WHAT LIVES IN EACH BEE HABITAT?

Ground nesting native bees like Amegilla will construct cells inside clay/sand/mortar mixtures in containers by digging or will also simply nest in bare patches of ground *(leave some ground based real estate naked and bare for your native bees!)*

Native solitary bees (and semi social like Exoneura) will use the hollows inside flower stems and bamboo to create nests and lay eggs before collecting pollen to store with the eggs for when it hatches.

Similar to native bees/ wasps that nest inside hollow cavities, there are also bees which nest in the tunnels that are created by wood boring grubs. There is overlap between the two types of habitat eg. Hylaeus. *(Check out the caps of the nests!)*

Blue Banded Bee – Amegilla

Cuckoo Bee – Thyreus

Reed Bees – Exoneura/ Braunsapis

Leafcutter Bees– Eutricharaea

Masked Bees – Hylaeus

Wasp Mimic Bees – Hyleoides

Grass Carrying Wasp – Isodontia

Resin Bees – Megachile

COOL NATIVE BEE FACTS

Australia has ~1700 known native bee species but its estimated to be >2600

62% nest in the ground in clay and sand

30% nest in cavities in dead wood/hollow stems

11 species make honey, the rest do NOT

European honey bees are NOT native to Australia

Most species are solitary - one female for one nest

Female native bees don't die when they sting (males don't have stingers), and only ~31 species don't sting (Meliponini + Stenotritidae)

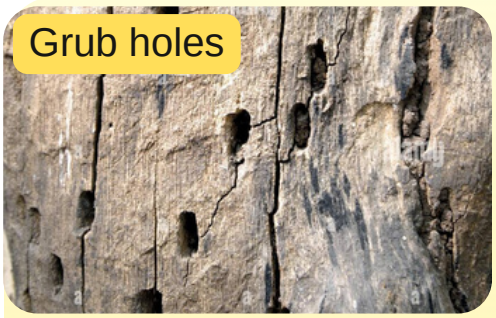
There are 5/8 global bee families in Aus

We have lots of short tongue bees in Aus

75% of Australia's crops benefit from insect pollination, and 87/115 major global crops

~88% of the world's flowering plants need pollinators to set seed/reproduce

NATURAL NATIVE BEE NESTING HABITAT


Grub holes


Reeds/Hollow stems


Clay Riverbanks


Xanthorrhoea spikes


Open ground substrate


Resin pots


Gum Nuts

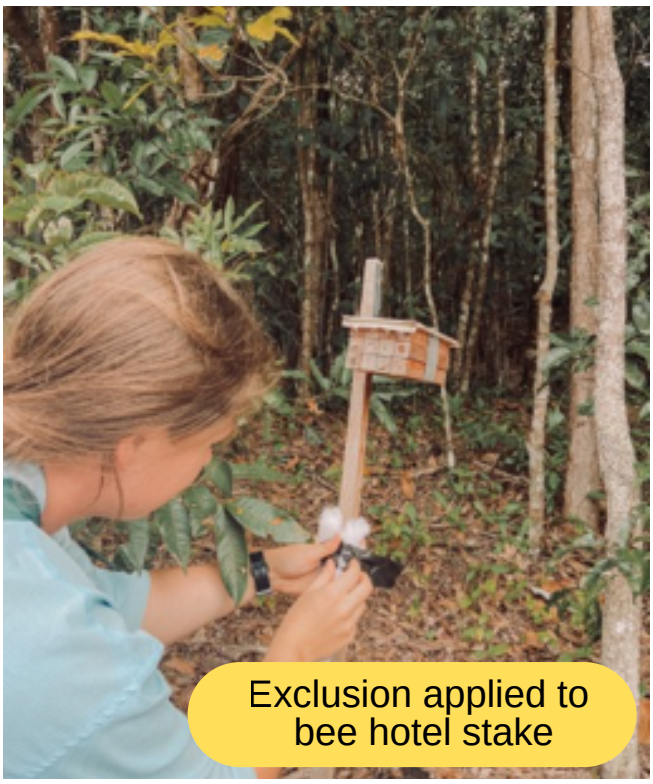

Fern Fronds

KEEPING ANTS OUT

Polyrachis spp. - a common ant in bee hotels in Far North QLD

Ant nest substrate on a bee hotel

Ants can be pesky competitors in bee hotels as they build large colonies that utilise many chambers (used for brood, food storage and trash).



Exclusion applied to bee hotel stake

Ant management suggestions by Holly Farnan (PhD Candidate, JCU)

To prevent ants taking over bee hotels:

- build smaller bee hotels with less holes
- avoid setting up hotels where long grass or vines touch the hotel as ants use these as pathways.
- mount bee hotels on garden stakes and apply a physical exclusion using cotton wadding wrapped in cling wrap, and covered in a sticky resin like Tanglefoot