

HFNC BEEAR STATE FOREST FAUNA SURVEY APRIL-JUNE 2012
Rod Bird

HFNC EXCURSION REPORT for the weekend of 21-22 April 2012.

Saturday was devoted to the selection of sites and setting up of 10 “remote” cameras (Saturday – Reto, Yvonne Jane and Rod) and Sunday to erection of 10 fauna nest boxes at 5 of those sites (Ken & Janeen, John & Glenys, Rod & Diane, Roger, Bob, Hilary and George with young Albert & Lennard).

Members of HFNC have been members of a Mammal Study Group or have independently conducted mammal surveys in years past (e.g. Mt Napier SP from 1975, Dundas Ra 1979, Youngs State Forest 2002), using cage traps, pit-fall traps, harp bat traps, spotlight surveys, daylight observations, hair-tube or predator scat analysis. The trapping of animals requires a permit and that presents some difficulties.

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 have taken part in surveys conducted at Dergholm State Park (Easter of 2012 and in December 2011). In 2011 we also had 5 cameras installed for a short period in the eastern part of Bear SF and detected an Eastern Pygmy Possum at a site near a Silver Banksia grove.

We are interested in establishing whether species such as Feather-tailed Glider (last seen from the Wannon Flora Reserve in 1977), Yellow-footed Antechinus, Agile Antechinus, Southern Brown Bandicoot and Tuan occur in the Bear SF. We have had evidence of Brush-tailed Phascogale (Tuan) in the Mt Napier SP (a chance sighting at night in 1977) and cat-captured animals in adjacent areas in 1989, and HFNC records of their presence in the Coleraine area in the 1960s, but no recent sightings in the SW region.

Glen Rudolph (Planning Manager Wimmera District, Land and Fire, DSE) provided us a map of areas destined for burning in 2012, and the area burned in 2011. We have avoided the area to be burned in 2012. However, after installing 3 cameras in the area west of the HallamsTrack we found signs of preparation for burning on the track that led west off Hallams Track to McAdams track. That had not been foreshadowed and may simply have indicated that the works crew had made a small error. Since it may have meant that burns in future years might be brought forward to 2012 we put no further cameras in the western block. I sent an email to Glen enquiring as to the situation and was informed that there was no intention to burn the western area – the freshly graded track was intended only to go to the dam.

Five ScoutGuard IR Model SG550V cameras were acquired in 2011 and 5 in 2012. The latter are Model SG550V-31B. These were installed on a suitable tree at approximately 1.3 m from the ground, in a habitat that offered hollows in trees or logs on the ground. The lens was directed to a lure placed near the base of the tree. We removed any vegetation from the immediate area that, when in motion, could trigger the camera. Our objective was to select a range of habitat types and establish at least 2 cameras in each: e.g. Brown Stringybark forest, Yellow Gum/Box woodland, Gum and Banksia woodland, or areas of Brown Stringybark in the forest burned in 2011 paired with adjacent sites not burned in 2011.

John Burtonclay from Mandurang constructed the boxes (www.nestboxenvironest.com)

The fauna nest boxes were of 2 types:

- Tuan/Glider box – 370 mm x 197 mm x 235 mm internal spaces (H x W x D), with hinged lid.
- Bush box – 271 mm x 195 mm x 157 mm internal spaces (H x W x D), with side opening.

Bendigo FNC members advised that, in the Ironbark Forests, Sugar Gliders are dominant over Brush-tailed Phascogales and will evict them from nest boxes unless pairs of boxes are placed near each other (e.g. 10 m apart). Apparently the dominant Sugar Glider male will not allow another family of Sugar Glider to occupy a hollow closer than about 50 m to his hollow, but will allow a Tuan to do so (provided the Tuan does not have the best hollow!). We have installed our boxes in pairs according to that premise.

We have 5 nest box sites and the boxes have been placed on trunks of suitable trees at 4-4.5 m from the ground. Each nest box site is within 50-100 m of a tree that has a camera installed. We tried to place these at least 50 m away from trees with obvious hollows. Whether that is important or not is unknown. Hopefully, if other hollows are present and occupied by Sugar Gliders that will not deter Tuan from using our nest box. We will leave the boxes in place for at least 2 years – longer if they are occupied. After 2 years we may re-site boxes that fail to become occupied. We may get some information on preferences of Sugar Gliders or Tuans for a particular box style, problems with bees, use by birds, or durability.

Site 1.

Road stop – 0.3 km from Bear SF sign on Hallams Tk (GPS Aust84, 37-22-51.6/142-02-50.6)

Camera site – ~ 150 m west @ **37-22-52.8/142-02-46.7 [Waypoint 001 BSF Cam01]**

Habitat – Dense *E. baxteri* forest with *X. minor* understorey (unburned >60 years). Few obvious hollows.

Site 2.

Road stop – 1.0 km from Bear SF sign on Hallams Tk (GPS Aust84, 37-22-31.4/142-02-27.3)

Camera site – ~ 110 m west down a slight gully @ **37-22-34.9/142-02-25.5 [Waypoint 002 BSF Cam02]**.

Nest box site – @ **37-22-34.9/142-02-24.5 [Waypoint 003 BSF NBox 1&2]**.

Habitat – Dense *E. baxteri* forest with *X. minor* understorey (unburned >560 years). A few obvious hollows in the mature trees.

Site 3.

Road stop – 2.7 km from Bear SF sign on Hallams Tk (GPS Aust84, 37-21-47.4/142-02-06.0) in a drainage flat with Silver Banksia and Prickly Tea-tree and a large roadside log on east side.

Camera site – ~ 100 m west behind the thicket @ **37-21-47.2/142-02-02.9 [Waypoint 004 BSF Cam03]**

Nest box site – @ **37-21-45.8/142-02-2.1 [Waypoint 005 BSF NBox 3&4]**.

Habitat – *E. leucoxydon*, *E. melliodora*, *E. viminalis*, *E. baxteri*, *B. marginata*.

Site 4.

Road stop – 5.5 km from Bear SF sign on Hallams Tk and along west track to McAdams Rd (log on north side of track) (GPS Aust84, 37-21-33.6/142-01-14.7)

Camera site – ~ 150 m NW @ **37-21-32.8/142-01-11.0 [Waypoint 006 BSF Cam04]**.

Habitat – Open forest of *E. leucoxydon* & *E. melliodora* with *X. minor* & heath understorey and some logs; *E. baxteri* forest adjacent . Few obvious hollows.

Site 5.

Road stop – Dam on track to McAdams Rd (GPS Aust84, 37-21-21.6/142-01-34.3) in a drainage flat with Silver Banksia, Black Wattle, Yellow Box, Stringybark and many logs.

Camera site – ~ 100 m west behind a thicket @ **37-21-19.9/142-01-28.7 [Waypoint 007 BSF Cam05]**

Nest box site – @ **37-21-20.0/142-01-30.2 [Waypoint 008 BSF NBox 5&6]**.

Habitat – *E. melliodora*, *E. baxteri*, *B. marginata*, *A. mearnsii* and *X. minor*.

Site 6.

Road stop – 0.9 km along the 2011 Burn Tk from jn 2011 Burn Tk/McAdams Tk (GPS Aust84, 37-20-54.5/142-01-38.8) in an area partly burned in 2011, with a huge Yellow Gum present 100 m east of the track.

Camera site – ~ 100 m east of track @ **37-20-53.2/142-01-40.7 [Waypoint 009 BSF Cam06]**.

Nest box site – @ **37-20-51.2/142-01-40.1 [Waypoint 010 BSF Nbox 7&8]**.

Habitat – *E. leucoxydon* & *E. baxteri* and *X. minor* in an area partially burned in 2011.

Site 7

Road stop – 0.9 km along the 2011 Burn Tk from jn 2011 Burn Tk/McAdams Tk (GPS Aust84, 37-20-54.5/142-01-38.8), opposite the area partly burned in 2011 (see above).

Camera site – ~ 100 m west of track @ **37-20-56.5/142-01-34.3 [Waypoint 011 BSF Cam07]**

Habitat – *E. leucoxydon* & *B. marginata* in an area not burned in 2011

Site 8.

Road stop – 0.1 km along the 2011 Burn Tk from jn 2011 Burn Tk/McAdams Tk (GPS Aust84, 37-21-20.5/142-01-46.3) in an area of Stringybark east of the Burn Tk area partly burned in 2011.

Camera site – ~ 100 m east of track @ **37-21-59/142-01-49 [Waypoint 012 BSF Cam08]**.

Habitat – *E. baxteri* & *X. minor* in an area partially burned in 2011.

Site 9.

Road stop – 0.1 km along the 2011 Burn Tk from jn 2011 Burn Tk/McAdams Tk (GPS Aust84, 37-21-20.5/142-01-46.3) in an area of Stringybark west of the track not burned in 2011.

Camera site – ~ 100 m west of Burn track @ **37-21-20.6/142-01-43.1 [Waypoint 013 BSF Cam09]**

Habitat – *E. baxteri*, some *B. marginata* & *X. minor* in an area not burned in 2011.

Site 10.

Road stop – 0.7 km N on Hallams Tk from its jn with McAdams Tk (GPS Aust84, 37-20-49.3/142-02-17.8)

Camera site – ~ 200 m west of Hallams Tk @ **37-20-51.6/142-02-12.1 [Waypoint 014 BSF Cam10]**.

Nest box site – @ **37-20-49.9/142-02-12.4 [Waypoint 015 BSF NBox 9&10]**.

Habitat – *E. leucoxydon*, *E. melliodora*, *E. viminalis* & *B. marginata* open woodland with *X. minor*.

The map below shows the area (purple) that will be “prescribed burned” in winter 2012. The cream-coloured area adjacent is also State Forest – those areas will not be burned in 2012.

Hallams Track runs up the western edge of the area. Hallams Track starts from East-West Rd. At about 5 km into the forest there is a track that leads west to Craigs Rd, which runs back south to East-West Rd. The burn area extends about 500 m along that track. The hatched area on the map is the area that was partially burned in 2011.

Our sites have been selected to keep clear of the intended 2012 burn.

