



Science Unit: *Weather and Seasons*

Lesson 6: *Central Park Field Trip*

School Year: 2009/2010
Developed for: Sir Guy Carleton and Sir Sandford Fleming Elementary Schools, Vancouver School District, Vancouver School District
Developed by: Catriona Gordon (scientist), Karin Bernauer, Maria Maragos, Anita Bramhoff and Ken Kilback (teachers)
Grade level: Presented to grades K and 1/2; appropriate for grades K – 5 with age appropriate modifications
Duration of lesson: 4 hours, including transportation and lunch

Below is the link for a detailed map of Central Park

http://www.burnaby.ca/_shared/assets/Parks_and_Trails_-_Central_Park_Map3259.pdf

Objectives

1. Observe signs of spring in a forest and pond environment.
2. Explore local forest flora and fauna and go on a nature scavenger hunt.
3. Learn basic tree identification.

Background Information

Central Park provides a good urban example of a coastal temperate rain forest. Large conifers include Western Red Cedar, Douglas Fir and Western Hemlock, while the understory vegetation consists of salmonberries, snowberries, vine maples, salal, sword ferns, bleeding hearts, to name a few native species. There are also fine examples of lightning trees, nurse stumps and logs, and blowdowns. The area between the upper and lower ponds is a naturalized marsh and stream area with native aquatic plants including watercress, skunk cabbage and cattails. Larger park animals include very tame squirrels, mallards and other ducks, Canadian geese, crows and songbirds.

Vocabulary

Blowdowns Trees which have been blown over by strong wind, usually showing root ball
Lightning Trees Trees which have been scarred or burned by lightning strikes, showing visible black marks.
Nurse Stumps or nurse logs: A dead tree which is used by other plants and animals as a home or source of food and nutrients

Materials

- Ziploc bags with neck string attached (one for each child) to carry items for field trip
- Bug jars with magnified lids
- Cell phone



SCIENTIST IN RESIDENCE PROGRAM

- pencils
- student booklet with blank pages for recording observations, stapled to hard cardboard
- first aid kit
- crayons
- nature scavenger hunt list
- tree identification cards
- magnifying glasses
- camera
- field guides to plants, insects

In the Classroom

Introductory Discussion

1. Go over safety and park rules with students (stay on the path, stay with your adult, “walking slowly with your eagle eyes and your deer ears to be able to observe things closely”, etc). This field trip is best done with one adult helper per 4-6 students, to allow for careful observation and smaller, more manageable groups of students.
2. Go over the 4L Rule: “Look, Listen, Learn and Leave It “ (behind...ie. No picking plants or taking things out of the park). Encourage careful looking listening, smelling and touching, but not collecting.
3. Plan a meeting time and place in the event that a group gets separated from the rest of the class.

Science Activity/Experiment

1. Brainstorm about what we may find in the park that are “signs of spring”. (Eg. Animals out of hibernation- squirrels, plants in bloom, fiddleheads on ferns, baby ducklings, new growth on shrubs and trees). Students can look for signs of spring and record these in their booklet.
2. Hand out copies of Nature Scavenger Hunt to adults, or students. Have each group go off and look for items on the list to tick off, once found. If insects or other invertebrates are found, place them briefly in the bug jars, for a good look, and then release them.
3. Central park has many great natural features to point out to students such as: lightning trees, nurse stumps and nurse logs, uprooted blowdown trees showing root balls, and a marsh area between the two main ponds. The marsh area has skunk cabbage, watercress, and other aquatic plants worthy of observation.
4. In an area with a good collection of conifer trees, hand out tree identification cards. Get students to try and identify the three major conifer tree species found in the park: Western Red Cedar, Douglas Fir, and Western Hemlock. Look and feel differences in bark, needles, cones and observe differences in general tree shape. Show students the characteristic droopy leader (top) of the Hemlock tree. Find the “mice” hidden in the Douglas Fir cones.

References:

Pojar, Jim and Andy MacKinnon. 1994. Plants of Coastal British Columbia. Lone Pine Publishing. Vancouver.

Acorn, John and Ian Sheldon. 2001. Bugs of British Columbia. Lone Pine Publishing. Vancouver.



SCIENTIST IN RESIDENCE PROGRAM

Sources of Photos in Scavenger Hunt List:

www.hilalplaza.com/BlackSeed.html (seeds)

historic.wildernesscommittee.org/.../Vol05No02 (Douglas fir cone)

www.springwoodforest.com/friends/ (green maple leaf)

zedomax.biz/.../ (spider web)

<http://www.istockphoto.com/index.php> (brown maple leaf)

www.ldcracingsailboats.co.uk (brown shoe)

www.shutterstock.com/pic-3562351/stock-photo-... (feather)

thekittycats.wordpress.com/.../animals/duck/ (mallard duck)

www.emlab.com/s/sampling/env-report-01-2009.html (polypore fungi)

www.broxtowe.gov.uk/index.aspx?articleid=1401 (woodlouse)

juniorannex.wordpress.com/2008/12/ (crow)

www.learnnc.org/lp/multimedia/9674 (woodpecker tree)

www.laspilitas.com/shop/plant-products/availa... (pink flower, Dicentra)

www.globalhome.de/kanada/k4index.html (skunk cabbage)

seattletimes.nwsourc.com/.../0407/living.html (nurse stump)

boojum.as.arizona.edu/.../Lecture8/earth.html (tree rings)

Central Park Field Trip: Nature Scavenger Hunt

Can you find...



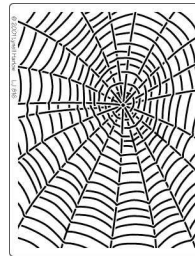
Seeds



A cone



A new green leaf



A spiderweb



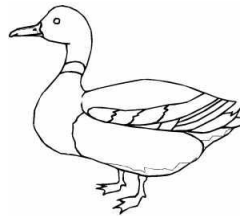
A brown leaf



A plant as tall as your shoe



A feather



Mallard Duck



Fungi



Wood louse



A Crow



A Woodpecker Hole



A pink flower



Skunk Cabbage



A nurse stump



Tree Rings