BFG

Buckinghamshire Fungus Group

Newsletter September 2003 No 4

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May we start with an apology for the fact that there has been rather a lapse in continuity with regard to circulars and records information since last season; this is an attempt to put that right, or at least to improve on the situation, particularly in view of the impressive newsletters recently introduced by our industrious neighbours, the Herts Fungus Group – Anne and Tom Andrews, the new editors and also members of this group, quite put us to shame!

We have now been in existence as a group for nearly five years, and currently have 46 members; we are affiliated to the British Mycological Society and the British Trust for Conservation Volunteers who also insure us in the field through Zurich Insurance. Included with this letter is a new address list of members. Please check your details are included and are accurate, and let me know of any changes / corrections. It should perhaps be stressed that this information is circulated solely for the purpose of enabling members to contact one another, and is therefore not to be handed out further afield without a member's consent. If you have an email address this would be a useful addition as we are not intending to send out record lists to everyone this year, but these will be available (when ready!) to anyone on request. Emailing would certainly be more economical on paper and postage, but we are happy to snailmail to anyone not online.

FORAY PROGRAMME

You received a copy of this earlier in the year, but as we are now about to start our autumn forays – the first is at Bradenham on September 20th – we thought a reminder of the dates might be timely. Numbers attending our forays are never over-impressive considering the size of membership; perhaps this is the season for that to change! Our updated programme is included.

NEW DATABASE

It has been apparent for several years that it would ease Derek's burden of collating all the ever-mounting records for the group if the main contributers - those who send Derek records of finds apart from the official group forays - were to use the same recording system. To this end Nick Jarvis has put a large amount of time and energy into producing our own database, and has insured that it is simple to use – even I can find my way round it! It has a host of useful information, including a checklist which although not with the very latest information as yet, does enable one to ascertain the occurrence and rarity of unfamiliar species, also a means of finding out a name from just a few letters of either the genus or species name if one's memory lets one down – very useful! You can also trace some species by their common English names (eg Fly Agaric), and this may well be expanded in the near future as plans are afoot to standardise and introduce a new list of English names. Liz Holden is at present looking into its compilation. It is possible to record using either the current accepted name or the previously recognised name, and in addition you can browse the records for any of the many listed sites on the database between any dates of your choice, printing out any lists you might require. At present only Nick's and my copies are up and running, but it is early days yet and the hope is that eventually we will have a system whereby any member who wishes may have a copy to use for reference, and those of us with the facility to enter records will have an easy way to transfer those records to Derek and thus on the to BMSFRD, the national recording database. (This, by the way, is also available on the net, together with a whole range of other useful information, via the BMS website.)

PICTURES ON THE NET

There is an ever-growing number of websites with fungus pictures now at our disposal, and it is well worth exploring as an aid, providing a vast range of examples and specimens, some with excellent microscopic details as well. If you've not explored this avenue yet, try entering "Index of fungi pages or photographs on the net" into Google, and I can guarantee you'll be there for hours! This is the best selection I've found, sometimes with a choice of eight or so different pictures of any one species, some with useful descriptions, supplied from all over the continent and often linking in to useful keys. I've recently downloaded one for Mycena in Norway which I'm keen to try out this season. It is based on macroscopic details as far as possible, is in easily understood language (you won't have to look up every other word in the glossary!) and it links on to excellent pictures, descriptions and microscopic diagrams. It appears that only one or two British species are missing from it, and only a handful of Norwegian species not relevant to us. On showing this to Richard Iliffe recently, (leader of the Leicestershire Group and something of an authority on mycena) he was impressed and keen to try it out this season. Hopefully it could be a really useful aid to identification.
If you have a favourite site, or any other tips of this sort to pass on, please let me know – or even better, write a short piece - for inclusion in the next newsletter. We need all the help we can get in our quest to improve our skills and increase our enjoyment of the vast fungus forest we've been let loose into!

RARE AMANITA AT BRADENHAM

Paul and I first found Amanita eliae at Bradenham Estate in late July 2000; at home afterwards I was fairly confident of the identification although I'd not seen or heard of it before, but the flesh- coloured smallish cap, the incredibly deeply submerged volva and the occurrence under mature oak all fitted well. So I casually listed it and discarded the specimen together with the rest of the day's finds once checked, having no notion that it was rare. Imagine my dismay when on mentioning it to Alan Outen (the Herts Group leader, also a BFG member and an outstanding field mycologist) he said he'd never seen it and was itching to photo it for his ever-growing slide collection. Kicking myself for not having checked anywhere for previous records before chucking it, I returned a week later to search again knowing it was probably a lost cause – a needle in a hay stack - being so rare. I found the same tree to no avail, but kept at it and a while later got my reward under an even bigger oak. This one got the treatment it deserved, it took five minutes to dig out and was driven to Alan the next day, with instructions from him to put it in the fridge overnight BUT standing up, not lying down, to prevent the stipe from curling upwards! I've since seen the proof of this in other amanitas. It was then dried and sent as a voucher specimen for the Fungus 2000 list.
Since then we've recorded it there once in '01 – early August again – and also at Hodgemoor Woods three times in '01 and twice in '02, the earliest date being July 1st and the latest Sept 6th.
So is it really that rare, or just not observed because it appears before the main foraying season? We failed to find it at Bradenham last year (it was an odd year for fungi!) but this year were delighted to find three separate specimens on Aug 6th, one of which had a stipe 19 cms long. (Paul found all three!) These received the appropriate reverential treatment and were duly photoed, described, and are safely residing in the Herbarium at Kew, and hopefully I've learnt my lesson to hang on to any unusual species in the interests of verifying records and furthering our understanding, etc.

Talking of this early in the season ……..

A*MAY*ZING AUTUMN FINDS?

In the Editorial of the latest (and excellent) Field Mycology magazine, I was interested to read Geoffrey Kibby bemoaning the lack of fungi in late May this year, particularly in Epping Forest, one of his stamping grounds – only one Russula and one Amanita. Not so in my local Chiltern stamping grounds! Browse through this list of agarics and you could be reading a foray list for September? October? One of them certainly November at Penn Wood Vicarage Lawn!:-
Agaricus campestris, Amanita crocea, excelsa, fulva, rubescens, Bolbitius vitellinus, Boletus erythropus, Calocybe gambosa (expected in Spring), Calvatia gigantea, Clitocybe clavipes, fragrans, gibba, sinopica (fair enough, also a Spring species), Collybia dryophila, Conocybe rugosa, Cystoderma amianthinum, Coprinus angulatus, auricomus (also a Spring species), impatiens, micaceus, Cortinarius fulvescens (awaiting confirmation with GK), Dermoloma cuneifolium, Entoloma conferendum, Flammulaster carpophila, Hypholoma fasciculare (common at any time), Hygrocybe chlorophana (in May?!), Inocybe lanuginosa, rimosa, unbrina, Laccaria laccata, Lactarius tabidus, Megacollybia platyphylla, Mycena acicula, pelianthina, stipata, Panaeolus sphinctrinus, Pluteus minutissimus, umbrosus, Psathyrella candolleana, Russula gracillima, puellaris, Strobilurus tenacellus (very common around here this Spring), Suillus grevillei, Tubaria conspersa, furfuracea ……..

I'm glad I live in the Chilterns!

(*in California which is desert with ocean to the west, the fungi fruit in February. Are we heading in the same direction?! DJS)*

As I write (beginning of September) I'd be glad to find ***any*** of the above at the moment! There's not a mushroom or toadstool to be found!

THOSE GREEN RUSSULAS!

As we are already well into the Russula season (they, like Amanitas and Boletes, are often around in July and August before the main autumn fruiting of fungi) I wondered if there might be some members who would appreciate some tips on separating the three commonly found green species – these being in order of commonness ***aeruginea***, ***heterophylla*** and ***cyanoxantha var. peltereaui*** (pronounced pelteroy).

As with all Russulas, their distinctive colours and cheesy (ie crumbly) gill texture lead one to their genus quite easily. (I've heard Geoffrey Kibby - the British Russula guru - joking that if you throw a Russula at a wall it crumbles on contact, and this has the added advantage that there is then not enough material left to have to bother with further identification!) Getting further than genus can cause even experienced mycologists quite a headache because those "distinctive" shades of colour are *extremely* variable, and descriptions of colour are anyway very individual - what is turquoise to one will be blue to another, green to a third, and so on. Add to this the fact that no book in common usage shows a picture of all these three green-capped species, not even Phillips, and you have a situation where it is quite possible to miss the fact that there are three commonly found species which can look almost identical.

Re shades of colour I quote now from Rayner (the Russula Bible before Kibby's amazing new synoptic key):-

- ***aeruginea*** –" herbage green, sometimes with yellowish, olivaceous or brownish tints, centre usually darker, never vinaceous nor violaceous, often with rusty spots…"
- ***heterophylla*** – "various shades of green, yellowish green or even ochraceous, olivaceous or brown…"
- ***cyanoxantha var. peltereaui*** – no full description, but a comparison with cyanoxantha stating "differs only in (cap) completely green…"

You begin to see the problem! Furthermore, one sometimes finds both ***aeruginea*** and ***heterophylla*** looking as clearly dark green as Phillips' photo of ***c. var. peltereaui*** (page 96) or both as pale as his photo of ***aeruginea*** (page 101); even further more, ***heterophylla*** also often had rusty spots like ***aeruginea***. "Here we go!" I hear you say, "this is yet another unfathomable fungal mystery. I think I'll give up russulas as well!"

Be not so hasty! Help is at hand, in the form of a small green crystal made of ferrous sulphate (iron salts, FE) and available from Derek at BFG forays (if you forewarn him first!). This is a very useful tool for Russulas in the field, because although most species turn slightly dirty rust-orange where rubbed on the stipe with a crystal, some have very different and distinctive reactions and luckily the three green species can (normally) be separated in this way.

It is common knowledge that vesca quickly turns salmon pink on the stipe and on the gills with a crystal, but not so commonly known that ***heterophylla*** reacts in exactly the same way, whereas ***aeruginea*** is one of many that turn slightly dirty orange. It is also well known that ***cyanoxantha*** is the only russula to have either no colour change at all with a crystal, or at most slightly green (unlike the ***xerampelina*** group which turn clearly dark green); ***c. var. peltereaui*** has this same colour reaction, ie none or slightly green. So here is a quick and easy guide to split these three, bearing in mind that the age and condition of the fruitbody together with the weather conditions will also affect the amount of colour reaction – there will be variation.

There are other clues to back up your initial determination, the most useful being the flexibility or brittleness of the gills when you rub your finger across them, the host tree they are found with, and to a certain degree the taste. Taking a nibble of the flesh from the cap edge, then having a little chew and spitting it out, is a recognised – some would say essential – method in determining Russulas, as they vary widely from tasteless, mild to fruity, slightly hot, bitter to extremely hot, even fiery. Many are eaten with relish on the continent and none are dangerously poisonous although some, like the ***emetica*** group, won't do you a lot of good if you insist on eating the whole cap(!), so you are in no danger if tasted as suggested above. However, having said that, I myself now use this helpful field clue sparingly since tasting ***Russula badia*** and ***sardonia var viridis*** (incidentally another green species!) too many times in Scotland a couple of years ago. They are both burning hot – the hottest in the genus! – and since then I have developed an intolerance causing pain like a burn and swelling on my tongue and lips where the Russula flesh touched, even with relatively mild ones. Don't let this put you off, it's an unusual allergy, but be warned against tasting ***badia*** or ***sardonia***, there more pleasureable ways of identifying them!

Microscope work will quickly confirm your field observations to split these three, but this is not the place to dwell on spore size and ornamentation etc, so below is a table to compare the macroscopic features, placing the differing characters in order of usefulness / uselessness.

Just as you begin to say "I might be able to sort these out now" I have to put a small spanner in the works:- there are other green Russulas around, although you are much less (and in some cases very un-)likely to meet them in our area. I've found two others in the Chilterns:- one under beech or oak is ***virescens*** – a very

beautiful species with glaucous green cap cuticle tending to crack up and look scaly, unmistakeable in the field. The other is ***pseudoolivascens***, one of the ***xerampelina*** group (typically smelling of crab when mature and turning quickly dark green with FE). This I collected recently from Hodgemoor, and was convinced it was ***heterophylla*** till I rubbed a crystal on the stem! * If you find an ***aeruginea*** lookalike (with the same FE reaction) clearly under oak with no birch present, you may have the second British record of ***pseudoaeruginea***! This appropriately turned up in Sussex in '01 at the BMS Russula Workshop weekend; it is macroscopically almost identical to ***aeruginea*** but there are distinct microscopic differences. I've already mentioned ***sardonia var viridis***, I've only seen this in Scotland under pine in groups, and like the much commoner and pink/red ***sardonia*** it is exceedingly hot and the flesh and gills turn amazingly pink with ammonia.

Russula ***romellii***, normally shown with a purple cap in the literature, can also be found entirely grass green and occurs under deciduous trees; however, it has clearly ochre-coloured gills and a spore print will reveal a distinct rust-orange colour – one of the darkest in the genus. I've not as yet found this in the South.

There are many other common Russula species with varying degrees of green present in the cap, but the ones mentioned above are – here I'm sticking my neck out! – the only British ones which can be positively entirely green. No doubt this is a dangerous generalisation, and I am very happy to be corrected and put firmly in my place!

* See Kibby's new key to the ***xerampelina*** group in the latest Field Mycology magazine (volume 4(3))

aeruginea	***heterophylla***	***cyanoxantha var. peltereaui***
FE reaction - normal dirty orange	FE reaction – quickly bright salmon pink on gills and stipe	FE reaction – either nil or slightly pale green
Gills brittle when rubbed; yellowish buff	Gills flexible when young, less so when mature; white to very pale cream	Gills very flexible when young and remaining so when mature; white to very pale cream
Occurs under birch, but also under conifer, NOT other deciduous trees	Occurs under a variety of broad-leaved trees, NOT under conifer	Occurs under broadleaved AND coniferous trees
Spore print cream	Spore print white to very pale cream	Spore print white to very pale cream
Cap colour more often pale beige/green, can have rusty spots	Cap colour more often pale yellow/green, can have rusty spots	Cap colour usually distinct mid-green all over, no rusty spots
Very common	Common	Common
Taste mild to slightly hot	Taste mild	Taste mild
Cap cuticle peels to about half way!	Cap cuticle peels to about half way!	Cap cuticle peels to about half way!

MELANOLEUCA OR LECCINUM?

One afternoon in the heatwave in August we were wandering in Burnham Beeches, trying to keep moving to avoid the streams of wood ants and not expecting to find fungi. We were very surprised to come across a large woodchip pile with at least 15 fruitbodies of a white flattish-capped medium-sized mushroom but with clearly black squamules on the stipe, looking very much like a Leccinum. This had to be picked and inspected despite the ants' attempts to deter us, because it was beginning to ring a faint bell in my mind:- the name Melanoleuca verrucipes flashed into my head, I wasn't sure why. Now very bitten and swearing at our attackers, we took a couple of specimens home, and sure enough it was indeed M. verrucipes with harpoon-shaped cystidia and slightly warty spores. On discovering from Alick Henrici that this was only the seventh British record and the furthest north it had been ever been recorded, we returned the next day to photo it properly and collect more material, only to find that there was another group of fungi growing at the top of the same pile that we'd not noticed in our excitement the day before. This, although baked in the sun and virtually dried already, turned out to be Leucoagaricus meleagris, and was the only eleventh British record, and Alick had had material of this sent to him just the week before. Maybe these two species both like hot weather – the next day was the hottest on record in Britain!

Reports on the two forays held earlier this year:-

RUSHBEDS WOOD – APRIL 27th

Leader: Derek Schafer; also attended: Penny Cullington, Alan and Pam Hills, Nick Jarvis, Justin Long , Jenny Schafer, Daphne da Silva, Liz Taggart.

This site, situated north west of Aylesbury, is a BBOWT and SSSI ancient broadleaved woodland on heavy clay soil, and has an ever-growing list of interesting fungi, mainly due to Nick Legon who is a frequent visitor here (this fact alone says much about its fungal potential!). Thus it was a fitting site for our first foray of the year, and we were rewarded with some beautiful spring weather and were serenaded by willow warblers, chiff-chaffs and blackcaps – recently arrived migrants.
The hot, dry few weeks prior to our visit meant some diligent searching was needed, but 36 species were recorded, of which predictably for this date only two were mushrooms: Alan Hills found Calocybe gambosa (only four days after St Georges Day!) and Liz Taggart collected a Psathyrella which turned out to be spadiceogrisea forma vernalis. Also of note were the crepidotoid Clitopilus hobsonii growing on phellinus (not previously recorded on this host), Phellinus pomaceus – not common but often in evidence here on its preferred host Blackthorn (see B&K vol 2 no 326) -, some magnificent saddle-like specimens of Polyporus squamosus, three Hypoxylon species including rubiginosum and two Hypomyces species on old PolyporusPolyporus badius – one the common aurantius, but the other identified by Derek was the aptly named rosellus and an intense shade of rose-pink. Continuing the redPolyporus badius –one was the common aurantius, but the other identified by Derek was the aptly named rosellus and an intense shade of rose-pink. Continuing the red theme, we were just too late in the season for Sarcoscypha austriaca which was much in evidence on damp fallen willow trunks on our previous springtime foray here, but a large patch of Nectria coccinea was found on an old elm trunk.
A total of 36 species were recorded for the day.

WESTON TURVILLE RESERVOIRE – JUNE 28th

Leader: Derek Schafer; also attended: Jacqui Darby, Amos Green, Jenny Schafer and David White.

Apart from Crepidotus mollis and Volvariella gloiocephala (= speciosa), the only agarics collected on this foray were six coprinus species, much to the delight of the leader and the amazement to everyone else! At one point Derek was seen disappearing head first into a reedbed, only to reappear with two very nice fruitbodies of Coprinus tigrinellus (his words, not mine!) thus justifying his (predictably) strange behaviour! As well as lagopus, leiocephalus and auricomus, he also found the unusual plagioporus with young material showing the dark vinaceous colour clearly, and also the third British record of velatopruinatus on a woodchip pile – this is only the second record oudoors. The first British collection was named by Derek from the Palm House at Kew last year, with a comment from Alick Henrici that he was convinced it had been collected in the gardens at Kew on previous occasions but given different names!
The total number of species collected was 22, the list boosted by 8 brackets/ corticioid types on wood, Jew's Ear, 3 ascos on wood and two common slime moulds. However, Nick Legon also visited the site a few days earlier and produced a list of equal length but only duplicating 3 finds, namely the Volvariella, Coprinus lagopus and Laetiporus sulphureus (Chicken in the woods). Knowing his plants well, and what he might find on them, he added 16 hyphomycetes/rusts/smuts/ascomycetes together with two psathyrellas, bringing the grand total for the two forays combined to 41 – a highly respectable total for this time of year.

It is hoped that this my first attempt at a newsletter will meet with members' approval, and I would greatly appreciate any feedback, either critical or otherwise. We are open to your suggestions and would like to feel that we include the sort of information and short articles which will be of use and interest to members, whatever their mycological experience and ability. To avoid the material being dominated by me in future, your own contributions to add variety and breadth of interest would be more than welcome. Many thanks.

PC