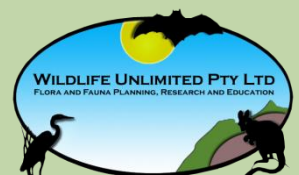


Spotlight surveys for Greater Gliders at scheduled harvesting coupes near Bendoc in East Gippsland

Coupes surveyed:

District	Coupe Number	Coupe Name
Bendoc	890-508-0001	Snail Nails
Bendoc	890-508-0019	Pin Tail
Bendoc	890-508-0020	Donkey
Bendoc	890-508-0021	Seeded Mustard

Report prepared by Wildlife Unlimited for VicForests



1 INTRODUCTION

Wildlife Unlimited was commissioned by VicForests to conduct a spotlight survey for Greater Gliders at scheduled harvesting coupes near Bendoc, East Gippsland. The survey incorporated four adjacent coupes: 890-508-0001 (Snail Nails), 890-508-0019 (Pin Tail), 890-508-0020 (Donkey) and 890-508-0021 (Seeded Mustard).

2 METHODS

A spotlight transect survey was conducted on June 29 2016 by two Wildlife Unlimited staff: Jim Reside and Jacinta Richardson. The survey involved walking within the coupes and along the coupe boundaries. Both observers used a LED Lenser brand head torch to search trees visible from the survey transect for Greater Gliders, which included looking for eye-shine or signs of movement. All fauna species detected either visually or by call were recorded by marking the location of the observer with a GPS and recording the bearing and estimated distance of the animal from the observer. A GPS was also used to record the location and distance of the survey transect.

3 RESULTS

3.1 Weather conditions

Weather conditions throughout the survey were as follows:

- Temperature: 3 °C
- Relative humidity: 65 %
- Cloud cover: 10 %
- Wind speed: light
- Rain: none

3.2 Survey effort

The survey was conducted between 18:20 and 22:30 on June 29 2016. The survey transect incorporated sections of Bendoc-Orbost Road, a vehicle track and bushland areas within coupe boundaries. The transect was highly conducive to spotlighting; the road was easily walkable and observers had a clear view of the canopy. The bushland areas consisted largely of open bush and visibility in these areas was only restricted slightly by the shrub layer. The total transect was approximately 5300 metres in length.

Table 1 Spotlighting survey transect details

Transect Number	Start time	End time	Start Easting	Start Northing	End Easting	End Northing	Distance (m)
1	16:20	22:30	663776	5882402	664074	5884167	5300

3.3 Fauna detections

A total of 16 Greater Gliders were detected during the spotlight surveys (Table 3). Twelve were detected within a straight-line distance of 1000 metres, between coupes Seeded Mustard, Donkey and Pin Tail (Map 1). The actual distance between Greater Glider detections based on the track walked by observers ranged between 68 and 1900 metres (Table 2).

Two Yellow-bellied Gliders, two Mountain Brushtail Possums and one Sugar Glider were also identified.

Table 2 Distances between Greater Glider detections based on track log downloaded from GPS used by observers

Note: No smoothing of the track log has been undertaken however additional sections of the track log generated while observers were standing still (e.g. when recording data) have been excluded.

Greater Glider detection #	Next detection # along track log	Distance between detections (m)
4 & 5	3	215
3	1	500
1	2	68
2	6	781
6	7	403
7	8	110
8	9	213
9	10	196
10	11	68
11	12	93
12	13	1900
13	14	322
14	15 & 16	185

Table 3 Nocturnal fauna species detected during spotlight survey of harvesting coupes near Bendoc

Coupe Name	Coupe Number	Species	No. of individuals	Greater Glider detection #	Seen/ Heard	Observer Easting	Observer Northing	Distance (m)	Direction (°)
Donkey	890-508-0020	Greater Glider	1	1	S	664170	5882921	0	0
Donkey	890-508-0020	Greater Glider	1	2	S	664152	5882896	18	180
Donkey	890-508-0020	Mountain Brushtail Possum	1		S	664088	5882922	0	0
Donkey	890-508-0020	Greater Glider	1	3	S	664076	5882680	25	320
Seeded Mustard	890-508-0021	Yellow-bellied Glider	2		H	664047	5882651	25	300
Seeded Mustard	890-508-0021	Greater Glider	2	4 & 5	S	663963	5882617	20	320
Seeded Mustard	890-508-0021	Greater Glider	1	6	S	663815	5882541	0	0
Seeded Mustard	890-508-0021	Greater Glider	1	7	S	663630	5882426	25	
Seeded Mustard	890-508-0021	Greater Glider	1	8	S	663530	5882430	25	
Seeded Mustard	890-508-0021	Greater Glider	1	9	S	663489	5882542	0	0
Seeded Mustard	890-508-0021	Sugar Glider	1		S	663458	5882593	0	0
Pin Tail	890-508-0019	Greater Glider	1	10	S	663400	5882684	0	0
Pin Tail	890-508-0019	Greater Glider	1	11	S	663432	5882743	0	0
Pin Tail	890-508-0019	Greater Glider	1	12	S	663446	5882833	25	70
Pin Tail	890-508-0019	Mountain Brushtail Possum	1		S	663769	5883232	0	0
Snail Nails	890-508-0001	Greater Glider	1	13	S	663923	5883855	0	0
Snail Nails	890-508-0001	Greater Glider	1	14	S	663922	5884086	0	0
Snail Nails	890-508-0001	Greater Glider	2	15 & 16	S	664074	5884167	0	0

Map 1 Nocturnal fauna detections at harvesting coupes near Bendoc.

Numbered labels correspond to 'Greater Glider detection #' recorded in Table 3.

