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NORTHWEST WILDLIFE PRESERVATION SOCIETY

Opalescent Nudibranch

Hermisenda crassicornis



By Aurora Hicks Beach

Opalescent nudibranch are a species of 'sea slugs', they have rhinophores that are projections which look like horns on their head. These rhinophores help them to find food by sensing the chemicals in the water.

Characteristics

Opalescent nudibranch are small, typically around 25 mm (less than an inch) they can however, grow to 70 mm (2.7 inches).

They always have bright orange areas on their back, and a faint blue line across the side of their body. The nudibranch has cerrata or finger like projections on their back which act as gills and their shape gives the nudibranch more surface area, therefore more intake of gases. Their distinctive colouration also acts as a warning to potential predators.

Life Cycle

Opalescent nudibranch do not live long, often less than a year. They are solitary creatures and as such cannot miss an opportunity to reproduce. This is why, like other nudibranch, the opalescent nudibranch is a hermaphrodite. The sex organs are on the left side of the body, so nudibranch usually line up head to toe during mating.

Each nudibranch then lays a string of eggs in a coil and the eggs are attached to algae or eelgrass. The eggs look like a tiny line of sausages linked together. In each capsule there is usually just 1 egg, however, it can contain up to 4. The eggs hatch after a week into veliger larvae. They are called this

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because the larvae has a velum, which is an organ that helps it to swim. The veliger larvae become part of the plankton until they metamorphosis where they enlarge the foot and loose the velum.

Habitat

The opalescent nudibranch is commonly found from Kodiak Island, Alaska down to Baja California, Mexico and Japan and South Korea. They are benthic organisms that can be found on rock, mudflats, docks, eelgrass beds and rocky intertidal areas to 35 metres (116 ft), however, they are more likely to be found in shallower, warmer waters.

Behaviour

This nudibranch feasts mainly on hydroids; however, it also consumes sea anemones, bryozoans, small crustaceans, small clams and carrion. The opalescent nudibranch is also a cannibal, the species is highly aggressive and when two meet it often turns into a biting battle. The first to reach the tail of the others wins and will consume the other.

When the nudibranch eats hydroids, the nematocysts which normal cause a sting, do not affect the nudibranch. In fact, the nematocysts pass through the digestive system unharmed and are moved to the tip of the cerrata where it is used as a stinging cell for the nudibranch to protect it from predators.

Threats

The term nudibranch comes from Greek 'nudus' naked and 'brankia' lungs or gills. This makes them vulnerable to chemicals and pollution in the water. Over sedimentation means that less oxygen gets into their system. As they prefer intertidal and shallow waters, they are constantly in close contact with humans and the pollution they bring. The nudibranch are, for the large part, not eaten by people and are not usually used in the pet trade due to their fragility, they are incredibly hard to keep and near to impossible to breed.

What We Can Do To Help

- Do not litter on land or in the water. Help clean up the environment – see <http://www.northwestwildlife.com/gcsc2004.php> for an article on the NWPS involvement in the "Great Canadian Shoreline Cleanup" campaign.
- Dispose of toxic substances such as antifreeze, batteries, and paint responsibly. Municipalities usually provide special disposal facilities for these types of things, as putting them down drains can be extremely toxic.
- Reuse and recycle whenever possible.
- Buy organic food – this supports farmers who are trying to preserve the environment by not using chemical pesticides and herbicides.
- Volunteer to help organizations like the Northwest Wildlife Preservation Society.

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- Take the time to learn about wildlife. Take a walk and observe the wildlife around where you live.

Where & When to view the animal

Nudibranch are found all over, even in tide pools. However, it best to see them whilst diving, anywhere along the west coast.

Bibliography

Web Resources:

Monterey Bay aquarium Animal facts: Opalescent Nudibranch

<https://www.montereybayaquarium.org/animal-guide/invertebrates/opalescent-nudibranch>

University of Puget, Opalescent nudibranch facts

<https://www.pugetsound.edu/academics/academic-resources/slater-museum/exhibits/marine-panel/opalescent-sea-slug/>

12 facts about nudibranch

<https://www.pugetsound.edu/academics/academic-resources/slater-museum/exhibits/marine-panel/opalescent-sea-slug/>

Encyclopedia of life

<http://eol.org/pages/451235/overview>

Sea slug forum

<http://www.seaslugforum.net/showall/hermcras>

Vic high Marine opalescent nudibranch

<https://www.vichighmarine.ca/opalescentnudibranch/>

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