Crepidula convexa Say, 1822 discovered in Willapa Bay, WA by Linda Schroeder

In May 2015 I was on an expedition to Willapa Bay, WA with Rick Harbo, Bill Merilees and George Holm to look for the introduced species, *Petricolaria pholadiformis* (Lamarck, 1818) [see Rick Harbo's article in this edition of *the Dredgings* on page 3]. We were exploring the beach on the west side of Goose Point at Bay Center, WA.

While the others searched the compressed mud for boring species, I wandered the beach looking for other mollusk species. I located some slipper shells attached to dead bivalves. It was immediately apparent they were not our local *Crepidula adunca* (G.B. Sowerby I, 1825). Rick was able to confirm they were *Crepidula convexa* Say, 1822.

C. convexa is a western Atlantic species, occurring from Nova Scotia to Georgia. It is unknown when they might have been first introduced to the bay, but the likely vector is commercial oyster culture. This is the source of most of the other introduced species in the bay.

Previous survey reports for exotics published in 1981, 2000 and 2005 do not mention *C. convexa* in Willapa Bay. But if it is an isolated population, it would not be hard to overlook. Since they need rocks or shells to attach to, their habitat at this site was very limited. The dead shells were not abundant and rocks of any size were sparse. Most of the living shells here are bivalves living below the substrate. Since it is a mud flat, most of the dead shells were coated with a slime of mud, making the slipper shells hard to spot. Also, the largest specimen found was only 13mm.

Another introduced slipper shell, *Crepidula fornicata* (Linnaeus, 1758), was found in Willapa Bay during earlier surveys but I did not



see that species at Goose Point. I returned a month later, on another low tide, to search the locations where *C. fornicata* had been found, but was unsuccessful. It was not that I couldn't find it, but was simply unsuccessful



Live specimens found at Goose Point on dead shells

reaching the habitat. The previous survey was likely done by boat from the water's edge. Approaching from the shore was virtually impossible because of the soft mud and how quickly one became mired. The search to confirm if this species is still living in the bay will have to wait until a later date.

Willapa Bay is not the only location on the west coast where *C. convexa* has been found. It has also been reported from Boundary Bay, BC, Padilla Bay, WA and San Francisco Bay, CA.

A – Apex is usually directly posterior and slightly above the aperture, **B** – Exterior is light tan to chocolate, usually with darker spots and a brown periostracum, **C** – Left side of shelf extends farther forward than the right, **D** – Muscle scar visible on the right side, just anterior to the shelf

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