# Stoney Creek Trail Report No. 36 - March 2022

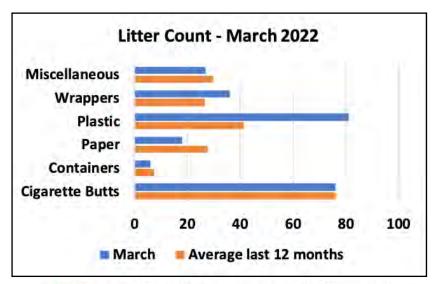
**The Front Page photo** is a "macro" view of plant life on the trunk of an alder tree near Sadie's bench. During the cold days early in the month, while waiting for signs of spring, I started looking at "primitive" life-forms on the Trail: lichens, liverworts and mosses. Identifying them by name has been a challenge due to the their great variety. For example, there are about 3600 species of lichen in North America (I've found nine so far - I think!). It has also been a challenge to interpret the scientifc jargon describing them on botanical websites. Nevertheless, I found them fascinating and have featured them on Page Three. The front photo spans an area about 4 cm wide and shows each ot the three life forms mentioned above. Can you spot them?

"Spring has sprung, the grass has riz, I wonder where the birdies is...." Well, they're here. There's a Song sparrow nesting near Bridge 1. Listen for him and others as you walk the Trail in the morning.

**Broken Bridge news:** From **Alex Hyde**, Natural Areas and Trails Coordinator: "Unfortunately I don't have any updates at this time. The bridge repairs are subject to provincial and federal permitting and may take some time."

Stoney Creek Salmon news: There will not be a major

release of Coho fry into the Creek on Mothers' Day this year. Due to new DFO guidelines, the hatchery must release smolts instead of fry, and the smolts must first have their adipose fins clipped, which means a delay of a month. The release will involve only hatchery volunteers and a few others. There is **good news** though, the wild salmon eggs have hatched! We've spotted a large number of fry in the Creek since the 25th.



Miscellaneous: clothing, glass, chewing gum, balls & fragments, etc. Wrappers: candy wrappers, foil, cellophane Plastic: doggy poo bags & scraps, plastic bags

Paper: tissues, napkins, receipts, newspaper, cardboard, etc. Containers: bottles, coffee cups, cans, juice boxes, bottle tops Litter: This month, we've gone through a supply of defective dog waste bags. They didn't detach cleanly from the top portion that's meant to remain in the dispenser. As a result, the bags have had to be torn loose, leaving many white shreds on the ground. This is why the plastic tally is much higher than usual.

- With this issue, 44 Trail Dogs have been featured since March 2021. To see photos of all the dogs (and a lot more) take a look at: www.stoneycreektrail.ca



## Lichens, Liverworts and Mosses :

**Lichens**, as mentioned in last month's Report, are actually two organisms living together: a fungus that provides 'shelter' and an alga that provides food by harvesting sunlight. Lichens come in many different colours and shapes. For example, they can be in the form of crusts, scales, leaves, clubs, or hair. They never form leafy stems as mosses do.

**Mosses and liverworts** are small, primitive plants that have root-like filaments called rhizoids rather than roots. They also lack a vascular (circulatory) system, so they must absorb water and nutrients through their leaves. For this reason, they normally live in damp places. Like ferns, they reproduce by spores rather than seeds.

Moss spores form in a capsule on the tip of a thin, upright stalk called a *sporophyte*. They are released into the air slowly. The lower part of a moss, called the *gametophyte*, is made up of leaves and stems. Moss leaves have radial symmetry, spreading out from a point, and can be almost any shape. Their stems, which may be simple or branched, upright or lying flat, are attached to rhizoids that anchor the plants to the surfaces of trees, rocks, decaying wood, or soil.

Liverwort spores form in a capsule that is usually held lower down, on a thicker, fleshy stalk. They are expelled all at once. The spores germinate to produce leafy (*foliose*) or flattened (*thallose*) plants. Most liverworts are foliose, looking like dark green mosses and having stems with two rows of very small, often rounded leaves that overlap like shingles. Thallose liverworts are flat like a green pancake and do not have stems or leaves.







# **Spring Flowers have Sprung:**















**Top:** A catkin (male flower) shed by a **Red alder** tree, a **Bitter cherry** blossom, and an **Indian plum** flower are all just steps from each other on Hemlock Hill.

Middle: A Red currant bush is one of the shrubs planted on Hemlock Hill by the City in 2018. This **unusual growth** also appeared at the top of the Hill.

**Bottom:** New to me this year is the **Trillium**, a shy little flower sometimes called a wood lily. Thanks to **Jean Lewis** for showing me where to find it. This **Salmonberry** bud will eventually become an orange-red berry. The ripening of the berries is associated with the song of Swainson's thrush, which is called 'salmonberry bird ' in many aboriginal languages.

### Trail Dogs:



**"Larry** is a nine month old border collie who came from Kamloops. He was the calm one in the litter...then he came home!

"He is a work in progress, loves people (jumps up to make sure they know he is there — sorry), and loves dogs, especially those who are happy to party with him.

"His favorite toy is a plastic juice jug that he terrorizes in the backyard.

"We are both learning to play agility and nosework, and hope to be running partners when he is done growing. He is a party animal!"

**"Ellie** was rescued from Alberta. She was eight months old when we received her. She was very timid at first and we had to feed her by hand. Now Ellie loves a cuddle whilst watching TV. She's a great dog.

"We had a little Yorkshire terrier before Ellie. Bailey was 11 when he died last Easter. We thought long and hard as to whether we would get another dog but we're happy that we did!"



# Activities at the ARPSES Hatchery:

On the right are a few of the 17,000 or so Coho fry in a feeding tank called a "Cap trough" at the Abbotsford Hatchery. The mesh-covered, stainless steel trough circulates fresh water pumped in from springs in Ravine Park.

The fry, which came from the eggs featured in the January Trail Report, emerged from the alevin stage during the first week of this month and were transferred from the incubator trays to the large tank.

Before they began feeding, it was necessary for the fry to aerate their swim bladders. They did this instinctively by swimming up to the surface of the water and taking several gulps of air. This would allow them to control their buoyancy (neutralize their weight) so they would use less energy swimming after food.

The fry will stay in the feeding tank until the summer when they've grown to become smolts and are big enough to have their adipose fins marked (clipped) for future identification. After that operation, they will be put in the rearing pond pictured on the right.

The smolts which are presently in the pond will be netted out, transported and released into Stoney and Clayburn Creeks — about 5000 per creek — in mid-June. According to **Dale Taylor** of ARPSES: "...it will not be a major event this year under the present DFO guidelines. We can have the hatchery volunteers and a few others. Hopefully we can do a fully attended event next year! We have released fry not smolts in the past on Mothers' Day but we need another month for development as the DFO is permitting us to release only marked smolts now."



## Life in the Cabbage Patch:



The **western skunk cabbage**, one of our earliest bloomers, first appears in wet areas in early March. The large cabbage patch pictured here is in the marshy area south of Bridge 4. Their flower head consists of a bright yellow spathe wrapped around the actual flower. They will reach maturity in April and remain visible until May, but the large, leathery leaves will persist until late summer. Note: the main references used for these Trail Reports are Pojar & McKinnon's *Plants of Coastal BC*, *Wikipedia* and *E-Flora BC*.





Across from the Prior Avenue playground, a short distance from the Forks and perhaps unnoticed by many trail visitors, stands this singular tree. It is a **Giant Sequioa**, native to California.

Although small by Sequoia standards and only 30 to 40 years old, its trunk is already over a meter thick at the base. Abbotsford City does not have a record of its planting, when or by whom.

This month, thanks to an anonymous donor, another Sequoia was planted, this time on the Straightaway. It is a welcome addition from a nursery in Pitt Meadows. **Trevor Houchen** of the City Parks Department, who selected the tree, says the Sequoia is a species they may have to lean on more in the future because of climate change.







#### One Down, Three to Go?

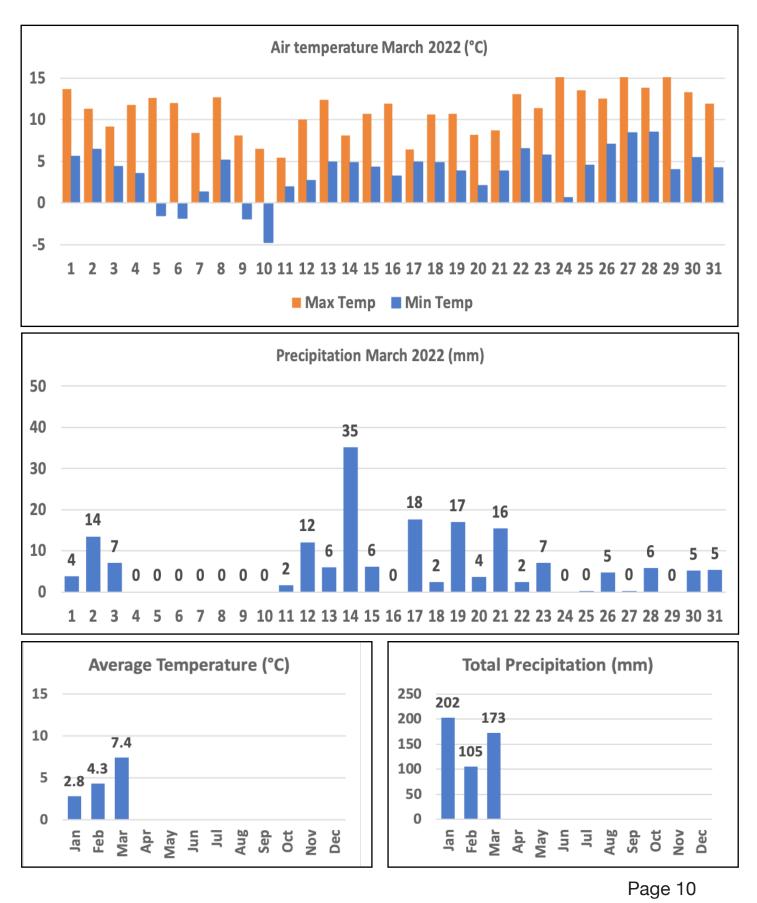


The photos above, taken upstream from Bridge 4, show how an upstart channel eventually grew to cause the destruction of a beautiful big cedar tree — as well as a bridge. The same course has begun near Bridge 3. Below, a new channel formed during the deluge last November is swirling and undercutting the roots of two more cedars. As well, since a moderate rainfall early this month, another innocent little side-channel just below the bridge has begun flowing around both sides of a third cedar. The channels will inevitably get bigger during next winter's rainstorms, if not sooner. Changes to the Creek must be accepted as a natural process, but they're hard to put up with when treasured trees may be lost. I have been told that the City is keeping an eye on the situation.





**Weather comments:** While the northern half BC experienced a winter that was warmer and wetter than usual, here in the south we've had normal temperatures and less than average precipitation from December through to February. However, comparing this month to March 2021, although the temperatures have been similar, there has been considerably less wind and more than twice the amount of rain. (Data from YXX)



#### For convenience, I use these custom place-names:

