

BIRD Feathers

An Activity Guide About the Songbirds of
British Columbia



Singing Wildlife Trees



GRADES: 4-7

SUBJECTS: Science



OBJECTIVE: Students will be able to recognize wildlife trees and understand their importance to songbirds as well as other wildlife.



METHOD: Students will go on a scavenger hunt for wildlife trees and the associated wildlife.

BACKGROUND

What is a Wildlife Tree?

In British Columbia, we have some of the most important forests in the world. There are a wide variety of forest types and tree species; in fact we have more species of plants and animals than any other province or state in North America. After thousands of years of growth and development, a complex forest ecosystem has developed, involving interactions between birds, mammals, insects, fish, fungi, plants and the non-living environment. Within the forest ecosystem, plants, like animals, are in many different stages of their life cycle. The life cycle of a tree starts with germination of a seedling; the seedling grows into a mature tree which then dies and decays. During their lifetime, trees provide habitat, food and protection for wildlife. Even after they die, trees are important to many kinds of wildlife.

A "wildlife tree" is a standing dead or dying tree that provides habitat for wildlife. These trees usually have dead or broken limbs and are also called snags. Wildlife trees are created when trees die of old age or are killed by insect attack, fire, disease, lightning, lack of light, or poor growing conditions. As a tree decays, it becomes softer due to the action of bacteria, insects and fungi. It also becomes smaller as branches and parts of the trunk break off. Until recently, snags were considered a dangerous nuisance and an eyesore by foresters and landscapers. They were usually removed. Now we have come to realize the value of snags to countless forms of wildlife, including cavity-nesting birds. Keeping these trees is a positive step towards enhancing wildlife habitat.

Who uses Wildlife Trees?

There are over 90 different plants and animals in B.C. that use wildlife trees for food, shelter, and resting places. Songbirds may forage for insects in the decaying wood, nest in a cavity or perch on a leafless limb. A tall wildlife tree may provide an ideal hunting perch; a wide trunk may provide good nesting cavities.

Songbirds that use wildlife trees for nesting can be divided into two categories: primary cavity excavators and secondary cavity users. Primary cavity excavators use their bills to create a hollow nest site in the decaying wood. Nuthatches and chickadees can bore their way into decaying trees once the wood is soft enough. Secondary cavity users build their nests in existing cavities. Some songbirds use wildlife trees to find food, shelter and perching sites. The Olive-sided Flycatcher perches at the tops of wildlife trees to hunt while the Brown Creeper gathers Bark Beetles from crevices in the bark of wildlife trees. Here is a list describing which songbirds use wildlife trees and what they need them for.



A Brown Creeper using a Wildlife Tree.

Table 1. Songbirds and Wildlife Trees

Activity/Use	Species
Hunting Perch	Olive-sided Flycatcher Pacific-slope Flycatcher Ash-throated Flycatcher Western Bluebird Mountain Bluebird Townsend's Solitaire
Secondary Cavity User	Pacific-slope Flycatcher Ash-throated Flycatcher Purple Martin Tree Swallow Violet-green Swallow Brown Creeper (behind bark) Bewick's Wren Winter Wren Western Bluebird Mountain Bluebird Townsend's Solitaire House Sparrow
Occasional Secondary Cavity User	Black-capped Chickadee Mountain Chickadee Boreal Chickadee Chestnut-backed Chickadee Chickadee Red-breasted Nuthatch White-breasted Nuthatch Pygmy Nuthatch
Primary Cavity Excavator	Black-capped Chickadee Mountain Chickadee Boreal Chickadee Chestnut-backed Chickadee Red-breasted Nuthatch White-breasted Nuthatch Pygmy Nuthatch

**Table 1. Songbirds and Wildlife Trees
continued**

Activity/Use	Species
Foraging	Black-capped Chickadee Mountain Chickadee Boreal Chickadee Chestnut-backed Chickadee Red-breasted Nuthatch White-breasted Nuthatch Pygmy Nuthatch Brown Creeper
Winter Roost	Black-capped Chickadee Mountain Chickadee Boreal Chickadee Chestnut-backed Chickadee Red-breasted Nuthatch White-breasted Nuthatch Pygmy Nuthatch

MATERIALS

Scavenger hunt checklist

Pencils

PROCEDURE

1. Discuss what a wildlife tree is and why it is important to songbirds. Make sure that the students can recognize these trees.
2. Take the students to a forest ecosystem for a wildlife tree scavenger hunt. Divide the students into small groups and give each group a copy of the following checklist:

- ___ a coniferous wildlife tree
- ___ a hunting perch
- ___ a stump
- ___ a cavity that could be used by a cavity-nesting bird
- ___ a deciduous wildlife tree
- ___ an open nest
- ___ a living tree with dead branches at the top (spike top)
- ___ a bird hunting for insects
- ___ a rotting log on the forest floor
- ___ a singing wildlife tree

3. Remind them to show caution and have respect for the environment (see *Activity : The Big Day*)



*adapted from a similar activity "*Wildlife Tree Scavenger Hunt*" found in the **Project WILD** activity book *Wildlife Trees of British Columbia*.

