



Science Unit: *Discovering Life in Local Habitats*

Lesson 7: *Animals in Winter*

School Year: 2010/2011

Developed for: McBride Elementary School, Vancouver School District

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Grade level: Presented to grades K and 1; appropriate for grades K – 7 with age appropriate modifications

Duration of lesson: 1 hour and 20 minutes

Objectives (Objectives refer to the science topic and/or the process of science.)

1. Learn how other animals cope with cold temperatures and reduced food supplies in the winter.
2. Become familiar with the winter local birds, and make a food source for them while food is scarce.

Background Information

Although humans have little adjustment to make during the cold months of the year, most other animals make great adjustments to the temperatures and lack of food. This lesson provides some perspective on this topic, and enables students to locally help some animals through the winter.

Vocabulary

migration: seasonal movement to different parts of the globe

hibernation: seasonal sleep/low activity through the colder months

Materials

- pine cones, one per student
- pipe cleaners, one per student
- lard/vegetable shortening on a plate for each table group
- knives/popsicle sticks to spread lard
- bird seed
- a line to hang between trees for hanging the bird feeders
- binder clips to secure the bird feeders on the line
- an identification sheet of local birds

In the Classroom

Introductory Discussion

Ask students what animals do in the winter when it gets cold and there is not much food.

Read a book about different strategies animals adopt to survive the winter (hibernate/migrate/eat stored food/scavenge for what little food there is) e.g. ref 1.

Ask students what local animals they know, and discuss what they might do for the winter.



SCIENTIST IN RESIDENCE PROGRAM

Tell students we will make a bird feeder, to provide the local winter birds a with a food source.

Brief description of science activity:

- Make a bird feeder and hang it on the school grounds.
- Become familiar with local birds and keep a record of bird sightings.

The processes of science that the students will focus on: observations, recording.

Safety guidelines: none

Science Activities:

(1) Activity Title: Bird feeder

Purpose of Activity: Make a food source for local winter birds.

Methods and Instructions:

Students work individually.

1. Students wrap a pipe cleaner through the scales of a pinecone leaving one long pipe cleaner end for hanging the pinecone.
2. Students spread vegetable shortening on their pine cone, then roll it in birdseed.
3. An adult helps the students to clip their bird feeders on a line outside with a binder clip. They should be hung on the line far from tree branches, out of reach of squirrels.

(2) Activity Title: Bird identification and log

Purpose of Activity: To identify local birds and keep a log of sightings.

Methods and Instructions:

Students work individually.

1. Show students pictures of familiar local birds, and listen to their calls. Use the website in ref 2. The birds we included in Vancouver were: sparrow, chickadee, starling, junco, bushtit and purple finch.
2. Post a sheet of common local bird pictures in the classroom, for students to tally how many times they see each of the birds.

References

1. Fisher, Ron. 1982. Animals in Winter. National Geographic Society.
2. <<http://www.allaboutbirds.org>> The Cornell Lab of Ornithology's excellent bird identificaion and calls website. Accessed May 27, 2011.