Sargeant Bay Society

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Newsletter #99 – Fall 2018

Editor – Rand Rudland

AGM, May 8, 2018 Report

The membership for the Society stands at 89 and continues to climb slowly.

The executive for the upcoming year is as follows:
Pres. – Rand Rudland
Vice-pres. – Tony Greenfield
Sec. – Maggie Marsh
Treas. – Garry Paulson

Directors returning are:
Katie Caple
Jeff Muckle
Heather Newman
Elise Rudland

New Directors are:
Wendy Griffin
Dave Spicer – responsible for salmon-related projects,
Rick Walters

Many thanks to retiring Lexi Harrington for her years of service as a director

Joop & Jessie Endowment for the Sargeant Bay Society update:

The annual Sunshine Coast Community Foundation (SCCF) presentation ceremonies took place in July at Chatelech High where the SBS was presented with a check in the amount of $585, representing the annual dispersement from the nearly $20,000 presently in this memorial fund dedicated to the memory of the Burgerjons. This annual revenue contributes to funding our ongoing events, educational projects and equipment acquisitions.

Donations are gratefully accepted.

Don Basham, SCCF honorary director, presents Rand R. with an SCCF check. Don is a past director of the SBS and is now active as a volunteer in the Park. (photo provided by SCCF).

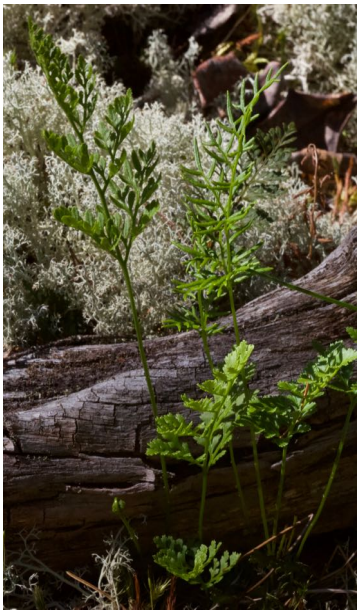
Summer Activities - 2018

1 - Botany Hike – May 20th

Kye Goodwin and Jeff Muckle led a hike to explore the botany of an area near Halfmoon Bay Elementary School on 3 new trails on Welcome Hill above Datsun Alley and Little Knives—Nick, Misty and Sparky.

"Toy Soldier" (*Cladonia bellidiflora*) – likely

Lichenomphalia umbellifera



Parsley Fern (*Cryptogramma acrostichoides*)

Heart-leaved Twayblade (*Listera cordata*)

Some of the many ferns and orchids found along the trails.

2 – Birding on the Berm – May 19th

Tony Greenfield and 35 local birders saw a total of 36 species during a 3-hour joint outing with the Sargeant Bay Society and the Sunshine Coast Natural History Society. The highlight of the day was an Eastern Kingbird (John Hodges photo), along with 6 species of warblers and a colorful Western Tanager (bottom – archived photo RR).

3 – Intertidal Explorations with Lee-Ann Ennis - Iris Griffith Centre - July 14th.

Well over 200 visitors enjoyed the Sargeant Bay beach on a perfect weather day for this annual event. At a 0.5' low tide, much of the area was exposed, including the rock outcropping with starfish, barnacles and other marine life galore.

Lee Anne (below) displays a crab, one of the 65+ species of marine life found this day.

What follows is the complete list of identified organisms located by members and visitors during a 0.5' tide on this sunny day in July.

A Bay Pipefish performs aquatic acrobatics with a Purple Seastar in the background.

Purple sea star, (*Pisaster ochraceus*)
Mottled star, (*Evasterias troschelli*)
Leather star, (*Dermasterias imbricata*)
Mossy chiton, (*Mopalia muscosa*)
Starry flounder, (*Platichthys stellatus*)
Sand dab (*Platichthys spp.)*
Crescent gunnel, (*Pholis laeta*)
and/or
Saddleback gunnel, (*Pholis ornata*)
Penpoint gunnel, (*Apodichthys flavidus*)
Ribbon prickleback, (*Phytichthys chirus*)

Bay pipe fish, (*Sygnathus leptorhynchus*)
Black eyed goby, (*Rhinogobiops nicholsii*)

Northern Clingfish, (*Gobiesox maeandricus)*
(above & below)

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https://www.facebook.com/sargeantbay

Tidepool sculpin, (*Oligocottus maculosus)*
(above) – likely

Sculpin unidentified, possibly Roughback sculpin
Fringed sculpin, (*Icelinus fimbriatus*)
Brown Irish lord (*Hemilepidotus spinosus*)
Pacific sand lance, (*Ammodytes hexapterus*)
Pacific herring, (*Clupea pallisii)*

This unusually large (8" long) Herring was caught by one of the excited young attendees. This is a very large herring to be found in such shallow waters at this time of year.

Northern kelp crab, (*Pugettia producta)*
Red rock crab, (*Cancer productus*)
Dungeness crab, (*Cancer magister*)
Green shore crab, (*Hemigrapsus oregonensis*)
Purple shore crab, (*Hemigrapsus nudus*)
Hairy shore crab, *(Hemigrapsus oregonensis)*

Hermit crabs, many observed, looks like:
Greenmark hermit crab
White knee hermit crab
Grainy hand hermit crab
Bay ghost shrimp, (*Neotrypaea californiensis*)
Side striped shrimp, (*Pandalopsis disbar*)
Skeleton shrimp, (*Caprella spp.)*
Krill
Splash-Zone Beach Hopper (*Traskorchestia traskiana*)
Rockweed Isopod (*Idotea wosnesenskii*)
Stubby Isopod (Gnorimoshaeroma oregonensis)
Sea Slater (*Ligia pallasi*)
Common acorn barnacle, (*Balanus glandular*)
Small acorn barnacle, (*Chthamalus dally*)
Thatched acorn barnacle, (*Semibalanus cariosus*)
Family Polynoidae, Scale worm
Family Nereididae worm
Nemertea, Ribbon worm, Light edged ribbon worm (*Cerebratulus spp.)*
Goddess-Worm (*Nephtys spp.)*
Platyhelmenthes, Flatworm (*Notocomplana spp.)*
Moon jelly, (*Aurelia labiata*)
Water jelly, (*Aequorea spp*)
Comb jelly
Burrowing anemone, (*Antropleura elegantisma*)
Pacific oyster, (*Crassostrea gigas*)
Bentnosed macoma, (*Macoma nasuta*)
Pacific littleneck clam, (*Protothaca staminea*)
Manilla clam, (*Venerupis philippinarum*)
Purple varnish clam, (*Nuttallia obscurity*)
Washington butter clam, (*Saxidomus gigantea*)
Nuttall's cockle, (*Clinocardium nuttallii*)
Pacific blue mussel, (*Mytilus trossulus*)
Lewis's moonsnail, (*Euspira lewisii*)
Wrinkeled dogwinkle, (*Nucella lamellosa*)
Sitka periwinkle, (*Littorina sitkana*)
Checkered periwinkle, (*Littorina scutulata*)
Mask limpet, (*Tectura persona*)
Plate limpet, (*Tectura scutum*)
Porphyra spp.
Sea lettuce, (*Ulva lactuca*)
Eel grass, (*Zostera marina*)
Rockweed, (*Fucus gardneri)*

Be sure to join us next summer for this exciting and informative event. Bring the grandkids!!!!

604-884-4642
srgntbay.soc@gmail.com

Sargeant Bay Society

<u>Sunshine Coast Community Foundation (SCCF) grant for trail maintenance equipment.</u>

Thanks to the SCCF for their $1,000 support towards the purchase of two pieces of battery-operated power tools for use by SBS volunteers in keeping our trails open and safe for hiking. The photo below was taken during the first use of the tools, used to clear a truck-load of Nootka Rose and invasive Himalayan Blackberries from the trails on the berm.

In addition to Sargeant Bay Provincial Park trail clearing, the equipment has been used by the SC Trail Society (SCTS) to clear Scotch Broom from the new trail head at Wormy Lake, as well as opening the Highway 101 access to the Triangle Lake Trail to improve visibility for the SCTS trail map sign. And much more to come.

Anyone interested in using the tools for HMB trails work, please contact Rand – 604-885-4642

Many thanks to the SCCF for their support.

If you photograph any interesting events or activities in the Park, please send along for inclusion in the Newsletter, with a short description of what you saw.
Send to: srgntbay.soc@gmail.com
Contact us at 604-885-4642

Streamkeepers Course Sept. 28th-29th. 2018. Sponsored by the Pacific Salmon Foundation

Submitted by Dave Spicer and Rand Rudland

The Sargeant Bay Society, with full funding from the Community Salmon Program of the Pacific Salmon Foundation, ran a very successful 2-day Pacific Streamkeeper Course with 10 participants from the Sargeant Bay Society.

The course, organized by Dave Spicer and taught by Dianne Sanford and Angela Kroning, focused on Colvin Creek from Redrooffs Road to the entrance into the marsh. Jim Wilson, Technical Support for Laura Terry, Community Advisor, Fisheries and Oceans Canada, also assisted with Module 11, fry trapping and identification.

After completion of background information sources for Colvin Creek, permitting, and available databases, an in-depth stream bed and vegetation cover analysis was done on Day 1.

The focus on Day 2 moved to looking at the inhabitants of the Creek-aquatic invertebrates and salmonids. Traps set for salmonids the previous evening were removed and emptied for review by the group.

Don looks on as Dave and Ian carefully transfer the fry from the trap to the bucket.

Module 11 taught identification skills for the fish found in the creek. Jim Wilson (below) is shown with his weight and measure set-up, and one of the eight fish caught in the four submerged traps set up and down Colvin Creek overnight. (One sculpin, four Cut-throat fry, and three Coho fry). This was encouraging, and interesting, as Sargeant Bay Society volunteers monitoring salmon returns on Colvin Creek last winter did not see any salmon returns, yet with the presence of coho fry in the creek as found in this study, it is clear that coho did successfully spawn last year.

Jim explains the finer points of identifying local species of salmonids.

Coho fry

Measurement process

Sculpin

Module 4 involved quantifying the numbers and composition of insect food species by sampling representative riffles of the creek bed. The following is a series of photos from that process.

Dianne Sanford (above) discusses with Jim and Mike the finer points of technique for netting the tiny insect larvae, worms and mites to be found in the gravel bottom of the Creek.

Ensuring all the living organisms are removed from the selected area rocks and gravel on the creek bottom requires hands-on cleaning of all the rocks and debris. The water is cool, around 11 deg C., hence the gloves.

Summarizing the Colvin Creek water quality, it was found to be in the "Good" range, with temperature (11-12 deg C), oxygen saturation (94.4%), pH level (7.5) and turbidity (6 JTU), all being very acceptable. These findings confirm it is favourable for salmonid life.

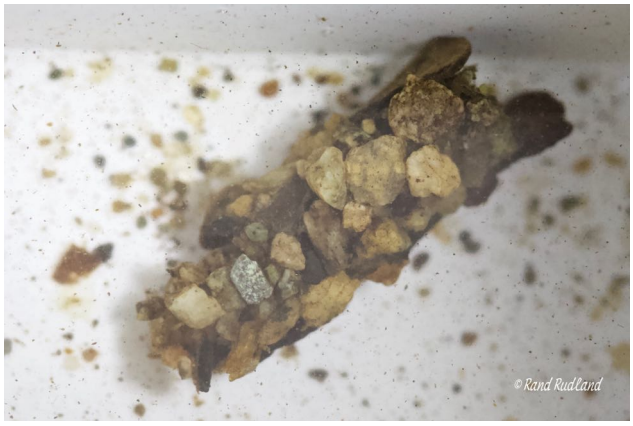
Environmentally there may be some mitigation required relating to erosion around the culvert under Redrooffs Road. The fine sediment in the creek introduced by this erosion is detrimental to the better quality gravel downstream that salmon prefer for spawning.

Further assessment of the marsh and Colvin Lake are planned in the near future, which will allow us to have a greater working knowledge of the salmonid habitat within Sargeant Bay Prov. Park.

Dianne studies the many invertebrate samples collected.

In summary, the Invertebrate Field Study found that in just 2 square feet of the streambed surface material sampled there were over 125 individual organisms, comprising 9 different taxonomic groups. One important finding was that all 3 of the most important invertebrate taxa considered to be indicators of low pollution in a stream were found in good abundance. Caddisfly Larva, Mayfly Nymph and Stonefly Nymph were all found and are considered polution intolerant. Colvin Creek would be considered "Good" on the Pollution Tolerance Index.

Some of the nine different invertebrate species identified are shown here.

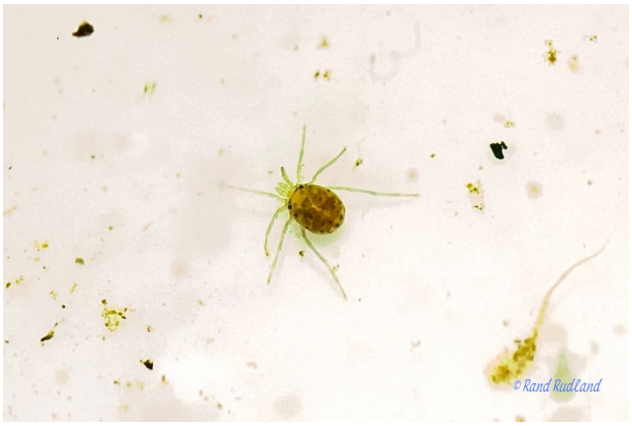


Caddisfly casing - unoccupied - above

Horsehair Worm (4")

Blackfly larva (<1/4")

Mayfly nymph (1/4”)



Water Mite

Stonefly nymph

Caddisfly larva (above)– without casing

Cranefly larva (below)

Freshwater Worm (<1.5”)

Participants and instructors for the 2018 Streamkeeper Course. Left to right – front; Jim Quirk, Angela Kroning (instr.), Penny Dunford, Don Basham. Back row; Wayne Rolfe, Mike Brown, Jeff Muckle, Dave Spicer, Shirley Samples, Garry Paulson. Middle; Ian KIrkland, Dianne Sanford (instr.).

Indian Consumption Plant – *k'eximemen*

Following discussions with BC parks, it was agreed that the rare Indian Consumption Plant found on a few places on the berm could benefit from reclaiming some of the dry habitat that has been encroached upon by the Nootka Rose. The newly aquired trail clearing equipment was again put to use to remove roses from areas behind locations where the plant was found to be hanging on in small numbers. These areas were then signed to educate the public, and cordoned off with pinned driftwood to increase the level of protection. Next year will determine the effectiveness of this approach, and further expansion of the growing areas will be done after the plants have completed their seed release.

Photo Journal from Sargeant Bay and Smuggler Cove Provincial Parks

Cardinal Meadowhawk at Colvin Lake

A Lincoln Sparrow during fall migration Sept 18th.

Yellow-rumped Warbler heading south in winter plumage

A large grasshopper sunning itself on the berm

A late evening walk into the ponds in Smuggler Cove provided a rare opportunity to observe the carnivorous habits of a local female Wood Duck! The Red-legged Frog didn't fare so well!!

Thanks to the Pender Harbour Wildlife Society for their efforts to promote invasive species awareness on the Sunshine Coast. Please print and refer to this for any invasive species you might encounter. Consider reporting all invasives on the provincial Report-a-Weed app available free online for Android and iPhone devices.

INVASIVE PLANT SPECIES

Common Periwinkle
Vinca minor

English Holly
Ilex aquifolium

English Ivy
Hedera helix

Giant Hogweed
Heracleum mantegazzianum

Himalayan Blackberry
Rubus armeniacus

Japanese Knotweed
Fallopia japonica

Leafy Spurge
Euphorbia esula

Orange Hawkweed
Pilosella aurantiaca

Purple Loosestrife
Lythrum salicaria

Scotch Broom
Cytisus scoparius

Yellow Archangel
Lamium galeobdolon

Yellow Flag Iris
Iris pseudacorus

For more information on identification, how to remove, and properly transport to a local green waste facility as well as suggestions for alternative plants, please visit our web site at *www.penderharbourwildlife.com*

Sechelt

Pender Harbour and District Wildlife Society