

Locating stingless bee colonies before cutting

Bob Luttrell

Tree loppers, fauna catchers and firewood cutters are often the first to contact a colony that might be removed. It is always better to be forewarned, and know the colony is in the tree, before it is actually cut down. Options can be considered.

As these little bees don't fly in the early morning, when it is cold or the weather unpleasant, doing an inspection in a warm part of the day when the bees are flying gives the best chance of locating the colony before the tree is felled. Initially look for the obvious, the entrance

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In the case of *Trigona carbonaria*, the most common bee in SEQ, the entrance is normally surrounded by deposits of resin, but is often in cracks or recesses on the trunk of living or dead trees, normally low in the tree

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Austroplebia australis prefer dead trees, smaller than the *T carbonaria*, and are more often in the higher branches. Their entrance may just be a hole with a ring of resin around the hole and only 1cm across. These bees put up a permeable screen each night and remove it when it warms up the next morning. It is possible to see this, but only if you have seen others to get your eye in. They are very inactive in winter unless it is warm and nearby trees are flowering, and often are not found until the chainsaw cuts through a collection of honey cells. All is not lost, they can still be rescued as long as all pieces making up the nest are put together as they were, and help given to reseal the exposed end hollow with whatever is at hand, some tape around the cuts gives the bees a chance to seal up the damage before ants, etc get in.

A third species, *Trigona hockingsi* is not common in SEQ, but is the main species north of Rockhampton. The entrances to its nests are often marked by a dirty smudge, clearly visible in dead trees. It seems to seek bigger trees. It is the most defensive of all the species, and most certainly takes exception to the chain saw operator by nipping at any tender spots it can get to. A bee veil takes the pressure off the operator if one is available. They might be effectively stingless, but they can bite, get into eyes and ears, and quite literally up one's nose. Blocking the entrance by covering with a piece of cloth as soon as it is accessible will minimize the annoyance from the bees unless the nest is exposed in the hollow by the cut. In that case block the hollow with a rag, plastic bag or whatever is at hand.

Approach the tree keeping the tree trunk between you and the sun looking for bees flying to and from the nest over the height of the tree. The backlighting on the bees wings makes them easier to see, sometime the presents of a parasitic wasp, the size of a honeybee, hovering just outside the entrance will give its location away. Move right up to the tree ending up looking nearly vertical, the bees are easier to see against a plain background such as the sky especially with the sun on their wings and a blue sky.

If you find a colony, perhaps you could consider whether the tree really must come down, is there a similar tree for firewood nearby, the bees show that the tree is piped and filled with dirt and not as good for firewood as a solid tree, perhaps the top of the tree can be removed and the hollow capped to leave the colony in situ. If a tree is being removed by a tree lopper in a backyard, and the colony is low in the tree in a sound trunk, or major branch, perhaps the homeowner might be prepared to keep that stump of the tree as a talking point. Most people find them to be fascinating residents once they know what they are and their significance. I am always happy to talk to people in such situations and provide more information. If the tree is a development area, perhaps it could be considered for retention especially if the colony was very lucky and in an area designated for parks, or even near the back of projected blocks.



Some examples of *Trigona carbonaria* entrances



Austroplebeia australis entrance, very small, little resin and **HARD TO SEE**. All *Austroplebeia* entrances are difficult to spot.

Finding a colony before work starts, or early in the process, allows you to contact me or someone else who might be able to re-locate the colony. It helps me to have a bit more time to get to you, or to find someone else in your area who may be able to collect it.



Trigona hockingsi entrance, concealed in a crack of an old tree trunk, little resin evident.

Please do not use this information to find and remove colonies of stingless bees from a safe natural situation. That is the best place for them, and it is those natural colonies that will keep the pool of bees going into the future. If a colony is in a tree in suburbia, just enjoy, record and report the natural activity of the hive, but unless the tree has to be removed let it be. The world will be a better place if the natural pollinators in our ecosystems continue to fulfil their roles, and evolve with the changes that are coming.

Bob the Beeman