

## **Urban Ecosystems**

#### **Teacher Information**

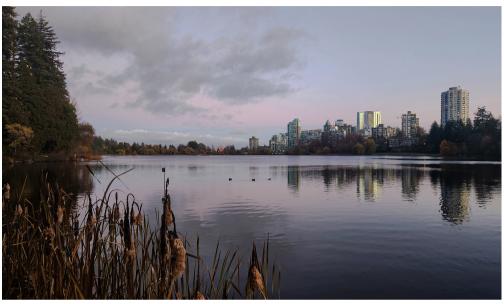


Photo: Rachel Green

## Lost Lagoon is an urban treasure trove! Learn about the species that call this area of Stanley Park home and their interactions with the downtown core.

How do human and environmental systems interconnect in Vancouver? Dive into what makes a healthy urban ecosystem and how biodiversity and climate change affect Stanley Park. This fun and informational program is a great for any curious high schooler.

Content	Page
Urban Ecosystems Program Checklist	2
Curriculum Connections	2-3
Essential Teacher Information	4-5
Park Etiquette for Students	6
Map and Directions	7
Essential Parent/Guardian Information	8

#### **Phone**

#### On the Web

School Programs Office: 604-257-6908 ext: 103 School Programs Cell: 236-867-1564 www.stanleyparkecology.ca school@stanleyparkecology.ca

Stanley Park Ecology Society, PO Box 5167, Vancouver, BC, V6B 4B2

# **Urban Ecosystems Checklist**

### **To Do Before** *Urban Ecosystems*

- Read this Teacher Information Package carefully
- Arrange transportation to arrive 15 minutes Send payment a minimum of two weeks prior before your program start time
- Send Essential Parent/Guardian Information home (Page 7)
- Review Park Etiquette with students (Page 5)
- Review "What to Wear" with students (Page 7)
- to your program

## **Curriculum Connections**

Urban Ecosystems is a place-based program that directly relates to the high school science curricula. Below, you'll find some Big Ideas and Curricular Competencies that will be addressed. You may contact us for a more detailed list for your grade if you wish.

### **Big Ideas:**

#### **Grade 8**

Life processes are performed at the cellular level

#### Grade 9

• The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them.

#### Grade 10

- DNA is the basis for the diversity of living things.
- Energy is conserved, and its transformation can affect living things and the environment.

#### Grade 11

#### Earth Sciences

• The transfer of energy through the atmosphere creates weather, and this transfer is affected by climate change.

#### Environmental Science

- Complex roles and relationships contribute to diversity of ecosystems.
- Changing ecosystems are maintained by natural processes.
- Human practices affect the sustainability of ecosystems.
- Humans can play a role in stewardship and restoration of ecosystems.

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## **Curriculum Connections**

## **Big Ideas:**

#### **Grade 11 continued**

Life Sciences

Organisms are grouped based on common characteristics.

#### Science for Citizens

 Scientific understanding enables humans to respond and adapt to changes locally and globally.

#### Grade 12

**Environmental Science** 

- Human actions affect the quality of water and its ability to sustain life.
- Human activities cause changes in the global climate system.
- Living sustainably supports the well-being of self, community, and Earth.

#### Specialized Sciences

- Biodiversity is dependent on the complex interactions and processes between biotic and abiotic factors.
- Climate change impacts biodiversity and ecosystem health.

### **Curricular Competencies:**

#### Grade 8-12

- Analyze cause-and-effect relationships
- Consider the changes in knowledge over time as tools and technologies have developed
- Contribute to care for self, others, community, and world through individual or collaborative approaches
- Contribute to finding solutions to problems at a local and/or global level through inquiry
- Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal, local, or global interest
- Experience and interpret the local environment
- Express and reflect on a variety of experiences, perspectives, and worldviews through place
- Make observations aimed at identifying their own questions, including increasingly abstract and/or complex ones, about the natural world
- Transfer and apply learning to new situations
- Use scientific understandings to identify relationships and draw conclusions



## **Essential Teacher Information**

### **Payment**

Payment is due a minimum of two weeks prior to your program date. Payment can be made by credit card over the phone or by mailed cheque. Please make cheques out to the Stanley Park Ecology Society and mark them with your invoice number, school name and program date. A \$25 fee will be charged for all cheques returned NSF.

### **Cancellation Policy**

Our programs are popular and space is limited. Where a cancellation is made less than two weeks in advance, the Stanley Park Ecology Society may retain the full program fee. COVID-19 Cancellation: If the BC government introduces COVID-19 restrictions that impact our ability to deliver these programs, full refunds will be given.

### **Be Prepared**

Our programs run rain or shine and are held entirely outside. Students will be learning through hands-on activities, getting a bit dirty and possibly wet (especially shoes). Please review the enclosed 'what to wear' list with your students prior to their park visit (see page 7). Due to the variable walking terrain, appropriate footwear is required.

#### **Adult Assistance**

We require the assistance of a minimum of two and a **maximum** of four adults. These adults are invited to participate in all activities and asked to help maintain discipline in the group. Please ensure adults turn off cell phones and refrain from having distracting conversations.

## **Arriving for the Program**

Please arrive 15 minutes before the program time in order to have a washroom break, snacks and division into groups. Programs do not stop for washroom and snack breaks as there is no access to facilities during the program. SPES educators will greet you at the meeting location at the designated start time. If you are running late, please call the School Programs cell phone at 236-867-1564 to let us know.

Continued on the following page



# **Essential Teacher Information**

### **Transportation and Meeting Site**

The meeting site for this program is at the Miniature Railway parking lot (see map on Page 6). This site is easily accessed by the #19 Stanley Park public bus, school buses, or private vehicles.

### **Photography**

We recognize that photos are a great way for classes to document their fieldtrips, and so we allow photos during our programs; however it is our policy at SPES School Programs that no videos are to be taken of/during our programs.

### **Pay Parking**

Pay parking is in effect at all times in Stanley Park. The rates from April 1 - September 30 are \$3.75 for 1 hour or \$14.25 per day per vehicle and from October 1 - March 31 are \$2.75 for 1 hour or \$7.75 per day. Rates are set by the Park Board and subject to change. Cash and credit cards are accepted at the ticket machines.

#### **Inclement Weather**

Programs run rain or shine in Stanley Park, however during dangerous weather we occasionally have to cancel programs for safety reasons. Extreme weather events can be dangerous in the park due to falling trees, slippery conditions, etc. Government-issued weather advisories are also monitored for important recommendations. A full refund will be issued if we are required to cancel a program due to inclement weather.



# Park Etiquette for Students

Stanley Park is a protected area that is home to many amazing living and nonliving things. We are lucky to be able to visit this area, but we must remember that Stanley Park is where these living things make their homes. As visitors to these organisms' homes we should tread carefully and act with respect.

To ensure the best possible experience for students and the Park's plants and animals, please take the time to review these guidelines with students before your Park visit.

### 1. Bring an open mind and your curiosity

In our outdoor classroom, we'll engage all of our senses while exploring nature. There will be times for listening to instructions, when students will be invited to raise their hands and ask questions. There will also be times when students are given challenges to complete while exploring or sharing stories with their friends.

## 2. Take only photos and memories.

Every single leaf, flower, shell, stone, and berry is an important part of the web of life in the Park. If we remove items from Stanley Park, we are removing potential shelter and food for living things. Students should leave everything as they find it.

## 3. Leave only soft footprints (not garbage).

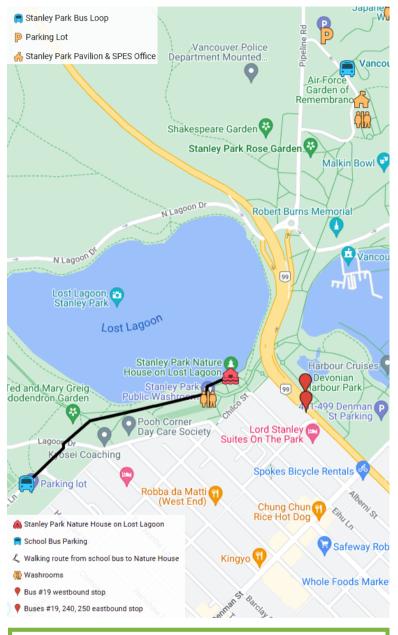
The animals of the Park have all the food they need. Human food can make them sick, create dependence on the humans, and lead to aggressive behaviour or overpopulation. Please ask students to ensure all garbage is disposed of properly. Even small crumbs shouldn't be left for animals to find.

### 4. Explore with respect.

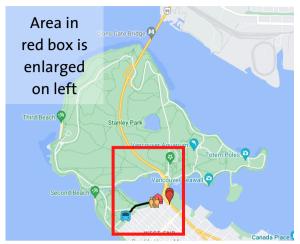
Let us lead your adventure on and off trail in the Park; students should not be ahead of their leader. There will be opportunities to gently touch safe plants in the Park. You might be hugging trees, smelling leaves, or just moving them to get a look from a different angle. However, birds and mammals like raccoons and squirrels – while cute and often accustomed to humans – should not be touched. These are still wild animals and we want them to stay that way.



# **Map and Directions**



For interactive directions, this map is also available at <a href="http://ow.ly/pUTTS">http://ow.ly/pUTTS</a>



### **Driving Directions from Vancouver**

- Travel northeast on Georgia St. past Denman St.
- Take the right lane exit into Stanley Park.
- Travel straight through the roundabout (take the second exit).
- Drive up the hill along Pipeline Road. Take your first right after the rose gardens.
- Follow this narrow road between the rose gardens and the trees past the Stanley Park Pavilion to the Miniature Railway parking lot.
- Walk southwest towards Lost Lagoon.

#### **Public Transit Directions**

 After you get off the #19 bus at Westbound Stanley Park Dr @ Pipeline Rd, walk northwest towards Lost Lagoon. We will meet you on the top of the Nature House.



# **Essential Parent/Guardian Information**

Field Trip Date:	

Your child will be visiting Stanley Park for the Urban Ecosystems program led by the Stanley Park Ecology Society.

During the *Urban Ecosystems* program your teen will get an introduction to nature in Stanley Park's forested trails, where they will use their senses to discover secrets of the forest and its plants and animals! **The entire program will be held outside, rain or shine.** 

To help make this an exciting and memorable experience for your teen, we strongly recommend that they were they wear the following items listed below. It is always colder in the forest, even on a sunny day. Your teen should be prepared to get a bit dirty and possibly wet, especially their shoes! If it is raining on the day of the program, it is especially important to dress well to keep the field trip fun.

## What to wear and bring to the Urban Ecosystems program

- T-shirt, long sleeved shirt, and sweater.
- Long pants no dresses please!
- Good walking shoes that you don't mind getting wet or muddy. NO flip flops or sandals!
- If sunny: sunscreen and hat.
- If raining: rain pants and waterproof jacket with hood or hat.
- If cold: warm gloves and hat.
- Refillable water bottle.

- Please, no umbrellas! In a large group, umbrellas can block the view for your teen's classmates and can accidentally poke someone in the eye.
- Avoid clothes made of cotton on rainy days.
  Cotton can be very cold when wet. Wear wool or synthetic clothes whenever possible.

In addition to school programs, the Stanley Park Ecology Society also offers fun, interactive forest and wildlife walks as well as online programs for families and adults.

Visit us at www.stanleyparkecology.ca for more information about the work of the Stanley Park Ecology Society and becoming a member.

