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### News from the FUNGIMAP

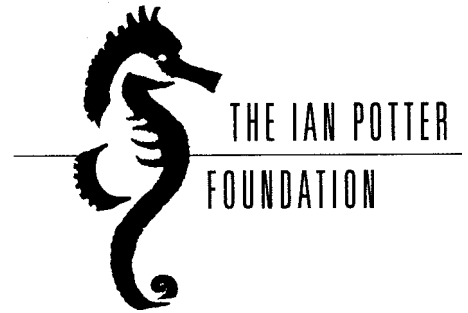
#### Coordinator

Previous Fungimap Coordinator Katy Sommerville has returned to her studies and is immersed in an Honours project on plant physiology at the moment. We thank Katy for her many contributions to Fungimap last year, especially all the hard work in editing the Newsletter and organising photos for the CD-ROM.

I started as Fungimap Coordinator in April this year, and have greatly enjoyed my time here so far. As well as thanking Katy for leaving everything in such an organised manner, I would like to thank Pat Grey, who came in voluntarily over the summer to answer the mail. This is very much appreciated!

Now is a very exciting time to be joining the Fungimap project: we have just launched our first CD-ROM (for details see page 5), and the inaugural National Fungimap Conference is on in WA in June. Unfortunately I am unable to attend, but those who are going are in for a fabulous time – for an update see page 6.

I haven't been here long enough to have much other news to report yet, but thought I'd share with you an impressive photo of a mystery fungus from Queensland. We love



receiving interesting sightings such as this, and we are still collecting good photographs. However, please remember we have limited resources and must concentrate on the target species – we generally don't have time to identify non-target species for you.



#### Henk Voogt with a mystery fungus on the Atherton Tablelands

We are also being inundated with mail, which indicates the level of interest in fungi in the wider community. This is fantastic – however please be prepared to be patient when waiting for a response!

Finally, please take the time to read the contact details for Fungimap on page 2 – the phone number and e-mail address for Fungimap Central have both changed. There is also an up-to-date list of Regional Coordinators.

Gudrun Arnold  
**Fungimap Coordinator**

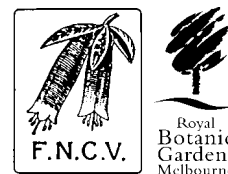
### VALE

**Ilma Dunn** died recently, the day after her 90th birthday. Ilma was a long time member of the Field Naturalists Club of Victoria and was among the first to send in records to Fungimap. Ilma was always very generous in allowing her photos to be borrowed for talks and used in publications, and her magnificent photo of *Entoloma virescens* graces the cover of the most recent *Victorian Naturalist*.

We were also very saddened to hear of the recent death of **Brian Andrews**. Brian was an active member and President of the Ballarat Field Naturalists Club. During 2000, despite illness, Brian cheerfully came into the Botanic Gardens most weeks to enter records into the Fungimap database. Brian's sterling contribution meant that the important task of entering data from the numerous records of target species was kept up to date. We extend our sincere sympathies to his family.



## Contacting FUNGIMAP



Fungimap Central:  
Royal Botanic Gardens, Melbourne  
Birdwood Avenue  
South Yarra VIC 3141

**Coordinator:** Gudrun Arnold  
**Telephone:** (03) 9252 2374  
**E-mail:** [fungimap@rbg.vic.gov.au](mailto:fungimap@rbg.vic.gov.au)  
**Website:** <http://calcite.apana.org.au/fungimap>

## Regional Coordinators:

These wonderful people contribute their time and experience voluntarily, because they love fungi! They don't have a lot to do with the administrative side of Fungimap, but they all know lots about fungi, and run workshops and forays from time to time.

### New South Wales:

Bettye Rees  
C/- 10 Lloyd Avenue  
Hunters Hill NSW 2110  
E-mail: [B.Rees@unsw.edu.au](mailto:B.Rees@unsw.edu.au)

### Western Australia:

Katrina Syme  
C/- Denmark Environment Centre  
PO Box 142  
Denmark WA 6333  
E-mail: [environ@denmarkwa.net.au](mailto:environ@denmarkwa.net.au)

### Australian Capital Territory:

Heino Lepp  
C/- PO Box 38  
Belconnen ACT 2616  
E-mail: [Judith.Curnow@ea.gov.au](mailto:Judith.Curnow@ea.gov.au)

### South Australia:

Pam Catcheside  
C/- 72 Eve Road  
Bellevue Heights SA 5050  
E-mail: [dpcatchi@arcom.com.au](mailto:dpcatchi@arcom.com.au)

### Tasmania:

David Ratkowsky  
C/- 20 York Street  
Sandy Bay TAS 7005  
E-mail: [D.Ratkowsky@utas.edu.au](mailto:D.Ratkowsky@utas.edu.au)

## SYDNEY FUNGAL STUDIES GROUP

For those of you living in or visiting the Sydney area, and keen to find some fungi, the Sydney Fungal Studies Group runs regular forays. The group welcomes people at all stages of skill and knowledge in the field of mycology, and offers a good opportunity to find fungi, practice identification, and meet like-minded people. Several of their forthcoming events are listed on the back of this Newsletter. Of course, if you do go on one of their forays, remember to send your records in to Fungimap! As we are currently inundated with identification requests, you may get faster results at one of their meetings, or alternatively check out their website.

For further details contact the Secretary, Donald Gover:

5 Dawes Street  
Little Bay NSW 2036  
Tel: (02) 9661 4898  
E-mail: [donauldgover@telstra.easymail.com.au](mailto:donauldgover@telstra.easymail.com.au)  
Website: <http://argus.appsci.unsw.edu.au>

\*\* We are grateful to the SFSG for allowing us to use their Fungal Funword, which you will find on page 5. \*\*

## THE VICTORIAN NATURALIST COLOUR FUNGI ISSUE

Issue 118(2) of *The Victorian Naturalist* was published recently. It includes several pages of colour illustrations of 15 of the Fungimap target species, and an article giving brief notes on the illustrated species. Some of the illustrations are the first in colour for the particular target species. Included are illustrations of the rare *Hypocreopsis* species from southern Victoria, and other rare species such as *Rozites roseolilacina* and *Nyctalis mirabilis*. Some common species that have been omitted from recent field guides are also included, such as *Dictyopanus pusillus*. The illustrations were kindly provided by Ilma Dunn, Bruce Fuhrer, Sheila Houghton, Virgil Hubregtse, Pat Jordan, Ian McCann, Margery Smith and Anneke Veenstra-Quah. The issue also includes an article about 'Native Truffles of Australia' by Teresa Lebel, accompanied by colour illustrations of different truffles. Additional copies of issue 118(2) will be available for sale (price yet to be confirmed) at the Fungimap conference. An order form will also be posted on the Fungimap website when the cost is confirmed.

## NOTES ON FUNGIMAP

### TARGETS:

#### *PODAXIS PISTILLARIS* AND *P. BERINGAMENSIS*

*Podaxis* is a desert puffball, which resembles the cosmopolitan Shaggy Ink Cap (*Coprinus comatus*). In the Shaggy Ink Cap, there is an elongated, scaly cap which covers the gills. Spores are black and the cap and gills eventually deliquesce, leaving a black inky mass of spores dripping from the apex of the long stem. *Podaxis* is quite similar in outward appearance, with a stem on which is borne an elongated peridium, the surface of which can be scaly as in the Shaggy Ink Cap. The peridium is, however, dry at maturity and does not deliquesce. The spores are not produced on gills, but in a powdery mass (gleba) inside the peridium. Both *Coprinus comatus* and *Podaxis pistillaris* are Fungimap target species.

In the older literature the genus *Podaxis* was recorded from Australia under a variety of names. Since the publication of Cunningham's monograph on Australasian Gasteromycetes (Cunningham, 1944) one species of *Podaxis* has been accepted as occurring in Australia – *Podaxis pistillaris*. In a recent paper by Priest and Lenz (1999), a new species of *Podaxis* has been described from Australia. *Podaxis beringamensis* is found on termite mounds in northern Australia, where it has been previously identified as *P. pistillaris* (Herbert,

1932; Hilton & Kenneally, 1981). *P. beringamensis* is much larger than *P. pistillaris*, and has smaller spores. Differences are summarised in the table below.

Priest & Lenz (1999) note that *P. beringamensis* has only been recorded from a few sites from within the wide distribution of its termite host (species of *Nasutitermes*). When sending in sightings of *Podaxis*, recorders are encouraged to note the substrate. Sightings of the termite mound *Podaxis* are of particular interest, and information on the soil type and an identification of the termite genus/species would also be useful. Good photos of the termite mound *Podaxis* would also be appreciated, for use in the next edition of the Fungimap CD-ROM.

### REFERENCES

- Cunningham, G.H. (1944), The Gasteromycetes of Australia and New Zealand. Published by the author.
- Herbert, J.W. (1953), *Podaxis pistillaris*, a fungus growing on termite mounds, *Queensland Naturalist* 14: 120–123.
- Hilton, R.N. & Kenneally, K.F. (1981), The desert *Coprinus* fungus (*Podaxis pistillaris*) in Western Australia, *Western Australian Naturalist* 15: 21–26.
- Priest, M.J. & Lenz, M. (1999), The genus *Podaxis* (Gasteromycetes) in Australia with a description of a new species from termite mounds, *Australian Systematic Botany* 12: 109–116.

**Tom May (Royal Botanic Gardens Melbourne)**

	<i>P. pistillaris</i>	<i>P. beringamensis</i>
Fruit body	Up to 15 cm high	14–36 cm high
Peridium	Up to 8 cm high, up to 3 cm diam.	Up to 15 cm high, 4–6 cm diam.
Gleba	Deep brown, to black at maturity	Ochre to deep brown, almost black at maturity
Spores	10–14(–16) x (8–)9–12 µm	(8–)10–12(–14) x 7–8(–9) µm
Substrate	On the ground	On termite mounds ( <i>Nasutitermes</i> )
Distribution	QLD, NSW, VIC, SA, WA, NT	QLD, NSW, WA

### Bruce Fuhrer's *A Field Companion to Australian Fungi*

Please note this popular book is currently out of print.

Please do not send any orders to Fungimap for it until further notice. We anticipate it will be re-printed later this year, and will advise you via the Fungimap website and the next Newsletter when this has occurred. For help with Fungi identification in the meantime, the new Fungimap CD-ROM has nearly all of the target species illustrated!

## LAUNCH OF THE FUNGIMAP CD-ROM

The first version of the Fungimap CD-ROM was officially launched at the Field Naturalists Club of Victoria hall in Blackburn on the evening of Monday 30<sup>th</sup> April, 2001. The event attracted a capacity crowd of approximately 80 enthusiastic Fungimappers, and the CD was very well received – by the end of the night nearly everyone who attended owned a copy.

The evening featured four speakers. Helen Aston launched the CD-ROM, after which Ian Bell, who designed the CD, gave a guided tour of how to use it. The usefulness of an interactive guide quickly became apparent, as he showed how it was possible to search for fungi variously using shape, colour or family. Tom May, the Convenor of the Fungimap project, then thanked the many people whose hard work had produced such a high-quality CD, particularly Ian Bell, Katy Sommerville, who coordinated collecting and scanning photographs for use amongst many other things, Simon Lewis, Parks Victoria for their generous grant, and all of the Fungimap volunteers who sent in photographs. The meeting was then treated to a presentation by visiting American photographer Taylor Lockwood, with a



slide show of seemingly hundreds of magnificent fungi photographs from around the world, set to music. To see more of Taylor's photos, visit his website at <http://www.fungiphoto.com>

For those of you unable to attend the launch, the Fungimap CD-ROM is now available from the Fungimap office, at the modest price of \$15 including GST, plus \$3 postage. Regional coordinators also have CDs to sell at workshops and forays, but please don't send orders to them as they don't have mailing facilities.

If you were one of the many generous people who contributed photographs, you will receive a complimentary CD as a token of our gratitude. I have just acquired a large pile of CD mailing boxes, so these should be going out to you soon, but if you haven't received one in the next month or so and you contributed photographs, please let me know.

## A BRIEF LOOK AT THE FUNGIMAP CD-ROM



The Fungimap CD-ROM is a unique compilation of illustrations and information for all 100 Fungimap target species. It contains more than 700 colour illustrations, including pictures of most target species. There are individual distribution

maps for all 100 species. Each species has text linked to different key features.

Please note: to run this CD-ROM requires PC / Windows, a screen resolution of at least 800 x 600 and high colour.



## Ordering the Fungimap CD-ROM

**Cost: \$15.00 including GST plus \$3.00 postage**

### By cheque:

Please send a cheque for \$18.00 made out to the "Field Naturalists Club of Victoria" to:

Fungimap  
Royal Botanic Gardens, Melbourne  
Birdwood Avenue  
South Yarra, VIC 3141

### By credit card:

Credit card orders can be taken over the telephone by Karen Dobson at the Field Naturalists Club of Victoria office, Telephone: (03) 9887 9860.

### Enquiries:

All enquiries should be addressed to the Fungimap Coordinator, Gudrun Arnold, at the Botanic Gardens: Telephone: (03) 9252 2374

**E-mail:** [fungimap@rbg.vic.gov.au](mailto:fungimap@rbg.vic.gov.au)





**Conference Update:**

The next major event on the Fungimap calendar is the Conference, which is shaping up to be a most exciting occasion. At last count **100 people** had registered, close to 90 of them for the full five days. It is fantastic to see that it is generating so much interest: people are coming from all over Australia, and some from overseas.

Two **additional speakers** have been confirmed:  
 Dr Ross Beever, New Zealand: *Weird and Wonderful Fungi*  
 Ian Bell, Melbourne: *The Fungimap CD-ROM*

The **conference dinner** will now feature live music, performed by brilliant local classical guitarist Zephyr Ware; negotiations are also underway with Denmark's wonderful group Acapellago for a song or two.

Katie Syme and the other members of the Conference Committee have been working very hard to secure **funding** for this event, and have enjoyed some success:

- Shire of Denmark: used to print Conference brochures.
- WA Lotteries Commission: grant put towards travel, fees and accommodation for West Australians (which has encouraged registrations from as far away as Kununurra, Yandanooka and Ravensthorpe).
- South Australian Government: providing funding for SA Coordinator Pam Catcheside.

The Committee is still awaiting responses from some state governments, and also from the Department of Family and Community Services who were approached for a small International Year of the Volunteer grant for publication of the conference proceedings.

Katie and the Committee look forward to welcoming you all to Denmark very soon!

For further details, contact the Denmark Environment Centre, on (08) 9848 1644.  
 E-mail: [environ@denmarkwa.net.au](mailto:environ@denmarkwa.net.au)  
 Website: <http://www.denmarkwa.net.au/~environ>



**FUNGAL FUNWORD**

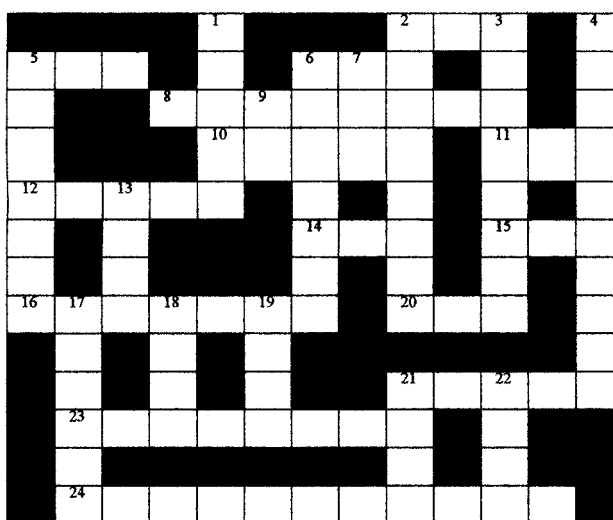
©Sydney Fungal Studies Group

**Across:**

2. A grass species
5. Colour of *Hygrocybe miniata*
6. Musical note
8. Fungus with rusty punctate spores, sinuate gills growing under pines
10. The smell of anthurus may do this
11. *Claviceps purpurea* will grow on this
12. A fungal beginning
14. Savoury biscuit
15. Signal for action
16. A toxic mushroom
20. A quadruped
21. Found in the Agaricaceae
23. Fungus with pink spores
24. Polypore turns red on cutting

**Down:**

1. Not here
2. Mushroom with rusty spores and a ring
3. Mushroom of the "country"
4. Pored mushroom
5. Diminutive of red, with white spores
6. Has pale pink echinulate spores
7. Avoid with lawyers wigs
9. Exist
13. Hibiscus fruit
17. White spores, gregarious. Cap usually conical.
18. Nidus
19. Needed for collecting fungi
21. Split
22. A growing medium



## FUNGI DON'T HAVE LEAVES, DO THEY?

by Pat Jordan, January 2001

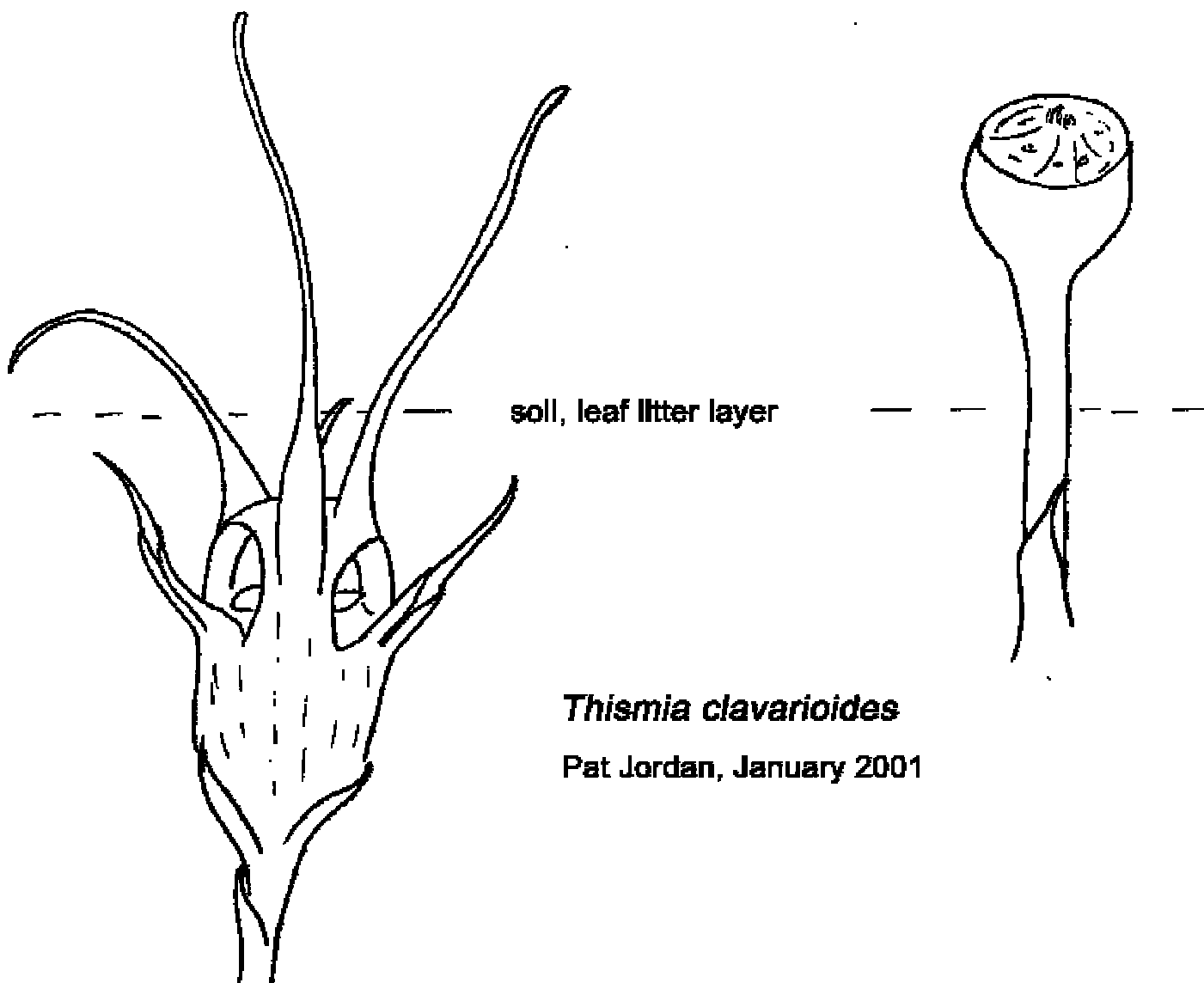
In March, while searching for the log on which I had previously found a mass of bright turquoise sequins (*Chlorociboria aeruginascens*), I found what I thought to be four small white mushrooms. In the dim rainforest light, they looked different, so I collected one and took it home. Under the microscope, it appeared to be similar to a stalked, birds nest fungus (*Nidula* sp.) BUT IT HAD LEAVES! I think my question to Tom May was along the lines of : "Is it a fungus? I think it has leaves!"

I knew my find was important when I received a reply from Tom by return mail! I had found the seed pod of a very interesting and unusual plant that lacks chlorophyll, a *Thismia*.

As only one species of *Thismia* had been described for Australia – this species had never been found in my area – and there was the possibility of finding a new species, I checked the location each week until early December. The bud I had been watching for weeks had been broken off and I idly prodded the club of a whitish coral fungus – the leaf litter fell away, and instead of a coral fungus, a *Thismia* flower appeared. This has since been confirmed by Kevin Thiele as a new, previously undescribed species that he plans to name after coral fungi, *Thismia clavarioides*.

A *Thismia* is a remarkable plant that spends most of its life underground, with only parts of the flower sometimes emerging out of the leaf litter. This species is translucent white except for the emergent 'horns' of some flowers being pale orange. It grows in a symbiotic relationship with a fungus, which in turn is associated with the root systems of forest trees. Little is known about its pollination or seed dispersal.

The most likely discoverers of *Thismia* are 'fungi people', or naturalists 'having a pee' – **so next time you notice the club of a coral fungus, or a bird's nest fungus, look twice before walking on. You too may find a *Thismia*!**



## ACKNOWLEDGEMENTS

### Fungimap Contributors: Recordors

<b>ACT</b>		Tony Young	23	Rosemary Cowen	1	Neville Walsh	1
Heino Lepp	4			Julia Davis	11	Gary Warner	1
Mark Nicholas	1	<b>SA</b>		John Eichler	7	Jean Youatt	1
		Ron Robinson	6	FNCV	7		
<b>NSW</b>				Sheila Houghton	3	<b>WA</b>	
Annette Ewins-Traviss	2	<b>TAS</b>		Virgil Hubregtse	10	Karen Clarke	7
Barry Kemp	4	Genevieve Gates	173	Ian McCann	69	Mavis Sowe	4
Jackie Miles	1	Muriel Hood	2	Betty Moroney	1		
Margery Smith	2	Sarah Lloyd	34	Dave & Lyn Munro	71		
Matthew Sparks	2	Sapphire McMullan-		Josephine Peake	2		
		Fisher	1	Judy Rutherford	2		
<b>QLD</b>		Di Williams	2	Elizabeth Sevier	1		
Beitske Maatje		<b>VIC</b>		Nigel Sinnott	17		
Smallegange	2	Carey Family	1	Allen Trumbull-Ward	1		
				Anne Walker	1		

Please note: this list is not completely up-to-date. Due to the difficulties inherent in changing coordinators, not all records have yet been added to the database – outstanding records will appear in the next Newsletter's acknowledgements section. If you have submitted records which do not appear here, you are welcome to contact me at Fungimap to reassure yourself that they have been received. Dung fungi collectors will also appear next time.

## FUNGI FROM KELLY'S BUSH

By Betty Rees, May 2001

In 1970, Kelly's Bush, the last pocket of urban bushland on the Hunter's Hill peninsula bordering the Western end of Sydney Harbour, was threatened by the purchase of land for housing development. As a result of the efforts of a dedicated group of local women known as the Kelly's Bush Battlers, a "green ban" was placed on the development at the site by the Builder's Labourers Federation and other unions under the guidance of Bob Pringle, Jack Munday and Joe Owens. After a prolonged battle the land was eventually purchased by the State Government in 1983 for the continuing enjoyment of the people of Sydney as well as local residents.

The site is small and yet, like all of the Sydney sandstone basin, carries a surprisingly rich and varied flora which survives on impoverished soil, provided sufficient rain has fallen. Kelly's bush is dominated by myrtaceous species especially *Kunzea ambigua* (the tick bush) which developed into a large, seemingly senescent middle storey, which appeared to have very little in the way of new seedlings developing beneath it. *Banksia serrata*, *B. integrifolia* and various *Eucalyptus* species provide a sparse upper storey with weeds spreading opportunistically inwards from the boundaries of the Bush due in part to uncontrolled run off from nearby recreational Weil Park. The Bush was also the site of a tin-smelting operation along the Parramatta River foreshore in past years, but "the Bush" was the site of countless adventures for lots of small children in the area.

In the last six years the "Friends of Kelly's Bush" has formed as the result of dedicated efforts by a group of voluntary Bush Care volunteers, resulting in an explosion of regeneration at the site. Parts of the senescent *Kunzea* have been cleared and

burnt on site, and the number of plant species present is increasing steadily as a result of access to the light and nutrients provided by the burning. Experiments with smoke water to promote seed germination are under way, and a student is undertaking a Master of Science at UNSW to study the pattern of regeneration. A National Trust bush regeneration team has been actively regenerating along the Parramatta River foreshore. Hunters Hill council is to be commended for appointing a Bushland management Officer to care for Kelly's bush and other bushland areas in the Municipality.

In Autumn, if sufficient rain has fallen, a remarkable range of varied macrofungi can be found on wood and on the soil, including several bolete species, one of which seems to be restricted to the stands of *Kunzea ambigua*. Recent wet weather in Sydney has caused an explosion of *Omphalotus nidiformis* in "the bush" with a dramatic after-dark show on standing dead trees.

Other fungi seen from time to time at Kelly's Bush include:

<i>Aseroe rubra</i>	<i>Gymnopilus allantopus</i>
<i>Amanita nauseosa</i>	<i>G. mullaunius</i>
<i>Amanita ochrophylla</i>	<i>Hypholoma fasciculare</i>
<i>Amanita punctata</i>	<i>H. aurantiacum</i>
<i>Boletus</i> sp.	"Jelly" fungus (with forked branches!)
<i>Coprinus</i> spp (x2)	<i>Mycena</i> spp (x2)
<i>Cortinarius</i> spp (x3)	<i>Psathyrella</i> sp.
<i>Descolea recedens</i>	<i>Pycnoporus coccineus</i>
<i>Fistulinella rodwayii</i>	<i>Schizophyllum commune</i>
<i>Fomes</i> sp.	<i>Tylophilus</i> sp.

We are indeed lucky to be able to have had this little bit of foreshore retained and preserved for us by the first environmental "green ban" in Australia, and by the efforts and

foresight of so many who have laboured so hard to make it possible.

## UP COMING EVENTS

Event	Date	Place	Contact
Field Naturalists Club of Victoria General Excursion	Sunday 20th May	Cement Creek, Vic	Dorothy Mahler (03) 9435 8408
Sydney Fungal Studies Group Foray	Saturday 2 <sup>nd</sup> June	Palm Grove, NSW	Pam O'Sullivan (02) 4362 1543
Sydney Fungal Studies Group Foray	Saturday 16 <sup>th</sup> June	Sassafras Gully, NSW	Alec Wood (02) 9570 1133
2001 Inaugural National Fungimap Conference	Friday 22 <sup>nd</sup> - Tuesday 26 <sup>th</sup> June	Denmark, WA	Katrina Syme (08) 9848 1644
Sydney Fungal Studies Group Workshop	Saturday 6 <sup>th</sup> October	University of NSW	Don Gover (02) 9661 4898

## TO CONTACT FUNGIMAP

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Next Issue

- Reports from the Fungimap Conference
- A whole lot more!

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The Fungimap Newsletter is edited by Gudrun Arnold.