Range extension for Saxidomus nuttalli Conrad, 1837

by Linda Schroeder

The California Butter Clam, *Saxidomus nuttalli,* was recently discovered in Coos Bay, Oregon. John Schaefer, Water Quality Specialist with the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, found three specimens at different locations within Coos Bay earlier this year.



The very large specimen found at Pigeon Point

The first specimen was found during an annual Tribal clam digging event. John is a member of the Coos Tribe. The dig took place in South Slough (at approx. 43°19'44"N, 124°19'17"W). The clam was dug live and was just over 100mm.

The second was a very large specimen, dug live from mud at Pigeon Point (at approx. 43°21'46"N, 124°18'29"W). This one was so large it gaped and was initially mistaken for a *Tresus* species until it was cleaned of the mud. The shell measured approximately 138mm.

Both specimens exhibit

purple staining at the posterior end of the interior of the shell and commarginal ribs on the exterior. These are not typical traits of the Washington Butter Clam, *Saxidomus gigantea* (Deshayes, 1839), the common butter clam species for the area. S.

gigantea will sometimes show the purple staining, but it is not common. The specimens were also a bit more elongated than a typical *S. gigantea*. John suspected they were another species and after some research concluded they must be *S. nuttalli*.

He contacted our club through the website and mentioned his find, noting that we made no mention of this species on our website. The current literature indicates that *S. nuttalli* is found no further north than Humboldt Bay, CA. John's photos were certainly out of the ordinary for *S. gigantea*, and seemingly too far north for *S. nuttalli*, so I had his email forwarded to Eugene Coan and Paul Valentich-Scott, authors of *Bivalve Seashells of Western North America*, for their opinion.

Paul was able to compare John's photos to specimens in the collection at the Santa Barbara Museum of Natural History and concluded that it was indeed *S. nuttalli*. Paul reported they did have a specimen collected from Crescent City, CA, which is north of Humboldt Bay, but the Coos Bay specimens extend the range even further.



Interior view of the two live specimens



This led John to search the shell pile near the Tribal hall which contains the shells of several seasons of community clam digging. He was able to locate another specimen in this pile, which was about 80mm. It had been dead collected with barnacles attached, likely picked up by a child. The shell would have come from Coos Bay but there is no way to know exactly where in the bay it was found or when it was picked up.

John will continue to watch for the species and try to collect more specimens. It is apparent that the species has been living in Coos Bay for some time to attain the sizes that they have. More study is needed to show if this is a self-sustaining population in the Bay as no young individuals have yet been found. Meanwhile, the photos of John's monster-sized specimen have been added to the club's website, since the species now falls within the region covered by our site, <u>www.PNWSC.org</u>.

Reference:

Coan, E.V., P. Valentich-Scott and F.R. Bernard. 2000: *Bivalve Seashells of Western North America*. Santa Barbara Museum of Natural History, Santa Barbara, CA.

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