Oregon Sea Grant Extension
Sustainable Tourism &
Outdoor Recreation Program

Interpretative Fact Sheet
Black Turban Snail
(*Tegula funebralis*)

The following short article is from the *Oregon Coast 101 Species* collection used by the Guide and Outfitter Recognized Professional (GORP) training program. These articles are intended to provide interesting facts you can share with your clientele and add value to your services.

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Black Turban Snail (Tegula funebralis)

tourism.oregonstate.edu/black-turban-snail-tegula-funebralis/

By colliek2 September 8, 2020

Finally, a critter with a purse…

Yes, you read the subtitle correctly. A purse. A pocket. A bursicle.

The common Black Turban Snail is an interesting little critter with an interesting organ in its pocket.

Black Turban Snails, photo by Steve Lonhart, NOAA MBNMS (Royalty free from SIMoN Sanctuary data base library)

Where Found

They are one of the most abundant snail species along the Pacific Coast and inhabit most of the North American Pacific Coast from Canada to Baja California, Mexico.

This rocky shore snail is commonly found between high and low tides in protected areas near boulders, tide pools, and close to shore.

Identifying

The snail is pretty easy to identify, and so is the age of the snail. Juvenile snails live in more shallow water compared to adults. As the snail ages, it also migrates to higher waters. A fully grown Black Turban shell may be just over an inch long (30 mm) and 30-years-old.

The name sake for the snail is not the shell but the head and foot which are also black. The shell is smooth, whorled and pyramidal shaped.

Predators

The Black turban snail has many predators including humans, crabs, stars, otters, birds, other snails, and more.

There is evidence that some humans also harvested the snail as part of their diet about 12,000 years ago. If the snail were the only food consumed, the average human would need to eat around 400 of them each day to survive. When they are easy to harvest, this is possible and the snail continues to be collected today.

But wait, what is IN that shell?

Don't be too surprised to find something other than a snail living inside the Black Turban shell. Hermit crabs will frequently adopt empty Black turban snail shells as their new home.

Photo of Hermit crab living in a Black Turban shell by Steve Lonhart NOAA MBNMS (Royalty free from SIMoN Sanctuary data base library)

The black distinctively smooth shell helps protect the snail. The Black Turban can withdraw its entire body into it for protection.

Shark-like Teeth

Black Turbans shred alga using a rasp-like (like a file) structure full of teeth. These teeth are constantly breaking and wearing. Thus, replacement teeth are produced continually, much like a shark must do.

What's ON that shell?

The shell of the Black Turban is covered with red algae. Limpets graze the shell eating the algae. Slipper shells (Crepidula adunca) also live on the Black Turban Snail's shell. The Slipper shell is a filter feeder and eats phytoplankton, bacteria, and diatoms that are on the shells.

Foods

Tegula funebralis feed on algae such as Macrocystis sp., Nereocystis sp., Gigartina sp., and Mastocarpus sp..

So what's up with the purse?

Black Turbans have a special organ that they carry in a pouch or purse like structure called more scientifically as a bursicle. This chemoreceptor will sense chemical changes that emanate from predators such as crabs and seastars.

Once detected, the snail can take defensive actions and attempt to escape. However, snails are not known to be speedy. Yes, they may flee, but not quickly.

They may move to higher, potentially safer ground, potentially out of the water, to try and avoid contact. They may also simply float away to esacpe.

And of course, they always take their purse.

REFERENCES:
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chemoreceptors)