

## About *Olivella pycna* Berry, 1935, least known of the Pacific Northwest olives

Article and photos by George P. Holm

Three species of olives, *Olividae*, all belonging in the genus *Olivella* Swainson, 1840, are known to occur in the Pacific Northwest. The species are *Olivella biplicata* (Sowerby, 1825), the largest of the three, *Olivella baetica* Carpenter, 1864, a smaller species which is often found on the same beaches along with the previous, and *Olivella pycna* Berry, 1935, the least common of the three. The last is a virtual unknown to most collectors as being present in the northwest while at the same time being a very commonly collected species in California.

The original description for *Olivella pycna* was published by Berry on page 162 of *Proceedings of the Malacological Society of London* in 1935. The first record for the species in the Pacific Northwest that I have been able to find in published literature is in *Marine Invertebrates of the Pacific Northwest* by Eugene N. Kozloff, 1987, in which he notes that the species is not common north of Oregon. The most recent recording of the species is in *Marine Life of the Pacific Northwest* by A. Lamb & B. P. Hanby (2005), where on page 237 there is a photograph of the species. I could not recognize the specimen [as one which I might have collected] and those who have seen the picture will agree with me that it is not a species that one could easily forget.

My interest in the species was instantly rekindled this past summer when I was visiting with Rick Harbo in Nanaimo and he asked me if I had ever collected the Zigzag Olive locally and then proceeded to show me some beached specimens that he had collected on Long Beach on the west coast of Vancouver Island. Although I had collected many times on Long Beach, I could not recall ever having seen any live olives or for that matter any beached olive shells that resembled those that I was being shown that day.

I recently had a second look at the local olives in my collection and was able to identify two specimens among them that were *Olivella pycna*. The specimens came from two different localities but were in my collection misidentified as *O. pedroana* and *O. baetica*.

The first specimen was a “crabbed” shell and it was collected in a tide pool on Long Beach South on Vancouver Island by my late friend Terry Smith in February of 1964. I had inherited Terry’s collection after his passing and since we were collecting partners, it was easy to assimilate much of his collection into my own as the data were the same. We were both new to shell collecting in 1964, and as neither of us at that time had collected a live olive of any kind, it would have been only for that reason that he had kept this specimen. The shell was very worn and the color was a chalky beige. The zigzag lines are barely visible on its surface, even when looking at it under a strong light. He had no identification with the specimen and it was only after I acquired the collection that I identified the shell as *O. pedroana*. I eliminated *O. biplicata* outright and found some differences when I compared it with *O. baetica* that satisfied me that I was looking at *O. pedroana*, which was the name given in literature available to me at the time.

The second *O. pycna* that I located was in a lot of 25 specimens labeled *O. baetica* and which Terry and I had dredged in Neah Bay, Washington, back in June of 1972. That single specimen was live collected and differed from the other specimens in the lot by being about a third larger in height and width and possessing the wavy lines, which are a diagnostic feature, on its shell. The base color of the shell was bluish white and the wavy lines were light brown.

In 1927, Ida S. Oldroyd wrote of *Olivella pedroana* that it had a range from Puget Sound to Cape San Lucas, Lower California. She and others who considered the species to be rare within its northern range were justified in doing so. Confusion existed that S. Stillman Berry commented about when he described *O. pycna*. “It [*O. pycna*] is uncommon in collections but has long been known, confounded by all writers since Carpenter with either *intorta* Carpenter or the questionable *pedroana* Conrad.” He concluded that *O. intorta* was probably a purely tropical species and that its “original and only certainly known locality [was] Cape San Lucas [Mexico].” Most authors, until recently and including Tucker Abbott, considered *O. pycna* the same as *O. pedroana* and placed it in synonymy. When Tom Rice published his “*A Checklist of the Marine Gastropods from the Puget Sound Region*” in 1968, he did so using his own collecting data plus the collecting data from Washington and British Columbia scientists and collectors such as Eyerdam, Stiles, Marshall, Duggan, Ward, Wingard, Fullerton, Griffith, Cowan and Quayle. All of the mentioned contributors had collected extensively locally and were all very familiar with most of the species to be found in the northwest. I believe that there are very few beaches from Vancouver Island to Oregon that have not been investigated at least once by one or more of them. All of them had collected *O. biplicata* and *O. baetica* in numerous locations along the coast, but not one of



*Olivella pycna* Berry, 1935

Long Beach, Vancouver Island, B.C.  
8 - 12 mm. Rick Harbo collector.



*Olivella pycna* Berry, 1935

Dredged in 90 feet in Neah Bay, Clallam Co. Washington. 19 mm. G. P. Holm collection

them nor any one else is mentioned in the checklist as having collected *O. pedroana*. *Olivella pycna* replaces *Olivella pedroana* in literature for the Pacific Northwest.

*Olivella biplicata* and *O. baetica* vary greatly in size throughout their range. The largest *O. biplicata* are found in the Pacific Northwest and the largest specimens that I have collected came from the open coast beach near Neah Bay, Washington. This local species was given the name *Olivella biplicata fucana* T. S. Oldroyd, 1921, but has since been placed in synonymy with *O. biplicata biplicata*.

*Olivella pycna* is also variable in size over its range. Berry's holotype from Bolinas Bay in California is 13.6 mm and his two paratype, also from California, are 15.5 mm and 12.2 mm. The specimen that Terry and I collected in Neah Bay is 19 mm; the "crabbed" specimen which Terry collected on Long Beach is 15 mm. Specimens that I have seen that were collected in northern California were less than 10 mm. A brief search on the internet for *O. pycna* found two measurements for the species - the first was 13 mm and included the species range as from Oregon to California and the second was on a dealer list where a specimen that was collected in California was 8 mm.

It will be interesting to see if other collectors may now also discover that they have *Olivella pycna* in their collections and similarly to my experience with the specimens that I located in my collection, that they will be there hiding under a different name.

*Olivella pycna* Berry, 1935



Humboldt Bay, California.  
Photo with permission of Mollusks of the North Coast.  
Photo - www.humboldt.org

*Olivella biplicata* (Sowerby, 1825)



Crescent City, Del Norte Co., California  
Specimen is 20 mm. G. P. Holm collector.

*Olivella baetica* Carpenter, 1864



Dredged in 90 feet in Neah Bay, Clallam Co., Washington.  
Specimen is 17 mm G. P. Holm collector.



Open Coast beach, Mukkaw Bay, Neah Bay, Clallam Co., Washington. Specimens are 32 and 35 mm. G. P. Holm collector.

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