



VICFORESTS PRE-LOGGING FAUNA SURVEYS 2010-11

SUMMARY OF RESULTS

PACKAGES 3-4

WILDLIFE UNLIMITED PTY LTD

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BAIRNSDALE 3875



ACN 147 131 119

Survey Methods

Tracks and traces transects

Target Species: Long-footed Potoroo, Koala, large forest owls, Spot-tailed Quoll, Spiny Crayfish.

Tracks and traces transects were conducted along habitat corridors such as vegetated gullies with the aim of locating owl roosts and potoroo/bandicoot diggings. Transects of at least 500m were conducted at each coupe. Relevant findings were photographed and coordinates recorded. Scats and pellets were collected for analysis if encountered.

Transects targeting Spiny Crayfish were limited by difficult access to some creeks due to dense vegetation. Transects were not conducted if creeks were dry. Searches for burrows and individuals in water pools and beneath rocks were conducted where possible.

Remote cameras

Cameras (Scoutguard & Moultrie passive infra-red) were maintained *in situ* for a minimum of 20 days, which is regarded as being a suitable timeframe to guarantee a 90% chance of species detection. Cameras were photographed *in situ* and coordinates and time of deployment recorded.

TARGET SPECIES:

Spot-tailed Quoll

Two camera traps were deployed at each coupe. Sites of habitat significance for Spot-tailed Quoll (large logs, riparian verges, rocky areas) were selected if present. Bait baskets containing sardines or a mixture of sardines and peanut butter were attached to poles for attracting predators such as quolls.

Long-footed Potoroo

Two camera traps was deployed at each coupe. Sites of habitat significance for Long-footed Potoroo, such as gullies with suitable thick vegetation were selected if present. Bait baskets were set up to contain a bait mixture (peanut butter, truffle and pistachio oil) suitable for attracting omnivores such as bandicoots and potoroos.

Spotlighting and call playback

Target Species: Powerful Owl, Sooty Owl, Masked Owl, Greater Glider, Yellow-bellied Glider, all frogs

A minimum of 1km/1hr spotlighting was conducted along road/track corridors adjacent to each coupe, which may have included some distance on either side of the coupe boundary. Species and coordinates were recorded for each observation. The spotlighting transects included:

- an on-dusk 15 min listening period initiated at dusk
- a 20 min playback session of all owl species & yellow-bellied glider
- a 1km/1hr spotlighting transect by 2 observers.

Opportunistic sightings

Tracks, traces and species heard or seen in the coupes outside the designated transects were recorded.

Results

Table 1 Summary of methods and significant results for package 3-4 coupes. (P/B=Potoroo/Bandicoot diggings,)=Owl, C=crayfish, X=No significant record, G=Glider, P/L=Potoroo/Lace Monitor, L=Lace Monitor)

Coupe #	Coupe Name	District	Tracks/traces	Playback	Spotlight	Cameras	Opportunistic
767-503-0011	East River	Swifts Creek	P/B, C, G	X	G	X	O
774-502-0015	Walking Eagle	Swifts Creek	X	O	G	B	C
829-515-0012	Paris Zero	Orbost	P/B	G	G	P	X
829-515-0004	Mr Milk	Orbost	P/B	G	G	P	X
829-515-0002	Harvard	Orbost	P/B	O	O/G	P/L	X
829-505-0010	I'm Back	Bendoc	O, G, P/B	G	G	X	X
895-511-0007	Nils Master	Bendoc	P/B	G	G	X	G
827-508-0013	Niconero	Orbost	X	X	G	X	X
827-510-0022	Jumping Castle	Orbost	P/B	G	X	L	X
827-517-0012	Firebird	Orbost	P/B	G	G	X	X

TARGET SPECIES:

Spot-tailed Quoll

No camera traps detected this species.

Long-footed Potoroo

Camera traps at Paris Zero (829-515-0012), Mr Milk (829-515-0004), Harvard (829-515-0002) recorded this species. At Paris Zero all 4 camera traps recorded Long-footed Potoroo.

Yellow-bellied Glider, Greater Glider

Yellow-bellied Glider were highest at I'm Back (829-505-0010), No.=6, and East River (767-503-0011), No.=4, during the 1hr/1km spotlight.

Powerful Owl Sooty Owl, Masked Owl

At Harvard (829-515-0002) a pair of owls were calling during the listening period and responded quickly to playback, indicating the possible presence of a nest nearby.

Crayfish

A single crayfish was located at Walking Eagle (774-502-0015), photographed and released. Feedback from Rob McCormack, crayfish taxonomist, indicates that this could represent an unidentified species. A return visit to collect camera traps also included a streamside search which failed to locate any further specimens.

Frogs

No significant species recorded.

Other Species (Smoky Mouse, Eastern Pygmy-Possum)

East River (767-503-0011) contained an extensive stand of banksia heathland providing potential habitat for the above species.

Tracks and Traces Transects

Table 2 Results of tracks and traces recorded in package 3 coupes.

Coupe No.	Date	Surveyers	Start coords E/N	End coords E/N	Observations	Easting	Northing
767-503-0011	15.2.11	JR, KD	580172/5872976	580072/5873336	Potoroo/bandicoot diggings	580498	5872995
					Termite mound	580748	5873118
					Grass tree (xanthorheceae)	580474	5873143
					Yellow bellied glider feed tree	580406	5873309
					Banksia marginata in flower	580319	5873283
					Termite mound	580219	5873233
					Eulamprus sp. (water skink)	580156	5873251
small cray holes							
774-502-0015	16.02.11	JR, KD	554505/5867244	554510/5867219	Brush-tail Possum spp.	554500	5867347
					Swamp Wallaby scat	554498	5867423
					Rabbit scat	554507	5867493
					Sambar Deer scat	554478	5867485
					Brush-tail Possum scat	554614	5867493
					Nannoscincus mecoyii	554810	5867375
					Wombat burrow	554810	5867375
829-515-0012	17.02.11	JR, AC	647342/5838823		Potoroo/bandicoot diggings	647310	5838817
						646709	5839217
					Brush-tail Possum scat	646709	5839217
					Common Eastern Froglet	646709	5839217
829-515-0004	22.02.11	AC, KD	646105/5839584	646077/5839604	Burrow	646000	5839407
					Whitewash	646000	5839276
					Termite mound	646003	5839235
					Lyrebird mound	645774	5839033
					Burrows/digging	645790	5838970
					Roost tree - small	645738	5838964
					Deer rubs on cherry ballart	645745	5839152
					Possum scat	645931	5839378
					Potoroo/bandicoot diggings	646036	5839548
829-515-0002	23.02.11	AC, KD	645914/5840006	645815/5840033	Possum scat	645923	5839885
					Lyrebird mound	645673	5839907
					Herbivore scat	645729	5839957
					Potoroo/bandicoot diggings	645737	5839964
					Large feather	645753	5839975
					Potoroo/bandicoot diggings	645787	5840011
					Feather - down	646033	5840346
					Bird scat with seeds	646068	5840349

bold, observations of interest/threatened sp.

Table 3 Results of tracks and traces recorded in package 4 coupes.

Coupe No.	Date	Surveyers	Start coords E/N	End coords E/N	Observations	Easting	Northing
892-505-0010	24.02.11	JR, AB	645914/5840006	645815/5840033	Possum scat	645923	5839885
					Lyrebird mound	645673	5839907
					Herbivore scat	645729	5839957
					Potoroo/bandicoot diggings	645737	5839964
					Large feather	645753	5839975
					Potoroo/bandicoot diggings	645787	5840011
					Feather - down	646033	5840346
					Bird scat with seeds	646068	5840349
895-511-0007	23.02.11	JR, AB	662947/5887028	662562/5887176	Brushtail possum scat	662925	5887347
					Eulamprus spp. - speckled belly	662911	5887352
					Swamp Wallaby scat - fresh	662912	5887388
					Brushtail Possum Scat on log	662900	5887438
					Active wombat burrow	662885	5887477
					Echidna diggings	662742	5887442
					Brushtail possum/swamp wallaby scat	662742	5887442
					Potoroo/bandicoot diggings	662646	5887326
827-508-0013	23.02.11	AC, KD	635571/5836061	636135/5836181	Wombat scat	635929	5836463
827-510-0022	24.02.11	AC, KD	636625/5834440	636726/5834289	Potoroo/bandicoot diggings	636771	5834430
					Lyrebird mound	637009	5834417
					Possum scat	637283	5834357
					Feather - down	637258	5834350
					Potoroo/bandicoot diggings	637004	5834241
					Scat	636917	5834253
827-517-0012	24.02.11	AC, KD	627937/5833780	627942/5833747	Lyrebird mound	627944	5833776
						628282	5833497
						628304	5833483
						628457	5833337
						628326	5833341
						628125	5833579
					Potoroo/bandicoot diggings	628168	5833551
					Feather - down	628429	5833365
Possum scat	628457	5833337					
Scat	628125	5833579					

bold, observations of interest/threatened sp.

Remote Cameras**Table 4** Remote camera results for package 3 coupes

Coupe No.	Date	Surveyers	Target species	Easting	Northing	Effective days in operation	Species identified
767-503-0011	15.02.11	JR, KD	Potoroo	580237	5872939	42	Lyrebird Swamp Wallaby Brushtail Possum Bush Rat Wonga Pigeon
			Potoroo	580474	5872931	42	Lyrebird Brushtail Possum Swamp Wallaby Deer Satin Bowerbird Wonga Pigeon
			Quoll	580485	5873206	42	Swamp Wallaby Kookaburra Wombat Lyrebird
			Quoll	580401	5873288	42	Lyrebird Swamp Wallaby
774-502-0015	16.02.11	JR, KD	Potoroo	554495	5867315	43	Swamp Wallaby Wombat Lyrebird Long-nosed Bandicoot Deer
			Potoroo	554478	5867486	43	Lyrebird Cat Swamp Wallaby
			Quoll	554789	5867390	43	Brushtail Possum Lyrebird Swamp Wallaby Cat
			Quoll	554838	5867257	4 - FAILED	Bush Rat
829-515-0012	17.02.11	JR, AC	Potoroo	646938	5838656	40	Lyrebird Long-nosed Potoroo Bush Rat Swamp Wallaby
			Potoroo	647094	5838638	40	Swamp Wallaby Bush Rat Long-footed Potoroo
			Quoll	647204	5838846	40	Cat Long-nosed Potoroo Lyrebird
			Quoll	646700	5839195	40	Long-footed Potoroo Swamp Wallaby Wombat Brushtail Possum Long-nosed Potoroo Lyrebird Golden Whistler

Coupe No.	Date	Surveyers	Target species	Easting	Northing	Effective days in operation	Species identified
829-515-0004	22.02.11	AC, KD	Potoroo	645790	5838970	FAILED	
			Potoroo	645760	5839272	38	Swamp Wallaby wombat Long-footed Potoroo
			STQ	645933	5839089	38	Wonga Pigeon Brushtail Possum Lyrebird Long-footed Potoroo Currawong Bassian Thrush
			STQ	645966	5839447	38	Wonga Pigeon Brushtail Possum Cat Bush Rat Bassian Thrush Eastern Yellow Robin Lyrebird Long-nosed Potoroo
829-515-0002	23.02.11	AC, KD	Potoroo	645915	5839870	FAILED	
			Potoroo	645657	5839940	34	Lace Monitor Wonga Pigeon Bush Rat Long-nosed Potoroo Lyrebird Cat Long-footed Potoroo Satin Bowerbird Wombat
			Quoll	645967	5840282	FAILED	
			Quoll	646103	5840168	34	Wombat Swamp Wallaby Brushtail Possum Lyrebird

bold, observations of interest/threatened sp.

Table 5 Remote camera results for package 4 coupes

Coupe No.	Date	Surveyers	Target species	Easting	Northing	Effective days in operation	Species identified
892-505-0010	24.02.11	JR, AB	Potoroo	667694	5879485	35	Lyrebird Brushtail Possum Swamp Wallaby Wombat
			Potoroo	668084	5879271	35	Lyrebird Swamp Wallaby
			Quoll	667897	5879482	35	Lyrebird Swamp Wallaby
			Quoll	667586	5879577	35	Lyrebird Cat
895-511-0007	23.02.11	JR, AB	Potoroo	662930	5887263	36	Lyrebird
			Potoroo			0	
			Quoll	662674	5887464	36	Lyrebird Swamp Wallaby
			Quoll	662647	5887261	36	Lyrebird Cat Swamp Wallaby
827-508-0013	23.02.11	AC, KD	Potoroo	635814	5836174	38	Swamp Wallaby Wombat
			Potoroo	636018	5836448		Wonga Pigeon Bush Rat Common Brushtail Possum Wombat Swamp Wallaby
			Quoll	635688	5836122	36	Tawny Frogmouth Common Brushtail Possum Lyrebird Bush Rat Swamp Wallaby
			Quoll	636029	5836341	38	Unidentified Small Mammal Bush Rat Common Brushtail Possum Lyrebird Swamp Wallaby Wonga Pigeon
827-510-0022	24.02.11	AC, KD	Potoroo	637181	5834444	37	Nil Identifiable images
			Potoroo	637299	5834363		Swamp Wallaby
			Quoll	636918	5834424		Swamp Wallaby Wonga Pigeon Lyrebird
			Quoll	637195	5834332		Swamp Wallaby Wonga Pigeon Lyrebird Common Brushtail Possum Lace Monitor
827-517-0012	24.02.11	AC, KD	Potoroo			0	Camera Failed, not installed
			Potoroo	628828	5833040	36	Lyrebird
			Quoll	628366	5833409	36	Lyrebird
			Quoll	628480	5833292	36	Lyrebird Wonga Pigeon Wild dog/dingo

bold, observations of interest/threatened sp.

Spotlighting and Call Playback

Table 6 Results of call playback and spotlighting surveys for package 3 coupes

Coupe No.	Date	Surveyers	Nocturnal Playback			Spotlighting				
			Coords E/N	Dusk listen results (no.)	Playback Results (No.)	Start coords E/N	End coords E/N	Results (no.)	Easting	Northing
767-503-0011	15.02.11	JR, KD	580249/5873197	Boobook owl (1)	Owlet Nightjar (1)	580547/5873422	580158/5872932	Sugar glider (1) Boobook Owl (2) Yellow-bellied Glider (4) White-striped Mastiff Bat (1) Owlet Nightjar (1)	580525 580461 580045 580461 580367 580353 580210 580329 580045	5873408 5873387 5873078 5873387 5873394 5873402 5873394 5873384 5873078
774-502-0015	16.02.11	JR, KD	554519/5866856	Boobook owl (1) Owlet Nightjar (1)	Sooty Owl (1) Boobook Owl (2)	554592/5866821	554458/5867716	Sugar glider (1) Greater glider (2) Ringtail Possum (2) Yellow-bellied Glider (2)	554502 554468 554439 554450 554416 554435	5867027 5867297 5867490 5867393 5867621 5867523
829-515-0012	17.02.11	JR, AC	647017/5838841	Yellow-bellied Glider (1)	Sugar Glider (1)	647240/5838458	647409/5839345	Yellow-bellied Glider (2) Owlet Nightjar (1) White-striped Mastiff Bat (1) Sugar Glider (1) Greater Glider (2)	647276 647410 647276 647276 647348	5838512 5839300 5838512 5838512 5838826
829-515-0004	22.02.11	AC, KD	645764/5839211	nil	Boobook owl (2) Yellow-bellied glider (2)	645640/5839481	646340/5839467	Yellow-bellied Glider (2) Boobook Owl (3) Sugar Glider (1)	645639 646216 645639 645955	5839481 5839584 5839481 5839618
829-515-0002	18.04.11	JR	645853/5840243	Powerful Owl (1) * Sugar Glider (1)	Powerful Owl (2) * Sugar Glider (1)	645853/5840243	646179/5839782	Greater Glider (1) Powerful Owl,(2) * Microbats >5 Owlet Nightjar (1) Long-nosed Bandicoot (2) Sugar Glider (1) Boobook Owl (1) Yellow-bellied Glider (1)	645841 645841 645841 645836 646049 646132 645836 645836	5840174 5840174 5840174 5840020 5840012 5839862 5840026 5840026

bold, observations of interest/threatened sp.

* Pair of Powerful Owls already on-site before start of playback and spotlight. Possible roost site within coupe

Table 7 Results of call playback and spotlighting surveys for package 4 coupes

Coupe No.	Date	Surveyers	Nocturnal Playback			Spotlighting				
			Coords E/N	Dusk listen results (no.)	Playback Results (No.)	Start coords E/N	End coords E/N	Results (no.)	Easting	Northing
892-505-0010	31.03.11	AC,PT	668030/5879560	Bobuck (1) Sugar Glider (1) Boobook Owl (1)	Yellow-bellied Glider (3) Bobuck (1) Boobook Owl (1)	668030/5879560	668180/5879320	Yellow-bellied Glider (6)	668030	5879560
895-511-0007	23.02.11	JR, AB	662777/5887329	Owlet Nightjar (1) Yellow-bellied Glider (1)	Boobook owl (1) Yellow-bellied glider (3)	663141/5887053	662322/5887143	Greater glider (2) Brush-tail possum sp. (1) Yellow-bellied Glider (2) Boobook owl (1) Southern Brown Tree Frog (1) Owlet Nightjar (1) Microbats (>10)	663056 662735 662919 662831 662555 662555 662377	588731 5887032 5887016 5887044 5887147 5887147 5887137
827-508-0013	18.04.11	MC	635527/5835880	Sugar Glider (1)	Sugar Glider (1) Boobook Owl (1)	635527/5835880	636366/5836325	Microbats (2) Pseudophryne semimarmorata Brush-tail Possum (4) Yellow-bellied Glider (1)	635768 636003 635933 636158	5835942 5835986 5835943 5836195
827-510-0022	18.04.11	MC		Yellow-bellied Glider (1) Microbats	Boobook Owl (1) Yellow-bellied Glider (1)	636733/5834100	636641/5834973	Sugar Glider (1) Boobook Owl (1)	636576 636563	5834627 5834769
827-517-0012	18.04.11	JR	628478/5833363	Yellow-bellied Glider (2) Boobook Owl (1)	Yellow-bellied Glider (2) Boobook Owl (1)	628478/5833363	627975/5834099	Sugar Glider (1) Yellow-bellied Glider (2) Swamp Wallaby	627884 627907 627976	5833651 5833803 5834100

bold, observations of interest/threatened sp.

Opportunistic Sightings

Table 8 Opportunistic observations recorded for package 3-4 coupes

Coupe No.	Date	Surveyers	General Observations	Easting	Northing
767-503-0011	15.02.11	JR, KD	Stream suitable for frogs and crayfish Extensive banksia/heath woodland-possible/probable Pseudomys fuscus, Cercatetus nanus habitat Grevillea, bossiae, other fabacea, acacia thryptomene - spinebills, crescent honeyeaters nectar feeding swarms of mosquitoes at 20:30 Powerful Owl Tawny Frogmouth Masked Owl Brushtail Possum spp.	580158 580158 580158 580235	5872932 5872932 5872932 5872923
774-502-0015	16.02.11	JR, KD	Coprosma in full fruit - bowerbirds Silvereyes feasting Eucalypts in full flower White-striped Mastiff Bat Lymnodynastes dumerilii - Pobblebonk Crayfish sp. - possible unidentified species Litoria ewingii - Southern Brown Tree frog	554519 554456 554486 554436	5866856 5866921 5867256 5867529
829-515-0012	17.02.11	JR, AC	Litoria phyllacroa - Leaf Green Tree frog Crinia signifera - Common eastern froglet Bobuck	647340 647353 647353 647381	5838918 5839112 5839112 5839147
895-511-0007	23.02.11	JR, AB	Greater Glider	662852	5887032
827-508-0013	23.02.11	AC, KD	Swamp Wallaby chewed up silvertop - fruit on the ground below	635565 635947	5836060 5835956
827-510-0022	24.02.11	AC, KD	White-throated Nightjar Sugar Glider Common Brushtail Possum Skink	636626 636626 636626 636820	5834441 5834441 5834441 5834420
827-517-0012	24.02.11	AC, KD	Skink Eastern Water Dragon	628076 628815	5833621 5833031

bold, observations of interest/threatened sp.

Appendix 1 Diurnal birds recorded for package 3-4 coupes

Bird Species	767-503-0011	774-502-0015	829-515-0012	829-515-0004	829-515-0002	892-505-0010	895-511-0007	827-508-0013	827-510-0022	827-517-0012
Black-faced Cuckoo Shrike	X	X			X					
Black-faced monarch/pilotbird	X		X			X				
Bronze-winged Pigeon		X								
Brown-headed Honeyeater								X		
Brown Thornbill			X	X		X	X	X	X	X
Brown Warbler				X						
Cicadabird	X	X								
Crescent Honeyeater	X		X		X	X	X			
Crimson Rosella	X	X		X	X	X	X			
Dusky Woodswallow	X									
Eastern Spinebill	X	X								
Eastern Whipbird	X			X	X	X				
Eastern Yellow Robin	X		X	X	X		X	X		
Gang Gang Cockatoo		X							X	
Golden Whistler	X	X	X		X	X			X	X
Grey Butcherbird	X	X	X	X	X	X			X	
Grey Currawong	X									
Grey Fantail	X	X	X			X	X		X	
Grey Shrike-thrush	X			X	X	X		X	X	X
King Parrot				X					X	
Kookaburra		X	X		X	X	X		X	X
Leaden Flycatcher	X	X								
Lewins Honeyeater			X	X	X				X	X
Lorikeet sp.									X	
Little Eagle							X			
Pied Currawong	X	X	X	X	X	X	X	X	X	X
Pilot Bird		X	X			X	X			
Pink Robin						X				
Red-browed Treecreeper						X				
Red Wattlebird	X	X							X	
Rufous Fantail	X					X				
Rufous Whistler	X									
Satin Bowerbird	X	X	X	X	X					
Silvereye	X	X	X				X			
Spine-tailed Swift		X					X			
Striated Thornbill	X	X				X	X	X	X	
Sulphur-crested Cockatoo	X	X				X	X			
Superb Lyrebird	X	X		X	X	X	X	X	X	X
Superb Fairy Wren	X	X	X				X			
White-browed scrubwren	X	X	X	X			X	X	X	
White-throated Treecreeper	X	X	X	X	X	X	X	X	X	X
Wonga Pigeon		X		X	X				X	X
Yellow-faced honeyeater	X					X	X			
Yellow-tailed Black Cockatoo	X		X	X			X			