

The Pulmonate Snail *Onchidella patelloides*

This marine snail/slug is a small oval shaped Gastropod without a hard shell; it has a thick leathery type covering instead. This description is based on the habitat and activities of the snails found in Bundabah Creek, Port Stephens, NSW, Australia. This is a marine tidal creek with 2 metre tides and salinity varying from 5 ppt salt during storm events to the usual 29 – 36 ppt salt. It is a mangroves lined creek system with a mud and rock substrate.



Habitat/Activities

The Pulmonate Snail *Onchidella patelloides* is an air breathing slug like gastropod that is inactive when covered in water. They live at the mid to high tide level finding shelter under rocks and logs when ever available. Once the tide drops they will feed and travel far and wide at night or on cloudy days but they do not like hot sunny days. Anything under 26°C will see them out and about. They can move quite fast when needed but usually when out feeding they move exceptionally slow, it is hard to notice if they are moving at all. On exceptionally hot sunny days (over 30°C) we collect them by turning over rocks and logs where they congregate. They share their habitat with a wide variety of crabs and snails without any conflict or interaction.

As the tide rises flooding the shoreline they stop feeding and seek shelter or just remain entirely motionless on the bottom. This is generally under rocks and logs in our area though in other areas I have seen them when caught in the open on a sand flat just hanker down onto the sand or mud, remain entirely motionless and wait for the tide to change. As the water rises all the worms, crabs and gastropods seek shelter as large numbers of marine predators move into these areas with the rising tide. It is potentially dangerous to these animals to be caught out in the open.



In this region of NSW these gastropods are regularly collected by Bream (*Acanthopagrus australis*) fishermen who use them for bait. Bream love them and will move up over the flats and mangroves to feed. Any *Onchidella patelloides* found in the open by a bream will be readily devoured.

Distribution

It is relatively common and found along most of the NSW coast as well as Victoria and Tasmania. It is also indicated that it is found in New Zealand. Generally found in the mid to high tidal range. In our area you can go 2 to 3 metres without seeing any then find 10 or 15 in close proximity. They seem to be a group animal and tend to congregate together both small and large specimens.

Breeding

Unknown. Very common in this area so must be relatively prolific breeders.



Description

Relatively small in size, mature adults reaching 3 grams in weight, 27 mm long, 19 mm wide and 11 mm high. They are oval shaped with small heads, small eyes on short eye stalks. The eyes seem to be good and they seem to have a good idea of what's happening around them. The top exterior of the shell is rough to the touch when dry and slippery smooth when wet with lots of protuberances. They are air breathing using a "hole" at the end of the foot, which is formed by the mantle.

Colouration

Colour varies with its habitat. This is a vulnerable species to predation by many fish species and needs to remain inconspicuous to survive. In our region on the mangrove flats they are a light grey brown colour that blends in well with its surroundings. They are extremely hard to distinguish from their surroundings but they do leave a trail that is a dead give away. The exterior skin/shell is not covered with weed or growths but does have a fine dirt/mud film on it that assists in camouflaging this snail.



Aquarium Attributes

Good aquarium pets not requiring much of anything. However they are boring in colour and activity so not recommended as an aquarium species. If you want to keep them you will need a fully enclosed tank as they climb out quite quickly and love wandering your house.

Conservation Status

Unthreatened at this stage. It is quite common over all of its range. It is too small for most humans that collect gastropods for food for human consumption and is generally unknown as a human food species. It is collected as a bait species but once again



this is only by a few dedicated fishermen and generally is unknown as a bait species. Additionally the areas it inhabits are remote and dirty muddy areas full of sand flies and mosquitos that deter most humans.

