



Making a difference...together

# GOING SQUIRRELLY

## Educators Guide

### Program at a Glance

On this fun and interactive program, we introduce children to the charming world of tree squirrels. We compare two tree squirrel species that live here in Victoria and learn about the unique features and behaviors they use to survive. Our program begins with an engaging squirrel puppet show highlighting the similarities and differences between native red squirrels and introduced eastern grey squirrels. In smaller groups, we focus our investigations on red squirrels because of their importance to our local forests. As we



explore an old Douglas-fir forest, we use fun and inspiring nature activities to learn about predator-prey relationships, squirrel middens and dreys and how squirrels prepare for winter. We conclude the program with a song and a challenge to help protect red squirrels and their forest home.

### In this program, your students will...

- Observe and enjoy seasonal changes in the forest
- Identify the amazing tree squirrels that live here
- Explore the forest and understand how it provides the basic needs for red squirrels
- Discover the unique value that red squirrels have in the forest
- Evaluate the impact of our actions on red squirrels and their forest home

### Curriculum Connections

Our place-based school programs directly relate to the K-5 science curricula. Below you will find some big ideas, curricular competencies and content that will be addressed on your program.

#### Big Ideas from BC Curriculum:

- Plants and animals have observable features (Science K)
- Daily and seasonal changes affect all living things (Science K)
- Through listening and speaking, we connect with others and share our world (ELA K & Gr1)
- Curiosity and wonder lead to new discoveries about ourselves and the world around us (ELA K & Gr1)
- Living things have features and behaviors that help them survive in their environment (Science Gr1)

### **Curricular Competencies from BC Curriculum:**

- Make exploratory observations using their senses (Science K)
- Share observations and ideas orally (Science K)
- Demonstrate curiosity and a sense of wonder about the world (Science K & Gr1)
- Observe objects and events in familiar contexts (Science K & Gr1)
- Ask questions about familiar objects and events (Science K & Gr1)
- Make simple predictions about familiar objects and events (Science K & Gr1)
- Transfer and apply learning to new situations (Science K & Gr1)
- Compare observations with those of others (Science K & Gr1)
- Consider some environmental consequences of their actions (Science K & Gr1)
- Experience and interpret the local environment (Science K & Gr1)
- Identify simple patterns and connections (Science K & Gr1)
- Express and reflect on personal experiences of place (Science K & Gr1)
- Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity, and community (ELA K & Gr1)
- Exchange ideas and perspectives to build shared understanding (ELA K & Gr1)
- Use language to identify, create, and share ideas, feelings, opinions, and preferences (ELA K & Gr1)

### **Content from BC Curriculum:**

- Identify the basic needs of plants and animals (K)
- Recognize seasonal changes in the forest (K)
- Understand changes that forest animals must make to accommodate seasonal cycles (K)
- Weather changes (K)
- Adaptations of local plants and animals (K)
- Strategies and Processes: Oral language and metacognitive strategies (ELA K & Gr1)
- Structural features of living things in local environment (Gr1)
- Behavioral adaptations (Gr1)
- Names of local plants and animals (Gr1)

### **Suggested Pre-Trip Activities**

- Draw pictures about your field trip and make predictions about what they might see
- Read stories to introduce the important roles squirrels play in our forest ecosystem
- Share personal stories and experiences about squirrels

## Follow-up Activities

- Start a nature log book for your classroom about squirrel sightings
- Create mural featuring squirrels at work in the forest
- Make a list describing how to protect red squirrels and their forest home
- Walk your school neighborhood looking for squirrels or signs of squirrels
- Plant a Douglas fir tree (red squirrel grocery store) on your school grounds

## Background Information on Squirrels

### The Squirrel Family

Squirrels belong to a group of mammals called rodents, which also includes mice, rats, beavers, pocket gophers and porcupines. Rodents are the most diverse group of mammals in the world. The squirrel family (*Sciuridae*) contains 273 species worldwide. North American squirrels are divided into two groups: ground dwellers and tree dwellers.

### Tree Squirrels

Tree squirrels are specialized for life in the trees. They rely on trees for food, shelter and transportation. They are more mobile than ground squirrels and have larger eyes, and longer ears and tails. Tree squirrels use their hind legs for leaping and their curved claws for clinging onto trees. They jump from tree to tree using their long bushy tails as rudders and as parachutes to slow their descent. Tree squirrels feed on conifer seeds, nuts, fruits, green vegetation, mushrooms, insects and occasionally other animals. They do not hibernate and so they must store enough food to survive the winter.

### Tree Squirrels of Southern Vancouver Island

On Vancouver Island, we have introduced grey squirrels, and the smaller native red squirrels.

Red Squirrel	Grey Squirrel
Mainly coniferous habitat	Mainly deciduous habitat
Small, red with white underbelly and conspicuous white eye-ring	Larger, usually grey; can also be black
Native to southern Vancouver Island	Introduced to southern Vancouver Island from Eastern North America
Caches fertile seeds	Notches seeds before caching them

Most often heard, not seen	Seen in urban and suburban areas
Stores food in large amounts, usually close to where it lives, therefore can stay in nests for days	Stores seeds individually, not near its actual home, so must leave nest daily

## Resources

Arnosky, Jim. Crinkleroot's Guide to Walking in Wild Places. Simon and Schuster, 1990.

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Cannings, Richard and Sydney Cannings. British Columbia: A Natural History of its Origins, Ecology, and Diversity, with a New Look at Climate Change. Greystone Books, 2015.

Lloyd, Megan Wagner. Finding Wild. Knopf Books for Young Readers, 2016.

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Wishart, P. and Hayley, D. Knee High Nature: Fall- A Guide to Nature Activities and fun. Edmonton. Lone Pine Publishing. 1994