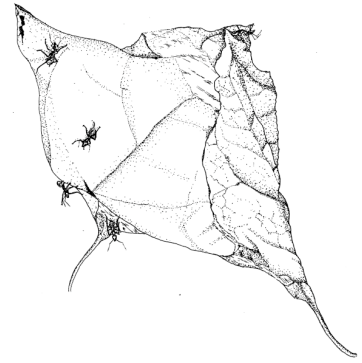


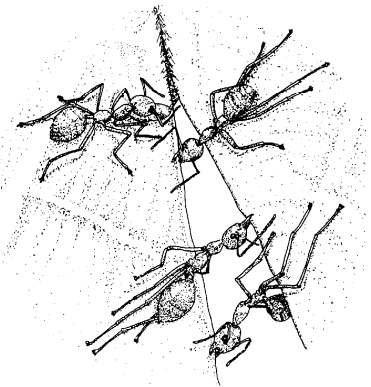
Tropical Factsheets

Green tree ants



Green Tree Ant Nest

- Green tree ants or 'weaver ants' live in colonies in trees. They build **nests** from living leaves. Armies of ants form **chains** of up to 12 cm long to bridge the gap between the leaves. They anchor themselves in position using tiny hooks on their feet.
- They pull the edges of the leaves together and then use their own **larvae** as glue-sticks to join the leaves together with silk. After the larvae's silk is used, the larvae pupate naked in the nest.
- The ants benefit from having a home, and the **tree also benefits** because the ants attack other leaf-eaters on its branches and leaves.
- Green tree ants travel far and wide to prey on small insects. They have no sting, but they bite their prey with their mandibles. Then they squirt an acid from their rear ends.
- The ants share their home with the **caterpillars** of some **Blue** butterflies.
- When the female butterflies are ready to **lay eggs**, they search for the correct food plant and also for the presence of ants.
- When the eggs hatch, the ants carry the little **larvae** into their nest. As the larvae grow, the ants care for them, clean them and protect them from predators and parasites, such as wasps and flies.
- The ants also guide the caterpillars at **night** when they emerge from the nest to feed on leaves.
- The caterpillars reward the ants with a sweet substance called honeydew (a mixture of sugar and amino acid) which they exude through pores on their skin.
- The caterpillars also attract the ants by **calling!** They produce a **vibratory sound** which carries for up to 5cm along the stems and leaves. This sound **mimics** similar calls that the ants use to communicate with each other. The calls keep the ants as **bodyguards** near the caterpillars.
- Some of the caterpillars can't survive without the ants and when they're separated they refuse to eat, become mouldy and **die**.
- Not all caterpillars have such a mutually beneficial relationship with the green ants. Some caterpillars **eat** the ant's larvae. The caterpillars of the **Moth**

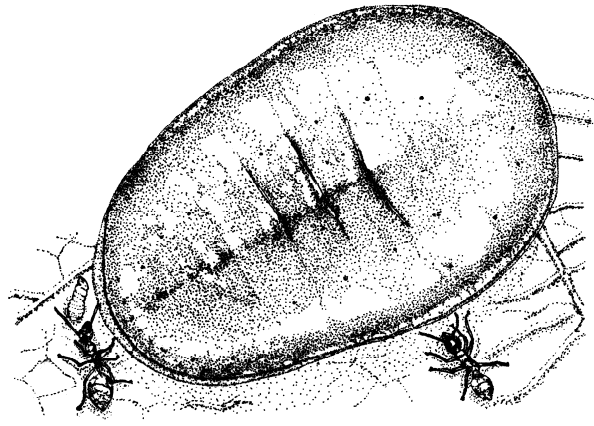


Green Tree Ants



Butterfly (*Liphyra brassolis*) crawl into the green tree ant nests once they hatch.

- The ants can't bite the caterpillars because they are protected by a very tough, flat, shield-like skin. When the **caterpillars** get hungry they drag the ant larvae underneath their thick skin for a meal.
- The **soft pupae** are protected inside their **last** larval skin. When the **butterflies emerge**, they are covered with **loose scales** which stick to the antennae and mouths of the green tree ants if they try to attack them. In this way the **butterflies** can escape unharmed from the ant's nest.
- Ants produce a defensive fluid called **formic acid**. Some birds use this defensive fluid to kill **parasites** such as lice and ticks, and also fungi in their feathers. They pick up an ant in their beak and run it over their plumage, especially on the inside of their wing feathers.
- Some birds squat over an ant nest with their wings spread and bathe in ants. This is called '**anting**' and is common in Satin Bowerbirds, Currawongs and many Honeyeaters.
- Honeyeater 'anting'
- The green tree ants themselves may also be **attacked**. A certain spider ***Amyciaea albomaculata*** mimics the shape and colour of the green tree ant.
- From behind, the spider's abdomen, which has two black spots, looks like the **eyes** on an ant's head. The spider raises its long front legs to look like an ant's **antennae**. So the spider looks like the front of a green tree ant at **both ends!**
- When the spider hangs from its silken thread it looks an ant in trouble. When the other green ants come to help it, the spider **ambushes** them!
- The **Assassin Bug** also looks like a green tree ant. It joins the ants' trails, and pounces on them.



Moth Butterfly Caterpillar



Honeyeater 'anting'



- Another related bug uses a different strategy for capturing the ants. It secretes a substance which the ants love to eat from a gland on its abdomen. This substance is a **drug** which makes the ants sleepy and they become very easy prey!
- Green tree ants are eaten by **insectivorous plants**. These plants live in areas with **poor soil** nutrients and therefore these plants rely on insects as an extra food source.
- The most common insectivorous plants in the tropical forests of north Queensland are the **sundews** (*Drosera*). When the ants (and other insects) wander onto a leaf they are **trapped** by the long hairs and sticky droplets which cover the surface of the sundew plant.
- Over a few days the leaf slowly closes, and the sticky droplets slowly **digest** the trapped insects.
- ***Green tree ants are found on all types of rainforest plants and bite with a nasty nip. Don't knock on their nests because this will cause them to get angry and bite.***