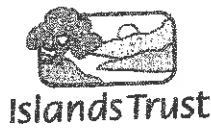


Trustee Notebook

By Laura Busheikin



After attending the Islands Trust-sponsored Greening Our Shores Workshop on February 26, I may never experience the beach the same way again. Now I see not just a beautiful sight, but a complex interaction of processes involving wind, waves, rock, plants, inland water, and creatures of all kinds. And I now have a much better idea of what we humans should and shouldn't be doing on our shorelines if we want them to remain viable.

Here are some highlights of the workshop:

Each island, including Denman, is unique.

Denman is made up of 60% sediment beaches and 40% rock beaches (as compared to Hornby Island, which is 75% rock and 25% sediment). This makes it a more complicated place to practice good shoreline practices. Our shorelines are continually in play, continually moving.

The Komas Bluffs on Denman's North end are one of the most significant bluffs in the Salish Sea area. Because they are highly erosional, they pose challenges – building on top of them is problematic, and they are susceptible to slumps and collapse. The sediment that erodes from them is responsible for the formation of Tree Island (aka Sandy Island) and Seal Island to the North.

Another unique feature of Denman beaches is one we've just experienced – the massive herring spawn. Our shores are probably the largest spawning habitat in the Strait of Georgia.

To learn more about the specifics of Denman shorelines, go to the Islands Trust Denman Island page and click on Greening Our Shores: Integrated Shoreline and Watershed Maps under Latest News - February, 2013.

The shoreline is a treasure-trove of ecological and aesthetic values.

Our beaches provide us with breath-taking views, fun destinations, tranquil places to walk, and essential access to the ocean. Ecologically, they play a vital role in the survival and well-being of the marine – and terrestrial – species we love. For instance, we may not see any salmon on the beach, but much of their food source starts there. The cycle of life feeding life goes like this: the insects feed the sand lance and surf smelt, tiny fish that spawn under rocks on the beach. The resulting offspring swim out to the ocean where they constitute 50% of the diet of juvenile Chinook salmon. The salmon provide sustenance for Orcas, grizzlies, bald eagles, humans, and much more.

Sea levels are rising – and quickly.

Experts previously predicted a sea level rise of 20 – 90 cm by the year 2100; recently many of them changed that

estimate to one metre. The steady rise will be exacerbated by storm surges that will have the potential to dramatically wash away large amounts of shoreline material.

Human activities can put our shorelines at risk – but there are sustainable alternatives that everyone can practice.

Seawalls, bulkheads, and other structures that harden the shoreline often do more harm than good. For instance, presenter Paul de Greeff showed us a photo of an RV Park where the owner had built a simple wooden wall to buttress the land, so that RVs could pull right up to the water. Beneath the wall, the shore was eroding at an alarming pace. Hard barriers are counterproductive because the waves bounce off of them, washing away even more sediment. The shoreline recedes, he explained, and the beach becomes less accessible as soft material is swept away, leaving behind hard-to-manoeuvre cobble.

De Greeff cheered us up by following this photo with one showing the same beach after remediation. The wall had been removed and the beach reshaped with a mild slope so that the wave action now rolled gently up and down. This is an example of a “soft” approach to shoreline management. The property was protected from erosion, the beach still looked natural and was accessible, and fish and wildlife could still thrive.

Seawalls and other types of beach hardening can also be detrimental for neighbouring properties, as the deflected energy of the waves creates a vortex, churning away at the beach next door. There have been court cases instigated by people who have lost chunks of their property due to inappropriate neighbouring shoreline practices.

As well, human ideas about beautification of coastal areas sometimes need rethinking. Building a lawn right up to the natural boundary of the shore may seem like a nice idea, but the next big winter storm can wash it away. The natural features – driftwood, shore plants, rocks – help anchor the natural sand, and provide essential habitat.

Presenter Brian Emmet spoke about the Green Shores for Homes program, which is being designed to offer waterfront property owners education and incentives for managing their shoreline sustainably. The hope is to introduce the program in the Trust area in the future.

Both presenters acknowledged that many of the biggest threats to the health of the shoreline do not come from the actions of Denman residents. Without downplaying potential dangers such as oil spills, increased industrialization of aquaculture, etc, they kept the focus clearly on what those of us who live here can do right now, at home, to protect our shores.