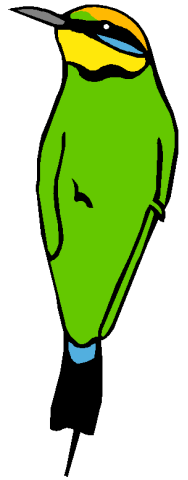


GARDEN FOR WILDLIFE

Lerp insects

By Christopher Palmer, Entomologist



These strange things on leaves that look like fuzzy pieces of cotton wool are actually a protective covering (a 'lerp') for an insect. They're often seen on trees in parks, gardens and beside roads.

Biology

Because they have piercing and sucking mouthparts, lerp insects belong to the insect order Hemiptera (hem-IP-tera), or true bugs. Both adults and nymphs are sap-suckers, feeding on the sugar-rich sap of the plants on which they're found. Any waste from feeding is excreted by nymphs as a sweet fluid, and this is woven into shape to then harden in air, forming the lerp. The lerp is mainly made of sugars, with small amounts of fats and proteins.

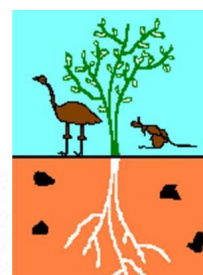
Adults have wings and look like tiny cicadas, but the nymphs are very different, being oval, flattened, and wingless. There are five nymph stages between egg and adult, and each nymph lives and develops under its protective cover. The nymph starts to build its lerp soon after it hatches from its



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egg and starts feeding, and so that it doesn't get squashed as it grows, it adds more fluid to the lerp, so it gets bigger as well!

Adults of some species are known to communicate with each other. Scientists have recorded sounds made by both males and females; the insects do this by rubbing one rough surface against another. This is called 'stridulation', and grasshoppers and crickets communicate in the same way.

In a relationship called 'mutualism', many species of ants look after lerp insects and protect them from predators. In exchange for this, lerp insects excrete any leftovers from their feeding (called honeydew), which the ants then feed on. Sometimes the lerps know exactly when to do this, because the ants tap them with their antennae when they're ready! The lerps shown in these photos belong to the genus *Glycaspis*, and they're being tended by *Iridomyrmex* ants.



How many are there?

Although the total number of described species of insects in Australia is well over 50,000, only a tiny fraction of this number is made up by lerp insects. There are only just over 350 species of lerps in Australia that are described, although there are many more that have been noticed but are not named or described. Different species make different types of lerps, so that some look like shells, while others look like scales, shells, cones, horns, fans, or even woven baskets. They're seen usually on native plants, especially *Eucalyptus* and *Acacia*.

Sugary lerps are a traditional Aboriginal bushfood, and lerps on the leaves of gum trees were described by European settlers and biologists in Australia in the first half of the 19th century. As lerps were eaten widely across Australia, they are known by many names in different parts of the country. In fact, the word 'lerp' comes from '*lerep*', in the Wemba Wemba language of northern Victoria and southern New South Wales, but they're called *ngkwarle aperaltye* or *merne aperaltye* in the Arrernte languages of central Australia. They were so popular that twigs with lerps on them were brushed across the lips and tongue, making them sore. When large numbers of lerps were found, they were cleaned and rolled into balls to eat later.

There are still spaces available for our upcoming workshop on *Habitat Creation: Natural Regeneration, Seed Collection and Propagation*, to be held on the 11th October commencing 10am at Lot 7802 Brumby Rd Ilparpa

A variety of topics will be covered, including:

- The importance of natural regeneration
- Assessing the potential of regeneration on your block
- Methods of encouraging natural regeneration
- Seed collection: where, how and species choice
- Seed drying, sorting, cleaning and storage
- Propagation and setting up your own personal/community nursery

Please RSVP by 4th October to 89 555 222 or lfw@lowecol.com.au

Have an enjoyable October!