



VICFORESTS PRE-LOGGING FAUNA SURVEYS 2010-11

SUMMARY OF RESULTS

BENDOC AREA

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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 at the interface between open eucalypt forest and heavily-vegetated fern gullies with the aim of locating owl roosts, potoroo/bandicoot diggings, ridgelines for quoll and koala and pools in streams for crayfish. 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 or deemed unsuitable due to their size. Searches for individuals in water pools and beneath rocks were conducted where possible and the presence of terrestrial cray burrows were noted.

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

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

Long-footed Potoroo

One camera trap was deployed at each coupe. Sites of habitat significance for Long-footed Potoroo, such as the ecotone between eucalypt forest and gullies with suitable thick vegetation (usually ferns) were selected if present. Bait holders 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

Targeted 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. Coupes 891-515-0007 and 840-504-0001 were surveyed twice.

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.

Frogs

Spotlighting transects for frogs were not conducted at Coupes 885-506-0009, 891-516-0036, 840-504-0001, 891-515-0007 as there was no suitable streamside habitat within or adjacent to the coupes. In these coupes the adjacent gully streams were very small, contained no visible clear pools and were mostly overgrown and completely covered with a dense mat of fern fronds.

At coupe 891-516-0031, the eastern half of the coupe, including the slope running down to the Bonang River had been harvested and was not surveyed. Potential habitat for frogs (and crayfish) may occur in this river.

Opportunistic sightings

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

Variations to survey protocol

Some variations to the original survey protocol must be noted:

- Hair tubing to target Long-footed Potoroo and Spot-tailed Quoll was not conducted. Remote camera traps were the alternative to this method.
- Songmeters to target owls, frogs and bats were not deployed. The Songmeter units were awaiting new “waterproof” backs.
- Spotlighting transects were conducted along roads/tracks adjacent to coupes and not through the coupes as previously described. This was done to ensure easy access and reduce the risk of injury to the observers while walking in the dark.

Summary of Results

Tracks and traces transects

A summary of the tracks and traces detected along transects conducted through the relevant coupes is shown in Table 1. Further information can be found in the data spreadsheets provided in digital format.

Table 1. Tracks and traces identified by transects.

Coupe No.	Date	Time	Surveyers	Start coordinates E/N	End coordinates E/N	Observations (no/site)	Site coordinates E/N	Crayfish transect
840-504-0001	25.11.10	12:20-15:30	AC, MC	661370/5870506	661378/5870733	Cray holes (9) Probable potoroo digs (2) predator scats (2) Probable potoroo dig (1) digs next to sedge (2)	661373/5870516 661396/5870721 661434/5870671 661420/5870608 661474/5870544	Creek outside coupe boundary. Suitable habitat not identified. Over 100 cray holes seen throughout coupe.
891-515-0007	26.11.10	9:30-13:00	AC, MC	651617/5879301	651967/5878990	probable potoroo digs (2) probable potoroo digs (2)	651674/5879229 651805/5879035	No running water or rock pools along the creek. Suitable habitat not identified.
891-516-0031	27.11.10	10:16-13:00	AC, MC, JR	654492/5879554	654382/5879584	sambar deer scat (1)	654468/5879386	Suitable habitat not identified
891-516-0036	27.11.10	15:00-17:30	AC, MC, JR	653429/5877837	6534806/5877695	Yellow-bellied Glider feed tree (1) Satin Bowerbird Bower (1) Crayfish holes (3)	653135/5877918 653135/5877918 653109/5877872	Suitable habitat not identified
885-506-0009	06.12.10	14:41-16:25	ACO, MC	674699/5867344	675039/5866950	Probable owl whitewash (2) Some digs/burrows -lyrebird? (3) Probable conical digs (4)	674735/5867273 674735/5867273 674788/5867161	Access to creek difficult due to dense vegetation. Suitable habitat not identified

Remote cameras

A summary of the species and number of events detected by remote cameras deployed in the relevant coupes is shown in Table 2. Further information can be found in the data spreadsheets provided in digital format.

Table 2. Species detected by remote cameras.

Coupe No.	Date deployed	Surveyors	Target species	Coordinates E/N	End date	Effective days	Species identified (No. events)
840-504-0001	25.11.10	AC, MC	Quoll	661425/5870704	13.01.11	50	Bush Rat (3) Feral Cat (5) Common Brushtail Possum (1) Bassian Thrush (3) Crimson Rosella (2) Lyrebird (2)
840-504-0001	25.11.10	AC, MC	Potoroo	661401/5870741	08.01.11	45	Bush Rat (6) Bobuck (2) Echidna (1) Lyrebird (1) Bassian Thrush (2) Blackbird (1)
891-515-0007	26.11.10	AC, MC	Quoll	651765/5879119	15.01.11	52	Black Wallaby (6) Lyrebird (6) Common Wombat (1)
891-515-0007	26.11.10	AC, MC	Potoroo	651698/5879228	15.01.11	52	Lyrebird (9) Bush Rat (8) Black Wallaby (8) Grey Currawong (1) Bobuck (1) Feral Cat (2) Common Brushtail Possum (2) Grey Shrike Thrush (2) Lace Monitor (1) White-browed Scrubwren (1)
891-516-0031	27.11.10	AC, MC, JR	Quoll	654572/5879508	12.01.11	47	Common Brushtail Possum (1) Black Wallaby (7) Sambar Deer (2) White-backed Magpie (1) Eastern Grey Kangaroo (1)
891-516-0031	27.11.10	AC, MC, JR	Potoroo	654488/5879481	camera failed	0	NA
891-516-0036	27.11.10	AC, MC, JR	Quoll	653248/5877593	15.01.11	50	Lyrebird (6) Black Wallaby (6) Feral Cat (1) Long-nosed Bandicoot (1) Common Brushtail Possum (1)
891-516-0036	27.11.10	AC, MC, JR	Potoroo	653135/5877918	15.01.11	50	Lyrebird (3) Satin Bowerbird (1) Red-necked Wallaby (1) Long-footed Potoroo (2) Echidna (1) Common Brushtail Possum (1) Black Wallaby (4)
885-506-0009	06.12.10	ACO, MC	Quoll	674664/5867510	16.01.11	42	Common Brushtail Possum (4) Lyrebird (1) Echidna (1) Feral Cat (1) Bush Rat (2)
885-506-0009	06.12.10	ACO, MC	Potoroo	675092/5866948	16.01.11	42	Lyrebird (9) Feral Cat (2) Common Wombat (2) Pied Currawong (1) Common Brushtail Possum (1) Bobuck (1)

Significant species are shown in bold



Figure 1. Coupe 891-516-0036, Long-footed Potoroo



Figure 2. Coupe 891-516-0036, Long-nosed Bandicoot

Spotlighting and call playback

A summary of the species detected by nocturnal call playback is shown in Table 3 and spotlighting transects in Table 4. Further information can be found in the data spreadsheets provided in digital format.

Table 3. Species detected by nocturnal call playback.

Coupe No.	Date	Surveyers	Coordinates (E/N)	15 min dusk listen	Results (no.)	Nocturnal playback	Results (no.)
840-504-0001	25.11.10	AC, MC	661579/5870438	20:00-20:15	Eastern Yellow Robin (1) Lyrebird (1) Kurrawong (1) Kookaburra (1) Southern Boobook (2) Bats (many) - 2 species	20:15-20:30	Nil
840-504-0001	15.01.11	AC, MC, JR	661187/5870362	23:05-23:20	Nil	23:20-23:35	Nil
891-515-0007	26.11.10	AC, MC, JR	651536/5879592	20:15-20:30	Common Eastern Froglet (1) Kurrawong (1) Southern Boobook (1) Kookaburra (1) Yellow-bellied Glider (3) Sugar Glider (1) Large microbats (10) Pipistrelle?	20:30-20:45	Nil
891-515-0007	15.01.11	AC, MC, JR	651608/5879663	21:20-21:35	Yellow-bellied glider (4) Southern Boobook (2)	21:35-21:50	Nil
891-515-0031	27.11.10	AC, MC, JR	654372/5879292	22:05-22:20	Southern Boobook (1) Common Brushtail Possum (1)	22:20-22:35	Nil
891-516-0036	27.11.10	AC, MC, JR	653661/5877688	20:20-20:35	microbat (2) Southern Boobook (2)	20:35-20:50	Yellow-bellied Glider (1) Southern Boobook (1)
885-506-0009	06.12.10	ACO, MC	674611/5867270	19:55-20:10	Lyrebird mimicking Yellow-bellied glider	20:10 - 20:45	Nil

Significant species are shown in bold

Table 4. Species detected by spotlighting transects.

Coupe No.	Date	Surveyers	Time	Start coordinates E/N	End coordinates E/N	Results (no.)
840-504-0001	25.11.10	AC, MC	21:15-22:30	661579/5870438	660817/5870369	Sugar Glider (1) Greater Glider (5) Common Brushtail Possum (1) Ringtail Possum Southern Boobook (1)
840-504-0001	15.01.11	AC, MC, JR	23:35-0035	661187/5870362	661885/5870066	Bobuck (2) Greater Glider (1) Feathertail Glider (1) Common Brushtail Possum (1) Southern Boobook (2) Sugar Glider (2) Ringtail Possum (1)
891-515-0007	26.11.10	AC, MC, JR	21:17-22:10	651536/5879592	NA	Sugar Glider (2) Yellow-bellied Glider (3) Greater Glider (1) Feathertail Glider (1) Wombat (1) Macropod (1)
891-515-0007	15.01.11	AC, MC, JR	21:50-22:50	651608/5879663	651185/5878751	Yellow-bellied Glider (5) Sugar Glider (3) Common Brushtail Possum (1)
891-515-0031	27.11.10	AC, MC, JR	22:35-23:35	654372/5879292	654572/5879508	White-striped Mastiff Bat (1) Common Brushtail Possum (1)
891-516-0036	27.11.10	AC, MC, JR	20:50-21:50	653200/5877950	653594/5877584	White-striped Mastiff Bat (1) Microbat (2)
885-506-0009	06.12.10	ACO, MC	20:53-21:30	674626/5867547	674878/5866812	Greater glider (1)

Significant species are shown in bold

Opportunistic Sightings

A summary of the species detected outside the designated transects within the relevant coupes is shown in Table 5. Further information can be found in the data spreadsheets provided in digital format.

Table 5. Opportunistic sightings.

Coupe No.	Date	Surveyers	Observations (no.)	Coordinates E/N	Diurnal birds
840-504-0001	25.11.10	AC, MC	NA	NA	Crimson Rosella Striated Thornbill Golden Whistler Kookaburra Fan-tailed Cuckoo Rainbow Lorikeet
891-515-0007	26.11.10	AC, MC	NA	NA	White-browed Scrubwren Spotted Pardalotte Fan-tailed Cuckoo Golden Whistler Lyrebird Kookaburra
885-506-0009	06.12.10	ACO, MC	probable potoroo dig (1)	674943/5866958	Pied Currawong Shining Bronze Cuckoo White-throated Treecreeper Grey Shrike-thrush Grey Fantail Fan-tailed Cuckoo White-browed Scrubwren Crimson Rosella Eastern Whipbird Golden Whistler Brown Thornbill Lyrebird