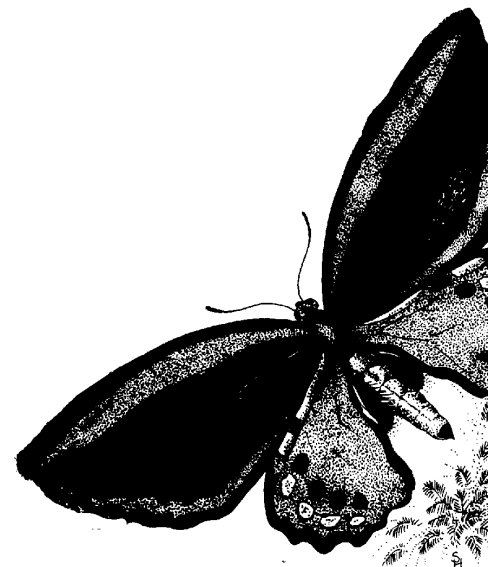


Tropical Factsheets

Birdwing Butterflies

- Birdwing butterflies are the **largest** of all Australian butterflies.
- The **male** Birdwing is brightly coloured with **green, gold and black**, and is smaller than the female.
- The larger **female** Birdwing is **black and white, with yellow markings** on the hindwings. She has a wingspan of up to 20 cm.
- Throngs of Birdwing butterflies can be seen around ***Aristolochia acuminata*** or ***Pararistolochia deltantha*** vines in summer in the tropical rainforests. These vines are also called **Dutchman's Pipe** because of the shape of the flowers.
- The female Birdwing butterfly **lays her eggs** on the leaves of these two species of *Aristolochia* vines.
- First, she locates the correct plants by '**tasting**' various leaves with chemical receptors in her forelegs. These receptors pick up chemical cues from the leaves of the vine.
- She also uses sense organs at the end of her abdomen to find tender young leaves which will be suitable for caterpillar food.
- *Aristolochia* vines are **poisonous**. The Birdwing caterpillars use these plant poison for their own protection by storing the toxins in prominent fleshy orange-red spines on their backs. This colourful protection mechanism prevents birds from eating them.
- However, a South American vine called ***Aristolochia elegans*** produces very large and attractive flowers and has been introduced to Australia as an ornamental plant.
- Unfortunately the female Birdwing butterfly receives the correct chemical cues from the leaves of this vine, and is fooled into laying her eggs on it. However, caterpillars cannot cope with the toxins and are eventually **poisoned** and killed by this species of *Aristolochia* vine.
- This invasive plant is spreading from gardens into the natural environment and is endangering the future of the beautiful Birdwings.
- When Birdwing caterpillars are almost ready to pupate, they **ringbark** the vines on which they are feeding. This causes the leaves to droop through loss of water, but does not stop nutrient flow.



Male Cairns Birdwing



- The large and very hungry caterpillar gets a higher dose of nutritious solids and less water.
- This highly nutritious last meal provides it with the necessary substances to survive the pupal phase of its life cycle. Male Birdwings set up a territory near the Aristolochia vines.
- In the early mornings, they patrol around the vine's base in search of freshly emerging females. The males mate with the females just after they have emerged from the pupa, even before their wings are dry. So at a very young age, the female Birdwing is ready to start laying eggs and repeats the life cycle again for the next generation.

Watch the Life cycle of your own Birdwing Butterflies

- To observe the life cycle of butterflies and moths is a very rewarding experience.
- It is **essential** to grow the right food plants. Only native vines *Aristolochia acuminata*, or *Pararistolochia deltantha* will allow the Birdwing Butterflies to reproduce.
- **Do not plant** *Aristolochia elegans* OR *Aristolochia ringens*. These imported South American vines attract the female Birdwing Butterflies to lay eggs, but they poison and kill the caterpillars.
- Observe how the colourful adult Birdwing Butterflies are attracted to *Aristolochia acuminata* or *Pararistolochia deltantha* vines.
- Watch and record the growth and development of the Birdwing caterpillars.
- Observe and try to understand the antics of the enemies of the caterpillars and adult Birdwing Butterflies.
- You can observe the pupae hanging on the vines. **It is best not to touch the pupae** as they are very fragile. Spray the pupa from time to time to moisten it.
- When the adult Birdwing Butterfly emerges, observe how it dries its wings before it is ready to fly away.
- You can make a Birdwing photograph album, a drawing scrap-book, or Birdwing Diary to keep as a permanent record of your observations.