



## UI Extension Forestry Information Series

### When Cutting Firewood, Remember...There's Life in Dead Trees

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A healthy forest needs dead trees. Sounds a little funny, doesn't it? Dead trees play at least two key roles in maintaining forest health - one while they're standing and one after they've fallen. How are dead trees important?

As dead trees fall down and decompose, the nutrients stored in them are slowly released back into the soil by the activity of fungi and bacteria. These nutrients can then be used by other trees. Downed logs, especially those partially buried by duff or soil, act as moisture reservoirs. Salamanders and other amphibians seek shelter in the moist wood of decaying trees. Seedling establishment is often enhanced by the availability of downed woody debris.

Dead logs in and over streams enhance fish habitat. Nearly all species of fish living in streams use log cover at some stage in their life cycle. Trout especially like to hide under fallen logs. Some of these logs also provide basking spots for turtles.

Standing dead trees are important because they provide nesting and resting sites for a variety of animals. About 45 species of birds that breed in Idaho use holes in dead trees as nest sites. A few more, like osprey, hawks, and the great-horned owl, use broken tree-tops to build their nests. Of the hole-nesters, seven species of owls and the American kestrel dine on small rodents in and around forests. About 30 species eat insects and are important in regulating the abundance of forest insects, including wood borers, bark beetles, budworms, and tussock moth larvae. Included in this group is the mountain bluebird, our state bird. Surprisingly, seven species of duck also use tree cavities for nesting including the gorgeous, but secretive, wood duck. In the winter, tree trunks provide insulation from the cold and

birds often congregate in tree cavities to share warmth and protection. In winter, up to 167 pygmy nuthatches, a common insect-eating bird in Idaho, have been known to roost simultaneously in a single tree cavity.

Next time you're out cutting firewood or cleaning up your woodlot, check the dead trees for trunk holes or broken tops. If they're present, leave the tree so it can serve as a home to insect-eating and rodent-eating birds that share your forest. These critters are helping you maintain a healthy forest.

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