

Tropical Factsheets

Winged adulthood

Snacking

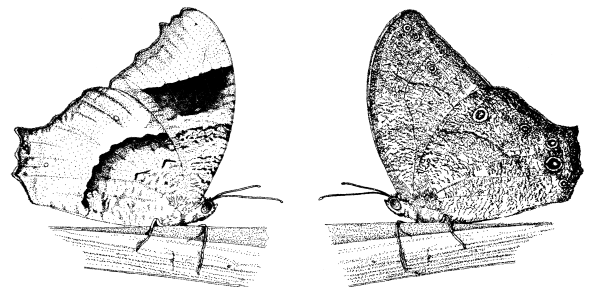
- While caterpillars focus on food and spend most of their time eating, the main task of adult butterflies is to find a mate.
- They only stop for the occasional snack, instead using the fat reserves they stored as caterpillars. Some adult butterflies do not even have mouth parts.
- Some butterflies and moths have a very long proboscis or tongue which they use to suck nectar and other fluids. These proboscis are very tightly coiled when not in use.
- Adult butterflies can't digest fats or proteins so they sip a little sugar and water from nectar or fermenting fruit juices. Some butterflies sit on wet sand near creeks to sip the water from the sand.
- They have chemoreceptors on their feet which can sense different strengths and types of nectar solution.

Eyes

- The eyes of an adult butterfly are made up of many lenses, and are a vast improvement on those it possessed as a caterpillar.
- A butterfly's eyes are particularly sensitive to movement and colour.
- Certain butterfly species prefer blue to purple, others prefer yellow to red. Generally they ignore green until they are ready to lay eggs.
- Some butterfly species can see ultraviolet. The wings of some male **White Butterflies** have iridescent ultraviolet patches which are invisible to us, but play an important part in courtship.

Mating

- Adult butterflies and moths spend all their time and energy finding a mate in order to produce eggs.
- Generally it is the males which do the searching. They have slightly larger eyes than the females to look for the right colour, shape and size of their potential mate.
- A good way of telling males from females is by their behaviour. Males are often seen perching or patrolling in search of females, while females spend a lot of time searching out host plants to lay their eggs on.





- Some male butterflies such as Birdwings stay around the larval food plants waiting for females to appear. They even pounce on females which have just emerged from the pupae and mate with them before their wings have completely dried.
- The males of Skippers, Swordtails, Triangles, Jewels, and Azures congregate on the tops of certain hills. Some males patrol the area while others adopt perches and challenge other male butterflies which fly nearby. They are attracted to the hilltops because females visit these areas specifically for mating. With little time to waste to look for a mate, this system is an efficient energy-saver.
- Male butterflies and moths have special scales on their wings which produce pheromones. The pheromones attract females of the same species.
- Odour is an important cue for nocturnal moths. Moths are often drab and active at night, and therefore rely mostly on smell to find a mate.
- In many moth species the female releases pheromones, and the chemicals become plumes of scent on the wind that advertise her presence. When a male detects a female's pheromones with his sensitive feathery antennae, he flies directly towards the source of the scent, which can be up to 11 km away. (There would be as little as one molecule in every cubic metre of air).
- Male butterflies also produce pheromones on a bundle of hairs which can be extended from the tip of their abdomens. These hairs are known as 'hair-pencils'.
- They become covered with a dust-like scented powder after the male inserts them into the pouches on his wings. The dust acts as an aphrodisiac on female butterflies of the same species.
- When a male finds a female, he flies above her and rains his 'love dust' onto her. Sometimes he tries to brush her head and antennae with his hair-pencils.
- Female butterflies also release pheromones from their abdomens. The butterflies sense each other's pheromones with their antennae.
- After mating, the males of Big Greasy and Glasswing Butterflies ensure paternity of the offspring by depositing a special substance which prevents further mating.