

Final Report for Permit No: 10006285
Small Mammal Surveys Using Motion-sensing Infra-red Cameras
Carried out by members of St Arnaud Field Naturalists Club Inc.
Location: Stuart Mill Nature Conservation Reserve, centred on Rostron Rd.
Period: 30th April 2013- 30th November 2013

Surveys commenced again in late April 2013.

The last 3 months of 2012 recorded only 43mm while the first 4 months of the year 2013 recorded only 27mm of rain resulting in complete lack of eucalyptus flowering across a wide area and a failure of various wattle species to flower properly and set seed.

Almost certainly as a result of the very dry conditions, no small mammals were recorded at all until July, after some 168mm of rain.

The same sites were used in 2013 as were used in 2012 but with a spread either side of the creekline where most of the Glider sightings had occurred, ie. further up into adjoining areas- Alluvial Terraces and Yellow Gum as well as Heathy Dry Woodland.

Only one glider sighting away from the creekline was made and only one site on the Creek itself yielded sightings- Site 19.

One Yellow Gum was noted with large bite patches on it but surveys over several weeks revealed no activity. Indeed, no sites showed recent bark bite activity on Redgums either- all the bite patches were old.

Species seen at Site 19	July and August 2013- Yellow-footed Antechinus and Brush-tailed Possum
	September Sugar Gliders first appear on 26 Sept 2013
	Yellow-footed Antechinus
	October Sugar Glider, various birds, Eastern Grey Kangaroo, Black Wallaby

Cameras were withdrawn at the end of October due to ongoing destructive winds.

No recordings were made of either Ring-tailed Possum or Brush-tailed Phascogale in 2013, nor was any recording made of Squirrel Glider although the very large bite patches on one Yellow Gum were interesting- at least 3 times the size of bite patches on Redgums where Sugar Gliders were recorded.

Despite the excellent habitat- many large old trees, most trees with hollows, both dead and live, much fallen timber, this area seems to be marginal for the continuation of some species especially the Squirrel Glider. Sugar Gliders are only in low numbers and at a very few locations despite the size of the target area. One would have to conclude that it is used only infrequently by Squirrel Gliders, perhaps in exceptionally good years.

It is interesting to note that Sugar Gliders seem to move well down the creeklines in the warmer months, being recorded only 13km south of St Arnaud during November to take advantage of flowering gums.

1.





Sugar glider at site 300m upslope from creekline- only one sighting recorded



For clear photos it is important to have the camera at least 1m from the subject- good if you can achieve this with a moving object

2.





Site 19- where most glider activity occurred- showing camera in place, “ruler” on tree and fresh bite marks -Oct 2012
 These are small River Red Gums(*Eucalyptus camaldulensis*). Behind are flowering Silver Wattles (*Acacia dealbata*)

Site Information from 2012 Interim Report

Sites 18 and 19 further north on the creekline adjacent to east leg of Wattle Flat Track.

EVC:Creekline Grassy Woodland,

River Redgums with Grey Box, Yellow Gum and Yellow Box on the flat, Golden and **Silver Wattle** Understorey and groundlayer almost absent- small forbs only. **Bite marks** on small redgums. Lots of kangaroo activity. Only kangaroos and possums at site 18.

Good Sugar Glider activity at site 19 on camera.

GPS Site 18: 0701058 / 5926440 Alt 310m

GPS Site 19: 0701188 / 5926609 Alt:310m

References

1. Gliders of Australia: A Natural History
 David Lindenmayer UNSW Press 2002
2. Complete Book of Australian Mammals
 Ed. Ronald Strahan Angus & Robertson 1983
3. Tracks, Scats and Other Traces: A Field Guide to Australian Mammals
 Barbara Triggs OUP 2003

