FERAL FAUNA

FRESHWATER JELLYFISH?

Peter Vickridge

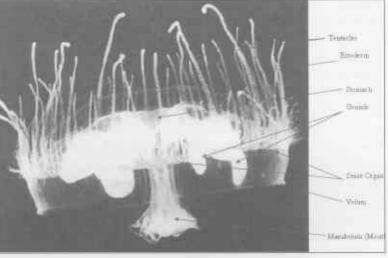
Have you ever heard of freshwater jellyfish? I must confess neither had I until I saw them with my own eyes!

Technically speaking they aren't really jellyfish, but a hydrozoid that has a medusa that certainly looks like a jellyfish. They are very small, the largest being a little larger than a ten cent piece. They look just like a saltwater jellyfish, complete with bell shaped body and

tentacles with stingers. They also move by pulsating movements of their bell-shaped body, but there the similarity to saltwater jellyfish ends. In its lifecycle it appears as either a plant-like polyp which asexually 'buds' to produce the typical jellyfish appearance or the medusae can also reproduce sexually, with fertilised eggs. The latter form of reproduction is apparently more rare, as most populations are either entirely male or entirely female.

Reportedly Craspedacusta sowerbii is as old as the earth itself, apparently its fossil has been dated back to the Pre-Cambrian era. It may have originated in the Yangtze River valley in China but is now found throughout all the continents except Antarctica, where its appearance is usually sporadic, appearing and disappearing in waterways. C. sowerbii was first recorded as a species in England in 1880, in America in 1908 and for the first time in Australia in 1950 in a reservoir near Adelaide. In Western

Australia the first sighting was in a goldfish pond in South Perth in 1959, with no further sightings recorded



at the Western Australian Museum since then.

Craspedacusta sowerbii is found in a variety of water environments: freshwater lakes, reservoirs, dams, water-filled gravel pits, rock quarries, algae-filled ponds and occasionally in rivers (but usually in calmer water and not in rough water such as rivers). Their appearances are totally unpredictable, appearing and disappearing in suitable waterways, sometimes only appearing for one summer and not again, sometimes reappearing some years later. So where have I seen them? In our own dam, on our property just outside Kirup! According to the previous owner of the property they have, rather unusually, been appearing in the dam every summer for well over 15 years. I have also been reliably informed that they recently appeared in the Pemberton swimming pool, but this sighting went unrecorded.

The jellyfish-like medusa only appear during the warmer months and die off over winter, when the polyps

become dormant. It is assumed that the dormant polyps are spread by being transported on plant material

carried by aquatic fauna. The medusae feed on zooplankton, using their stinging cells on their tentacles to capture their prey. Fortunately their stingers seem unable to affect human skin, at least no one has been stung whilst swimming in our dam. They have proven to be difficult to keep in aquaria as their thinwalled structure is easily damaged by filters.

If you find all this hard to believe or want more information, try searching the web for 'freshwater jellyfish' the results are amazing. One site, for the Indiana University of Pennsylvania in America, has a huge amount of information on freshwater jellyfish.

If none of the above is new to you and you have actually seen freshwater jellyfish, please report your sighting to both the Western Australian Museum and Dr Terry Peard (tpeard@iup.edu).

References:

WA Naturalist 9: 4 1964

Indiana Uni. of Pennsylvania http://www.nsml.nsm.iup.edu/tpeard

Gen-yu Sasaki, Japan website at http://www.microscopy-uk/mag/artnov99/fwjelly

Peter Vickridge is Works Coordinator at CALM, Kirup. He can be contacted on: peterv@calm.wa.gov.au