



**Stoney Creek Trail Report
No. 52 - July 2023**

The **Front page photo** shows an invasive plant called **St. John's wort** which grew on the bank of the Creek just downstream from the Nursery trees. As you will see on the next page, there are many non-native "weeds" growing in Stoney Creek Park.

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Above: our thanks go to the Parks maintenance crew for using a leaf blower to clear the debris that accumulated on the concrete pads under the Trail benches. Looks great! Hopefully this will be repeated when the leaves are cleared away in the fall.



On the left are the two familiar kinds of dog poo bags that were discussed in the [March, 2023 Report](#). In March, as an experiment I hung them in a shady spot where they were exposed to air (oxygen) and a little rain, but not direct sunlight (heat). In four months, they were totally unchanged! Obviously it will take more than just oxygen to degrade them.



Below: dog owners will have noticed the City is now providing different bags. The maker claims they have developed an additive that will create what is called an *oxo-biodegradable* plastic. The additive is supposed to speed up oxidation caused by light and/or heat.

The first step in degradation is oxidation, whereby the plastic breaks down into fragments. In the second step, the brittle fragments hydrate (attract water) and can then be digested by microbes (bacteria and fungi). In the absence of oxygen in a landfill, degradation will be slow and depends on heat generated by microbes.

The new bags appear to have the same texture as the green ones and may be made of the same type of plastic. I'll bury all three now and see what happens.

Invasive Plant Species on Stoney Creek Trail (1/3)

The following information came mainly from [BC Government websites](#).

The BC Environmental Protection and Sustainability ministry: “An invasive plant is any non-native plant species that has the potential to cause undesirable or detrimental impacts to human or animal health, the economy, cultural values, and/or ecosystems.”



Invasive plants threaten the natural environment and biodiversity. They may displace native plant species, reduce habitat for rare and endangered species, contribute to loss of aesthetic values, and cause changes to the ecological community. As well, some of these plants are toxic to humans and animals, causing allergic reactions, skin burns and abrasions, and possible poisoning.

Free from the plant pests that keep them in check in their native ranges, invasive plants reproduce rapidly and spread aggressively, dominating natural areas and altering biological communities.



Problems caused by invasive species have increased dramatically in recent decades, due in large part to expanding human populations. Population growth leads to greater disturbance of the land and overuse of public land for recreation. Increased globalization of trade and travel also encourages the introduction and spread of invasive plant species.

Human activity often causes the spread of invasive plants. Because it is close to urban development, Stoney Creek Park has been affected by construction, movement of machinery, removal of natural growth such as the tree canopy, disposal of garden waste and unintentional introduction of seeds hitch-hiking on clothing and dog hair.

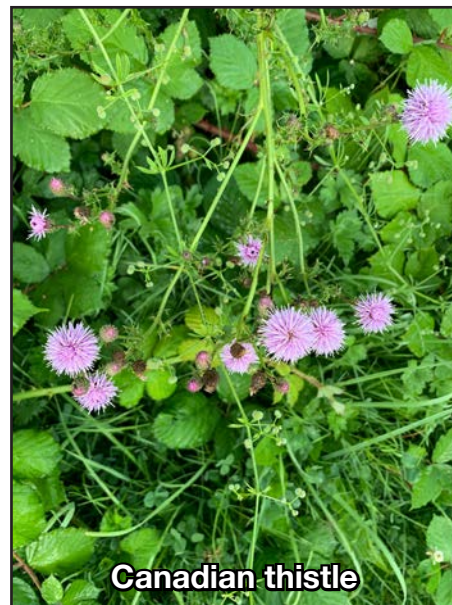
There are a number of traits that describe the nature of invasive plants in comparison to native species. Here are some that could describe those on Stoney Creek Trail:

- Rapid, unhindered growth and reproduction in the absence of predators;
- Prolific seed and/or vegetative reproduction;
- Ability to alter soil conditions to their own benefit;
- Production of toxins to ward off grazers and/or predators.

Invasive Plant Species on Stoney Creek Trail (2/3)

Because of the above traits, the invasives' ability to outcompete native plants can result in large infestations that may cause the following problems:

- a decline in plant and animal biodiversity;
- reduced soil productivity by affecting mychorrizal fungi;
- negative effects on rare and endangered species;
- decreased quality of water and fish habitat.



The number of plant species shown on these pages is about one tenth of all those listed as invasives on the BC Government's ["Invasive terrestrial plants"](#) website.

Invasive Plant Species on Stoney Creek Trail (3/3)



In Focus: The Himalayan Blackberry (1/2)



The **Himalayan blackberry**, a species native to western Asia, was introduced to North America in the late 19th century and has since become a highly invasive plant in many parts of the continent, including western Canada.

This hardy and adaptable plant has thrived in a variety of habitats, from forests and fields to roadsides and disturbed areas. It can reach heights of up to 3 metres, forming dense thickets with its arching canes.

These photos were taken on the Hemlock Hill path.

Left: a juvenile vine maple tree is under there somewhere!

Right: the leaves of the Himalayan blackberry are compound and composed of 3-5 leaflets with serrated edges.

The other invasive species of blackberry found along the Trail, the **Cutleaf blackberry**, can be identified by its deeply notched leaves (see Page 4).

Both species produce beautiful white to pale pink flowers in late spring or early summer, which develop into juicy, sweet, and edible berries in late summer or early fall.



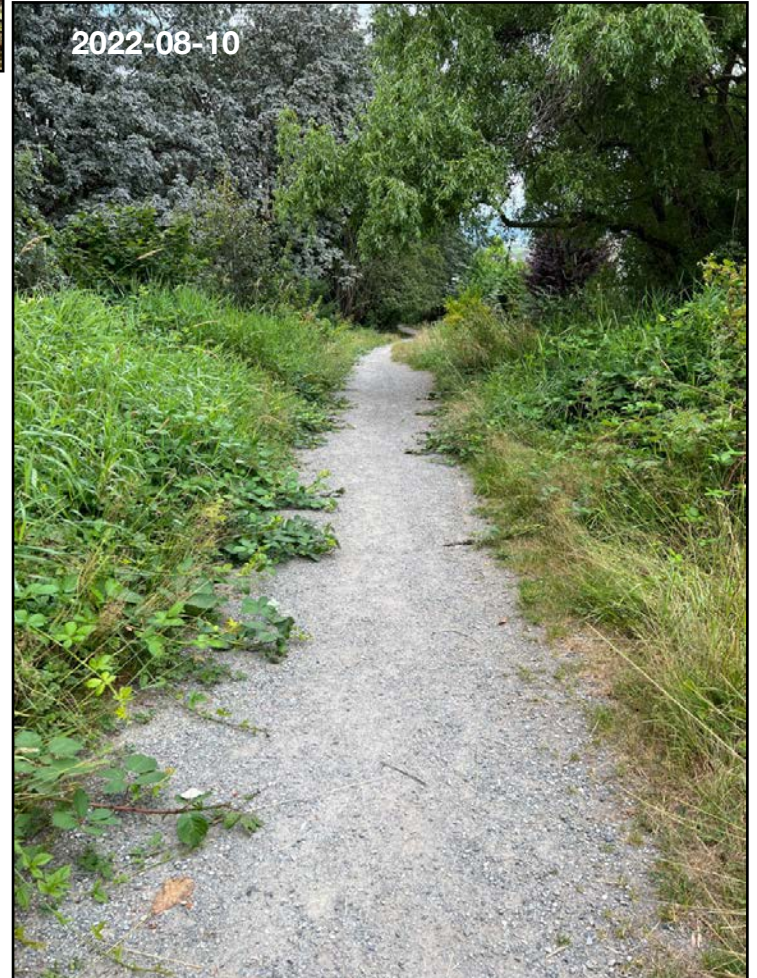
The Himalayan Blackberry (2/2)



The aggressive growth of the blackberry and its ability to outcompete native plants pose a significant challenge for ecosystem management. Continued efforts are needed to control its spread and minimize its impact on native biodiversity.

Left: in May, 2022, the blackberries beside the Hemlock Hill path were severely cut back by a crew hired by Parks and Recreation at the beginning of the growing season.

Below: By August of that year, three months later, the blackberries were again creeping over the path in a hazardous manner.



As you can see, an attempt was made to manage the spread of the Himalayan blackberry through manual removal. However, the inability to eradicate by methods short of herbicide application and biological control methods means that the plant will continue to be a problem in several areas along the Trail.

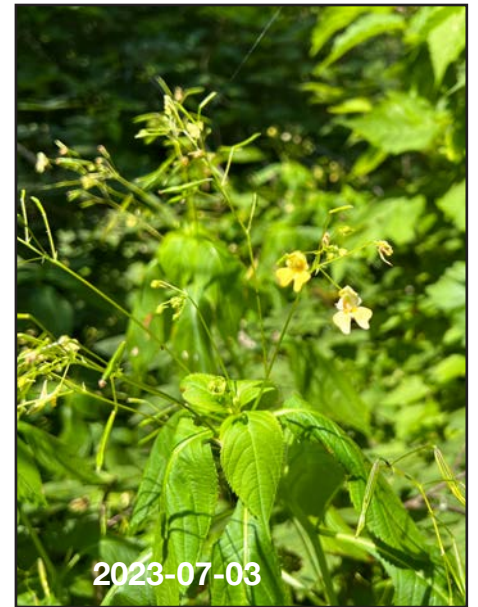
Changes to the Trail in a Decade



View downstream from Bridge 5



Odds and Ends

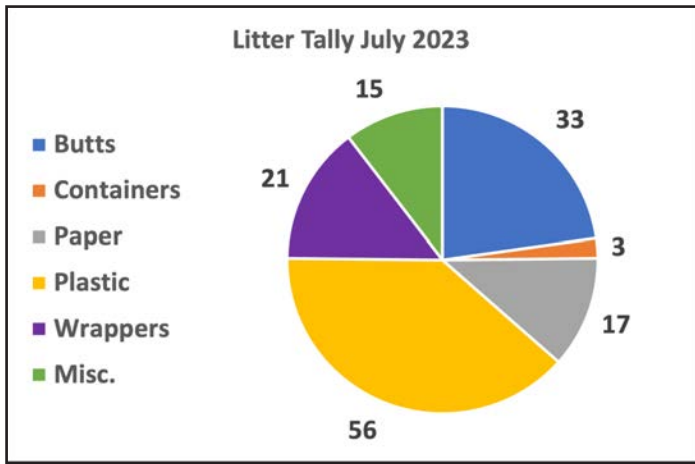


Top: a new and growing **Painted Pebble** display; these **Orange** and **Yellow jewelweeds** are native relatives of the invasive Himalayan Balsam.

Middle: Allergy specials, **Beardless wildrye** and **Orchard grass** and **Timothy** just dripping with pollen.

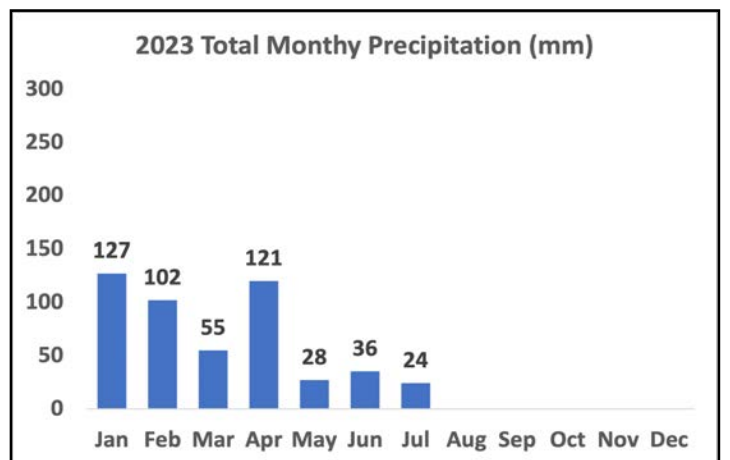
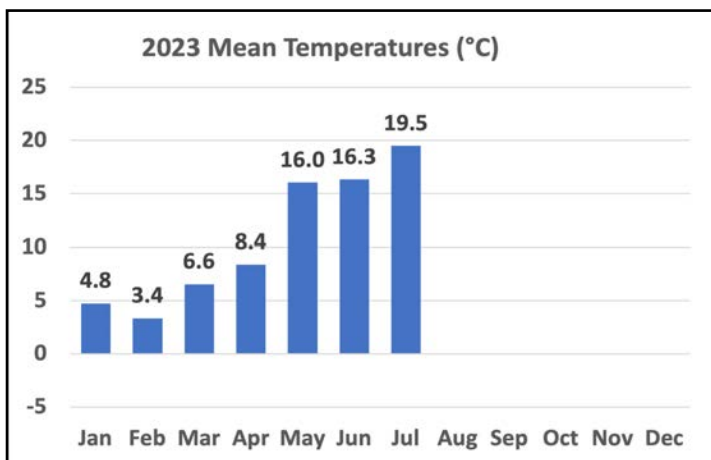
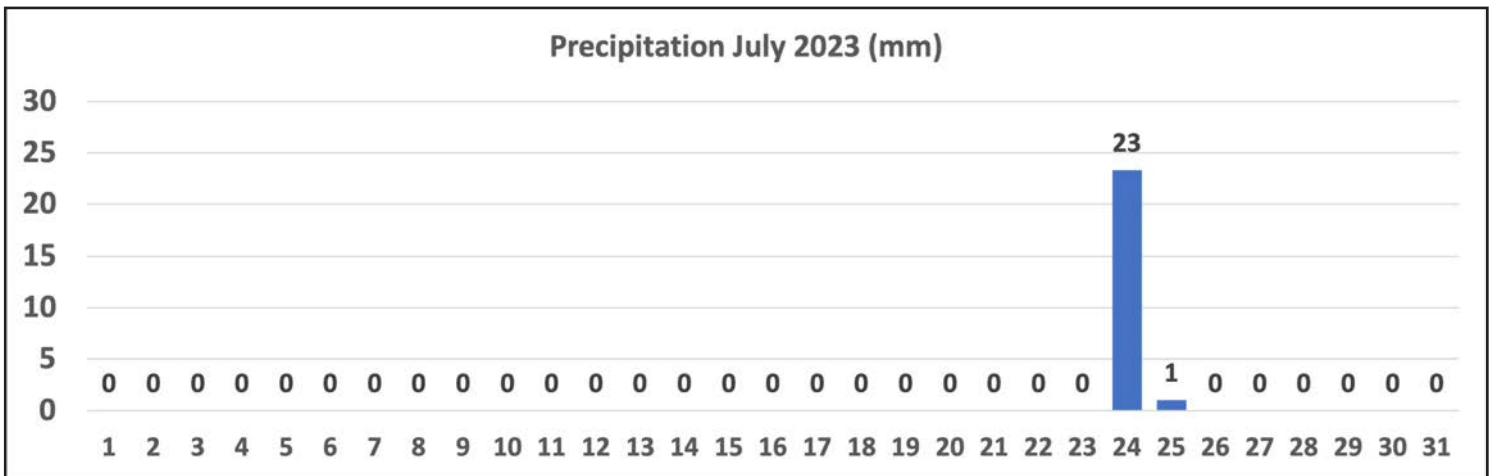
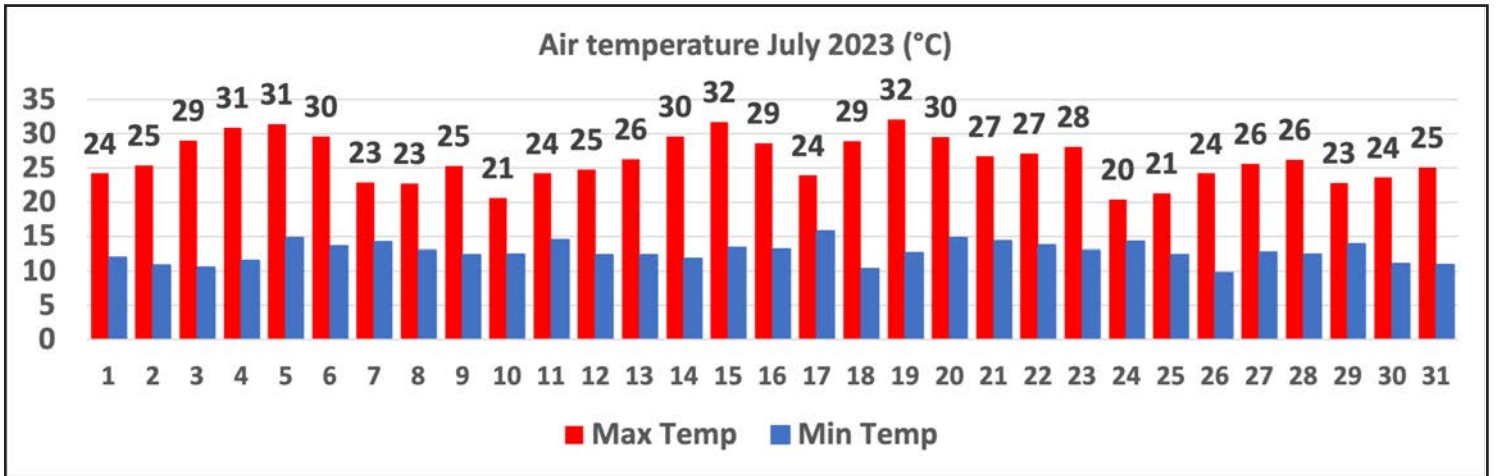
Bottom: A **Fringed willowherb**; a **Signal crayfish** and a **Pacific lamprey** found in the Creek by **Mikayla R.** and **Emma W.**





Litter items included in this report:

- Containers:** bottles bottle tops, cans, coffee cups, juice boxes.
- Paper:** tissues, napkins, receipts, newspaper, cardboard, etc.
- Plastic:** dog poo bags & shreds, other items made of plastic.
- Wrappers:** candy wrappers, foil, cellophane.
- Miscellaneous:** clothing, glass, chewing gum, balls & fragments, etc.



For convenience, I use these custom place-names:

