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.

RDN Coats Marsh Weir Assessment, June 1, 2020, SRM Projects.

Gabriola Riparian Areas, February 24, 2012, Madrone.

RDN Berm Report, September 12, 2013.

RDN Water Level Management, September 14, 2021, Madrone.

RDN NHC/EDI Weir Replacement Study, April 12, 2023.

RDN/NTBC Coats Marsh Weir Management Proposal, May 2, 2023.

RDN NHC/EDI Decommissioning Plan, December 18, 2023.

RDN NHC Beaver Dam Risk Assessment, January 10, 2024.

For an up-to-date list see <u>here</u> and for pertinent Gabriola Streamkeepers notes see <u>here</u>.

Coats Marsh hydrogeology.

Water-levels' summary.

Coats Marsh RP and 707 CP Trail Maps: Maps Y and Z.

Gabriola Stream and Wetlands Atlas.

Coats Marsh Species Checklists.

Freshwater fish on Gabriola Island, BC

Coats Marsh – human disturbance of breeding and migratory <u>ducks and geese</u>.

Coats Marsh – beaver dam stability.

Coats Marsh Management - paper on, weir decommissioning

Coats Marsh brief history.

Long-term precipitation (1944-2024) – <u>statistics</u>. Updated every month and used as the "normal" meaning average precipitation at Coats Marsh.

Field observations—2024 (Jun.—)

THIS FILE (Field Observations 2024) IS A SUPPLEMENT TO:

"Observations at Coats Marsh, Gabriola Island" File: 673.

For an up-to-date list of supplements see <u>here</u>.

<u>Jun.04, 2024</u> (day 3244, 2922+322):ViGRG cum. 1166.4 mm (norm. 1068 mm).

Scudding clouds and spitting rain; grasses tall and green; water-laden shrubbery arched over narrow footpaths threatening those who venture through with a soaking shower, (bit like a surfer riding a breaking mega-wave).

Some stretches of old logging turn-again lanes¹ through what were once cedar groves, now stands of alder, are vernal pools hosting water-plantains, marsh horsetails, water-parsley, angelica, and other wetland flora.

<u>Jun.07, 2024</u> (day 3247, 2922+325):ViGRG cum. 1166.4 mm (norm. 1073 mm).

Adela septentrionellae (fairy moths) on the first of the oxeye daisies. Associated with ocean spray in the nature guides but in the park they

always appear on the daisies before the ocean spray has flowered. The females sport reddish caps; the males, ridiculously long antennae.

Also on the oxeye daisies an interesting collection of beetles, possibly Scotch-broom-seed beetles, *Bruchidius villosus*. If that's what they are, introduced from Europe into the US and on finding that they control broom, have been used there as a control agent, probably entering a more cautious BC unassisted at the turn of the century. Here, they are missing their designated target, perhaps justifying caution. The oxeye-daisy disc is about 15 mm diameter.

¹ "Driving livestock from farmsteads or villages to and from fields [in the mid-sixteenth century] required narrow ways fenced on both sides so that animals did not wander into crops....If these ways dead-ended at the outermost field, locals knew them as "turnagaine lanes". John R. Stilgoe, "What is landscape", pp.158, 175-6, MIT, 2015.













Small red things:

fringecup (*Tellima grandiflora*)
male pileated woodpecker (*Dryocopus pileatus*)
sheep sorrel (*Rumex acetosella*), and
bicoloured flaxflower (*Leptosiphon bicolor*), not going to
make it, drying-out in moss, the wet season almost over.



 $\underline{\text{Jun.13, 2024}}$ (day 3253, 2922+331): ViGRG cum. 1169.6 mm (norm. 1082 mm).

In Upper Coats Marsh Creek, Pacific water-parsley (Oenanthe sarmentosa), water striders (sp.?), and cutthroat-trout fry (Oncorhynchus clarkii ssp.) 2 3. The lowest reaches still running.







² Subspecies probably *clarkii* (coastal, File <u>6103</u>, p.9, File <u>678</u>). Hoggan Lake was stocked in 1924 and 1927 with trout from Cowichan Lake, the common subspecies there being *clarkii* rather than *lewisi*.

³ Jethro Baker has also posted pictures of the fish on the <u>GSK Facebook</u> page, June 13.

<u>Jun.19, 2024</u> (day 3259, 2922+337): ViGRG cum. 1177.4 mm (norm. 1090 mm).

Report of beaver activity from 3 weeks ago. One sighting in the outer marsh(east end) late afternoon. Another sighting on shore at the weirpool after dark illuminated by moon and yard lighting. Seemed this animal may have been smaller than the long-time resident which is interesting if true.



Mallard family down to five ducklings, joined by an "aunt", all looking healthy, not fledged, but making progress. Loss is commensurate with usual loss due to predation.

Lack of migrant waterfowl due to avian flu virus H5N1 perhaps?

A Pacific ninebark (Phyocarpus capitatus) flowering.







Spiny rose galls (Diplolepis sp. bicolor or less-likely polita) on baldhip rose (Rosa gymnocarpa).

They're created by non-stinging gall wasps (Cynipidae).

Salal (Gaultheria shallon) blossoms copious this year. Some now shedding their bell-shaped array of connate (fused) petals in preparation for berry formation, but even so they're a bit behind compared with the Oregon grapes (below). They're very sticky at this stage.

Both make excellent jam, but I think the grapes are better. Salal berries are also difficult to detach without squashing them.











 $\underline{\text{Jun.23, 2024}}$ (day 3263, 2922+341): ViGRG cum. 1177.8 mm (norm. $\underline{\text{1095 mm}}$). Weir 189 mm WPB scale. [cal. datum: weir -0.458 m].

No outlet from the weir but the drainage pipe still running, but not enough to maintain any surface flow at the Marsh Trail culvert.



Evening. While waiting for shadows to lengthen and the beaver to pass by, entertainment provided by cedar waxwings, swallows, a goldfinch, a few hen mallards, foxgloves and a galaxy of oxeye daisies.







Spotted coralroot (Corallorhiza maculata)

The oxeye daisies are evocative of snow when densely packed, or whitecaps when it's blustery, but I prefer stars. Yellow discs emitting rays of white light.

Another flower that appears en masse in the greenswards this time of year is hairy cats-ear (Hypochaeris radicata).

♦ previous file

