

**Stoney Creek Trail Report
No. 34 - January 2022**



The **Front Page photo** is a view looking south, up the Straightaway. It was taken on the morning of December 30th, at the end of a week-long cold spell. It had been -13° overnight, and we'd just had our second significant snowfall of the winter.

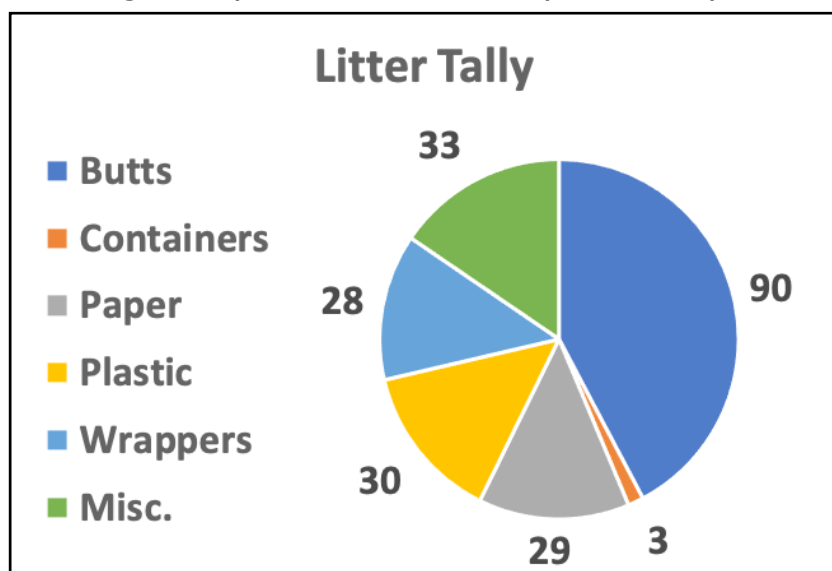
This has been a record winter for a period with snow on the ground: from December 25th to January 16th — a stretch of 23 days. (Last winter we had virtually no snow until the middle of February). Naturally, collecting litter was almost impossible during that time. The numbers in the chart below all came in the last half of the month.

The history of this winter's snow cycle is reviewed on the following three pages. Hopefully, we've seen the last of the white stuff for this season!

As we have seen, Stoney Creek and the flora along it undergo changes over time, in minor and sometimes major ways. The main purpose of these reports is to record a history of events and sights along the trail.



As if the snow wasn't enough to put up with, we had intermittent fog from the 11th to the 18th, then freezing fog from 23rd to the 26th. On the positive side, the Indian Plum buds (above) are a reminder that better days are coming soon. Be on the lookout for Skunk Cabbages to poke their heads up in a couple of weeks.



You may have noticed that I have avoided showing people in photos.... How would you feel about being seen in a Trail Report? Comments?

- To identify places mentioned in this report, see the "index" on Page 11.

- All photos were taken with an iPhone XS.

- Back issues are available upon request.

- See also www.stoneycreektrail.ca

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

This Winter's Snow Event:

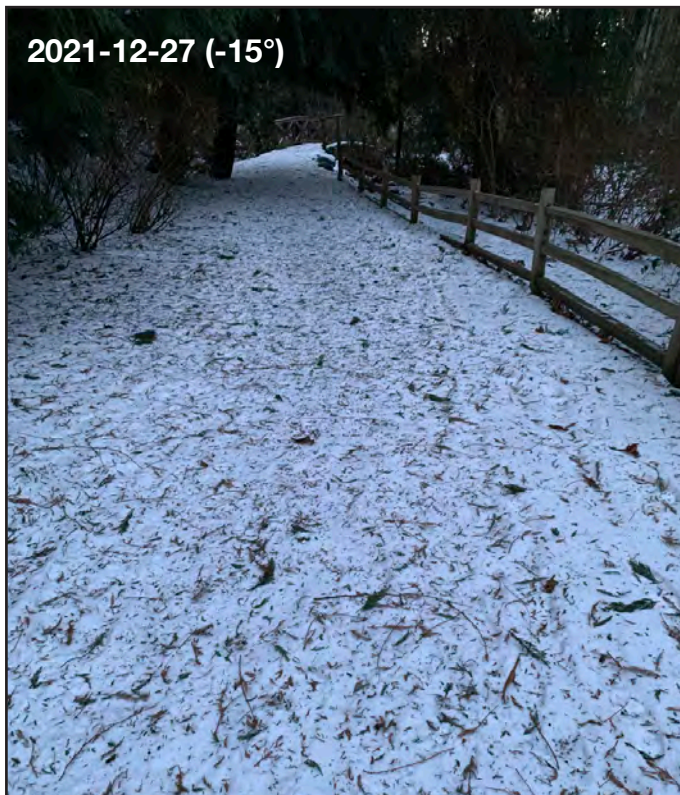
On December 22nd, the daytime temperature reached a record 10.5°. Then winter arrived! The daytime temperature plummeted to -12° within four days. On Christmas Day, 19 cm of snow fell. This turn in the weather was accompanied by strong winds which gusted to 67 kph on Boxing Day.



The icy winds caused the cold, dry snow to plaster tree trunks and drift around fence-posts, litter barrels and other obstacles. They also ripped small leaves from the cedar trees, scattering them widely.

The second snowfall (15 cm) came on Dec. 30th, as shown in this photo of Bridge 1 (below). It was taken at noon, after it had “warmed up” to -3° from -13° overnight.

Most of these photos are dark, due to being taken in early morning under thick overcast.



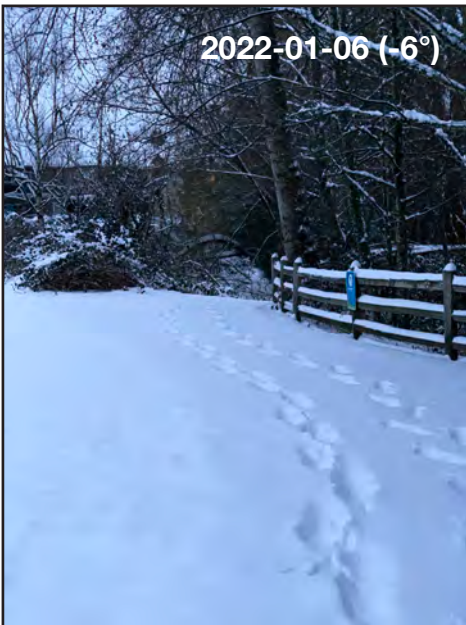
The Snow Event (concluded):



By January 1st, the overnight temperatures were low enough to give us a couple of days of lovely dry snow.

Then, on January 2nd, daytime temperatures started rising again, well above 0°. Strong winds also helped to turn what was left of the snow into slush. But overnight temperatures kept dropping below 0°, so we had to deal with frozen slush for several mornings. Not nice for walking.

There were more reversals: the return of the cold overnight on the 5th resulted in more snow and by the next morning we had another 15 cm on top of frozen slush. This was followed shortly by another warming trend: on the 7th, the



weight of heavy rain on top of the snow brought the cedars to their knees. Luckily, it was not cold enough to result in an ice storm, so damage to the alders and other deciduous trees was minimal.

It kept freezing overnight until the 11th when we had another two days of heavy rain. The snow turned to slush in a major way. (This prevented me from walking the trail and taking photos for several days). However, the end of the snow cycle was in sight.



During the following days, daytime temperatures were approaching 10°. On the 16th, I had my first opportunity to pick up litter since Christmas.

By the 17th, most of the snow/slush had pretty well disappeared.

The Great Blue Heron:

One of our resident herons, over one metre tall, stands stock-still in the icy water. Talk about patience and stamina! It could often be seen this month near Bridge 3. Its plumage is drab now, but will show brighter colours during the breeding season.



Two sub-species of the Great Blue Heron live year-round on coastal BC. They are a “species of special concern.” The draining of marshes and destruction of other favourite haunts due to urban development are a serious threat to their survival.

The Pacific Great Blue Heron will occasionally forage in farm fields, but depends mainly on wetlands in southern BC for survival. Its main food is small fish, although occasionally it will eat insects, rodents, frogs, and even small birds.

The Heron has two principal ways of fishing. The first method is to hunch motionless in shallow water with only its head and eyes moving to locate the prey. When a potential meal comes close enough, a lightning-fast thrust of its head catches the prey in its bill. It swallows the catch head-first using a deft movement. The second method is to wade slowly in deeper water until a fish is driven out from a hiding place. When the prey is within range, the bird uncoils its s-shaped neck and stabs its beak into the water. If it fails to find fish in an area, it walks or flies a short distance away and resumes fishing.



The Heron’s loud squawk, and flight with slow wingbeats, tucked-in neck and trailing legs make it easy to recognize.

You may be interested in visiting the **Great Blue Heron Nature Reserve** beside the Vedder River south west of Chilliwack. Be aware that the nesting area (with over 150 nests) in the south-western part of the Reserve is out of bounds from March to July.

Salmon Egg “Shocking”:



*These photos were taken during my visit to the ARPSES hatchery on January 14th. Thanks to **Dale Taylor**, ARPSES president and **Tyler Thibault**, DFO Community Advisor for showing me the facilities and procedure.*

These Coho salmon eggs came from the Chilliwack River Hatchery. Upon arrival at the ARPSES hatchery they were treated with disinfectant to minimize the possibility of infection by bacteria, fungi or parasites. Each incubator tray holds around 2500 eggs, or about the number found in one spawner. The infertile and dead eggs appear pale orange.

The photo below shows the eggs after three weeks of development, at the “eyed” stage. The embryos have a rudimentary nervous system. If you look carefully, you may see the spinal cord as well as the eye.



© Bill Beatty

Salmon Egg “Shocking” (continued):



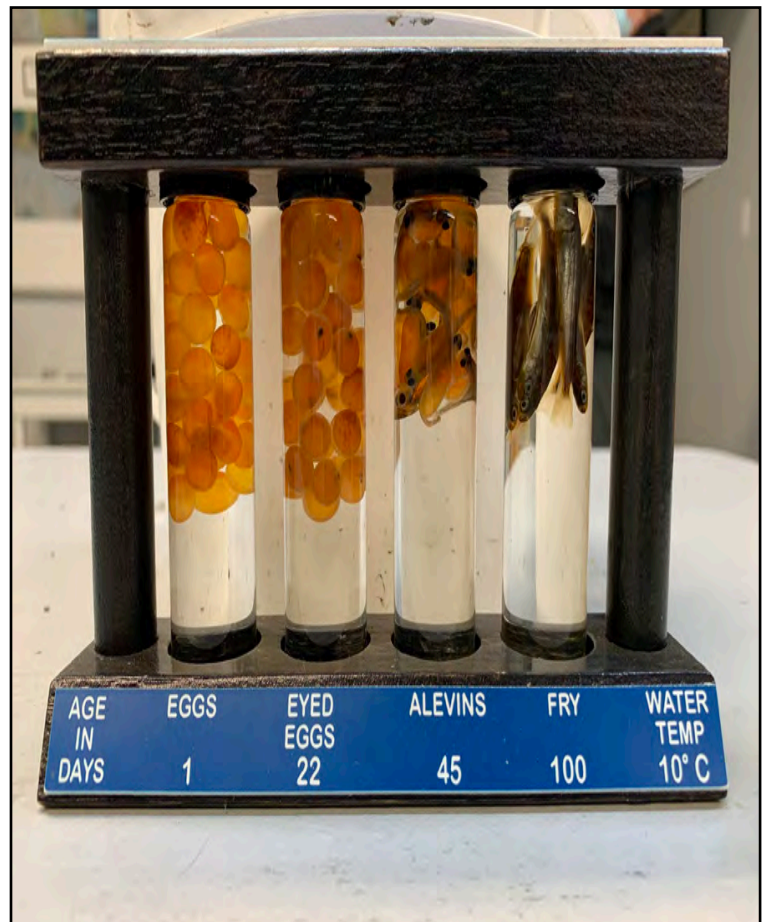
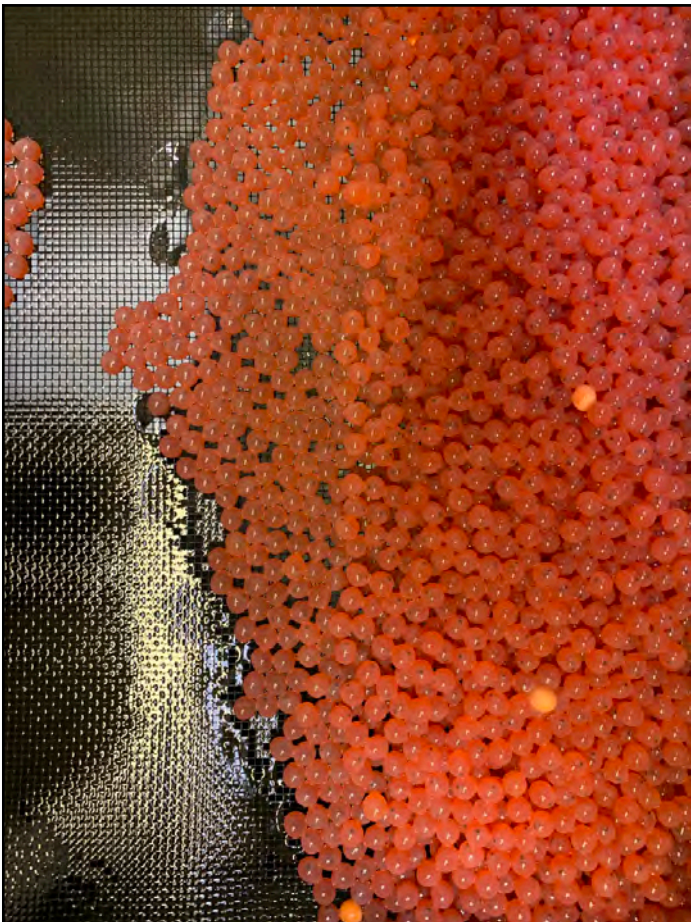
At the eyed stage, the eggs are considered to be ready for shocking.

Shocking is done mechanically, by pouring the eggs from a height of about 30 cm from one bucket of water into another.

This process ruptures the membrane covering of any unsuccessful eggs so that they turn pale and can be easily separated from the fertile, healthy ones.

Afterwards (bottom left), the eggs are returned to the incubator. In a day or so, all the obviously dead ones will be removed by hand to reduce the risk of fungus growth.

Eggs processed in a hatchery have a much greater survival rate than those in the wild (95% vs. 5%)



The Pond Gravel Removal (Jan. 17 - 19):



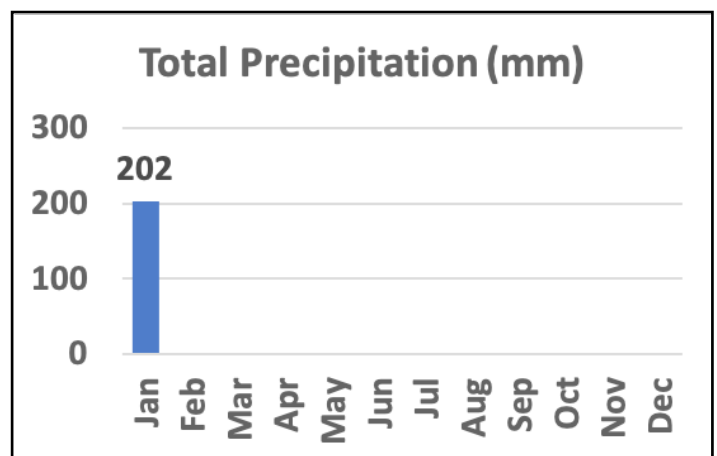
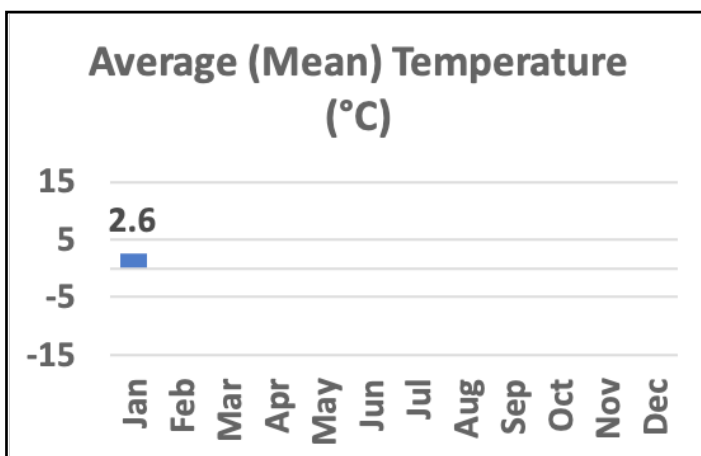
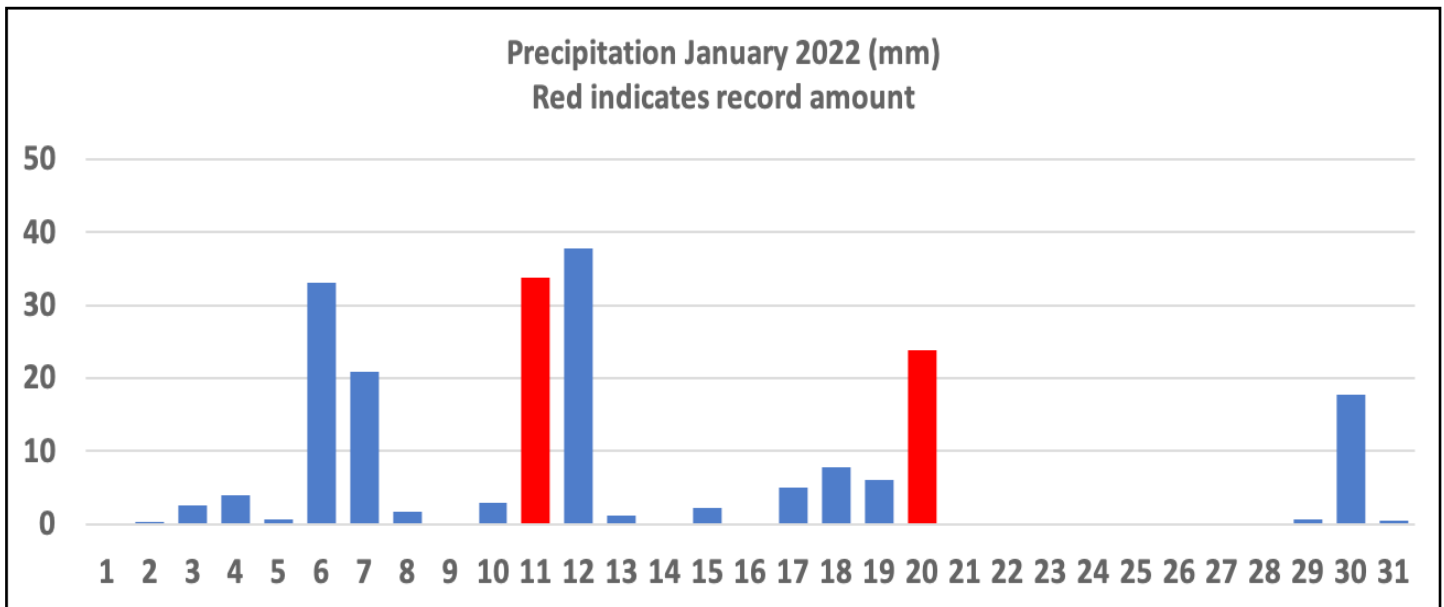
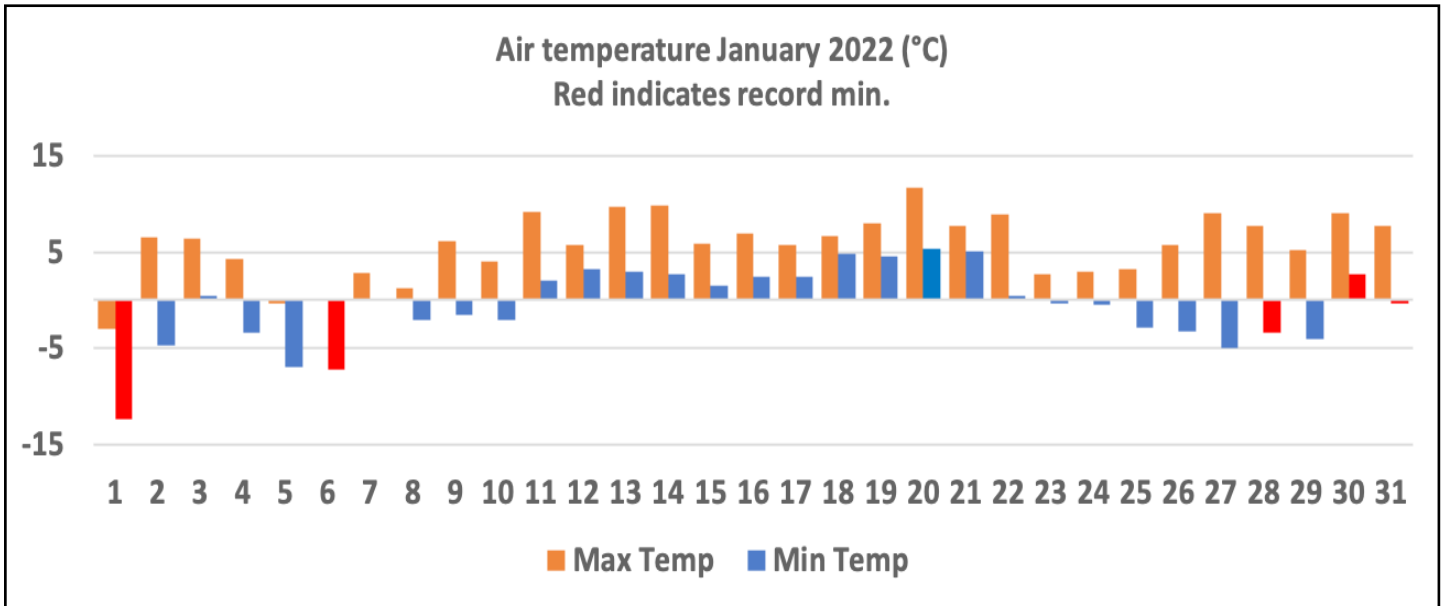
Top: to begin with, the Aqua-Terra Environmental crew, **Dylan** and **Maria**, placed downstream and upstream net barriers. Then, using a backpack battery unit with an electrified wand to stun the fish, they scooped them up with a hand net.

Middle: in a bucket, they managed to collect a number of juvenile trout and salmon, as well as a couple of other species: a native Threespine Stickleback and an invasive Pumpkinseed (freshwater sunfish). The fish were transported to a point upstream and returned to the Creek. (A salmon redd was discovered below Bridge 0 and was left undisturbed).

Bottom: when the fish were taken care of, a gravel removal operation was carried out by the City with an excavator and dump truck. It was estimated that between 150 and 180 tonnes of gravel had been deposited by the November deluges. About half the gravel was removed in this, the second such operation in the last six months.

By the following day the Creek water had cleared up nicely and the net barriers were removed.

Weather comments: A La Niña weather pattern (the colder counterpart of El Niño) has been affecting our weather since the fall. It occurs when Pacific ocean temperatures near the equator are below normal, causing cooler, wetter weather along the Coast during the winter. The U.S. Climate Prediction Center forecasts that it will last through to March. (Graph data from YXX): Note that the records are based on data since 2013.



For convenience, I use these custom place-names:

