

Juan de Fuca Strait Field Trip by Linda Schroeder

Photos by Linda Schroeder and George Holm



Whiskey Creek beach looking west. Holes we saw in the soft mudstone in the foreground identified to us where *Platyodon*, *Petricola* and *Adula* could be found.

muddy patches, soft mudstone, large boulders, and a wide variety of types of seaweed, grasses and kelp. By the end of the low tide we had added a half dozen new species to our current list of varieties found at this site. George located *Kellia suborbicularis* (Montagu, 1803) and more of his 'as yet to be described' new *Tricolia*. Several species of boring clams are present here and we chipped away at the mudstone around some dead *Platyodon cancellatus* (Conrad, 1837) holes and located a couple more species. We found *Adula californiensis* (Philippi, 1847) and *Petricola carditoides* (Conrad, 1837). Living inside the dead *Platyodon* shells we found *Leukoma staminea* (Conrad, 1837) with prominent frilled ridges, which is normal in this situation. As the tide came in we discovered some very nice crabbed *Caesia fossatus* (Gould, 1850) and that's another new species for this site. Joyce Matthys spent the morning filming the various critters we located and got some great footage. She'd also brought a small aquarium along on the trip and was able to take some real close-ups of some animals moving around.

Our nice weather ended by Monday afternoon and we were treated to below normal temperatures and ongoing showers the rest of the week. Tuesday we awoke to some pretty



It was slippery walking on the seaweed covered rocks at Freshwater Bay. The tide range can be seen by the seaweed draped from the branches of the beached tree. Bert and Linda are in the foreground and the yellow specks in the background are Steve and Carol.

The club made its first multi-day field trip of recent years. Over the first week in June we traveled to the Olympic Peninsula to shell along the Strait of Juan de Fuca. We based our trip out of the Whiskey Creek Beach Campground. Seven of us arrived on Sunday, June 1st. Joyce and Ken Matthys, from Oregon, set up their RV while Steve Kulseth, Carol Kuthy, Bert Bartleson, George Holm and myself shared a couple of rented cabins. The day was pleasant and mostly sunny and the week held much promise. This was to be a record setting week of low tides with more days of good low tides in a row than had been seen in years.

On Monday morning we awoke to another nice day and enjoyed watching nearly a dozen bald eagles cavorting about the beach in front of us. We shelled at the beach by the campground our first day. It's a long stretch of private beach with several different habitats present – rock and gravel, some sandy and



Bald eagles were numerous in the area. Left is a juvenile and right is an adult with typical dark plumage and white head.

present – rock and gravel, some sandy and muddy patches, soft mudstone, large boulders, and a wide variety of types of seaweed, grasses and kelp. By the end of the low tide we had added a half dozen new species to our current list of varieties found at this site. George located *Kellia suborbicularis* (Montagu, 1803) and more of his 'as yet to be described' new *Tricolia*. Several species of boring clams are present here and we chipped away at the mudstone around some dead *Platyodon cancellatus* (Conrad, 1837) holes and located a couple more species. We found *Adula californiensis* (Philippi, 1847) and *Petricola carditoides* (Conrad, 1837). Living inside the dead *Platyodon* shells we found *Leukoma staminea* (Conrad, 1837) with prominent frilled ridges, which is normal in this situation. As the tide came in we discovered some very nice crabbed *Caesia fossatus* (Gould, 1850) and that's another new species for this site. Joyce Matthys spent the morning filming the various critters we located and got some great footage. She'd also brought a small aquarium along on the trip and was able to take some real close-ups of some animals moving around.



Linda Schroeder is watching Joyce Matthys as she films shells and other sea life she has brought back to her portable aquarium.

steady rainfall that lessened to mist by the time we headed to Freshwater Bay for the morning. This beach has a large stretch of sand and small gravel interspersed with some large boulders. Then the west side of the beach is very rocky and covered in kelp and seaweeds. Not too many bivalves were present on the sand but Joyce did find some large Sea Stars to film. The rocky area was very slippery but we persisted and were rewarded with *Granulina margaritula* (Carpenter, 1857), which is our only local *Marginella* species. Other highlights were some bright orange *Ocenebrina lurida* (Middendorff, 1849), *Lirularia succincta* (Carpenter, 1864), an *Alvania* species and more of George's *Tricolias*. And of course there was the usual array of typical rocky shore gastropods.



Red and Purple sea urchins at Slip Point.



Above - Slip Point. California mussel bed is in the foreground. George, Shary and Trevor are in the background collecting and below it is Steve, Carol and Trevor who are checking out the rocks.



Turbonilla sp., an *Onoda* sp., a *Barleeia* sp., and an *Alvania* sp. Shary scored with one each of *Epitonium indianorum* (Carpenter, 1865) and *Epitonium tinctum* (Carpenter, 1864). Bert found a half shell of a *Panopea abrupta* (Conrad, 1849). Bert and I also located some *Humularia kennerleyi* (Reeve, 1863).



Shary Almasi and Trevor Roberts turning rocks to see what lurks beneath. This is the area where Shary found her *Epitoniums*.

In this location once the tide breaches the outer rocks, the Point fills in with water rapidly. We stayed until we were literally chased in by the tide. The drizzly rain decided to return about then so it was a good time to leave the beach anyway. Carol and Steve had left us a little earlier as they wished to drive out to Cape Flattery and Neah Bay that day as well. They came back with some very nice fossils they had found at a road cut along their route. The fossils had washed out of a formation much higher on the hill and were lying along the road shoulder. Ken and Joyce didn't join us at Slip Point but instead returned to Freshwater Bay that day. Raindrops on the lens had spoiled all her footage of the previous day and she wished to recapture some of it. She returned happy, having found some equally good creatures to film. It worked out for the best as it would have been very difficult to tote around her equipment on the jagged rocks at Slip Point.

Thursday we were shelling at Whiskey Creek Beach again and the day teased us by starting out dry. But this time as the tide was heading out the

Wednesday started with more rain, but once again it tapered down to just some mist as we headed over to Slip Point on Clallam Bay. Most of us had never been to this site before although it was said to be a great location. We were not disappointed. We were treated to the sight of hundreds of thousands of sea urchins which had each burrowed it's own hole in the mudstone. The vast majority of them were purple urchins, but there were a few red and green-spined ones mixed in. Bert even found a small white-spined urchin. This is a heavily wave swept area and quite a variety of shells had been washed up and captured in these depressions on top of the urchins. Walking among all the spines was tricky but worth the effort. I had never found *Promartynia pulligo* (Gmelin, 1791) before and was very excited to find a very large one washed up. That was not to be the end of them as I found 4 altogether and each one was huge, a couple were more than twice the average size listed in literature, and two of them were live!

One section of Slip Point has a large California mussel bed, *Mytilus californianus* Conrad, 1837. It was quite impressive. Past the mussel bed is a mix of rocks and boulders. George busied himself looking for micro-species and found over a half dozen types, including *Homalopoma luridum* (Dall, 1885), *Homalopoma baculum* Carpenter, 1864, *Lirularia lirulata* (Carpenter, 1864), more *Granulina*, a



George Holm looking in the eelgrass for *Lacuna* and the new species of *Tricolia*.



Joyce Mathtys is filming on Whiskey Creek Beach. She is focusing on the colorful starfish that George called to her attention.



rains showed up again and followed us pretty much all day. This was to be one of the record low tides in many years so most of us were not about to pass it up despite the rain. Our rain gear got lots of use this week. Trevor and Carol decided to sit out most of this one and stayed warm and dry in a cabin. The rest of us were back to it, poking among the rocks and kelp. Bert and I decided to head out to a far point on the beach, a good mile and a half distant. I had previously found some species there unique to that location on this beach. It's a spot that is only accessible during a few low tides a year and is normally cut off where water meets a cliff face. Although it was good exercise, our trek was for naught. Only a couple of the species were to be found, and only in small numbers. The spot was covered by more kelp and seaweed than usual, something we found at several sites this week. It was very difficult to negotiate the slippery rocks and one had to be especially careful as it was a very long way back to help should you break a leg. And if the tide came in before you made it past the cliff you were in real trouble indeed. There was one bright spot as I did find a handful of isolated *Mytilus californianus*, which I



Pillar Point County Park was an expansive sandy beach with only a few shells to find.

had never noticed there before so I was able to add another species to the list for this site. By the time Bert and I had returned to the main beach, Trevor & Shary and Carol & Steve had headed home for the week. George, Bert and I continued to shell for a short time but then they too needed to leave for home. Joyce and Ken were originally going to remain until Saturday but found out a granddaughter was coming to town (in Oregon) that they would have limited opportunity to see. So they planned to head out early the next morning. I enjoyed a last evening together with the Matthys' and Joyce and I reviewed all the pictures and film footage she had taken. I helped her identify all the species she had shot and we chatted well into the evening. It is Joyce's goal to create a video of Northwest beach creatures, much like she has in her two Sanibel based videos. She's also promised to create a casual trip video of the week for our club to have.

Although most people could only stay through Thursday anyway, everyone had pretty much had enough of the cold weather and rain and they were ready to go home. I also decided to call Friday my last day as the forecast was not looking to improve. Friday morning I headed over to Pillar Point County Park. It had been my hope to

located *Protothaca restorationensis* Frizzell, 1930 at this site. I was to be sorely disappointed though. Not only could I not find that one, I had a tough time finding any bivalves on the beach. Normally this extensive sandy tide flat is just littered with dead shells. The heavy wind and wave activity of the week had instead swept it clean. Nothing but a few *Tresus*, *Macoma* and *Saxidomus* lay about. This beach usually contains the same assortment of Veneridae clams as those where I normally find *P. restorationensis*, so I thought if I could find it anywhere along the Strait, it'd be here. The *Saxidomus gigantea* (Deshayes, 1839) were relatively easy to find and I did locate a very few *Leukoma staminea* (Conrad, 1837) near a rocky section. Finally after two hours of crisscrossing the beach, I found a couple half shells of *Callithaca tenerrima* (Carpenter, 1857). But I never saw a *P. restorationensis*. Several other species I'd previously logged at this beach were not to be seen as well. It just wasn't a good day for bivalves. However, I did discover an established bed of *Nuttallia obscurata* (Reeve, 1857) at an inner muddy cove. Previously only one broken half shell of this species had been reported there. This population expansion has already been reported to the Nonindigenous Species Database. Gastropods were also lacking for the day but it's not a site known for a good gastropod variety. Just as I had had enough and was headed back to the car, the sky started clearing and the sun came out. It was too little, too late though since the tide was coming back in.

Despite the rain and cool temps, we all had a good time and enjoyed the trip. New species were added to our lists. Everyone went home with varieties they had never found before. We enjoyed showing Joyce and Ken some Northwest beaches. Although they live in Oregon part of the year, they don't frequent the beaches there. They were amazed at the diversity of species up here. I'm sure they'll be back for more of our field trips in the future. My search for *P. restorationensis* here remains for another day.