

"It was the hairy penis that clinched it" – bat identification fun in the Wombat Forest

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Images by Gayle Osborne

Many people are familiar with microbats. They often roost in roof cavities and occasionally escape into the house, however not many people can identify the species, and many people are not aware that nine species of microbats are found in our area.

A grant from the Hepburn Shire enabled us to invite a scientist, Ann Williamson, to trap microbats at two locations on public land in the shire – Cornish Hill and the Glenlyon Reserve.

An ingenious device, called a harp trap is used. Fine fishing line is strung from a frame, catching the bats, which fall gently into a long bag and as they crawl up the sides they are trapped under a flap. The trick is to place the trap on a bat flyway. Bats follow tracks and waterways and the harp trap usually is placed under an overhanging tree funneling them into the trap. Some bats turn off their echolocation when flying these well-used routes and are caught in the trap, however some manage to fly out.

Two traps were set up at Cornish Hill in the early evening and checked at 11pm for lactating females, which would need to be released. At this stage we had not captured any bats and we were anxious that we would have nothing to show the enthusiastic people who would arrive at 6.30 the following morning.

Luckily there were six bats in one trap. They were weighed and their forearms measured to assist with identification. Penis size and shape also assists with identification. We had five Large Forest Bats *Vespadelus darlingtoni* and one Southern Forest Bat *Vespadelus regulus*, all male.

Unfortunately, we were unsuccessful at the Glenlyon Reserve and Ann generously agreed to return. A few weeks later, we set up along the Loddon River near the reservoir and were thrilled with our collection of eleven bats (four species).

One Lesser Long-eared Bat *Nyctophilus*



Eastern False Pipistrelle Bat *Falsistrellus tasmaniensis*



Lesser Long-eared Bat *Nyctophilus geoffroyi*

geoffroyi, two Southern Forest Bats *Vespadelus regulus*, six Large Forest Bats *Vespadelus darlingtoni* and two Eastern False Pipistrelle Bats *Falsistrellus tasmaniensis*.

The Eastern False Pipistrelles were of great interest, as they are not regularly caught. The species confirmation was the weight, 21grams and forearm length being more



Large Forest Bat *Vespadelus darlingtoni*

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Intimate examination of a male Eastern False Pipistrelle Bat



Not so hairy male Large Forest Bat

than double the usual species found. The hairy penis on the male was the final validation. They are widely distributed in Victoria but considered uncommon and prefer wet/damp forest types. The Pipistrelles are dark coloured, and quite a bulky bat. The pair were very quiet, and submitted graciously to forearm measurement, penis / nipple examination and of course a barrage of photographs.

The Large Forest Bats and Southern Forest Bats are quite similar, with neat compact ears and uniform body colour, the main difference being the size. It is always great to see the two species side by side so that the size can be compared. The Southern Forest Bats almost looks like it could be a juvenile of the Large Forest Bat.

The Lesser Long-eared Bat was a little cold, so its long ears were folded back, much like a concertina fan.

As with many birds and animals, each bat species also has its own niche in the ecosystem. Eastern Falsistrelles forage just below the forest canopy and avoid dense understorey and regrowth, whereas the Lesser Long-

eared Bats tend to fly close to vegetation and into the understorey and the Large Forest Bats forage in the spaces between trees. Large Forest Bats are commonly seen foraging at dusk over dirt roads in the forest in autumn, fattening up for the lean winter months.

Each bat species also has preferred insect types and this will be seen with their type of teeth; large teeth for beetles and moths. Microbats help keep our insect populations under control. "A small bat can catch and eat more than 600 mosquitoes in one hour."¹

All microbats rely on large old trees as an essential habitat component. Large old trees have hollows which are maternity roosts, and rough peeling bark which provides part-time roosts. The big old trees also flower more profusely, with higher nectar flow, and thus have a much more abundant and diverse insect fauna to provide food for the bats. ■

Reference:

1. Greg Richards and Les Hal (2012). *Bats Working the Night Shift*



Above - Dismantling harp trap

Below - Ann Williamson offers a close examination of a Large Forest Bat

