Beaver Lake, a Glint in the Jewel of the City

Beaver Lake in Vancouver’s Stanley Park is one of the last remaining wetlands in the City of Vancouver. It is home to a lot of amazing wildlife, and because of its open expanse of nearly four hectares, it is a great venue to see these species in action, morning through night.

A common sight is the great blue heron, a species of special concern in BC. Beaver Lake is a popular spot for young fledgling herons in training to catch some easy meals before heading off to feeding grounds further afield. You may also see the majestic blue dasher dragonfly, a behemoth of the insect world, whizzing alongside the quick and maneuverable barn swallow. Both are species at risk in BC and both are after the same thing – a feast of small flying insects. The ever popular, and always fashionable, wood duck can also be found swimming Beaver Lake amongst a sea of other dabbling and diving ducks.
Beaver Lake, a Glint in the Jewel

However, if you have been a visitor of Beaver Lake for many years, you likely have noticed that it is shrinking. In 1938, the lake was nearly seven hectares. In that same year, two events changed the fate of Beaver Lake forever. First, the Causeway was built through the Park significantly affecting the amount of water that Beaver Lake receives from surrounding streams. The second, and most detrimental, event was the introduction of the invasive fragrant lily (the one with a pink flower, not to be confused with the native yellow pond lily) which has since aggressively grown to cover much of the lake.

Today the lake is nearly half the size it was in 1938. Research has shown that this trend will continue if nothing else is done. Although it is a common natural process for a lake to fill in over time, the introduction of invasive plants has rapidly sped up the process. Not only is the lake shrinking, the quality of the habitat is diminishing. The invasive lily is decreasing the amount of available oxygen in the water and drastically increasing the rate of organic accumulation. Floating mats of vegetation are now cropping up all over the lake where dense mats of decayed lilies are rising up from the bottom. If nothing is done to counter this manmade challenge, Beaver Lake will quickly become a forest meadow, and many of the species that rely on this much needed freshwater habitat will disappear.

Fortunately, a great deal of research has already been completed and Vancouver Park Board, with guidance from SPES and the Stanley Park Ecological Action Plan (2011), has already begun planning for restoration activities that will hopefully be favoured by the community, approved and carried out over the next few years. Potential options for remediation may include invasive plant removal, a degree of lake dredging and/or the removal of floating islands. This is all in order to deepen the lake to a level that would retain and support more aquatic species of wildlife and native vegetation, including coastal cutthroat trout, another species of special concern in BC. Enhancements will also be made to the outflowing Beaver Creek to provide improved salmonid habitat and lake access. Work on the creek has begun with generous contributions from Environment Canada’s EcoAction Community Funding Program, HSBC Freshwater Initiatives and the Habitat Conservation Trust Fund.

Among the 80 species of birds and many other species that will benefit from the restoration, we can also aim for a reintroduction of extirpated wildlife like the western painted turtle and Pacific tree frog. And let us not forget the beavers of Beaver Lake, who should be quite happy to see their lake deepened: Since the return of a solitary beaver in 2008 after a 60 year absence, these busy workers have begun the dredging process themselves, moving mud, sticks and branches from around their lodge to plug the outflow to Beaver Creek. The five beavers that now call the lake home are working tirelessly to maintain their lake habitat, and we can safely say that we are working with these Canadian icons to see that their dreams come true.

Dan Straker,
Urban Wildlife Programs Coordinator

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>Trails are built around the perimeter of Beaver Lake making it a major recreational area.</td>
</tr>
<tr>
<td>1916</td>
<td>Fish hatchery is constructed by Vancouver Angling society, stocked with cutthroat for 30 years. Beaver Lake is supplied with artificial water inflow from municipal water supply.</td>
</tr>
<tr>
<td>1929</td>
<td>Beaver Lake is dredged, removing organic material from the lake.</td>
</tr>
<tr>
<td>1938</td>
<td>Vancouver Causeway is built across the Beaver Lake watershed. Aquatic fragrant water lily (Nymphaea ordata) is introduced and the lake begins to rapidly infill with vegetation</td>
</tr>
<tr>
<td>1999</td>
<td>Extensive research (Beaver Lake Environmental Enhancement Project) undertaken</td>
</tr>
<tr>
<td>2008</td>
<td>First beaver in 60 years re-settles the lake. SPES installs Wood Duck (Aix sponsa) boxes.</td>
</tr>
<tr>
<td>2011</td>
<td>Stanley Park Ecological Action Plan completed and approved by Vancouver Park Board</td>
</tr>
<tr>
<td>2013</td>
<td>Bog is restored. Environmental Assessment of the lake is approved and initiated.</td>
</tr>
<tr>
<td>2020</td>
<td>Beaver Lake will disappear if no action is taken (Hatfield Consultants estimate, 1985)</td>
</tr>
</tbody>
</table>
On August 24 and 25, Stanley Park Ecology Society hosted its second BioBlitz celebrating its 25th anniversary and Stanley Park’s 125th birthday. During this 24 hour biological relay, field researchers identified a multitude of living organisms in Stanley Park while our education team showcased the natural wonders of Stanley Park to the public.

In addition to the variety of surveys led by our committed volunteer team of 25 scientists, SPES presented 29 interpretive events: 5000 visitors participated in walks, plankton ID, a native plant garden open house, bat netting, hummingbird banding, amphibian surveys, face painting and a mural workshop, to name just a few.

Our Nature House was hopping throughout the weekend with 1600 visitors experiencing the wonder of nature through a scientific lens. Community members of all ages met and learned about creatures that call Stanley Park their home, while scientists collected data about which species reside where in the Park.

Although the Park is an island in a highly urbanized landscape, it is an oasis for a wide range of plants, animals, fungi and pollinators. Forest, foreshores and wetlands teem with a significant variety of plants and wildlife. Even managed landscapes like the Rose Garden and areas dominated by ornamental planting provide food and shelter for many insects, small mammals and birds.

One highlight of the weekend was finding a millipede (Rhiscosomides minor) that had not been identified in Stanley Park before.

This species has only been found in a handful of other locations in BC including Pacific Spirit Park in Vancouver, Crippen Park on Bowen Island, Point No Point near Sooke, Saturna Island, and recently at Ridley Island near Prince Rupert. This is only one of many species to be added to the life-lists of Stanley Park.

The SPES conservation team will be compiling and analyzing the data collected at the Bioblitz and drafting a report on what was identified during the 24 hour blitz. These results help SPES track the ecological health of the Park and guide future conservation efforts such as prioritizing areas for restoration or habitat enhancement.

Stay tuned for the report which will be posted on our website at www.stanleyparkecology.ca by the beginning of November.

Stanley Park Ecology Society thanks all of the scientists, partner organizations and volunteers who worked to make this weekend such a fun success, with special gratitude to our key sponsor, TD Friends of the Environment Fund.

Julia Burns,
Anniversary Events Program co-Coordinator
Stanley Park Young Naturalists: Nature Through New Eyes
Uncover your inner animal and create a wildlife mask that shows your wild side. Explore the wonderful world around us with a nature art specialist. For accompanied kids ages 5-14.
Sat, Sept 7, 10 am -12 noon

Urban Foraging
Lush berries and edible plants are plentiful, but which ones will fill your tummy without putting you in the ground? Explore the range of edible indigenous foods found in our local forests.
Sun Sept 8, 1:30-3:30 pm *

Underground in Stanley Park: Creature Colonies
Beneath the trails and towering trees there are vast colonies and creature caverns. Uncover facts about the millions of creatures we seldom see that keep Stanley Park healthy and vibrant.
Sun, Sept 15, 1:30-3:30 pm *

Animal Crossing
With the wet weather on its way, muddy boots are to be expected, but whose muddy feet left all these curious tracks? Take a closer look at the signs animals leave behind that can tell us who’s hiding just around the corner.
Sun, Sept 22, 1:30-3:30 pm *

Birds of a Feather
Join us for this monthly, easy 2 hour walking exploration to watch for Fall migrants, and learn about bird ID and behaviour. Meet at the Stanley Park Nature House.
Participation by donation.
Sun, Sept 29, 9-11 am

World Rivers Day: Salmon Forest
As many as six different salmon species swim past Stanley Park on a return trip to their natal streams to spawn. Learn how they influence not only the streams they inhabit but the forests around them.
Sun, Sept 29, 1:30-3:30 pm *

Nocturnal by Nature: Stanley Park’s Night Life
The days are getting shorter and the nights longer; a perfect combination for the creatures of the night. Join us for a preview afternoon stroll and reveal the nature of Stanley Park’s night life.
Sun, Oct 6, 1:30-3:30 pm *

Stanley Park Young Naturalists: Fun With Fungi
Do garden gnomes really live in little mushroom houses? Come along as we learn all about the fantastic fungi that live in the forests of Stanley Park. For accompanied kids ages 5-14.
Sat, Oct 5, 10 am - 12 noon

Fierce Flyers
Join us as we explore the world of predatory birds that call Stanley Park home. Learn about their special adaptations and interesting habits. Take apart a real owl pellet to see who was eaten for dinner.
Sun, Oct 20, 1:30-3:30 pm *
Stanley Park Ecology Society Annual General Meeting

Join SPES for a special keynote presentation by well-renowned biologist and author, Richard Cannings on the birds of BC and Stanley Park’s Beaver Lake.

West End Community Centre
Thu, Oct 24, 7:30-9:30 pm

Free admission.

Keynote presentation by

Richard Cannings, author-naturalist: *Birds: Richness and Rarity in the City*

---

**Birds of a Feather**

Cooler weather is on its way, and with it the winter birds. Join us for a two-hour easy walking exploration to meet the season’s birds, and learn about bird identification and behaviour.

Participation by donation.

Sun, Oct 27, 9-11 am

---

**Amazing Eagles: A visual presentation.**

Explore the fascinating world of bald eagles with pioneer eagle researcher, David Hancock.

Participation by donation.

West End Community Center
Sat, Nov 2, 1-3 pm

---

**Forests, Feathers, and Foreshores**

Looking for ideas on how to get through the winter? Join in on an enlightening walk to look at how plants and animals adjust to survive the cool, wet (and sometimes white) West Coast winter.

Sun, Nov 3, 1:30-3:30 pm

---

**War and Peace in Stanley Park**

In the 1800’s Stanley Park was declared a British Military Reserve...or was it? On this walk, discover over 125 years of military related stories, ranging from secret defence sites, monuments, memorial gardens, protests, gathering places and war effort activities.

Sun, Nov 10, 1:30-3:30 pm

---

**Birds of a Feather**

Join us for this easy, monthly 2 hour walking exploration to see early winter birds, learn about bird ID and behaviour. Meet at the Stanley Park Nature House.

Participation by donation.

Sun, Nov 24, 9-11 am

---

**Creatures of the Night**

Running in parallel with the Stanley Park Ghost Train, SPES’ nature program,”Creatures of the Night” is an entertaining adventure for explorers of all ages.

Join an ecology guide through the forest on a 30 minute candle-lit walk to meet and talk with some of Stanley Park’s elusive evening animals!

Departing on each half hour, 6:30-9 pm, Thu-Sun Oct 11- Nov 2.

Tickets: $5 Adults, $3 Children & $15 Family of four.

Lanterns are provided.

Members free on Oct 9

---

**Bright Nights Christmas Train**

During the holiday season the Miniature Train and Plaza in Stanley Park go through a festive transformation of nearly two million lights and displays. Fun for all!

Dec 5 - Jan 5

SPES members ride free on December 4; show your membership card.

http://vancouver.ca/parks-recreation-culture/ghost-train.aspx

---

**Halloween Ghost Train in Stanley Park**

Crawl out from your coffins, slither from your slabs, and ooze out from your tombs! These October nights summon you from darkness.

Oct 11 - Nov 2
(closed Oct 14)

SPES members ride free on October 9; just show your membership card.

---

**Not a member yet or want to renew?**

Read more about SPES memberships on page 7.
Although we work our days in Stanley Park, even the staff rarely get to catch sight of all the surprising and often overlooked wildlife wonders. We are grateful for the generosity of a number of very talented photographers who know the woods and wetlands in ways that inspire interest and intrigue.

Here are a few nature notes shared recently by one such eagle-eyed nature-enthusiast, Peter Woods:

**July 14, 2013 - Stanley Park**

“I was on one of my regular insect surveys and encountered this exotic looking moth in the forest - in the dark - on South Creek Trail about 50 m west of the Shakespeare Garden. The insect landed on a damaged portion of an exposed Douglas fir root. I had to use flash to get the photo since it was in dense shade.

“Now, looking at it more closely, I suspect that its a female and could have been laying eggs. I’m going back to check tomorrow (Monday). This is only the second clear-wing moth I’ve ever seen in Stanley Park ... and the second species!”

**As-yet unidentified moth, July 14, 2013.**

*Photo by Peter Woods.*

“The Sequoia pitch moth above was ‘my’ first clear-wing moth in Stanley Park. The moth flew into a Himalayan blackberry thicket on the south side of Lost Lagoon where I was busy photographing bumblebees.”

“I have to add just one more moth from today. It’s only 4mm long but armed and dangerous.”

**About Clearwing Moths**

Clearwing moths (family Sesiidae), also called wasp moths, is a family of approximately 1,000 species of moths that are long-legged with a slender, dark body with bright red or yellow markings. The wings frequently lack scales and are transparent. They look like anything but moths actually and many mimic bees or wasps quite convincingly. This is their main form of defence against predators and it allows them to be active during the day.
Membership has its perks!

Support your park ~

Together we are making a real difference to nature and wildlife in Vancouver’s urban wilderness, Stanley Park, and helping people of all ages enjoy the natural world.

Purchase your SPES membership through our secure online membership store. Only $20 for an individual, $40 for the whole family and $15 for seniors or youth.

www.stanleyparkecology.ca/membership

Benefits include a special invitation to ride the Halloween Ghost Train (free for SPES members on Oct 9) and Christmas Bright Lights Train in Stanley Park (see page 5 for dates), and 20% off food at Prospect Point Cafe and Stanley’s Bar & Grill.

If you prefer to phone us or have us send a membership form by mail, call 604-718-6523.

Thanks to our Supporters and Partners

Thank You

SPES relies on the generous support of individuals and organizations whose financial support help us to continue our longstanding commitment to environmental education, stewardship and conservation in Stanley Park.

We would like to thank our most recent donors:

Victor Balon
Drew Dennis
Spencer Chandra Herbert
Stephen Hogarth
Hewer Home Hardware
David Jagpal & Leanne Dospital
Joslin Kobylka
Mary Landell
James LeMere
Tricia Lundh
Marilyn Mattenley
Bradley Mckillop
Ray McNabb
Donna Penney
Dan & Jan Phelps
Joyce Prior
Janet Shindler
Opus Art Supplies
Monica Wilson
TELUS
Tides Canada
Agnes Thomson
Vancouver Talmud Torah/
Liron Gertsman
Vancouver Craft Beer Week
Debbie Archeck
John and Mae Harvey
Sallie Graham
Leora Fenner
Gareth David
David Leung
Fergal Callaghan
Kayla Wilson
Patricia Dairon

SPES is a registered charity #11916 6890 RRR0001. Charitable tax receipts will be automatically issued for donations of $30 and more.

This project was undertaken with the financial support of the Government of Canada through the Federal Department of the Environment.

Ce projet a été réalisé avec l’appui financier du Gouvernement du Canada agissant par l’entremise du ministère fédéral de l’Environnement.
SPES promotes awareness of and respect for the natural world and plays a leadership role in the stewardship of Stanley Park through collaborative initiatives in education, research and conservation.

Contact Us:
Stanley Park Ecology Society
PO Box 5167
Vancouver BC V6B 4B2
info@stanleyparkecology.ca
www.stanleyparkecology.ca

Reception: 604-257-6908
Membership & Donations: 604-718-6523
Media: 604-718-6523
Volunteering: 604-681-7099
Conservation: 604-718-6547
Urban Wildlife: 604-681-9453
School Programs: 604-257-6907
Nature House: 604-257-8544

In 2009, SPES launched a pilot project in collaboration with local environmental artist, Sharon Kallis, that takes a creative approach to ecological restoration in Stanley Park. As SPES diligently removes invasive plants, we are repurposing and ‘upcycling’ some of this green waste as baskets, hats and jewellery.

With financial support from the Greenest City Community Grants program and the Vancouver Foundation, this year we are putting this ‘new resource’ back into the Park as bio-netting for erosion control on a slope which had previously been cleared of English ivy along the north side of Lost Lagoon.

This multi stage project began with the removal of English ivy by a team of volunteers. The vines are then processed and crocheted with the help of volunteers using the fence on top of the Nature House as a crochet hook, producing mats of various lengths and widths. The mats are hung to dry and are scheduled to be installed in early October. Bound with willow stakes, the crocheted mats will secure soil onto the slope and native plants will be planted to grow through the holes. Over time the bio-nets decompose and the slope will become restored as the roots of plants begin to stabilize the slope preventing further erosion.

If you are interested in learning more about this project or volunteering, please contact stewardship@stanleyparkecology.ca.

Ivy Smith, Stewardship Coordinator

Notice of SPES’ Annual General Meeting
(see page 5 for time and location)

For information on membership or nominations to the Board, contact 604-718-6523.