

Urban

Bushland

Fungi

Fungi of Bungendore Park, Perth, Western Australia

Written and produced by Neale L. Bougher, Roz Hart, Sarah de Bueger, Kim Sarti, & Brett Glossop

Department of Environment and Conservation – Perth Urban Bushland Fungi Project



'Orange group' organising their GPS



Close attention to digging up a fungus



'Red group' recording fungi



'Green group' recording their fungi collections

PUBF Website : www.fungiperth.org.au











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Photos and field assistance by participants of the Perth Urban Bushland Fungi Project

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This report presents data resulting from a Perth Urban Bushland Fungi (PUBF) Project foray held on 1 July 2007 at Bungendore Park - a bushland in the Perth region, southwest Western Australia. This report also summarises and integrates data from three previous fungi events at Bungendore Park. Additionally, the report provides management recommendations for understanding and conserving fungi biodiversity at the Park.

Forty people attended the PUBF event at Bungendore Park in 2007. This event was organised with the assistance of the Bungendore Management Committee. Five foraying groups were led by Roz Hart and Tanja Lambe; Joe Froudist and Louise Little; Phylis Robertson; Jolanda Keeble and Neil Goldsborough; and Margaret Langley and Kirsten Tullis, all leaders from the PUBF Project.

The groups gathered back at the Bedfordale Hall for lunch and examination of the fungi just in time as heavy rain set in for the afternoon. With assistance from the leaders, the fungi collected were sorted. Mycologist Neale Bougher identified the fungi and talked about their characteristics and their roles in bushlands.

Bungendore Park

Bungendore Park is an A-class reserve of 498 hectares located in southwest Western Australia about 30km southeast of Perth's central business district. The park occurs on the lateritic uplands of the Darling Plateau and western slopes of the Darling Scarp. Annual rainfall averages around 1139mm. The vegetation at Bungendore Park is typical of the western edge of the northern jarrah (*Eucalyptus marginata*) forest (Hames Sharley, 1997; Lewis 2007). Open jarrah-marri (*Corymbia calophylla*) forests dominate the Park, and there are lesser areas of other vegetation types including marri-wandoo (*Eucalyptus wandoo*) woodland, and sheoak (*Allocasuarina*) woodland.

Bungendore Park Fungi

The PUBF fungi survey at Bungendore Park in 2007 was preceded by below average rainfall for the month of June. Nevertheless, 84 records including 42 different fungi were accumulated, and 11 specimens were vouchered into the Western Australian Herbarium (Tables 1, 2). These include genera of decomposer fungi such as *Lepiota*, *Pholiota* and *Psathyrella*, and beneficial mycorrhizal fungi belonging to genera such as *Amanita*, *Inocybe* and *Lactarius*, and some mycorrhizal truffle fungi, e.g. *Hydnoplicata convoluta*.

The 2007 survey is the fourth survey of fungi to be conducted at Bungendore Park. As with the survey in 2007, all the three other surveys were also undertaken during periods of unusually low rainfall. The previous surveys were:

- 1. Inaugural fungi survey at Bungendore Park, 11th June 2000: 45 people collected 41 species.
- 2. 15th July 2001: 38 people collected 28 species.
- 3. 22nd June 2003: 63 people collected 24 species.

The three previous surveys yielded a total of 80 different fungi species.

Only 16 out 42 (38.1%) of the fungi species recorded in the 2007 survey were the same as those recorded in the previous surveys. Only two species of fungi were recorded in all of the four surveys so far; *Coltriciella dependens* and the Golden Wood Fungus, *Gymnopilus allantopus* (Table 3). The four surveys so far at Bungendore Park have yielded a total of 105 species of fungi (Table 3). It is likely that many more fungi occur in the park. This is emphasised by the finding that 61.9% (26) of the 42 fungi recorded in the year 2007 survey are new records for Bungendore Park (fungi not recorded in the previous surveys and not previously for the Park). The figures are estimates because some of the fungi recorded in this and the previous surveys remain tentatively identified or unidentified pending further collections or more detailed comparative analyses. Many of the fungi could only be identified to genus level. This is because detailed taxonomic examinations are yet to be completed, or perhaps some are undescribed species.

Records so far indicate that the fungi community at Bungendore Park has similarities to fungi communities in other parts of the northern Darling Scarp that are dominated by jarrah forest or jarrahmarri forest. For example, the distinctive orange-coloured fungi *Lactarius clarkeae* and *Russula flocktonae* are not restricted to the scarp. However they appear to fruit more abundantly than elsewhere in sites at Bungendore and in other parts of the scarp where a lateritic duricrust is close to the surface and is sparsely overlain by soil.

Management recommendations for understanding and conserving Fungi Biodiversity at Bungendore Park

Bungendore Park has a wide range of vegetation types (Lewis, 2007) that undoubtedly influence the presence, abundance and spatial distribution of fungi species at the bushland. Vegetation-fungi patterns could be clarified if surveys of fungi were carried out annually over many years at the bushland. Conservation of biodiversity and general interest in Bungendore Park (as with other parts of the Perth region) has primarily focussed on flora and fauna, e.g., Bungendore Park Management Plan 1997-2007 Hames Sharley (1997).

However, the Bushland's Flora, Fauna and Fungi need to considered together for future management. The Fungi have crucial ecological roles for maintaining bushland health, including linkages between the 3 F's. An increased level of knowledge about the fungi at Bungendore Park is required as a basis for documenting and understanding the fungi, and in turn for helping to manage and conserve the Bushland's Flora and Fauna. As the current Bungendore Park Management Plan (Hames Sharley, 1997) is expiring this year, preparation of a new Management Plan may be well-placed to include reference to the Park's fungi.

Management recommendations involving fungi include:

- 1. Undertake biological surveys to build up an inventory of fungi: Far more fungi are likely to occur in Bungendore Park than those recorded in the surveys conducted so far. Because of the unpredictable nature of fungi fruiting, surveys need to be conducted over many years in order to capture the biodiversity of fungi present in any given area. Such inventory data may be used to classify fungi communities at Bungendore Park, compare the fungi communities at Bungendore with those at other Parks, and be used as a baseline for monitoring changes in biodiversity at the Park, e.g. any trend towards reduction in the diversity of significant ecological groups of fungi such as mycorrhizal species, and the effects of major disturbances such as fire or disease incursions.
- 2. **Record comprehensive data on surveys:** (i) the identity of the fungi (ii) the main features of the fungi (including close-up photographs) (iii) habitat (in litter, on dead wood etc...) (iv) plant species associated with each of the fungi. Standard recording sheets for fungi biodiversity surveys are available on request from PUBF.
- 3. **Georeference the surveys:** It would be desirable to georeference the surveys at Bungendore Park to build up a spatial map of distribution of individual fungi species. Such data can be overlain onto vegetation, soil and fire-age maps so as to potentially recognize associations between particular fungi and plants or vegetation and landscape types. A georeferencing survey kit developed by John Weaver for PUBF is available on loan from the WA Herbarium.
- 4. **Involve community:** It is recommended that further fungi surveys involving members of the local community be undertaken at Bungendore Park. The involvement of community members can facilitate a greater sampling effort, a general increase in awareness of fungi and their roles and linkages in bushlands, and a greater appreciation of the need to preserve bushland. Fungi surveys are well suited to annual involvement of Friends Groups and volunteers from the local community.
- 5. Determine the mycorrhizal plant partners of fungi. To understand the mycorrhizal relationships between fungi and plants at Bungendore Park, the list of known plants at the Bushland should be annotated with the likely mycorrhizal status of each plant, e.g. categories such as ectomycorrhizal, arbuscular, epacrid, orchid, not mycorrhizal. This will help understand how the pattern of occurrence of various species of fungi relates to the distribution of vegetation types at Bungendore Park.

Perth Urban Bushland Fungi Project: Bungendore Park Fungi

- 6. **Determine animal interactions with fungi:** Determine what truffle fungi are present at Bungendore Park, and if they and other fungi are being used as a food resource by local native mammals. Such information may have significant application if mammals are being encouraged or relocated into the area, or to help understand why there may have been declines in mammal populations at Bungendore Park. Insects that use fungi as food and/or habitat are also likely to be present in the Bushland.
- 7. **Include Flora, Fauna and Fungi in signage and interpretative material at the Bushland:** To promote public awareness and appreciation of the conspicuous and less conspicuous biodiversity at Bungendore Park and the linkages between the 3F's that influence the long-term health of the Bushland. A colourful brochure about fungi at the Park would be one of many appropriate options.
- 8. **Support a strategy for preserving representative landscapes:** Support a management plan that aims to preserve a variety of natural vegetation types and the diversity of plant species within the type groups. Also preserve a diversity of fire ages, including at least some long-unburnt patches if possible. This strategy will help retain a variety of microhabitats for fungi e.g. specific components of wood (logs, banksia bark, twigs etc...), litter, moss beds, and specific mycorrhizal partner plants. In turn, this strategy may foster fungal and other biodiversity at Bungendore Park.

References

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Hames Sharley (1997) Bungendore Park Management Plan 1997-2007.

Lewis, J. (2007) Flora of Bungendore Park, Bedfordale, Western Australia. Bungendore Park Management Committee, Armadale, Western Australia.

Robinson, R. (2003) Fungi of South West Forests, Department of Conservation and Land Management, Kensington, Western Australia.

Table 1: Bungendore Park Fungi List: 1 July 2007

<u>Life Mode Key</u>: M = Mycorrhizal, S = Saprotrophic (Decomposer), S/P = Saprotrophic and Parasitic. Life Mode allocation is based on probability only, as many fungi have not been tested.

Field Book Page # refers to the Perth Urban Bushland Fungi Field Book which is available for downloading from the project website at www.fungiperth.org.au

Fungimap Target: refers to species that have been selected by the Australia-wide mapping project, Fungimap, for collecting detailed records to be compiled into distribution maps. See Fungimap on-line at <u>www.rbg.vic.gov.au/fungimap</u> and the book *Fungi Down Under* by Grey, P. and Grey, E (2005).

						Field	
Scientific Nome	Common Nomo	Farm	Habitat	Life	Fungimap	Book	Specimen
Scientific Ivallie	Common Name	FOrm	парна	Mode	Target	Page	ID
						#	
							3076, 3077,
							3106, 3114,
Amanita sp.		mushroom	litter/ground	Μ			3117, 3119,
_			-				3130, 3138,
							3142, 3152
Amanita	Yellow Headed	1	1	Л	V		2101 2126
xanthocephala	Amanita	musnroom	litter/ground	IVI	res		3101, 3136
Bovista sp.		puffball	litter/ground	S			3075
Calocora quaninioidas	Scotsman's	ially fungue	dood wood	ç		0.1	3122
Culocera guepiniolaes	Beard	Jeny lungus	ueau woou	3		Q-1	3122
	Tough						
Coltricia cinnamomea	Cinnamon	mushroom	litter/ground	S		N-1	3081, 3094
	Fungus						
Coltriciella dependens		mushroom	litter/ground	S			3115, 3158
Cortinarius sublargus	Dumpy Cortinar	mushroom	litter/ground	Μ			3118
Cortinarius sinapicolor		mushroom	litter/ground	Μ		J-39	3147
							3087, 3093,
Cortinarius sp.		mushroom	litter/ground	Μ			3095, 3100,
							3144, 3155
Dacrymyces sp.		jelly fungus	dead wood	S			3132
Dormocybe clelandii	Cleland's	mushroom	litter/ground	м			3150
Dermocybe cielanali	Cortinar	musmoom	inter/ground	141			5157
Entoloma sp.		mushroom	litter/	S			3098, 3116,
Linotonia sp.		musmoom	underground	5			3151
Fomitopsis	Lilac Bracket	bracket	dead wood	S		N-2	3090
lilacinogilva	Fungus	brucket	ucuu woou	2		1, 2	5070
<i>Galerina</i> sp.		mushroom	litter/ground	S			3126
Gymnopilus allantopus	Golden Wood	mushroom	dead wood	S		J-15	3089, 3125, 3137
Gymnonus	I ungus						5157
eucalvntorum		mushroom	litter/ground	S			3148
Hohenbuehelia sn		shell	dead wood	S			3157
Hydnonlicata		511011	underground/	5	1		5157
convoluta		truffle	under litter	Μ		E-1	3084
Inocybe sp.		mushroom	litter/ground	М			3112
Laccaria sp		mushroom	litter/ground	M			3082 3139
Luccur in sp.		musinoulli	muer/ground	111			5002, 5159

Scientific Name	Common Name	Form	Habitat	Life Mode	Fungi map Target	Field Book Page #	Specimen ID
Lactarius clarkeae		mushroom	litter/ground	М			3107
Lepiota sp.		mushroom	litter/ground	S			3080, 3111, 3127, 3140, 3141, 3146
Leptonia viridomarginatum	Green Goblin	mushroom	litter/ground	S			3083
<i>Mycena</i> sp.		mushroom	litter/ground	S			3078, 3129
<i>Peziza</i> sp.		cup	litter/ground	S			3097
Pholiota communis	Common Pholiota	mushroom	litter/ground	S		J-26	3120, 3123
Psathyrella sp.		mushroom	litter/ground	S			3091
Psilocybe coprophila		mushroom	dung	S			3099, 3113, 3128, 3145
Ramaria capitata var. ochraceosalmonicolor		coral	litter/ground	М			3079, 3086
Ramaria sp.		coral	litter/ground	М			3131, 3135, 3153, 3154
Rhodocollybia sp.		mushroom	litter/ground	S		J-40	3143
Rickenella fibula	Orange Mosscap	mushroom	litter/ground	S		J-27	3108
Russula clelandii		mushroom	litter/ground	Μ			3085
Russula flocktonae		mushroom	litter/ground	Μ			3088, 3149
Russula neerimea group		mushroom	litter/ground	М			3156
Russula sp.		mushroom	litter/ground	Μ			3105, 3133
Stereum illudens	Purplish Stereum	bracket	dead wood	S		O-6	3124
<i>Tricholoma</i> sp.		mushroom	litter/ground	S			3092, 3104, 3121, 3134
Tubaria serrulata		mushroom	litter/ground	S			3109
Undetermined Ascomycete		cup	litter/ground	S			3096
Undetermined Resupinate		resupinate	dead wood	М			3103, 3110
Unknown		-	-	-	-	-	3102

Table 2: Permanent Vouchered Specimens from Bungendore Park 2007

Eleven of the fungi collected during this event were deposited into the DEC Western Australian Herbarium with the following details:

Coltriciella dependens	Voucher ID: BOU 339	Specimen ID: 3158
Entoloma sp.	Voucher ID: BOU 340	Specimen ID: 3116
Gymnopilus allantopus	Voucher ID: BOU 337	Specimen ID: 3089
Hydnoplicata convoluta	Voucher ID: BOU 341	Specimen ID: 3084
<i>Inocybe</i> sp.	Voucher ID: BOU 338	Specimen ID: 3112
Lepiota sp.	Voucher ID: BOU 334	Specimen ID: 3146
<i>Lepiota</i> sp.	Voucher ID: BOU 336	Specimen ID: 3080
<i>Lepiota</i> sp.	Voucher ID: BOU 335	Specimen ID: 3127
Lepiota sp.	Voucher ID: BOU 335	Specimen ID: 3111
Pholiota communis	Voucher ID: BOU 343	Specimen ID: 3120
Rhodocollybia sp.	Voucher ID: BOU 342	Specimen ID: 3143

Table 3: Fungi from Bungendore Park 2000, 2001, 2003, 2007

Compiled from the following events at Bungendore Park:

11th June 2000: Approx 45 people collected for about 1 hour during unseasonably dry weather near junction of Dryandra Drive and Wattle Road; 41 species collected. Identifications provided by Dr Neale Bougher.

15th July 2001: Approx. 38 people collected for about 1 hour during unseasonably dry weather in vicinity of Pit #5; 28 species collected. Identifications provided by Messrs Kevn Griffiths & Roger Hilton.

22nd June 2003: Approx. 63 people (Darling Range Naturalists Club, WA Naturalists Club Fungi Study Group & general public) collected for about 1 hour following extremely dry weather at two sites; near Pit #10 and along Track #11 (off Wattle Road). 24 species collected. Identifications provided by Dr Neale Bougher.

1st July 2007: Approx. 40 people collected for about 1 hour, 42 species collected. Identifications provided by Dr Neale Bougher.

Keys for this Table

Books (see reference list in this report for full details)

cf. compare to

p._ page featured in *Fungi of Southern Australia*

[p._] page featured in A Field Guide to the Larger Fungi of the Darling Scarp & South West of Western Australia

(**p._**) page featured in *Fungi of the South-West Forests*

{p._} page featured in *A Field Companion to Australian Fungi*

<u>**Perth Book**</u> refers to species included to date in the *Perth Urban Bushland Fungi Field Book*, which is available for downloading from the project website at www.fungiperth.org.au

<u>**Target</u>** refers to Fungimap target species, see Fungimap on-line at www.rbg.vic.gov.au/fungimap <u>**Life Mode**</u>: M = Mycorrhizal, S = Saprotrophic (Decomposer), S/P = Saprotrophic and Parasitic Life Mode is probable only as many fungi have not been tested.</u>

 \checkmark designates fungus observed on given date

SCIENTIFIC NAME and page featured in books	Perth Book	Target	HABITAT	LIFE	11-6- 2000	15-7- 2001	22-6- 2003	1-7 -2007	COMMON NAME & NOTES
Agaricus sp. (unidentified) cf. p. 228			litter/ground	S	~				
<i>Aleuria rhenana</i> p. 92, (p. 58)			litter/ground	S		~			Stalked Orange Peel Fungus - orange cup
Amanita eucalypti			litter/ground	Μ			\checkmark		
Amanita sp. A (unidentified)			litter/ground	М	~				
Amanita sp. B (unidentified)			litter/ground	М	~				
Amanita sp. C (unidentified)			litter/ground	М			~		
Amanita sp. D (unidentified)			litter/ground	М				~	

SCIENTIFIC NAME and page featured in books	Perth Book	Target	HABITAT	LIFE	11-6- 2000	15-7- 2001	22-6- 2003	1-7 -2007	COMMON NAME & NOTES
Amanita umbrinella p. 170, {p. 20}	J-36		litter/ground	М	~		~		
<i>Amanita</i> <i>xanthocephala</i> p. 172, (p. 10), {p. 21},		#6	litter/ground	М	~			~	Yellow-headed Amanita
<i>Armillaria</i> <i>luteobubalina</i> p. 192, (p. 12), {p. 22},	J-2	#10	dead/living trees	Р		✓ 			Australian Honey Fungus pathogenic, base of jarrah
Austroboletus occidentalis p. 300, (p. 30)			litter/ground	М	~		~		Ridge-stemmed Bolete
Austropaxillus muelleri			litter/ground	М			✓		
<i>Bolbitius vitellinus</i> p. 230,	J-3	#17	litter/ground/ dung	S	✓				Yellow glutinous young caps
Boletellus obscurecoccineus {p. 80},	K-1	#18	litter/ground	М			√		Rhubarb Bolete
Boletus prolinus group	K-2		litter/ground	Μ	\checkmark				
Bovista sp.			litter/ground	S				\checkmark	
Calocera guepinioides	Q-1		dead wood	S			~	~	small yellow threads in wood
Collybia sp.			litter/ground	S		\checkmark			
Coltricia cinnamomea	N-1		litter/ground	S		√	✓	√	Tough Cinnamon fungus
Coltriciella dependens			dead wood	S	~	~	√	~	rusty pendant polypore – log underside
<i>Cortinarius archeri</i> p. 242, (p. 16), {p. 30}	J-34		litter/ground	М		~			Archer's Cortinarius - violet/purple
Cortinarius basirubescens p. 246			litter/ground	М		~			red-brown cap, red/white stripe
<i>Cortinarius</i> cf. <i>radicatus</i>			litter/ground	М	√				
Cortinarius sinapicolor p. 258, {p. 34}	J-39		litter/ground	М	✓			✓	
Cortinarius sublargus			litter/ground	Μ				\checkmark	
<i>Cortinarius</i> sp. A (unidentified) cf. p. 224			litter/ground	М	~				
Cortinarius sp. B (unidentified)			litter/ground	М	✓				
Cortinarius sp. C (unidentified)			litter/ground	M				~	
<i>Cortinarius</i> sp. (truffle- like)			under litter	М		~			
Dacrymyces sp			dead wood	S	✓			✓	
Daldinia concentrica p. 96, (p. 66)			dead wood	S	~				Cramp Balls
Dermocybe clelandii			litter/ground	М				\checkmark	Cleland's Cortinar

SCIENTIFIC NAME and page featured in books	Perth Book	Target	HABITAT	LIFE	11-6- 2000	15-7- 2001	22-6- 2003	1-7 -2007	COMMON NAME & NOTES
Dermocybe globuliformis p. 250			under litter	М	✓				Underground Yellow Cortinarius
Entoloma sp.			litter/ground	S				\checkmark	
<i>Exidia glandulosa</i> [p. 52]			dead wood	S		~			Witches Butter
<i>Fistulina hepatica</i> p. 318, (p. 48), {p. 116}	N-9	#42	living tree	Р	~				Beefsteak Fungus
Fomitopsis lilacinogilva	N-2		dead wood	S	~			~	Lilac Bracket Fungus
Galerina eucalyptorum			litter/ground/ wood	S		~			
<i>Galerina unicolor</i> p. 270			litter/ground/	S	✓				
Galerina sp.			litter/ground	S				✓	
<i>Gymnopilus allantopus</i> p.272	J-15		dead wood	S	~	~	~	~	Golden Wood Fungus
<i>Gymnopus</i> aff. <i>Dryophila</i> p. 194			litter/ground	S	~				Cedar-scented Collybia
Gymnopus eucalyptorum			litter/ground	S	✓			~	
Hohenbuehelia sp.			dead wood			~		~	<i>Pleurotus</i> -like fan, dark cap
Hydnoplicata convoluta	E-1		under litter	М				✓	Truffle-like Peziza
Hypholoma australe p. 232, {p. 49}			dead wood, stumps	S	~				
<i>Hysterangium</i> sp. (unidentified)			under litter	М	~				
Inocybe sp. A			litter/ground	М		✓			small, buff, fibrous
Inocybe sp. B			litter/ground	М		~			brown-ochre, fibrous
Inocybe sp. C			litter/ground	М		√			brown tufted cap on jarrah bark
Inocybe sp. D			litter/ground	M			✓	,	
Inocybe sp. E			litter/ground	M				~	
Laccaria lateritia p. 198	J-17		litter/ground	M	✓				11.1.22
Laccaria sp.			litter/ground	M		✓		 ✓ 	small, buff, on moss
Lactarius clarkeae			litter/ground	M				~	
Lactarius sp.			litter/ground	M			✓		
Lepiota sp. A			litter/ground	S	~				
Lepioia sp. B			littor/ground	5 5		./		• •⁄	Croon Cabli-
Lepionia viridomarginatum			ntter/ground	3		v		•	Green Goblin
<i>Leptonia</i> sp. (unidentified) cf. p. 222			litter/ground	S	√				
<i>Lycoperdon</i> sp. (unidentified) cf. p. 131			litter/ground	S	~				

SCIENTIFIC NAME and page featured in books	Perth Book	Target	HABITAT	LIFE	11-6- 2000	15-7- 2001	22-6- 2003	1-7 -2007	COMMON NAME & NOTES
<i>Macowanites</i> sp. (unidentified) p. 138			under litter	М	~				
Mycena sp. A			dead wood	S			~		growing on marri nuts
Mycena sp. B			litter/ground	S				✓	
Mycena carmeliana			dead wood				✓		
<i>Mycena</i> sp. cf. p. 206			dead wood	S	~		~		
<i>Omphalina</i> sp.			moss	S/P		√			Ochre, not yellow
<i>Omphalotus nidiformis</i> p. 210, {p. 70},	J-21	#74	living/dead trees	S		~	~		Ghost Fungus
<i>Panus fasciatus</i> [p. 42], (p. 26), {p. 51},	J-24	#76	dead wood	S		~			Hairy Panus
Peziza sp. A			litter/ground	S		√			brick red, tiny, on soil
<i>Peziza</i> sp. B			litter/ground	S				✓	
Phellinus sp.			dead/living trees	Р			~		
Pholiota communis			litter/ground	S				✓	Common Pholiota
<i>Pholiota multicingulata</i> p. 234			dead wood	S		✓			
Pholiota sp. A				S		✓			
Pisolithus albus p. 122	L-3		litter/ground	М	~	~	~		
Psathyrella sp.			litter/ground	S				✓	
Pulveroboletus sp.			litter/ground	Μ			✓		Entirely yellow
<i>Pycnoporus coccineus</i> p. 330, (p. 52), {p. 127}			dead wood	S	✓		√		Scarlet Bracket Fungus
<i>Ramaria capitata</i> var. <i>ochraceosalmonicolorp</i> . 332, (p. 36)			litter/ground	М	√			~	Salmon Coral Fungus
<i>Ramaria</i> sp. A (yellow, unidentified)			litter/ground	М	~				
Ramaria sp. B			litter/ground	Μ				✓	
<i>Resupinatus</i> sp [cf. p. 40]			dead wood	S/P		~	~		
Rhodocollybia sp.			litter/ground	S				\checkmark	
Rickenella fibula	J-27	<u> </u>	moss	S				✓	Orange Mosscap
Russula sp. A			litter/ground	M			√	,	
Russula sp. B			litter/ground	M				✓ ✓	
Russula clelandii p. 144, {p. 74}			litter/ground	M	~		~	~	red purplish cap, pink stem
Russula flocktonae p. 150, {p. 74}			litter/ground	М	✓			 ✓ 	velvety orange cap
Russula neerimea p. 152			litter/ground	М	✓			✓	yellow-brown cap
<i>Schizophyllum</i> <i>commune</i> [p. 45], {p. 76},	R-2	#90	dead wood	S	✓				
Secotium sp. (unidentified)			under litter	M	√				

SCIENTIFIC NAME and page featured in books	Perth Book	Target	HABITAT	LIFE	11-6- 2000	15-7- 2001	22-6- 2003	1-7 -2007	COMMON NAME & NOTES
<i>Sepedonium</i> sp.			other fungi	Р	~		~		Yellow mould parasitising <i>Boletus</i>
Stereum illudens			dead wood	S				\checkmark	Purplish Stereum
<i>Stropharia semiglobata</i> [p. 36]			dung	S		✓			Dung Round Head
aff. <i>Torrendia?</i> sp.(unidentified)				М		~			
Tremella <i>mesenterica/aurantia</i> p. 110	Q-2		dead wood	S	~				Jelly Fungus
<i>Tremelloscypha</i> <i>australiensis</i> [p. 52]			ground	S		√			On ground
<i>Tricholoma</i> <i>eucalypticum</i> p. 216			litter/ground	М	~				
Tricholoma sp.			litter/ground	Μ				\checkmark	
Tubaria serrulata			litter/ground	S				\checkmark	
Unidentified sp.						~			small white 'shells' on bark
Unidentified sp.								\checkmark	
Unidentified Ascomycete			litter/ground	S				~	cups
Unidentified resupinate			dead wood	S				✓	

Perth Urban Bushland Fungi Project: Bungendore Park Fungi



StreetExpress Map showing the location of Bungendore Park in Bedfordale.



Aerial photo showing the colour coded tracks taken by the five groups, 1 July 2007.

Joe Froudist and Louise Little's group, 1 July 2007.



The numbers on the coloured dots in the fungi photos correspond to the collecting number and usually **do not** match the photo number. It is the **photo number** preceding the fungus name which correlates with the site on the map above.

Event: Bungendore Park Date: 1/07/2007 Group Number: 211 Photographer: Louise Little



03 Bovista sp.

Specimen ID: 3075 Growing in lateritic gravel amongst litter in jarrah woodland. Latitude: 32° 11' 20.4"South Longitude: 115° 2' 59.8"East 1/07/2007 Image: B72_211LL03

05 Amanita sp.

Specimen ID: 3076 Growing in lateritic gravel amongst litter in jarrah woodland. Latitude: 32° 11' 20"South Longitude: 116° 2' 59.3"East 1/07/2007 Image: B72_211LL05







Margaret Langley and Kirsten Tullis's group, 1 July 2007.



The numbers on the coloured dots in the fungi photos correspond to the collecting number and usually **do not** match the photo number. It is the **photo number** preceding the fungus name which correlates with the site on the map above.

Event: Bungendore Park Dat	e: 1/07/2007	
Group Number: 212 Photograp	her: Kirsten Tullis	
AND PARK BR	02 Coltricia cinnamomea	Tough Cinnamon
	02 Conneta ennamomea	Fungus
		Specimen ID: 3094
	Growing on the edge of gravel track in jarrah, woodland.	/banksia/marri
	Latitude: 32° 11' 60.1"South Longitude: 116	5° 2' 40.5"East
	1/07/2007	Image:
	1/07/2007	B72_212KT02
	06 Cortinarius sp.	Specimen ID: 3095
	Growing in gravel amongst litter in jarran/bar Latitude: 22° 11/50 7"South Langitude: 110	s° 2' 40.2" East
Omnio 2 3	Lanude: 52 11 59.7 South Longhude: 110	5 - 2 - 40.5 East
	1/07/2007	B72_212KT06





Perth Urban Bushland Fungi Project: Bungendore Park Fungi

Georeferenced Track and Photos

Jolanda Keeble and Neil Goldsborough's group, 1 July 2007.



The numbers on the coloured dots in the fungi photos correspond to the collecting number and usually **do not** match the photo number. It is the **photo number** preceding the fungus name which correlates with the site on the map above.

Event: Bungendore Park Date	e: 1/07/2007	
Group Number: 213 Photograph	her: Neil Goldsborough	
	04 <i>Amanita</i> sp. Growing in loam in marri/dryandra woodland Latitude: 32° 10' 53.6"South Longitude: 11 1/07/2007	Specimen ID: 3106 d. 6° 2' 26"East Image: B72_213NG04
9 P. 01000	07 <i>Lactarius clarkeana</i> Growing in loam in marri/dryandra woodland Latitude: 32° 10' 53.6"South Longitude: 11 1/07/2007	Specimen ID: 3107 d. 6° 2' 25.8"East Image: B72_213NG07



	26 <i>Amanita</i> sp. Growing in loam in marri/dryandra woodland. Latitude: 32° 10' 52.2"South Longitude: 116 1/07/2007	Specimen ID: 3114 ° 2' 25.6"East Image: B72_213NG26
	31 <i>Coltriciella dependens</i> Growing on jarrah wood in marri/dryandra wo Latitude: 32° 10' 51.9"South Longitude: 116 1/07/2007	Specimen ID: 3115 odland. ° 2' 25.4"East Image: B72_213NG31
12.	33 <i>Entoloma</i> sp. Growing in loam in marri/dryandra woodland. Latitude: 32° 10' 51.9"South Longitude: 116 1/07/2007 Vouchered WA Herbarium: BOU 00340	Specimen ID: 3116 ° 2' 24.4"East Image: B72_213NG33

Phylis Robertson's group, 1 July 2007.



The numbers on the coloured dots in the fungi photos correspond to the collecting number and usually **do not** match the photo number. It is the **photo number** preceding the fungus name which correlates with the site on the map above.

Event: Bungendore Park Date: 1/07/2007 Group Number: 214 Photographer: Phylis Robertson 05 Amanita sp. Specimen ID: 3117 Growing in soil at base of a jarrah tree in jarrah/marri woodland. Latitude: 32° 10' 58.1"South Longitude: 116° 2' 57.4"East 1/07/2007 Image: B72_214PR05 **07** Cortinarius sublargus **Dumpy Cortinar** Specimen ID: 3118 Growing in soil at base of jarrah tree in jarrah/marri woodland. Latitude: 32° 10' 58.1"South Longitude: 116° 2' 57.4"East Image: 1/07/2007 B72 214PR07





17 Lepiota sp.

Specimen ID: 3127 Growing in gravel in jarrah woodland. Latitude: 32° 10' 58.6"South Longitude: 116° 2' 57.1"East 1/07/2007 Image: B72_214PR17 Vouchered WA Herbarium: **BOU 00335**

18 Psilocybe coprophila

Specimen ID: 3128

Growing on kangaroo dung in jarrah forest. Latitude: 32° 10' 58.6"South Longitude: 116° 2' 57.1"East 1/07/2007 Image: B72_214PR18

20 Mycena sp.

Specimen ID: 3129

Growing on marri nut in jarrah forest. Latitude: 32° 10' 58.6"South Longitude: 116° 2' 57.1"East 1/07/2007 Image: B72_214PR20

21 Amanita sp.

Specimen ID: 3130

Growing on gravel track in marri/jarrah forest. Latitude: 32° 10' 58.7"South Longitude: 116° 2' 57.1"East 1/07/2007 Image: B72_214PR21

22 Ramaria sp.

Specimen ID: 3131 Growing amongst litter in marri/jarrah forest. Latitude: 32° 10' 59.6"South Longitude: 116° 2' 56.5"East Image: B72_214PR22

23 Dacrymyces sp.

Specimen ID: 3132 Growing on dead *Banksia grandis* bark in jarrah/marri/banksia woodland. Latitude: 32° 10' 59.6"South Longitude: 116° 2' 56.5"East 1/07/2007 B72_214PR23

Roz Hart and Tanja Lambe's group, 1 July 2007.



The numbers on the coloured dots in the fungi photos correspond to the collecting number and usually **do not** match the photo number. It is the **photo number** preceding the fungus name which correlates with the site on the map above.

Event: Bungendore Park Da Group Number: 215 Photograp	te: 1/07/2007 pher: Tanja Lambe
	02 <i>Russula</i> sp. Specimen ID: 3133 Growing in gravel of track edge, in marri/sheoak woodland. Latitude: 32° 11' 29.8"South Longitude: 116° 2' 40.8"East 1/07/2007 Image: B72_215TL02
	03 <i>Tricholoma</i> sp. Specimen ID: 3134 Growing in gravel amongst leaf litter in marri/sheoak woodland. Latitude: 32° 11' 29.8"South Longitude: 116° 2' 40.8"East 1/07/2007 Image: B72_215TL03







