Update – Invasion by *Cernuella virgata* in Tacoma

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An article in the *Tacoma New Tribune* on November 4, 2007 described the discovery of an infestation of the "Mediterranean snail" or "vineyard snail" at the Port of Tacoma. The snails, *Cernuella virgata* (Da Costa, 1778), were found on about 160 acres of land owned mostly by the Port of Tacoma and City of Tacoma. Where the snails first came from remains a mystery. They are native to the lands bordering the Mediterranean Sea and Northern Europe. The port handles shipments of marble and stone from Italy so they may have hitched a ride on that type of cargo or on cargo containers. They are widely dispersed in many different locations around the world, including Australia, where they are agricultural pests.

On October 26, 2007 the United States Department of Agriculture (USDA) issued an abatement order to 16 different property owners giving them 25 days to eliminate brush and apply snail bait to kill the snails. George wrote an article in *The Dredgings* (Vol. 48 No. 1) about this discovery and my subsequent visit to the location which had been described in the November 2007 newspaper. I was able to find about 25 of the snails although only five were alive. Most had apparently drowned in several small puddles present on the site I visited. Three were aestivating on the stems of weeds. I took photos of the live snails I collected, although they were very shy and didn't want to move about or leave their shells, when I was attempting to photograph them.

Following some urging by George to revisit the site, I returned in November 2010 to see what had changed. I can report that the Port of Tacoma has taken this infestation very seriously. The location where I had previously found snails was entirely different. Originally, it was a flat grassy area with small alder trees (up to ten feet tall) and blackberry vines covering the back portion, with weeds near the front. Upon my return I didn't even recognize the place! It was now completely cleared of all vegetation. It was then covered by roughly four inches of compacted, crushed rock, laid over a plastic mesh. No pooled water was visible. It looked like a parking lot. In addition the area had a wire across the front with a large sign saying "Keep Out! Area under Quarantine by the USDA. Invasive snails present." Since I saw no evidence of the snails I figured I would follow up with the port officials and get an update on the success of this eradication effort.

I called the Port of Tacoma and was transferred to their public affairs officer. I explained the purpose of the call and we discussed the progress that has been made. The first attempt to control the brush on the site was to use goats, but this didn't work very well. The Port then hired large brush mowers to come in and they double-bagged the chopped up vegetation and hauled it off to a solid waste landfill for burial. After the brush was removed, snail bait was applied. The number of acres under observation and control has now increased to about 640 [one square mile]. The areas are surveyed routinely for any sign of snails on the sites. When they are found, additional snail bait is applied. They are fairly confident that all snail activity will disappear within another three years of treatment and careful monitoring. It appears from my observations that their control efforts are working well.