Prime Real Estate, from a Blue Banded Bee point of view

By Bob Luttrell

Have you seen this bee coming from under your house?

Blue banded bee (Amegilla sp) on Plectranthus

The time that these beautiful bees emerge from their winter dormancy is getting close, and they will once again grace our gardens with their striking flashes of reflected iridescent blue bands and golden brown thorax hair. They are highly visible as they endlessly and noisily search for suitable flowers. Never backward, they have a habit of flying towards people and just hovering, eyeballing us, as I call it, then going on with their business of finding a mate in the case of males, and collecting pollen and nectar to provision their brood cells in the case of females. Resist the inclination to 'swat' at these bees and enjoy the experience of observing their activity. They are the size of a honeybee, the females can sting but usually only if disturbed by catching or being stood on.

They have the unusual habit of gathering to nest in sometimes large numbers under our Queenslander houses on stumps, in soil that is kept dry, cool and protected by the house above, but with good access to the outside. They get to use the ground floor while you live in the top floor. Very efficient use of space, and a contribution to the environment as well. In spring there will be a major hatching from these established nesting sites, and quite large numbers of these bees can appear around the houses with suitable conditions. The males will hang in groups or lines of bees on vegetation outside the house overnight, and when the females start moving from their tunnels in the warmth of the morning, the male will enthusiastically check all comers. While these bees are capable of stinging

Hovering Blue banded bee male, checking resting female cleaning herself for another foraging trip

but usually only if they are caught or stood on. It is rare for them to become aggressive, curiosity is more common. If we don't try to swat them or brush them away, a sting is very unlikely, even in quite close quarters.

You may even see them checking out the mortar between the bricks of your house, but this is very hard going for them. If you get the chance, just listen to the sound of them trying to dig into the mortar, and marvel at the toughness of their mouthparts. They are rarely able to establish more than an occasional nest site this.

Fine weeping foliage is favoured by the males, but whatever is at hand near the main flight path of the females is used, even the wires of Christmas lights left from the previous season for example. The males clamp their mandibles, jaws, onto the plant and do not need to hold on by their legs. Sometime this flight path can cause concern, perhaps across a path, in one case from below steps at the front entrance. Strategic blocking of the flight path to encourage them to locate away from these areas may help with the concern while still allowing co-existence,

Burrow entrances in level ground under a house

These bees in nature like a bank of firm fine soil, even soft sandstone. It can contain gravel to give it stability, as long as there is enough fine material for the

females to dig their nesting burrow. They prefer a site with a solid overhanging shelf such as a rock layer or tree base to get protection from the elements.

We do not know why they gather in such large numbers, perhaps it is the progeny of a successful female, but more probably other females are attracted to a successful site by the pheremones the bees release. If you notice these bees coming from under your house, do not panic. They are a very special Australian native bee, an Amegilla species, are wonderful to watch at work in your garden. They are buzz pollinators, and if you have good hearing and are fortunate enough to be close to a female foraging, you may hear the sound of the buzz in which she vibrates the flower to stimulate release of the pollen. They are being developed as a native pollinator for tomatoes in greenhouse culture by researchers in Adelaide with the co-operation of the horticultural industry, and will do the same job in your vegetable garden especially.

If you are concerned about the presence of these bees under your house, please do not ring for the pest exterminator as first response. They take a lot of killing and repeated applications of chemicals, because of the depth of burrows. In the vast majority of case they really do not need to be removed and they can be left to share your house. They are one of the most special of the Australian solitary native bees and could well fill an important pollination role in the future

There are many people out there who would dearly like the experience of sharing the house site , and one nest site I know of has been active for 50 years, providing a natural morning wakeup call in spring and summer for the residents above the timber floor in the house. It is possible to encourage them to use man made blocks filled with a suitable soil/medium, and at the end of the season an occupied block can be moved to a new site to give others the pleasure of thee experience. It can of course help to reduce the number of bees at the original site if it is becoming too large or a cause of concern

Along with these bees you will often see one of the most spectacular of the Australian bees, the cuckoo bee, which as its name indicates, has a sinister place in

the natural system. It is a parasite of the blue banded bees. It seeks out an unattended burrow to lay its egg in the provisioned cell, and the young will hatch out later in the season to continue the cycle, the balance of nature using the foraging efforts of another species to provide for its young.

Cuckoo Bee entering burrow of a blue banded bee

This bee does have to seek an energy source so is capable of foraging on its own. It is a spectacular bee to find in any garden as the photo below shows.

Cuckoo bee (Thyreus sp) on purple top (Verbena sp)

Should you find a nesting site of the blue banded bees in any situation, I am interested in inspecting at your convenience. I know of sites at Aspley, Wights Mtn, Buderim and Cedar Creek. There are 3 potential species of blue banded bee in this south-east Queensland area, and we do not yet know which form these aggregations. Just send me an email via the contact form on this site. I am keen to know just where these sites are, and just which bee is involved.

If you have concerns with the blue banded bees, just get in touch. I will do what I can to help you and of course the bees.

Bob the Beeman