

HFNC BEEAR STATE FOREST NEST BOX OCCUPATION Report 20 Nov 2012

Rod Bird

This survey involved the installation of 10 ScoutGuard IR Model SG550V cameras and nest boxes in a range of habitat types, e.g. Brown Stringybark and Messmate Stringybark forest, Yellow Gum/Box woodland, Gum and Banksia woodland, or areas of Brown Stringybark in the forest burned in 2011. The nest boxes were installed on 22 April 2012 at 5 of the sites where cameras were also installed. The camera results were reported earlier. The nest boxes were used in the hope that it may reveal species such as Brush-tailed Phascogale (Tuan).

John Burtonclay from Mandurang constructed the boxes (www.nestboxenviro.net)

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.

One large and one small box were placed on trunks of suitable trees at 4-4.5 m from the ground at each of 5 sites. We tried to place these at least 50 m away from trees with obvious hollows. 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, after which we may re-site the boxes. This study may give some data on preferences of Sugar Gliders or Tuans for a particular box type, problems with bees, use by birds, or durability.

Site 2.

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

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.

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

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

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, Brown Stringybark, Messmate Stringybark and many logs.

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.

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

Habitat – *E. leucoxyton* & *E. baxteri* and *X. minor* in an area partially 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)

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

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

Results

The results were disappointing since no sign of habitation by birds or mammals was found in any of the 10 boxes. Bees were found in 3 of the 5 large boxes (Sites 2, 5 & 6) but not in the small boxes. A burst of insect spray through the entrance hole was applied to the 3 boxes and then we decamped in a hurry, since the bees were active. John Burtonclay applies a burst of spray early morning (<14°C) to kill the bees before they leave the box. He finds that PestStrip (dichlorvos) is the only way to keep bees out.

Site 2. *E. baxteri* & *X. minor* woodland where the first 2 of 10 nest boxes were installed.



Site 3. *E. leucoxyton*, *E. melliodora*, *E. viminalis*, *E. baxteri*, *B. marginata* & *X. minor* woodland.



Site 5. *E. melliodora*, *E. baxteri*, *B. marginata*, *A. mearnsii* and *X. minor*.



Site 6. *E. baxteri*, *E. leucoxyton* & *X. Minor*.



Nov. 2012 – checking a nest box for signs of use by small mammals or birds.

Site 10. *E. leucoxyton*, *E. melliodora*, *E. viminalis* & *B. marginata* open woodland with *X. minor*.

