NOVEMBER 2002

AUSTRALIA'S FUNGI MAPPING SCHEME

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News from the Fungimap Coordinator

The 2nd National Fungimap Conference is fast approaching, and bookings are now open! There is information on page 6, and I urge you all to have a look and consider attending. Because we wish to keep group sizes small for forays and workshops, so that everyone has the chance to learn, attendance at the Conference is strictly limited to 150 people. The 2001 Conference was very popular, and I expect that this one will also book quickly, so if you would like to attend I encourage you to complete and return the enclosed registration form (page 7) as soon as possible. Bookings will close on 31st January 2003, but places may be filled before then.

The Conference Committee is:

Gudrun Evans, Fungimap Coordinator Ed Grev, Field Naturalists Club of Victoria Merilyn Grey, Field Naturalists Club of Victoria

Pat Grey, Field Naturalists Club of Victoria Teresa Lebel, Royal Botanic Gardens Melbourne

Tom May, Fungimap Convenor

At Fungimap Central, data entry is now progressing at a great pace with the assistance of Geoff Lay, who volunteers some of his time each week. I am very grateful for his help.

Pat and Ed Grey are still working on the Fungimap Book - if you have any photos of the species they are looking for (see page 8), they would love to hear from you.

Gudrun Evans **Fungimap Coordinator**



North Coast Regional Botanic Garden Coffs Harbour, NSW

Jardens Aelbourne

Invitation to visit Fungi Collection

F.N.C.V

Fungimap volunteer Barry Kemp is building up a collection of documented photographs of local fungi, which are stored in the Herbarium at Coffs Harbour in ring binders. (The plant collections take up most of the room, so he is not creating a dried collection, but he does try to include a spore print.) About 220 species are currently represented, although many have not been fully identified. Barry extends an invitation to anyone associated with Fungimap to inspect the collection if you are passing through Coffs Harbour. This is a great holiday destination and there are many moist gullies and rainforest areas within easy reach, so would be worth a few days' stay. The fungus season is fairly long, usually about October to June, the spring being the dry season. Ph: (02) 6653 1131

E-mail: barrykemp@optusnet.com.au

QUEENSLAND FUNGIMAPPERS!

An enthusiastic Fungimapper from the Brisbane area is hoping to organise a workshop and perhaps a foray for next year, to give people the opportunity to learn basic fungi identification techniques, and familiarise themselves with some target species. Participating in a workshop is a great way to boost confidence with ID skills, and learn lots about fungi. As we currently don't have a Queensland Regional Coordinator, organising the workshop will not be simple, so we would like to get a feel for the level of interest in such an event first. If you would like to attend an Introduction to Fungi Workshop in the Brisbane area next year, please contact Gudrun (details on page 2) to register your interest.



CONTACTING FUNGIMAP





Fungimap Central

Royal Botanic Gardens Melbourne Birdwood Avenue South Yarra VIC 3141 Coordinator: Gudrun Evans Telephone: (03) 9252 2374 (Mon - Thurs) E-mail: <u>fungimap@rbg.vic.gov.au</u> Website: <u>http://www.rbg.vic.gov.au/fungimap/</u>

Regional Coordinators

These wonderful people contribute their time and experience voluntarily, because they love fungi! They all know lots about fungi, and run workshops and forays from time to time. If you are interested in having a foray or workshop run in your area next season please contact Gudrun.

New South Wales: Bettye Rees C/- 10 Lloyd Avenue Hunters Hill NSW 2110 E-mail: <u>B.Rees@unsw.edu.au</u>

South Australia: Pam Catcheside C/- 72 Eve Road Bellevue Heights SA 5050 E-mail: dpcatchi@arcom.com.au Western Australia: Katrina Syme C/- RMB 1020 South Coast Hwy Denmark WA 6333 E-mail: <u>syme@westnet.com.au</u>

Australian Capital Territory: Heino Lepp C/- PO Box 38 Belconnen ACT 2616 E-mail: Judith.Curnow@ea.gov.au Tasmania: Sapphire McMullan-Fisher C/- Geography and Environment University of Tasmania GPO Box 252-78 Hobart TAS 7001 E-mail: <u>smcmulla@postoffice.utas.edu.au</u>

Western Australia (Kimberley Region): Matt Barrett E-mail: <u>mbarrett@kpbg.wa.gov.au</u>

INTERESTING GROUPS Sydney Fungal Studies Group

Runs fungi forays, talks and workshops in the Sydney area.

Secretary: Donald Gover 5 Dawes Street Little Bay NSW 2036 Ph: (02) 9661 4898 E-mail: <u>djgover@bigpond.com</u> Website: <u>http://argus.appsci.unsw.edu.au/fungi/</u>

Adelaide Fungal Studies Group

Holds monthly meetings and forays during the fungi season.

- Meetings: Usually second Tuesday of the month at the Staff Room of the Plant Biodiversity Centre, off Hackney Road, 7.30pm. There will be no meetings from November to February inclusive.
- Excursions: Day excursions are normally on the Saturday before the meeting. There will be no excursions from October to March inclusive. Check with Pam before the excursion as venues may change due to special fungal fruiting flushes.

Convenor: Pam Catcheside Ph: (08) 8222 9379 (w) E-mail: dpcatchi@arcom.com.au

WA Fungal Studies Groups

The two groups in WA, in different geographical locations, organise events both separately and together.

- A group within the WA Naturalists' Club organises fungal forays, workshops, identification evenings and talks, based in Perth.
 WA Naturalists' Club, PO Box 8257 Perth Business Centre WA 6849 E-mail: <u>wanats@iinet.net.au</u> Website: <u>http://www.wanats.iinet.net.au/</u>
- The William Bay National Parks Association Fungi Studies Group is based around Denmark, WA. Contact is Katrina Syme. E-mail: <u>syme@westnet.com.au</u>

INTERESTING WEBSITES

- Natural Selection: <u>http://nature.ac.uk/</u>
- ♦ Royal Botanic Gardens Melbourne fungi pages: <u>http://www.rbg.vic.gov.au/biodiversity/fungi/</u>
- Taylor Lockwood: <u>http://www.fungiphoto.com/</u>
- The Hidden Forest: <u>http://www.hiddenforest.co.nz/</u>
- ♦ MykoWeb: <u>http://www.mykoweb.com/</u>
- ◆ Fungi Images on the Net: <u>http://www.in2.dk/fungi/</u>

USING A WEB-BROWSER TO LOCATE PHOTOS OF FUNGI

Tom May (Royal Botanic Gardens Melbourne)

When seeking to identify fungi, comparison against illustrations is very useful, and many larger fungi can be confidently identified from photos. There are many good illustrated field guides, but for those with access to the Internet, there are also numerous high quality images of fungi on a wide range of different websites. Individual sites are listed at sites such as 'The WWW Virtual Library: Mycology' http://biodiversity.bio.uno.edu/%7Efungi/, which has links to numerous websites about fungi, including MykoWeb http://www.mykoweb.com/ and the fabulous New Zealand site 'The Hidden Forest' http://www.hiddenforest.co.nz/fungi/index.htm.

Because there are numerous websites with fungi images, it can be difficult to find an image of a particular species of interest. One way is to search for species or genera by name through a web-browser, but you can end up with numerous results, only some of which include photos. There is, however, a very useful function of the Google web-browser which enables you to search for images, and to refine these searches. Go to the front page of the webbrowser http://www.google.com/ and click on the 'images' tab above the space where you type the terms you are looking for. Type in the name of the fungus (can be common name or scientific name, and could have genus only or genus and species). The results are presented with thumbnails of all the images found, and you can then click on these to go to the particular website. It's a good way to see a whole lot of different images of the same fungus. Advanced searches are possible, such as including other terms like country, or excluding certain terms (which can help if there is a commonly illustrated fungus in a genus, and you would like to see pictures of species other than this one). As usual, with web-browsers some of the results can have nothing to do with what you are looking for, and not all images on all websites are included, but on the whole it seems to work quite well.

ARE THE DIFFERENCES BETWEEN TWO SUPERFICIALLY WHAT SIMILAR SPECIES OF AUSTROBOLETUS?

Katrina Syme

Austroboletus occidentalis and A. lacunosus are boletes which share a number of features, the most notable of which is an exquisite, deeply reticulated stem surface.

The caps of both species are initially slightly conicoconvex, but flatten as they mature. They share the same cap colour - a pale dusky pinkish at first which becomes vellowish rusty brown, sometimes almost orange-brown. They both have cap surfaces which exhibit a suede-like appearance. The cap margins are uneven and hang down over the edge (appendiculate) and before the cap expands this margin clings, but is not attached, to the stem. When immature, the tubes are creamy white, but as the pinkishbrown to brown spores mature, the tubes turn fleshcoloured to pinkish-brown.

I have documented three collections of each species now and, until the last collection in May last year, had thought



Austroboletus lacunosus

© Katrina Syme

that A. lacunosus was the smaller of the two species. Of the nine fruiting bodies found that day in the Walpole-Nornalup National Park, the largest had a cap of enormous proportions. At 220 mm broad it far exceeded the 90 mm cap of the last collection I had made of A. occidentalis.

Despite these similarities, it is simple to tell the species apart – you only have to touch them. Whereas the caps and stems of A. lacunosus are dry, those of A. occidentalis are sticky to touch and the bits which adhere to the fingers are lastingly bitter. Its stem is white, taller than the other species, moist and even slightly glutinous at times, while that of A. lacunosus is dry, more deeply reticulate and slightly tinged pinkish-rusty-yellowish near the base.

In addition the fruit bodies of A. lacunosus have a pleasant, slightly fragrant, scent.



Austroboletus occidentalis

© Katrina Syme

THE MISSING TARGET - UROMYCES POLITUS (WITH NOTES ON OTHER AUSTRALIAN RUST FUNGI)

Tom May (Royal Botanic Gardens Melbourne)

There are many many thousands of microfungi in Australia – among the moulds, mildews, rusts, smuts, and numerous other fungal groups. Microfungi are those fungi which are not readily visible to the naked eye, except sometimes through their symptoms such as leaf spots. The bulk of Australia's fungal biodiversity will be microfungi. This is because many microfungi are thought to be specific to particular plant and animal (particularly invertebrate) hosts, and there are numerous indigenous plants and animals in Australia.

When selecting the 100 Fungimap target species, it was thought a good idea to include at least one of the 'larger' microfungal species – *Uromyces politus*. This is a rust fungus, and was chosen because it forms a visible, although tiny, fruit body which is made more obvious because it occurs in clusters, and is on an interesting host (*Lignum*). There is also a good illustration in colour of the species (*Fungi of Australia* vol. 1A, figure 52). Rust fungi are often quite specific to certain hosts, which helps in identification of the fungus.

Much useful information about Australian rusts was brought together by Daniel McAlpine in his 1906 monograph The Rusts of Australia. This is a wonderful book, with numerous black and white microphotographs of spores as well as drawings of fungi and symptoms. McAlpine arrived in Australia from Scotland in 1884, and played a major role in the foundation of plant pathology in Australia, and was also an accomplished fungal taxonomist. The book is obviously the result of extensive first hand experience with the subject matter. It is such a contrast to Cooke's Handbook of Australian Fungi, published only a decade or so earlier by the English mycologist Mordecai Cooke. It is extremely difficult to match fungal specimens to the species included in the Handbook. McAlpine's rust monograph and his The Smuts of Australia (1911) were landmark publications in shifting for the first time the locus of taxonomic activity on Australian fungi from Europe to Australia.

The reproduction of rusts is fascinating, with a single species producing up to five different spore types during different stages of the life cycle (Pascoe & Shipton, 1996). In addition, some rusts infect two quite unrelated hosts (at different stages of the life cycle). One of the spore types is the aeciospore, which is produced in a structure called the aecidium, which is often cup-shaped, hence the common name 'cluster-cups'. Other spore types include the urediniospore (summer-spore), which usually forms in orange- to rust-coloured masses, and the teliospore (winter-spore), a thick-walled resting spore.

The most diverse genera of Australian rusts are *Puccinia* (which includes Wheat Rust, but also many species infecting native hosts), with two-celled teliospores and *Uromyces*, with single-celled teliospores. Another local rust is *Uromycladium*, which forms large galls on *Acacia*.

Rusts are common on cultivated plants, weeds and on native hosts. On a walk around my garden I spotted the bright yellow or rusty patches of rust spores on weeds such as Spurge (*Euphorbia*), Mallow (*Malva*) and Sow Thistle (*Sonchus*). Spores of these rusts are all urediniospores or teliospores, which form from pustules on the leaves or stems, rather than from a cup-shaped structure as do the aeciospores.

Cluster-cups are cup-shaped to cylindrical, usually ranging in size from 0.2 to 0.6 mm in diameter, and may be white, yellow, orange or rarely brown. The margin of the cup may be delicately toothed, crenulate, irregularly torn or deeply incised, and is sometimes curled outwards. On some hosts cluster-cups are on both the upper and lower surface of the leaf, whilst on others, they occur only on one surface. They can also occur on stems. Some rusts cause the host tissue to become differently coloured, raised or thickened. There are also interesting differences in the patterns of cluster-cups, with some species clustered in lines, others in concentric circles, and yet others in no particular pattern. The aeciospores are formed in the cluster-cup as a pale yellow to orange mass of spores.

Among the rusts dealt with by McAlpine (1906), there are some 42 species which form aeciospores on indigenous hosts (Table 1, see next page). Some rusts are known only from the aeciospores, possibly because other spore stages have not yet been discovered, especially where these occur on different hosts.

For rusts known only from the aeciospores, the genus Aecidium is used, otherwise the cluster-cups are referred to as aecial stages of Puccinia or Uromyces, depending on the morphology of the teliospores. Among native rusts with aeciospores are some quite distinctive species that could be expected to be seen by keen-eyed field naturalists. Among the 'larger' and more distinctive species are two which form cylindrical cluster-cups on members of the Fabaceae (Aecidium platylobi on Platylobium and A. soleniiforme on Goodia) and Aecidium monocystis which forms cluster cups up to 0.75 mm in diameter on leaves of the mountain-inhabiting Abrotanella (Asteraceae). In Uromyces some species have cylindrical cluster-cups, which may reach as much as 1.5 mm or more in height, such as in the aecial stages of Uromyces polycnemi and U. politus.

Cluster-cups of *Uromyces politus* (Figure 1) are cylindrical, and usually form in lines bursting through the epidermis of the host stem. Cluster-cups are bright orange, fading eventually to ivory-coloured. The apex is paler, with a broadly toothed margin. McAlpine (1906) gives the average height as 1.5 mm, but his plate shows the height to reach 3 mm.

Table 1. Rusts with aecial stages occurring on native hosts in Australia. Where the rust produces other spore types on alternate hosts, these hosts are indicated. Data from McAlpine (1906), with host genera and families updated according to Walsh & Entwisle (1994–1999). Arranged by alphabetical order of host family and genus.

Rust (aecial stages)	Host (Family)
Puccinia tetragoniae	Tetragonia (Aizoaceae)
Aecidium deeringiae	Deeringia (Amaranthaceae)
Uromyces polycnemi	Hemichroa (Amaranthaceae)
Aecidium monocystis	Abrotanella (Asteraceae)
Puccinia calocephali	Blennospora, Calocephalus (Asteraceae
Puccinia brachyscomes	Brachyscome (Asteraceae)
Puccinia calotidis	Calotis (Asteraceae)
Aecidium cymbonoti	Cymbonotus (Asteraceae)
Puccinia erechtitis	Senecio (Asteraceae)
Puccinia lagenophorae	Lagenophora (Asteraceae)
Aecidum oleariae	Olearia (Asteraceae)
Puccinia podolepidis	Podolepis (Asteraceae)
Puccinia tasmanica	Senecio (Asteraceae)
Puccinia vittadiniae	Vittadinia (Asteraceae)
Puccinia brunoniae	Brunonia (Brunoniaceae)
Puccinia aucta	Lobelia, Pratia (Campanulaceae)
Aecidium disseminatum	Hypericum (Clusiaceae)
Aecidium eburneum	Bossiaea (Fabacae)
Aecdium platylobi	Platylobium (Fabaceae)
Aecdium soleniforme	Goodia (Fabaceae)
Aecidium nymphoidis	Nymphoides (Menyanthaceae)
Pucciniae morrisonii	Pelargonium (Geraniaceae)
Puccinia dampierae	Dampiera (Goodeniaceae)
Puccinia saccardoi	Goodenia, Velleia (Goodeniaceae)
Puccinia gilgiana	Leschenaultia (Goodeniaceae)
Uromyces puccinioides	Selliera, Scaevola (Goodeniaceae)
Uromyces tricorynes	Tricoryne (Liliaceae)
Puccinia loranthicola	Muellerina (Loranthaceae)
Uromyces danthoniae	Danthonia (Poaceae)
Puccinia epilobii-tetragoni	Epilobium (Onagraceae)
Uromyces orchidearum	<i>Chiloglottis</i> (Orchidaceae)
Aecidium plantaginis-variae	Plantago (Plantaginaceae)
Uromyces politus	Muehlenbeckia (Polygonaceae)
Aecidum calthae	Caltha (Ranunculaceae)
Puccinia agropyri	Clematis (Ranunculaceae)
	Alternate: Agropyron (Poaceae)
Aecidium ranunculacearum	Ranunculus (Ranunculaceae)
Aecidum plectroniae	Canthium (Rubiaceae)
Puccinia operculariae	<i>Opercularia</i> (Rubiaceae)
Aecidium disciforme	Veronica (Scrophulariaceae)
Aecidium veronicae	Veronica (Scrophulariaceae)
Puccinia caricis	Urtica (Urticaceae)
	Alternate: <i>Carex</i> (Cyperaceae)
Puccinia hederaceae	Viola (Violaceae)

McAlpine (1906) records *Uromyces politus* only from Tangled Lignum, *Muehlenbeckia florulenta*, and lists two collections, both from November: one from Pamameroo Lake (near Menindee, NSW), collected in 1860, the other from Koondrook (on the Murray River upstream from Swan Hill), collected in 1905. The Australian Plant Pest & Disease Database (herbaria BRIP, DAR and VPRI) includes further collections from NSW (Bourke, Moree and Urana) and SA (Wellington).

The host *Muehlenbeckia florulenta* (of which *M. cunninghamii* is a synonym) is a shrub, usually leafless, with clusters of small yellowish flowers. Tangled Lignum

occurs in inland parts of all mainland states, sometimes forming dense stands, in swamps, and fringing lakes and floodplains (Walsh & Entwisle, 1995–1999; Cunningham *et al.* 1981).

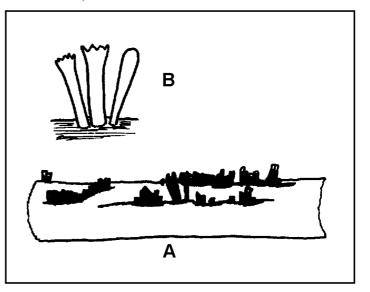


Figure 1. Uromyces politus on Muehlenbeckia florulenta. A: cluster-cups in lines on host stem (approx. x5); B: individual cluster-cups showing toothed margin. Based on A: *Fungi of Australia* vol. 1A, figure 52; B: McAlpine (1906: fig. 297).

Because the host is widely distributed, it will be interesting to see whether the fungus occurs throughout the host distribution, or only within a portion. It is important to get an idea of patterns as far as the proportion of the host area occupied by host-specific fungi. This will assist in assessing the conservation status of the fungi. Any fungus associated with rare or threatened hosts would seem to be at least as rare or threatened as the host. However, even for widespread hosts, the fungi could turn out to be rare.

A couple of weeks ago in the Horsham area of western Victoria I inspected some plants of Tangled Lignum growing around a dry River Red Gum (*Eucalyptus camaldulensis*) swamp, in the zone where Black Box (*Eucalyptus largiflorens*) occurs, hoping to spot Uromyces, but to no avail. In fact, so far no records of Uromyces politus have been submitted to Fungimap. Do keep an eye out for Uromyces politus when next you are in a Lignum swamp.

ACKNOWLEDGEMENTS

Thanks to Sharon Morley (Victorian Department of Agriculture, Knoxfield) for providing data from the Australian Plant Pest Database.

REFERENCES

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- Walsh, N.G. & Entwisle, T.J. (1994-1999), *Flora of Victoria*, volumes 2-4. Inkata Press, Melbourne.

2ND NATIONAL FUNGIMAP CONFERENCE Rawson Village, Victoria, Thursday 15th – Tuesday 20th May 2003 Proudly hosted by the Field Naturalists Club of Victoria

INFORMATION SHEET

Bookings for the 2nd National Fungimap Conference are now open! The Conference is proudly hosted by the Field Naturalists Club of Victoria, and supported by the Royal Botanic Gardens Melbourne.

The Conference is specifically aimed at Fungimap volunteers. We will be running workshops and forays at various skill levels, to help everyone increase their knowledge of fungi, and gain practical experience with identification techniques: from "An Introduction to Fungi" for beginners to specialised workshops on particular groups or techniques for those with more experience. To ensure everyone attending gets the maximum benefit, group numbers will be limited, and therefore **CONFERENCE ATTENDANCE IS STRICTLY LIMITED TO 150 PEOPLE.**

SPEAKERS:

Keynote Address:

Renowned fungi photographer **Bruce Fuhrer** will present a talk on Saturday evening, entitled **"My Favourite Hectare"**. Bruce will discuss his fungal studies at Warrandyte State Park over a number of seasons, illustrated with his magnificent slides. The talk will be open to the public.

Fungimap Talks

On Friday 16th May, a series of talks will be presented covering Fungimap and a wide range of fungi topics, which will cater for a general audience. Speakers include:

Dr Neale Bougher, Mycologist, CSIRO Forestry and Forest Products, Perth; Pam Catcheside, Fungimap Regional Coordinator, SA; Gudrun Evans, Fungimap Coordinator, Royal Botanic Gardens Melbourne; Dr Teresa Lebel, Mycologist, RBG Melbourne; Dr Tom May, Senior Mycologist, RBG Melbourne; Dr Bettye Rees, Mycologist, University of NSW; Fungimap Regional Coordinator, NSW; Katrina Syme, Fungimap Regional Coordinator, WA; Dr Tony Young, Honorary Associate, Queensland Herbarium, Brisbane.

PROGRAM:

Thursday 15th May

Registration in the afternoon. Lunch and dinner provided. An optional bus transfer will depart Melbourne (RBG) at 2pm.

Friday 16th May – Fungimap Talks

The number of people attending talks on this day is unlimited. Saturday 17th, Sunday 18th and Monday 19th May

Three days of morning Fungi Forays to surrounding forest, and afternoon Workshops on fungi identification, led by experienced fungi people. Leaders include many of the speakers, the other Regional Coordinators, and other prominent people from the world of fungi.

Tuesday 20th May

Breakfast provided. Optional bus transfer will depart Rawson, returning to Melbourne (RBG) at 12 noon.

REGISTRATION FEE:

A flat registration fee of **\$175** applies whether you attend all or only a couple of days of the Conference. There is no concession rate: we have kept the standard rate as low as possible for everyone.

Registration for just the Fungimap Talks is possible, as numbers during this day are unlimited. A registration fee of **\$75** includes a program, lunch, and morning & afternoon tea.

ACCOMMODATION & FOOD:

Fully-catered, basic accommodation is provided on-site at Rawson Village. Each night's accommodation includes three meals in the cosy dining room (with open fire), as well as morning and afternoon tea, and supper. Bed linen is provided.

Several types of sleeping arrangements are available. We will endeavour to accommodate people in the room-style of their choice, but as we will need to use all the rooms available, this may not always be possible. Rooms will be booked on a firstcome, first-served basis.

<u>Standard</u>

These rooms are \$45 per person per night, including food.

- Shared bunkroom with ensuite. These rooms have three bunks, and therefore accommodate 3 6 people. There is an ensuite with a shower and toilet attached to each room. Rooms are heated centrally with under-floor heating.
- **Double room** (double bed) or **twin room** (two single beds) with shared bathroom facilities. These rooms are in lodges (13 –18 rooms per lodge), and there is a male and a female shower & toilet block in each lodge. Each room has an individually-operated wall heater.

Motel style STRICTLY LIMITED

These rooms are \$60 per person per night, including food.

• **Motel style**. There is a <u>very limited number</u> of standard motel-style rooms available on site. To book one of these, please phone Gudrun on (03) 9252 2374 to make a reservation *before* sending your registration form.

CANCELLATION POLICY:

A full refund, less a cancellation fee of \$50, will apply to all registrations cancelled before 15th April 2003. All cancellations after this date will only be refunded if the place is filled by someone else. This policy includes payment for accommodation and food.

INSURANCE:

Registration fees do not include insurance of any kind. It is strongly recommended that all delegates take out their own travel and medical insurance prior to coming to the conference. The policy should include loss of fees through cancellation of your participation in the conference or cancellation of the conference itself; loss of airfares for any reason; medical expenses; loss or damage to personal property; additional expenses, and repatriation should travel arrangements have to be altered. The Field Naturalists Club of Victoria and the conference committee take no responsibility for any participant failing to insure.

FURTHER INFORMATION:

For all enquiries contact Gudrun Evans at Fungimap: Phone: (03) 9252 2374 or E-mail: fungimap@rbg.vic.gov.au

A Tax Invoice (from the FNCV, ABN 55 791 612 829) will be issued on receipt of your registration and payment.

A more detailed information pack will be sent to all registrants in February 2003, with full program details and an opportunity to sign-up for particular workshops and forays.

BOOKINGS CLOSE 31ST JANUARY 2003 PLACES LIMITED TO 150





REGISTRATION FORM

2ND NATIONAL FUNGIMAP CONFERENCE

Rawson Village, Victoria, Thursday 15th – Tuesday 20th May 2003

Proudly hosted by the Field Naturalists Club of Victoria

Personal Information:

Title:	Surname:	First Name:		
Address:		Suburb/Town:	State:	Postcode:
E-mail address:			Phone: ()	
Are vou a mem	ber of the Field Natura	alists Club of Victoria? Y / N		

Registration Fee:

- □ 1: Full Conference \$175
- □ 2: Friday Talks only \$75 (Includes lunch)
- □ 3: Part Conference \$175 (Attendance at only two or three days is possible, but the Registration Fee remains fixed.)

Fully-catered Accommodation:

Fully-catered, basic accommodation is available on-site at Rawson Village. Please indicate which nights you will require accommodation (each night includes three meals), and your preference for the style of room you stay in.

Which nights will you require accommodation:

- $\Box \quad Thursday \ 15^{th} May$
- □ Friday 16th May
- □ Saturday 17th May
- □ Sunday 18th May
- □ Monday 19th May

Total no. nights: ____

Accommodation Style:

□ <u>Standard</u>

(\$45 per person per night) Choose one of options A, B or C:

- □ A. Shared bunkroom (3–6 people) with ensuite
 - I am prepared to sleep on a top bunk if necessary: Y / N
- **B. Double room** with shared bathroom facilities
- □ C. Twin room with shared bathroom facilities

Please indicate below with whom wish to share a room:

(Your name should be included in this space on their form.)

□ <u>Motel Style</u>

<u>(\$60 per person per night)</u>

STRICTLY LIMITED NUMBERS To book a motel-style room you **must** ring Gudrun on (03) 9252 2374 to make a reservation before sending your registration form.

Transport:

- Optional bus transfer from Melbourne (\$40 for return trip)
 - Depart Royal Botanic Gardens Melbourne at 2pm on Thursday 15th May
 - Arrive Royal Botanic Gardens Melbourne at 12 noon on Tuesday 20th May

□ <u>Own transport</u>

- If you are driving, would you be prepared to use your vehicle during the Conference to transport people to forays? Y / N
- If yes, how many extra people could you take?

Arrival / Departure:

Arrival Day:

Departure Day:

** All prices are GST inclusive.**

1:	Full Conference			2:	Friday Talks only		3	8: Part Conference		
	Registration Fee:	\$	175		Registration Fee:	\$ 75		Registration Fee:	\$	175
	Accommodation & food:				Total:	\$ 75		Accommodation & food:		
	5 nights @ \$45 =	\$	225					nights @ \$45 =	\$	
	Subtotal:	\$	400		Note: Number of people			Total:	\$_	
	(Optional bus transfer	\$	40)		attend Friday's talks is unl	imited.				
	Total:	\$_								

Full payment must accompany registration form.

Payment accepted by cheque or money-order only: must be made payable to "The Field Naturalists Club of Victoria".

Additional information:

Special dietary requirements:

Indication of	your fungi skill level for workshops:
	Beginner

- □ Intermediate
- □ Advanced

Special access requirements (wheelchair, etc.):

Requests or ideas for workshop topics:

Completed registration form, together with full payment, should be sent to Gudrun Evans at Fungimap, Royal Botanic Gardens Melbourne, Birdwood Avenue, South Yarra VIC 3141, by 31 January 2003. Places are limited to 150 people; registration forms will be processed in the order received.

Amanita austroviridis (Bougher & Syme p. 159)

Chlorovibrissea bicolor (Vibrissea bicolor) (154)

Coprinus comatus (B&S 291), various stages for general view

Stereum hirsutum group (including S. complicatum) (135) (B&S 329)

Amanita xanthocephala (Fuhrer p. 21)

Ascocoryne sarcoides (144)

Calostoma fuhreri

Helvella villosa

Nyctalis mirabilis

Cookeneina tricholoma

Flabellophora superposita

Gloeophyllum concentricum

Omphalina chromacea (62) *Piptoporus australiensis* (119)

Leucopaxillus lilacinus (B&S 201)

Piptoporus maculatissimus (121)

Pleurotus australis (B&S 325)

Rozites symeae (B&S 281)

Schizostoma laceratum

Volvariella speciosa (77)

Uromyces politus

Microporus affinis (=*M. flabelliformis*)

Bolbitius vitellinus (B&S 231)

FUNGIMAP BOOK - PHOTOS

Pat and Ed Grey want to thank all the Fungimappers who have generously sent in photos so that we have a choice for the book. Unlike the CD-Rom, we are limited with space. We will publish two photos for each species - one shot to show all the characteristic features of that species, preferably without removing it from the ground, but maybe some manipulation, the other photo to show a habitat shot. However, if the species is small, this shot needs to be close so that it doesn't disappear when the illustration is reduced to fit the page arrangement. Thus, we keep going over and over the photos, putting some in, taking them out, often remaining undecided. This is why almost none have been returned. We expect the job will take quite a while yet, so please bear with us.

You'll be pleased to know that all is not doom and gloom and we have selected a few definitely (at the moment!). For some species we have a large number of shots, yet none 'quite right', usually for the 'cut out' detailed view. For the rarer species we often have none. Here is the list of required photos – if you can help please contact Pat and Ed Grey:

Ph: (03) 9435 9019; E-mail: greyvox48@hotmail.com

A MYSTERY FUNGUS

Katrina Syme came across a strange looking mushroom recently, and completed the following data sheet to help with identification.

Fungi Field Data		Collection No: KS 5/2002		
Date: 09/10/02	Genus: Unknown (po	ss. Amanita)	Species: Unknown	
Collector: Katrina Syme		Field name: <i>fuzzy pinkish soft mushie</i>		
Location: WA, Bunbury, Cathedral G	rammar School, Bussell Hwy	, Gelorup. Appear	red during Fibres West forum.	
GPS Lat:	Long:	Alt:		
Plant Assoc: unknown, believed to ha	we a close relationship to she	ep and aluminium	needles & a spinning wheel	
Habit: Solitary, but others may appea	Image: Abit: Solitary, but others may appear No./age of f/b's examined: 1, new			
Spore Print Colour: unknown, impos	ssible to sever cap			
Odour: slightly of sheep, also soap pe	owder	Taste: unknown,	but texture unpleasant in mouth	
KOH: Untested Other chemical tastes: None			tastes: None	
Photos: One, but looks washed out. S	ee Methuen colours below			
Characterised by: 1. Soft texture				
2. Slightly hairy	v / fuzzy			
3. Undulating annulus with uneven edge				
4. Soft pink colouration, cap surface more salmon pink				
5. Could be related to <u>Amanita carneiphylla</u>				

<u>Pileus:</u> – 155 mm broad, circular, very broadly convex with small central umbo, margin pronounced with even, crenulate edge, slightly upturned, slightly fuzzy, undulating / indented; surface dull, dry, areolate with some small bumps randomly distributed but more concentrate at central umbo; innately downy-woolly, colour deep salmon pink 7B7–7C7 No bruising or exudates

<u>Flesh:</u> – soft, white, warm, in individual strands, stuffed, smell slightly sheepish <u>Lamellae:</u> – 70 mm long x 4 mm deep, adnate, some sinuate, broad, close, edge fimbriate, face fimbriate, deep pink on margin and face 9A4, bifurcating in an uneven manner. L = 12 I = 15 ($\frac{1}{2}$ cap). No bruising or exudates.

<u>Stipe:</u> $-95 \text{ mm} \log x 45 - 60 \text{ wide, central, terete, tapering upwards from slightly wider base, which is angular bulbous below double ridged margin, texture smooth, evenly areolate, longitudinal regular pattern, texture downy-woolly, same colour as lamellules but ridged base & short bulb paler pink. 8A2.$

Annulus superior, finer texture, margins uneven & appearing slightly ragged; pale pink with slightly paler edge.

Flesh: - same as in pileus. Definitely stuffed.

The mystery fungus Note - the wool is actually much darker pink (the photo came out very pale), and was dyed with *Dermocybe splendida*. © Katrina Syme



BOOK REVIEW: Treasures from the Kingdom of Fungi by Taylor F. Lockwood

Simon Lewis (Royal Botanic Gardens Melbourne)

This article originally appeared in The Victorian Naturalist 119(5), October 2002. It is reproduced here with the kind permission of the editors. Website: http://home.vicnet.net.au/~fncv/vicnat.htm

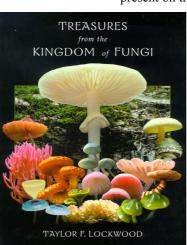
The aptly titled Treasures from the Kingdom of Fungi is the long-awaited hardbound collection of Taylor Lockwood's amazing photographs. Taylor has been presenting these in slide shows around the world for the past 15 years. This 128 page book contains approximately 250 colour photographs of fungi, illustrating 157 taxa from 19 countries (including 25 Australian taxa). Text is limited to the preface, foreword and a brief introduction; most of the book consists of page after page of delightful photographs including many mushrooms but also a good selection of puffballs, stinkhorns, coral and bracket fungi.

The images are grouped together in chapters that divide the book aesthetically rather than scientifically. Chapters include 'The Span of the Rainbow' showing fungi of every colour of the rainbow, 'Foods of the Gods' illustrating some of the edible fungi, and a 'Lovers' Lane' of naturally-occurring. artistically-twinned examples. Each photograph is captioned merely with identification of the fungus (although some 20% are 'unidentified', not even to genus), and the general location where the photograph was taken (usually the country name only, but states are also listed for the USA examples). Taylor's enthusiasm for the topic is clearly evident with the layout and backgrounds on each carefully designed page showing great attention to detail.

Having spent many days in the field in search of perfect fungi to photograph, and having referred to many other books of field photography, I can personally attest to the difficulty of finding a good quality specimen and the skill required to capture it adequately for posterity. The broad range of superb field examples chosen as the subject matter in this book are evidence of Taylor's efforts 'on the ground', and his technical and creative talents as photographer are clearly demonstrated in the spectacular images that result.

One drawback of this book is the number of photographs labelled as 'unidentified'. Taylor does not collect specimens to allow identification at a later date, and some of the photographs are artistic rather than scientific, and so lack all the diagnostic features required for identification. However, scientific presentation is not the aim of this book. Taylor's goal was to inspire interest in and appreciation of fungi, which I feel he has well and truly accomplished with this collection. Treasures from the Kingdom of Fungi is not a field guide or scientific text (which should have few unidentified photographs and preferably include a scale), but a brilliant 'coffee table book' on fungi.

To produce a book without some typographical or grammatical errors would be an almost impossible task. There



were a small number of general mistakes in this book as well as a few names spelt incorrectly; Cyptotrama aspratum (spelt as asprata), Mycena leaiana (incorrectly spelt leiana) and Tremella fuciformis (incorrectly spelt fusiformis), also in the index Boletus is spelt Bolteus, and Cladonia comes before Cladina. However, these certainly do not detract from the overall high standard of presentation.

The retail price of \$55 for this book may seem a little high, but it is well worth considering for the bounty of beautiful, high quality images. Taylor's aim 'to inspire others into deeper appreciation of this special part of the natural world' has been admirably achieved by superbly illustrating the diversity of this often weird and wonderful kingdom. Although this is not a scientific text, I still feel it should be present on the book shelf of every mycologist and naturalist as

an inspiration and delight if nothing else.

Twelve Fungimap target species are included (most showing diagnostic features): Amanita phalloides (var. alba) p. 45; Ascocoryne sarcoides p. 106; Boletellus obscurecoccineus p. 51; Coprinus comatus p. 118; Craterellus cornucopioides p. 121; Cyptotrama aspratum pp. 37, 55; Lepista nuda p. 118; Mycena interrupta pp. 31, 42; Mycena leaiana p. 86; Podoserpula pusio p. 28; Pseudohydnum gelatinosum pp. 20, 79; and Tremella fuciformis p. 106.

Publisher: Taylor Lockwood, 2001. 128 pp, 250 colour photographs. RRP \$55.00 Available from Fungimap for \$45.00 +

\$10.00 postage.

Wanted

Cryptogam articles for the Australian Network for Plant Conservation's Newsletter Danthonia. The goal of the ANPC is: 'To promote and develop plant conservation in Australia'. Help us to raise the profile of cryptogams . submit an article today!

Contact Laura Vallee for article specifications, sample copies of the newsletter and deadlines. E-mail: laura.vallee@ea.gov.au Ph: (02) 6250 9523

Katrina Syme would like to report that she made a shocking discovery yesterday when she bought next year's ACF Wilderness Diary. The colour photo for week 41 appears to be of Stereum ostrea, a target species. (She'd like to be more certain, but she only sees it when visiting the eastern states!) The picture, however, is labelled 'Lesueur's tree frog', and yes, there is a small creature in one part of the picture, but the major part is occupied by the fungus! A letter of protest is being sent.

NEWS FROM WA

Roz Hart, WA Naturalists' Club

<u>Meeting with the WA Herbarium</u>: On 15th August the WA Fungal Studies Group members were invited to the WA Herbarium where Karina Knight, the Curation Technician of Cryptogams (Mosses, Fungi and Bryophytes) talked to us about how the FSG and the Herbarium can work together for mutual benefit. Firstly Karina made it clear that the Herbarium does not have a service to identify Fungi, in fact they would like our help with this. There is no mycologist at our Herbarium and this is of great concern. Karina's job is to look after the collection. She made it clear that she is an interested amateur who lodges fungus specimens but is not a mycologist. She explained to us that the function of the Herbarium is to:

- store reference material for taxonomic work;
- provide specimens for use in identifications;
- be an arbiter of correct names;
- provide a database of names.

Over the last 20 years in the Herbarium there has been a concerted change from a "stamp collection" type of facility to a conservation resource. Our entire herbarium collection in WA is databased, including the cryptogams. This means all the information is available electronically on Florabase, which can be accessed by participating community groups. Karina asked for our help to fill in information gaps by collecting and submitting fungi specimens. There are 531,000 plant specimens in the WA Herbarium, which is an average of 0.2 specimens per square km of WA. The standard aimed for is 1 species per square km. This covers 13,500 species of vascular plants (the Cryptogam numbers haven't yet been added into these figures). The SW of WA is well known as a major hotspot of flora diversity and we really should have 2,500,000 vascular specimens in the Herbarium. There is a crying need to document the fungal biodiversity of Western Australia. There are only 6,376 fungus specimens in the WA collection and this includes both micro and macro fungi. The collection includes a large number of rusts and smuts, most of which came from the Ag Dept collection. There are about 1,000 known fungi species so far and the more we look, the more it is clear that this is a huge underestimate. And at this rate we have 0.0025 specimens per square km. So there is an awful lot of collecting to be done!!

Karina urged the FSG members to register as Herbarium volunteers which gives us access to their library, which includes a number of specialised fungi books and journals not readily available elsewhere. It also gives access to their dryers, the reference herbarium, lists of fungi from different areas as well as to the Florabase information.

Karina specified that the characteristics of a good collection include:

- a range of specimens representing immature to mature specimens, and lots of them;
- a spore print, preferably on white paper (*very important*);
- a description of the specimen with a sketch;
- a description of the substrate, vegetation and land features;
- locality including Latitude and Longitude (*essential for databasing*).

Karina reminded us that collections are meant to last forever, so do a good job. However, although appreciated, an ID is *not essential.* What is needed is a well-dried collection of specimens with ID taken as far as possible, your data and collecting number, the date collected and if possible, a photo.

She encouraged us to have a go at keying out specimens and we intend to work at doing this together as a group next year. Many collections go unnamed at this stage. Aim to get to the family level at least as this helps define a storage place. All available data helps, including observations such as it comes up in the same place and/or same time every year, only after fire, etc.

Once supplied to the herbarium, specimens will be frozen to kill unwanted organisms, then put into a plastic bag, have a label attached, be boxed and databased. Please supply all information at the one time so it can be kept together. Space is available at the Herbarium for us to meet and work together on our ID skills next fungus season.

Katrina Syme has been busy organising the Fungi & Fibre Symposium, mentioned elsewhere in this newsletter. Fungi studies of the William Bay National Parks Association are in recess until the beginning of the next fungus season.

NEWS FROM SA

Pam Catcheside, SA Regional Coordinator

The September foray of the Adelaide Fungal Studies Group was cancelled, in part because of the dry weather and the consequent paucity of fungal fruit bodies.

The final meeting for the year was on Tuesday, 8th October at the Plant Biodiversity Centre. Renate Velzeboer, Project Officer with National Parks and Wildlife Service, South Australia spoke on Phytophthora cinnamomi. This root-rot pathogen is not a true fungus though it is often called a fungus. It is thought to have been brought into Western Australia from Indonesia in orange trees around 1900 and into South Australia around 1970 from infected berries from nurseries in the Dandenong Ranges. It attacks the roots and stems of plants; the symptoms are yellowing of the foliage followed by dieback of the entire plant. In SA Phytophthora has been found in the Mount Lofty Ranges around Adelaide, the Fleurieu Peninsula and Kangaroo Island. The Field Naturalists Society and its member clubs, the Botany and Mammal Clubs and the AFSG always follow the suggested protocols for minimising the spread of *Phytophthora*. These include brushing boots and spraving the soles with methylated spirits.

Renate's talk was followed by a mushroom tasting of species bought from commercial outlets (we would not take the risk of eating fungi from the wild). We savoured *Agaricus bisporus* (buttons and Swiss Browns), *Lentinula edodes* (shiitake), *Flammulina velutipes* (enokitake, Velvet Foot) and *Pleurotus ostreatus* (Oyster Mushroom). The *Flammulina velutipes* was voted the most interesting taste and texture.

The Group will be keeping in touch by email and will meet again on 11th March 2003. At that meeting, the year's activities will be planned. I will give a brief revision of fungal groups and fruit body structures.

NEWS FROM TASMANIA

Sapphire McMullan-Fisher, Tasmanian Regional Coordinator

The fungi slide night was held on the 20th September, and was well attended with over 30 people – great for a Friday evening. I did a talk highlighting the species recorded for Hobart from the Fungimap records. I also focused on species which I had also seen around Hobart, but as yet hadn't made the records! This was followed by a short break to recharge people's drinks, then we went through Ruth Brozek's slides from the Tasman Peninsula. As ever there were many slides which defied identification. It was great to see the diverse range of fungi seen from a 'drier' part of Tasmania.

Not much is on until next year's fungi season but I hope people will continue to keep their eyes open for fungi, particularly in Tassie's Alpine areas which can be just as productive in the warmer months.

NEWS FROM NSW

Bettye Rees, NSW Regional Coordinator

SYDNEY FUNGAL STUDIES GROUP GOES MOLECULAR!

At their annual October workshop held at the University of New South Wales, members of the Sydney Fungal Studies Group under the capable guidance of Dr Bill Allaway undertook a combined group exercise to extract DNA from a large range of fungal species. This ambitious and wellexecuted experiment was enjoyed by all participants as they saw DNA precipitated out as a thread-like blob of jelly in their own hands. The DNA was then purified and stained before running in a gel in an electric field. People of all levels of interest and experience enjoyed the hands on activity which was only made possible by Bill's superb organisation of events in which he was assisted by Helen Kranidiotis.

In breaks in the lab work, a series of interesting lectures were offered, ranging from the use of "attine fungi" as structural features in ant's nests to the structure and function of cords in pathogenic *Armillaria* species. Lunch is always an added bonus at these functions as each person seems to bring enough to feed at least six people and mushrooms featured strongly in lots of dishes.

A trio of Fungimappers have just completed Stage 1 of a detailed and stunningly ambitious survey of Chatham Park Rainforest Nature Reserve at Tuross Head on the NSW far south coast. The group, comprising Ray and Noreen Baxter with Robin Corringham at the helm planned and executed the survey after attending the Inaugural Fungimap Conference at Denmark in 2000. The survey contains not only information about the fungi occurring at the site but also the plant and animal species as well. Now that the basic infrastructure has been established, the group intends to follow up with annual records of species occurring at each site between the months of March – May (prime fungal season in NSW – if ever it should rain again!). More news of this project in the next newsletter.

All welcome to the SFSG Cristmas party on November 23rd! Please contact Don and Judith Gover ASAP at <u>djgover@bigpond.com</u> if you're in Sydney on that weekend.

ACKNOWLEDGEMENTS

FUNGIMAP RECORDERS						
Patrick Warrington	1	TAS		Ian McCann		
ACT		Martin & Eva Finzel	12	& Thelma Argall	6	
John Carter	1	Genevieve Gates	564	Sharon Morley	1	
NSW		Sarah Lloyd	82	Beth Page	1	
	1	David Ratkowsky	19	Gary Watson	48	
Claire deLacey Hans Feitz	1	VIC		WA		
Kathy Hatton	1	Robert Bender	1	Daphne Edinger	3	
Margery Smith	5	Cecily Falkingham	35	Patricia Gurry	7	
Sydney Fungal SG	5	Paul George	39	Roz Hart	31	
QLD	5	Ewen Johnson	10	Alan Notley	1	
•	2	Peter Koster		Kay Rae	5	
Eva Ford	3	& Cathy Cheadle	10	Katrina Syme	9	
Ian Stone	I	Geoff Lay	5	Bunbury Naturalists	s 17	

THE 11TH INTERNATIONAL FUNGI AND FIBRE SYMPOSIUM Saturday 12th - Friday 18th July 2003

Workshops, field trips, a day's outing to ancient Tingle forests and a Bush Dance are all included in the registration price for this exciting Symposium. There will also be an exhibition of work, floor talks, yarn sharing, illustrated talks from the countries represented - on fungi, the mysteries of pH, the use of mordants and conservation of the world's fungal biodiversity.

Venue: Denmark College of Agriculture, 80 single rooms available, fully catered; meals available for non- residents.

Accommodation & Tourist Information: Denmark Visitor Centre, 60 Strickland St, Denmark, WA 6333

Ph: (08) 9848 2055; E-mail: accommodation@westnet.com.au

Symposium numbers are limited to 120.

Workshop tutors include:

- ♦ USA: Dorothy Beebee, illustrator of 'Mushrooms for Color' and Miriam Rice, the book's author, who has been experimenting with dyes, pigments and papermaking with fungi from the early 1970s.
- Sweden: Hjördis Lundmark, founder of the Swedish Mushroom Dyers' Association and co-author of a book on fungi dyes with Hans Marklund, a biologist who has several books on fungi to his credit, and Mattias Andersson, chairman of the Mushroom Society in Stockholm.
- Norway: Mycologist and founder of Forum for Soppfargere (Mushroom dyers) Anna-Elise Torkelsen.
- Finland: Kirsti Palmen, who has experimented with *Pisolithus* dyes for more than 20 years, Ulla Lapiolahti prints fabric with species of *Dermocybe*; Riikka Räisänen will present a lecture which she also gave at the Colour Congress in Iowa in 2002.
- Scotland: Paper maker **Anna King**, whose basketry and paper has been exhibited in many countries.
- Australia: Fibre artist Nalda Searles and textile dyer Peggy Buckingham, Nessie Henshaw, a fungi dyer and Katrina Syme, fungi dyer and co-author of *Fungi of* Southern Australia.

Brochures are available from: IFFS 2003 C/- Greenskills, PO Box 577, Denmark WA 6333 Email: grskillsdmk@greenskills.green.net.au

FORTHCOMING EVENTS Please note that these activities are not organised by Fungimap

Event	Date	Place	State	Contact
Field Naturalists Society of SA meeting	Wednesday 13 th	Royal Society	SA	Pam Catcheside
Speaker: Pam Catcheside	November, 7:45pm	Lecture Room		Ph: (08) 8222 9379 (w)
Sydney Fungal Studies Group Christmas Party	Saturday 23 rd November	Sydney	NSW	Don Gover
				E-mail: <u>djgover@bigpond.com</u>
Australian Network for Plant Conservation (ANPC)	Tuesday 4 th - Thursday	Yass	NSW	Laura Vallee
Workshop - Landscape Rehabilitation: Approaches	6 th February 2003			Ph: (02) 6250 9523 (w)
and Techniques. Cost: \$180				E-mail: <u>laura.vallee@ea.gov.au</u>
Recovery: A Decade Towards A Biodiverse Future	Monday 24 th February -	Geelong	VIC	Laura Vallee
5^{th} ANPC National Conference & Conservation	Saturday 1 st March	Conference		Ph: (02) 6250 9523 (w)
Techniques Workshops	2003	Centre		E-mail: <u>laura.vallee@ea.gov.au</u>
Adelaide Fungal Studies Group meeting	Tuesday 11 th March	Plant Biodiversity	SA	Pam Catcheside
Programme Planning for 2003	2003, 7:30pm	Centre, Adelaide		Ph: (08) 8222 9379 (w)
WA Naturalists' Club General meeting	Friday 2 nd May 2003,	UWA Extension,	WA	WA Naturalists' Club
Speaker: Richie Robinson from CALM, Manjimup,	7:30pm	Clifton Street,		E-mail: <u>wanats@iinet.net.au</u>
will talk on fungi.		Nedlands		
2 nd National Fungimap Conference	Thursday 15 th May -	Rawson Village	VIC	Gudrun Evans
Hosted by the Field Naturalists Club of Victoria.	Tuesday 20 th May 2003			Ph: (03) 9252 2374 (w)
Places will be limited. Bookings close 31 st January.			E-	mail: <u>fungimap@rbg.vic.gov.au</u>
WA Naturalists' Club Fungal Studies Group Fungal	Saturday 31 st May -	Dwellingup	WA	WA Naturalists' Club
Foray in the Jarrah forest at Dwellingup	Monday 2 nd June 2003			E-mail: <u>wanats@iinet.net.au</u>
11 th International Fungi & Fibre Symposium	Saturday 12 th - Friday	Denmark	WA	E-mail:
	18 th July 2003		grskillso	dmk@greenskills.green.net.au

TO CONTACT FUNGIMAP

FUNGIMAP

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Fungimap Newsletters are available in colour on-line at our new website: http://www.rbg.vic.gov.au/fungimap/

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Fungimap is a joint project of the Field Naturalists Club of Victoria and the Royal Botanic Gardens Melbourne.

The Fungimap Newsletter is edited by Gudrun Evans.

FUNGIMAP NEWSLETTER

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Royal Botanic Gardens Melbourne Birdwood Avenue South Yarra Victoria 3141



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