Friends of Cypress Provincial Park Society
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Fall/Winter 2018 Newsletter

Friends of Cypress Provincial Park's Summer Activities

So what did we do this summer?

• **Summer Walks and Hikes – co-sponsored with Nature Vancouver:** Friends of Cypress Provincial Park in conjunction with Nature Vancouver sponsored 8 very successful walks with engaging leaders and engaged participants. Each of the walks showcased different aspects of the park: June and July walks around Yew lake with innumerable stops to wonder at the change of vegetation through the season; a third walk around Yew Lake in September (change in vegetation again), and then to Bowen Lookout; the Gentian Lake hike with the return via West Lake; the hikes to Eagle Bluff and to Hollyburn Peak where the rooty and stony nature of the trails requires constant vigilance and the inclines deep breaths.


Gail Ross with engaged participants on the Yew Lake Trail

• **West Vancouver Community Day and Coho Festival:** Both days draw people not only from West Vancouver but from the broader Vancouver community. Friends of Cypress shares a booth with of the Old Growth Conservancy Society (OGCS). Both FCPP and the OGCS members engage people in discussion about the importance of conservation and preservation. Well displayed visuals and hands-on materials attract people to the booth. Many people become aware for the first time that Cypress Bowl Ski Resort is actually within Cypress Provincial Park. Flower brochures and maps are available. FCPP Board members are always grateful for the participation of FCPP members at the booth on both the West Van Community Day and at the Coho Festival.

• **West Vancouver Cypress Liaison Meetings:** Twice a year the District of West Vancouver brings together various groups with connections to the West Vancouver Upper Lands. A member of the FCPP Board attends as does someone from Cypress Bowl Recreation Limited and Parks. As development of the upper lands proceeds many issues of importance are raised and discussed such as increased traffic, increase in park use, the spread of invasive plants.

Park Projects and Trails Work

• **Environmentally Sensitive Area Signs:** As reported in our 2017 Fall/Winter newsletter FCPP designed and funded ESA signs (replacing Parks' delaminated signs). Mike Castle, former director, is adjusting the signs so that they can better withstand winter conditions. They will then not have to be collected at the beginning of the winter and reinstalled in spring. We hope to have our new ESA signs installed as well at First and Gentian Lakes.

• **Baden-Powell Black Mountain to Eagle Bluff Trail:** In 2016 Rangers and FCPP had determined that reroutes around steep granite rock slopes on the Black Mountain Trail en route to Eagle Bluff needed the most immediate trail work attention. We anticipated that trail work on those reroutes would begin in 2017. However, as reported in our Spring/Summer 2017 Newsletter internal park difficulties led to a delay in hiring a trail crew. This year, we are pleased to report that six Student Rangers, working with Ranger Simon Debischopp, worked on the two reroutes over a 6 day time period. Further work on those trail reroutes and other improvements to the trail will hopefully begin next year. As we have previously reported FCPP has donated $40,000 to the Park Enhancement Fund designated specifically for improvements to that extremely popular high use trail. The work of the Student Rangers did not draw upon those funds.

• **Howe Sound Crest Trail:** Completion of the HSCT to the summit of St Marks will clearly take several more seasons. “We have 1.5m to go - and are progressing at 200m per year” in the words of Alex Wallace President, FCPP. The terrain is difficult and trail work can be interrupted by the many boots on the trail. After a lengthy discussion with Dylan Eyers, BC Parks Lower Mainland Section Head, FCPP made a $20,000 contribution for the purpose of continuing the BC Parks Howe Sound Crest Trail Upgrade project. This is intended as additional funding to match those funds that Dylan Eyers, on behalf of Parks, has committed to the project. FCPP has requested that the funds donated by FCPP be dedicated to the HSCT and used for no other purpose.

On September 24 Jeremy Powers and the Rare Earth crew started work on the trail once they had received their contract. The crew found however that the beginning section of the trail, worked on last year, had been damaged by spring run-off. Hikers had been walking on the outside edge of the trail to avoid the snow ridge. This made the trail slant sidewards and the crew felt their equipment could roll off the trail. Therefore the crew worked on the existing trail sections and did not move on to further sections.

• **Hollyburn Trail:** Alex Wallace made good progress brushing out reroutes on three awkward sections at the peak of Hollyburn. Further work on that trail is dependent on the availability of rangers to supervise and contribute to the trail work.

• **Trail Watch:** Initiated in 2011 and coordinated by Anne Leathem since 2014, the program assigns volunteers to “take on” a number of trails in the park, walking the trails numerous times in a season, reporting on downed tress, trail degradation, invasive species, missing or deteriorated signs. Volunteers pick up litter, clear culverts, block illegal shortcuts, clip bushes Every spring Anne Leathem coordinates a meeting with a Cypress Park Ranger and trail Watch volunteers. A BC Volunteer Agreement is then signed for the current year. If you would be interested in signing up for Trail Watch please contact Anne Leathem at anneleathem07@gmail.com

FCPP would like to acknowledge as well the work that has been done by Knee Knackers Volunteers, coordinated by Andrew Wong, on the Baden-Powell Black Mountain trail; the work done by Fiona Wright and Paul Berlinguette on the 2011 Cypress Wetland Restoration program and their long standing commitment to the Lost Lake Trail; and the Alpine Club’s volunteer work on the HSCT.

BC Parks News

Scott Donker, Area Supervisor for BC Parks South Coast Region, has advised that he is “starting his new job as stay-at-home dad on November 9 and will be in that role until June 15, 2019”. Ranger David Whiteside will be his replacement.

• **Student Ranger Program:** We reported in the Summer 2018 Newsletter about the Student Ranger Program introduced by Parks in April 2018. That program will be continued in 2019 and we would hope that Cypress Provincial Park will again benefit from the enthusiasm and high energy of student volunteers.

• **Volunteer Appreciation:** On November 6, BC Parks, at the Mt Seymour Parks office, hosted a Volunteer Appreciation Evening. Various stewardship groups attended the meeting presenting photos and information about the work they had done in BC Parks. Included were hiking and paddling clubs,

mountain bike associations and FCPP representatives. Pins were awarded for 5 and 10 years of volunteering.

Please note: BC Parks Cypress Provincial Park website confirms that The Backcountry Access Corridor (BAC) is open from 7 AM to 10 PM.

Cypress Mountain Resort News

Russel Chamberlain, President and General Manager of Cypress Mountain Resort (CMR), reports that snowmaking was added to the lower section of the ski run “Horizon”; that female and male toilets at the Black Mountain Lodge were upgraded; and that work was started to expand parking lot 3A, with completion planned for summer 2019.

The general improvement of the washrooms has been appreciated. For the first time in many years all the female toilets are working. However, on busy summer days, when the washrooms are in heavy use, the female washroom in particular can be a problem in terms of paper supply and cleanliness. Concerns can be addressed to FCPP board members but also to CMR: CypressMountain@cypress.mountain.resort

Cypress Invasive Plant Management Strategy

Invasive plants are and should be of concern to all who use the park. The spread of highly invasive species such as reed canary grass and broom threatens to overwhelm native vegetation. They are but a few of the invasives that make their insidious assault on the native vegetation of the Park.

Park Conservation Specialist Joanna Hirner forwarded an outline of the Invasive Plant Implementation Strategy that was was planned for the summer and in particular the work being done by Echo Ecological

-Inventory and mapping of reed canary grass in high priority areas of the park (basically the trailheads and trail corridors beyond the ski base area, including Yew Lake, Black Mountain, Baden-Powell Trail, Howe Sound Crest trail, the Baden-Powell Trail and other trails in the Nordic and Hollyburn area).

-Removal of reed canary grass from these high priority areas if and where found. It is this work that the Student Rangers helped with (digging out patches of reed canary grass). For the patches which were too large to remove manually, seed heads were removed, bagged and taken off site to try and reduce seed spread.

In addition, Echo Ecological is trying a couple of new things on a small scale: Cardboard cover treatments covered in clean mulch of some of the much larger patches immediately around trail heads to suppress reed canary grass and try to decrease the risk that visitors pick up seeds on their way to the trails; planting some willow cuttings on the edge of the Cypress Creek wetlands where landscape cloth has successfully suppressed reed canary grass over the last two years.

- **Simon Debischop, Senior Ranger** reported: “We spent a full day with 6 people in total **(**5 Student Rangers + 1 Senior Ranger) in Cypress Provincial Park dealing with invasive species. These areas were previously identified by Joanna Hirner and most of them were previously treated. Due to the advanced stage of seed development we chose to cut and leave the plants on site rather than transport and spread seeds elsewhere. In total we cut about 100 plants from 5 different areas between Quarry lookout and Horizon ski run. That

included around 20 blackberry plants growing on the ski runs".
- **Friends of Cypress Members** also participate in "weed pull"as part of Trails Watch duties. Extra eyes on the trails help with the control of invasives. To quote from the Invasive Plant Council of British Columbia: "Invasive plants are the second greatest threat to biodiversity after habitat loss; they are UNWANTED".

Third Edition Cypress Provincial Park Summer Hiking Map

The third edition of the summer hiking map was available this summer at kiosks in the park and in the Black Mountain Lodge. Mike Castle, former Director, spent countless hours determining creek courses, contours and accurate Park boundaries. His work has also added much to our understanding of early logging on Hollyburn and particular of the Nasmyth Channels, a significant example of water engineering. Take the Third edition map with you as you hike next summer and follow the intricacies of Nasymth Channels.

Mike's description of the channels is as follows:
"In 1918 James Nasmyth started a logging operation on Hollyburn. A shingle bolt mill was built adjacent to Rodgers Creek, near what is now the last bend at the upper end of Cypress Bowl Road. The Nasmyth mill was shut down in 1923.
Shingle bolts were transported down the mountain in a flume. The remains of the dam, at the head of that flume, are still clearly visible inside the bend in the road, at El. 750 m. The water supply in Rodgers Creek was insufficient, so water was diverted from the upper reaches of a Cypress Creek tributary, below Hillstrom Peak, and from Brothers Creek. Using existing gullies and wetlands,…. a series of channels was excavated to link these natural features and divert water toward Rodgers Creek via Sixth, Fourth, Third and First lakes. (Fifth and Second lakes were not part of the diversion).
The uppermost diversion was at El. 1080 m, on a Cypress Creek tributary which flows from Hillstrom Peak. The dam is no longer there but the diversion channel is clearly visible. The channel carried the water from the Cypress Creek watershed to the south east, over a divide to the upper edge of the Capilano watershed. An earthfill dam diverts the water 90° into another channel, which leads over a second divide to Sixth Lake (El. 1040) and the headwaters of Brothers Creek. This part of the channel system is still functioning today.
50 m below Sixth Lake, there was a third dam (now removed) where a channel leads to Fourth Lake. A dam at the outlet at Fourth Lake diverted water to a channel leading to Third Lake.
A dam at the outlet of Third Lake controlled the flow into Marr Creek. From here the water flows to First Lake. The dam at First Lake is now spanned by the Nasmyth Bridge. A flume carried the water from the dam/outlet to a point about 70 m south of the dam. The flume is gone but the clearing through the trees is still visible. From here a 50 m long excavated channel leads south west, crosses under the Main Trail, spanned by a small bridge. The channel discharges into a natural gully and creeks which flow, via a culvert under Cypress Bowl Road, into Rodgers Creek.
BC TRIM mapping still incorrectly shows some of the old Nasmyth channels as watercourses, but this has been corrected on the FCPP Hiking Map. All of the channel system can still be seen today, although some of it can be difficult to find.
The B-P trail, just above the Warming Hut, runs along the crest of the old dam at the outlet of Fourth Lake, with a bridge over the breached section.
On the Nasmyth Bridge, at the outlet of First Lake, there is a display of heritage photos provided by the Hollyburn Heritage Society. "

Logging on Hollyburn was not without its opponents. Opposition grew to the increasingly mechanized and (for that time) large scale logging. When logging operations threatened the Capilano Watershed John Davidson, first provincial Botanist of BC and founder of the Vancouver Natural History Society (Nature Vancouver), was a loud and influential opponent. Logging in the watershed he thundered was "stealing the heritage of future generations".

John Davidson and the Vancouver Natural History Society

Who was John Davidson and why does he belong in the FCPP Newsletter?
Not only did John Davidson establish the Vancouver Natural History Society (Nature Vancouver) in 1918, this year, of course, the centenary, but he was the person who gave the name Hollyburn to Hollyburn. In 1912 on a camping trip to Black Mountain he realized that a steep gully separated the ridge he was on from Black Mountain which had been his destination. He called the ridge Hollyburn, the name we know it by today. John Davidson's hiking and camping trips were also and primarily botany trips. He documented the plants he saw and collected.

Katharine Steig founding member of FCPP, currently advisor to FCPP, former President of FCPP, long time Director of FCPP, gave an inspiring and informative talk to the Vancouver Natural History Society on September 9, **comparing Davidson's plant list to plants that are found in Cypress Provincial Park today.** Surprisingly, most of the plants identified by Davidson can still be found though some, such as butterwort, are increasingly rare. Round-leaved Sundew, (Drosera) on the other hand, is thriving. Complacency, however, is not an option. We need to know and document plant habitat, and be aware of threat and loss.

For our botany minded members the following presentation might be of interest: Professor John Davidson, founder of the Vancouver Natural History Society in 1918 presenter Daniel Mosquin, Research Manager of the UBC Botanical Garden, November 22 7:30 pm, Unitarian Church (Hewett Hall) 949 West 49th Ave., Vancouver.

Nature Notes

WHITE PINE BLISTER RUST Eva Nagy

The first time I heard about this disease was about 20 years ago when my husband and I visited the property of a forester friend, Alan Turner. Alan had a huge acreage in Langley where he was growing interesting trees collected from from Canada and the United States, as well as from around the world. One day we were talking about planting companion plants, certain flowering bushes to enhance his property. Naively I asked him: "why don't you plant any red flowering currents (Ribes sanguineum)"? His reaction was profound to say the least: "You never ever plant currants close to white pines"! he yelled. So I had to educate myself about a tree killing disease carried by the beautiful Ribes sanguineum, the disease we call blister rust. This is what I found:
A major threat to high elevation white pines and their ecosystems is a non-native fungus *(Cronartium ribicola)* that causes the disease white pine blister rust. The fungus/rust is native to Asia and was introduced to the eastern and western coasts of North America around the turn of the 20th century on infected white pine seedlings grown in Europe.
White pine blister rust has a complex life cycle that requires two hosts: a white pine and a currant or gooseberry plant (Ribes ssp.) All species of white pine are susceptible at all ages. However seedlings and young trees are often more easily infected and die more quickly as a result of infection.

Generally, white pine blister rust spores germinate on the plant surface and grow into the pine through the stomatal openings in the needles or through a wound. Once inside the pine needle the fungus grows down to the twig and into the branch and ultimately to the main stem of the tree. The damage caused by the rust killing the cambium causing a canker, girdles the stem which prevents water and nutrients from passing through the canker area. As a result the distal portion of the twig, branch or stem dies. If the canker forms on the main stem, it will result in topkill often causing the tree to die. The infected branch will often swell. After a year or more, the rust forms spores that are contained in blister-like sacks that erupt through the bark of the twig or stem. When the blisters rupture they release bright orange aeciospores

which infect the alternate host. While hosted on these other plants the rust produces basidiospore that are released in the fall and can infect the pines. Ironically the rust is shed from the gooseberry or currant plant when the plant sheds its leaves in the fall.

It can take years for the disease to kill a large tree, but the pathogen can kill small trees within a few years. Consequently the blister rust threatens multiple aspects of the regeneration process by not only reducing available seed but also causing seedling mortality. So the disease continues to spread into high elevation areas where the effects go beyond the loss of individual trees and can lead to the loss of a forest. For many years one of my questions remained unanswered. How did the trees survive in the countries from whence had come the disease? Dr. Greg O'Neill of the Kalamalka Forestry Centre provided the answer. Our Canadian white pine had no resistance to the pestilence brought from somewhere else. Trees in the "somewhere else" had developed a resistance.The white pine in North America had not.
How are the white pine faring today in Cypress Provincial Park? What do we see as we walk the Yew Lake trail? Or the trail to Eagle Bluff? Walk with us next summer. Let's take stock of the white pine in Cypress Provincial Park.

SOME CYPRESS PROVINCIAL PARK FUNGI Anne Leathem

While walking on the trails in Cypress Provincial Park you may see mushrooms hiding in the undergrowth or growing on a tree. There are hundreds of species, some sought after and others ignored. What is their role? They are extremely important for several reasons. Many are decomposers called saprophytes consuming dead or dying matter – they are the reason we don't see years worth of needles and leaves piling up. They also break down the fallen branches and trees returning their constituents to the soil. Others are parasites that may kill trees.

Another very important fungal role in the life of trees is that some form a mutualistic symbiotic relationship and supply trees with minerals such as phosphorus, nitrogen and potassium as well as water. The wide ranging mycelia (roots) of the fungi gather nutrients and water from the soil and deliver these to the roots of the trees via intimate connections. The trees in turn supply carbohydrates (food) to fungi. This mycorrhizal function is very important to a healthy forest and may be lost in clear cuts.

The colourful *Amanita muscaria* (Fly agaric) is an iconic mushroom known for its striking beauty and interesting history and is one of the most commonly encountered in popular culture. It is pictured on some European Christmas cards and was rumoured to be the beginning of Santa Claus' red and white costume. It has been used as an entheogen in shamanistic rituals by Siberian tribes and in eastern Europe. It is mycorrhizal with conifers in our forests.

Cortinarius violaceus is a very purple mushroom with rusty brown spores becoming

quite dark in maturity with an almost metallic like sheen. It is also mycorrhizal with conifers and is one of the few edibles in this genus, but since others cause kidney failure it is not recommended!

You may have seen strange blobs that don't look like our traditional idea of mushrooms. They may have a gelatin-like consistency and come in various colours like our well known golden jelly cones or jelly cups *(Heterotextus alpinus),* looking like gum drops growing on conifer wood in spring.

Another is orange jelly fungus (*Dacrymyces chrysospermus*) that grows on conifer wood in the spring.

Another grows mainly on buried wood in the fall doing its job of decomposing the wood. It has common names such as apricot jelly mushroom and salmon salad (*Guepenia helvelloides*) describing its delicate colour and texture. They are edible but tasteless and have been candied, pickled and used in salads, but let's let it do its important job.

A striking orange colour glimpsed in the forest may turn out to be chicken of the woods or sulphur shelf (*Laetiporous conifericola)*. It grows on conifer wood in early fall. The tender edges have been eaten after very thorough cooking but stomach upset and allergic reactions have occurred.

Other weird blobs you may see are slime mould (*Myxomycetes*) which were once classed as fungi. They are gathering of single-celled organisms that consume microorganisms and help break down wood.

They can be various colours-white, yellow, pink and brown. Touch them and they feel liquid or can form a crust.

Fungi can add to the interest of forest walks and **though mouldy things can be associated with end of life, they can lead to new beginnings.**

FCPP DIRECTORS for 2018.
President **:** Alex Wallace; Vice-President: Anne George; Secretary: Anne Leathem; Treasurer: Irene Miller; Directors at Large: David Cook; Eva Nagy; Bill Kinkaid; Lyn Grants.

Contact us at info@cypresspark.ca

RENEWING YOUR MEMBERSHIP

Your $10 FCPP membership is for a one year period. If you wish to check your membership status for renewal, please contact treasurer Irene Miller (ivm3924@shaw.ca or 604 224-7768).

Please clip and mail the membership form below. FCPP Directors greatly appreciate your support of the work our Society does to enhance and protect Cypress Provincial park. THANK YOU!

For membership in Friends of Cypress Provincial Park Society, please mail to:

Treasurer, Friends of Cypress Provincial Park Society Date:_____

Name (s)_____

Address _____

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Enclosed is $10 for single/family membership.

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