Some landowners who enjoy feeding and photographing birds actually *plant* dead trees in urban backyards, which can be strategically placed to be non-hazardous and yet maximize viewing opportunities. Bird feeders can be hung from the branches, and woodpeckers will excavate their cavities in this "natural" setting. Neighbors may think it unusual at first, until they take a closer look. For as Aldo Leopold once wrote, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

Artwork by Gary L. Wilford

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Illinois Audubon Society P.O Box 2418 Danville, IL 61834 www.illinoisaudubon.org Standing Dead Trees: Saving Critical Wildlife Habitat



Standing dead trees, sometimes called snags, are a vital wildlife resource. Unfortunately, many landowners do not realize their value, and think of them as unsightly. They tend to remove such trees as soon as they appear. Cutting the dead and dying trees from woodlots and forests actually decreases the overall health of these areas, making them more susceptible to insect damage. Why?

More than 10% of our forest-dwelling birds in North America depend on snags and dead branches for nesting. These "cavity nesters" are extremely important in the forest ecosystem because they consume large quantities of bark beetles, carpenter ants, and boring insects which are detrimental to healthy trees.

While many foresters once thought that standing dead trees caused insect pests to spread, it is now known that the opposite is true-- insect numbers are better controlled by the birds which utilize the trees for homes than by removing the dead snags.

SNAGS AS NESTING SITES

The best-known cavity nesters, of course, are the woodpeckers, which are able to excavate holes in the softer, decaying wood of dead trees. Six species of Illinois woodpeckers regularly make holes in dead limbs and snags for sleeping chambers and nest sites. Since woodpeckers generally do not use the same holes in subsequent years, this leaves unused cavities available for smaller songbirds which cannot make their own (such as prothonotary warblers, titmice, bluebirds, and crested flycatchers.)

Some of the older holes may be enlarged and used by flying squirrels, gray and fox squirrels, and screech owls. Holes excavated by pileated woodpeckers are often used by wood ducks and hooded mergansers, and larger ones are also used by barred owls and raccoons.





SNAGS AS HUNTING AND RESTING POSTS

Dead limbs and snags are also used as perches by hawks and owls. From such vantage points, these birds can observe a large area and more easily spot potential prey. Even small flycatchers, such as wood pewees, will use these lookouts. They sally forth after insects and return to the same perch repeatedly. Vultures often roost on dead snags at night. In the early morning hours, they can be observed sitting with wings spread, soaking up the heat of the sun's first rays.

When groups of dead standing trees are in or near water, they may attract herons, egrets, or cormorants which build their stick nests among the branches. Such colonies, containing many nests, may last several years until the trees decay enough to disintegrate. Then the birds are forced to find new areas suitable for nesting.

FUNGI AND INSECTS

Dead trees are usually attacked rather quickly by fungi and boring insects. Several kinds of wood-rotting fungi live on snags, gradually encouraging decomposition as they take nourishment from the tree. Some kinds of edible fungi are also regularly found growing on dead and decaying trees. These include the beefsteak, oyster and honey mushrooms.

Many kinds of insects proliferate the dead wood, some making tunnels through the

heartwood, and others finding food and shelter under the bark. Over time, as the bark dries out and falls away, some insects disappear, but other new species arrive to take advantage of the system of tunnels throughout the trunk to hunt smaller creatures for food.





NEW LIFE IN THE FALLEN TREE

As decomposition continues, the snag is weakened and eventually succumbs to wind and rot. It falls to the forest floor, where water is more easily retained in the remaining log. This allows the process of decay to proceed more rapidly. Even so, the now-soft tissue of the log provides a home for snails, slugs, termites, centipedes, millipedes, spiders, salamanders and many other small creatures. Slime molds and tiny mushrooms, puffballs, and other fungi grow on the moist surface. Spores of mosses germinate in this perpetually damp environment, and soon the remaining log is covered with green plants. With each passing season, the log becomes more a part of the forest floor. The stored food and energy which were once part of the living tree have been recycled through the death and decay of the snag, and have become a part of a myriad of creatures in the forest ecosystem.

SNAGS AS FIREWOOD

Many people heat with wood or use it for recreational fires. There is nothing wrong with cutting some firewood, as long as enough dead trees remain for wildlife. USFS biologists recommend that a minimum of three good quality snags per acre should be left uncut and available for woodpeckers and other cavitynesting birds. Recent studies show that redheaded woodpeckers are declining in numbers throughout their range. Without enough suitable home sites, these beneficial birds may disappear from the landscape.



SNAGS IN AN URBAN SETTING

There is no doubt that a standing dead tree can be hazardous if it is near a building or if it were to fall on someone. Hazardous snags should be removed or sufficiently trimmed to eliminate danger. A tree once fallen, though, poses no threat, and should be left in place if it does not block a drive, street, or walkway.