



## Bug of the week: The dragons of the waterway

In a time when Dengue Fever is present on Rarotonga, we should be thankful that we have some effective mosquito predators patrolling above and below the water keeping the disease-carrying pest numbers down. In the Cook Islands we have seven dragonflies and two damselflies that fit into the Order Odonata. See all nine species here:

<https://naturalheritage.gov.ck/cibed/dbs/results.html?t=odonata&c=1>

The key distinguishing characteristics between dragonflies and damselflies are shown below.

### Characteristics

### Dragonflies

### Damselflies



Dragonfly Nymph



Wandering Percher (*Diplacodes bipunctata*)



Narrow-wing Damselfly (*Agriocnemis exsudans*)

#### Body size:

Larger and more robust wider, rounded bodies.

Smaller, more delicate, and have a slender, needle-like body.

#### Eyes:

Larger eyes that are closer together.

Smaller eyes that are more separated.

#### Wings when resting:

Wings out at right angles to their body.

Fold their wings together along their back.

#### Flight speed:

Fast

Slow

Dragonflies have ancient roots, with their lineage dating back to over 300 million years ago, even predating dinosaurs. As many as 6-7,000 species are thought to exist worldwide. Male and female dragonflies of the same species often have different colours and markings. Most dragonflies mate and fly in tandem, with the female egg-laying while the male remains connected. The wandering glider (*Pantala flavescens*) clutch consists of about 500 to 2000 eggs. The eggs are spheroid in shape with the semi-major axis 0.5 mm and 0.4 mm at the smallest points. Larvae develop within 38 to 65 days, which allows this migrant dragonfly to reproduce in temporary waters or even in swimming pools. The wandering glider has the longest dragonfly migration known to science – about 17,700 km. Dragonflies are fascinating insects known for their impressive flight capabilities and predatory nature. They are one of nature's most successful predators catching up to 90% of the time, thanks to their incredible 360° vision

and manoeuvrability. They can hover in mid-air, fly right, left, up, down, forwards, and even backwards. They can reach a top speed of 55km/hr and a G force of 4 – most humans pass out around 4 or 5 Gs. They spend a significant portion of their lives underwater as larvae (nymphs), eventually transforming into winged adults. We are truly fortunate to have these amazing insects looking after our welfare.