

# North Cascades

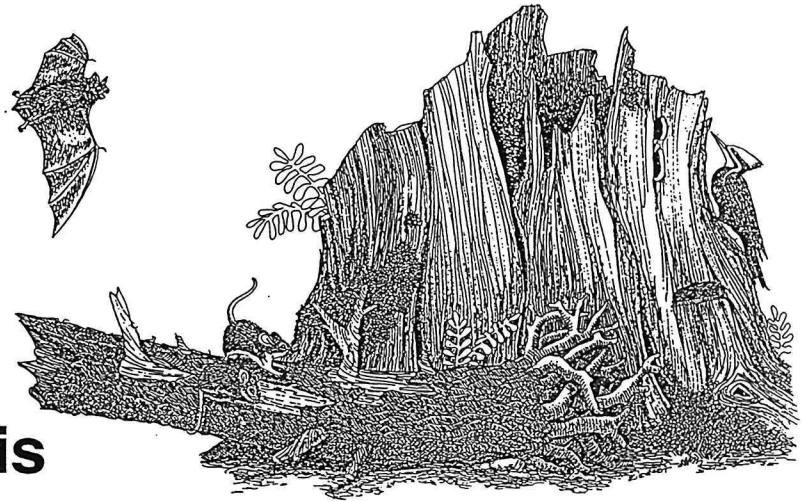
Ross Lake and Lake Chelan

North Cascades National Park  
Ross Lake National Recreation Area  
Lake Chelan National Recreation Area  
U.S. Department of the Interior

## SNAGS

Are a woodpecker's  
best friend

And other Woody Debris



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## FOREST CONDOS

**Is there life in a dead tree?** Whooo asked that question? Dead trees (“snags”), partially dead, and dying trees provide some of the richest habitats in the forest. Snags in Northwest forests provide homes and feeding sites for nearly 100 species of birds and mammals. Hosts of insects, larvae, spiders, fungi, mosses, lichens, and microscopic organisms make the snag a vibrant column of life - an important component of the whole forest.

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## BECOMING A SNAG

Hardwoods, true firs, and hemlocks have a relatively short life and decay rapidly - providing a rich succession of snags and downed wood. Douglas-fir and cedar live for hundreds of years and may take decades, even centuries, to fully die. As trees get older they become hosts to parasites, decay organisms, and insects which carry on recycling functions in the forest ecosystem.

Fire, rolling rocks, and wind damage provide wounds which allow decay organisms access to inner parts of the tree. During this time of gradual death and decay, the snag is a condominium for many life forms. In time the snag falls, and as it further decays on the forest floor, it hosts an even greater diversity of life as well as providing a reservoir of moisture and a slow release source of nutrients.

Western red cedar typically develop heart rot in the lower trunk and can survive for centuries with large sections of dead wood and “spiked” tops. Dead wood scars provide homes for insects and a great variety of cavity dwellers. Black bear not only den in hollow base sections but climb up trees and den in large rotted out cavities. The decay process provides soft wood and even generates heat for winter cavity residents, like the bear and chipmunk.

Slabs of dead loosened Douglas-fir bark create niches for roosting and hibernating bats. Older trees often loose their tops in wind storms creating platforms ideal for large birds like bald eagles and osprey to build their nests.

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# SNAGS AND PEOPLE

In managed forests, snags were traditionally cut to protect people and property from falling debris and to keep fire from spreading through dry snag tops. It was also thought that snags carried harmful forest "diseases."

Now that the value of snags is better understood, we are seeking ways to live with them. Near the North Cascades Visitor Center and in Park campgrounds you may hear or see a woodpecker working on a human created snag. Rather than cutting all "hazard" trees in developed areas, we are reducing hazards and creating snags by topping certain weakened trees to a height that would not allow them to fall on buildings or walkways. These snags quickly become homes for life which would otherwise be displaced by our presence.

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## SNAG WATCHING

Ask a ranger where snags are apt to be found. Watch and listen for the tap tap tap of the sapsucker and the heavier sounds of the pileated woodpecker digging out ants or drumming for a mate. The sapsucker makes rows of small round holes on living wood to allow sap to flow. This traps for insects, which the sapsucker returns to eat. Notice larger rectangular holes in decaying wood. This is the signature of the pileated woodpecker. The work of the sapsucker allows decay organisms to enter the tree - and excavations of the pileated create nesting cavities for many birds and mammals.

In the dusk of evening, you could witness a scenario which is vital to forest ecology. A flying squirrel might launch from its cavity nest and glide to a lower trunk and then scramble down to dig in the forest duff. It is searching for truffles, the fruiting bodies of underground fungi which are vitally important in providing trees and other plants with water and nutrients. The squirrel in turn spreads the fungal spores in its droppings throughout the forest. And if you are extremely fortunate, you could witness a cavity dwelling owl swoop from its snag top in search of the flying squirrel or other small mammals on the forest floor.

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## PARTIAL LIST OF SNAG AND DOWNED LOG-USING ANIMALS

### BIRDS

pileated woodpecker  
harlequin duck  
sapsuckers  
chickadees  
spotted owl  
wood duck  
barred owl

great horned owl  
osprey  
hairy woodpecker  
downy woodpecker  
northern flicker  
three-toed woodpecker  
black-backed woodpecker  
bald eagle

### MAMMALS

black bear  
bats  
flying squirrel  
Douglas squirrel  
Townsend's chipmunk  
deer mouse  
Trowbridge's shrew  
red-backed vole

