



**Stoney Creek Trail Report
No. 85 - April 2026**

INDEX

Page 3: [Green Infrastructure](#)

Page 7: [Big Photos](#)

Page 11: [Millipede](#)

Page 12: [Odds & Ends](#)

Page 13: [Charts](#)

Page 14: [Photomap of Trail](#)

The front page shows a striking photo of the flowers on the large red currant bush, a plant native to the Pacific Northwest. It was taken on Hemlock Hill on March 27th, which indicates how early this shrub blooms.

Although the flower cluster looks like one big, elaborate blossom, it's actually a *raceme*—a long central stem lined with many small individual flowers. The flowers at the bottom of the raceme (closest to where it attaches to the branch) open first, and blooming continues along

the stem over time. Each pink, bell-shaped unit you see is a complete, individual flower. If you were to remove one, you'd find it has its own petals, sepals, and reproductive structures.

For something new, I've published a series of large photos starting on page 6. Incidentally, the photo on page 9 gave a surprise—I didn't notice the tiny spider until later, when I processed the photo for publishing. It's a sheet-web weaver ([Neriene digna](#)).

You will have noticed that the off-leash signs along the trail were abruptly removed last week. Have you seen a public notice about this? I was told by a City official there was an administrative review of off-leash areas. They are working “to better align the Parks Bylaw with the Fraser Valley Regional District Animal Control Bylaw.” There will be a broad discussion about the off-leash areas across Abbotsford's park system and the new strategy “is anticipated to launch no earlier than 2027.” Why not leave the signs up until the new system is launched?? In the meantime, dog owners, please act responsibly!



There is growing concern about toxins in rivers and creeks across BC. Over the past three years, several major organizations in the province have held workshops to address the problem of 6PPD-quinone (6PPD-q). As noted in previous trail reports, this toxin is produced from tire-rubber dust on streets, but it can also come from tire-rubber crumbs used as infill in some synthetic turf fields, artificial lawns, and certain playground surfaces. These workshops have focused on creeks on Vancouver Island and the Lower Mainland, and their findings may be useful for Abbotsford as well. A number of provincial and federal green-funding programs could potentially support local efforts.

The following feature outlines several possible methods of remediation for Stoney Creek.

Green Stormwater Infrastructure (1/4)

Stoney Creek Park is surrounded on all four sides by paved streets. According to the Abbotsford Webmap, there are five storm drain outfalls between Laburnum Ave at the top end of the park and Bateman Rd at the bottom. As described in my [February trail report](#), water samples taken at two of these locations gave evidence that 6PPD-q (a toxin created when the tire additive 6PPD reacts with ozone) had entered our storm drain system during rain events and could have been present during the arrival of spawning salmon.

Two species of fish in Stoney Creek, coho salmon and coastal cutthroat trout, are especially sensitive to 6PPD-q. A green replacement for this poisonous chemical is not yet available. For now, we could try to intercept road runoff and remove as much of this toxin as possible before it gets to the outfall. From an engineering perspective, green stormwater infrastructure (GSI) has been identified as one of the most promising tools for doing so.

Here are examples of various types of GSI.

Rain Garden:

A rain garden is a shallow, landscaped depression designed to capture and soak up stormwater runoff. It is filled with a mix of sand, compost, and topsoil in which hardy native plants able to tolerate wet roots and drought are planted. It could be small enough to be a backyard project.

Rather than allowing rainwater to rush into a storm



drain, a rain garden acts like a filter, holding the water temporarily while the soil and plant roots trap sediment and filter out pollutants. It reduces the volume of runoff that would otherwise overwhelm municipal sewer systems during heavy downpours. It allows water to seep back into the ground, replenishing local groundwater supplies.

Rain gardens are a low-maintenance way to add curb appeal to a property. Because they rely on native plants, they often become mini-habitats for birds, butterflies and bees—small ecosystems in backyards or parks.

Green Stormwater Infrastructure (2/4)



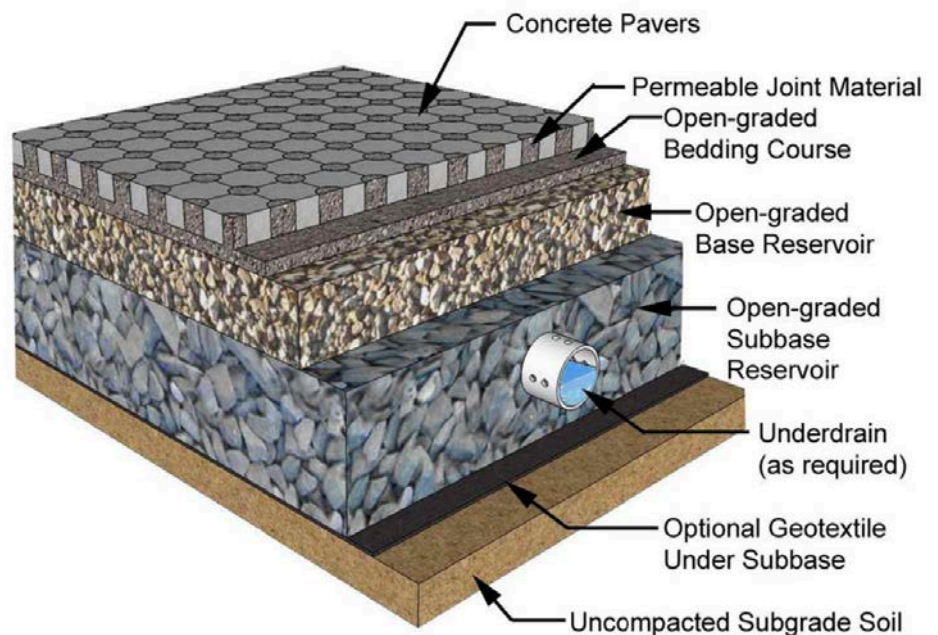
Bioswale:

A bioswale is a wide, shallow trough or channel that can replace or sit alongside a street gutter. It filters water before it enters the sewer system or outfall. It is lined with check dams, and a special mixture of sand, soil, and vegetation to slow the water down, preventing runoff flashes. It will remove metals, hydrocarbons, and some dissolved pollutants.

Permeable pavement:

Permeable pavement can be made with concrete, stone, or asphalt engineered with "void spaces" that act like a giant sponge for rain. A base layer of crushed aggregate stores water temporarily while it soaks into the ground. It will allow water to reach nearby trees as well.

It is complicated and comparatively expensive, as the installation has to be "power-blown" occasionally to prevent the pores from clogging. It is typically used in low- to moderate-traffic areas.



© D.J. Sample

Green Stormwater Infrastructure (3/4)

Bioretention cell (engineered stormwater system):

This is essentially a large, complex rain garden built on a municipal scale. It contains special "engineered" soil designed to meet specific standards for water volume and filtration at a higher rate while capturing, treating, and slowly releasing stormwater. In addition to aggregates, sand and soil, bioretention cells increasingly contain activated carbon which is very effective in removing 6PPD-q. They eventually fill up and have to be cleaned and the activated carbon replaced.



Placing green stormwater infrastructure in Stoney Creek's urban setting would be a challenge. It would involve the installation of rain gardens and bioswales to intercept street runoff on its way to the Palfy and Bateman outfalls. *It is not necessary to treat all the runoff* to reap meaningful benefits—early runoff carries most of the pollutants. Capturing and treating it could significantly improve the water quality.

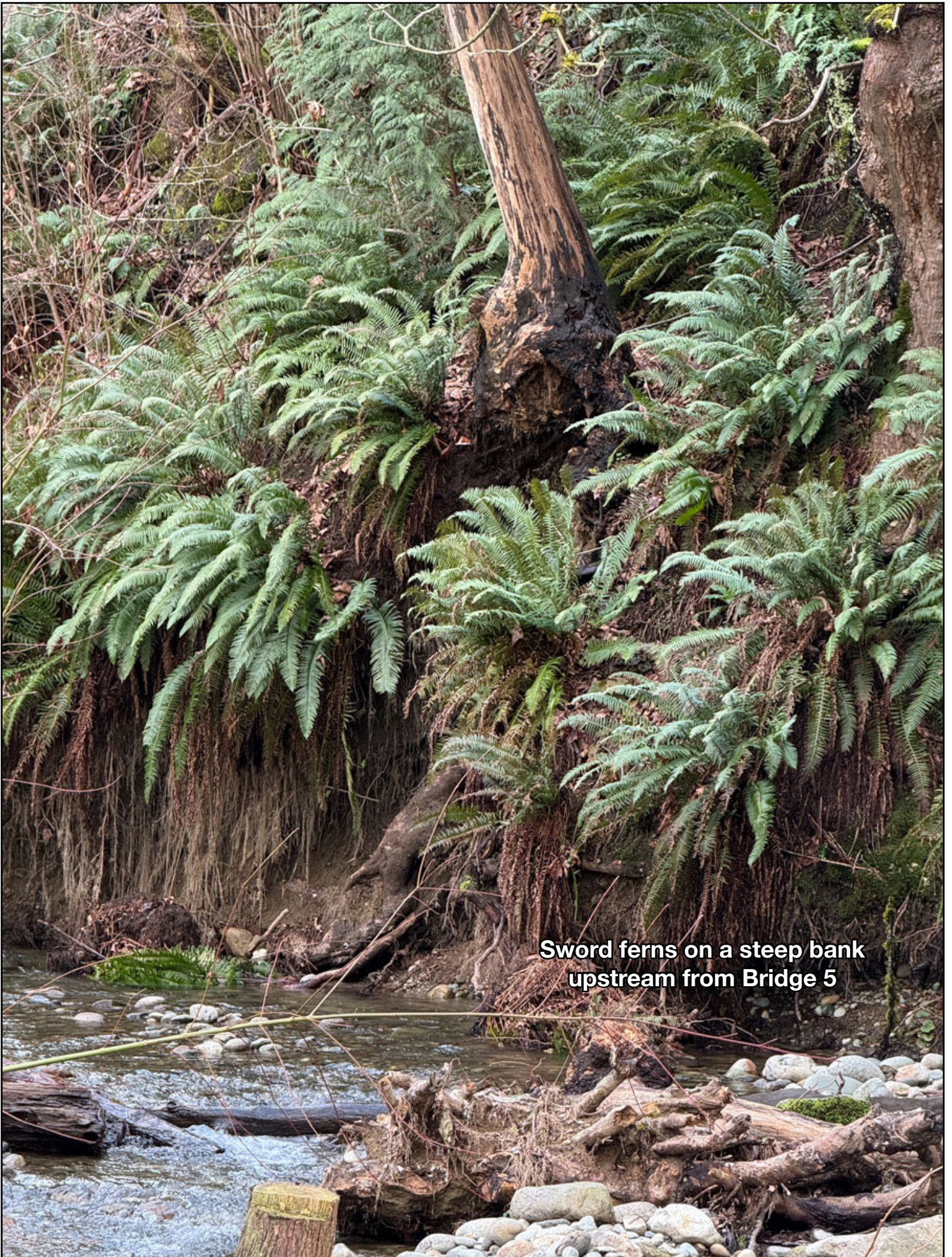
Much of the work has already been done. We have research results, water-quality guidelines, environmental regulations and engineered designs. Abbotsford already has several bioretention cells in place and there are many municipal GSI installations elsewhere in the Fraser Valley. Protecting Stoney Creek's salmon and aquatic ecosystem depends on leadership, accessing funding, and greater public awareness.

The St. George Rainway Project in Vancouver (4/4)



The Rainway consists of a large-scale series of bioswales and bioretention cells ("rain gardens") built where St. George Creek once flowed. It's planted with Pacific Northwest flowers, shrubs, and grasses. It is a community-driven initiative, being built to achieve several goals including water management, ecological restoration, and traffic calming.





**Sword ferns on a steep bank
upstream from Bridge 5**



**Bigleaf maple flowers at
the Hearthstone entrance**

Giant horsetails near Bridge 5



One-centimetre-tall trumpet cup lichen on the Dog Corral fence rail



Yellow-Spotted Millipede - the "Insect of the Month"

The Yellow-spotted millipede (*Harpaphe haydeniana*) is found mainly in the moist forests of the Pacific Northwest. This one was buried under leaf litter on Hemlock Hill.

It is also known as the almond-scented millipede, after its defensive odour. The dark colouration with contrasting yellow-tipped keels warn of its ability to exude toxic hydrogen cyanide. This means it has few predators. The cyanide secretions are not dangerous to humans, but can cause irritation and pain if it contacts sensitive areas such as the mouth, eyes, or nose.

The Latin name *Harpaphe* comes from the Greek harpe meaning hook, referring to the curved body segments, while *haydeniana* comes from the American explorer of the West, Ferdinand Hayden.



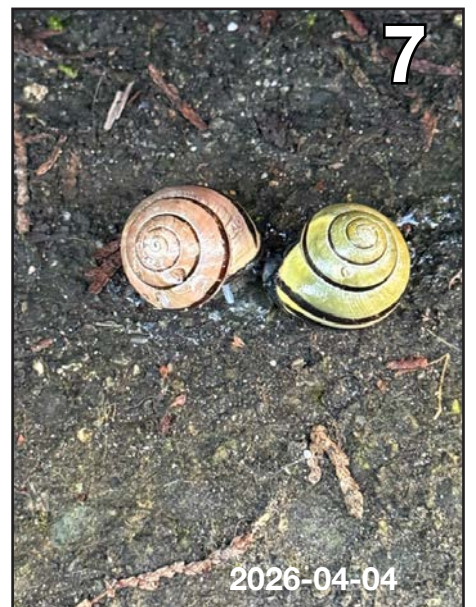
Harpaphe haydeniana reaches a length of 4–5 centimetres when mature. The upper surface of its body is black to olive green and distinctively marked along the sides with patches of a yellowish colour. It has approximately twenty body segments and about 30 pairs of legs. As they molt and grow, millipedes become darker, the spots get brighter, and they add body segments with each molt. As they move, their many legs create a smooth, wave-like motion that helps them slip easily through dense leaf litter. Individuals may live for 2–3 years.

The Yellow-spotted millipede is an important part of the forest ecosystem, breaking down leaf litter, freeing its nutrients for other organisms.

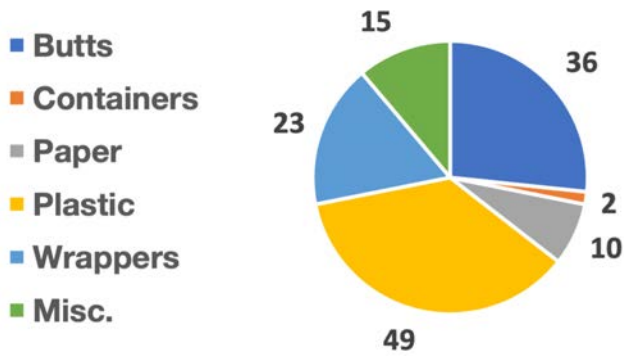
Odds & Ends



1. The shy trilliums are blooming again!
2. Japanese quince on Hemlock Hill.
3. It's good to see a clump of the rare Pacific waterleaf beside the path near the Latimer entrance.
4. A motionless great blue heron in the Bateman Pool.
5. Dull, short-growing Oregon grape (*Mahonia nervosa*) on Hemlock Hill.
6. Glossy, tall-growing Oregon grape (*Mahonia aquifolium*) across from the Dog Corral.
7. A pair of brown-lipped snails meet in the Hearthstone Court entrance.



Litter Tally April 2026



Total litter items = 135

Containers: bottles, bottle tops, cans, coffee cups, lids, juice boxes.

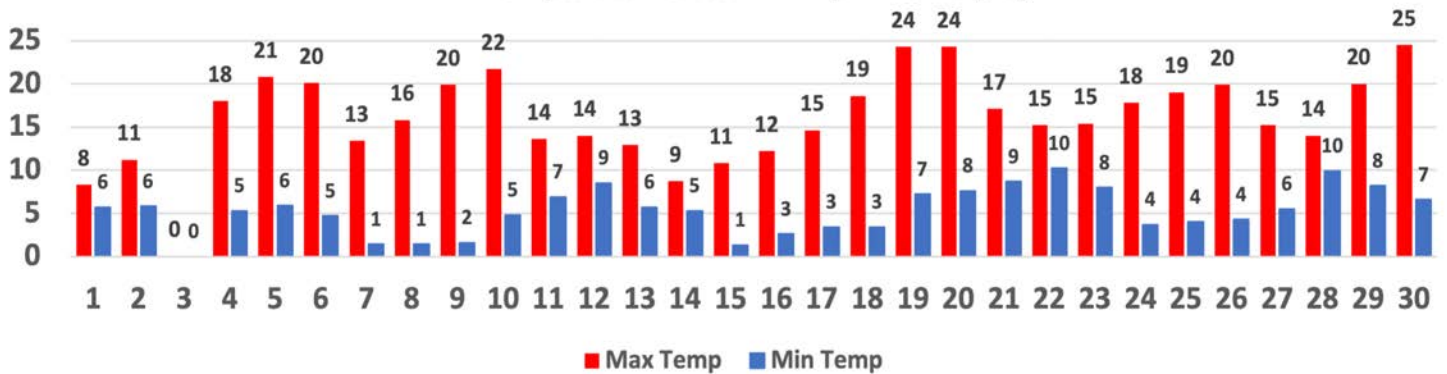
Paper: tissues, napkins, posters, newspaper, receipts, cardboard, etc.

Plastic: dog-waste bags & shreds, other items made of plastic.

Wrappers: candy wrappers, foil, cellophane.

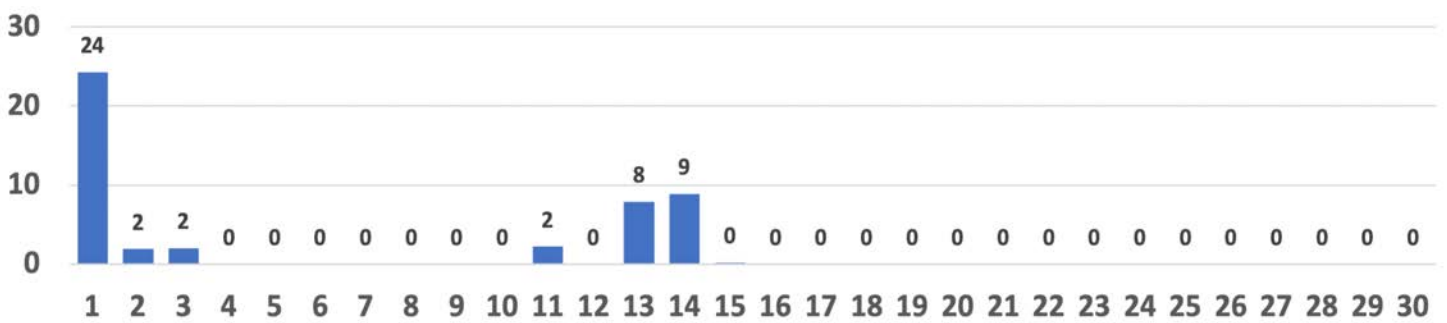
Miscellaneous: clothing, glass, chewing gum, dog balls & fragments, etc.

Air Temperatures at YXX April 2026 (°C)



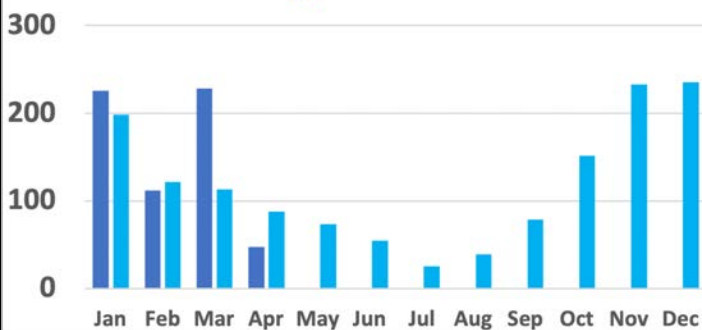
Precipitation at YXX April 2026

Total = 47.4 mm



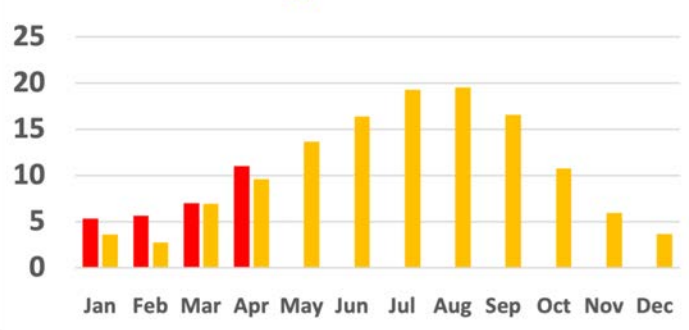
Precipitation in 2026 (mm)

Average: 2019-2025



Average Temperatures in 2026

Average: 2019-2025



For reference, I use these custom place-names:

