

I.D. of a Boundary Bay, B.C. Opisthobranch
by Bill Merilees

Prompted by findings from a Canadian Wildlife Service study on the diet of the shore bird, Dunlin (Fry, 1980) a visit was made to the foot of 96th St. in Delta, B.C. to look for small snails on September 12th, 1984. This area, known as Mud Bay, (49° 05' N, 122° 53'W) is an 'off shoot' of Boundary Bay near the mouths of the Serpentine and Nicomekl Rivers. During this investigation a number of smallish species were found including small individuals of the introduced *Batillaria zonalis* (Bruguère, 1792) and *Nassarius fraterculus* (Dunker, 1862) along with a small white shelled opisthobranch. Efforts to identify the latter proved difficult and this remained a nagging challenge.



Various studies and private correspondence have reported or suggested a variety of possible species. This included *Cylichna* sp. and *Acteocina culcitella* (McEwan and Gordon, 1985), *Acteocina cerealis* (Sewell, 1984), and *Cylichna harpa* (Behrens, 1981). None of these identifications however seemed to 'fit' or prove to be satisfactory determinations.

A year ago I sent a few specimens to Jim Mclean at the Los Angeles County Museum. His reply, (McLean, 2011) along with illustrative material, proved conclusively that this opisthobranch was *Retusa obtusa* (Montagu, 1807). (see photo). This is the Arctic Barrel-bubble of Abbott (1974). Its presence at Mud Bay appears to be the most southerly extent for this specie's distribution for Western North America (Mclean, 2011). Should this be 'so' there is an interesting challenge here! Since Mud Bay is but a 'stone's throw' from the Canada – United States Border, who will be the first to locate *R. obtusa* on the American West Coast, south of the 49th parallel?



Sandra Millen examining a clump of dead eel grass

At the foot of 96th Street, Delta this snail was found to be easily located in decaying mats of eel grass that had drifted onto the beach. By shaking or washing a mat lightly over a basin of water, sand and snails settled out. In 1984, more than 30 were located, in fairly short order. The specimens were all about 3 mm in length. In company with George Holm, Rick Harbo, Sandra Millen and Linda Schroeder, an attempt to repeat this collection on April 10th, 2012 failed. Perhaps this was due to the season?



Above - Rick Harbo and Linda Schroeder search along the shore in the area where *Retusa obtusa* was found in decaying mats of eel grass. Below - Bill Merilees, Sandra Millen, Rick Harbo and George Holm

This species has a considerable northern hemisphere distribution. This includes the Mediterranean and North Seas, Scandinavia, the east coasts of Canada and the United States south to North Carolina. Now for the west coast, it has been found from Alaska south at least to Mud Bay. Over this extensive distribution it has been found within the intertidal area to depths as great as 300 metres. *R. obtusa* is also well known in the fossil record. With variations in shell morphology, and the possibility that more than one species may be present, an extensive taxonomic nomenclature has evolved.

April 18th, 2012

References:

- Abbott, R.T., 1974: American Seashells (second edition) Van Nostrand Reinhold, New York.
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- Mclean, J. M., 2011: Personal correspondence.
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