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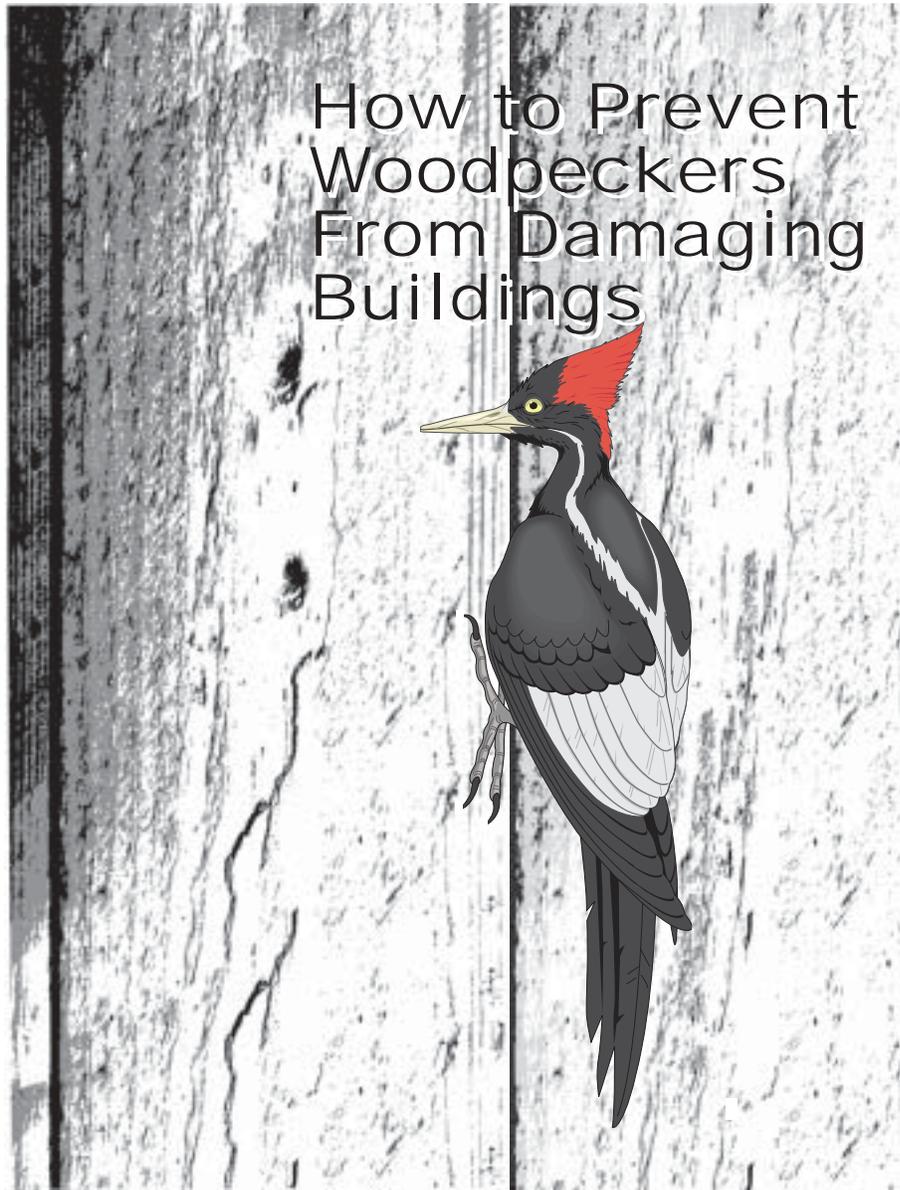
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# How to Prevent Woodpeckers From Damaging Buildings



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# Introduction



**W**oodpeckers damage Forest Service facilities in urban areas as well as those in remote settings. The damage can be relatively large holes used for nesting cavities, small cone-shaped holes the woodpeckers make as they search for insects, or paint chipped off by woodpeckers drumming on the sides of

buildings. Most damage to buildings seems to be near the eaves, especially in places where woodpeckers can get a foothold. Woodpeckers do not limit their activities to wood buildings. One space shuttle mission was delayed while workers repaired damage to foam insulation on the shuttle's external fuel tanks.

No one seems to know for sure why woodpeckers damage buildings. Some suggestions include:

- A shortage of natural nesting sites
- Feeding on insect larvae in the siding
- Drumming to attract a mate or mark a territory
- Just for the fun of it.

## ***Help! Woodpecker on a Rampage***

*This is a last, desperate appeal for succor from any knowledgeable authority, excluding the Missoula Police Department or the Fire Department, who, while dealing on a daily basis with criminals, nuisances and felonious destroyers of wooden buildings, may have the expertise to deal with the villain who has wrecked property and disturbed the quasi-rural atmosphere of peace and quietude that characterizes our mid-Rattlesnake Elysium.*

*I refer of course to the big, fat, demented woodpecker who has for the last month or so made it his business to hack 6-inch holes in my cedar siding and the inch-thick underlying Thermax which I had never before considered to be a source of tasty insectiferous nutrition, being distinctly non-organic....*

*Will no one rid me of this meddlesome woodpecker?*

*More to the point, can someone tell me how to patch Thermax and vertical-channel cedar siding? HELP!*

Excerpts from a letter to the editor of the *Missoulian* in Missoula, MT.

# Nesting



**W**hen woodpeckers decide to use a building for a nest site, they usually have a reason.

Most woodpeckers need large snags or trees in which to build their nests. If they can't find them, they will use homes, buildings (Figure 1), or even telephone poles as substitutes. The best way to prevent woodpeckers from creating nest holes in buildings is to provide suitable nest trees nearby. Woodpeckers are

territorial. The ones you provide a home for will drive others of the same species away.

Making a hole in sound wood takes a lot of energy. Most woodpeckers prefer snags and trees whose centers have been softened or decayed by heartrot. Heartrot is a caused by different types of fungi that come into contact with the heartwood of a live tree. Heartwood is

the older, darker, central wood in a tree. Heartrot does not kill the tree, but softens, or hollows out, the center. The longer a tree lives, the higher the chance that it will contract heartrot. This may be one reason woodpeckers prefer to nest in large trees and snags. Younger trees, which are generally smaller, may not have lived long enough to develop heartrot. Decay in sapwood can also provide a suitable nest site if the tree has a thick layer of sapwood. Sapwood is the newly formed, lighter wood between the heartwood and the bark.

What makes a tree with heartrot suitable for nesting birds? Trees and snags with heartrot usually have sound sapwood. This provides an ideal situation for nesting and roosting cavity-nesters. The sapwood provides insulation from the weather and protection from predators. The decayed heartwood makes it easier to excavate the nest cavity. Buildings function like nest trees, providing a hard, protective shell on the outside, while they are hollow on the inside.

Woodpeckers are not the only species that benefit from suitable nesting snags and trees. Woodpeckers are primary cavity nesters, which means that they create nest and roost sites for themselves and many other species. Secondary cavity-nesting birds, such as bluebirds, Wood Ducks, and swallows, cannot excavate their own cavities. They depend on woodpeckers to do this work for them. Many mammals such as pine marten, raccoon, and black bears, use hollow trees as den sites. Small mammals may benefit from the work of woodpeckers.

Nearly all woodpeckers and cavity-nesting birds eat insects. Research has shown that in areas where their numbers are strong, cavity-nesting birds can prevent or slow down local outbreaks of insect pests. Insect control by cavity-nesting birds can help protect valuable timber resources. Cavity-nesting birds can benefit farmers by controlling insect pests such as grasshoppers and certain beetles. They may also help control mosquitoes. A single swallow or bat,



Figure 1—Damage caused when woodpeckers drill holes for a nest.



both secondary cavity nesters, can eat up to 1,000 mosquitoes a day. So woodpeckers can make homes for cavity nesters that can help you clean up the neighborhood.

## Solving Problems Related to Nesting

### Long-Term Solutions

To select suitable snags for woodpeckers, choose the largest diameter and tallest snags that are set back a safe distance from buildings. If the only snags or trees with decay happen to be near buildings or walkways, consider topping them to 20 feet or less. A 10-foot-tall snag won't present much of a safety risk and may be used by several cavity nesters (Figure 2).

To select suitable trees for nesting, look for large trees that have a broken top. This often indicates heartrot. Labeling these trees with a "Wildlife Tree" sign will help inform visitors of the benefits of these dead and dying trees.

In areas without snags, managers should create nest trees. Several methods can be used. Snags can be created by topping a tree with a chain saw or girdling the tree up high. Girdling the base of a tree is not recommended because these trees tend to fall over quickly. Perhaps the best way to create suitable nest trees is to inoculate live trees with decay fungi. This can be done by drilling a small hole in the tree trunk and inserting a dowel infected with live heartrot fungi. Trees infected with heartrot can be used for many years by nesting woodpeckers and other species. Check with local foresters or wildlife biologists to determine which tree species are the best to retain as wildlife trees.

In areas where it may be years before suitable nest trees and snags can be



Figure 2—A woodpecker excavated a nest in this tree, which had been topped to provide an anchor for a cable car crossing on a river in Montana.

provided, managers should try to discourage woodpeckers from using buildings for nesting and provide a nest box they can use.

### Immediate Solutions

The best way to prevent further woodpecker damage to the eaves of a building is to erect netting 2 to 3 inches from the side of the building recommends Dan Casey, a biologist for

the American Bird Conservancy in Kalispell, MT. A mesh of  $\frac{3}{4}$  inch is generally recommended, according to Rex E. Marsh (*Woodpeckers*, 1994). At least 3 inches of space should be left between the netting and the damaged building so that birds cannot cause damage through the mesh. The netting can also be attached to the overhanging eaves and angled back to the siding below the damaged area and secured taut but not overly tight (Figure 3). Be sure to secure the netting so that the

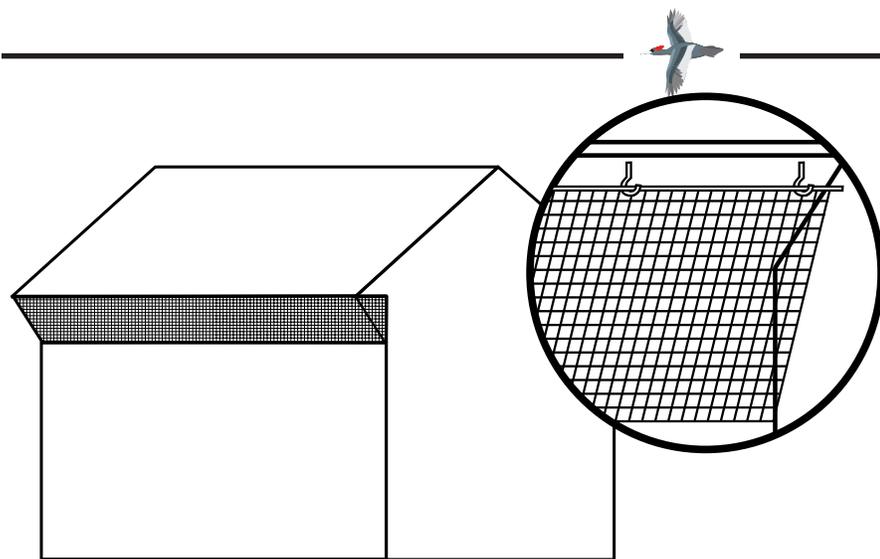


Figure 3—Plastic netting attached to a building from the outside edges of the eave and angled back to the wood siding. Insert shows one method of attachment using hooks and wooden dowels (used with permission from *Woodpeckers*, 1994, Rex E. Marsh).



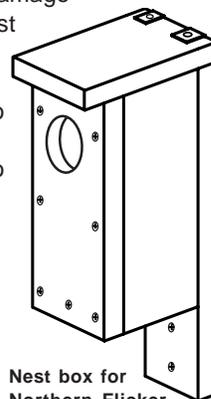
Figure 4—Northern Flickers are one of the species of woodpeckers most likely to damage buildings (photo used by permission of the Cornell Lab of Ornithology, photographer J.R. Woodward).

birds have no way to get behind it. If installed properly, the netting is barely visible from a distance. If the birds move to another area of the dwelling, that area too will need to be netted.

Netting is becoming increasingly popular as a solution to woodpecker problems because it consistently gives desired results.

Northern Flickers are the woodpecker species most likely to try to nest in a building. If Northern Flickers (Figure 4) begin damaging a building to excavate a nest cavity, sometimes they will use a nest box mounted over the damaged area. The nest box should be sized and designed for the species of woodpecker that is causing the damage

(Appendix A). All nest boxes should be made so that a panel can be lifted to clean out the box. This will allow you to remove undesirable species such as the European Starling and the House Sparrow, both introduced species. Aggressive starlings can chase even large woodpeckers away.



Nest box for Northern Flicker (Appendix A).

Kas Dumroese, a research associate with the University of Idaho's Forest Research Nursery, suggests that nest boxes for Northern Flickers should be constructed of 2 by 8's, one wide, one deep, with a 3-inch hole about 3 inches from the top. Total depth of the nest box should be about 18 inches. Adding wood chips or shavings to the bottom can encourage nesting.