the North Wales coast. This will enable further study of Inocybe as well as allowing us the opportunity to look in detail at the extensive mycological flora that exists within the diverse nutrient deficient grassland and sandune habitats.

The dune systems of Anglesey (Abermenai - Aberfraw SSSI), Morfa Harlech and Morfa Dyffryn SAC and Ynyslas, within the Dyfi Unesco Biosphere Reserve, are all within a relatively short drive of Maentwrog (Plas Tan y Bwlch). Visits to these sites are likely to be interspersed with shorter trips in the locality of the centre. These national and international reserves offer opportunities to record:

- Strandline, foredune and mobile dune communities.
- Semi-fixed/fixed dune grassland communities.
- Dune slack/mire communities.
- Heathland and dune heath communities.
- Nutrient deficient grasslands.

Accommodation has been provisionally booked for 30 individuals and participants have the option of shared or single rooms.

This event is being supported by the Kew waxcap project team who will be attending this event along with Danish expert Dr David Boertmann.

It is expected that this week will contribute substantially to the wax cap project as well as providing an impetus to the recording of the UK Dune systems.

Cost* £486 standard room, £539 ensuite room (£20 discount for BMS members)
Chemicals will be available.

* Re the costs of these two training workshops. We are attempting to reduce the costs to ensure that attendance is maximised, if we are successful we anticipate considerable interest by members of the national recording network / affiliated local groups, therefore early booking is advised. Please advise if your early booking is dependent on a lower price being charged, your booking will be held on this basis and no booking deposit will be forfeited if you choose to withdraw if support grant is unavailable.
Field Meeting 2011

Overseas Foray: Semiramis Hotel, Platres, Cyprus

16th November - 25th November 2011
Semiramis Hotel, Platres, Cyprus
Local Organiser: Michael Loizides

The foray will be hotel based in Platres in the Troodos mountains. The Cyprus Mediterranean Forests of High mountain ranges and low plains, include a wide range of habitats. Oak, Strawberry, Juniper, and Cypress trees thrive at lower elevations. Coastal areas, river basins and exposed hill tops are covered with Helianthemum and Cistus and other shrub-like vegetation. The driest areas of these also include wild olives and carob trees. Acres of mountain pine forests and juniper woodlands cover the mountain summits.

Until recently relatively little fungal recording has been done on the Island. Nattrass recorded 37 species in 1937 and these were the only records until Deryck Viney in his larger Fungi of North Cyprus published in 2005 described about 200 species.

In 2007 the Cyprus Mycological Association (CMA) was set up and they have subsequently identified well over 800 species. This active, newly formed group are keen that we should visit the Island to extend their understanding of its mycobiota. It will be the first visit to Cyprus by the BMS.

The Semiramis Hotel can accommodate 20 people in shared accommodation but there are a number of other more expensive local hotels in this winter ski resort that can be booked if numbers exceed our expectations (Forest Park Hotel being one). It is hoped that there will be a number of local mycologists joining us. The local foray organiser will be Michael Loizides the secretary of the CMA.

There are regular flights from the UK (Manchester, Luton, Gatwick & Bristol) and driving is on the same side of the road as the UK.

Costs are likely to be approx £600 - £700 inc flights.

It is envisaged that the BMS will book the hotel for delegates who will pay for their own accommodation and travel costs.

Cost £70.00 inc additional BMS costs such as workroom, local foray organiser etc, (£20 discount for BMS members).

For full booking procedure for Forays and Workshops please refer to page 29.

Want to Join Your Local Fungus Group?

Local Fungus Groups exist in many parts of the country helping to put mushrooms on the map in the UK.

They are run on a voluntary basis by enthusiasts seeking to share their knowledge of wild fungi and improve members’ identification skills. They provide a welcoming environment for new members to enjoy exploring the world of fungi and run varied foray and workshop programmes which are suitable for all levels of expertise.

If you are interested in joining your Local Fungus Group, please contact Sophie Embleton (sophie@britmycolsoc.info) at the BMS Office who will put you in touch with your nearest group.
### Booking Form 2011

<table>
<thead>
<tr>
<th>SPRING MEETING/ WORKSHOP</th>
<th>Requirements:</th>
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<tr>
<td>ASCOMYCETES WORKSHOP Fri 13th May - Sun 15th May 2011 (2 nights)</td>
<td>Workshop only  Yes/No</td>
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<tr>
<td>Cost £140 Single en suite with breakfast packed lunch and eve meal</td>
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<tr>
<td>SPRING ASCOMYCETE FORAY Mon 16th May - Sat 21st May 2011 (5 nights)</td>
<td>Foray only Yes/No</td>
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<tr>
<td>Cost £260 Single en suite with breakfast packed lunch and eve meal (tutored)</td>
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<tr>
<td>Both at Northern College, Stainborough, S. Yorkshire</td>
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<tr>
<td>Organiser: Caroline Hobart</td>
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<td>Tutors: Hans Otto Banil, Thomas Læssøe, Jens Petersen</td>
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<tr>
<td>Closing Date: 1st Feb 2011</td>
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<tr>
<td>Cost for combined event (7 days) £360 Single en suite Full Board. (£20 discount for BMS members) *please see supporting information.</td>
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<tr>
<th>AUTUMN MEETING</th>
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<tr>
<td>Sat 10th Sept – Sat 17th Sept. 2011 (7 nights)</td>
<td>Full board  Yes/No</td>
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<tr>
<td>Exeter University</td>
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<tr>
<td>Organiser: David Farley</td>
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<tr>
<td>Tutor: Dr Peter Roberts</td>
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<td>Closing date: 1st June 2011</td>
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<tr>
<td>Cost £380 Single en suite with breakfast and 3 course eve meal. Workroom and / or Forays £70.00 (without accommodation) (£20 discount for BMS members)</td>
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| INTRODUCTORY SESSIONS in the Forest of Dean |
| Starting To Identify Fungi Sat 24th Sept – Tues 27th Sept. 2011 (3 nights) |
| 9 places only Tutored course |
| Cost £100 Shared en suite, B&B + packed lunch and coffees only (eve meal taken in local pub) |
| I would like to use a microscope  Yes/No |
| I have a microscope  Yes/No |
| Identifying fungi with the aid of a microscope. Weds 28th - Sat 1st Oct 2011 (3 nights) 9 places only Tutored course |
| Cost £100 Shared en suite, B&B + packed lunch and coffees only (eve meal taken in local pub) |
| I would like this option  Yes/No |
| I would like this option  Yes/No |

| UPLAND MEETING Dune/Unimproved grassland workshop |
| Wed 7th Oct – Fri 14th Oct 2011 (7 nights) |
| Hay Tan Y Bwlch, North Wales |
| Organiser: Caroline Hobart. |
| Tutor: Eef Arnsdts, visiting guest David Boerntmann |
| Closing date: 1st Aug 2011 (very early booking advised initial interest high) |
| Cost *please see supporting information £486 standard room £339 ensuite room (£20 discount for BMS members) |
| Standard room  Yes/no |
| Ensuite room  Yes/no |

| OVERSEAS MEETING |
| Wed 16th Nov – Fri 25th Nov 2011 (9 nights) |
| Platres, Cyprus |
| Organiser: Michael Loizides |
| Closing date 1st Sept 2011 |
| Accommodation booked by BMS, participants pay hotel bills (see full description) |
| Cost Administrative / workroom charge £70 (£20 discount for BMS members) |
| Single room  Yes/no |
| Shared room  Yes/no |

£20 discount for accompanying non participants. Early booking is helpful for the organiser and wise for events with limits on numbers. Full payment is required 6 weeks in advance or when advised by the organiser. Payments should be sent to the Foray Manager NOT the organiser. It is suggested that those booking consider travel insurance to cover late cancellations.

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<tr>
<th>PLEASE COMPLETE FOR EACH PARTICIPANT (BLOCK CAPITALS)</th>
<th>BMS member</th>
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<td>Normal diet</td>
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<td>Address</td>
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<td>Phone no</td>
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<td>Other requests</td>
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<td>Collect from station</td>
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I enclose £20 non-refundable booking fee for each person per event booked and understand that full payment is due when requested by the organiser and at least six weeks before the event.

Signed .................................................................................................................................

PLEASE MAKE CHEQUES PAYABLE TO BRITISH MYCOLOGICAL SOCIETY. Send Booking form and cheques to: Caroline Hobart, BMS Foray Manager, 84 Stafford Road, Sheffield, S2 2SF email foraymanager@tiscali.co.uk

Registered Charity No: 27660
The programme of events organised by the Field Mycology & Conservation (FMC) committee appear on the Society’s website www.britmycolsoc.org.uk along with a booking form which can be downloaded from the website. There is a £20 non-refundable booking fee per person per event which should be sent to the Foray Manager with a completed booking form for each participant. For some events it is possible to attend on a part time basis or to be non-resident. There will still be a fee for workroom space, administration and tutoring costs. The Society welcomes non-members to its events but anyone with a keen interest in field mycology can become a member of the Society. (Benefits of joining the BMS include reduced costs of attending field meetings, subsidised costs of Field Mycology and the increased opportunities to interact with mycological experts and to participate in conservation and education outreach activities). BMS members and accompanying non participants are entitled to a £20 reduction for each event.

At least six weeks before the event (depending on the conditions imposed by the venue chosen), the organiser will ask for payment in full. If you do not pay this, then your place will be forfeited. Nearer the event and after full payment, refunds will need to be negotiated with the organiser, who may be able to find a substitute; otherwise a refund may not be possible. Participants should consider travel insurance to cover late cancellation.

The Foray Manager will send your booking details to the organisers of each event. Your booking will be acknowledged by email. If you do not have an email please enclose a stamped, addressed envelope if you require acknowledgement. Please bear in mind that some events have a limited number of places and may become fully booked quite early.

The form also allows you to indicate your preferences for accommodation in more detail. The available accommodation varies with the venue and, while we would like to try to meet everyone’s individual needs as far as possible, this may not always be possible. Additional charges will usually apply, for example single rooms or ensuite facilities when they are available. Please contact the Foray Manager with any queries.

The BMS small grant scheme is open to students attending any field meeting and if you are eligible and would like to apply please contact the Foray Manager.

NOTES ON EVENTS

Workshops are usually held over a weekend, are mainly indoors and combine lectures and examination of prepared material from the workshop tutor, with individual study using both fresh and herbarium fungal specimens as appropriate. A microscope is essential. In some cases, some outdoor foray activity may be part of the workshop. Numbers are limited, usually to around 25 participants, and the courses are generally fully booked.

Residential Forays have a long tradition extending back to the 19th Century and provide an opportunity for participants to study the fungi of a particular area. The days will include a programme of field outings to collect material to study after returning to the workroom, where investigations often continue late into the evening or the early morning! Although there is only a limited programme of formal lectures, if any, the forays provide an opportunity for exchange of knowledge on current developments in taxonomy and conservation, and an intensive learning environment for those with a serious interest (though not necessarily extensive expertise) in fungal identification. The records of fungi made during BMS forays are added to the Fungal Records Database of Britain and Ireland which is then made accessible through the online NBN gateway. As part of this recording activity, forays also provide an opportunity to add herbarium specimens to the National collections and the active participation by members of the Kew Mycology Department, as well as other herbaria, is a welcome part of the events. The evening round-up sessions, in which the outstanding finds of the day are viewed and discussed, conclude each day’s activities.

First time participants to a BMS event - The Society is keen to encourage new participants with an interest in fungi to extend their expertise and participate in its forays and workshops, including field mycologists in affiliated local groups throughout the British Isles. The organisers provide help and encouragement to new or less experienced attendees and are happy to be approached to discuss your particular needs. The organisers are keen to foster a friendly atmosphere to make it possible for all participants whatever their level of expertise to experience a friendly, informative and enjoyable event.
FUNGAL DEVELOPMENT AND PATHOGENESIS
School of Biosciences, University of Exeter
Tuesday 13th September, 2011 - Friday 16th September, 2011

Meeting Chairs: Mark Ramsdale, Nick Talbot

Advisory Committee: Steve Aves, Steve Bates, Tom Richards, Darren Soanes, Gero Steinberg, Chris Thornton

Why Exeter?
The City of Exeter, at the heart of Devon has something for everyone, whether your tastes are for exploring the delights of city life or enjoying the countryside. With a population of about 110,000, Exeter is a friendly city which happily combines modern life with a sense of the past. Cafes, restaurants, pubs and modern shops mix easily with historic buildings, including the Cathedral, the ancient Guildhall which is the oldest civic working building in the country, Moi's Coffee House and the Ship Inn (both favourite haunts of Francis Drake and Walter Raleigh). The excellent selection of funky bars, cafes and restaurants also makes Exeter a vibrant place to be after dark. Exeter University's Streatham Campus is widely acknowledged as one of the most beautiful in the UK and is built around a former botanic garden, an ideal setting for the School of Biosciences. Exeter Biosciences houses a number of fungal biology groups with research interests ranging from basic cell biology, host-fungal interactions to community structure. The department has a long association with the Society and will provide a great setting for the meeting.

Travel Arrangements to Exeter
The University campus is ideally situated for all travel links, whether they are by road, rail or air:

Exeter International Airport: 6 miles
M5 motorway link: 4 miles
Exeter St David's rail station: 2 miles

Accommodation: Holland Hall can accommodate up to 400 guests in en suite bedroom facilities just five minutes walk away from the lecture theatres

Meals
Lunches: Holland Hall
The venue enjoys sweeping views across the Exe estuary in its panoramic glass restaurant. Holland Hall can accommodate 360 guests in its restaurant. The glass fronted split-level mezzanine bar is perfect for a drinks reception.

Dinners: Reed Hall, Holland Hall, Venue TBA
Enjoy eating in the splendour of our majestic Italianate Mansion, Reed Hall, set within beautifully landscaped gardens, complete with Koi carp lake. Large opening doors, leading directly into the gardens, add an extra special dimension to all summer celebrations. For the evening, the centre of the room is cleared to reveal an excellent dance floor, where guests can dance the night away. The University's Refresh dining room, Gallery Restaurant and Balcony Bar are centrally located beside the Great Hall Complex and can be used in conjunction with the Great Hall or independently, providing a range of dining options. The Refresh dining room can accommodate up to 300 guests while the Gallery Restaurant and Balcony Bar are suitable for smaller, more intimate, occasions.
Have you taken an interesting or stunning image of fungi that you want to share?

Big or small, laboratory or field you could be the next to appear in ‘Fungus Photo Corner’.

Send your high resolution images to mycologistnews@britmycolsoc.info not forgetting to include as much information as possible about what, where and when it was taken.

Please note, that in sending your photographs to us you are allowing the British Mycological Society to reproduce the image to appear in its printed and online versions of Mycologist News.

This issue’s photograph has been supplied by Emma O’Neil of Slaithwaite, Huddersfield.

“...My son Finley (age 9) found this Giant Puffball on a dog walk near home in Slaithwaite.”

The picture shows us that this giant measured in at a whopping 66.5 inches!

Many thanks to Finley and Emma O’Neil for sharing this staggering find.

Pictures © Emma O’Neil