### **Stewardship** News

Metro Vancouver Regional Parks Natural Resource Newsletter

Fall 2017



Metro Vancouver Regional Parks are important to people as places to connect with nature and get away from the pressures of the city. They're also critical wildlife habitat, and provide ecosystem services such as cleaning the air and helping to control temperatures. Each year, staff, partners and volunteers invest time and effort to restore the health and beauty of these special places. Here are some recent highlights.

#### Working together to keep the "wild" in wildlife

By Brian Titaro

Bound by wilderness to the north and blueberry farms to the south, Minnekhada is home to a healthy black bear population. It's believed they use the park as a summer staging ground, waiting for the blueberries to ripen and then moving into the farms to fatten up for the winter. During this time bears share trails and roads with park visitors, dogs and cars, and may lose their fear of people.

This can lead to serious problems when bears venture into neighbourhoods looking for easy food and can't be scared off. When a bear becomes too comfortable around people it may need to be destroyed for public safety.

Between June and July of 2016, bears were recorded along Oliver Road 76 times. About 60 percent of those encounters involved visitors being within 100 metres of the bear, and 30 percent involved high-risk activities such as putting out food.

This summer, Natural Resource Management staff initiated a black bear monitoring program to determine how bears are using the park. Wildlife trails throughout the park were mapped, and wildlife cameras were installed at key locations to learn about the daily and seasonal movement patterns of the bears, as well as when and where they are most concentrated. This baseline information can be used to develop a site specific, scientifically-based management plan that keeps people and bears at a safe distance from each other, and keeps the bears wild.



A black bear sow and cubs using a wildlife trail in Minnekhada Regional Park took this selfie by triggering a wildlife camera that helps gather information on black bear movement patterns.

Pacific Parklands Foundation provided funds to purchase wildlife cameras, and the University of British Columbia provided assistance on project design and graduate students to help with the collection of field data. Metro Vancouver staff have also been stationed along Oliver Road during the 2017 summer months to keep people moving and to provide education on bear safety.

Brian Titaro is the Stewardship Technician for Central Area Regional Parks.

Our Meetup.com group - Metro Vancouver Regional Parks Ecological Restoration Team – is the place to find out about stewardship events and become a volunteer. Interested in helping? Just join the group, lend a hand and help spread the word! www.meetup.com/Regional-Parks-Connect-Metro-Vancouver





### New Watershed Stewardship Centre opens

By Cody Naples

With the snip of the ceremonial scissors, the flash of cameras and the applause of 800 guests, the Kanaka Creek Watershed Stewardship Centre opened to the public earlier this year.

The centre is the result of Metro Vancouver's partnership between the Kanaka Education and Environmental Partnership Society, better known as KEEPS, and Fisheries and Oceans



Officials including Metro Vancouver Chair Greg Moore and Regional Parks Committee Chair Heather Deal (far left) opened the Kanaka Creek Watershed Stewardship Centre.

Canada supported by Pacific Salmon Foundation and Pacific Parklands Foundation along with many other donors.

The centre includes the George Ross Learning Room, a separate resource building, the Bell-Irving Hatchery and the 'Roof to Creek' learning landscape. The latter feature gives visitors a first-hand demonstration of best practices for stormwater management, allowing them to see how rainwater, captured on-site, is slowed, filtered and cleaned through a series of ponds and channels before entering the Kanaka Creek

The 'Roof to Creek' learning landscape together with outdoor classroom spaces, interpretive exhibits and other opportunities for water contact and stewardship, will facilitate learning about watershed ecosystems and stormwater management for generations to come.

Cody Naples is the Special Events Assistant at Regional Parks East Area.

# Stewards of the night help monitor important bat colony

By Robyn Worcester

Deas Island Regional Park is home to the largest nursery colony of bats in the province.

At least 2,400 bats live in the maternity colony at Deas Island Regional Park. (When the young are born in summer, the numbers may go up to about 3,500.)

Two species live there: the little brown bat (Myotis lucifugus) and the Yuma bat (Myotis yumanensis). Both rely on the habitat at Deas Island Regional Park and the surrounding area for food such as insects, including thousands of mosquitoes. The little brown bat is a SARA Schedule 1 Endangered species; both species are also known to be at risk for white-nose syndrome – a fungus that has decimated bat populations elsewhere in North America.

Metro Vancouver Regional Parks is working with the South Coast Bat Conservation Society to monitor the bat population at the regional park.

Efforts started in the summer of 2016 to establish a monitoring program at Burrvilla, a 1905 heritage building in the park. (The colony resides in Burrvilla's attic). Every week or two from June to mid-August, the team volunteered their time and equipment to conduct colony counts and operate acoustic monitoring equipment to count bats as they emerged from the attic to hunt for insects at sunset.

In 2017, the work expanded. In addition to weekly counts of emerging bats, the team also initiated a pilot mark-recapture study. Bats were caught in mist-nets and implanted with radio tags for monitoring.

The method is safe and provides long-term occupancy information at bat colonies within one season and across years. Because bats are long lived (up to 30 years in captivity), this pilot study will provide many years of information on the activity of bats at this important colony.

Robyn Worcester is the Natural Resources Management Specialist for West Area Regional Parks.



Yuma bat (Myotis yumanensis) captured from the Deas Island Regional Park maternal colony.

### Searching for cutthroat in the small streams of Minnekhada

By Brian Titaro

A number of small, cool, gravel-filled streams fringe the marsh edges at Minnekhada Regional Park. While these small streams may not seem like much, they are important habitat and provide refuge to one of the park's least-seen inhabitants: the coastal cutthroat trout (Oncorhynchus clarki clarki).

A member of the salmon family, this provincially blue-listed species is in serious decline along eastern Vancouver Island and the Lower Mainland. Their dependence on small streams for spawning and rearing makes them vulnerable, since small streams are easily altered or destroyed. Many of these small streams aren't mapped or officially recorded, and are overlooked during planning processes (residential, agricultural and industrial) and so may not receive the kind of protection that larger streams and rivers receive.

Minnekhada Regional Park hosts a number of suitable small streams. The Minnekhada Park Association recently conducted a fish monitoring program to see which streams in the park are home to this special fish. By officially identifying their presence in a number of the park streams, staff can implement management practices to minimize disturbance to their habitat and ensure a safe, protected place for them to thrive.

Brian Titaro is the Stewardship Technician for Central Area Regional Parks.





- (L) Volunteers take a closer look at one of Minnekhada's resident cutthroat trout, and learn to recognize the characteristics to tell them apart from other species.
- (R) Young coastal cutthroat trout resident in the streams of Minnekhada Regional Park.

# The Acadia Forest Restoration Project

By Krista Voth

Parts of Pacific Spirit Regional Park have seen a lot of human alteration (e.g. logging, invasive species introductions) and need a helping hand to return to more fully functioning forest habitat. One such area lies between Chancellor Boulevard and University Boulevard. Here, the forest is composed of mostly older deciduous trees mixed with a few conifers and a few too many invasive holly trees.

The Pacific Spirit Park Society, working with Metro Vancouver Regional Parks staff, has started a project to lend that helping hand: the Acadia Forest Restoration Project. It's meant to enhance a 2.82 ha section of the park between Salish and Sword Fern trails. The goal is to have a forest that is more diverse in terms of both deciduous and coniferous trees, and native shrubs – all of which provides food, shelter and nesting habitat for a variety of wildlife species, from bees to butterflies to birds and more.

Invasive plant removal started in the summer of 2017; native species were planted in October as part of Metro Vancouver Regional Parks' annual EcoBlitz event. Pacific Spirit Park Society is a community-based volunteer organization. Members work with Metro Vancouver as part of the Regional Park Partners program, and hold a vision of an urban forest and foreshore park that is protected and cared for in perpetuity, for the benefit of all. Their programming is centred on ecological restoration, data collection, monitoring and environmental education, empowering community members through skills development and stewardship training.

For more information or to volunteer, go to pacificspiritparksociety.org

Krista Voth is the Program Coordinator for Pacific Spirit Park Society.





- (L) The area known as 'Acadia Forest' lies in the northern part of Pacific Spirit Regional Park near Chancellor Blvd and Acadia Rd.
- (R) Volunteers of all ages are helping to remove invasive plants from the Acadia forest area of Pacific Spirit Regional Park, and replant with native shrubs and trees.



#### Thank you for lending a hand!



This year's 4th annual EcoBlitz saw 615 volunteers contribute over 2,249 hours at 21 events in 12 regional parks.

Volunteers from the general public, 18 community groups and park partners removed 11,650 kg of invasive plant material and planted 6,651 native trees, shrubs, ferns and more. Thanks again to everyone who helped make this year's EcoBlitz a success!

We'd also like to give a special thank you to our partners Pacific Parklands Foundation and the Sitka Foundation who provided funding for many of the plants and tools used for the Coastal Sand Ecosystem restoration projects at Iona Beach and Boundary Bay Regional Parks, and a thank you to the Vancouver Park Board for their tree donations to the projects in Pacific Spirit Regional Park.



A Big Thank You to all the park associations, community groups, businesses and Metro Vancouver Ecological Team members who contributed to enhancing regional parks in 2017:

A Rocha Canada Alouette Elementary BC Geocaching Association

BC Youth Parliament

BCIT Ecological Restoration

BCIT Fish, Wildlife and Recreation

Boundary Bay Park Association

Bowen Island Weed Warriors

Burnaby Lake Park Association

Catching the Spirit

Colony Farm Park Association

Delta Home Learners Nature Kids

Derby Reach Brae Island Park Association

Doctors of BC

Elsie Roy Elementary School Erma Stephenson Elementary

Evergreen

Fort Camping

Fresh Air Learning

Girl Guides Canada

Glen Valley Watershed Society

Hope Lutheran Christian School

Immaculate Conception School

Island Pacific School

Kanaka Education & Environmental

Partnership Society

Langara College

Langara Volts

Langley District Schools

Langley Environmental Partners Society

Leo Clubs

Maple Ridge Christian School

Maple Ridge Parks and Leisure

Nature Conservancy of Canada

Nature Trust BC

Northwest Wildlife Preservation Society

Pacific Academy

Pacific Spirit Park Society

Scouts Canada

Simon Fraser University

South Coast Conservation Programs

Stantec

Stratford Hall

Take a Hike Foundation

Telus

University of British Columbia - Biology

University of British Columbia - Forestry

University of the Fraser Valley

Walnut Road Elementary

