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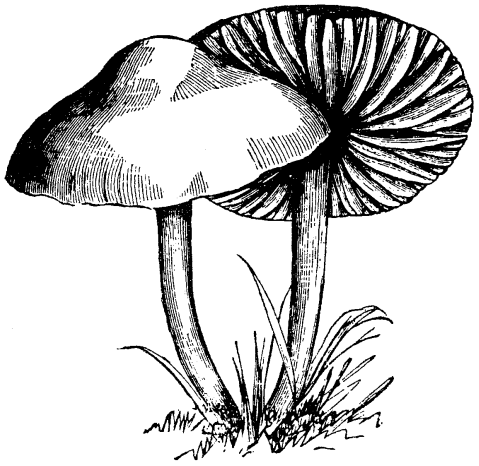
Newsletter

April 2014



FAIRY-RING CHAMPIGNON

Marasmius oreades

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View from the Chair

A brief 'View' because the main thing that has happened since the last Newsletter has been the AGM – and you should all have received the minutes of that meeting from Mike Walton [emailed to those with email addresses, included with this newslettewr for those without]. In case you didn't have time to read the minutes, Mike has taken over as Secretary from Carey Saunders who, sadly, had to resign and two new people were elected to the Committee – Jeanette Maddy and John Watt. Once again we had to amend the constitution in yet another attempt to register for Gift Aid but this really is our last try! In the absence of our belov- ed President, Bruce Ing, one of our members, Mike Valentine gave a talk on Fungi of the North West illustrated by stunning photographs after which there was a splendid AGM lunch prepared this year by Robin Dean. Fortified and cheered most of us then embarked on a brief AGM foray around Risley Moss Reserve. There were the usual but always welcome Scarlet Elfcups and a good number of species found (list posted by Tony Carter).

So far this year there have been two forays, both well-attended. In March, Mike Valentine led a foray to Spring Wood near Whalley and the list of 77 species found has already been sent to the email group and posted on the web site by Tony Carter. A very good species total for so early in the year and an altogether excellent foray. The second foray of the year (on 13 April) was the traditional visit to the Sefton coast, this time to the Freshfield end. The total species found isn't yet known but the site was very dry (sand drains so quick-

ly) so is likely to be modest. But it was another very enjoyable day so those of you who rarely come on forays, I hope you can manage a few this year.

You can see news of National Fungus Day from Jeanette Maddy below and the foray programme (sent to all and also available on the website) lists all the other delights in the year ahead. There is our annual residential foray to Keswick (booking form enclosed), which is always a highlight of the year and there is still space available. Note that two foray dates have been switched since the original programme was sent: the Moor Piece foray is now on Sunday, 21 September, and the Risley Moss beginners' foray is on SATUR- DAY 27 September. This last foray will be followed by a microscope work- shop IF a sufficient number of people are interested: unless at least 5 people want to attend, it isn't worth paying for the workshop room. So do please let me know if you are thinking of attending the workshop. If you want to brush up your microscope skills or are even thinking of starting microscopy, this is a great opportunity.

Enjoy the fungal year ahead and I hope to see you on a foray.

Irene Ridge

Stains and Reagents

To facilitate the procurement of stains, reagents and immersion oil for members whilst minimising delivery costs, it has been agreed to try to place bulk orders for members from time to time. I have been tasked with coordinating this.

Congo red powder (1 gm) is already available at £3.54 and I have a supply of 10 ml brown glass dropper bottles at £1.86. Ideally I will pass these to people during Sunday Forays but I could occasionally post supplies onwards. Payment should preferably be made by cheque, made out to Northwest Fungus Group.

Do let me know of any other chemicals that you need, and the urgency with which you require them, and I will try to arrange a co-ordinated order.

Finally, thanks to those members who have already shared their experience with me and provided me with tips.

John Watt

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UK Fungus Day 2014

Sunday 12 October 2014 is UK Fungus Day. Many events, lectures, science displays and outreach activities are being planned to run over and around the weekend of 11/12 October to raise the profile of fungi and fungal research throughout the UK and Ireland.
Information is available at http://www.ukfungusday.co.uk/.

Jeanette Maddy (07548 838 946) - co-ordinator for NWFG

Me Ol' Bam-Boo*

Tony Carter

I was sowing beetroot seeds in my allotment, using small pieces of bamboo cane to mark the rows. I noticed that one piece was covered with small black flask shaped pycnidia poking through the outer surface. (see opposite)

I took it home for examination but nothing in my literature quite fitted. So I consulted Peter Wilberforce who expressed interest as fungi on bamboo, in the UK, are not common. I sent it to him for further research.

Peter reports - The nearest match I can find is *Astrosphaeriella stellata* (Pat.) Sacc. This agrees with my findings of large, asymmetric spores, strongly constricted and 1-septate, and with some spores showing a slender gelatinous coating. (see opposite) Known only from Bamboo recorded (1981) from India and the Far East. The taxon was first published as *Amphisphaeria stellata* Pat. (1913 in Bull. Soc. de la Mycologique de France). There is a full description in Hawsworth's paper in Lin Soc 1981.

Peter decided that this was a specimen that should be looked at further, so he sent it to Kew. It was examined by Brian Spooner, who confirmed *Astrosphaeriella stellata*.

This is a first for the United Kingdom. I checked the National Database and it is not mentioned there.

I cannot believe that it is a rarity but I doubt that many people foray amongst bamboo canes in their gardens.

(*Chitty Chitty Bang Bang)

MOVING NORTH?

Tony Carter

On Saturday 28 September, I led a fungal foray for the public at Ainsdale Sand Dunes Nature Reserve on behalf of Natural England.

We found about forty species, mostly the more common varieties such as *Amanita muscaria* (Fly Agaric), *Paxillus involutus* (Brown Rollrim), *Lactarius tabidus* (Birch Milkcap) and *Pholiota squarrosa* (Shaggy Scalycap). These are species a foray leader hopes for when assisting a group of novices.

However, one specimen, found by the gate leading into the paddock, was new to me. Pure white and woolly, it was densely covered in a powdery substance that came off easily when handled. (See page 7) I identified it to the group as a probable *Cystoderma* (Powdercap), which seemed logical at the time.

Later microscopic observation and further research showed that it was a Dapperling, *Cystolepiota pulverulenta*. I had never seen one before. It is the first record for Ainsdale and VC59. Ainsdale rarely fails to surprise.

According to the British Checklist, this species is normally found in southern counties such as Oxfordshire, Somerset and Devon. Is this another species moving north with a warming climate?

Astrosphaeriella stellata

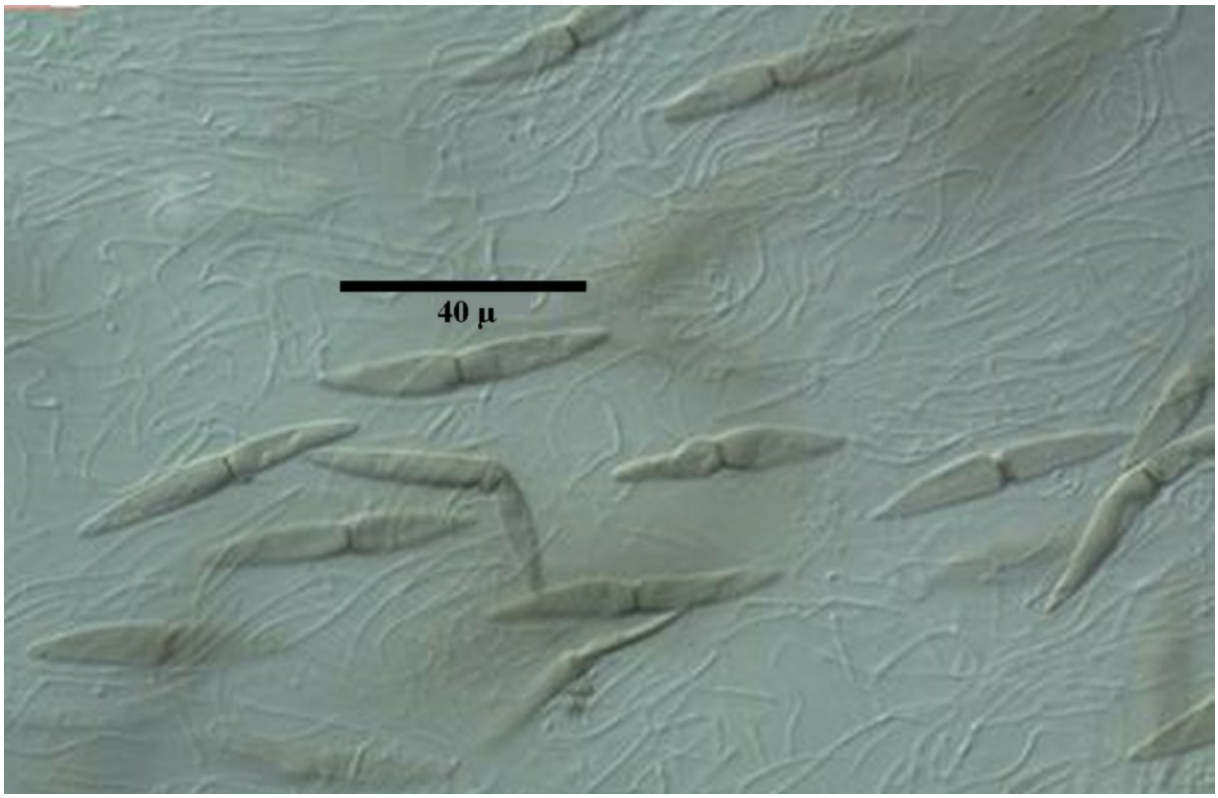

Photo courtesy of Peter Wilberforce

See page 9

See page 11

Cystolepiota pulverulenta
Photograph courtesy of Peter Ross.
Hand courtesy of Tony Carter (page 4)

See page 9

Shitake (left) and Oyster Mushrooms (right) - see page 10

Keswick Weekend - Pages 11 & 12

The cultivation of edible woodland fungi at Scutchers Acres

John Watt

A few years before my retirement, as a woodland owner in Lancashire, I was informed by the Council's tree officer about a workshop on the cultivation of woodland fungi which I attended with great interest and thereafter acquired books by Paul Stamets, one of which is called *Mycelium Running: How mushrooms can help save the world*; a provocative title, and rightly so.

However it was only after my retirement when I had formed a Friends of Scutchers Acres volunteers group and had built up links with the local youth group of the Lancs Wildlife Trust and local schoolchildren, that I embarked upon a serious attempt to grow some mushrooms on logs. I was also given a grant towards this by the West Lancs CVS as a Community Food Growing project.

The information given at the initial induction had indicated that my chosen site near the Eller Brook River within an acre of *Picea abies* should be ideal, sheltered from direct sun and wind. This parcel of 'non-native' coniferous woodland, within a mosaic of broadleaved woodland and grassland is, in itself, a wonderful place for mycorrhizal fungi especially late in the year. I have observed the regular appearance there of *Lepista flaccida*; *Rhodocolly- bia butyracea*; *Clitocybe nebularis*; *Clitocybe rivulosa*; *Russula queletii*; *Ramaria abietina*; *Chlorophyllum rhacodes*; and on one occasion a group of *Limacella guttata* and also of *Agaricus silvicola*.

From the supplier, AnnforFungi in Inverurie, I selected *Pleurotus ostreatus*; *Pleurotus pulmonaria*; *Lentinula edodes* (Shiitake), and *Hericium erinaceous* (Lion's Mane) as suitable for broadleaved log cultivation. The fungus comes in the form of either dowels or 'spawn' which one innoculates into the drilled holes with a 'jaberator' - as it has been jokingly called. For the logs, I had felled a mixture of Grey Alder; Grey Willow; Turkey Oak; Silver Lime and Common Ash in January 2012, and then cut them into 1 m lengths by 10-20 cm diameter. They were labelled carefully and stacked off the ground on pallets pre-treated with wood-preservative. (See page 6) Eight weeks later these were ready for drilling, inoculating and sealing with hot cheese-wax and so several sessions were coordinated between groups of volunteers, the local children from the wildlife Trust and the school (see pages 6 & 7). It proved to be great fun for the children - even though many kids don't like to eat mushrooms - and it was a good opportunity to be the advocate for the place for fungi in our world. I had to disappoint that the fungal logs would take at least 18 months to bear fruit. This being the case, we undertook a second series of inoculations again this spring, using Pedunculate Oak and Turkey Oak, bringing the tally to over 70 logs in total.

Fairly soon after the first series of inoculations, we suffered a very dry spring and I became quite concerned about the drying out of the logs so that I bought a Protimeter moisture meter, and found indeed that the moisture content was dropping to the 20% levels in some cases, especially in Ash, which for this reason, like sycamore, is actually not a suitable species for log cultivation. I then bought a double diaphragm manual water pump for irrigating logs and filling water butts even though I don't have time to do this very often.

After some months, it was possible to see signs of the mycelial run from the whitish appearance at the cut ends of most of the logs and a few oyster mushrooms sprouted in autumn 2012, after only 8 months. (See page 7) This autumn, following the long dry spell in summer, we shocked logs into fruiting by soaking some and delivering a sharp hammer blow to the ends of other logs, as is the traditional Japanese method. However, the 10% of logs which did sprout fungi this autumn appeared to have done so spontaneously without specific shock treatment. However, the number of fruiting bodies per logs was at most about 5-6 i.e. not the amount the commercial producer would wish. So far, we have had a mixture of some shiitake (see page 7) and oyster mushrooms and the Forest School children were able to cut these from the logs and take some back to school for cooking and I have also dried some. Annoyingly, many of the oak logs cut this year have sprouted extensive growths of *Bulgaria inquinans* and it will be interesting to see if they out compete the inoculated mushrooms.

The logs, if still with viable edible fungal mycelia, should continue to produce fruiting bodies for some years, and so I do not for the moment plan further inoculations this coming spring. Furthermore, because I can only look after them on a low maintenance regimen, i.e. without regular control of moisture, I need to evaluate the overall potential success of such a project and how easily it could become a community food project. I am wondering if the logs would in fact be better stored on the ground, to ensure better moisture preservation.

The logs are evident to walkers in the woods, and for the most part have not been interfered with, except on the one occasion some adventuresome children built a log cabin with many of the logs; I left this for some days but in due course my volunteers and I reorganised them back onto their pallets and put up a polite notice!

Mushrooms such as shiitake, quite apart from their nutritional value most especially for vitamin D, are said to possess many health-giving properties with dozens of scientific papers on their antiviral, antibacterial and immunostimulant properties. Lentinan is an approved anti-cancer drug in Japan.

The mushrooms were described in Japan in AD199 and they have been cultivated in the Far East for one thousand years. In the time of the Sung Dynasty there is the first written account of growing them in logs in Longquan

province, and striking the logs to bear fruit. Even today, 95% of farmers in this region of China practise its cultivation. In comparison, we in the west have been far behind.

Shiitake are generally saprophytic and their preferred hosts are *Castanopsis cuspidata*, *Pasania* and *Quercus* and Asian *Fagus* species. Despite their ability to grow in other broadleaved logs and their widespread cultivation, it is interesting that the fungus does not appear to have spread in the wild beyond its traditional geographical region. Is this just a matter of time? Keep a look out for it may turn up anywhere, especially in Scutchers Acres now!

Editorial

We have one article in reserve so I would encourage anyone thinking of writing an one to do so in order that we can bring the next newsletter out in good time. Many thanks to all those members who have contributed articles for this issue and to Mike Walton for typesetting and organising the printing and posting of the Newsletter.

Articles need not be long or technical and can be submitted to me by email (to pfhamlyn@ gmail.com). Alternatively please send hard copy, ideally in a form that can be electronically scanned (i.e. black print or type) or, if this is not possible, hand-written in clear and legible writing. Pictures of fungi to accompany articles are very welcome preferably sent as separate attachments.

Paul F Hamlyn

Lake District Foray 2013

Robin Cowley

The Lake District foray always turns up a good collection and this autumn the fungi did themselves proud. But there were four very special things that made this year's foray unusual: a profusion of honey fungus, some tremendously good picture shows, wild mushrooms on the menu and massages.

Saturday was a gorgeous warm, dry and sunny day and even Sunday was less wet than predicted, so there was plenty of encouragement from nature to go and see what we could find.

The two best sites, not for the first time, were Blencathra and Great Wood. To Irene's delight both yielded over a hundred different species, with a colourful range of waxcaps from the Blencathra fields. This was fortunate because the fields below Latrigg were noticeably lacking in what is usually a diverse display; plenty of *Hygrocybe virginea* and a few *H. conica* but little if anything else. The eager explorers returned with baskets full of treasures, but also tales of a surprisingly large amount of honey fungus on the loose.

The National Trust's Aira Force site beside Ullswater again had a splendid ring of *Amanita muscaria* in its car park - at least until late on Saturday, by which time it was reported that some children had been allowed to do what children like to do with fungi. Dodds Wood also turned up an interesting

range of Boletes, Amanitas, Lactarius and Russulas to name only the ones I could recognise on the table. This was far better than the previous year when it was extremely wet and slippery and yielded nothing much. And there was quite a bit of honey fungus there.

Lots of wonderful things turned up, although possibly not so many rarities as have turned up in previous years. I was delighted to see a specimen of the white hedgehog fungus (*Hydnum repandum*) captured to complement the more usual orange (*rufescens*) variety that we know where to find, a parasitic bolete (*Pseudoboletus parasiticus*), some huge Lactarius and delicate angel wings (*Pleurocybella porrigens*).

There were also exciting exploratory visits to Moss Wood, highly recommended the previous year by a local, Thornthwaite and Borrowdale.

Moss Wood, beside Bassenthwaite, was a dead loss - apart from rather a lot of honey fungus. Thornthwaite, west from Keswick, yielded nothing much either, although much of the more promising parts were fenced off so not explored. Borrowdale, however, was a revelation. A very beautiful site (even in the Sunday drizzle) with a lovely climb up from the Bowder Stone car park then back down and up and around and about and down with lots of fungus on the way. The highlights were some frogs, a bank of bright yellow chanterelles, solitary fly agarics, several ceps (including an utterly perfectly formed specimen straight out of the textbook that was hiding under some bracken), plenty of Russulas, Entolomas and Lactarius and the usual funny little brown things that aren't interesting enough to identify (oops, did I say that?). Oh, and lots more honey fungus. There was also a very handy coffee shop at the bottom on the way back to the road, but the intrepid adventurers were too soggy to chance that.

Back at the hostel there was a choice of the games room laboratory for the dead keen with their microscopes, or the luxury of a cup of tea up in the lounge for the fungused-out. We had some delightful photographic presentations with unusual birds and fungi and things (I won't say who from as Steve might feel embarrassed). Our catering team did us proud again, with amazingly wonderful food, the best apples I've ever eaten and a dazzling array of farm-made cheeses. Just to prove how adventurous they were the catering team seized upon the opportunity to cook and sample the text-book cep and a decent handful of chanterelles liberated from Borrowdale. This bravery was so encouraging that it led to them preparing and serving just enough *Boletus badius* for everyone to sample with our last evening meal. Utterly delicious. Undoubtedly this should become a tradition for Lake District forays.

As should the intriguing group event that followed our last meal - which involved lots of massage (courtesy of Enid Braddock). It almost got me rather excited!

And there it was; Keswick 2013, another memorable event.

I'll bet you're sorry you missed it now!