

Gabriola Streamkeepers—Water levels and quality

Observations at Coats Marsh, Gabriola Island

—with notes on Coats Marsh Creek, East Path Creek, and Stump Farm Streams.

References:

[RDN Coats Marsh Regional Park](#), 2011–2021 Management Plan, Appendix A.

[Coats Marsh hydrology](#) .

Coats Marsh RP and 707 CP Trail [Maps](#): Maps Y and Z.

Gabriola Stream and Wetlands [Atlas](#) .

Coats Marsh Species [Checklists](#) .

Coats Marsh – human disturbance of migratory [ducks and geese](#).

Field observations—2017 (October—December)

THIS FILE ([Field Observations 2017-3](#)) IS A SUPPLEMENT TO:

“[Observations at Coats Marsh, Gabriola Island](#)” File: 673.

For an up-to-date list of supplements see [here](#) .

October 2, 2017 (day +807, 731+76):

A flock of ring-necked ducks, resting, and a lone, American widgeon. Earlier arrivals still here.



October 9, 2017 (day +814, 731+83):

Very quiet, almost silent.

There are probably over twenty species of grasses in the park, many introduced. One of my favorites is bentgrass (*Agrostis capillaris*). It catches light like a mist and has a touch that's lighter than that of any feather. In parts of Britain, "bent" was once a



word for ungrazed sun-bleached grass, or a landform covered with same. I'd like to think bentgrass is so named because it's so easily flattened by wind and rain in the fall, but it isn't.

October 11, 2017 (day +816, 731+85): Cistern level -214 mm SCB. Weir -145 mm WPB (scale). NanRG cum. 54.2 mm.

Banded-woolly-bear caterpillars. Everybody more vocal after autumnal showers—flickers, jays, frogs, squirrels, towhees, sparrows, juncos, wrens. Families of American widgeons foraging together on the lake.



October 16, 2017 (day +821, 731+90): Cistern level -218 mm SCB. Weir -150 mm WPB (scale). NanRG cum. 69.0 mm.

Quiet. Everything waiting for something to happen. Dabblers on the lake again, mostly drabby-browns but one or two easily recognized ring-neckeds. Also possibly a grebe and even remotely possibly a ruddy duck in winter plumage.



Curious things, the size of midges, on the Marsh Trail near the clearings, drifting like thistle down until you try to catch one, and strikingly blue, as if they were miniature damselflies. Perhaps a smoky-winged ash aphid (*Prociphilus americanus*), but, living on what? Doug-fir, grand fir, alder, arbutus? No ash trees here (*Fraxinus* sp.). More likely, I'm reliably told, a cotton alder psyllid (*Psylla floccosa*).



Clumps of reed canary grass are common in the park. Some of the stems are over two metres high, which means I cannot reach up to their tips, unless of course they're "bent".

Mid-October isn't the usual time to find a new species

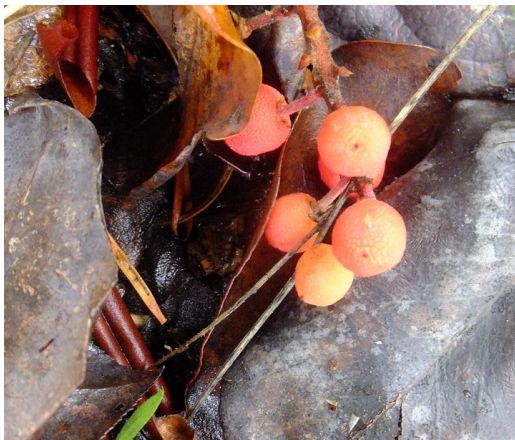


of wildflower, but here along East Path were a few not-noticed-before northern goldenrods in bloom; in the south of the province, more often found on mountain slopes.



October 20, 2017
(day +825, 731+94):
Cistern -157 mm SCB (+61). Weir -56 mm WPB (+94). NanRG cum. 140.8 mm (+72). Heavy rain, but creek beds dry. American widgeons and ring-neckeds.

Fall colours intense this year - the days get shorter and the wavelengths get longer - rosy gomphidius; ailing salal; blushing leaves of oceanspray and black hawthorn; bird-plucked arbutus berries; and the hanging fruit of honeysuckle. Bryophytes on the forest floor growing green while the luminous golden leaves of bigleaf maples add to the litter and those of all the deciduous bushes yellow away. Only season-denying alders stubbornly hold on to their green.



October 23, 2017 (day +828, 731+97): Pileated woodpecker. I know they're around but don't see them very often.

Leaf blight, a fungal infestation of arbutus (*Arbutus menziesii*), as prevalent as it was last year up here. It afflicts all the leaves on the smaller trees, but mostly leaves below the canopy on taller ones.



On a more cheerful note, chanterelle, unusual in that their caps are lemon-yellow and their stipes white (*Cantharellus cascadensis?*).

October 24, 2017 (day +829, 731+98): Cistern -123 mm SCB (+34). Weir -21 mm WPB (+35). NanRG cum. 165.0 mm (+24). Widgeons, fox sparrows, juncos, ravens, transient Canada geese, bald eagle, ring-neckeds, occasional small clouds of midges on the Ridgeway and a few dragonflies still in the clearings. All creeks dry.

October 30, 2017 (day +835, 731+104): Weir -30 mm WPB (-9). NanRG cum. 165.4 mm (0). Discharge from private property drainage pipe into Coats Marsh Creek. It's been running since October 20 but the creek-bed at the culvert is still dry.

October 31, 2017 (day +836, 731+105): Cistern -125 mm SCB (-2). NanRG cum. 165.4 mm (0). Recharge is late this year.



More than a dozen ring-neckeds and a few watchful widgeons. Flushed a hawk in the snags along the eastern margin, young Cooper's maybe. Old Pacific ninebark there too, prone but thriving. Don't often notice them, some leaves maple-like.

Robin's pincushions on baldhip roses in the clearings; they're hosting the larvae of mossy rose gall wasps (*Diplolepis rosea*).



November 6, 2017 (day +842, 731+111): Weir -7 mm WPB (+23). NanRG cum. 187.2 mm (+22). Frosty. Patches of snow.

November 7, 2017 (day +843, 731+112): Cistern -104 mm WPB (+21). NanRG cum. 187.2 mm (+22). The buffleheads have arrived for their winter sojourn. A dozen or more joining the ring-neckeds.



November 11, 2017 (day +847, 731+116): Weir -6 mm WPB (+1). NanRG cum. 203.2 mm (+16). Light rain, drifty wind, chilly and *dunkel*. Only the sound of footsteps and soughing in the canopy. Nothing flowing.

November 12, 2017 (day +848, 731+117): Cistern -79 mm SCB (+25). NanRG cum. 239.2 mm (+52). Heavy rain. Lots of ring-neckeds, counted twenty-five in a raft on open water but there were more; a few buffleheads, and a solitary mallard.



In clearings in the understory of the fir-forest, willows suddenly stand out, speckled with yellow teardrops as if by an artist's brush; alders finally surrendering their leaves creating carpets of olive brown... and pictures ideal for jigsaw-puzzles; Indian-plums with leaves, mostly saffron, sometimes wine-red, emerging from the trail-side shrubbery where they've gone mostly unnoticed by passers-by since early spring.



Puddles, bare branches, brown bracken, but over all, the ever green evergreens with seas of green salal below.





November 14, 2017 (day 850, 731+119): East Path Creek has begun to flow.

November 15, 2017 (day 851, 731+120): Weir +219 mm WPB scale (+225). NanRG cum. 310.2 mm (+107). Heavy rain. Coats Marsh Creek has begun to flow.

November 17, 2017 (day 853, 731+122): Cistern +130 mm SCB (+209). NanRG cum. 313.6 mm (+74).

I wonder why some Oregon grape leaves (*Mahonia nervosa*) turn brilliant red? Turning bronze (or burgundy, take your pick) might be a seasonal



effect (the cold), but I'm doubtful that explains the red. It sometimes affects only part of a leaf, and most of the neighbouring plants commonly retain all of their healthy green. Salal leaves do this occasionally too. Is there a pathogen at work here? ¹

Autumn red foliage is not common within the park. Apart from the O.G. there's minor contributions from trailing blackberries, thickets of hippeastrum wild roses, and occasional individual leaves of huckleberries, Indian plums, and other shrubs, but from infrequent to completely absent are the hawthorns, Pacific crab apples, Douglas maples,² red-osier dogwoods, and (dream on) vine maples whose reds would nicely complement all the yellows.

November 18, 2017 (day 854, 731+123): Trumpeter swans arriving.

November 22, 2017 (day 858, 731+127): Weir +445 mm WPB scale (+226). NanRG cum. 399.8 mm (+90). Heavy rain. Coats Marsh Creek flowing strongly.

¹ Probably not. In other parts of the island nearer the sea, reddening is less often seen. For an expert discussion of this question with no definitive answer see: Nicole M. Hughes, *Winter leaf reddening in 'evergreen' species*, New Phytologist (2011) 190: 573–581. <http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2011.03662.x/pdf>.

² Douglas maples have a reputation for being colourful in the fall, but the few I have seen on the island have been golden yellow, but with no red.

This has been such a good year for fall colours. For the past few weeks, you can walk the trails and without leaving them spot deciduous trees deep in the woods that you had no idea were there. Some you can even identify from afar by their shade of yellow and size of leaves.



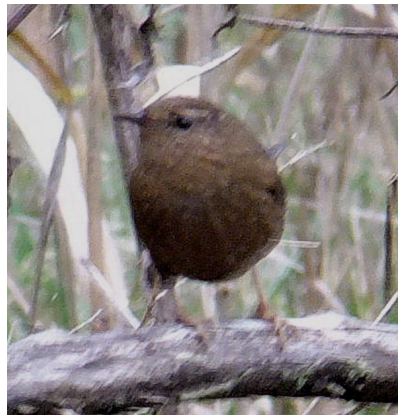
Today, three otherwise easy-to-miss species in the park: cascara, choke cherry, and Pacific crab apple.

November 24, 2017 (day 860, 731+129): Weir +366 mm WPB scale (-79). NanRG cum. 404.2 mm (+4).

November 26, 2017 (day 862, 731+131): Cistern +179 mm SCB (+49). NanRG cum. 431.2 mm (+128).

East Path Creek and NE Arm spillway flowing robustly. Usual ducks hanging out together, but the swans have moved on.

Into the NE Arm, a soggy sodden swampland; tawny reeds and grasses; one or two willows and struggling firs but mostly alders, leafless, catkined, and dappled with grey lichen; a few frogs and wrens; deer trails



that have become rivulets; shallow puddles aspiring to be ponds; in the salal margin a lone evergreen blackberry bush, a bashful intruder compared with its aggressive cousin.

"The day but a thin solution of night."



November 28,
2017 (day 864,
731+133):

A hunt for red-osier dogwood.

Score?

Wild roses 185:
Dogwoods 0.

Nutty! remarked
one spectator
from his seat



among the briars.

November 29, 2017 (day 865, 731+134): Weir +329 mm WPB scale (-37). NanRG cum. 439.8 mm (+36). Buffleheads and ring-neckeds. East Path Creek not flowing.



December 7, 2017 (day 873, 731+142): Weir +280 mm WPB scale (-49). NanRG cum. 451.6 mm (+12). Buffleheads and widgeons in fog being burnt off by the late-morning sun. Skims of ice in the shade. The lake unackered by the slightest movement of the air. A perfect inversion.



December 8, 2017 (day 874, 731+143): Cistern +169 mm SCB (-10). NanRG cum. 451.6 mm (+20). Fog lifting, now but sun-pierced misty wrack. ~~White cheese polypore~~, *Phlebia tremollosa*, I think, *Tyromyces chioneus*, on living alder.



December 12, 2017 (day 878, 731+147): Weir +259 mm WPB scale (-21). NanRG cum. 451.6 mm (0). Not much water from the pond leveller now, just a drindle, most of the water in Coats Marsh Creek is flowing over the sill. NE Arm is only flowing as it approaches the lake. East Path Creek bed is dry.



~~The white cheese is maturing nicely.~~

Ravens garrulous, rather disquietingly so when combined with slow swooshing wingbeats overhead as they move purposely from one treetop to another. But their world is not mine and the raucous mob soon moves on.

Further down the path where the undergrowth is thicker, flock of ruby-crowned kinglets, charmingly unperturbed by my presence, cheerfully foraging among the oceansprays' gone-to-seed brown blossoms.



December 22, 2017 (day 888, 731+157): Weir +378 mm WPB scale (+119). NanRG cum. 524.2 mm (+73). Pond leveller working flat out. Saplings along the trails arched over with the weight of ice-filled snow. A bauble tree.



December 29, 2017 (day 895, 731+164): Weir +366 mm WPB scale (-12)
NanRG cum. 553.8 mm (+30).

December 30, 2017 (day 896, 731+165): Cistern +190 mm SCB (+21) NanRG
cum. 553.8 mm (+102). East Path Creek running at near capacity with
meltwater. Ring-neckeds and transient mallards together in sizeable
groups on the open-water margins of the iced-up lake. A few
buffleheads here and there too, but being less sociable. ◇



Next [file](#).

Previous [here](#)