The Changing Face of a Lake

Today, if you ask someone what the most popular winter activity in Vancouver is, you’ll likely be told skiing, snowboarding, or snowshoeing. But what if you’d asked the same question in 1920? The answer would likely have been ice-skating!

Throughout the early to mid-part of the 20th century, Lost Lagoon was Vancouver’s most popular outdoor skating venue. It was a bustling spot all winter as streetcars ran down Georgia Street to deliver enthusiastic Vancouverites, skates in hand, for a day of fun on the ice. The winter freeze was a regular occurrence in Vancouver even into the 1950s. In January 1957, the Vancouver Sun reported an estimated 20,000 people visited Lost Lagoon to ice-skate in just one day.

Although many Vancouverites will fondly remember these cold winters, the lake doesn’t freeze over as it used to do. In fact, the last time the lake was usable as an outdoor skating rink was in 1971. Today, a thin layer of ice may form over parts of the surface, but only for a few days at a time.

People weren’t the only visitors to flock to Lost Lagoon during the winter. Wetland birds have been visiting the area since before European contact. When the lake...
was still a saltwater extension of the Burrard Inlet, flocks of thousands of wintering waterfowl were seen in the area, which was vital for birds stopping to refuel along migration routes as well as an overwintering site for many species. Even into the early part of the 20th century the saltmarshes were noted as important feeding grounds for waterfowl. In 1921, a Province news article explained how common birds such as ruddy ducks, mergansers, buffleheads, teal, widgeon, pintails and occasionally mallards flocked to the swamps and saltmarshes around Coal Harbour to feed.

Fast forward to 2013 and the winter scene is now quite different. Local naturalists and birders, who have been coming to Stanley Park for decades, have reported that bird numbers have steadily declined over the years. In the late 1980s both greater and lesser scaup were common sights in winter but now both are considered uncommon and large flocks are rarely seen.

Between August 1993 and July 1994, the peak number of birds for Lost Lagoon and Beaver Lake combined were seen in January and totaled 6,529 (Michael Price unpublished data in Robertson and Berhuys, 1995). In similar surveys, conducted by SPES between 2006 and 2009, those peak winter numbers were much lower at just 900. However, more recent data taken from SPES monthly bird counts, indicates the number of waterfowl using Stanley Park’s wetlands, including Canada geese, mallards and all other waterfowl, has remained stable for the past 6 years. It consistently falls at around 2,500 to 3,500 for the entire year.

The reason for the decline in waterfowl numbers at the Lagoon over past decades can only be speculated, but habitat loss and degradation in their breeding areas, changes in their abundance and distribution due to the effects of climate change, and the increase in population and pressures from human use of their wintering areas may be factors. In an attempt to enhance and restore habitat for those species that still do visit the Lagoon in winter, SPES has restored one of the habitat islands, replanted degraded riparian vegetation, and installed floating logs as resting platforms. SPES monthly bird counts also continue to provide one of the most comprehensive bird data sets for the Park and allow for continual monitoring and analysis.

Lost Lagoon remains a popular destination for both birds and Vancouverites. Today a winter stroll around the lake may yield sightings of merganser, scap, bufflehead, widgeon, goldeneye, ringed neck duck, shoveler, as well as the ever present mallard and Canada goose, but no longer ice skaters! Despite our increasingly urbanized world, countless park visitors and bird enthusiasts continue to visit Lost Lagoon to commune with nature and enjoy a winter refuge at a beautiful little lake in the city.
When winter rolls around, we like to cozy up with a cup of hot chocolate and wear a warm sweater; but what do animals do? This winter, let’s discover how animals keep warm and adapt to colder temperatures.

Using arrows, match the animal below with the corresponding winter adaptation

1. This large water bird can be found fishing the waters of Beaver Lake or Lost Lagoon. It has a high percentage of rod-type photoreceptors in its eyes, which allows it to hunt in the dark, shorter winter days.

2. These tiny birds are usually found buzzing around the Stanley Park Rose Garden in spring and summer. Like humans, they choose to visit warmer climates as winter approaches.

3. This small creature will move its nest into a hole in a tree; sometimes it will adopt a hole that a woodpecker has left behind. It will insulate the nest with shredded bark and moss and will take shelter there on especially cold days to conserve energy.

4. This flying creature has two strategies for coping with winter temperatures. Some species migrate south to warmer areas while others hibernate in sheltered spots, including caves, abandoned mines or deep rock crevices, living off stored fat.

5. This small bird’s spring call sounds like “cheeseburger” but it eats berries through the summer. In the winter, when berries aren’t available, it uses its well adapted beak to crack open and eat nutrient dense nuts and seeds.

6. This kingdom of many legged animals seeks shelter from the cold winter weather in holes in the ground, under the bark of trees, deep inside rotting logs or in any small crack or crevasse found in the forest.

Answers: 1 - Great blue heron, 2 - Rufous hummingbird, 3 - Douglas squirrel, 4 - bat, 5 - Black capped chickadee.
## Nature Programs
For all Nature Programs, meet at Stanley Park Nature House unless otherwise noted.

### 604-718-6522
*

*$5 for SPES members, children and seniors. $10 for non-members.

### Stanley Park Young Naturalists: Christmas Bird Count for Kids
Calling all young birders! Join other youth and experts for this annual bird survey!
After an information session, we will head into the forest for a 1.5 hour walk and regroup to share our findings.
For accompanied kids (ages 5-14).
Meet at Stanley Park Dining Pavilion, 610 Pipeline Rd.

**Sat, Dec 7, 9.30am-1.30pm**

### The Edge of Winter
Looking for ideas on how to get through the winter? During this walk explore the ingenious ways that plants and animals have adapted to the cold temperatures, increased rain (sometimes snow), and winds of winter. And they do it without gloves or toques!

**Sun, Dec 8, 1.30-3.30pm**

### Stanley Park Young Naturalists: Nature Journals
As we explore the world around us, we see beautiful sights and cool creatures. What better way to keep track of it than with a Nature Journal that we will create.
For accompanied kids (ages 5-14).
Meet at Stanley Park Dining Pavilion, 610 Pipeline Rd.

**Sat, Dec 14, 1-3pm**

### Celebrating Solstice
The chestnuts are roasting and holly has been hung. But where do these traditions come from? On this walk we explore the history and customs of midwinter festivals and understand the traditions behind the plants and decorations that we associate with the holiday season.

**Sun, Dec 22, 1.30-3.30pm**

### Birds of a Feather
Enjoy the birds of winter and discover how many species call the park home during the chilly months of the year. Join us for a two-hour easy walking exploration to learn about bird identification and behaviour.

Participation by donation.

**Sun, Dec 29, 9-11am**

### Stanley Park Young Naturalists: Cool Conifers
Have you ever wondered why certain trees flourish in certain areas? Join us on an exploration of how conifers adapt and thrive in this temperate rainforest!
For accompanied kids (ages 5-14).

**Sat, Jan 4, 1-3pm**

### Wonderful Wetlands
Walk the paths of Beaver Lake and discover how wetlands play a vital role as the kidneys, gills and lungs of natural ecosystems. Beaver Lake exhibits a variety of wetland types.
Learn about the characteristics and ecology of each.

**Sun, Jan 5, 1.30-3.30pm**
### Membership Perks!

#### Bright Nights in Stanley Park.
**Dec 5 - Jan 5**

**SPES Members Go Free!**
Dec 9 - Dec 11 from 7-9pm

(must show valid member card)

www.brightnight.ca

---

<table>
<thead>
<tr>
<th>Winter 2014</th>
<th>stanleyparkecology.ca/events 604-718-6522</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winter Wandering</strong></td>
<td></td>
</tr>
<tr>
<td>Vancouver is a fantastic place for year round hiking and exploration, but are you prepared for what the wet West Coast might have in store for you on the trails? Join us on a walk in Stanley Park for some tips on how to enjoy the great outdoors safely this winter.</td>
<td></td>
</tr>
<tr>
<td><strong>Mysteries of a Feasting Forest</strong></td>
<td></td>
</tr>
<tr>
<td>Like us, trees enjoy a great feast. But in the great Canadian Boreal Forest, nitrogen for proteins is hard to come by. Nicole Linfoot, a biologist from Alberta’s Lesser Slave Lake Bird Observatory, gives a visual presentation about this ecological mystery.</td>
<td></td>
</tr>
<tr>
<td>Participation by donation. <strong>West End Community Centre</strong> Mon, Jan 13, 7-8.30pm</td>
<td></td>
</tr>
<tr>
<td><strong>Stanley Park Young Naturalists: Animal Origami</strong></td>
<td></td>
</tr>
<tr>
<td>Try your hand at the unique art of origami and create your favourite forest creature from Stanley Park or around the world out of colourful paper. For accompanied kids (ages 5-14).</td>
<td></td>
</tr>
<tr>
<td><strong>Meet at Stanley Park Dining Pavilion, 610 Pipeline Rd.</strong> Sat, Feb 1, 1-3pm</td>
<td></td>
</tr>
<tr>
<td><strong>Romantic Stanley Park: The Amorous, Curious and Shady Sites</strong></td>
<td></td>
</tr>
<tr>
<td>A Valentine’s Day stroll through what has been known for decades as “the most romantic spot in Vancouver.” Hear intriguing stories from the Park’s past and see rare historical photographs.</td>
<td></td>
</tr>
<tr>
<td>Sun, Feb 9, 1.30-3.30pm</td>
<td></td>
</tr>
<tr>
<td><strong>Mysteries of a Coastal Temperate Rainforest</strong></td>
<td></td>
</tr>
<tr>
<td>Join us for a walk and learn about the structure, ecology and global distribution of temperate coniferous forests and help us answer such questions as “Why are they made up of trees of such enormous size?” and “Why can some tree species live for well over 1000 years?”</td>
<td></td>
</tr>
<tr>
<td>Sun, Feb 16, 1.30-3.30pm</td>
<td></td>
</tr>
<tr>
<td><strong>Birds of a Feather</strong></td>
<td></td>
</tr>
<tr>
<td>Discover how the birds spend Valentine’s Day as our feathered friends start strutting their stuff in preparation for mating season. Join us for a two-hour easy walking exploration to learn about bird identification and behaviour.</td>
<td></td>
</tr>
<tr>
<td>Participation by donation. <strong>Meet at Stanley Park Dining Pavilion, 610 Pipeline Rd.</strong> Sun, Feb 23, 9-11am</td>
<td></td>
</tr>
<tr>
<td><strong>Stanley Park Young Naturalists: Our Feathered Friends</strong></td>
<td></td>
</tr>
<tr>
<td>Create bird nest boxes out of recycled materials. Learn what happens to a nest in an abandoned tree cavity and why woodpeckers are integral to many other birds’ survival. For accompanied kids (ages 5-14).</td>
<td></td>
</tr>
<tr>
<td><strong>Meet at Stanley Park Dining Pavilion, 610 Pipeline Rd.</strong> Sat, March 1, 1-3pm</td>
<td></td>
</tr>
<tr>
<td><strong>Beneath the Canopy</strong></td>
<td></td>
</tr>
<tr>
<td>Because of their small size, many plants are usually overlooked in our local forests. On this walk we’ll learn to identify the species and to recognize the roles of mosses, liverworts and lichens in the forest of Stanley Park. Be sure to bring a hand lens - if you have one - to see features below the range of the human eye.</td>
<td></td>
</tr>
<tr>
<td>Sun, March 2, 1.30-3.30pm</td>
<td></td>
</tr>
</tbody>
</table>
Beaver Lake Habitat Enhancement Project

Beaver Lake, one of the last remaining wetlands in the City of Vancouver, is rapidly declining and could disappear as soon as 2020 if no measures are taken.

The Vancouver Park Board and Stanley Park Ecology Society (SPES) have been working in partnership, under guidance from the Stanley Park Ecological Action Plan (2011), to come up with potential plans for enhancement of the lake. To ensure the long-term ecological viability and diversity of the lake, a consultant team (led by Aquaterra Environmental Ltd) was contracted to help gather more information and devise a series of habitat enhancement plans. Throughout the summer, the team worked to uncover mysteries such as: what is the nature of the islands that have recently emerged at the lake, how deep is the lake bottom and what is it made of, and why has the infilling been so rapid?

After the biologists and hydrologists completed their surveys, Tom Biebighauser and Dr. Valentin Schaefer, leading experts in wetland and novel ecosystem restoration, were invited to make recommendations and advise on the project. SPES staff gave them a tour of the site and both experts indicated concerns for the lake's future. The team also met members of the Squamish, Tsleil-Waututh and Musqueam First Nations to discuss the potential plans.

The Vancouver Park Board invited the public to attend open houses on November 21 and 23 to review and comment on the proposed options. Materials and comment forms from these events are available online at vancouver.ca. Further comments will be received online until January 1, 2014.

Following this current phase of public consultation, the consultant team will create a final restoration plan which will be brought to a Park Board meeting later this winter.

For further information about the proposed options contact Vancouver Park Board:

Alan Duncan, Project Manager on 604-257-8515 or email alan.duncan@vancouver.ca

Photo above by Mark White

Wildlife Sightings

Every week we receive lots of wildlife pictures and reports from local photographers and naturalists. Here are two uncommon sightings shared recently by naturalist, Peter Woods.

White-throated sparrow on Beaver Lake Loop Oct 15, 2013


Send us your sightings on Facebook or email: sponsors@stanleyparkecology.ca
Join SPES as a new member and attend Bright Nights in Stanley Park for FREE from Monday, Dec 9 until Wednesday, Dec 11 between 7-9pm (you must show a valid membership card).

Enjoy over three million twinkling lights, festive displays and holiday music as you journey through the forest on this magical adventure.

Hosted by the Vancouver Park Board and the Firefighters’ Burn Fund, this event runs from Dec 5 to Jan 5. For more information about hours and tickets, please visit www.brightnights.ca.

You can also support SPES’ conservation and education work in Stanley Park by enjoying a bag of delicious organic popcorn made with real butter from our Cob House in the Miniature Train Plaza.

To become a member call 604-718-6523 or visit www.stanleyparkecology.ca

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:

Loise Irwin
Spencer Chandra Herbert
Stephen Hogarth
Kathleen Swain
Janet Schindler
Anna Trinh
Saul Geller
Paula Caird
Alexandra King

We would also like to thank all those who recently made donations at SPES’ Cob House and Nature House.

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

Buy a friend or loved one the gift of membership or one of our adoption packages and you’ll be giving twice this Christmas!

Buy a SPES Membership from $15 per year
Support the stewardship of Stanley Park and its wildlife and enjoy discounts to nature walks, special events and other park attractions.
Memberships are available for as little as $20 for an individual, $15 for seniors and youth and $40 for the whole family.
Register online www.stanleyparkecology.ca or call 604-257-6523

Adopt a Great Blue Heron Nest - $48
Stanley Park is home to one of the largest urban great blue heron colonies in North America!
Adopt a Great Blue Heron Nest and help SPES to protect these incredible birds.
Adopters receive:
• Certificate of Adoption
• Printed information about Stanley Park’s great blue herons
• Updates on the status of the heron colony and your nest throughout the season
• An annual heronry report
• A tour of the heronry during a Discovery Walk offered each spring

Adopt an Eagle Nest - $100
Stanley Park is home to up to four pairs of nesting bald eagles. Help to ensure the bald eagle population continues to thrive in Stanley Park.
Adopters receive:
• Certificate of adoption
• Important information about bald eagles and their nests throughout Greater Vancouver
• Invitation to attend a special Discovery Walk to observe eagles in Stanley Park
• An annual status report highlighting important conservation issues in nesting areas
• A charitable tax receipt

To adopt visit www.stanleyparkecology.ca or call 604-718-6523