

SNAGS AND THE ENVIRONMENT

Dead standing timber, known as snags, attracts an amazing array of animals from microscopic worms to fishers, hibernating bears, and bald eagles, and generally makes for healthier forests.

Consider this:

More than 500 species of birds use snags for food, nesting, or shelter.

80 bird species nest in snag cavities.

Nearly 300 mammal species rely on snags for shelter or food.

400 species of amphibians and reptiles use snags at some point in their lives.

Waterborne snags benefit almost every species of fish.

Each stage of disintegration brings new species of wildlife for you to witness. Understanding how snags decompose will enhance your outdoor enjoyment.

Declining:

Lightning, high winds, heart-rot fungus, ice storms, insect infestation or some other traumatic event strikes a mortal blow. Alive but failing, the tree's bare branches and protruding crowns can still support the nests of heavy-bodied raptors such as bald eagles. Hollows host snoozing bears.

Dead:

After the tree drops all needles and leaves, birds invade. Brown creepers forage for insects while flycatchers and bluebirds perch on bare branches during hunting. Large pileated and Lewis's woodpeckers dig out ants and other tree boring insects, at the same time excavating nesting cavities for small animals such as racoons and wood ducks.

Loose Bark:

Bats roost and scorpions hide under a snag's loose bark plates, and Prothonotary warblers nest in bark cavities. One researcher tallied 150 pygmy nuthatches inside a single ponderosa pine hollow.

Clean:

Although smooth and bark-free, the snag is riddled with holes. Large woodpeckers return to construct nests here, while owls, squirrels, and hooded mergansers move into abandoned cavities.

Broken:

Large excavating woodpeckers forage on new insects enjoying the dry exposed wood, and fishers, racoons, and wood and harlequin ducks move into their abandoned nests. Owls and hawks build nests on top of broken snags.

Decomposed:

As the snag decomposes further, smaller wood borers like downy and acorn woodpeckers drill into the trunks, creating cavities that attract nesting chickadees, wrens, and warblers.

Downed wood:

Even after a snag falls, it continues to serve as a wildlife community center. Small mammals cache food in the log's crannies. Marbled and spotted salamanders nest in the moist, rotting wood. And legions of termites, millipedes, and soil micro-organisms turn the fallen snag into rich soil.

Snags that happen to fall in lakes or streams are still a boon to wildlife. "They slow the velocity of water, which creates pools," reports Don Virgovic, a biologist with the Forest Service's Pacific Northwest Region. "They trap sand, gravel, and cobble, which support critical fish spawning habitat."

Rootballs and Stumps:

Salamanders lay their eggs in moist depressions left by rootballs, and squirrels turn every stump into a picnic table with a view as they watch for predators. Even at the end of life, trees give back to the woods.

A Burning Issue

Make sure your campfire doesn't cost a squirrel or sparrow its home.

"People rip branches off trees and haul out all the dead and downed wood just to keep a little fire going," laments Forest Service biologist Don Virgovic. "Downed wood is more valuable than most people think, for fallen branches provide critical habitat for small animals and insects." Sometimes, however, we need a campfire in the backcountry. There will be plenty of wood for all forest creatures, including you, if you follow these guidelines.

- **Collect loose wood that's no thicker than your thumb or longer than your forearm and do so over a wide area so you don't deplete wood sources in a concentrated spot. Don't break branches off dead trees, even fallen ones, and gather only as much as you need.**
- **Carry your own fire starters so you don't have to burn as much tinder. Birch and juniper bark also work well.**
- **Pick the right type of downed wood. Pine, poplar, and cedar burn fast and hot so they're good fire starters. Switch to apple, beech, cherry, maple, or oak to maintain an efficient fire for an extended period of time. These, plus ash, birch, elm, and tamarack, burn to coals that are ideal for cooking.**
- **Warm a hypothermic person from the inside with a cup of hot chocolate made on your stove rather than building a raging fire to throw heat on him.**
- **Burn wood completely and scatter ashes and unused sticks. A small hot fire, rather than a large roaring fire, will burn wood more thoroughly.**

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