

Friends of Mount Douglas Park Society



Winter 2017-18

New Bench Overlooking Blenkinsop Valley

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Salmon Carcass Transplant

When: 10:30 am, Saturday 27 January, 2018

Where: Edgemont Rd Park Entrance

Join us on Saturday, 27 January, 2018 for our seasonal salmon carcass transplant. We meet at the Edgemont access to Mount Douglas Park at 10:30 rain or shine. Special thanks to the Howard English Hatchery volunteers at Goldstream who will bring approximately 100 salmon carcasses - partially thawed! - which we will put into Douglas Creek. This transplant mimics the results of a large return of salmon to Douglas Creek. The carcasses



Can I take it home?

will decompose into the aquatic ecosystem delivering marine derived nutrients to riparian vegetation and invertebrate populations thus setting up the system for productive trophic webs. This activity does not take a long time. If we have a good turnout one and a half hours will do it. Wear rain gear, or old clothing, and rubber boots if you have them. We will supply cotton gloves. This is a great event for older children, but the creek banks are muddy, slippery and steep and the creek can be dangerous at high flows so each child under 16 must be accompanied by an adult.

Park Plan

A copy of our 32 page Society's Park Plan, 3rd edition, is being distributed along with this newsletter to current members. If you didn't receive a copy, then the upcoming salmon carcass transplant event is a good opportunity to renew your membership or use the membership renewal form on the last page of this newsletter. Your support through your membership is truly appreciated.

See the full colour version of this newsletter at <http://MountDouglasPark.ca>

South Ridge Trail Major Improvements

The lowest section of the South Ridge Trail near the junction with the Harrop Trail, is within the sandy south slopes of Mount Douglas. Heavy rains caused severe erosion of the sandy slope and, as is the case for almost all of the Park trails, increased usage has made a hollow within the trail that captures and concentrates the water flows, leading to even more erosion.

The restoration project's first priority was to divert the rain water from the trail. This must be done at several locations so as not to create erosion at the diversion. With the water diverted, some sections of the trail were stabilized with only minor changes, but the steeper sections required construction of stairs.

One section of the old trail had significant erosion that had spread creating multiple trails. This trail section has now been closed and bypassed.

Since it only takes a few off trail walkers to create a new trail in this area, split rail fences have been installed to protect these sensitive areas and keep people on the trails.



Steps constructed over steep loose sand section. Split rail fence keeps walkers on trail and protects adjacent sand allowing for recovery.



New section of South Ridge Trail

Society Work

The Society conducted an information session and membership drive in September.

Tireless volunteer invasive pullers John Jungen and Dick Battles toured the work areas with Saanich Parks Rick Hatch.

Saanich News featured a front page article about the Park preservation challenges related to dumping of trash and garden waste and also illegally taking plants from the Park.



FMDPS information and membership event.



John Jungen, Rick Hatch, Dick Battles



Drawn by Tia, Grade 5



Sounds of the forest

Douglas Creek Restoration Work Summer 2017

The final restoration section in our five year plan was successfully completed last July. The restored section was the 130 m just downstream from the weir. The support from Pacific Salmon Foundation with a grant this year of \$9250 is truly appreciated as is their endorsement of this project.



Director of Engineering, Harley Machielse attempts to hit the spike!



Saanich Urban Forestry plus Creeks & Waterways crews surround Machine Operator Gary – job well done by all!



Initial planning meeting with Parks Urban Forestry & Public Works Creeks & Waterways. Project lead Dave Clough, RPBio on the right.



Jordon Lamarche and Dave Clough measure dissolved oxygen



All creek water must be pumped around restoration area during work.

Restoration Planting

Trucks and machines and vegetation don't mix very well, hence the equipment access routes used to bring rocks and tree root balls to the creek must be restored. This restoration planting waits until the fall rains saturate the ground in November.



Park's Urban Forestry Don Illingworth



Rich Hatch from Parks Urban Forestry, provided top-notch planting instructions to 30 volunteers that planted 175 native plants.



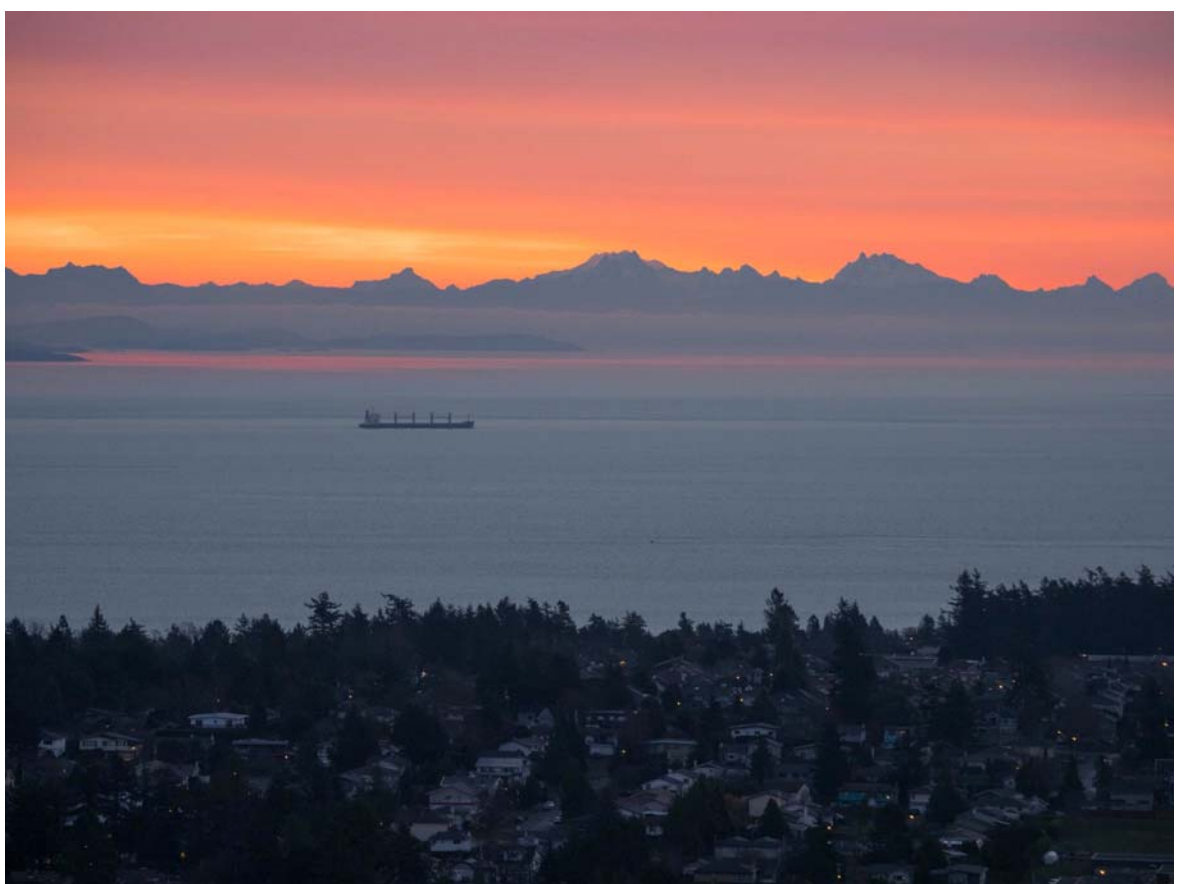
Volunteer Tia Greenwood enjoys planting

\$10,000 Presented to Saanich

Our Society topped up a \$9250 Pacific Salmon Foundation to \$10,000 which was presented to Saanich Parks for the most recent Douglas Creek restoration work.



Councillor Dean Murdock, Parks & Recreation Chair, accepts \$10,000 cheque from FMDPS president Darrell Wick.



Mark Vukobrat climbed to the summit for this sunrise photo.



Fall Colours from South Ridge Trail



Do you know your mushrooms?

Ambassador Program

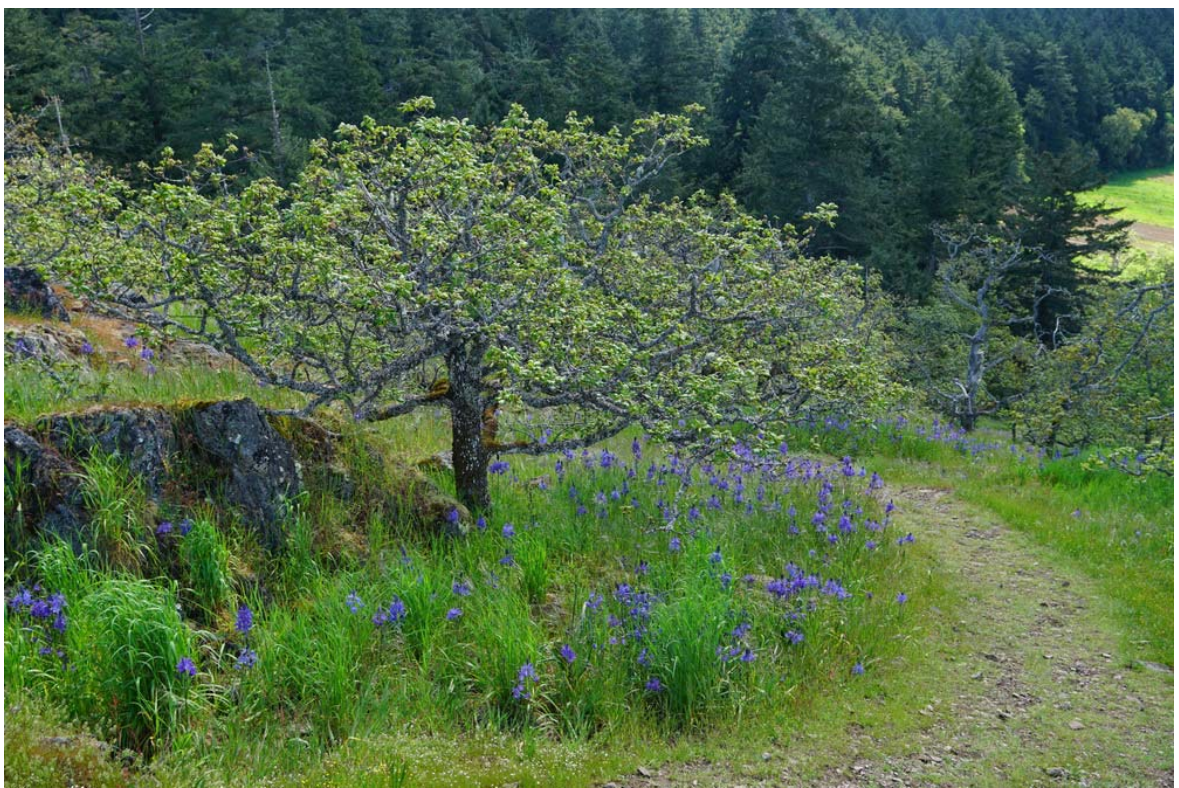
Saanich Parks and the FMDPS are jointly sponsoring a Park Ambassador program. Volunteers will walk the Park trails at various times providing trail and other information to visitors. The details are being developed with plans to start early summer 2018.

Parking Changes

A new limited mobility parking space has been created in the lower Churchill parking area. At the beach parking lot, the old wood car stops had deteriorated and have now been replaced with new low concrete wheel stops.

New Benches

The Friends of Mount Douglas Park Society donated two new benches for the Park. The first can be seen along Churchill Drive at the Irvine Trail crossing. The other bench (cover photo) is on a knoll about half way up the Blenkinsop Trail. It provides a truly wonderful view of the Blenkinsop Valley and the Sooke Hills beyond.



Trail passes through spring colours, Garry Oak and camas



Turkey vultures soaring around summit



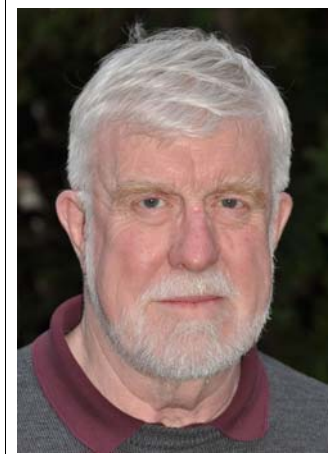
Fall Maple leaves in the beach picnic area



Mt Baker from southeast summit

Society Treasurer Graham Shorthill Retires

Graham was one of the founding board members of the Friends of Mount Douglas Park Society way back in 1989, almost 30 short years ago. At the time, a wise local activist said “You know, you're in this for the long run!”. Fortunately Graham is only passing on the position of treasurer and promises to continue as a board member, a promise we intend to ensure he keeps! Graham knows so much of the Society and the Park history and we really depend on that knowledge and expertise. Graham helped write the Park Charter with the words “wilderness preserve for generations to come” and his work has truly supported those words. Who now is going to accept this challenge to ensure it is preserved for the next generations? We all thank you, Graham!



Graham Shorthill



Victoria and Olympic Mountains from main summit

Coho Returns – South Island Streams 2017

Guest article by Peter McCulley, Technical Advisor Salmonid Enhancement Association, Howard English Hatchery at Goldstream. Peter has been a long time supporter of Douglas Creek and along with the other volunteers at the hatchery has made the reintroduction of salmon in Douglas Creek a reality.

Most South Island streams and rivers experienced disappointing returns of coho this Fall. The consensus from fisheries scientists is that juveniles migrating to the ocean in 2016 experienced unusually warm temperatures in their first year at sea. Higher temperatures meant increased activity levels for the young fish which required more food. However, warmer water tends to produce poorer quality and less nutritious species of zooplankton upon which young salmon feed. Their survival suffered and there wasn't much fisheries managers could do about that.

However, in my opinion, there was an area where DFO should have exercised greater oversight. The Department allowed an extremely aggressive net fishery to be conducted in the approach waters to Saanich Inlet. At one point there were over 100 seiners and gill netters harvesting chum salmon in this area. The problem is that coho, chinook and steelhead intermingle with the chum and are swept up as by-catch in the nets. Our observers saw little attempt to protect these non-targeted fish. No telling how many by-caught fish were sacrificed. Goldstream River experienced the lowest return of coho in twenty five years; extremely disappointing to the volunteers at the Goldstream Hatchery.

Editor's note: Douglas Creek salmon typically return for spawning during November. The good story was there was ample rain and creek water for the salmon to migrate upstream, the bad story was that the water was turbulent making sightings difficult. We didn't see any live salmon. However, the good news is that after the water levels subsided, several redds were identified in the spawning gravel.

Douglas Creek Status and Challenges

Large numbers of spawning salmon along with cutthroat trout were a common sight in Douglas Creek up until the start of Gordon Head urbanization in the early 1960s according to long time residents.

As forest and farmland were converted to houses and streets, the engineering paradigm at the time was to “get the water into a pipe as soon as possible”. This resulted in a highly efficient storm water delivery system that quickly overwhelmed the creek; banks eroded a metre or more and spawning beds were washed out.

Douglas Creek restoration, under the guidance of a professional biologist, began in 2010. This work included armouring the banks with large boulders, cabling woody debris and tree root balls between rocks and introducing spawning gravel. A section of perhaps a little more than 100 m was completed each year until the entire creek restoration was completed in 2017. This represents a very significant investment of time and money in the stream channel. We do not want to lose this effort to poor headwater infrastructure.



Low and high water as seen from the same location

There is a serious overall decrease in salmon populations, making every potential spawning creek, even small ones like Douglas Creek, all the more important.

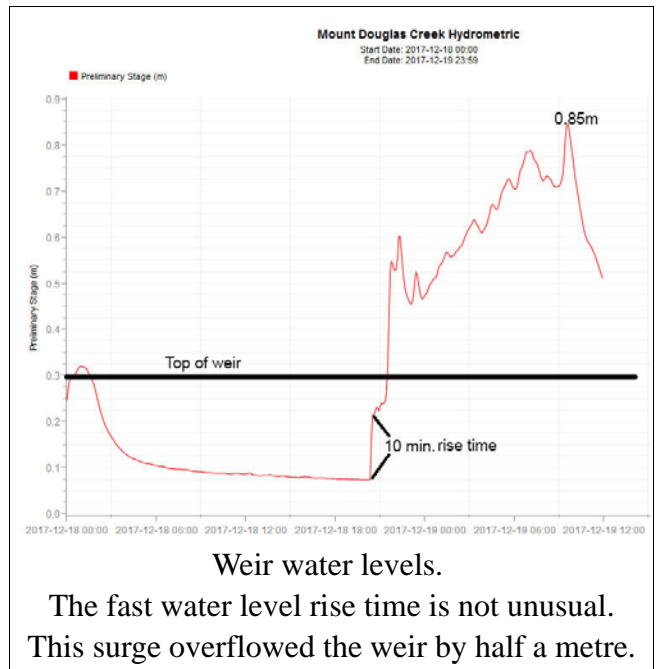
Following the final restoration work this summer, an assessment of the creek was performed and found that:

- Water quality measurements regularly performed by the CRD were good but did show issues with first flush rains. In fact, according to the CRD, water quality was as good as, if not better than, some other local creeks that currently support good salmon returns.
- Sediment analysis showed pollutant levels were sufficiently low to not be of major concern. This analysis provides information about short-term pollutants that might be missed by periodic water quality sampling.
- Invertebrate levels within the creek were found to be seriously low, while invertebrate levels in close by tributaries were good.
- Summer water levels are low but remain steady throughout the summer dry season.

Now that Douglas Creek has been successfully restored with very positive assessments, what impediments are there for spawning salmon, salmon fry and smolts?

There are multiple issues:

- Extreme storm surges that are estimated at over 100 times the normal flow levels (See photos). Surges of half a metre over the weir have been recorded. Records show regular heavy rain intensities.
- With respect to invertebrate numbers, multiple professional biologists state the invertebrates are being washed out by the storm surges, along with invertebrate food and allochthonous debris (leaves, bark, small sticks, needles, logs). We note that invertebrate levels in tributaries are at good levels only a few centimetres from Douglas Creek where they are protected from surges.



- It's reasonable to assume that any fry or smolts would similarly be washed out.
- Storm surges regularly exceed the design capacity of the weir as a floating pollutant trap. Ideal water levels, both for the function of the weir, and especially for the creek, would not exceed the weir height.
- There are strong indications that summer creek water is coming from one or more springs in the Shelbourne / Cedar Hill Road region. This spring water is certainly dependent on good water table levels.

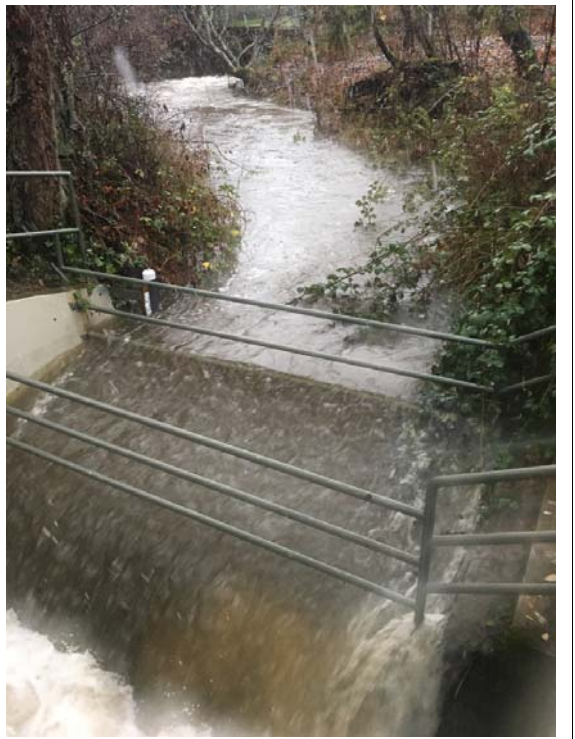
Douglas Creek, what is next?

There are two general goals:

First, the likelihood of summer creek water needs to be confirmed. If there are springs, they need to be identified and protected.

Second, the excessively large storm surges need to be reduced. There are multiple possibilities:

- Analysis of impervious surfaces within the watershed, totalling surfaces from streets, driveways, walkways and rooftops, half of that impervious surface area is rooftops. Worded differently, half of the storm surge water comes from rooftops.
- It might be possible to divert storm water from some areas so that it never enters the creek.
- Incentives to reduce impervious surfaces would help as would more and better rain gardens or street swales.



Water half a metre over weir, even flowing over lower railing.



Example of low and high water.

The recent bank armouring with rocks and tree root balls has stopped further erosion.

Board of Directors

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Twitter	Ed Wiebe	1628 Longacre Drive	V8N 2N1	721-4483
At-large	Nancy Lewthwaite	1559 Mt Douglas X Road	V8N 1Z9	658-0763
At-large	Alan Walton	4236 Parkside Pl.	V8N 4V5	477-5003

Membership Renewal - Gift Membership

Providing information via this newsletter about the Park is an important Society function. We want to reach more Park users and Park neighbours. Why not **give someone you know a gift subscription and include it with your renewal**? A one-year membership isn't much more than the price of a good cup of coffee! You provide the gift and we'll send notification to the recipient of your generosity. We hope you will continue to support the work of the Society for another year.

Gift From _____

New Member (or renewal) form:

Name: _____

Email _____

Address: _____

Postal Code _____ Telephone No. _____

Membership **4 years \$20** 3 years \$15 2 years \$10 1 year \$5

Send or deliver to: Treasurer, Friends of Mount Douglas Park Society
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<http://www.mountdouglaspark.ca>

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