

Did you know that dragonflies are carnivorous? Baby dragonflies (dragonfly larvae) use their fast, extendable jaws to catch unsuspecting prey. They eat tadpoles, fish, and other waterbugs – including each other!

Adult dragonflies always catch their prey mid-flight. They hunt small insects including midges, flies, and mosquitoes. An adult dragonfly can eat up to hundreds of mosquitoes per day, making dragonflies very important for their population control.

Dragonflies get eaten by spiders, fish, frogs, birds – and even by other dragonflies that are bigger than them!

Adult dragonfly wings work independently of each other, which makes dragonflies very acrobatic flyers. They can move straight up and down, hover, pivot on the spot, and even suddenly switch to flying backwards! Dragonflies are also very fast, reaching speeds of up to 40km/h.

Dragonflies have existed for over 300 million years. Fossil records show that in prehistoric times that they used to have a wingspan of up to 80cm!



Dragonflies start their life as larvae living in water and breathe using gills. Some dragonflies stay as larvae for up to 2 years. At the end of their larval stage they crawl out of the water, which initiates their lungs to start breathing from air. Their exoskeleton cracks open from the back of their skull and the adult dragonfly emerges – its abdomen pops out like a folded accordion and its wings slowly uncurl

and harden in the sun. Adult dragonflies may only survive for a few months, or up to a year.

Dragonflies are one of many types of aquatic insects that spend part or all of their lives in water. These waterbugs are an important food source for living things like fish and frogs. Although dragonflies are predators many waterbugs are shredders, collectors, filter feeders, or scrapers, meaning they feed on organic matter such as leaves, woody debris, and algae. So they are also important for keeping our waterways clean by helping to decompose organic matter and break down nutrients.

We can also play a part in keeping our waterways clean so that dragonflies and many other beautiful aquatic insects can survive to adulthood. Maintaining vegetation in and around a creek is the most important thing we can do. Plants growing in the water like rushes and sedges provide habitat for waterbugs. Trees and shrubs growing on banks also provide habitat via the logs, bark and leaves that fall in the water. Leaf litter is also an important food source for a large portion of water bugs. All of these plants also help reduce erosion of banks, slow water flow during floods, provide a mix of bright and dark areas in the waterbody, and regulate water temperature by providing shade.



Many species of dragonfly larvae require pristine water quality to live in, including high oxygen levels and very specific water temperatures. Their presence often indicates clean water quality. Living things that can indicate the health of an ecosystem are called “bioindicators”.

Most waterbugs are bioindicators. By doing a survey of what’s living in the water, we can find out the health of the water. If the only species present are ones that can survive in polluted waters, then we know that the ecosystem is not healthy. However if there is a good variety of species including ones that can only live in clean water, then we know that the ecosystem is healthy.



Please [contact](#) our ECO Education Service team to request a waterbug survey workshop or fieldtrip.

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