

Friends of Mount Douglas Park Society Fall 2022 Newsletter



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This newsletter is available online in colour at <http://moundouglaspark.ca/>
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Annual General Meeting

The Society is holding its Annual General Meeting at 7 PM on 18 October 2022 in the Feltham Room at the Gordon Head Recreation Centre.



Volunteer with Pulling Together in Saanich

<https://www.saanich.ca/EN/main/parks-recreation-community/parks/natural-areas/volunteer-for-pulling-together.html>

We acknowledge and respect the First Peoples on whose traditional territory *Mount Douglas Park* rests.

From the Minutes of Saanich Council

August 15, 2022

NAME RESTORATION PKOLS (MOUNT DOUGLAS PARK)

To receive the submission titled “PKOLS (Mount Douglas) Name Restoration” from the W̱SÁNEĆ Leadership Council (WLC) and support the WLC request that Saanich name Mount Douglas Park: PKOLS (Mount Douglas Park).

The Director of Parks, Recreation and Community Services stated:

- Staff have indicated to the WLC that they would be happy to assist in the geographical renaming of the peak.
- Staff would begin to refer to it as PKOLS: Mount Douglas Park immediately.
- The name is for the entire park.

MOVED by Councillor de Vries and Seconded by Councillor Mersereau: “That Council receive the submission titled “PKOLS (Mount Douglas) Name Restoration” from the W̱SÁNEĆ Leadership Council (WLC) and support the WLC request that Saanich name Mount Douglas Park: PKOLS (Mount Douglas Park).”

Council discussion ensued with the following comments:

- The work at the staff to staff level is appreciated.

The Motion was then Put and CARRIED

The Society will be following Saanich Parks and deciding on a new name in the following year.

Guess Who

Find the answer on the last page of this newsletter.

- Comfortable in the creek and the ocean.
- Slender and sleek.
- A seafood devotee but will eat anything they can catch in and near the water.
- Famous for its playful personality.

Bigleaf Maples

Maple trees are ancient, going back a million years or more. Of 128 species of maples, the bigleaf maple, *Acer macrophyllum*, is the only one native to northwest coastal regions. These multi-trunked giants are the tallest of the maples typically ranging from 12-23 metres tall, some recorded as tall as 48 metres!

Bigleaf maples also have the largest leaves of any tree in North America! Some reportedly reaching 60 cm wide, although the average size is about 30 cm. Tree leaves act as solar panels and allow the tree to store energy from the sun. Because bigleaf maples have huge leaves, they can store a lot of energy which will be converted to food through photosynthesis.

Maples are very often seen in riparian zones after fires or logging since they have high productivity rates and easily regenerate. They can grow over 3 metres in 1 year. They have evolved with local insects and disease pathogens



therefore disease and pest problems tend to be minimal, and survival rate of these trees is typically high. They can live to 300 years or more in the right conditions.

Maples give back to nature.

Maples are important to the ecosystem in which they live. Plants, animals, soil, and even aquatic life benefit from these majestic giants. During growth bigleaf maples require high amounts of nutrients along with water, which they absorb from the soil. Trees have small tubes, called xylem, that extend from its roots and run throughout the tree transporting water and nutrients; this is the sap. The entire tree becomes rich in nutrients, and the bark especially high in calcium. This is ideal for air plants like mosses, liverworts, and licorice ferns. Air plants don't require soil to grow and thrive on the bigleaf maples nutrient rich bark as substrate.

Moss load on bigleaf maple trees is typically the greatest of all the tree species in the Pacific northwest. In coastal rain forests a bigleaf maple could be supporting up to 1 ton of mosses. These trees are experts at aerial gardening.

In fall, bigleaf maples produce a lot of leaf litter. Their leaves are enormous. High nutrient content in leaves promotes quick decomposition, typically within a year. As leaves break down, nutrients are released back into the soil, improving soil quality. In addition, a deep widespread root system holds soil in place, and prevents it from becoming compact. This allows water to soak into the ground instead of flowing over the surface and washing away loose soil. Widespread leaves and branches act as a wind break and rain control so soil is not blown away or washed out. Thus, bigleaf maples help minimize erosion.

Long leafy branches provide a source of shade and shelter in the summer. As a bigleaf maple grows it drops its lower branches, creating nooks and crannies in the tree that small animals and birds love to nest in. Branches that fall on the ground provide woody debris for other plants to germinate on and give shelter to small creatures. When the branches fall into the creek they enhance the habitat quality for aquatic life. Maplewood decays more rapidly than other wood because of its high nutrient content, providing organic matter that is readily available as food in the water. Branches hanging over the creek also provide a tasty snack for fish when bugs fall into the water.



Early in spring, maples are a very important source of nectar for bees and insects coming out of hibernation. They have an abundance of flowers which provides a much-needed food source after a long sleep. When their seeds spin to the ground in late spring, they provide food for a variety of critters.

Maples in danger.

Big leaf maples are being impacted by climate change, and instances of die off have been increasing over the past decade. Rising temperatures and drought conditions are making survival more challenging for bigleaf maples. During extremely dry conditions, bubbles can form in a xylem tube, possibly rendering it unusable forever. If a tree is unable to get enough water or nutrients it will inevitably die.

In some areas bigleaf maples are reportedly producing smaller leaves with a yellowish scorched appearance, and leaves are falling much sooner than they should. This is especially evident near roads and developed urban areas where

temperatures are higher. Without healthy leaves, photosynthesis can't happen, and a vicious cycle begins. The tree gets stressed and must put energy into simply surviving instead of growing large leaves, however without these large leaves the tree is unable to produce enough food which causes it more stress. A stressed and weakened state makes the tree more vulnerable to pests, disease, and extreme weather such as wind and ice storms.

Climate extremes are an issue when weather warms up for a few weeks and triggers the tree to produce new buds, then suddenly drops. New buds could freeze, dry out, and die. This results in the loss of a whole phase of new growth which took up a lot of the tree's energy reserve to produce. If the tree is already in a weakened state, replacing these buds could be a struggle and could result in starvation the following year.

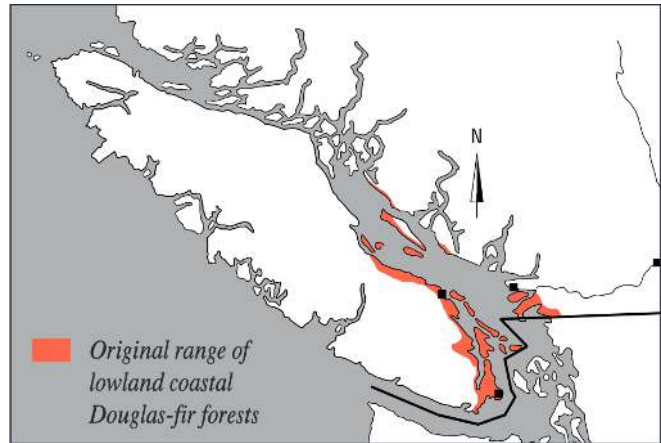


While working to remove invasives in the Park, volunteers stumbled across this fawn. Fawns will lie perfectly still while their mother is off foraging. If you find a fawn please don't disturb it. Its mother is almost certainly nearby and will return to it soon.

Very Dry Summer

You may have noticed that the summer of 2022 was extremely dry. Between June 3, when 9 mm of rain was recorded at UVic to October 2 only 4.3 mm of rain were observed there. That's a span of more than 90 days. No single day saw even 1 mm of rain.

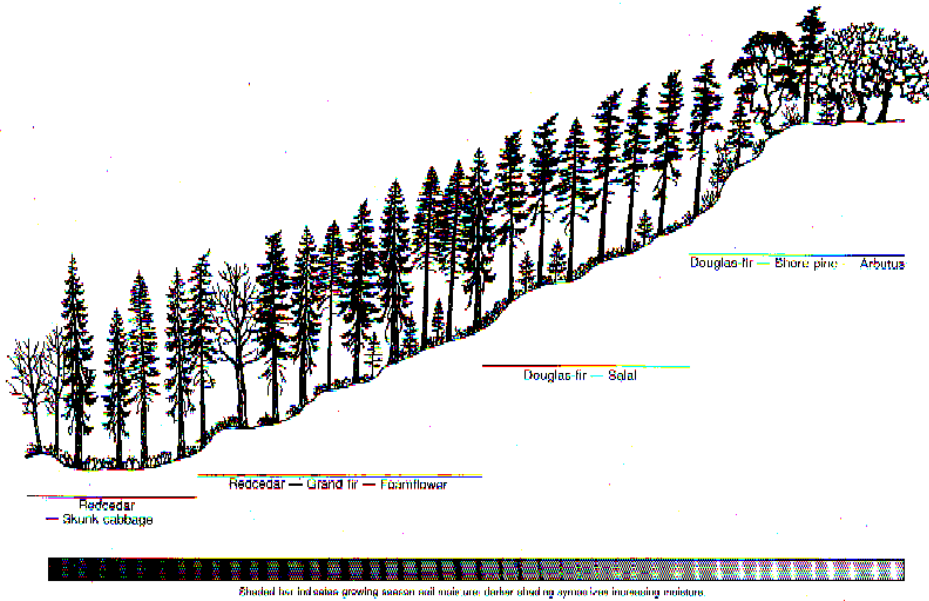
The Park is located in the Coastal Douglas-fir Ecosystem on the southeastern edge of Vancouver Island. It lies in the rain shadow of Vancouver Island itself and the Olympic mountains to the southwest. Dry summers are expected here, they are part of the normal seasonal cycle, and the natural ecosystems in the Park are well-adapted. However, extreme dryness like this year is unusual. The last time such low summer rains were observed was in 2012.



Coastal Douglas-fir Ecosystems - BC Min. Environment, Lands, and Parks



Climate change is generally causing the summer climate of the region (the eastern coast of Vancouver Island, the Gulf Islands) toward drier summer conditions. This puts pressure on the native tree species in the forest. A species, like Redcedar is especially vulnerable since it has shallow roots and tends to grow at lower elevations where water may collect in the surface soil for longer than on higher or steeper slopes. A particularly dry summer



“Simplified schematic diagram of topographic relationships among four common site associations of the Coastal Douglas-fir zone.” Figure 17 from Ecosystems of British Columbia, Special Report Series 6, BC Ministry of Forests.

stresses individual trees and other plants that are living in marginal conditions and makes them more susceptible to harm from disease and pests. Many of the invasive species that encroach on the park are able to survive the dry periods. These are species like English ivy, Scotch Broom, Himalayan blackberry. When mature trees weaken and die these species can outgrow and shade the local native vegetation.

The creek in the Park flows year round. Where does the summer water come from? With the help of Saanich staff the Society was able to trace the summer water through the storm water system to a region on the southeast slope of the park, where Harvest Lane butts up against the park boundary. Here, water stored during our reliably wet winters drains from an aquifer in the rock and makes its way to the creek. Before Gordon Head was developed this water would have followed natural channels. In general, unrecorded water, a stream or aquifer that is not licensed or reserved for other purposes, is not protected in

BC. The Society is working on ensuring that the Spring is officially noted as it's of vital importance to the creek and surrounding habitat.

Stairs to the Beach

The old concrete stairs leading to the beach have been condemned. Years of erosion at their base and along the creekside have left them tilted and otherwise unsafe. Saanich has proposed to install a safer way down to the beach along the slope to the left (heading down) of the stairs.



30th Anniversary

On November 22, 1992 Saanich Council met at the summit of Mount Douglas. This unusual Council meeting took place to formally mark the grant of the Park by the Province to Saanich and to enact the park trust with wording following the original grant to Victoria over 100 years ago. Council unveiled the bronze plaque that stands at the summit today. The text of the Charter, inscribed on the plaque, is given below.

Mount Douglas Park Charter

The lands known as Mount Douglas Park are hereby reserved in perpetuity to the protection and preservation of the natural environment for the inspiration, use and enjoyment of the public.

This land has been transferred by the Province of British Columbia to the Corporation of the District of Saanich on the condition that it be maintained and preserved as a public park.

With this charter, the spirit and intent of the original crown grant of 1889 is maintained while its scope is expanded to include within Mount Douglas Park all adjacent municipal parkland present and future, so that the whole will continue as a wilderness preserve for generations to come.

Proclaimed this 22nd day of November 1992 by the council of the Corporation of the District of Saanich on behalf of the citizens of Saanich.

In honour of the anniversary the Society is planning a number of events to take place throughout the year. The first of these events is a photo contest, details below. More to come!

Photo Contest

The Friends of Mount Douglas Park Society want to celebrate this anniversary with a series of events, starting with a photo contest, that highlight the beauty

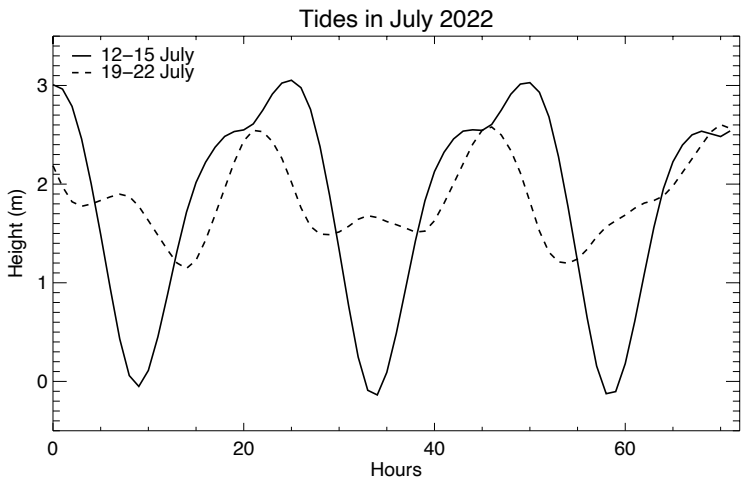
and unique aspects of this natural Park. The goal of the photo contest and other future events are, in addition to highlight the beauty and unique aspects... but also to raise public awareness of these aspects and promote awareness of the need to protect and preserve.

You are invited to submit your favourite photos of something you like in the park. Rules and submissions for this contest are given on the Society's website: <https://mounddouglasspark.ca>.

Low Tide

In mid-July we experienced the lowest tide in a decade. It was a great opportunity to explore the beach far from the usual water's edge. Ocean tides are caused by the tug of the Earth, Moon, and Sun on each other. When the moon and sun are aligned in a straight line we observe Spring tides (from the verb, to spring, rise up suddenly). Spring tides have the largest tidal range, the difference between the low and the high. It turns out that this past summer we were also as close to the moon as we can get which means it's pull on the Earth was stronger than usual.

The opposite of the spring tide is the neap tide. Neap comes from the Germanic word, to nip or pinch. This happens when the Earth, Moon, and Sun align along a right angle. Neap tides have the smallest tidal range. The figure below shows the Spring tide around 12-15 July and the following neap tide for comparison.





Red rock crabs exposed by the low tide on 12 July, 2022.

Lots of beachcombers were out exploring what wildlife could be found during the low tides. The lows occurred in the morning and the weather was fine. One interesting feature, usually not seen, was the undersea bed of the creek. The channel passed just west of the large rock, an erratic left behind during the last glaciation, until it reached a large bar of gravel and sand. This is where the creek, flowing fast and strong during winter storms slows enough to drop its load of sediment. The creek channel divided into two at this point to flow around the bar.



The tide was out far beyond the well-known rock, a glacial erratic, north of the creek mouth.



A Great Blue Heron, Ardea herodias, fishing at the water's edge during July's low low tide.



Answer to Guess Who

The North American river otter, *Lontra canadensis*, lives along the coast in the Park. It's a regular, if hard to spot, visitor to the creek. It catches and eats all manner of small fish, crabs, small clams and mussels, snails, and even amphibians.



A river otter spotted from the bridge, exploring and foraging in the creek.

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Membership, Renewal, Gift Membership Still just \$5/year

Becoming a member helps us advocate for the park.

Join online: <https://mountdouglaspark.square.site/>

Join Online



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, 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. Do this online (above) or with this form.

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

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