

## HFNC Mt Napier State Park fauna survey camera installation report March 2015

### Rod Bird

Saturday 21 March 2015 was devoted to the setting up of 10 “remote” infra-red sensor cameras at those sites, with Rod, Reto & Yvonne, Dave & Lyn, Ken & Janeen, John & Glenys and Hillary in the party. Rod had scouted the route in the previous weekend. The main area was the forest in the NW corner, east of Menzel’s track at Murroa Corner and along Cole Track as far as the E-W stone fence. The sites varied from tall Manna Gum (*E. viminalis*)/Blackwood (*A. melanoxylon*) forest to deep bracken and open grassy woodland.

The forest contains Manna Gum as the sole eucalypt, with Blackwood, Tree Everlasting (*Ozothamnus ferrugineus*) and Cherry Ballart (*Exocarpos cupressiformis*) as the dominant tall vegetation. There are some Sweet Bursaria (*Bursaria spinosa*) and a few *Myoporum viscosum* (Sticky Boobialla) and (in only a very few places) Black Wattles (*A. mearnsii*) as the only other taller vegetation. Austral Bracken (*Pteridium esculentum*) is the principal understorey flora, with Silver Tussock (*Poa labillardierei*) in rocky barriers.

Members of HFNC have undertaken fauna studies in the park in years past. The studies by PR Bird from 1974-1995 (*The Victorian Naturalist* 1997) employed cage traps, pit-fall traps, harp bat traps, predator scat analysis, spotlight surveys and daylight observations. The study by Reto Zollinger in 2004 (unpublished) employed hair-tube samplers; the species identified from that method are shown below.

Table 1. Mammals revealed in previous Mt Napier State Park fauna surveys

| Rod Bird 1974-1995              |                         | Reto Zollinger 2004          |                         |
|---------------------------------|-------------------------|------------------------------|-------------------------|
| <i>Antechinus agilis</i>        | Brown Antechinus        | <i>Antechinus agilis</i>     | Brown Antechinus        |
| <i>Antechinus swainsonii</i>    | Dusky Antechinus        | <i>Antechinus swainsonii</i> | Dusky Antechinus        |
| <i>Capra hircus</i>             | Feral Goat              |                              |                         |
| <i>Felix catus</i>              | Feral Cat               | <i>Felix catus</i>           | Feral Cat               |
| <i>Lepus capensis</i>           | European Hare           |                              |                         |
| <i>Macropus giganteus</i>       | Eastern Grey Kangaroo   |                              |                         |
| <i>Mus musculus</i>             | House Mouse             |                              |                         |
| <i>Oryctolagus cuniculus</i>    | Rabbit                  |                              |                         |
| <i>Ovis aries</i>               | Sheep                   |                              |                         |
| <i>Petaurus breviceps</i>       | Sugar Glider            |                              |                         |
| <i>Phacolarctos cinereus</i>    | Koala                   |                              |                         |
| <i>Phascogale tapoatafa</i>     | Brush-tailed Phascogale |                              |                         |
| <i>Rattus fuscipes</i>          | Bush Rat                |                              |                         |
| <i>Rattus lutreolus</i>         | Swamp Rat               | <i>Rattus lutreolus</i>      | Swamp Rat               |
| <i>Rattus rattus</i>            | Black Rat               |                              |                         |
| <i>Tachyglossus aculeatus</i>   | Short-beaked Echidna    |                              |                         |
| <i>Trichosurus vulpecula</i>    | Common Brushtail Possum | <i>Trichosurus vulpecula</i> | Common Brushtail Possum |
| <i>Vulpes vulpes</i>            | Red Fox                 |                              |                         |
| <i>Wallabia bicolor</i>         | Black wallaby           | <i>Wallabia bicolor</i>      | Black wallaby           |
| <i>Bats</i>                     |                         |                              |                         |
| <i>Chalinolobus gouldii</i>     | Gould’s Wattled Bat     |                              |                         |
| <i>Chalinolobus morio</i>       | Chocolate Wattled Bat   |                              |                         |
| <i>Miniopterus schreibersii</i> | Common Bent-wing Bat    |                              |                         |
| <i>Nyctophilus geoffroyi</i>    | Lesser Long-eared Bat   |                              |                         |
| <i>Nyctophilus gouldi</i>       | Gould’s Long-eared Bat  |                              |                         |
| <i>Vespadelus darlingtoni</i>   | Large Forest Bat        |                              |                         |
| <i>Vespadelus vultutnis</i>     | Little Forest Bat       |                              |                         |
| <i>Vespadelus regulus</i>       | Southern Forest Bat     |                              |                         |

Recent availability and application of remote cameras for fauna survey work has allowed trap-shy animals to be more readily detected and surveys to be extended over a longer period, also increasing the chance of detecting more species. Members of HFNC conducted camera-surveys in the Bear SF in 2012 & 2014, and also installed 10 fauna nest boxes in trees (see report on the HFNC website).

We are interested in establishing whether species such as Feather-tailed Glider (last seen from the Wannon Flora Reserve in 1977), Yellow-footed Antechinus, Southern Brown Bandicoot and Yellow-bellied Glider occur in the Mt Napier SP. We have had a chance sighting of Brush-tailed Phascogale (Tuan) in the Mt Napier SP at night in 1977 and a cat-captured Tuan in adjacent areas in 1989, but we have no knowledge of any recent sightings in the SW region.

### **The camera equipment and set-up**

Five ScoutGuard IR Model SG550V and 5 Model SG550V-31B infra-red cameras were available. These were installed on a suitable tree at one of 3 positions:

1. approximately 1.3 m from the ground, with the lens directed to a lure placed near the base of another tree from 1.5 to 3 m distant. This is intended to attract ground-dwelling fauna
2. approximately 0.5 m from the ground, 1.5-2 m distant from another tree where the lure is placed at the butt from 20 cm to 40 cm from the ground
3. approximately 2.3 m from the ground and directed at a lures placed on the trunk of an adjacent tree 2-3 m distant and at about the same level as the camera. This is intended to attract fauna that have climbing ability or a propensity to avoid near-ground situations.

The lures are of 2 types, both placed together in separate containers.

1. An odourous mixture of oils (linseed 79%, pistachio 20% and vanilla essence 1%) placed in plastic containers with holes in the sides to release the odour.
2. A 50/50 mixture of peanut butter and molasses or golden syrup – placed in a metal tea-strainer

The cameras were set to fire 3 shots in rapid succession when activated by movement (the sensor was set at 'normal', to avoid too many false shots due to movement of foliage). The interval before the camera could fire again was set at 3 minutes. The hours during the day when the camera was permitted to operate was 3 pm to 10 am daily. The daylight photos are in colour but the night flash photos are grey-scale. The resolution of the photos was set at 5 mpix (the highest available setting) and 2 mbyte SD cards were used in the cameras. Eight AA batteries were required for each camera.

A permit was required from DELWP and a Volunteer permit was required from Parks Victoria to conduct this project. A list of volunteers attending at each visit is to be returned to PV.

### **Installation Sites**

#### **Site 1.**

Track stop – 0.4 km from Murroa Corner on loop east past Old Crusher.

Camera site – ~ 40 m east @ GPS Aust84, 37-51-39.3/142-01-34.4. Camera set at 1.3 m height and lure 30 cm from the base of an opposite tree.

Habitat – Manna Gum & Cherry Ballart with bracken amongst lava stone.

#### **Site 2.**

Track stop – 0.6 km from Murroa Corner, at intersection with an E-W track back to Menzels Track.

Camera site – ~20 m south of track at base of the rise, @ 37-51-44.5.9/142-01-34.9. Camera set at 1.3 m and lure near the foot of a tree 2 m distant.

Habitat – Dense bracken and Manna Gum

#### **Site 3.**

Track stop – ~100 m east along E-W track to a cut log, then north ~100 m to tall Manna Gums.

Camera site – ~ Large old gums, @ 37-51-41.2/142-01-38.2. Camera set at 1.5 m on a small tree and the lure set at 2.3 m on the huge Manna Gum 3 m distant.

Habitat – open, almost bare understorey and very large, tall Manna Gum and some Blackwood.

#### **Site 4.**

Track stop – 0.7 km from Murroa Cnr on E-W track to Menzels Track, near a very large old log,

Camera site – ~ 30 m N, @ 37-51-42.6/142-01-29.4. Camera set 1.5 m on a small tree and the lure set at 2.3 m on a larger tree 1.5 m distant.

Habitat – open bracken, Manna Gum, Cherry Ballart and stone.

#### **Site 5.**

Track stop –1.6 km on Cole Tk, just before the jump up.

Camera site – ~ 80 m east along the base of the barrier, @ 37-52-06.8/142-01-24.4. Camera set at 0.6 m on one tree and the lure near the base of a tree 2 m distant.

Habitat – open, almost bare understorey and very large, tall Manna Gum and some Blackwood.

**Site 6.**

Track stop – 2.0 km on Cole Tk, near trail in to old quarry.

Camera site – ~ 60 m east of quarry, @ 37-52-19.3/142-01-27.0. Camera set at 1.5 m on one tree and the lure set at 2.3 m on a large tree 2.5 m distant.

Habitat – Big trees and moderately dense bracken and stone.

**Site 7.**

Track stop – 3.1 km on Cole Tk, near a v. large Manna Gum on west side.

Camera site – ~ 100 m east @ 37-52-52.8/142-01-26.4. Camera set at 1.5 m on one tree and the lure set near the base of another tree 2 m distant

Habitat – Tall Manna Gum and moderately dense bracken

**Site 8.**

Track stop – 3.5 km on Cole Tk, off a fire parking bay on east side.

Camera site – ~ 90 m east of track @ 37-53-07.5/142-01-25,1. Camera set at 1 m on one tree and the lure set 0.5 m from the base of another tree 2 m distant.

Habitat – Tall Manna Gum and moderately dense bracken

**Site 9.**

Track stop – 3.9 km on Cole Tk, off a fire parking bay on east side.

Camera site – ~ 20 m back along track to the swale, then ~20 m east, @ 37-53-18.0/142-01-23.7. Some clearing of bracken was needed here to prevent firing of the camera due to wind. Camera set at 1.3 m on one tree and the lure set at the base of another 2 m distant.

Habitat – medium sized Manna Gum and dense, tall bracken near barrier stone

**Site 10.**

Track stop – 4.4 km on Cole Tk just past the E-W stone fence, in open ground

Camera site – ~ 50 m south along Cole Tk to 10 m past a cut tree stump, then east ~40 m, @ 37-53-38.2/142-01-23.6. Camera set up at 1.5 m on one tree and lure set at 2.3 m on another tree 2.5 m distant.

Habitat – medium sized Manna Gum and dense, tall bracken near barrier stone

**Observations**

The weather was fine, warm and calm. The forest floor was very dry and no leeches were seen.

We observed 8 or 9 Koalas along the way. They have had a detrimental impact on the Manna Gums, with many dead and others stripped of leaves.

Our lunch spot was in a clear spot near the old stone fence (Site 10). Our day concluded at 3 pm.

**Photo:** Camera and lure set up at Site 10.

