



# Help the endangered purple copper butterfly

**Saving our Species**

In partnership with:

Central Tablelands Local Land Services



# Purple copper butterfly

## *Paralucia spinifera*

NSW conservation status: **Endangered**

Commonwealth conservation status: **Vulnerable**

The purple copper butterfly has a thick body and a wingspan of only 20–30 mm. The upper sides of its wings are purple, black or deep brown, with a bronze or green iridescence in sunlight. Its wing undersides are patterned with brown, black and grey. Its black antennae are dotted with white spots and have a black tip.

Butterflies can emerge from late August to early November and usually fly between 10 am and 2 pm on warm, sunny days with little or no wind.

Caterpillars grow to about 22 mm in length and are light green with darker longitudinal markings. They are nocturnal and can be found crawling along blackthorn stems and feeding on the leaves from 10 pm to 5 am between November and January.



# Distribution

The butterfly is found on Wiradjuri country in the area bordered by Bathurst, Lithgow and Oberon in the NSW Central Tablelands, with an outlying population at Mount David. One of Australia's rarest butterfly species, it is also likely to occur in areas yet to be discovered across New South Wales.

Features common to known sites include:

- altitude greater than 850 m above sea level
- presence of native blackthorn and attendant ants
- heavy frosts and/or occasional snow
- 3–4 hours of exposure to direct spring sunlight.

# Habitat

The butterfly lives in open woodland or forest with a sparse understorey dominated by native blackthorn, *Bursaria spinosa* subsp. *lasiophylla*.

Native blackthorn is an erect, spindly, often multi-stemmed shrub that generally grows about 2 metres tall. It has spines along the primary branches and the dark green foliage is sometimes sparse.





## Life cycle

The butterfly's life cycle relies on a 'mutualistic' relationship with attendant ants (*Anonychomyrma itinerans*) and the presence of native blackthorn. After mating, the female lays her eggs on or near blackthorn bushes, at the base of which there are ant nests.

In the 14 to 17 days the caterpillars take to hatch, the attendant ants constantly patrol the blackthorn. When the larvae hatch, they are immediately tended by ants, which patrol a line between the feeding caterpillar and ant nest, and roam around the host plant attacking other insects that they find.

As the caterpillars grow, the ants move them underground into their nest by day and out at night to continue grazing on blackthorn leaves. The ants' efforts are rewarded with a sugary honeydew from a gland on the caterpillar's back. Pupation (the transformation from caterpillar to butterfly) occurs between December and August in the ants' nest.

# Threats and conservation actions

Threats to the butterfly include habitat loss and modification through clearing, spraying, grazing, inappropriate use of fire, weed invasion and habitat disturbance by feral pigs.

Saving our Species, in partnership with Central Tablelands Local Land Services, is undertaking conservation actions including:

- monitoring purple copper butterfly populations at known sites
- surveying to find more butterfly populations
- controlling pest animals and weeds
- engaging with the community so people can keep a lookout and report sightings
- improving community awareness and identification skills
- undertaking ecological burns to ensure healthy butterfly habitat using traditional ecological knowledge practices.



# How you can help

You can contribute to the butterfly's conservation by:

- retaining native blackthorn areas on your property
- telling your friends and family about this unique species to raise awareness
- visiting [www.environment.nsw.gov.au/purple-copper-butterfly](http://www.environment.nsw.gov.au/purple-copper-butterfly) for tips on how to find butterflies
- reporting butterfly sightings at [naturemapr.org](http://naturemapr.org).

## Acknowledgements

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- Central Tablelands Local Land Services
- Lithgow City Council
- Lithgow–Oberon Landcare Association
- NSW National Parks and Wildlife Service
- Bathurst Regional Council
- Central Tablelands Regional Landcare Network
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### Photos:

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