Fungus Survey of Oxfordshire Newsletter 2011



Entoloma bloxamii by Pam Hills

Editor's News

According to my records this is the seventh issue of our Newsletter. Apparently Judy Webb started the Newsletter in 2005 – a nice tradition and a useful way to keep in touch and share the excitement of new finds etc. Sorry to say as your new editor/secretary this Newsletter will be late, almost a year late; it covers the news and finds from 2010. Having worried that I would have nothing to include I now have more than space will allow- thanks to all those who contributed and apologies for photos and articles not included. My thanks to Marketa Samalova for her invaluable help with the layout.

Molly Dewey



News from our Chairman

We are sorry to bring you the sad news that our President, Terence Ingold, died, a few weeks short of his 105th birthday on 31st May 2010. He was, as you will see in his obituary, an acclaimed and eminent mycologist and educator and was elected President of the Fungus Survey of Oxfordshire in 1991. We saw little of him in recent years but welcomed his letters which always included a drawing or a poem. I was privileged to meet him in September 2009 at his home in Northumberland, when we sat outside in the garden where he recalled many of the tales of his life and gave me a marvellous insight into his many notable achievements.

(See short obituary later)

We are fortunate that Professor Richard Fortey FRS has agreed to be our new President. As a long time member of the group he is an accomplished, thoughtful and experienced mycologist. However he is more widely known as an internationally acclaimed palaeontologist. A former head of Fossil Arthropods and Merit Researcher at the Natural History Museum, London, he has continued his research at the Natural History Museum and is currently the visiting Professor of Palaeobiology at University of Oxford. We look forward to many years of his distinguished patronage!

Again the committee drew up an interesting and varied program for 2011, but we still need to find a way of getting some young blood into the group. With the declining interest in mycology within most university departments in the UK, less and less students are entering the field. How can this be addressed? Max Peterson

Editors note: Richard Fortey has written number of interesting books, all with a geological base but for me undoubtedly the best, and most hilarious is his book 'Dry Store Number one' in which he gives the behind scenes history of the Natural History Museum in London.

Professor Terence Ingold

C.M.G., D.Sc., F.L.S., Hon.D.Litt.

Terence Ingold , formerly one of the world's leading mycologists died, aged 104, in May 2010. His studies of fungi were driven by a fascination with form, how it develops and how it relates to function. Most extraordinary of all were his studies of the weirdly shaped spores of aquatic hyphomycetes, collected from the foam of river banks which became known as "Ingoldian fungi". Enthralled by the beauty of nature, especially in its microscopic forms, he loved fungi and would speak of them as old friends or companions! His enthusiasm was palpable and inspired generations of students.

Graduating from Queens University, Belfast with postgraduate study at the Royal College of Science (now Imperial College), he held posts in Reading and Leicester before taking up the prestigious chair of Botany at Birkbeck College in 1944. Appointments as Dean of the Faculty of Science (1956-60) and Chairman of the Academic Council (1969-72) at London University followed, leading in turn to involvement in the development of higher education overseas, especially in Africa. Perhaps contribution was his greatest in the establishment, in 1963, of the University of Botswana, Swaziland and Lesotho, subsequently split into three universities, one in each country. It was for his contribution to overseas education that he was conferred the award of CMG in 1970, although he was clear that he wished to be remembered more for his mycology and not for his contribution to higher education at home and abroad.

Mycological research continued for three decades into retirement where he worked at the old dining room table at home in Benson with no more sophisticated equipment than a microscope, a camera lucida and a haemacytometer for counting spores, producing many publications.

He married Nora in 1933, and theirs was an exemplary union for almost 65 years until Nora's death in 1998.

With fond memories of his childhood he would tell of being taken by his father to the Belfast shipyards to see the building of the *Titanic*. He won an essay competition as a teenager with the prize of meeting Sir Ernest Shackleton, the polar explorer.

Casting his vote in the general election on May 6th shortly before he died "to keep the Tories out", as a lifelong Labour supporter, perhaps this was the only thing in which he did not succeed.

Professor Cecil Terence Ingold, botanist, mycologist and university teacher: born Blackrock, Dublin 3rd July 1905; Lecturer in Botany University of Reading 1930-37; Lecturer University College of Leicester1937-44; Professor University of London at Birbeck College 1944-1972.

Editor's note Looking through the minutes of our FSO meetings I see that Prof Ingold was present at our first meeting along with Prof Harley who agreed to take the chair. After Prof Harley died in 1991 Prof Ingold was unanimously elected President and Mike Ivory Chairman.

In my final year as an undergraduate in Botany at Queen Mary College, University of London 1957/8 I attended Prof. Ingold's University Intercollegiate lectures on Spore Dispersal in Fungi. They were great, he was most entertaining and enthusiastic. Recently digging through my book collection I came across his little book (A5 size) on Dispersal in Fungi all beautifully illustrated with his own pen and ink drawings. It was published by OUP in 1953!

2010 Forays and news from our Recorder, Judy Webb

During last year 2010 we managed 8 forays, a couple were cancelled because too dry or too cold. The Whitecross Green Wood foray led By Caroline Jackson-Houlston found 72 fungal species and one slime mould (if you include those on her preliminary visit) but the winner turns out to be our Secretary, Molly Dewey's garden, in November with over 80 species! New interesting sites for us during 2010 were Cothill Fen NNR wet woodland and Big Wood mixed coniferous and deciduous woodland in Eynsham Park. A first visit to Hartslock steep chalk grassland down by Goring (home of the rare monkey orchids) was disappointing as few fungi were up in a place that should have lots, but one of the most interesting things was the uncommon bracket fungus Phylloporia (Phellinus) ribis at the base of an old spindle tree.



Phylloporia (Phellinus) ribis Photo: Judy Webb

Hinksey Heights Nature reserve, which has calcareous fen and a lot of very wet woodland, produced some small toadstools of the 'Little Brown Job' type which were however immediately distinctive by their strong 'Moth Balls' (Naphthalene) smell. These are therefore in the genus *Camarophyllopsis* with a common name for the genus of 'Fan Vault' from the very decurrent gills. All members of the genus are rare, Red Data Listed, but as to which species, not known yet. The black speckles on the stipe indicate *C. atropuncta* (Dotted



Fanvault).

Camarophyllopsis sp. Photo: Judy Webb

Our president, Richard Fortey has been busy again forging ahead with fungal discoveries. He reports:

"New county records are perhaps not so unusual if more inconspicuous species are considered. However, it is bigger news when a "first for Britain" is recorded, especially if it is a large agaric! Alick Henrici this year

confirmed the identification of Clitopilus cystidiatus, which I first found in Harpsden Wood near Henley in 2008. This species growing on chalk in a mossy beechwood looks little different from the familiar "Miller" C. prunulus. It is about the same size, but with a distinctly greyish cast to the cap - rather than pure white - and perhaps a firmer texture. Under the microscope it has a gill edge that is sterile and lined with cystidia, which is easy to distinguish from the Miller's fertile edge with basidia. It was recognised in Europe as a separate species a few years ago by Hauschnecht & Nordeloos, so its occurrence in Britain might have been anticipated. But it is nice that we had it in Oxfordshire first. Other notable rarities recorded in 2010 included only the second UK occurrence of Arrhenia baeospora on a nutrient poor bank in the middle of Henley. This is a little fungus with decurrent gills that would formerly have been included in Omphalina. As to those extremely inconspicuous white patches that can be seen on twigs and branches, one with distinctive lemon-shaped spores turned out to be Dendrothele citrisporella, which is not yet on the British checklist, since (as Martyn Ainsworth explained) it has been the victim of misidentification in the past. Found it by accident while looking for something else!"

The Shaggiest Cap?

In September 2010, Fiona Turner, who lives near Banbury, was lucky enough to find a specimen of the amazingly shaggy milk cap *Lactarius mairei*. She sent the photo into Gavin Bird at TVERC for confirmation with the FSO. It is an unmistakeable fungus, so easy to confirm. I just hope it turns up one day in our forays further south!



Lactarius mairei Photo: Fiona Turner

Sandy Stiltball

In spring this year, Judy was called out to see a spectacular and rare fungus in a site near Abingdon. This was found by Rod d'Ayala in March and was an old dry specimen of the Sandy Stiltball, Battarrea *phalloides*. This looks like a puffball on a tall, shaggy stalk and was growing from leaf litter at the base of a very old pollarded willow in sandy soil on the bank of the small stream flowing past the fen at this site. This is not only Red Data Listed as 'Near -threatened, but is a Biodiversity Action Plan (BAP) species and Listed on Schedule 8 of the Wildlife and Countryside Act, meaning it should not be collected. This is not the first Oxon record; Richard Fortey had previously recorded one in South Oxon from the base of a hedgerow with oak in 1997. Most other records are from hedgerow bases on sandy soil and it seems to have a preference for fruiting within old hollow trees. 73 records on the BMS database, but many are extremely old - 1890s for example. Distribution mostly Suffolk, Norfolk, Kent, Surrey, Sussex.



Battarrea phalloides

Photo: Judy Webb

The garden mushroom and the new Agaricus book

Max Peterson's back garden once again sprouted a good crop of the strange *Agaricus bresadolianus* which looks a bit like an edible mushroom, but is distinct because of the prominent white branching rhizomorphs from the stipe base. The new book by Geoffrey Kibby 'The Genus *Agaricus* in Britain', says 'rich soils, often in disturbed areas, gardens, parks, path sides, often strongly anthropic, very rarely in the wild, uncommon'. Perhaps we should all look to the bottom of our gardens!



Agaricus bresadolianus Photo: Max Peterson

Rusts on Red Campion

Gill Brand of Warwickshire has asked that the Oxon group look out for rusts on the leaves of Red Campion, *Silene dioica*, when out in local woods. From the top the leaves appear to have yellowish spots and if you turn over such leaves then you will see the typical rust fungal type of spot with the spores underneath. Apparently there are two possible species: *Puccinia arenariae* and *Puccinia behenis*. The two species can be distinguished by examining the spores microscopically. The Brands are keen to see if either or both occur in Oxon, so keep your eyes peeled for affected red campion leaves when out and about.

Fungi and Maggots

At the Autumn Conference of the BMS at Kew on Sat 26th November, the theme will be 'Fungi and Insects' so Judy will be giving a short talk entitled '**Mind that Maggot, Fungi are important to flies'** where she will discuss all the important findings from rearing studies of fungus gnats and other flies from fungi collected on the group's forays.

From Caroline Jackson-Houlston

The warmth and wetness of the summer of 2010 set up a very good fungus season for the main period of autumn foraying. In particular, mycorrhizal fungi such as *Cortinarius* and *Russula* seemed to have an excellent year, with seldom-seen species deciding that this was the year to produce fruit bodies. One presumes that this was due to an extended period of stable moist conditions in the leaf litter. Oxfordshire weather records confirm that August was warmer and wetter than usual (<u>www.geog.ox.ac.uk</u>). Instead of experiencing a September drought, foray programmers were caught "on the hop" by the plentiful appearance of fungi throughout the month.

As the largest genus of macrofungi in Europe, indeed, possibly in the world, it is not surprising that *Cortinarius* species (Webcaps) are a challenge to identify. Confirmation of many species may be only possible through high magnification microscopy, or chemical tests, some of them with chemicals as bad for the mycologist as the fungus might be, and definitely not what your partner wants to find in the vegetable compartment of the fridge. Karl Soop lists 9 such tests in *Cortinarius in Sweden*. The good news is that since these fungi are all mycorrhizal, identifying the tree or shrub partner can sometimes be definitive, and some of them have very distinctive smells and tastes.

What Cortinarius have in common is a cortina, or fibrous veil, in their early stages. There are some 450 species, in the broad sense of the genus, in Europe alone, and quite a lot of them are brown! On the other hand, they are also, typically, big and sexy, and cover the whole colour spectrum from red to violet (though the greens are a bit unconvincing) and can also be nearly black or nearly white. Some are edible, but some are deadly poisonous, causing complete renal failure. They can be slimy or dry, have cap ornaments such as scales, or stem ornaments such as coloured banding, and dramatic colour changes as Indeed, one of the challenges to they age, identification is finding them young enough to exhibit characteristic early features such as veil or original gill colour. An old Webcap will be a brown webcap, at least when it comes to the gills, as the spores are always a rusty brown. When fresh, though, they can stop observers in their tracks, as the with glistening blue-violet species found at Highmoor Trench on our 2010 foray, C. croceocaeruleus.

My interest in Cortinarius is largely sparked by their artistic possibilities, since although I enjoy the intellectual challenge posed by identification, my skills falter at the microscope stage. It must be admitted that the average mycologist tends to imitate the Pharisee rather than the good Samaritan and pass by on the other side when faced with a Cortinarius. This is ironic, since it puts a huge and diverse genus into the same category as a number of genera notable only for little brown jobs. However, foray lists for Oxfordshire sites in 2010 showed an increase in records that is probably not due solely to a gritted-teeth determination to get to grips with the genus at last.

As with most fungi, Cortinarius still suffer from nomenclatural instability, and no one volume offers illustrations of more than a minority. The European *Cortinarius Flora Photographica* will set you back around £450. I have therefore compiled a list of fairly recent popular works with illustrations of *Cortinarius* species, cross-referenced to their synonyms, and lodged this with the group's Recorder. Anyone wanting a copy is welcome to apply to her or to me.

2011 looks like another good year, with at least 7 species at Highmoor Trench by the second week of September.

From John Killick taken from his articles for the Oxford times

Hare's Ear Otidea onotica

Fungus forays often yield cup fungi that grow in mud; a common example is orange-peel fungus, which does closely resemble discarded orange peel. They were called Peziza in 1719 by J. Dillenius who later became Oxford's Professor of Botany; his was a curious choice of name as Peziza in classical Greek had been the Giant Puffball! Abingdon Naturalists' 2010 foray spotted a near relative in which the "peel" is asymmetrical and can resemble a hare's ear in shape. It grows on rotting matter in soil in, for example, woodland paths. It reproduces in a very different way from toadstools; embedded in its surface are microscopic bags called asci containing eight spores each with two oil droplets. The asci in this kind are narrow and unusually long, up to 0.2 mm. Changes in air pressure cause the spores to be squeezed out singly, or more dramatically in "puffs" when all eight are ejected simultaneously.



Otidea onotica Photo: Margaret Killick

Stinking Parasol Lepiota cristata

When I lived in Milton 30 years ago this dainty fungus adorned my lawn - surprisingly as it is more often found in woods and wood edges where it exploits dead organic matter. The little caps are white but their rich brown skin makes a disc in the centre and pretty concentric rings farther out. Like other parasols it has white gills and the stem has a ring (fragile in this one); the print from its bullet-shaped spores is, unusually, greyish green. Beware; it lacks the bag-like volva seen in the Death Cap but does contain similar poisons (amatoxins) and one of several very similar species did poison a child who picked it. The key feature is its strong smell, but people interpret fungus smells in differing ways and this one has been termed strong, foul, fishy or spicy, fungusy, pungent, coal tar, and acid; I myself rather like it and liken it to the witch-hazel used to treat bruises. Alias Stinking Dapperling, it is widespread in the Northern Hemisphere.



Echinoderma (Lepiota) aspera Photo: Margaret Killick

An observation from Alan Hills

To me *Boletus appendiculatus* is a fungus that I would expect to find fairly early in the year when the weather is warm; somewhat common in the new Forest and the warmer woodlands in the Ascot area mostly in July. To my surprise on the 18th September of this year we came across a couple carrying a bag in a local forest. I enquired if they were looking for mushrooms? Yes, was the answer and we have found three wonderful Ceps (Boletus edulis).

I asked to see and was shown three very fresh *Boletus appendiculatus*, good for the pot but a rare species in the Oxford area; all were perfectly fresh. This was all they had found on their walk.

So I began to wonder why so late? The easy explanation would be the weather, but why? So I went to my database to check the records, to my amazement I had only found it previously twice at this place, on 24th September 1997 and 30 August 2004 both very late records for the species showing that this location. Also within this 200 yard stretch of woodland other rare boletes are to be found including *B. queletii, B. fechtneri, Xerocomus chrysonemus* and *Leccinum crocipodium*, showing me that we have pockets in the UK that do not conform to normal sightings.



Boletus appendiculatus Photo: Alan Hills