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NEWS FROM THE FUNGIMAP CO-ORDINATOR

A big cheery hello to all Fungimap members! The big news this month is the lead up to the 2009 Fungimap Conference this May. Planning is now well advanced with a full program of speakers. To all those early bird members, thank you for returning your registration forms so promptly and your workshop questionnaires.

The Conference will be held from Thursday 21st May to Tuesday 26th May 2009, at Wallerawang (near Lithgow) in NSW. We expect many of our members will enjoy the fabulous train ride from Sydney, past the Blue Mountains to Lithgow. We are excited to be holding this Conference in conjunction with the Sydney Fungal Studies Group Inc. (SFSG).

There are 12 Workshop titles to choose from including the ever popular Photographing Fungi as well as Threatened Fungi, Slime Moulds and Curating specimens.

There will be excellent talks from Fungi experts from NZ, the US and from all the states of Australia. See Page 16 for further Conference details on Fungi Speakers and Workshops.

There are still some places available to attend the unique one day Disc Fungi Masterclass in Sydney, just after our Conference. The Masterclass will be led by Dr Peter Johnston, a world expert on ascomycete taxonomy. Peter will be sharing his extensive knowledge of the structure, classification and identification of disc-fungi. This Masterclass will be using microscopes, and will be held at the University of New South Wales.

Please email me for further Conference OR Masterclass details. You can also check the Fungimap web page for the latest updates.

Baby News: two former Fungimap Coordinators have had babies in recent times. Last year Cassia Read and partner Warwick Smith had a pretty baby girl named Sylvie. On 5th March this year, Gudrun and Alistair Evans gave birth to beautiful identical twin boys. Our very best wishes go out to both families.

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Fungi Group
Forays, monthly meetings & presentations.
Contact: Virgil Hubregtse Ph: (03) 9560 7775
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WA
Perth Urban Bushland Fungi Project
Fungi workshops, walks, surveys in Perth Urban bush areas.
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FROM THE EDITOR

I hope you enjoy the smorgasbord in this issue of the newsletter. By chance there are three, although very different, articles on Laccocephalum demonstrating the webs of knowledge that gradually build up around a genus.

I am really looking forward to the camaraderie (and the fungi) at the Fungimap V Conference. I urge you all to look out for photogenic fungi and capture them for the ‘bumper’ edition of the newsletter. There will be plenty of expertise at the conference – and a workshop – to help with photography. The deadline for the next issue will be Friday 3rd July.

Pam Catcheside
In early September 2008, I was one of the leaders on a Landscope Expedition to Thundelarra Station, a former pastoral lease in the Midwest Region approximately 40 kilometres north-west of Paynes Find. Recently purchased by the Department of Environment and Conservation (DEC), Western Australia, the property lies in the Yalgoo Interim Biogeographic Regionalisation (IBRA) region, linking the western and eastern sections of a conservation area established with the purchase of a number of pastoral leases since 1995.

Leaving the north-eastern wheat-belt behind us, we headed into the iron-rich red soils with their marbling of glistening, wind-polished stones, finally being forced to stop in order to admire and photograph the vast array of wildflowers flanking the highway. There were low bushes of violet-flowered Eremophila and woolly grey-leaved Solanum shaded by Acacias which in turn were surrounded by carpets of pink, yellow and white ephemerals. And there were fungi! Desert Puffballs (Podaxis pistillaris) resembling elongated black powderpuffs on sticks emerged from the bare soil; there was a solitary Ice Cream Cone fungus (Phellorinia herculeana) and amid the mulgas were Dyeball fungi (Pisolithus sp.) - the first of many sightings of this ubiquitous genus.

Although I hadn’t been in the area for over thirty years, this was familiar territory. In the first half of the last century, my Scottish-born father-in-law had ridden this way on horseback to prospect for the alluvial gold which supplemented his income while he developed the farm at Wubin, the last small town we had passed. Many years later, during the wildflower season between seeding and harvesting time, Alex and I would drive up here, to a favourite picnic spot near a large gnamma (a granite rock hole holding water) nestled in a granite outcrop. How I wished I’d taken notice of the area’s fungi, then!

We refuelled the bus at Paynes Find (population once 500, now about 20), and turned off on the dirt road to Thundelarra, some 40 kilometres to the north-west. There were tantalising glimpses of hilly breakaways in the distance, patches of blue and white flowers like flat puddles on the sides of the road and real puddles of water in some of the depressions. This augured well for us. There had been good rains this year after the years of drought which had forced the owners to sell all of the station’s sheep (in the 1920s, 28,500 sheep had grazed there).

Before long, the date palms fringing Thundelarra’s original century-old mud brick homestead came into view, with the new rammed-earth homestead beyond. A large number of outbuildings were scattered over a wide area with a wind-generator and numerous solar panels in a fenced-off area near the house. Our quarters were in the corrugated iron-clad shearer’s quarters, upgraded to cater for tourists some while back. The cookhouse, harbouring a huge gas stove, was nearby and between the two a large, home made, wood-fired, stone-clad tank provided enough hot water for all fifteen of us.

After unpacking the vehicles, we set up tables and chairs in the huge nine-stand shearing shed which was to be the workplace for those wanting to paint. The shed was home to swallows and zebra finches and there was constant movement of birds flying in and out, feeding their noisy offspring.

Not expecting to find fungi, one of the things I intended to do was to look for soil crust cryptogams using books sent me by Heino Lepp and Judith Curnow. The soil in the rangelands is covered with a crust of cryptogams - mosses, liverworts and mostly lichens - which is damaged by hard-hoofed animals, resulting in erosion. Feral goats are the big problem now and all the station’s wells and windmills (which are fed by underground water) are being gradually closed down and the goats trapped and shipped away. With the arrival of a colleague from the Geraldton District office a day and a half later, we began setting up (continued on page 5)
permanent 20 m x 20 m quadrats in different soil and vegetation types, recording all the vegetation and counting each plant species. Monitoring will record changes in vegetation under the altered management regime.

On the first morning out, I was busy attempting to photograph some minute mosses and lichens when the first fleshy fungi were found – three *Phylloporus* sp., growing under *Eucalyptus striaticalyx*.

Scattered on the soil surface near one shallow lake were aboriginal stone tool chippings and, near another, evidence of more recent visitors - metal trouser buttons, purple and green shards of glass and small rusty pieces of wire. One day we had morning tea at Field's Find, one of the many abandoned mines (Baron de Rothschild mine was an earlier one) on Thundelarra. Along with the slag heaps and the weed called 'Rosy Dock', we found a hand-made horseshoe nail, bits of china and old glass, a squashed wick-holder from a hurricane lamp and a tiny metal belt buckle inscribed 'made in Paris'! Once there were enough residents to fill three hotels here, but no structures remain.

Acacias (mulga) predominated. Among them were *Acacia grasbyi* (Miniritchie), with the most glorious bark of tiny purple-red upward-sweeping curls, while another was pendulous with slender, pale green seed pods. There were crows’ nests in the windmills. We saw a metre and a half long Bungarra, or monitor lizard, red-tailed black cockatoos and more FUNGI. While one of the plots was being laid out, a large crack in the ground with a raised, angled lid of soil was found. Revealed underneath was a pair of perfect, large white *Amanitas*. This find excited a great deal of interest and lots more cracks were found – one revealing six fruiting bodies! We had left the shovel at camp - but a metal stake sufficed. Later, in three other locations, we found many more of this species, then two more species of *Amanita* turned up. Among the fungi recorded were *Tulostoma*, *Lycoperdon*, *Geastrum*, *Montagnea*, *Pycnoporus* some dried up boletes, *Lichenomphalia*, *Phellinus* and one target species - *Poronia erici*. When I have time, I’ll try keying some out.

In all, 15 species of fungi were seen and half of these were collected, along with a good number of other cryptogams, for the Western Australian herbarium.

Photographing and writing descriptions of the fungi was not a problem but, without my fan-forced drier, preserving them was a challenge. I sliced them thinly and laid them out on the floor near the wide entrance to the shearing shed, but one morning we awoke to a light drizzle and they had rehydrated, so I poked wire through the slices and strung them up to dry. This worked a treat. I do hope the rusty holes result in a bit of mirth in the future.

Returning home, we witnessed the effects of the State’s mining boom. A large stretch of highway was being widened to cope with the large amount of traffic we passed, heading northwards. Huge trucks, thundering (Continued on page 6)
along - some carting two or three trailers - each loaded
with mining equipment, dongas (temporary housing) and
four-wheel drive vehicles. Some were bearing other,
massive trucks - haul packs, which cart the mined earth to
the processing plants - or quantities of their monstrous
tyres. It’s wonderful that large tracts of station country are
being purchased for conservation, but none are exempt
from mining. Applications for mineral prospecting and
mining leases on Thundelarra and other leasehold land are
published weekly in the ‘West Australian’ newspaper.

Knowledge of fungi from the Rangelands which make up
most of this vast state are few indeed and I feel privileged
to have been there at just the right time to record some of
them.

Landscape Expeditions are jointly run by the Department
of Environment and Conservation and the University of
Western Australia Extension.

References:
Eldridge, D. & Tozer, M.E. (photography by Heino Lepp).
(1997) *A Practical Guide to Soil Lichens and
Bryophytes of Australia’s Dry Country*. Department
of Land and Water Conservation.
mosses and allied plants of Southern Australia*. Flora
of Australia Supplementary Series Number 20.

**LACCOCEPHALUMS ON KANGAROO ISLAND, JUNE 2008**
Richard Robinson
Department of Environment and Conservation, Manjimup, WA

Fire plays an important role in the ecology of many
species of Australian macrofungi (McMullan-Fisher et al.
2002, Robinson et al. 2008). A number of conspicuous
species respond immediately to fire and develop fruit
bodies from underground sclerotia within days of the bush
being burnt. Other taxa fruit in the autumn following early
seasonal rains. In both the Ravine de Casoars (Ravine de
Casoars Wilderness Area) and Platypus Waterholes
(Flinders Chase National Park), which were burnt in the
wildfire of December 2007, three such species were
regularly encountered.

*Laccocephalum tumulosum* is a large species that develops
pored mushroom-like fruitbodies up to 20 cm diameter
from sclerotia that may weigh several kilograms. The
sclerotium is comprised of soil bound together by fungal
mycelium to form a stone-like structure that gives rise to
its common name of ‘the stone maker fungus’.

Fig. 1. *Laccocephalum tumulosum*
Photo: Richard Robinson.

*Laccocephalum sclerotinium* is a small species developing
pored mushroom-like fruitbodies up to 30 mm diameter
from marble-sized sclerotia in the soil. The sclerotium of
*L. sclerotinium* is composed entirely of creamy white
fungal material with a very firm and dense texture
enclosed in a brown, brittle, skin-like casing.

Fig. 2. *Laccocephalum sclerotinium*
Photo: Richard Robinson.

The third species of *Laccocephalum* collected appears to
be undescribed. It was similar in appearance to *L. sclerotinium*, but larger in stature, with the cap up to 75
mm in diameter and the sclerotium 50 mm in diameter. It
differs from *L. sclerotinium* in having a ‘collar’ on the
stem where it emerges from the soil, and below the soil the
context of the stem is embedded with sand, ash and
organic material. The context of the sclerotium has a
marbled appearance with grey-brown gelatinous granules
enclosed within a creamy white fungal mass that is less
dense that that of *L. sclerotinium*. The microscopic
characters of *L. sclerotinium* and *L. nov. sp.* also differ.

(continued on page 7)
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Laccocephalum nov. sp. has subclavate basidia about 31.1 x 7.8 µm and large subfusiform spores about 11.9 x 4.5 µm, while L. sclerotinum has basidia about 19.4 x 4.8 µm and elliptic spores about 5.3 x 2.8 µm. Taxonomic investigation of the undescribed Laccocephalum is continuing and it is intended to compile a comprehensive description of the species for publication in the near future.

References

COLLECTION OF A LACCOCEPHALUM IN QUEENSLAND
Jane Thompson

In 2006 I made a collection of an amazing fungus, a species of Laccocephalum, similar to L. tumulosum. The fungus appeared after fire, in the Glasshouse Mountains, Queensland where I live. I found it fruiting in our windbreak, an endangered Regional ecosystem, RE 12.5.3. (The first number ‘12’, stands for the bioregion in Queensland, ‘5’ is the land zone which is old loamy sandy plains, ‘3’ is the vegetation type with Eucalyptus tindaliae and/or E. racemosa, Banksia integrifolia and Xanthorrhoea sp.)

Five days after this area was burnt for the first time in approximately 50 years, large fungal fruiting bodies started coming up. Sixty-eight mottled brown fungi of varying sizes from 8 to 26 cm across the tops of their caps appeared in a 5 m area. Smaller patches of one to ten, large dinner plate-like fungi, were dotted around in the ash. We had never seen such a fruiting event and I emailed the Queensland herbarium to see if they were interested.

I was asked to collect specimens over a range of development stages and, if possible, to dig down some distance into the soil under one of the fruiting bodies to obtain the tuber. I was so intrigued I went up to the area and photographed, drew and then started digging like an archaeologist with a strong kitchen fork and tablespoon and mattock. About 3 cm down I came to the top of a hard football shape with small bumps. The smell of mushroom was strong and it attracted two types of ants, different flies and birds. Hours later I had unearthed the most amazing tuber weighing in at 13 kg, minus the cap and stalk. When I lifted it out and tried to put it in a bag it broke and exposed its inner structure. The outer hard casing was lined with white mycelium or fungi ‘roots’. A 2 cm gap, dripping with tasteless liquid, separated the case from the centre, a large mass of dirty pink, lung-like, spongy substance with mycelium running through it. I thought the cool, profusely driping liquid was interesting because the air was hot, and the ground warm, not as cool as usual, and we were still in drought.

How to get the specimen to the Herbarium quickly was a problem. Luck was on my side as the mycologist/botanist Nigel Fechner was on a field trip at nearby Wamuran and he and a colleague came to collect the fungus for (continued on page 8)
identification and to put in the Herbarium. He said that he had never seen such a large specimen of a *Laccocephalum*. (It also turned out that he helps identify many of my plant samples I send in. So it was nice to put a name to a face.)

Nigel told us that work is being done in Western Australia on this genus. Nigel was excited about these Queensland specimens and pleased to have them to study. He said that the tiny holes underneath the large cap are the pores from which the spores are liberated. The genus belongs in a large group of fungi, the polypores. The tuber is called a sclerotium; the inside is solid, but soft. It is made up of layer after layer of compressed mycelium. It is very moist, and becomes quite fragile, especially in hot, dry conditions. This group of fungi causes cubical wood rot in the wood on which it grows. Fire stimulates the sclerotium to put up a fruiting body.

I hear from older locals that the fungus is well-known but may appear only once in their lifetime. It comes up only after a fire and while the ash is still hot. One species of *Laccocephalum*, *L. mylittae*, is sometimes called Native Bread. The common name gives us a clue that the fungus could be edible. I wonder if the aborigines used fire not only to chase animals out of forests for food and to make it easier to walk through the bush but also used it to trigger these fungi to fruit and therefore provide a good feed?

(I am grateful to Richard Robinson and Nigel Fechner for comments on the *Laccocephalum* species in this article. Dr Robinson considered that, from the description, it was probably not *L. tumulosum*—Ed.)

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**LAETIPORUS PORTENTOSUS** *(a bracket fungus)*

*John Kinsella*

It has weathered the storms, though its white punk posture has injected rot into the heart of the eucalypt, and its pore surface, green sheen of a mirror more luminous than glass, is breached by numerous invertebrates, larvae that will interphase with our sense of space, the air we breathe, prayer-trace and outdoor embrace of change and surprise: such brackets we hinge on, use to prise apart our rituals, distract from grief; halo we might walk beneath, and so the first people here carried fire in its smouldering tinder.

(John Kinsella is one of Australia’s foremost poets. The poem was sent to Fungimap after Tom May had identified the fungus *Laetipoeus portentosus* from a photograph sent in by John. Tom says that the ‘green sheen’ mentioned in the poem is apparent in the photo but the usual colour of the fungus is whitish to pale yellow—Ed.)
In early 2008 the Brisbane City Council commissioned an investigation into the effects of climate change on the macrofungi that occur in the Brisbane region. The city of Brisbane contains numerous parks and reserves which conserve extensive areas of natural forest and woodland. These not only act as wildlife reservoirs for the south-east of Queensland, they also preserve samples of its original flora and habitats that have been largely destroyed by human occupation and development. With this in mind, the study was undertaken with the intention of providing the Council with suggestions on how to best preserve the macrofungi contained in the parks and reserves and thereby lessen the overall effects of climate change on the biota of the Brisbane region.

Dr Tony Young and Mr Nigel Fechner began the study in March 2008 and the completed report (65 pages) and its Appendix (56 pages) were submitted to the Council in August 2008. The study had four aims:
1. To consider (briefly) the critical importance of the macrofungi in the Brisbane biota;
2. To document areas of Brisbane where the various ecological groups of macrofungi are to be found and the relevance of those regions to biodiversity of the macrofungi;
3. To examine those areas and determine their vulnerability to various impacts imposed or exacerbated by climate change; and
4. To suggest methods of ensuring conservation and preservation of the macrofungi and the ecosystems they support.

While the documents have not yet been publicly released by the Council, it is of considerable importance that the Australian mycological community is aware that this baseline study now exists, because its studies and methodology may be of value in similar Australian research conducted in other locations. The authors stress that this study was conducted under a very limited time frame and they consider it only the start of further studies on climate change and the Australian macrofungi. Despite this shortcoming, the authors hope that their study will assist similar research in other parts of Australia. Interested researchers should contact the Biodiversity Planning Natural Environment & Sustainability Branch, Brisbane City Council, G.P.O. 1434, Brisbane, Qld, 4001, and request further information.

With very few fungi appearing during summer a naturalist’s attention must turn to other things - such as some unusual looking flies that settled on sags (Lomandra longifolia) just near our house.

In late November 2008 a group of about six individuals stayed around for an hour or more. They conveniently remained motionless while I examined them closely and took numerous photographs. Their distinctive shape made identification relatively easy: they were sun flies (Tapeigaster sp.), and they belong to an endemic Australian genus in the family Heleomyzidae that occurs in temperate forests throughout the world. Adult Tapeigaster spp. feed on the fluids of dead animals; the larvae feed on fungi.

But being mid summer there was not a mushroom to be seen! A brief shower a month later stimulated the growth of a cluster of Amanita sp. which quickly caught the attention of the resident Fungimapper as well as a group of (continued on page 10)
sun flies. According to the ANBG website (cited below) the territorial male patrols the cap of mushrooms or boletes while the female lays her eggs on the gills or pores.

Fig. 1. Sun fly on fungus.
Photo: Sarah Lloyd

The sudden appearance of the sun flies prompted several questions. Firstly, had there not been some summer rain where would the females have laid their eggs? Secondly, how do the larvae cope with the desiccation of their fungal home, which in the summer months occurs in a matter of days? Unfortunately, these questions remain unanswered, but a ‘Google’ search unearthed some information about another fungivorous fly, but one whose lifestyle is restricted to the cooler wetter months.

*Perissomma fusca* is a small (2-4 mm) fly whose larvae have only been found in *Boletus granulatus* that occurs in association with introduced pines. While some fungivorous flies (e.g. fungus gnats, *Mycetophilidae* spp.) target fresh boletes, *P. fusca* prefer the soggy mass of decomposing fruit-bodies that need the very moist conditions typical of winter months. Consequently, adult *P. fusca* are only seen from late autumn to late winter.

In all aspects of its life *P. fusca* has adapted to the brief appearance of its larval habitat: decomposing fungi. Ovipositing occurs during the early stages of fungal decomposition and the eggs hatch after one or two days when the fungus is liquefying. The larvae, whose mouthparts and respiratory system are modified to allow them to live in a semi-liquid medium, feed on the fungal debris. The mature larvae have chitinized skin and devices for closing external orifices which enables them to withstand desiccation. The pupae, which develop within a puparium formed from the unmodified larval skin, aestivate in soil or litter during summer when soggy decomposing fungi are few and far between.

(The genus name *Perissomma* comes from *perissos* meaning extraordinary, beyond the regular number and *omma*: eye. *Perissomma* have three ocelli and their eyes, remarkable in that they are divided laterally into completely separated dorsal and ventral components, are separately innervated and thus function as four eyes.)

Anyone who has collected fungi will soon discover that they got much more than they bargained for. Fungal fruit-bodies provide sustenance for a range of invertebrates including mites, gnats, springtails, beetles, moths and nematodes. Some feed on any of the fungal parts (the generalists); others specialise on just the hyphae or spores. And, in typical invertebrate fashion, there are the opportunists – the predators that feed on the feeders of fungi.

Like Fungimappers who have to cope somehow with the dearth of study material in the drier months, invertebrates too have evolved some intriguing adaptations to cope with the unpredictable and ephemeral nature of their fungal hosts.

**References:**

**HYPHAWEB**
Heino Lepp has added another section to the Australian National Botanic Gardens (ANBG) fungal website. He says ‘It’s a mixed bag of self-contained snippets and stories, from humorous to somewhat technical. Some are related to existing parts of the website and eventually will be linked from the relevant parts … There are more in the pipeline’. They are listed together, with a short description of each:


(’It’s a fun and fascinating addition to an already wonderful website. Topics are diverse, ranging from one on Beatrix Potter to Megafaunal extinctions and fungal spores and a quirky section on fungi and Valentine’s Day—Ed.)

**HANDY HINT**
From Ian Bell:

**Where was that fungus?**

If you use a GPS and have a digital camera, it only takes a moment to take a photo of the GPS screen. You then have the location, date and photos all together.
Flora, Fauna and Fungi and the interdependencies between them need to be understood and managed in order to nurture Australia’s bushlands. This message is slowly gaining recognition and implementation. Western Australia’s Department of Environment and Conservation (DEC) Science Division recently launched a new series of Science Information sheets. The series aims to communicate DEC research findings and to promote understanding of biodiversity conservation and natural resource management in WA. The series is available online at the DEC website and can be directly accessed at: http://www.dec.wa.gov.au/science-and-research/publications-and-resources/factsheets-posters.html

So far (to March 2009) three of the eight information sheets posted outline conservation initiatives in which fungi are a significant operational component.

- **Sheet 1/2009:** Fire mosaics can enhance macrofungal biodiversity - by Richard Robinson outlines how fungal community structure on burnt sites differed each year following fire for at least five years, and that at the sub-regional scale the diversity of fungi is enhanced by a mosaic of vegetation with different post-fire phases and fire intensities.

- **Sheet 4/2009:** Gilbert’s potoroo translocated to new areas find their fungi - by Neale Bougher and Tony Friend announces a critical step along the road to rescuing these potoroos from extinction – now we can be confident that Gilbert’s potoroos can be successfully translocated into areas with at least two vegetation types because they immediately and sustainably access a diverse range of fungi.

- **Sheet 7/2009:** Woylie declines: what are the causes? - by Adrian Wayne shows how understanding about fungal food resources and their relationship to healthy and declining populations of woylies is an integral part of understanding the management of these animals.

These information sheets are indicative that DEC is implementing quite a range of research and conservation activities involving fungi in WA. More information sheets will be forthcoming, and hopefully the series will continue to help to promote the message above about Flora, Fauna and Fungi.

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**A FUNGUS THAT IS SIMULTANEOUSLY AN ASCOMYCETE AND A BASIDIOMYCETE**

Heino Lepp

That's the translation of an eye-catching title of an article by R. Ferry in Revue Mycologique (volume 17, 1895, pages 162-167). Moreover, it's about one of the Fungimap targets: *Laccocephalum mylittae* (Native Bread) - though Ferry talks of *Mylitta australis*, The Revue included summaries of papers published in other journals. Ferry summarized (and quoted from) part of a paper by Charles Bommer about sclerotia and mycelial cords (*Sclérotes at cordons mycéliens*, which appeared in volume 54 (1894-1896) of Mémoires couronnés et Mémoires des savants étrangers, published by l’Académie Royale de Belgique). I haven't seen Bommer's paper but have seen it described as taking up the first 116 pages of those *Mémoires* (with an additional 6 pages of plates) and with the discussion of Mylitta australis occupying pages 67-86.

The name *Mylitta australis* had been created by the Reverend Berkeley in 1839 for the sterile sclerotium but a fruiting body was not found until much later and it was not until 1892 that the latter was formally described as *Polyergusmylittae*. The nature of Mylitta australis and, later, the relationship between it and *Polyergusmylittae* puzzled various mycologists. Berkeley had thought *Mylitta australis* to be a truffle and Cooke's 1892 *Handbook of Australian Fungi* included *Mylitta australis* in the ascomycetes as a truffle, though Cooke wrote that spores were unknown. Bommer, as reported by Ferry, found swollen-ended hyphae within specimens of *Mylitta australis* and, within each swollen end, one or more ovoid bodies, with the largest swellings having just one large ovoid body per swelling. These large ovoid bodies were brown, quite refringent and with verrucose surfaces. All in all very much like spores, so Bommer took them to be ascus. *Mylitta australis* would therefore take its place in the truffle family Tuberaceae. In Bommer's words: ‘The asci are strongly analogous to those of *Tuber melanosporum*’.

Ferry posed the question: If *Mylitta australis* were a truffle, what of *Polyporus mylittae*? Once again he quoted Bommer: ‘Perhaps we have here a case of parasitism, such as that of *Cordyceps ophiglossoides* or *Boletus parasiticus* which always develop, respectively, on *Elaphomyces* and *Scleroderma*’. (continued on page 12) (continued from page 11)
While most Cordyceps species parasitize invertebrates, Cordyceps ophioglossoides is a widespread parasite of the truffle genus Elaphomyces in the northern hemisphere. Though Bommer mentioned the parasitism hypothesis (as had others) he then wrote that a specimen of Mylitta australis in the British Museum revealed the truth. Within this specimen there was a cavity, its surface bearing many shallow pits, each lined with a hymenial layer very much like that of Polyporus mylittae. In mushrooms each gill surface bears a hymenial layer, composed of basidia, hyphal ends and, often, cystidia - all lined up in a palisade-like formation. You’ll find similar palisade-like layers in various other types of basidiomycetes - including the polypores. In the British Museum specimen the hymenial layers were sterile, lacking spores and mature basidia. Bommer noted that A.J.C. Corda, in the 6th volume of his Icones Fungorum (posthumously published in 1854), had recorded a similar sterile, palisade-like formation in Mylitta australis. In Bommer's view the tissue of the Polyporus-type palisade layers was identical with that of the rest of the Mylitta specimen, so it was not a case of one species growing on another. This led him to conclude that there was a very close connection between Mylitta australis and Polyporus mylittae - namely one fungus with two different reproductive mechanisms. Here are Bommer's words as quoted by Ferry: ‘Such an interpretation would lead to the conclusion that the fruitbody of a hymenomycete (Polyporus mylittae) is here, in reality, the conidiophore of the fruitbody of an ascomycete (Mylitta australis).’ Conidia are asexual spores and a conidiophore is a structure that bears conidia. Ferry noted that ‘Anton de Bary had long ago put forward the hypothesis that the basidiomycetes and the rust fungi might be conidial forms of ascomycetes’ and Ferry also wrote that the differences between basidia and conidia are not well-defined.

I don't know what Bommer saw (and stress again that I have not seen his paper) and the fungus is not simultaneously an ascomycete and a basidiomycete, but the paper is of some historical interest. My impression is that Bommer's Mylitta australis observations were little studied by later workers, since I’ve yet to find the paper listed in any relevant bibliographies. You can find Revue Mycologique in the digital library of the Royal Botanic Garden, Madrid <http://bibdigital.rjb.csic.es/ing/index.php>.

**FUNGAL NEWS**

The 2008 PUBF Fungi Season – in brief
The PUBF Team: Neale Bougher, Roz Hart, Sarah de Bueger & Brett Glossop

The WA Naturalists’ Club, the Urban Bushland Council and the Department of Environment and Conservation with the support of Lotterywest, are pleased to announce the continuation of the Perth Urban Bushland Fungi Project (PUBF) in 2009. There will be six public events this year, focussing on the hills of Perth. In addition, as in past years, there will be a weekend workshop held outside Perth.

The Project team are currently planning events for 2009 and information on all our fungi events will be posted on the PUBF website at [www.fungiperth.org](http://www.fungiperth.org) as soon as possible. It is important to book a place if you wish to take part in any of our fungi walks or workshops. Email at fungi@iinet.net.au is the best way to contact us, as the PUBF team all work only part-time.

Fungi Reports from surveys undertaken in 2008 were presented to the bushland groups involved, at the Urban Bushland Council AGM on 3 March 2009. These reports are now available on the PUBF website.

A greatly expanded new edition of Fungi of the Perth Region will be available on-line from the PUBF website from April 2009. The book has a self-managed format and design, enabling pages with new additional species or other updates to be simply appended to hard copies of the previous edition.

Looking back over the 5 years that the Perth Urban Bushland Fungi Project has been collecting data, it is interesting to see that 27 of the possible 105 target species have been recorded. Seven of the target species were recorded every year, in decent numbers. These were Amanita xanthocephala (31 records), Boletellus obscurecoccineus (13), Omphalotus nidiformis (39), Poronia erici (15), Schizophyllum commune (29), Stereum hirsutum (15) and the Tremella mesenterica group (74). On the other hand, in three cases: Coprinus comatus, Leucopaxillus lilacinus and Podoserpula pusio the target species have been found once only.
The big event this summer in Queensland was the Mycoblitz, held on the Atherton Tablelands at the end of February. The Blitz was coordinated by Sandra Abell-Davis from James Cook University and the new Tropical Herbarium in Cairns. She successfully organised eight cars and about 40 fungal enthusiasts for five days of fungal forays, photographs, collections and identifications. We were all ferried, fed and watered successfully and apart from a few leech bites and stinging tree encounters a great time was had by all.

There were mycophiles from all over Australia and a strong contingent from the northern hemisphere. There was excellent expertise in the microfungi, particularly rusts, smuts and tar spots (Ceri Pearce and Roger Shivas), ascomycetes, especially parasitic ones like Nectria (Amy Rossman and Priscilla Cheverri), slime moulds (Elaine and Peter Davidson), and in the basidiomycetes with the Agaricales (Rytas Vilgalys), Boletaceae (Roy Halling), Entolomataceae (David Largent), Ramaria (Nigel Fechner), tropical Aussie fungi generally (Matt Barrett) and Truffles (Sandra Abell-Davis). There was a strong photographic contingent including Bruce Fuhrer and Garry Sankowsky. The locals were generous with their knowledge and the visitors delighted in the local fungi and ecosystems.

It is amazing how much data can be accumulated by an enthusiastic group over five days. Preliminary data sheets show that there are over 1000 new records for fungi for the region. Some 80 species were identified, along with collections identified only to genus (85), family (21) and phylum (4). About 90 Fungimap records were made during the Blitz, covering 32 target species, which was an increase of ten species for the area (Table 1).

Table 1. Fungimap Targets found in the Atherton-Cairns area before (B4) and during the Mycoblitz (BLITZ). * New record for the area.

<table>
<thead>
<tr>
<th>Target</th>
<th>B4</th>
<th>BLITZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amauroderma rude</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Anthracophyllum archeri *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Asperoë rubra</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Bolbitius vitellinus *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Boletellus obscureoccicucus *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Calostoma fuscum *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Ceratiomyxa fruticulosa</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Colus hirudinosus group</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Cookeina tricholoma</td>
<td>+</td>
<td></td>
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<tr>
<td>Cymatoderma elegans</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Cyptotrama aspratum</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Dictyopanus pusillus</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Dictyophora indusiata (Phallus)</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Gloeophyllum concentricum</td>
<td>+</td>
<td></td>
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<tr>
<td>Gymnopilus janonius *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Helvella villosa (H. chinensis) *</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Hericium clathroides</td>
<td>+</td>
<td></td>
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<tr>
<td>Laccocephalum mylittae *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Marasmius elegans</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Microporus affinis</td>
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<td>Microporus xanthopus</td>
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<td>+</td>
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<tr>
<td>Mycena austroringida</td>
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</tr>
<tr>
<td>Mycena vescidocruenta</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Omphalotus nidiformis</td>
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<tr>
<td>Oudemansiella radicata (Xer. australis)</td>
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<td>+</td>
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<td>Panus fasciatus</td>
<td>+</td>
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<tr>
<td>Podaxis pistillaris</td>
<td>+</td>
<td></td>
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<tr>
<td>Pseudohydnum gelatinosum *</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Schizephyllum commune</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Stereum ostrea</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Tremella mesenterica *</td>
<td>+</td>
<td></td>
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<tr>
<td>Volvariella speciosa</td>
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<td>+</td>
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</tbody>
</table>

The pick of the weirdest unnamed fungus was the yellow hydnoid fungus (Fig. 1) found at Davies Creek. We may have to wait until Matt Barrett does DNA analysis to find out this specimen’s genus. Most of the better collections of the named species (lodged a the Tropical Herbarium) and unnamed fungi (lodged at the Queensland Herbarium) were photographed and dried, so hopefully some time in the future more mycological work will be done on these exciting tropical specimens. (continued on page 14)
As for other events in Queensland, the Queensland Mycological Society has successful forays with good summer rains to the Springbrook Plateau, Mt Glorious and Mt Tamborine. Members are continuing to refine the system for managing data and images with a system for naming images. The general meetings continue to be lively and stimulating – a highlight of February’s meeting was an exposé of ‘Fungi and their extraordinary sexual cycles’ by Andrew Kettle.

Central Coast Fungal Group, NSW
Pam O’Sullivan

There may be some impromptu fungal forays as well as the fixed dates for activities (see ‘Forthcoming events’). If someone sees that the fungi are ‘going wild’ in their area please let us know and we may be able to take advantage of such ‘fruitings’!

This year we are hoping to establish some survey sites across the region that we can monitor on a regular basis. To do this effectively we are hoping to build up a number of small teams to work in different areas. We will train participants in surveying and collecting skills. There will also be a strong emphasis on documentation and preservation of specimens, so that we will have properly documented voucher specimens to go with our species lists. If you are an experienced mycologist or have other skills that you can contribute to this work we would appreciate your input into this project. If you are interested please contact us and discuss what level of involvement would suit you.

Greg Bell, who recently moved up to the Port Macquarie region, is interested in forming a group to look at the fungi in that area. Contact details are: <gregbell@gmail.com>

The fungi are really starting to move in this region after all the rain in past weeks so happy and safe foraying for 2009.

THE FUNGIMAP FACT SHEET DATABASE
Tom May & Paul George

During 2008 Fungimap created the Fungimap Fact Sheet Database (FFSD). The FFSD holds information relevant to the publication of material about the target species. For each species, there are fields in the database for the scientific and common names, and also for descriptive information about the various structures of the fruit-bodies (cap, gills, pores, and so on, as appropriate to different sorts of fungi). In addition, the FFSD includes links to photographs of the species and to other images such as distribution maps and graphs.

Most descriptive information entered in the FFSD came from existing sources (in particular Fungi Down Under) but data on some new target species were compiled during the course of the project. New graphs summarising the time of appearance of each species were produced, from the main Fungimap records database (see example below).

Fact Sheet Fusion is used to produce outputs. A template can be created for one particular type of output, such as the html code required for a web page. This template can be edited without having to separately prepare coding for the individual page for each species.

In tandem with the development and populating of the Fungimap Fact Sheet Database, a major inventory and assessment of images lodged with Fungimap was carried out. Of the more than 3500 images submitted to Fungimap, some 2002 have been retained as support for records, and also as a source of photographs for publications. The images inventory now contains information on the type of image (digital, print and transparency) and where they are located in the Fungimap office. All electronic images have been assessed for quality. Checking of the copyright status of images is still to be completed. Once this is done, fact sheets will be placed on the Fungimap web site.

Creation of the Fungimap Fact Sheet Database was generously supported by The Norman Wettenthal Foundation. Most of the programming and data compilation was done by Paul George and Tom May, and the considerable task of checking and assessing images along with correcting errors in records was carried out by Paul and Gail Stott, Wendy Cooke and Graham Patterson.

Having the Fact Sheet Database operational means that data can readily be updated and new target species can be added. In addition to producing web pages and material for a CD-ROM, there are now exciting possibilities for using the FFSD to develop fungal field guides for specific geographic regions or habitats (arid, rainforest, coastal etc.). In time, you may be even be able to download a field guide for your own favourite patch of bush.
BOOK REVIEW

BRUSH WITH GONDWANA:
THE BOTANICAL ARTISTS GROUP OF WESTERN AUSTRALIA

Text by Janda Gooding
Illustrations by Rica Erickson, Pat Dundas, Ellen Hickman, Penny Leech, Philippa Nikulinsky, Margaret Pieroni & Katrina Syme
Reviewed by Helen Cohn, Royal Botanic Gardens Melbourne

The Botanical Artists Group of Western Australia is a group of seven women (dare one call them the BAG ladies?) whose shared passion is the scientifically accurate and aesthetically pleasing depiction of the natural world. In recent times the art of botanical illustration has undergone a resurgence, with Australia now having some of the world’s most highly regarded artists. From Fremantle Arts Press comes a book on the work of some of Australia’s best practitioners of this highly skilled art. Issued to co-incide with the 2008 exhibition of the members of the Botanical Artists Group of Western Australia, this book is at once a celebration of their work and a window into the natural world that they depict.

The Group was formed in the early 1990s. Each year from 1992 to 2003 members’ work has been exhibited at Kings Park and Botanic Garden in Perth, while more recent exhibitions have been held in commercial galleries. This is a significant achievement and the book a worthy acknowledgement of dedication and accomplishments of the Group’s members.

Each of the artists reflects on the path that brought them to botanical art, whether it be from a commercial art background or through frustration at not being able to find adequate guidebooks to the local flora, and the inspiration that they draw from the bush around them. They describe the way in which they decide what to illustrate, how they select the specimens they use, and strong connection between science and art in their work. The media used by the artists ranges from watercolour to coloured pencils, each offering different challenges in the accurate depiction of the plants being studied. What comes through clearly is the artists’ passion for the Australian flora and the world around them.

Doyen of the Group is Rica Erickson, who has been writing about and illustrating the Australian flora since the early 1950s. She was thus in the vanguard of the modern era of scientific illustration in Australia. Among her interests were trigger plants and orchids and she became a specialist in these plants. Such is the concentrated study given to specific groups of plants by botanical artists that, like Erickson, they become expert in those plants. Margaret Pieroni has spent much time studying and painting *Verticordia* and *Dryandra*, while Pat Dundas’s particular interest has been orchids.

Of special interest to readers of Fungimap News is the work of Katrina Syme, well-known to many for her role as Fungimap’s Vice President and Western Australian co-ordinator. Syme’s field of expertise is fungi. A number of her fungi paintings are reproduced, among them ones that show the fungi nesting in the forest litter, others being working drawings with notes about the subject and particularly the colours. For Syme, painting fungi is only part of the story: her forays seeking specimens to paint have yielded undescribed species and resulted in many specimens being lodged in Australia’s herbaria.

Much of the book is a showcase of the work of the members of the Botanical Artists Group. A wide range of their work has been beautifully reproduced, each work chosen to highlight the individuality of the artists’ styles as well as the infinite variety of the plants that have become their subjects. The captions to the illustrations are in such a small font, and in such light ink, that this reviewer had to reach for a magnifying glass to read them. The book concludes with, for each artist, the landmarks in their careers, the publications in which their work had been reproduced and the collections in which their work is represented.

*Brush with Gondwana* has admirably achieved its object of celebrating the work of seven of Australia’s most accomplished botanical artists. Not only does the book give an insight into the integral connection between scientific accuracy and beautiful works of art, it offers the reader a visual feast of some of Western Australia’s most intriguing and spectacular plants. Underlining the work of each of these artists is their concern for the accurate depiction of a flora that is immensely rich, still being discovered, and of uncertain future.

Cortinarius archeri, watercolour over pencil,
Katrina Syme 2002
FUNGIMAP V CONFERENCE Wallerawang NSW May 21st to May 25th 2009

Conference Speakers and Workshops

We are delighted to be holding our 5th Fungimap Conference in conjunction with the Sydney Fungal Studies Group. Conference programmes with full details and including NSW train and bus information will be sent to all registrants in the coming weeks. Here is a sneak preview of the forthcoming Fungimap V Conference programme.

The first day, Friday 22nd May 2009 will be a day of talks including:

- Dr Steve Stephenson from USA on Slime moulds
- Dr Peter Johnston from NZ on Discomycetes
- Dr Michael Priest from NSW on Microfungi natives
- Dr Peter McGee from NSW on Fungi in the restoration of Ecosystems
- Dr Simone Louwhoff from VIC on Lichens
- Dr Neale Bougher from WA on Perth Urban Bushland fungi and WA

Speakers presenting a 15 minute snapshot of Favourite Fungi from around Australia:

- Dr Matt Barrett from WA/NT on Macrofungi of the Kimberley
- Pam Catcheside from SA on Fungi from the Driest State, South Australia
- Genevieve Gates from TAS on Entoloma fungi
- Dr Frances Guard from QLD on Sunshine Coast fungi
- Dr Ray Kearney from NSW on Lane Cove fungi
- Katrina Syme from WA on A Season of Fungi (Denmark WA area)

This year’s key note address will be given by Dr Tom May on “A Journey among the Fungi”. As in past years, we will be running 6 concurrent workshops on Saturday 23rd May and Sunday 24th May 2009.

Conference registrants will attend one workshop each day from a choice of six allocated for each day.

- Genevieve Gates from TAS on Wood decay fungi
- Paul George from VIC on Photographing fungi
- Dr Roy Halling from USA on Boletes
- Dr Peter Johnston from NZ on Disc fungi
- Dr Teresa Lebel from VIC on Truffle ID with Melissa Danks
- Dr Simone Louwhoff from VIC on Lichens
- Dr Tom May from VIC on Keying out fungi
- Dr Michael Priest from NSW on Microfungi
- Helen Rommelaar from VIC on Curating specimens
- Dr Steve Stephenson from USA on Slime moulds
- Katrina Syme from WA on Documenting and collecting skills

FORTHCOMING EVENTS (MARCH – AUGUST 2009)

Please note that not all these activities are organised by Fungimap.

Sydney Fungal Studies Group. Website: www.sydneyfungalstudies.org.au
Program and workshop details are on the website. Topics will appear when speakers and their topics have been determined. The website contains interesting images and articles. Reproduction of material is possible and easy to obtain as email links are provided on the website to the relevant author (under each image, also see ‘Contacts’ in the directory). Forays will commence at 10 am. If weather is unsuitable, or you wish to enquire about a particular foray, please contact the relevant co-ordinator listed in the events table below.

Central Coast Fungal Group, NSW Contact Pam O’Sullivan Email: pam@osullivan.com.au
Field Naturalists Club of Vic, Fungi Group (FNCV). Website: www.vicnet.net.au/~fncv then Calendar of events. All forays start at 10.30 am, BYO lunch. Monthly meetings on Monday nights start at 8.00 pm at the FNCV meeting rooms, Blackburn. For non-members there will be a $5.00 fee per foray for insurance. For further details contact Virgil Hubregtse, Ph: (03) 9560 7775.

*Please note that, due to the recent bushfires, some forays may be cancelled. Check with Virgil Hubregtse.

Adelaide Fungal Studies Group. (A club of the Field Naturalists Society of SA). Forays: BYO lunch, meet 10 a.m. unless otherwise stated. On the Tuesday after each foray, a meeting will be held at the State Herbarium of SA, Hackney Road at 7.30 pm. Specimens collected on the foray will be examined.
Contact Pam Catcheside, Ph: (08) 8222 9379, Email: Catcheside.Pam@saugov.sa.gov.au

Queensland Mycological Society. Website: http://www.qms.asn.au/ QMS Inc. General Meetings are held in the Bailey Room at the Queensland Herbarium, Mt Coot-tha Botanical Gardens, commencing at 7pm on the second Tuesday of each month (unless otherwise advised). QMS Field Trips: approximately 3 hours duration; numbers are limited; bookings essential please check our website for details http://www.qms.asn.au/field.html. Field trips will be monthly, usually on the second last or last Saturday of the month. For further information contact the QMS secretary, Email fungiqld@yahoo.com.au
**Perth Urban Bushland Fungi Project (PUBF)**
For latest information, check website: [http://www.fungiperth.org.au](http://www.fungiperth.org.au)
N.B. Places on forays, workshops etc. are limited so visit the website for details.

**WA Naturalists’ Club, Fungi Study Group**
Website: [http://www.wanats.iinet.net.au/fungigroup.html](http://www.wanats.iinet.net.au/fungigroup.html) Fungal forays, workshops, identification evenings and talks, based in Perth. WA Naturalists’ Club, Email: wanats@iinet.net.au

**Fungimap WA, forays in the Denmark area**
Contact Katrina Syme, Email: katrinasyme@gmail.com

**Fungi workshops in the South Coast NRM Region, WA with Katrina Syme**
Bring lunch; morning and afternoon teas provided. Numbers limited, bookings essential. Phone Craig Carter (08) 9848 1019, Email: CCarter@greenskills.org.au

**Friends of Warwick Bushland** (Friends of Warwick Open Space Conservation Area & Friends of Warwick Senior High School Bushland Bush Forever Site no 202). Meet at Bowling & Tennis Club car park, Lloyd Drive, Warwick Co-ordinator: Janina Pezzarini Ph: (08) 9447 9494, Email: neen@ext.uwa.edu.au

**Fungal network of New Zealand**
Contact: Petra White, Email: white.p@xtra.co.nz. Website: [http://www.funnz.org.nz](http://www.funnz.org.nz)

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<th>State</th>
<th>Contact</th>
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<tr>
<td>Adelaide Fungal Studies Group Programme meeting, microscope workshop.</td>
<td>3rd MARCH</td>
<td>State Herbarium of SA, Hackney Road</td>
<td>SA</td>
<td>Pam Catcheside, Ph: (08) 8222 9379</td>
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<td>Sydney Fungal Studies Group Foray</td>
<td>7th MARCH</td>
<td>Coachwood Glen</td>
<td>NSW</td>
<td>Elma &amp; Ray Kearney, Ph: (02) 9428 5336</td>
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<td>Central Coast Fungal Group Fungi ID Workshop</td>
<td>11th MARCH</td>
<td>Rumbalara</td>
<td>NSW</td>
<td>Gosford City Council Bushcare, Ph: (02) 4304 4564</td>
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<td>The Watagans</td>
<td>NSW</td>
<td>Pam O’Sullivan, Email: <a href="mailto:pam@osullivan.com.au">pam@osullivan.com.au</a></td>
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<td>Sydney Fungal Studies Group Foray</td>
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<td>Mt. Wilson</td>
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<td>Queensland Mycological Society (QMS) Foray</td>
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<td>Central Coast Fungal Group Fungi ID Workshop</td>
<td>1st APRIL</td>
<td>Wycare in Wyong</td>
<td>NSW</td>
<td>Nikki Bennett, Ph: (02) 4350 1638</td>
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<td>Sydney Fungal Studies Group Foray</td>
<td>4th APRIL</td>
<td>Robertson</td>
<td>NSW</td>
<td>Roy Freere, Ph: (02) 4885 1766</td>
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<td>Field Naturalists Club of Vic, Fungi Group (FNCV) Foray</td>
<td>5th APRIL</td>
<td>Beeches (cancelled due to bushfire</td>
<td>Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<td>Field Naturalists Club of Vic, Fungi Group (FNCV) Meeting. Talk, Geoff Lay ‘Tropical Fungi’</td>
<td>6th APRIL</td>
<td>FNCV meeting rooms, Blackburn</td>
<td>Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<tr>
<td>Narooma Shire Council Fungi Workshop</td>
<td>7th APRIL</td>
<td>Narooma</td>
<td>NSW</td>
<td>Teresa van der Heul, Email: <a href="mailto:vanderheul@vanderheul.com.au">vanderheul@vanderheul.com.au</a></td>
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<tr>
<td>Queensland Mycological Society (QMS) Meeting</td>
<td>14th APRIL</td>
<td>Bailey Room, Mt Coon-tha Botanic Gardens</td>
<td>Qld</td>
<td>Email: <a href="mailto:fungiqld@yahoo.com.au">fungiqld@yahoo.com.au</a></td>
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<tr>
<td>WA Wildflower Society Perth Branch Talk, Katrina Syme ‘Fungi of the South Coast’</td>
<td>14th APRIL</td>
<td>8pm Subiaco Community Centre, Bagot Rd, Subiaco</td>
<td>WA</td>
<td>Nina McLaren Ph: (08) 9448 5419</td>
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<tr>
<td>Sydney Fungal Studies Group Foray</td>
<td>18th APRIL</td>
<td>Bola Creek</td>
<td>NSW</td>
<td>Don &amp; Judith Gover, Ph: (02) 9661 4898</td>
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<td>Central Coast Fungal Group Foray</td>
<td>18th APRIL</td>
<td>Williams River Day use area</td>
<td>NSW</td>
<td>Skye Moore, Ph: 0427 903 372</td>
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<td>Field Naturalists Club of Vic, Fungi Group (FNCV) Foray</td>
<td>19th APRIL</td>
<td>Mount Macedon</td>
<td>Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<tr>
<td>Queensland Mycological Society (QMS) Foray</td>
<td>25th APRIL</td>
<td>Chermside West</td>
<td>Qld</td>
<td>Email: <a href="mailto:fungiqld@yahoo.com.au">fungiqld@yahoo.com.au</a></td>
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<td>Event</td>
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<td><strong>Field Naturalists Club of Vic, Fungi Group (FNCV) Foray</strong></td>
<td>26th April</td>
<td>Devilbend, Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<tr>
<td><strong>Sydney Fungal Studies Group Foray</strong></td>
<td>1st to 3rd May</td>
<td>Grampians, Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<tr>
<td><strong>Adelaide Fungal Studies Group Foray</strong></td>
<td>2nd May</td>
<td>Springwood, SA</td>
<td>Alec Wood, Ph: (02) 9570 1133</td>
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<tr>
<td><strong>FNCV Meeting. Talk, Mark Newbound 'Molecular surveys of fungi: a fruitless approach...'</strong></td>
<td>4th May</td>
<td>FNCV meeting rooms, Blackburn, Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<tr>
<td><strong>Adelaide Fungal Studies Group Meeting</strong></td>
<td>5th May</td>
<td>State Herbarium, SA</td>
<td>Pam Catcheside, Ph: (08) 8222 9379</td>
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<tr>
<td><strong>WA South Coast NRM Workshop with Katrina Syme</strong></td>
<td>9th May, 9am-4pm</td>
<td>Valley of Giants Education Room, Valley of Giants, off South Coast Hwy, E of Nornalup, WA</td>
<td>Craig Carter, Ph: (08) 9848 1019; <a href="mailto:CCarter@greenskills.org.au">CCarter@greenskills.org.au</a></td>
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<tr>
<td><strong>Central Coast Fungal Group Foray</strong></td>
<td>9th May</td>
<td>Hargraves Beach, NSW</td>
<td>Nikki Bennettts, Ph: (02) 4392 1728</td>
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<tr>
<td><strong>Field Naturalists Club of Vic, Fungi Group (FNCV) Foray</strong></td>
<td>10th May</td>
<td>Bunyip, Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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<tr>
<td><strong>New Zealand Fungal Foray/Australasian Mycological Society Conference</strong></td>
<td>10-16th May</td>
<td>Waikanae, Kapiti Coast, New Zealand</td>
<td>Paula Wilkie, email: <a href="mailto:wikiep@landcareresearch.co.nz">wikiep@landcareresearch.co.nz</a></td>
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<tr>
<td><strong>Queensland Mycological Society (QMS) Meeting (AGM)</strong></td>
<td>12th May</td>
<td>Bailey Room, Qld Herb., Mt Coot-tha Botanic Gardens, Qld</td>
<td>Email: <a href="mailto:fungiqld@yahoo.com.au">fungiqld@yahoo.com.au</a></td>
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<tr>
<td><strong>FUNGIMAP V. CONFERENCE</strong></td>
<td>Thursday 21st to Tuesday 26th May</td>
<td>Black Gold Country Cabins, Wallerawang, NSW</td>
<td><a href="mailto:fungimap@rbg.vic.gov.au">fungimap@rbg.vic.gov.au</a></td>
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<tr>
<td><strong>FUNGIMAP AGM</strong></td>
<td>Monday 25th May 7.30pm</td>
<td>Black Gold Country Cabins, Wallerawang, NSW</td>
<td><a href="mailto:fungimap@rbg.vic.gov.au">fungimap@rbg.vic.gov.au</a></td>
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<tr>
<td><strong>Sydney Fungal Studies Group Foray</strong></td>
<td>30th May</td>
<td>Strickland Forest, NSW</td>
<td>Pam O'Sullivan, Ph: (02) 4362 1543</td>
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<tr>
<td><strong>Adelaide Fungal Studies Group Foray</strong></td>
<td>30th May</td>
<td>Kaisersstuhl, CP, SA</td>
<td>Pam Catcheside, Ph: (08) 8222 9379</td>
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<td><strong>Queensland Mycological Society (QMS) Foray</strong></td>
<td>30th May</td>
<td>T.B.A., Qld</td>
<td>Email: <a href="mailto:fungiqld@yahoo.com.au">fungiqld@yahoo.com.au</a></td>
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<td><strong>Field Naturalists Club of Vic, Fungi Group (FNCV)</strong></td>
<td>JUNE</td>
<td>NO MEETING, FUNGIMAP CONFERENCE</td>
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<tr>
<td><strong>Adelaide Fungal Studies Group Meeting</strong></td>
<td>2nd JUNE</td>
<td>State Herbarium, SA</td>
<td>Pam Catcheside, Ph: (08) 8222 9379</td>
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<tr>
<td><strong>Royal Botanic Gardens Melbourne Seminar, Brandon Matheny, Inocybe: out of the Palaeotropics?</strong></td>
<td>3rd JUNE 1 pm</td>
<td>Mueller Hall, VIC</td>
<td>Tom May (03) 9252 2319</td>
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<tr>
<td><strong>WA South Coast NRM Workshop with Katrina Syme</strong></td>
<td>6th JUNE, 9am-4pm</td>
<td>Scotsdale Hall, Scotsdale Road, Denmark, WA</td>
<td>Craig Carter Ph: (08) 9848 1019; <a href="mailto:CCarter@greenskills.org.au">CCarter@greenskills.org.au</a></td>
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<tr>
<td><strong>PUBF with Darling Range Branch, WA Naturalists' Club. Fungi walk.</strong></td>
<td>7th JUNE</td>
<td>Bushland site, Shire of Mundaring, WA</td>
<td>Roz Hart, Ph: (08) 9334 0547; <a href="mailto:Roz.Hart@dec.wa.gov.au">Roz.Hart@dec.wa.gov.au</a></td>
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<tr>
<td><strong>Field Naturalists Club of Vic, Fungi Group (FNCV) Foray</strong></td>
<td>7th JUNE</td>
<td>Greens Bush, Vic</td>
<td>Virgil Hubregtse, Ph: (03) 9560 7775</td>
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</table>
Queensland Mycological Society (QMS) Meeting
9th JUNE Bailey Room, Qld Herb., Mt Coot-tha Botanic Gardens Qld Email: fungiqld@yahoo.com.au

Sydney Fungal Studies Group Foray
13th JUNE Mill Creek NSW Bettye Rees, Ph: (02) 9817 5978

Adelaide Fungal Studies Group Foray
13th JUNE Porter Scrub CP. Meet Lobethal. SA Pam Catcheside, Ph: (08) 8222 9379

Field Naturalists Club of Vic, Fungi Group (FNCV) Foray, short talk
14th JUNE Blackburn Lake (with Friends of Blackburn Lake) Vic Virgil Hubregtse, Ph: (03) 9560 7775

Adelaide Fungal Studies Group Meeting
16th JUNE State Herbarium SA Pam Catcheside, Ph: (08) 8222 9379

Field Naturalists Club of Vic, Fungi Group (FNCV) Foray
21st JUNE Dom Dom Saddle Vic Virgil Hubregtse, Ph: (03) 9560 7775

Walpole-Nornalup National Parks Assn. Foray (leader Prue Anderson), then Pizza Night. Date to be determined Bushland, Che Sara Sara. Meet Pioneer Park, Walpole, 2pm WA Colin Steele, Ph: (08) 9840 1309; David Edmonds Ph: (08) 9840 1105

Field Naturalists Club of Vic, Fungi Group (FNCV) Foray
5th JULY Blackwood Vic Virgil Hubregtse, Ph: (03) 9560 7775

Field Naturalists Club of Vic, Fungi Group (FNCV) Meeting
6th JULY FNCV meeting rooms, Blackburn Vic Virgil Hubregtse, Ph: (03) 9560 7775

PUBF with 'Bush Skills for the Hills’ Fungi workshop
12th JULY John Forrest National Park WA Roz Hart, Ph: (08) 9334 0547. Roz.Hart@dec.wa.gov.au

Field Naturalists Club of Vic, Fungi Group (FNCV) Foray
19th JULY Upper Reservoir Yarra Vic Virgil Hubregtse, Ph: (03) 9560 7775

Adelaide Fungal Studies Group Surveys in Parks (numbers limited)
20-24th JULY Naracoorte, South-east. SA Pam Catcheside, Ph: (08) 8222 9379

Adelaide Fungal Studies Group Foray
1st AUGUST Deep Creek CP. Meet Delamere Store SA Pam Catcheside, Ph: (08) 8222 9379

Adelaide Fungal Studies Group Meeting
4th AUGUST State Herbarium SA Pam Catcheside, Ph: (08) 8222 9379

Queensland Mycological Society (QMS) Meeting
11th AUGUST Bailey Room, Qld Herb., Mt Coot-tha Botanic Gardens Qld Email: fungiqld@yahoo.com.au

Adelaide Fungal Studies Group Foray
29th AUGUST Onkaparinga CP. SA Pam Catcheside, Ph: (08) 8222 9379

Adelaide Fungal Studies Group Meeting
1st SEPTEMBER State Herbarium SA Pam Catcheside, Ph: (08) 8222 9379

Adelaide Fungal Studies Group Final Meeting for year: Fungi of 2009, members’ photos
10th NOVEMBER State Herbarium SA Pam Catcheside, Ph: (08) 8222 9379

INSTRUCTIONS TO AUTHORS

Members and non-members of Fungimap are welcome to publish in the Fungimap Newsletter. Articles should be no more than 800 words, news items no more than 500 words; images should preferably be jpg, resolution at least 300dpi and submitted in at least the size that they are to be published. Avoid images larger than 1Mb (preferably copied to CD-ROM and posted). Please send your contributions to Pam Catcheside (Catcheside.Pam@saugov.sa.gov.au) or Fungimap, RBG Melbourne, Private Bag 2000, South Yarra, Victoria 3141 (fungimap@rbg.vic.gov.au). Articles submitted for publication in the Fungimap Newsletter should not be submitted to any other journal or newsletter awaiting publication or have been previously published in another Newsletter or journal. Authors submitting manuscripts are responsible for obtaining the copyright holder’s permission to reproduce any material for which the author does not hold copyright.
ACKNOWLEDGEMENTS: RECORDERS, FUNDING, VOLUNTEERS and SUPPORTERS

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FUNGIMAP
Royal Botanic Gardens Melbourne
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Email: fungimap@rbg.vic.gov.au
WEBSITE
This Fungimap Newsletter was edited by Pam Catcheside, Tom May & Lee Speedy

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