



Science Unit: *Aquatic Ecosystems*

Lesson 6: *Burnaby Lake Field Trip*

School year: 2006/2007

Developed for: Collingwood Neighbourhood Elementary School, Vancouver School District

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Grade level: Presented to grades K and 3; appropriate for grades K-7 with appropriate modifications.

Duration of lesson: 4 - 5 hours with lunch

Notes: This field trip was organized by the Burnaby Lake Regional Park, GVRD Parks, Central Area. Tel. 604 520 6442 for booking field trips. To lower costs of this field trip, you can choose the option to co-teach activities with the park interpreters. Leaders are very good at tailoring the program to the needs of your group and your area of study. If you are a distance away from this Regional Park, you may wish to call the same number to arrange a trip to a GVRD park closer to your school.

Changes to Pond Ecosystem Field Trip

This 2-hour organized field trip begins at the Nature House at Burnaby Lake Regional Park, at the foot of Piper Ave. on the north side of Burnaby Lake. The Nature House has a permanent collection of natural artifacts. There are also bathrooms and an outdoor picnic area close by.

A ratio of 15 students (maximum) per park interpreter is allowed. Each group of 15 students should also have at least 2 other adults to accompany them. The field trip includes a pond dip with materials provided, a predator-prey game, a close up look at a beaver lodge, an overview of the lake in the observation tower and a beaver costume, showing some of the beaver's special adaptations.

The best times to visit Burnaby Lake are September, late April, May or June (warmer months of the year) when many pond invertebrates are visible as well as many birds such as ducks and geese and their young. The park has many hiking trails and a boardwalk for exploring other parts of Burnaby Lake.

Objectives

- The students will learn about a lake ecosystem, and sample and examine lake organisms.
- The students will learn about beavers, their lodges, and their importance in a freshwater lake ecosystem.
- The students will learn about predator-prey relationships.

Materials

- Materials are provided by the GVRD Parks Office and include pondscopes, nets, pond dipping buckets, aquatic invertebrate keys, supplies for predator-prey games, beaver costumes and artifacts.

Introductory Discussion

What is a lake? What animals might we see here?



Science Activity

Classes should be pre-divided into groups of 15 and then groups will rotate to do three stations:

1. pond dipping, a look at the beaver lodge
2. predator-prey/coyote-beaver game
3. walk to the observation tower and an explanation of the many adaptations of the beaver, using artifacts and a beaver costume.

Closing Discussion

What interesting animals did the students find? What did they like about Burnaby Lake? What new things did they learn about a lake ecosystem?

References

Have students debrief the field study in class by brainstorming the animals and plants they saw in each of the three areas they visited at Burnaby Lake (forest setting, by the pond, and at the look-out area). Have them record their ideas on the follow-up activity sheet.

Note: Another field trip lesson plan on the Jericho Park pond ecosystem can be obtained from the Scientist in Residence Program website; See: Water unit, Lesson 4, *Pond Ecosystem Field Trip*, <http://www.scientistinresidence.ca>.