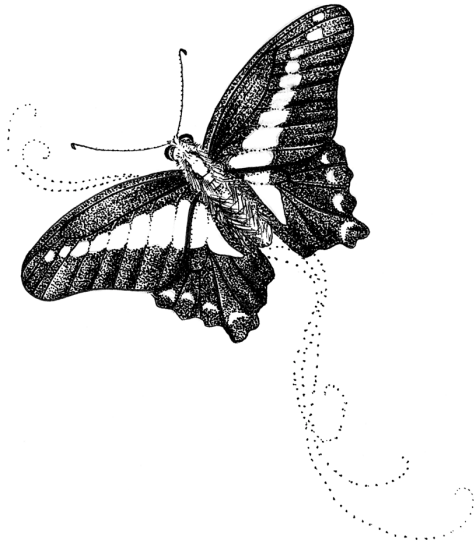


Butterflies and Moths of Couran Cove Island Resort

Dazzling visitors to Couran Cove Island Resort with their array of spectacular colours and majesty, South Stradbroke Island boasts at least 39 species of butterfly and many species of moth (most of which are yet to be recorded). With such obvious beauty, you might think that these creatures would be easy to sight, however, they are easily camouflaged within a variety of flora. To find these insects you will have to look carefully in the special places that attract the different species. This may mean peering among fleshy leaved mangroves or seeking out rotting fruit in the rainforest. Other locations for butterflies are areas of bush near beaches or on headlands and islands, some of the habitats we boast at Couran Cove Island Resort.



Blue Triangle (Graphium sarpedon)

Although moths are surprisingly more diverse than butterflies, there is comparatively little known about their diet and habits. There are more than 50 scientific groupings in the moth family and it is commonly believed that there are several thousand species of moth in South East Queensland alone. Moths and butterflies are closely related insects and are classified together in the large group known as *Lepidoptera*, which means 'scaly wings', a characteristic of both moths and butterflies. However, there are some very obvious differences between these insects. Butterflies usually fly in the daytime, they have a swollen end to their antennae and their front and rear wings are not hooked together during flight. Moths on the other hand are

mostly nocturnal, with antennae that are varied in shape and rarely swollen at the end. They have bristles at the edge of their wings that bind the wings together in flight.

BUTTERFLIES OF SOUTH STRADBROKE

1. Australian Admiral (*Vanessa itea*)
2. Australian Painted Lady (*Vanessa kershawi*)
3. Australian Rustic (*Cupha prosopone prosopone*)
4. Black and White Tiger (*Danaus affinis*)
5. Blue Tiger (*Tirumala hamata*)
6. Blue Triangle (*Graphium sarpedon*)
7. Caper White (*Anaphaeis java*)
8. Common Albatross (*Appias paulina*)
9. Common Crow (*Euploea core*)
10. Common Eggfly (*Hypolimnas bolina*)
11. Common Grass Yellow (*Eurema hacabe*)
12. Common Jezebel (*Delias nigrina*)
13. Common Migrant (*Catopsilia pyranthe*)
14. Common Moonbeam (*Phylliris innotata*)
15. Common Red Eye (*Chaetocneme beata*)
16. Eliena Skipper (*Trapezites eliena*)
17. Evening Brown (*Melanitis leda*)
18. Glasswing (*Acraea andromacha*)
19. Grass Dart sp. (*Ocybadistes walkeri sothis*)
20. Lemon Migrant (*Catopsilia pomona*)
21. Lesser Wanderer (*Danaus chrysippus*)
22. Meadow Argus (*Junonia villida*)
23. Northern Jezebel (*Delias nysa*)
24. Nysa Jezebel (*Delias nysa nysa*)
25. Orange Palm Dart (*Cephenes augiades*)
26. Orange Ringlet (*Hypocysta adiante*)
27. Orchard Butterfly (*Papilio aegaeus*)
28. Painted Skipper (*Hesperilla picta*)
29. Pale Darter (*Telicota colon*)
30. Pea Blue Butterfly (*Lampides boeticus*)
31. Small Grass Yellow (*Eurema smilax*)
32. Small Green-banded Blue (*Danis hymetus*)
33. Southern Orange Dart (*Juniana sunias nola*)
34. Tailed Emporer (*Polyura sempronius*)
35. Union Jack (*Delias argenthona*)
36. Wanderer (*Danaus plexippus*)
37. White Nymph (*Mynes geoffroyi guerini*)
38. Yellow-banded Dart (*Suniana sunias*)
39. Yellow Palm Dart (*Cephenes tricoepepla*)

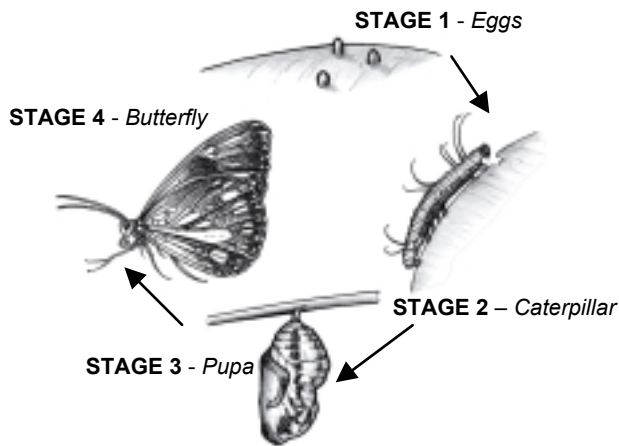
LIFE CYCLE OF A BUTTERFLY

Adult female butterflies lay eggs on their preferred plants (stage one), using their acute sense of smell and taste. A few days later the tiny larvae or caterpillars hatch and begin feeding on the egg case and soft leaves of the host food plant (stage two).

The larvae go through a series of moults as they grow, casting off their skins up to five times. Once the larvae has reached full size it attaches itself to the leaf or stem with a patch of silk (cremaster). Its skin splits and reveals the resting stage or pupa (sometimes called chrysalis – stage three). Some larvae also spin a silken girdle to support the pupae. Inside the pupal shell the marvel of metamorphosis occurs. Cells and tissues are rearranged according to a pre-programmed genetic code and after a few weeks, the adult wings can be seen just underneath the pupal skin. In its final stage, the young butterfly pushes its swelling thorax through its shell and climbs out grasping its pupal case. When the wings are dry and stiff the butterfly takes off in search of nectar food plants. Butterflies do not require a specific habitat, but they must have access to two types of plants:

- Specific host food plants (for the larvae stage)
- Plants producing nectar (for the adult butterflies)

By studying their lifecycle we see the significance of preserving the host food plants, for butterflies and moths, in their native locations.



The four stages in the life of a butterfly

ATTRACTING BUTTERFLIES TO YOUR GARDEN

Due to habitat degradation, many butterfly species have become rare, endangered or even extinct. As an individual, you can help promote butterfly populations in your area simply by planting the right host trees and host plants in your garden. Following is a list of some food plants of six butterflies native to South East Queensland:

- Blue Triangle (*Graphium sarpedon*)
Endiandra spp
Blush Coonoo (*Planchonella laurifolia*)
Cryptocarya spp
- Orchard Swallowtail (*Papilio aegaeus*)
Pink Euodia (*Melicope elleryana*)
Sandfly Bush (*Zieria smithii*)
Teak (*Flindersia australis*)

- Australian Fritillery (*Argyreus hyperbius*)
Arrow-leaf Violet (*Viola betonicifolia*)
- Painted Lady (*Vanessa kershawi*)
Ammobium alatum
Yellow Buttons (*Chrysocephalum apiculatum*)
- Richmond Birdwing (*Ornithoptera richmondia*)
Birdwing Vine (*Parastolochia laheyana*)
Birdwing Vine (*Parastolochia praevenosa*)
- Lemon Migrant (*Catopsilis pyranthe crokera*)
Pepperleaf Senna (*Cassia barclayana*)
Leichhardt Bean (*Cassia brewerteri*)

RECORDED MOTHS OF STRADBROKE

- Bag Shelter Moth (*Ochrogaster lunifer*)
- Burnett Moth (*Lactura* sp.)
- Fruit Piercing Moth (*Eudocima salamina*)
- Giant Wood Moth (*Edoxyla cinerea*)
- Granny's Cloak Moth (*Speiredonia spectans*)
- Hawk Moth (*Gnathothlibus erotus*)
- Joseph's Coat Moth (*Agarista agricola*)

MIMICRY AND CAMOUFLAGE

Many insects employ the defence of mimicry to avoid detection by predators. By looking like something that is known to be distasteful, predators will steer clear. Some butterflies and moths are extremely distasteful to predators. These butterflies are usually conspicuous both in colour and behaviour.

Other species employ colouration, structure or behaviour that enhances concealment. For example, the larvae of the Orchard Butterfly (*Papilio aegaeus*) resembles bird droppings. The Evening Brown (*Melantis leda*) uses inactivity to conceal itself. When settled, it will sit with its wings up. Resembling what it is resting on (usually dead leaves), giving it a perfect camouflage. When disturbed, the Evening Brown will only fly a short distance before landing again to utilise this technique.

WHAT EATS BUTTERFLIES AND MOTHS?

It is well known that butterflies and moths are eaten by birds, lizards and other animals such as mice. But what is less known, is that there are several carnivorous plants that also feed on them. Using a strong scent with the promise of nectar, the plants lure the insects to them. The plants then trap the insects by their foot or proboscis. The breaking down process provides nutrients to the plant.

Botanical Illustrations by Louise Sanders®