# THE ANT, THE PLANT, AND THE CATERPILLA

The ELTHAM COPPER BUTTERFLY is a special insect beacuse of its close symbiotic relationship with a group of ants called the Notoncus ants and the Sweet Bursaria (Bursaria spinosa) plant.

# What is Symbiosis?

Symbiosis is a close relationship between two different kinds of organisms, or living things. There are three basic types of symbiotic relationships called: mutualism, commensalism, and parasitism. Mutualism is a relationship in which both organisms benefit. The Eltham Copper Butterfly, the Sweet Bursaria plant, and the Notoncus ant have a mutualistic relationship. The ECB caterpillar eats only the Sweet Bursaria leaves. The ants house and protect the caterpillar and the ants receive a reward.

### **Biology**

The Eltham Copper Butterfly is a small butterfly, about the size of a 10 cent coin (1.94cm) with bright copper colouring on the tops of its wings and grey underneath. The grey colour helps them blend in with the plants.



Eltham Copper Butterfly

Adult butterflies lay their eggs on the roots, stems or leaves of the Sweet Bursaria during Summer. Once the eggs hatch, the ants guide the caterpillar down into the ant nest underground for the winter. The ants guard the caterpillars (providing protection from predators, such as Huntsman spiders

and European wasps) ushering the caterpillar to and from the ant nest to feed on the Sweet Bursaria leaves at night. As a reward for protecting the caterpillar the ants feed on the sugar secretions from the body of the caterpillar.



The caterpillar begins pupation in Spring, where it spins a cocoon in the ants nest, usually on the roots of the Sweet

Bursaria plant. In summer a copper coloured butterfly will emerge from the cocoon. It loves fluttering in the warm sunshine and drinking the nectar from the summer flowers of the Sweet Bursaria bush.

# Endangered

The Eltham Copper Butterfly is an endangered species. It is now classified as Endangered Invertebrate in Victoria, because of the loss of its bush habitat. This is due to farming and urbanisation, which means where new houses and roads are built. Other reasons are weed invasion, people dumping rubbish and walking on the plants, cutting down the plants, and bushfires.



ECB caterpillar (larvae) with Notoncus ant



Sweet Bursaria plant flowering

## Habitat & Location

The Eltham Copper Butterfly is only found in isolated pockets of dry open woodlands, where the Notoncus ants live and Sweet Bursaria grows in Victoria, Australia.

- Eltham / Greensborough area
- Kiata & Salisbury areas in western Victoria
- Castlemaine / Bendigo









Eltham Copper Butterfly (feeding on nectar).