



DARING DUCKS

This one hour program is delivered on site at Swan Lake Christmas Hill Nature Sanctuary.

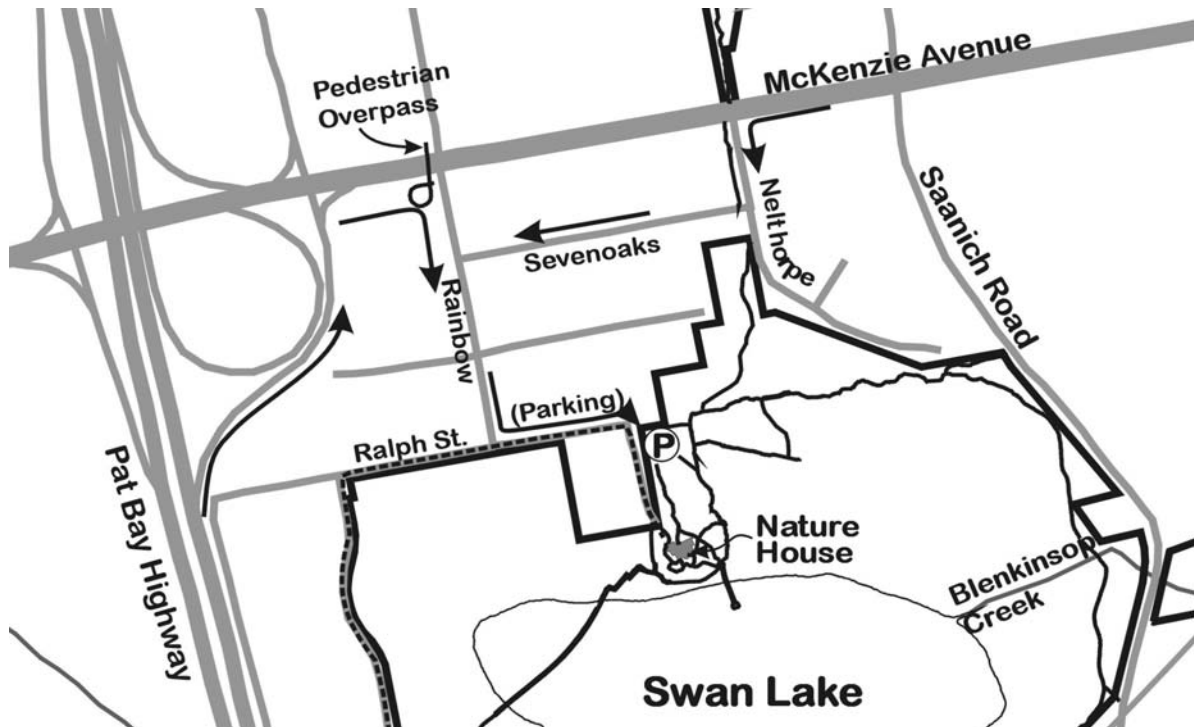
BEFORE YOU ARRIVE:

1. Provide students with easily read **nametags** for both indoors and outdoors.
 2. Please encourage appropriate **clothing** for the weather.
(no umbrellas) Remember that half of your program is outside.
 3. Divide your class into **two groups** before your program.
- We welcome parents; please ask them to be responsible for their group and to help the children.

The program consists of these activities:

1. Indoor explorations and experiments (25 minutes)
2. Outdoor explorations and feeding ducks (35 minutes)

WE'LL MEET YOU IN FRONT OF THE NATURE HOUSE.



PROGRAM OVERVIEW

Inside activities

What's a duck?

What makes a duck a duck and not some other kind of animal? We will use pictures to explore the qualifications of a duck (feathers, webbed feet, and bill).

How do ducks get their food?

We will split the kids into three groups and explain that each will get a turn trying out a tool representing a different type of beak.

We'll have some basins with different food-type items floating on the surface or in the water (styrofoam chips, duck food, pipe cleaner "worms"). The students will try out three different types of implements to collect all of the items which will lead into a discussion about what works best for each food type and why. We will also look at real duck bills. Ducks eat many things (fish, roots, shoots, insects, worms), but their favorite food is seeds, like the flatted oats. Therefore, they have lamellae on their beaks that strain out the seeds and leave behind the water.

Water off a duck's back

We will take turns squirting water on the feathers. What do the students observe? It forms beads rather than soaking into the feather. Fluffy inner feathers absorb the water and that is why they are tucked underneath the waterproof ones. We will have a brief talk about how this works.

Outside activities

Why are ducks different colours?

Camouflage game: feathers are hidden in an area with specific boundaries. Some are brightly coloured, others cryptically coloured. The students will try to see how many feathers they can actually find. Then we compare their numbers with the actual number we've hidden and show them where each feather is. This leads into a talk why males are brightly coloured and females are camouflaged.

How fast can you fly?

Most birds are built for flying (although there are some exceptions namely ostriches, emus, and penguins). Let's find out how fast we could flap. We will try to flap our arms as fast as the flapping wings of different birds to see if we can keep up.

Walk like a duck

Has anyone ever noticed a duck walking around? Doesn't it look like their knees bend

backwards? These “knees” are actually their heels so that they are actually walking on their tiptoes, with most of their leg hidden, and warm, under their body feathers.

Feeding the ducks

We will observe the ducks as they come in for food. What kind of ducks do we see? Are they males or females? We will also explore dabbler vs diving ducks.

Our Goals

The students will be able to:

1. Differentiate ducks from other types of animals and learn about duck species other than the Mallard.
2. Discover some of ducks adaptations for their lifestyle and habitat.
3. Use their senses to explore the Nature House and our outdoor setting.

Learning Outcomes for the Science IRP: The outside part of the program depends on the season, so outcomes can vary. Our program **may contribute to some of the following learning outcomes:**

Kindergarten

- *Use the five senses to make observations
- *Share with others information obtained by observing
- *Describe features of local animals (e.g., colour, shape, size, texture)
- *Compare common animals
- *Demonstrate the ability to observe their surroundings
- *Describe features of their immediate surroundings

Grade 1

- *Communicate their observations, experiences, and thinking
- *Classify living creatures based on their similarities and differences
- *Describe the needs of living creatures
- *Observe how ducks respond to seasonal changes



Payment

An invoice will accompany the confirmation letter you received. **Payment** is due at the time of the program, and cheques should be made out to **Swan Lake Nature Sanctuary** and given to the programmer. **VISA or MC** can be phoned in.

Receipts will be sent by e-mail or fax upon request.

Change of Dates and/or Times:

If you wish to change the date or time of your program please contact us at **250.479.0211** or at programs@swanlake.bc.ca. We will do our best to accommodate your request, depending on available times and dates.

If you have any questions or comments about your program please don't hesitate to contact us; we always welcome your feedback.

We greatly appreciate students' feedback! If you send artwork and writing describing your experiences at Swan Lake we will display as many as we can around the Nature House.

