

Colour Variation in a Collection of *Margarites pupillus* (Gould, 1849)

By Bill Merilees

Usually bright pink, this small trochid snail is commonly found along our coastline. It is the species most often encountered by shell collectors and intertidal fossickers. Amongst our otherwise drab snail fauna, by colour alone, this one certainly stands out!

In 2013, in company with Rick Harbo, Linda Schroeder and George Holm during a visit to Gabriola Passage, south east of Nanaimo, we made a small detour into the entrance of Degnen Harbour. At about 25ft we dropped a small dredge. When hauled up, underneath a large 'wad' of very wiry seaweed, was a good bucket load of coarse sandy substrate.

First, the stiffness of the algae was quite remarkable. Dr. Louis Druehl, author of "Pacific Seaweeds" has identified this species as Bushy Ahnfel's Seaweed (*Ahnfeltia fastigiata*). He described its texture as "approaching [that of] a plastic scrubbing pad". It grows in sandy areas from an underground rhizome (stem) to form bush-like clusters 40 cm (16") high.

As for the molluscs in this sample, my portion yielded 20 species of bivalves, 23 gastropods, and at least 3 chitons; 774 specimens in total (photo). The two most interesting 'finds' were a single specimen of *Nuculana* (*cellulita* or *penderi*??) and 50+ specimens of *Margarites pupillus*.

For *Nuculana* to be found in shallow water (<30 metres, Coan, Scott & Bernard, 2000) is unusual. This is possibly explained by water turbulence generated by tidal flows in nearby Gabriola Passage which are known to exceed 7 knots.

For the *Margarites*, what made this sample memorable was the considerable range of colours present, from near magenta to bright orange (see photo). Some even showed a distinct white ring around their apertures (lower right) while others exhibited a noticeable degree of opalescence (top centre). Why this variation, from the normal pink? This is a very good question! Since *Margarites pupillus* is a known algal grazer possibly the answer to this conundrum is dietary?



Rick Harbo photo

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References

- Appeltans W., et al. 2018. *World Register of Marine Species*. <http://www.marinespecies.org>
Coan EV, Scott, PV & Bernard, FR. 2000. *Bivalve Seashells of Western North America*. Santa Barbara Museum of Natural History.
Druehl, LD. 2000. *Pacific Seaweeds – A Guide to Common Seaweeds of the West Coast*. Harbour Publishing
See the front cover of *The Dredgings* Vol. 53 No. 6, 2013 for a photo showing the shells from this dredge.