

Econotes: Butterflies – where (and when) to look for them

MANY people are surprised to learn that there are more than 50 different species of native butterfly in the South-West, with more than 30 found in the metropolitan area.

Where are our butterflies?

Native butterflies fall into two groups: a small group of highly mobile species, which ranges widely and can be found in both gardens and native bush, and a larger group of less mobile species which is restricted to native bush. In the Perth metropolitan area, most native butterflies are now isolated in the remnant bushlands where they breed – these are the 'resident' species. Only the highly mobile species, such as the Australian painted lady and yellow admiral, and introduced species such as the cabbage white and monarch, are frequently seen outside bushlands.

Over the past three years, surveys at 40 metropolitan bushlands have recorded 35 species of native butterfly or day-flying moth (day-flying moths look and behave just like butterflies). Most of the outer metropolitan bushlands had 10 or more resident species. Koondoola bushland, north of the Swan River, had the richest fauna, with 15 resident species.



The tiny fringed heath-blue can still be found in many bushlands, but is sensitive to disturbance. (Photo: T. Lundstrom).

Nearby, Warwick, Marangaroo, Errina Road and Cottonwood bushlands had between nine and 13 species. The richest surveyed sites south of the Swan River - Ankerell Road bushland, Banksia Nature Reserve, Casuarina Prison bushland, Dennis de Young Reserve, Sandy Lake, Shirley Balla Swamp and Wandii Nature Reserve - had between eight and 11 species. Bushlands in the inner suburbs usually had less than six species.

A species list of surveyed sites can be obtained from the local Friends group or relevant local council.



The western xenica is common in many Perth metropolitan bushlands between late September and early November. (Photo: Matt Williams)

Butterfly habitat needs

Butterflies need specific plants on which to breed, and are generally intolerant of disturbance such as fire. Bushlands with the most butterfly species are those in good condition, with an open canopy and diverse understorey.

The absence of resident butterflies is most noticeable in small bushlands close to the city, which have been isolated for a long time, or have suffered past disturbance. Harry Sandon Reserve, Hillview and Shenton bushland still have three resident species, but Kensington, Wal Hughes, Point Resolution and Signal Hill bushlands now have no resident native butterflies.

Some native butterflies actually increase after disturbance. These species have caterpillars able to feed on widespread, introduced weeds. The Australian painted lady (caterpillars can feed on cape weed), the tiny western grassdart (feed on various introduced grasses), and the western and marbled xenicas (feed on veldt grass) are commonly seen in most suburban bushlands. Kings Park and Bold Park both support thousands of western xenicas.

When to look

Most resident bushland butterflies breed only once a year. They can be seen only for a few weeks each year, during their brief 'flight period'. The rest of the time they are in their other life stages: egg,

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caterpillar, pupa. Almost all these butterflies have their flight period in spring, between late September and mid December. A few, including the endangered graceful sun moth, have it in autumn. For each species, the flight period is synchronised for the entire population – so you need to know both where, and when to look. To find a particular species, you should find out its peak flight period. Although late October to early November is the best time to find the western jewel, fringed heath-blue, blue iris-skipper and spring sun moth, it is not until mid-November that other species such as the western brown and large bronze-azure are at their peak.

Overall, the best time to look for butterflies is in warm sunny weather during October and November, when the majority of species are on the wing, and the chances of seeing them are greatest. Late morning is usually the time when butterflies are most active.



The meadow argus (left) and Australian painted lady are common widespread butterflies that can be seen in both bushlands and gardens. (Photo: Matt Williams)

Resources

- CALM's Naturebase website has pictures and information on many of the more common native butterflies. www.naturebase.net/plants_animals/butterflies/index.html.
- A field guide to Australia's 416 butterfly species has recently been published by CSIRO Publishing. <http://www.publish.csiro.au/nid/23/pid/3948.htm>. (See Resources page 12).
- Hay, R.W., Houston, T.F., Williams, A.A.E. and Williams, M.R. (1994). Bring back the Butterflies – butterfly gardening for Western Australians. Western Australian Insect Study Society Inc. and WA Museum.