



Inside...

Floating Heroes	p.2
Return of the Herons	p.3
Supercolonies	p.3
Public Programs	
Calendar	Insert
Adopt a Nest	p.4

Connecting People With Nature

The Stanley Park Ecology Society is a community-based, not-for-profit organization dedicated to encouraging stewardship of our natural world through environmental education and action.

Become a Member!
See back page to find out how you can get involved.

Contact Us:

Second floor
Stanley Park Dining Pavilion
PO Box 5167
Vancouver BC
V6B 4B2

Tel: (604) 257-6908

Fax: (604) 257-8378

Nature House:
(604) 257-8544

Email: info@stanleyparkecology.ca

Phenology: Noting Nature's Calendar



Are you observant? Then you will notice that nature has a rhythm. The study of nature's rhythm is called phenology. It is the study of changes in plants and animals from year to year as they respond to weather, climate and the seasons.

(Koren Johnstone, Environmental Educator, Nature House)

Phenology is as old as humankind! In early times, being conscious of nature's cyclical occurrences, such as when the salmon were running and other food-related events, was especially important for our immediate survival. Today, more and more of us are becoming interested in phenology simply as a fun and educational way to enjoy the natural world.

...Did You See That??...

Each spring around April we await the first Rufous Hummingbird returning from its wintering grounds in Mexico. That is a phenological event. Around this time, salmonberries in our area are coming into bloom, just in time for the arrival of the nectar-hungry hummers. Later on in mid-May, the Swainson's Thrush will appear in time for the ripening of the fruit of the salmonberries. Phenologists keep track of cyclical natural events like these from year to year. Their records would typically include dates of:

- Spring and fall migrations of bird and mammal species
- Growth stages of various animal species
- Bird and mammal breeding activities
- Denning and emergence of hibernating animals
- Butterflies, mosquitoes and other insects emergence
- Plant bud, bloom and fruiting
- Peak fall foliage and leaf drop

**The Heat Is On:
Phenology & Climate Change**

In August 2004 the European Commission cited climate change as 'one of the greatest environmental and economic threats facing the planet'. The recent trend of increasing global temperature is continuing, with 2005 listed as the second warmest year in records dating back to 1861.



continued...

Phenology continued from cover page...

Phenology presents compelling evidence that climate change is taking place now, and that it is already having a significant effect on our wildlife. Spring is arriving earlier and fall is staying on later, so that winter is being shortened at both ends and is increasingly frost-free. This is producing a noticeable effect on natural ecosystems. For example, plants are budding and flowering sooner, and insects and migrant birds are being seen earlier than in previous years.

Getting Involved: Becoming a Recorder

Tracking nature over the seasons is an enjoyable way for you to develop naturalist skills and to cultivate a sense of place in the natural world. If you keep accurate and consistent records for a number of years, these can become valuable information for assessing how climate change is affecting our wildlife habitats. If you are concerned about climate change, you can make a meaningful

contribution by participating in various phenology-based programs. For example, by reporting certain plant species found in your community on Environment Canada's 'Plant Watch' program www.plantwatch.ca, you can help researchers discover how common plants are responding to climate change.

Keeping your own phenological records can be as straightforward as maintaining a notebook to list a few of your favourite seasonal highlights, or as involved as using computer software to track a whole range of periodic natural events. In any case, you will need to observe the species you are tracking closely and frequently, and learn their basic lifecycles.

If you would like to find out more about the wonderful variety of species found in Stanley Park, please visit us at the Nature House on Lost Lagoon. You can check out our displays and our guided Discovery Walks, and learn about flowers, shrubs, trees, birds and other animals as they undergo

changes during the year. You can also enter your sightings into our Observation Log and compare your findings with those of other naturalists and members of the public.

Fast Facts

- The word *phenology* comes from the Greek word *phaino*, "to show or appear", and *logy*, "to study".
- The first written phenological records are Chinese, dating back to 974 B.C. Japanese records for the peak cherry bloom date back 1,200 years.
- Phenology records in Edmonton, Alberta, show that spring plants are blooming an average of 10 days sooner than they did 45 years ago.
- Spring moves north, west, and uphill at predictable rates:
 - 15 miles north/day
 - one degree of longitude west/day
 - 30 meters uphill/day

The Nature House at Lost Lagoon in Stanley Park is open on weekends from 9:30 AM to 4:30 PM.

Floating Heroes in Lost Lagoon

(Michelle Gaudry, SPES Stewardship Assistant)



Lost Lagoon is one of the most popular features of Stanley Park. Each winter, hundreds of migratory birds return to the lagoon to seek refuge from colder climates found in British Columbia's interior and as far north as the Arctic. The Stanley Park Ecology Society (SPES) is working to enhance the habitat of these majestic creatures by placing floating islands in the lagoon that allow the birds to rest safely.

Proper resting areas help to maintain migratory and resident bird populations and are imperative to the survival of threatened bird species. In 2001, the Double-crested

Cormorant was placed on the Conservation Data Centre's red list and is now considered a *threatened* species throughout the province. As this species is a year-round resident of Lost Lagoon, it is important to ensure that adequate habitat is available.

Research has shown that if floating logs are placed in small bodies of water, cormorants will flock to them. The birds lack well developed oil glands and require a safe place to dry their wings.

While improving the quality of life for waterfowl in Lost Lagoon, these log rafts will also provide the public with ideal viewing opportunities that are far enough away from the lagoon's shoreline to protect the birds from human disturbance. Once the islands are in place, a monitoring program will track which species are benefitting from using the floating logs.

This exciting project has been a collaboration between the Stanley Park Ecology Society, the Vancouver Park Board, and the Public Conservation Assistance Fund. A special thank-you goes out to Home Depot and Lafarge Canada Inc. for their generous donation of supplies. We also thank our dedicated volunteers, without whom this ongoing study would not be possible.

Construction is underway and we hope to see the islands installed in the lagoon by early spring. So keep your eyes peeled—bird watching at Lost Lagoon may be entering a whole new era!

Back to the Branches Stanley Park's Blue Herons Return to Roost

(Robert Boelens,
Co-Existing with Coyotes Coordinator)

Vancouver residents got two surprises on the 14th of January: there was no rain, for a change, and glances upward at a few of the 170 nests in the Stanley Park Heronry revealed a pair of nesting herons and several more perched in nearby branches.

The herons are back. While it is too early to tell how many of the 300+ adult birds that nested in Stanley Park last year will return in 2006, the arrival of the first few birds has heron monitors excited.

In the last two weeks of January following the sighting, several keen observers spotted the occasional nesting heron while others reported that all the nests were empty.

February, however, began with noisy displays of courtship: clapping bills, long necks extended skyward and plenty of preening of long, white breeding plumage on the chest all helped to set the mood for the mating that follows.

During the herons' absence, the Vancouver Park Board consulted with SPES and increased the range of the protective fencing around the colony's trees. The aim of the fencing is to minimize disturbance to the birds while keeping park visitors safe from falling branches and heron droppings.

Visit

www.stanleyparkecology.ca
for the latest on Stanley Park's
herons.

Ant Supercolonies: the Next Invasion?



In recent decades, several ant species around the world have developed an expression of social organization that is unparalleled in the natural world.

Known as *supercolonies*, these organizations can consist of millions of genetically unrelated ant colonies that function as a single, massive cooperative unit. The largest supercolony spans over 6,000 km and is located in Europe along the Mediterranean coast. Billions of individual ants inhabit coastal areas from Northern Italy to Portugal, forming the largest known biological organization on Earth.

Paleontologists speculate that colonial behaviour in ants and bees appeared 40–60 million years ago. Since that time, colonial insects have functioned as extended families working in single hives and defending them against enemies, which often include rival colonies of the same species.

Supercolonies are unlike any other known biological association; they defy simple scientific explanation. Why this behaviour evolved is still a mystery, but even greater is the enigma of how they emerged.

Globally, at least three ant species organize into supercolonies. On the Japanese island of Hokkaido, supercolonies of red wood ants have been active for over 30 years, while on Christmas Island in the Pacific Ocean, yellow crazy ants have destroyed almost half of the sensitive jungle habitat of red land crabs, now a threatened species.

Elsewhere, super-colonies of Argentine ants have eliminated as much as 90% of their competing species, drastically reducing genetic diversity in occupied areas of Europe, Australia and the United States.

These ants likely arrived in ships carrying plants to Europe from Argentina. Adapting quickly to the favourable Mediterranean environment, they rapidly reproduced in the absence of typical predators.

The Lower Mainland's mild climate and ample shipping industry make it a prime location for a supercolony. It's worth keeping a close eye on our local ants...

(Andrew Scott,
Nature Artist and SPES Interpreter)

COMFY GATHERING SPACE FOR RENT

Meetings/Workshops Birthdays Yoga Classes Parties

Looking for a place to meet? We have an **80-SQUARE-METER** sunny room on the 2nd floor of the classic Stanley Park Dining Pavilion near the Rose Gardens and Malkin Bowl.

100% of your rental fee for this **35-person capacity** room goes to the Stanley Park Ecology Society to help us to connect people with nature.

For more information, call **604.257.6908** or email at info@stanleyparkecology.ca

spring nature programs

DISCOVERY WALKS

Venture into Stanley Park on a two-hour guided walking tour with a naturalist or local expert. Walk themes and leaders vary. See upcoming themes following. Leave from the Lost Lagoon Nature House every Sunday at 1 pm. Rain or shine! \$8 public, \$5 members/student.



NATURE STORY & CRAFT

Nature games, stories and crafts for 3- to 6-year-olds. A fun way to learn about local plants and animals! Last Saturday of each month at 11 am at the Nature House. \$5 per child, \$2 per member; parents no charge.



BIRDING IN STANLEY PARK

Join naturalist and bird watcher Cathy Aitchison for a 2-hour tour in Stanley Park to identify migratory and resident birds and learn bird watching skills. Meet at the Nature House. By donation. The last Sunday of every month at 9am.



Mar 5

 **Seeing the Forest for the Trees** Join naturalist Murray Lashmar to learn how forests change over time, how to identify Stanley Park's trees, and how they depend on one another.

Mar 11

 **Ivy Busters**

Mar 11

★ **Historical Walk** - Famous & Forgotten Women of Stanley Park

Mar 12

 **Return of the Herons** Join Robyn Worcester to explore the newly returned herons at the heronry and see what the eagles and other birds are up to in the park as they prepare for the breeding season.

Mar 16

★ **Special Evening Presentation**-Seabird Studies of Stanley Park

Mar 19

 **Celebrate the Spring Equinox** with Robyn Worcester. Observe the changes in bird behaviour as spring arrives: Migrants arrive and leave, some prepare nests, and some perform courtship rituals.

Mar 25

 **Children's Nature Story & Craft**

Mar 26

 **Climate Change: How does nature adjust?** Take an illustrated walk & talk along the trails of Stanley Park with biologist David Cook to better understand the impact of climate change on animals and plants of our Temperate Rain Forests.

Mar 26

 **Birding with Cathy Aitchison**

Special Evening Presentations

Seabirds of Stanley Park

With support from the Canadian Wildlife Service, students in BCIT's Renewable Resources Program are conducting a survey of the seabirds that spend their winters in the waters along Stanley Park's seawall. They are ready to share the results.

Where: second floor of Stanley Park Dining Pavilion

When: Thursday March 16, 7:00-8:30pm

Free: pre-registration recommended

Call: 604-257-6908

Spirit Bears, Salmon, and Cedars

Video imagery of the rare white "Spirit Bear" fishing at night is a spine chilling thrill. Tom Reimchen's exciting research that traces deep sea nutrients through salmon, ancient trees, even songbirds is all linked to the bears' success at this fishing.

Join us for a cyclical story of epic proportions!

Where: Stanley Park Dining Pavilion

When: Tuesday April 11, 7-9 pm

Cost: \$10 SPES members; \$14 general public

Pre-registration: 604-257-6908

spring nature programs

Apr 2

 **Walk on the Wildside** Robyn Worcester leads this discovery tour to the Great Blue Heron colony, through mature forests, and rich wetlands and discusses how West Coast First Nations peoples depended on the rainforest.

Apr 8

 **Ivy Busters**

Apr 9

 **Stumped: The Wildlife in Dead Trees** Join naturalist Murray Lashmar and explore the fascinating relationship between wildlife and standing and fallen dead or dying trees within the forest.

Apr 11

 **Special Evening Presentation-Spirit Bears, Salmon, & Cedars**

Apr 16

 **Songsters in the Garden** with birder Cathy Aitchison. As we walk through Stanley Park looking for returning birds, we'll pay special attention to their songs and practice identifying the little feathered singers.

Apr 29

 **Children's Nature Story & Craft**

Apr 30

 **Rebirth of Bugs** Enjoy a stroll in the park with nature interpreter Andrew Scott and examine the dramatic physical changes occurring every spring in the fascinating insect world.

Apr 30

 **Birding with Cathy Aitchison**

May 7

 **The Trees of Stanley Park - characteristics & ecology** Learn with biologist David Cook how to identify the tree species of mature to old growth Temperate Rain Forest of Stanley Park.

May 13

 **Ivy Busters**

May 14

 **International Migratory Bird Day Walk** Why do birds migrate? How do some birds fly thousands of miles twice a year between breeding and wintering territories? Learn about these small miracles of endurance and perseverance with birder Cathy Aitchison.

May 21

 **Biodiversity Day Walk** Join renowned botanist Terry Taylor for a look at the biodiversity of Stanley Park and relate it to global biodiversity. He will also help people to understand aspects of biodiversity.

May 27

 **Children's Nature Story & Craft**

May 28

 **Old Growth Forests** With biologist David Cook walk through some of the old growth areas of the Stanley Park and discover how a forest developed from the early beginning to the mystery of great age.

May 28

 **Birding with Cathy Aitchison**

Jun 4

 **Insects Rule Earth** Join nature interpreter Andrew Scott and discover why Stanley Park would not exist without help from its insect population. Can you believe it? Check it out!

IVY BUSTERS

New Schedule – Second Saturday of each month

Stanley Park Needs your Help ~ Aliens are Taking Over!!!

Come enjoy the beauty of Stanley Park on a spring morning and help us to remove alien invasive plants that are smothering native vegetation.

Meet at the Stanley Park Dining Pavilion at 9:00am sharp until noon. Please bring plenty of water and wear solid footwear. Don't let showers dissuade you; we'll be here rain or shine!

Spring Ivy Busters Events: March 11, April 8, May 13

Spread the word.... bring your family and friends; participants will receive discounts for our Discovery Walks.

Parking passes and refreshments will be provided.

Thank you for helping to preserve Stanley Park's status as a wildlife sanctuary.

We look forward to seeing you here...

For more information, visit www.stanleyparkecology.ca or call (604) 718-6522

DISCOVER THE WILD SIDE OF STANLEY PARK: CUSTOM TOURS

We'll design a customized nature walk or historical tour for your group. Just ask us!

Bookings: 604.718.6522

Adopt a Nest newsletter update

They're Back!

Adopt a Nest and help SPES celebrate the arrival home of Stanley Park's famous Great Blue Herons.

In 2005 SPES monitored the nesting, incubation and fledging activity of 176 nests. This year we hope to see the continued success of these stately birds. Help us work for wildlife by

Adopting a Nest.

Nest adopters receive an Adoption Certificate, SPES membership, bi-monthly updates on the birds and a complimentary tour of the herony. Call 604-257-6908 or email at nests@stanleyparkecology.ca

Sponsors & Donors



KEITH LORD SPORT FOUNDATION

Parks and People Programs



Cecilia Stoll
Bernard Gessie
Cam & Chris Cathcart

Membership Supports:

- School and Public Programs helping more than 12,000 children and adults to discover nature each year through hands-on stewardship adventures.
- The Lost Lagoon Nature House, Vancouver's only ecological interpretive centre, welcoming over 15,000 visitors each year.
- Wildlife monitoring, habitat restoration and biodiversity conservation in Stanley Park.

Members Enjoy:

- Discounts on Discovery Walks, Family Programs and Events.
- Seasonal activities calendar and our quarterly newsletter.
- Voting privileges to help SPES enact ecological stewardship in Stanley Park.
- Special perks & promotions from community partners.
- Free preview nights on Christmas Bright Nights and the Halloween Ghost Train



YES, I Want to Get Involved!

NAME _____

ADDRESS _____

CITY _____ POSTAL CODE _____

PHONE _____ EMAIL _____

All information will be kept confidential according to the Personal Information Protection Act.

PAYMENT METHOD

Cheque Visa MasterCard

Cheques are payable to:
Stanley Park Ecology Society
PO Box 5167
Vancouver, B.C. V6B 4B2
Canada

Card Number: _____

Expiry Date: _____

Cardholder: _____

I WANT TO BECOME A MEMBER

- Family (\$30) Individual (\$15)
 Junior <19 (\$7.50) Senior/Volunteer (\$10)

I WANT TO MAKE A MONTHLY DONATION

I authorize the following monthly donation to the Stanley Park Ecology Society:

- \$10 \$15 \$25 \$ _____

MY GIFT IS ENCLOSED:

- \$20 \$50 \$100 \$ _____

SPES is registered charity # 11916 6890 RR0001. Charitable Tax Receipts issued for donations of \$30 or more