

June 4th Shoreline Outing

On Sunday, June 4, 2023, 20 members of Comox Valley Nature enjoyed a tidal walk at Pt Holmes with Rick Harbo, retired biologist and author of many seashore books describing Pacific Northwest marine life! The beach consists of a large sandy section and a boulder-covered area, the lower section of which is mainly covered in seaweed (algae).

Rick explained that some intertidal species commonly seen are not native to B.C. and were sometimes introduced inadvertently through ship's ballast water, foreign trawlers or along with other species. For example, Manila Clams were accidentally brought in with oysters shipped from Japan and are now widespread along the coast. Dark Mahogany-clams are a more recent arrival from Japan and have spread rapidly. Rick was not aware that they were having any negative effect on native clam species. In fact, they provide food for our native species of birds such as Bald Eagles, gulls, Surf Scoters, and Great Blue Herons. Japanese Oysters (the ones we cultivate at Fanny Bay) were purposely introduced for the shellfish culture industry because the native Olympia Oyster was nearly wiped out by over-harvesting and is slower growing than the Japanese Oyster. Given the proximity of oyster culture in Baynes Sound, it is surprising how few oysters were found at Pt. Holmes. The invasive Sargassum seaweed (Japanese Wireweed) came incidentally with oyster spat from Japan in the early 1900's. Sargassum weed now covers a much larger area of the rocky intertidal area of Pt. Holmes beach than 10 years or so ago.

We saw a few species of sea stars. The Purple Sea Star, whose populations were recently hit by Sea Star Wasting disease, has survived and is now recovering. Sunflower Stars have been devastated. Rick noted that Purple Sea Stars are not all purple but can occur in a range of colours. Mottled Sea stars and Leather Sea Stars were situated at edges of large rocks or buried in seaweeds, sheltering from drying effects of the sun. Leather Sea Stars have a soft outer covering and often have a garlic or Sulphur smell.

Our first fish spotted was a Cockscomb Blenny, a colourful, eel-like fish found among the rocks and seaweeds at our feet in shallow water. Of special interest was the Plainfin Midshipman, a fish having a large mouth and head, and a tapered body. Its body was dark grey with rows of luminous white spots that glow in the dark, reminiscent of the buttons on a naval midshipman's coat.

The females of the Midshipman deposit orange egg clusters underneath intertidal rocks, then males guard the eggs until the end of July. Three months of guarding is quite a commitment. Males can 'hum' a low song at low tide. We heard a wonderful recorded rendition on Rick's phone. It may be to keep other males away. Two types of males exist in this species, the second being a 'sneaker male' which is smaller in size, but which can sneak in to fertilize some of the egg cluster but do not displace the larger male. Research is ongoing to fully understand the paternity of some of the hatched eggs.

Of interest is that eagles, gulls and herons feast on the midshipman. Today we saw an eagle with one strung out in his talons enroute to a nearby nest to feed its young. The sun shone through delicate fins and the silhouette was clear to see. More than 10 eagles and numerous gulls combed the beach for food. It was obvious that there were many fish under rocks, so good food for so many birds today.

Many Red Rock Crabs sidestepped their way around our feet and through the seaweed. Numerous Red Rock Crab shells also littered the area where we walked, making us think that there were many dead crabs. Rick pointed out that the shells, in fact, had been vacated by molted crabs via their hinged

carapaces. It was fun to check them out after that and to see that they had, indeed, left parts of their former tissue behind!

Also observed were Frilled (Wrinkled) Dogwinkles and their eggs attached to rocks, standing straight up vertically. Bright Orange Sea Cucumbers were common under the rocks. Less common were small white or pinkish sea cucumbers under rocks. A couple of Mossy chitons were also seen with thick strap-like hairs on the girdle (margin). The interior surface of the plates are blue. The exterior of the plates are often worn and the colour and pattern are lost. While walking back over the sand, two very young Sand Lance were found. Rick pointed out holes in the sand where siphons of Horse Clams protruded—when poked they squirted out seawater as they retracted their siphons. Some of the sand holes were likely created by some type of worms.

A variety of seaweeds overlaid the rocks and were floating in tide pools: Succulent Seaweed, Coralline algae, Branching Segmented Coralline algae, Turkish Towel, and, on exposed rocks, Sea Lettuce. A very iridescent flat algae, Iridescent Seaweed, glistened in the sun when immersed in the sea water.

Overall, it was a pleasant afternoon, listening to various stories of the local fauna and flora of the seaside!

Submitted by Jennifer and Robin Harrison