

## **FUNGI GROUP WEEKEND FORAYS 18-20 April 2008**

The Fungi Group organised a weekend away to foray in the Otways and look for fungi in the cool temperate rainforest there. We stayed in the Youth Hostel in Apollo Bay, which was very comfortable and had a meeting room, where we gathered at the end of the day, as well as a kitchen. On the Friday afternoon we went to Mait's Rest because Marriner Falls at Paradise was closed; on the Saturday we met the Timboon FN group at Melba Gully, and we finished up on Sunday with a morning foray at Hopetoun Falls. At all of the forays we managed to see something special and interesting.

### **Otways, Mait's Rest, nr Apollo Bay 18 April 2008**

Leathery Goblet *Cymatoderma elegans* was almost the first fungus seen at Mait's Rest. This Fungimap target species is a goblet-shaped species that grows on wood and the lower spore-bearing surface has wrinkles and furrows. This area is the farthest point SW that it has been observed. It has been seen at Wilson's Promontory and is also often found in the tropics and semi tropics, as is another species that we saw – *Lyophyllum connatum* whose fruit-bodies looked white, fat and caespitose, exactly like the photo in *A field guide to Australian fungi* by Bruce Fuhrer. 2005 (# 172).

We also saw several small patches of the delicate Coral Tooth, *Hericium coralloides*, growing on an upright Nothofagus trunk – again one of the westernmost sightings. The Otway Ranges are, in fact, an outlier of the Strzelecki Ranges and Wilsons Promontory harbouring remnant cool temperate rainforests as well as tall Mountain Ash eucalypt forests.

A traveller from the US was interested in fungi so we were pleased to show her the blue Pixie's Parasol *Mycena interrupta* and the red/orange Velvet Parachute *Marasmius elegans*. Both are Fungimap target species. Altogether we found ten Fungimap target species and by that time it was too dark to see in the gully.

**Pat Grey, Ed Grey**

### **Otways , Mait's Rest, Apollo Bay Species list**

**Vegetation: Temperate rainforest:** Myrtle Beech, Messmate, treeferns

**GPS reading: 38°45'22"S 143°33'16"E**

#### **Table sorted into alphabetical order**

**No** = sequential numbering of species as they were found; **T** = Fungimap Target species; **S** = specimens taken for further examination

**See Fungi Group CD** = CD contains 109 species and over 870 illustrations, available from FNCV

**See Fungi down under p. #** = *Fungi down under: the Fungimap guide to Australian fungi* / by Pat Grey and Ed Grey. 2005

**See Fuhrer photo #** = *A field guide to Australian fungi* / by Bruce Fuhrer. 2005

**See McCann p. #** = *Australian fungi illustrated* / by I.R. McCann 2003

**See Bougher and Syme p.#** = *Fungi of Southern Australia* / Neale L. Bougher and Katrina Syme. 1998.

No	S	T	Type	Species	Description	Substrate
1		T	Smooth	<i>Cymatoderma elegans</i>	Looks just like a goblet; this is one of the most south-westerly sightings of the species. <b>See Fungi Down Under p. 77</b>	rotting wood
2			Gill	<i>Lyophyllum connatum</i>	Looks like <b>Fuhrer # 172</b> , however, who notes that this is found in warm to tropical regions, and cool temperate rainforest.	ground
3			Gill	<i>Pholiota squarrosipes</i>	<b>See Fuhrer 238</b>	soil
4		T	Gill	<i>Mycena interrupta</i>	<b>See Fungi Down Under p.47</b>	old gumnut
5		T	Gill	<i>Mycena viscidocruenta</i>	<b>See Fungi Down Under p.50</b>	forest litter
6		T	Shelf-leather	<i>Stereum ostrea</i>	<b>See Fungi Down Under p.79</b>	dead wood
7			Polypore-bracket	<i>Trametes</i> sp.	Dark velvety top with white edge. This is thought to be a form of <i>T. versicolor</i> . <b>See Fuhrer 425</b>	
8			Asco-spike	<i>Xylaria</i> sp.	White spikes at tips	dead log amongst moss
9			Gill	<i>Leucoagaricus rubrotinctus</i>	larger species, cap with brown-red scales. <b>See Fuhrer 165</b>	soil
10			Gill	<i>Marasmius alveolaris</i>	Dimples in cap, like scoops, size to 5 mm, radially pleated; stem thin 'horse-hair' type; lamellae not attached to a collar, rhizomorphs absent. <b>See Fuhrer 179</b>	bark
11			Asco-disc	<i>Mollisia</i> sp.	Cream-green discs.	inside fallen bark
12		T	Gill	<i>Mycena nargan</i>	at first we could only see the darker more mature caps, but then there was a young specimen with the characteristic white scales on the cap. <b>See Fungi Down Under p. 49</b>	wood
13			Pore	<i>Polyporus melanopus</i>	Commonly known as Black Foot, because the base of the central stem is black; cap tan-brown initially velvety, central depression, margin very undulating; stem cylindrical, paler near the pores; pores white/cream, occasional decurrent on one side of the stem.	dead wood
14		T	Gill	<i>Marasmius elegans</i>	<b>See Fungi Down Under p.44</b>	soil

No	S	T	Type	Species	Description	Substrate
15			Polypore-bracket	Postia lactea	See Fuhrer 417	litter
16			Gill	Cortinarius sp.	Brown with a khaki-brown band on stipe	soil
17			Gill	Hypholoma fasciculare	Stained red at base of stem on cutting. This seems to be an unusual feature in an otherwise 'typical' specimen. See Fungi Group CD, Fuhrer 137	dead wood
18			Gill	Pluteus cervinus	See Fuhrer 242	dead wood
19			Gill	Leucocoprinus sp.	White cap, cream gills closing up, slight colouration in umbo with slight striations. Ring on stem.	soil
20			Gill	Crepidotus variabilis	white shell on wood, gills turn brown with maturing spores. See Fungi Group CD, Fuhrer 66	very small branch
21			Gill	Armillaria novaezelandiae	A bit old. See Fuhrer 21	dead wood
22			Gill	Coprinellus sp.	Caps mauve-grey with whitish centre	dead wood
23			Gill	Pluteus lutescens	small, yellowish, with free gills and a pink spore print. See Fuhrer 243	buried wood
24		T	Asco-cup	Plectania campylospora	'Brown Forest Cup'. See Fungi Down Under p.109	wood
25			Polypore-bracket	Rigidoporus laetus	See Fuhrer 420	dead wood
26			Gill	Collybia eucalyptorum	See McCann p 44 top left.	soil
27		T	Coral	Macrotyphula juncea	'Fairy Club'. See Fungi Down Under p.80	dead fallen leaf
28			Gill	Marasmius crinisequi group	'Horse-hair Fungus'. Cap was typical – small pyramid in dimple. See Fungi Group CD, McCann p.51, lower left photo	litter
29			Asco-spike	Paecilomyces tenuipes	Parasitises beetles. See Fuhrer 515	in treefern moss
30			Gill	Hypholoma brunneum	See Fungi Group CD, Fuhrer 136	fallen log

No	S	T	Type	Species	Description	Substrate
31			Gill	Psathyrella sp.	Stipe to 80 mm, very fragile.	soil
32			Polypore-bracket	Ganoderma australe	<b>See Fungi Group CD, Bougher and Syme p.320</b>	fallen log
33		T	Spine	Hericium coralloides	<b>See Fungi Down Under p.75, Fuhrer 372</b>	upright trunk
34			Gill	Clitocybe clitocyboides	<b>See Fungi Group CD, Fuhrer 31</b>	ground
35			Gill	Cystolepiota aff seminuda	<b>See Fungi Group CD, Fuhrer 70</b>	upright trunk
36			Gill	Mycena maldea	Smelled of nitric. <b>See Fungi Group CD, Fuhrer 187</b>	wood
37			Puffball	Morganella subincarnatum	A small spherical puffball that grows on wood – M. purpurascens is very similar, but can only be separated with a microscope. <b>See McCann p. 101, top right</b>	mossy log
38		T	Gill	Omphalotus nidiformis	'Ghost Fungus'. <b>See Fungi Down Under p.53</b>	wood on ground

## Otways, Melba Gully 19 April 2008

It is always fun to find *Mollisia* sp. 'yellow-stainer' and to rub the small discs, which immediately turn from off-white to yellow, then eventually return to almost off-white. We have not yet kept any specimens long enough to see if they do finally become off-white again. The Swiss Book of Fungi 1, Ascomycetes p 174, no 198 "*Helotium*" *versicolor*, has an interesting observation to make: "When touched with the tip of a needle, the whole fruiting body changes colour within a few seconds to sulfur-yellow and then becomes orange-yellow....The discolouration of the whole fruiting body (not only the spot touched) to sulfur-yellow on mere contact, observed in our specimen is perplexing and not known by us to occur in any other fungus." However, *Mollisia* sp. 'yellow stainer' has a diameter to 5 mm while *H. versicolor* is minute, only 0.4-0.8 mm diameter.

Perhaps the most exciting find was *Pseudocolus fusiformis* – the stinkhorn with three orange arms joining at the top, enclosing the dark gleba and emerging from an egg. In fact there were several 'eggs' around the two fruit-bodies we saw. At first we were unsure about the species because according to Fuhrer it grows in the tropics and the colour of his image was so much paler than the specimen we saw, but several members researched it and found that it was the species we saw. It is also important to note that the size of the species mentioned was only to 60 mm high. Dry collections that Dr Tom May showed us in the Herbarium were tiny. The common name (from Europe and America) Stinky Squid did not actually apply here, as there was almost no smell from the gleba. Recently the group has not found many Stinkhorns, so it was good to find this one, which most of us had not seen before.

Another Fungimap target species, *Craterellus cornucopioides* was also spotted. It was not easy to see, and perhaps that is why there are not a lot of records for this species. It was the first time I had seen one, so that was a thrill for me. The larger fruit-body was typical and easily recognised – a deep trumpet shape with a dark 'mouth' and grey down the outside, but just down from this one were two other very dark 'trumpets'. Unfortunately it was so dark along this section of the track that it was not possible to photograph the dark fruit-bodies.

Two collections for the MEL Herbarium were made from this spot. The first was the minute blue *Mycena* sp. found only on dead Tree Fern Fronds. With the naked eye they look like dots on the stem, but under a hand lens (10 x) it is possible to see the tiny fruit-bodies clearly. The young appear as blue 'buds', which develop into a blue cap and stem with widely-spaced gills under the cap. As the fruit-body matures the cap loses its blue colour and becomes white, but the stem always retains some blue. Once you see it, it is easily recognised in the field – the problem is, first you need to see it. The sharp eyes of Helen from the Timboon FN found this collection, after which we all joined in to find more. The second collection was that of the parasitic *Paecilomyces tenuipes*, a spiky ascomycete. When flicked the spikes gave off clouds of white. The species was growing in moss on a Tree Fern. After removing the moss the parasitised beetle could be seen, so we decided to make this a collection for MEL.

As we proceeded along the track we found several groups of *Lentinellus* sp. (growing on wood the cream gills have a ragged/toothed edge) and from Fuhrer's images we gave them a name. However, G Gates and D Ratkowsky had some interesting points to make on the new work done on *Lentinellus*. The following is part of what was said in a report by G Gates and D Ratkowsky in relation to their work on the Tasmanian species of *Lentinellus*

“According to the work on the genus *Lentinellus* (270-page monograph comprising three separate papers) recently published by K Hughes, a molecular biologist; we are able to note the following changes to the nomenclature of the Tasmanian species.

*L. pulvinulus* The species that we were calling *L. pulvinulus* appears to be that species. Its known distribution is confined to the Southern Hemisphere, occurring in New Zealand and Argentina as well as in Tasmania. Phylogenetically, the species is closest to *L. perstrictifolius* (Speg.) Singer, also of Argentina, and suggests a Gondwanan origin (Petersen and Hughes, 2004).

*L. castoreus* The second sessile or laterally stipitate species is *L. castoreus* (Fr.) Kühner & Maire, not *L. hepatotrichus*, which Petersen and Hughes (2004) consider to be a synonym of *L. pulvinulus*, nor *L. ursinus*, which is widespread in Europe, eastern Asia and North America, including temperate Mexico, but does not appear to extend south of the Equator. *Lentinellus castoreus*, on the other hand, is a very widespread species, whose worldwide distribution includes both temperate and tropical areas of both hemispheres. One feature that we had overlooked in our previous treatment of this taxon is the fact that the gills are much closer together than those of *L. pulvinulus*. Indeed, the crowded lamellae, in contrast to the rather distant gill spacing of *L. pulvinulus*, help make the two taxa easy to differentiate macroscopically. In terms of phylogeny, *L. castoreus* is closest to the *L. ursinus* clade (Petersen and Hughes, 2004). Both these broad species groups are noteworthy for their small spores. [Perhaps Fuhrer # 155, with its close gills should rather be *L. castoreus* – Pat Grey]

*L. omphalodes*. The centrally stipitate species that we had confidently called *L. omphalodes* is not that species, as that taxon is confined to the Northern Hemisphere. In any case, its name has been changed to *L. micheneri* (Berk. & M.A. Curtis) Pegler. Prof. Petersen (pers. comm.) suggested to us that our species might be *L. novae-zelandiae* (Berk.) R.H. Petersen or a new species, *L. tasmanica* R.H. Petersen, described in their monograph (Petersen and Hughes, 2004, pp. 128-131). *Lentinellus novae-zelandiae*, as the name suggests, was first described from New Zealand, but is also known from southern Argentina. This species has a lateral or absent stipe, however, in contrast to the well-developed, usually central, stipe of our Tasmanian collections, and perhaps more importantly, the pileus surface has pileicystidia, which our material lacks. Hence, the Tasmanian stipitate taxon is unlikely to be *L. novae-zelandiae*. On the other hand, our extensive collections of a soil-borne stipitate *Lentinellus* agree with Petersen's description of *L. tasmanica* in all important respects, including the absence of pileicystidia, with the exception of one very important character, viz. spore size. The protologue (Petersen and Hughes, 2004, p. 130) described the spore size as 3.6-5.2 x 3.2-4.0 µm, with a mean spore length of 4.60 µm. In another paper in the same monograph, devoted to type specimen studies, the spore size was given as slightly smaller, viz. 3.6-4.2 x 3.2-3.6 µm, and subglobose in shape. Our own Tasmanian material generally has spores in the range 5-6 x 3.5-4 µm, and is better described as elongate ellipsoidal rather than broadly ellipsoidal or subglobose.

Are we to believe that there is a fourth widespread Tasmanian taxon of *Lentinellus*, or is it better to adopt a more conservative approach and conclude, for the moment at least, that the slightly larger spores of our collections do not suggest that the taxon is a different species from *L. tasmanica*? We opt for the latter alternative and conclude that our centrally stipitate species is *L. tasmanica*, despite the apparent discrepancy of spore size. A supporting macroscopic character is the observation by Petersen and Hughes (2004, p.130) that basidiomata of *L. tasmanica* 'seem prone to poor drying, and in the process turn dark brown with tissues hardening'. All our collections of the stipitate species exhibit this characteristic." [Perhaps Fuhrer # 154, with central stem should rather be *L. tasmanica* – Pat Grey]. The work by K Hughes (and Gates and Ratkowsky) indicates that on forays the Fungi Group needs to study more closely the samples that we find

We also kept seeing a very small species of *Agaricus* sp. The cap was to 50 mm with radiating fibres, the stem had a ring and the gills were free. Although in stature and radiating scales on the cap it looked more like a *Lepiota* species the brown gill colour indicated *Agaricus*. We have given it a field name 'lightweight' because of its distinctive smallness.

In addition to 'typical' *Marasmius crinisequi* group, four fruit-bodies with all the typical features had a dark edge to the gills – these will be noted as *M. crinisequi* group 'dark gill edge'. Also several specimens of *M. sp.* 'angina' with purplish to pink-grey caps and pale margins, purple-brown gills and thin tough black stem were found inhabiting dead twigs.

At all the forays we kept seeing Lepiotoid species – were they *Lepiota*, *Leucoagaricus* or *Leucocoprinus*? Could we distinguish them in the field? This is what Shepherd & Totterdell (1988) p. 71f said about them. “Lepiotoid species are characterised by free gills, a ring on the stem and a spore print that is usually white (occasionally brown or green); the group includes the following genera:- genus *Lepiota* is characterised by small to medium-sized fruit-bodies with a central stem easily detachable from the cap; cap convex umbonate that may be almost smooth, but is more often scaly; stem usually slender, with a ring, base usually swollen. Genus *Leucocoprinus* – cap convex and umbonate, relatively thin and fragile, plicate margin; stem slender with swollen base. Genus *Leucoagaricus* – cap convex not umbonate, smooth margin; stem short. The very large species, genus *Macrolepiota* (*now mostly in the genus Chlorophyllum*) can be distinguished by the larger size; cap convex umbonate, scaly, margin smooth; long stem.” See also the key to Lepiotacea Shepherd & Totterdell (1988) p 28. In relation to these definitions perhaps Fuhrer # 164 should be *Leucocoprinus* (not *Leucoagaricus*) *ooliekirrus*.

Similarly with *Panaeolus* and *Psathyrella*, Shepherd & Totterdell (1988) p. 85 “in the field it is difficult sometimes to differentiate between these two species, both have a similar stature and dark spores. *Panaeolus* – small to medium-sized fungi with bell-shaped to hemispherical cap, NOT striate at the margin; does not deliquesce; stem very elongate, smooth, no ring; gills in young specimens are strongly mottled, but on maturing become more evenly black, wedge-shaped; on dung or rich ground. *Psathyrella* - small to medium-sized fungi; cap conical then convex or flat; stem thin and fragile, breaks easily; gills black, but NOT mottled; spore print purplish-brown to black.”

Pat Grey, Ed Grey

### Otways, Melba Gully 19 April 2008 Species list

Lat/Long 38 deg 41' 51"S 143 deg 22' 10" E

**No** = sequential numbering of species as they were found; **S** = specimens taken for further examination and descriptions and some for collection for RBG (description, drying); **T** = Fungimap Target species.

**See Fungi Group CD** = CD contains 109 species and over 870 illustrations, available from FNCV

**See Fungi Down Under p. #** = *Fungi Down Under: the Fungimap guide to Australian fungi* by Pat Grey and Ed Grey. 2005, available from RBG

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**See McCann p. #** = *Australian fungi illustrated* by I R McCann. 2003, available from FNCV

No	S	T	Type	Species	Description	Substrate
01			gills	<i>Campanella olivaceonigra</i>	tiny grey-white hanging shell, with widely-spaced gills. <b>See Fungi Group CD</b>	small twig
02		T	gills	<i>Marasmius elegans</i>	typical velvety-orange cap. <b>See Fungi Down Under p. 44</b>	litter on bank
03			gills	<i>Mycena</i> sp. aff. <i>yuulongicola</i>	caps dark with paler edge; clustered on stump; looked more like <b>Fuhrer # 214</b>	stump

No	S	T	Type	Species	Description	Substrate
					than anything else.	
04			gills	Laccaria sp.	Orange with dark centre; had the typical pink bloom on the gills	ground
05			truffle	Truffle	pinkish, no columellar, quite dense. Paul George to check spores	ground
06			gills	Mycena albidofusca	small, cap mouse-grey, with a 'lens' at the apex. <b>See Fungi Group CD</b>	litter
07		T	jelly	Tremella mesenterica	Yellow Brain; yellow, soft gelatinous convoluted mass. <b>See Fungi Down Under p. 84</b>	wooden rail
08			gills	Melanoleuca sp.	large species, with mushroom-colour cap and white close gills. For an example (which did not appear to be our species) <b>See Fuhrer # 183</b>	ground
09			gills	Pholiota squarrosipes	typical yellow-brown in colour, with fringe of scales around margin; stipe with fibrillose scales below membranous ring. <b>See Fuhrer # 238</b>	ground
10			gills	Mycena toyerlaricola	small red species, that appears restricted to Nothofagus cunninghamii rainforest; M. toyerlaricola differs from M. viscidocruenta – a similar-looking species – because it does not have a bright red glutenous stem. . <b>See Fuhrer # 211, 213 and Fungi Down Under p. 50</b>	litter
11			gills	Coprinellus disseminatus	older fruit-bodies grey, plicate, young fruit-bodies pale yellow-tan. <b>See Fungi Group CD under Coprinus disseminatus</b>	ground
12			gills	Mycena epipterygia group	Mycena with pale cap, but yellowish, slimy stem. <b>See Fungi Group CD</b>	soil/litter/moss
13			gills	Rhodocollybia sp.	typical Rhodocollybia with a flaring stipe, close white gills and brown cap.	ground
14			gills	Crepidotus variabilis	Small (to 15 mm) white shells, caps abut the substrate; gills at first white, but becoming brown with mature spores. <b>See Fungi Group CD</b>	twig
15			gills	Melanotus hepatochrous	small brown shell on wood, with a tiny white knob for a stem. <b>See Fuhrer # 185</b>	wood
16			gills	Crepidotus nephrodes	cap very pale yellowish, with a furry white section near the attachment; <b>See Fuhrer # 65; McCann p. 27 top R</b>	fallen log

No	S	T	Type	Species	Description	Substrate
17			gills	Panaeolus sp.	cap d 25 mm x 15 mm high, pale with brown speckles and pale hairs; stipe long (110 mm), white, hollow; gills mottled dark (indicating this is a Panaeolus sp.), white cystidia on edge of gills.	ground/?dung
18			polypore-bracket	Ganoderma australe	very large bracket, brown on top, with a white margin and white pores. Tan spores are often seen en masse on the top of the cap or on nearby wood. <b>See Fungi Group CD</b>	fallen log
19			gills	Tubaria sp. 'stitches'	Striate cap with white 'stitches' around edge. This species has all the features of a Tubaria, as well as always having a characteristic striate cap with white scales round the edge that looks like 'stitching'.	litter or perhaps buried wood
20			jelly	Heterotextus peziziformis group	Jelly Bells, small spathulate or turbinate, yellow jellies clustered on wood. <b>See Fungi Group CD</b>	fallen twig
21			gills	Mycena maldea	Tiny (cap 4 x 3 mm), white fruit-bodies. The presence of criniform stipes (stems without caps) indicates the species. cf with M albidocapillaris group, a similar-looking species but which has no criniform stipes, no smell and is attached to the substrate with a whorl of radiating mycelium. <b>See Fungi Group CD</b>	bark
22			coral	Coral	White, small, spiky	ground
23			gills	Marasmius sp. 'angina'	<b>See Fungi Group CD</b>	litter
24		T	spines	Mycoacia subceracea	tiny yellow species on the underside of small pieces of wood; under a hand lens bright yellow 'teeth' can be seen. <b>See Fungi Down Under p. 76</b>	wood
25			gills	Lentinellus aff omphalodes	Lentinellus species have serrated gill edges, white spore print.	wood
26			polypore-bracket	Polyporus badius/melanopus	thin, several brackets arise from a common base; stipe short, brown-black, felty <b>See Fuhrer # 415</b>	wood

No	S	T	Type	Species	Description	Substrate
27			gills	Agaricus sp. 'lightweight'	very small (cap to 50 mm), cap with radiating fibres; stem with ring; gills free, brown. In stature looks more like a Lepiota species, but the gill colour indicates Agaricus.	ground
28			gills	Coprinus sp.	Small white, floury species, similar to C. niveus but smoother in centre of cap	ground
29			gills	Mollisia sp. 'yellow-stainer'	These tiny (to 5 mm) off-white discs immediately turn a bright chrome yellow when touched, and after some time return to almost white again.	small dead wood
30		T	gills	Mycena viscidocruenta	Tiny, red species with a glutinous stem. <b>See Fungi Down Under p. 50</b>	
31			gills	Panaeolus sp.	Stipe 120mm, white hairs at base, pale. Cap 30 mm, chocolate brown. Gills mottled, arcuate adnexed on outside. Young have hairs on cap. Older are hygrophanous	
32			gills	Entoloma sp. 'small dark blue'	cap blue/purple with dimple, pale hairy fibres; gills sinuate with lamellulae, white; stipe deep blue, almost concolorous with cap, pale with cystidia near gills, with white mycelium to half way up, dense at base.	ground
33	sp		gills	Pluteus sp. 'dark velvet'	this species was noted for its dark, velvety cap; cap 25 mm, convex to flat, short brown hairs, margin striate curling over the edge of the gills underneath; stipe 30 mm, central, cylindrical, off-white with longitudinal fibres; gills pale turning pale, pink-tan, free; spore print pinkish aging to pale tan. <b>Grgurinov p 425</b> – possibly <i>P. muscorum</i> , size and colour are about the same, but this species is solitary among moss (our species was solitary and on a log, which was mossy) and it is too small to be <i>P. cervinus</i> . In Phillips, <i>P. podospileus</i> has a similar colouring.	wood
34			earth ball	Scleroderma sp.	possibly <i>S. cepa</i> ; typical earthball, round, yellow, leathery with a brown spore mass; more yellow than <b>Fuhrer # 339</b> ( <i>S. cepa</i> )	ground
35			gills	Marasmius sp	Pinky cap with deeper pink centre. Stipe horsehair, two-tone, pale just near cap. Cap 10mm.	litter
36			asco-disc	Chlorociboria aeruginascens group	More blue than green; stains the wood blue. <b>See Fungi Group CD</b>	log
37		T	slime	Ceratiomyxa fruticulosa	white, like spiky snowflakes. <b>See Fuhrer # 536</b>	rotting wood

No	S	T	Type	Species	Description	Substrate
38			stinkhorn	<i>Pseudocolus fusiformis</i>	3 orange arms joined at top arising from whitish egg and dark gleba in centre. Top of arms wrinkled horizontally. Some of the off-white 'eggs' were nearby. <b>cf Fuhrer #364</b> ; Paul George comments- a <i>Pseudocolus fusiformis</i> which looks good for the shape, although it is somewhat paler than our find. I have found some web sites that mention it in New England, USA, which is hardly 'tropical or subtropical' as Fuhrer states. Jurrie Hubregtse remarks that Bruce's picture has obviously faded. I found pictures from Australia, showing the orange colour, on the internet. <i>Pseudocolus fusiformis</i> has been found in the Otways. I think that's what this fungus is. Pat Grey - a question mark remains about the size and lack of smell.	ground
39			gills	<i>Lentinellus</i> sp. aff. <i>ursinus</i>	No stipe, hairs at attachment! <b>See Fuhrer # 156</b> . It is useful to note the revisions of <i>Lentinellus</i> , see above in report	wood
40		T	gills	<i>Mycena austrororida</i>	small (to 15 mm), white or tan cap; can always be recognised by the 'gloop' on the stipe, if very dry, only at the base. <b>See Fungi Down Under p. 46</b>	small branch
41			gills	<i>Pluteus atromarginatus</i>	apart from <i>Pluteus</i> characteristics this species is recognised by the gills which have an almost black edge as well as its larger size. <b>See Fuhrer # 241</b>	stump
42			gills	<i>Melanophyllum haematospermum</i>	cap mouse brown with hanging veil remnants on the margin; gills pink-brown which produces a dark green print when fresh. <b>See Fungi Group CD</b> .	soil, leaf litter
43			?	<i>Typhula</i> / <i>Macrotyphula</i> / <i>Xylaria</i>	long (ca 150 mm), rubbery, floppy, brown, with a knob at the tip. Virgil Hubregtse believes that the specimen was not really like <i>Macrotyphula</i> , and believes it to be <i>Xylaria</i> . In contrast to that Pat Grey believes that it is too 'floppy' to be a <i>Xylaria</i> .	twig
44			gills	<i>Marasmius crinisequi</i> group	Colour on gill edge. Long stipe - 50mm. Cap biscuit colour; some <i>M. crinisequi</i> group fungi appear to have a dark edge, some don't. The <i>M. crinisequi</i> group, characterised by the thin, horse-hair stem may involve several species. <b>See Fungi Group CD</b>	litter
45			gills	<i>Mycena kuurkacea</i>	<i>Mycena</i> with stem that 'bleeds' a red fluid when cut or broken. <b>See Fungi Group CD</b>	wood
46			gills	<i>Coprinus</i> sp. (aff. <i>plicatilis</i> )	cap small, grey, very pleated; important to note whether the gills were attached to a collar.	ground/dung

No	S	T	Type	Species	Description	Substrate
47		T	gills	Armillaria luteobubalina	Solitary. <b>See Fungi Down Under p. 23</b>	wood
48		T	leathery shelf	Stereum ostrea	thin, funnel-shaped fruit-bodies, massed along several fallen logs, bright yellow zoned upper surface. <b>See Fungi Down Under p. 79</b>	wood
49	FN CV 77		gills	Mycena sp. 'blue stem'	Cluster of minute blue fungi on dead tree fern rachis; minute (to 3 mm); at first small blue knobs, that expand into a tiny cap with thick widely-spaced gills; at first blue, than paling to white; stem always blue. <b>See Fuhrer # 219</b> , looks exactly like the specimen we collected.	tree fern
50	FN CV 78		asco-spike	Paecilomyces tenuipes	2 fruit bodies emerged from near the back end of the beetle larva; fruit-body total length of spike 20 mm; head spiky, feathery head ca 5 mm, pale yellow covered with white powdery conidia which puffed off when touched; stipe ca 15 mm, pale yellow; beetle was pupating just below the moss layer on the Tree Fern trunk. Several other small fruit bodies appeared to be developing on the beetle larva. <b>See Fuhrer # 515</b>	parasitised body of beetle larva, found in moss on the stem of a Tree Fern
51			gills	Russula persanguinea	one of the very few Russula seen over the weekend – cap red/purple, stipe white, gills white. <b>See Fuhrer # 258</b>	ground
52		T	Craterelles	Craterellus cornucopioides	Horn of Plenty; this fruit body was quite large, ht ca 100 mm; trumpet-shaped with grey wrinkled outside; inside dark grey. Further down on the bank we saw two other much smaller fruit bodies, these appeared black, and were probably young fruit-bodies. <b>See Fungi Down Under p. 60.</b>	ground
53		T	gills	Mycena interrupta	blue Pixie's Parasol, it is the only blue Mycena visible to the naked eye; another one is minute (see no 49) needs a lens to see clearly. <b>See Fungi Down Under p. 47</b>	upright trunk
54			asco-disc	Torrendiella eucalypti	minute (0.5 mm) stalked discs always found on fallen Blackwood (A. melanoxylon) leaves. It was given the name 'eucalypti' when the Kew mycologist described it and did not recognise the leaf as an Acacia (perhaps it should be Torrendiella blackwoodi or melanoxyloni ??). Disc 0.5 mm, yellow, rim with dark spiky hairs coming up and over the disc; stalk dark.	leaf blade

No	S	T	Type	Species	Description	Substrate
55			gills	Lentinellus pulvinulus	See Fuhrer # 155	small branch
56			jelly	Calocera sp.	tiny jelly-like, yellow spikes (occasionally forked). for a sample see Fuhrer # 450	end of log
57			asco-spike	Xylaria polymorpha	Dead man's Fingers; black, club-like stumps. See Fungi Group CD	log, in moss
58			jelly	Sirobasidium brefeldianum	'grey blobs covered in silicone'. size to 4 mm, round, off-white, gelatinous. A very distinctive fungus recognisable in the field. See Fuhrer # 454	bark
59			gills	Armillaria novae- zelandiae	Important features to note are the viscid cap, and stem viscid below the ring. See Fuhrer # 21	wood
60			asco-mass	Beauveria bassiana	like blobs of white icing sugar over a caterpillar. See McCann p. 110, top	caterpillar, very hairy

## Otways, Hopetoun Falls, Nr Beech Forest 20 April 08

The final foray for this great weekend was at Hopetoun Falls, where a variety of fungi awaited us along the track. Although the area was not really wet, it was damp enough to yield 45 species, including four Fungimap targets.

Some of the species are mentioned below:

*Rickenella fibula*, its tiny yellow-orange caps decorating a moss bed. This fungus grows with several different types of moss in a variety of locations, but we didn't see it on our other two 'Otway forays'.

*Conocybe filaris*, a small fungus with a warm brown, cone-shaped cap and a distinctive membranous ring on the stem, growing on dead wood.

An *Agaricus* species with red tones in its cap reminded us of similar species we have seen in other bushland, but the tone of the red was noticeably different.

An *Entoloma* with a grey-brown cap, pale gills and smooth grey stem was growing on the ground near the start of the track. Near the end of the track an older specimen of the same species was found. Maturing spores had turned the gills of this one pink. The gills looked free, but on close examination were found to be very finely sinuately adnexed. Characteristic white mycelium covered the base of the stem, which was 80 mm long.

A *Marasmius* species in the *crinisequi* group proved interesting, because its gills had dark edges. We haven't seen specimens like this before.

*Melanophyllum haematospermum*, with characteristic white veil remnants hanging from the margin of the cap. This fungus is unusual in that it produces a spore print that is green when fresh, but brown when dry.

A considerable number of a large brown *Cordyceps* sp. were growing on big (at least 100 mm long) caterpillars under a Blackwood *Acacia melanoxylon*. Conveniently for us, an animal had dug up a specimen that we could examine. The *Cordyceps* fruit-bodies differed from *C. gunnii* in that the main colour was brown rather than black, and there was no yellow at the base. The bases looked as though they may have been infected with a white fungus.

There was a variety of *Mycena* species, including a very photogenic group of *Mycena epipterygia* with its yellow stems, and a small *Mycena* with a dark reddish brown, velvety cap. Its broken stem produced a red-brown juice, and the gills had a red-brown edge.

At the end of the track a display of the beautiful blue *Mycena interrupta*, growing on the side of a log, gave us a delightful finish to a very pleasant weekend.

Thanks go to Denise Carew, Sue McLean and Pat Grey for compiling the fungi lists.

**Virgil Hubregtse**

**Otways, Hopetoun Falls, Nr Beech Forest 20 April 08 Species list**

GPS reading at carpark: 38° 40' 06"S 143° 34' 05"E

Wet sclerophyll forest - nr car park Eucalyptus dominated; down in waterfall gully, Myrtle Beech rainforest

**No** = sequential numbering of species as they were found; **S** = specimens taken for further examination and descriptions and some for collection for RBG (description, drying); **T** = Fungimap Target species.

**See Fungi Group CD** = CD contains 109 species and over 870 illustrations, available from FNCV

**See Fungi Down Under p. #** = *Fungi Down Under: the Fungimap guide to Australian fungi* by Pat Grey and Ed Grey. 2005, available from RBG

**See Fuhrer #** = *A field guide to Australian fungi* by Bruce Fuhrer. 2005, available from FNCV

**See McCann p. #** = *Australian fungi illustrated* by I R McCann. 2003, available from FNCV

No	S	T	Type	Species	Description	Substrate
01			gill	Leucocoprinus sp. 'brown' centre'	found in the grass at the start of the walk, near the car park. <b>See McCann p. 34 top</b>	ground under eucs
02			gill	Crepidotus nephrodes	cap very pale yellowish, with a furry white section near the attachment; <b>See Fuhrer # 65; McCann p. 27 top R</b>	small fallen branch
03			gill	Rickenella fibula	tiny orange-brown species growing in the moss; small hairs fuzz out along the stem (need a hand lens to see them). <b>See Fungi Group CD</b>	in moss under eucs
04			gill	Galerina hypnorum group	tiny orange-brown species, always in moss, usually on large, fallen logs. <b>See Fungi Group CD</b>	in moss
05			gill	Gymnopilus sp.	colour was quite mustard-yellow.	fallen log
06			earthstar	Geastrum sp. probably triplex	pale thick stars, darker spore container, chocolate brown 'mouth' with peristome, turreted, not plicate. The spore sac sunk down into the surrounding 'stars', somewhat similar to G. saccatum, or G. javanicum (see <b>Bougher &amp; Syme</b> p 116)	ground
07			gill	Coprinus sp.	very small (cap less than 10 mm) delicate species, young buds and developing fruit-bodies very hairy; cap grey, hairy; on over-mature caps the margin had rolled back to form a square; gills dark; stipe thin.	on wombat dung

No	S	T	Type	Species	Description	Substrate
08			coral	Coral	white, spiky at tips, divisions with more of a U shape than V.	ground
09			gill	Armillaria sp.	Possibly <i>A. novae-zelandiae</i> because it is one of the few species of parasitic fungi in Temperate Rainforests	Living tree
10			gill	Leucoagaricus rubrotinctus	this species looked just like the image in Fuhrer ( <b>Fuhrer # 165</b> ), cap with reddish brown fibrils, darker in the centre, white free gills and a ring on the stem.	ground
11			gill	Mycena sp	stem white; gills white, wide apart; cap covered with white spores of those above;.	living tree
12			gill	Agaricus sp. (? austrovinaceus) 'large'	large species; cap 120 mm diam, red-brown scales, umbo; stem with ring; gills free, brown with spores	ground
13			gill	Coprinellus disseminatus	typical group, older fruit-bodies grey, plicate, young fruit-bodies pale yellow-tan. <b>See Fungi Group CD as Coprinus disseminatus</b>	base of stump
14			gill	Leucocoprinus sp.	cap with dense scales in centre (very dark) under hand lens, on the pale cap fine black speckles radiate around the cap to the margin.	ground
15			gill	Psathyrella sp.	cap pale brown with umbo, margin paler ?hygrophanous; stem white; gills dark brown, close.	ground
16			gill	Clitocybe sp.	very typical, cap pale colour, very infundibuliform with whitish, decurrent gills and very depressed centre to the cap. Perhaps <i>C. clitocyboides</i> , but they were off the path behind a fence and rather difficult to see. <b>See Fungi Group CD</b>	ground
17			gill	Agaricus sp. 'lightweight'	very small (cap to 50 mm), cap with radiating fibres; stem with ring; gills free, brown. In stature looks more like a <i>Lepiota</i> species, but the gill colour indicates <i>Agaricus</i> .	ground
18			gill	Conocybe filaris	a species easily recognised by its very small stature (cap diameter ca 5 mm) and large (for the size of the fruit-body) skirted ring on the thin stem. It can be differentiated from <i>Descolea recedens</i> group ( <b>See Fungi Group CD</b> ) (which also has a large skirted ring), by its smaller, less robust stature and lack of yellow fleck-like scales on cap and stem. <b>See Fuhrer # 38</b>	wood, dead

No	S	T	Type	Species	Description	Substrate
19			gill	Agaricus sp. 'bush'	Larger than the 'lightweight', seemed more Agaricus size	ground
20			gill	Lepiotoid	very tiny, very delicate species; cap 5 mm, pale with very dark centre, striate margin; stem very thin, with ring	in moss
21		sp	gill	Mycena sp. (aff subalbida)	tiny white Mycena; cap 2 mm, convex, outside of cap bulges between the gills, hairy bristles like sugar granules (cystidia?); stem 6 mm, central, cylindrical, almost translucent, slightly hairy, joined to the substrate with a pale disc; gills widely spaced, interspaced with 1 set lamellulae; young fruit-bodies are minute (less than 0.5 mm) white round balls bristling with white hairs; smell of nitric chemical.	Tree Fern frond
22			gill	Macrolepiota clelandii	'typical', but old. <b>See McCann p. 34 middle</b>	ground
23			asco-mass	Beauveria bassiana	like blobs of white icing sugar over a caterpillar. <b>See McCann p. 110, top</b>	caterpillar, very hairy
24			gill	Melanophyllum haematospermum	several 'typical-looking fruit-bodies'; cap mouse brown with hanging veil remnants on the margin; gills pink-brown which produce a dark green print when fresh. <b>See Fungi Group CD.</b>	litter
25			gill	Mycena epipterygia group	small fruit-bodies with yellow stems. <b>See Fungi Group CD.</b>	Tree Fern frond
26			gill	Mycena sp.	small species (ht to 20 mm); cap 7 mm, dark (red/brown), velvety; broken stem produced a red-brown-staining juice; gills with red-brown edge.	wood
27		T	asco-jelly	Ascocoryne sarcoides	purple/pink jelly blobs, or discs. <b>See Fungi Down Under p. 111</b>	cut end of fallen log
28			polypore bracket	Ganoderma australe	very large bracket, brown on top, with a white margin and white pores. Tan brown spores were seen on the top of the cap and nearby on the wood. <b>See Fungi Group CD</b>	fallen log
29			gill	Rhodocollybia butyracea	surface texture of the cap was greasy, and the stature was typical of Rhodocollybia – stem widens towards base, gills white and close. <b>See Fuhrer # 34</b>	ground

No	S	T	Type	Species	Description	Substrate
30			gill	<i>Mycena kurramalla</i>	note particularly the arched decurrent gills with a prominent red edge. <b>See Fungi Group CD.</b>	small, mossy fallen branch
31			gill	<i>Marasmius crinisequi</i> group 'dark gill edge'	had all the characteristics with the cap and stem, but the gills had a brown edge. <b>See Fungi Group CD.</b>	litter
32			asco-disc	<i>Bisporella citrina</i> group	small lemon-yellow (to 3 mm) discs on wood. <b>See Fungi Group CD.</b> Information in the <b>Swiss Fungi Book 1 Ascomycetes</b> states that the diameter of the disc is from 1-3 mm, therefore anything larger must be considered a different species (? <i>Discinella terrestris</i> ).	wood
33			asco-spike	<i>Xylaria ?hypoxylon</i>	black, tiny spikes (to 12 mm), coming out of wood, forking with wider section, topped by a black spike with a bit of white; young specimen looked like a cross arising from a wide black hairy base, there were sparse hairs on the arms; looking in Swiss Fungi vol 1, no 348, it may be an Australian type of <i>X. filiformis</i> , but in the book 'Fungi Out West, 2007, by Chinchilla FN (QLD), p 28 shows an illustration similar to that which we saw, called <i>X. hypoxylon</i>	wood, small piece
34			gill	<i>Psathyrella</i> sp.	brown cap dark gills.	fallen Tree Fern stem
35			asco-vegetable caterpillar	<i>Cordyceps</i> sp. 'brown' aff <i>gunnii</i> '	Jurrie Hubregtse examined his photos and commented that the <i>Cordyceps</i> ranged in colour from a brown to a very dark brown. As far as he could tell (apart from their stature, which was like that of <i>C. gunnii</i> ), their morphology is neither that of <i>C. gunnii</i> (colour different) nor <i>C. hawkesii</i> (no distinctly marked division between the head and stipe, and for most specimens the colour was different). He did not think it was the same <i>Cordyceps</i> as shown in McCann as "Yellow Caterpillar <i>Cordyceps</i> " on page 109, because there is no yellow. The best we can do at the present is call it Brown <i>Cordyceps</i> sp.	in ground parasitic on buried, pupating caterpillar
36			gill	<i>Tubaria</i> sp.	brown fungus on wood; tubaria	short, rotten branch
37		T	gill	<i>Mycena nargan</i>	Black/brown caps, younger specimens with the typical white scales. <b>See Fungi Down Under p. 49</b>	short, fallen rotten branch
38			gill	<i>Lepiota</i> sp.	cap 60 mm, pale with a dark brown scaly umbo, and radiating brown scales around the cap	ground

No	S	T	Type	Species	Description	Substrate
39			gill	Cystoderma sp.	small, pale orange/brown; cap diam 12 mm, convex, tan/brown, scurfy, with dimples, flesh yellow; stem length 45 mm, cylindrical, watery yellow, top section smooth, lower section rough and scaly below band of scales like a worn away ring; the base covered in lacy mycelium, hollow; gills pale cream, with shallow lamellulae. The macro description is similar to <b>Fuhrer # 69</b> ( <i>C. amianthinum</i> ) apart from its smaller size so it could be <i>C. musicolum</i> as described by <b>Grgurvinovic</b> that is similar to <i>C. amianthinum</i> , but smaller.	fallen very rotten branch
40			asco-spike	?Xylaria sp.	they were black spikes (to 20 mm) like Xylaria – but the spikes had an orange base and white top; really old specimens were just black stumps	falling Tree Fern stem
41			polypore-bracket	Polyporus sp.	4 fruit-bodies emerge from a single base. cap 16 mm, projects 13 mm, thickness 2 mm, flat with slight depression at stem, hairy, margin smooth; stem vertical attached, 12 mm, diam 4 mm, white near cap, brown at base, rising directly from substrate; pores 4-5 per mm, decurrent, white; spore print white.	small branch, rotten
42		T	gill	Schizophyllum commune	Split Gill; these split gills are very decorative and a distinctive feature of this shelf; cap off –white/grey and furry. <b>See Fungi Down Under p. 57</b>	side of fallen log
43			gills	Pholiota? sp.	This species was difficult to determine, even to genus. Paul George made the following comments: looks a lot like Pholiota to me, but obviously it's quite young. <i>P. multicingulata</i> is the closest I can think of - it grows on wood, although it usually has bands of brown scales on the stem.	wood
44		T	gill	Mycena interrupta	a blue Mycena, beautiful display along the side of a log, about 6 fruit-bodies. <b>See Fungi Down Under p. 47</b>	fallen log
45			gill	Entoloma sp. 'grey-brown'	grey-brown cap, 39 mm diam, radially fibrillose, starting to split radially in several places; gills pallid but starting to turn pink with the spores; stipe grey-brown, hollow; growth habit solitary	soil and leaf litter