

Care guide

Diving beetles, Dytiscidae



Diving beetles are found throughout Australia with over 200 species present. They occur in a wide variety of fresh water habitats, but prefer slow moving or stagnant water bodies. Surprisingly they are even found within temporary water bodies in some of Australia's harsh arid zones.

These beetles are predaceous and/or scavengers and behave much like sharks within the insect world. Some species will actively prey upon other small animals within their habitat, while others rely on finding things that are dead or dying. They are quickly drawn to the scent of a dead animal in the water and sometimes large numbers of these beetles can be found feeding on a carcass.

They are perfectly adapted to live under water with streamlined bodies and legs fringed with hairs to act as flippers. They still need to surface for air, and do so by backing up to the surface and allowing air to move into the space between the elytra and the abdomen. This trapped air is then taken with the beetles just as a scuba diver takes oxygen in a tank.

Despite being aquatic for most of their life, these beetles can readily take to the air and do so as a method of dispersal to breed and to find water if their habitat dries out. As a result, they are sometimes encountered flying around lights at night.

Reproduction takes place under water, and eggs are often laid into aquatic vegetation. The larvae are predacious and are usually elongate with large pincer like jaws. Pupation usually takes place in a moist zone near the edge of the water.

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Green diving beetles, *Cybister spp.*

Food: Dead insects or small pieces of vertebrate prey such as shrimp, prawns, fish etc. Food may be offered daily or every second day, but as with all aquatic animals, take care not to over feed and foul the water. Reduce the feeding rate and/or volume if your beetle/s are not consuming all their food.

Enclosure: A fish tank 30cm long and 20cm deep would be the minimum requirement for most species. The tanks should include some aquatic vegetation of logs and rocks for the beetles to cling to while not swimming.

Water conditions: Fresh water. The safe zone is 15° - 25°C although most species will tolerate temperatures higher and lower than this. pH, GH and KH seem less relevant as these beetles can tolerate a range of conditions, although neutral conditions would be most desirable, with relatively low general hardness.

Life span: Adults up to 2 years

Handling: These beetles are best handled using a small aquarium net. They can release a pungent smell as a defence (which is very hard to get off your hands) and can also bite with their small sharp mandibles.

Reproduction: These beetles are quite difficult to breed in captivity. While some species will readily lay eggs in floating cork, *Cybsiter spp.* prefer live vegetation. Feeding emergent small larvae is quite difficult as they require very small live food, or to be managed individually and fed tiny dead food via forceps. Allowing pupation to occur is also difficult as the larvae will need to leave the water at the appropriate time to pupate within a soil like material.

Common issues: Due to their ability to fly, these beetles are prone to escape if a lid is not present upon their enclosure.

For more information contact Minibeast Wildlife at info@minibeastwildlife.com.au