



# Managing Iowa Wildlife

## Woodpeckers

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### Introduction

According to an ancient Roman myth, Picus, the son of Saturn, was a handsome young forest god who could foresee the future. Circe, the sorceress famous for turning Ulysses' companions into swine, was very much attracted to Picus. He rejected her, however, and, in a fit of revenge, she turned him into a woodpecker. This is how the scientific name of the family (Picidae) and the order (Piciformes) of the woodpeckers originated.

There are more than 200 species of woodpeckers worldwide, and 22 in the United States. In Iowa, there are 10 reported species, though three of these are either very occasional or are accidentals. The remaining seven woodpecker species are either year round residents or common migrants (figure 1).

The adult males of six of the seven Iowa species—red-headed, red-bellied, downy, hairy, and pileated woodpeckers, and the yellow-bellied sapsucker—have some pattern of black, white, and red. Females are similar, but less colorful (except in the red-headed, in which both sexes are alike). All individual species can be identified easily with a good bird field guide.

The pileated is the largest Iowa woodpecker, up to 19 inches long and weighing up to 1 pound. The downy is the smallest, only 6 inches in length and weighing only several ounces.

All woodpecker species are considered migratory. They are protected under the federal Migratory Bird Treaty Act and also by Iowa state law.

### To Be a Woodpecker

Woodpeckers have several unusual adaptations that distinguish them from other bird families.

The bill is made of strong bone with a hard, horny covering. In most species, the tip of the bill is chisel-like. The more dependent a particular species is upon pecking, the more its bill resembles a chisel.

Woodpeckers do not get headaches, as often shown in cartoons, because the bill is adapted to distribute the shock throughout the thickened skull. The area where the bill attaches to the skull is modified to function as a sort of shock absorber. Nostrils are covered by feathers to keep splinters and dust out.

Woodpeckers also have very long tongues, often longer than the bill itself; in fact, most have tongues at least twice the length of the bill. For storage, the tongue is curled around the back of the head between the skull and the skin. Most species have barbs, or a sticky saliva, or both, covering their tongues to aid in probing for and pulling out insects.

The shaft (rachis) of the tail feathers is extra stiff as they are used as supports when the bird holds itself vertically on a tree trunk. Another adaptation for climbing involves the toes. Woodpeckers have two toes facing forward and two facing backward (most birds have three front and one back). In some species, the two back toes can be rotated a full 180 degrees so that all four toes face front.

Woodpeckers move up a tree by hopping and climb down tail-first. Nuthatches and brown creepers also are found probing for insects along tree trunks but are not related to woodpeckers. They usually move in a downward direction on the trunk. These differences in foraging direction are thought to help reduce competition between species, allowing them to probe for insects on the same trees.

## Life History and Ecology

### Habitat

Red-headed, flickers, and sapsuckers are the three migratory species most common to Iowa. Red-headed are common summer residents across the state but are uncommon in winter, as they migrate south from mid-August through October. They can be found in woodlands and shelterbelts. Sapsuckers are common migrants, but they may take up summer residence farther north. They can be found nesting in wooded areas and pine groves along rivers in north-eastern Iowa.

Red-bellied, downy, and hairy woodpeckers are common and often abundant permanent residents throughout Iowa. Red-bellied woodpeckers remain mostly in woodlands. Downies are found in woodlands, orchards, and shelterbelts. They are also found feeding in weedy fields and corn stubble. Hairies are found in woodlands and along rivers. Hairies and downies often find suburban and small town environments quite acceptable.

Flickers are abundant in woodlands, orchards, windbreaks, and urban areas throughout the state in summer. In winter, they can be found in southern Iowa. In spring and fall, they can be seen in large numbers feeding on ground insects along roadsides and in open fields.

Pileated woodpeckers are found mainly in the eastern third of the state. They are uncommon year-round residents of mature timber and of woodlands along rivers. Their rectangular feeding holes, up to 12 inches in length, distinguish them from the round holes of other woodpeckers (figure 2).

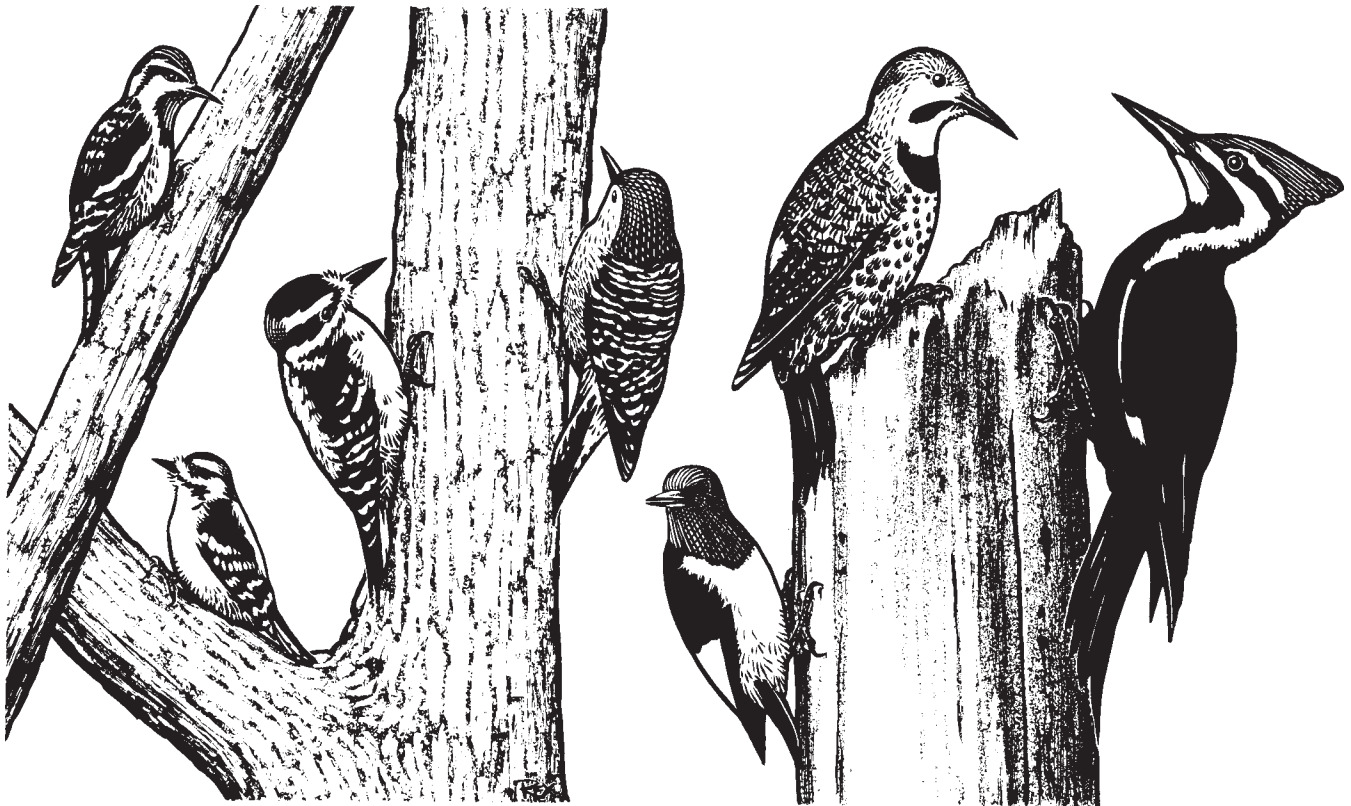


Figure 1. Woodpecker species found in Iowa (from left): yellow-bellied sapsucker, downy, hairy, red-bellied, red-headed, flicker, and pileated.

## Behavior and Reproduction

All Iowa woodpeckers nest in tree cavities (and in some cases in houses). Usually they prefer trees that are dead but sturdy and not very decayed. Both sexes take turns excavating the nest hole, the opening of which is almost always a perfect circle (pileated woodpeckers make oval or oblong holes). This is a somewhat remarkable feat, comparable to trying to make a circle of dots filled in entirely by tapping a pen point on a piece of paper.

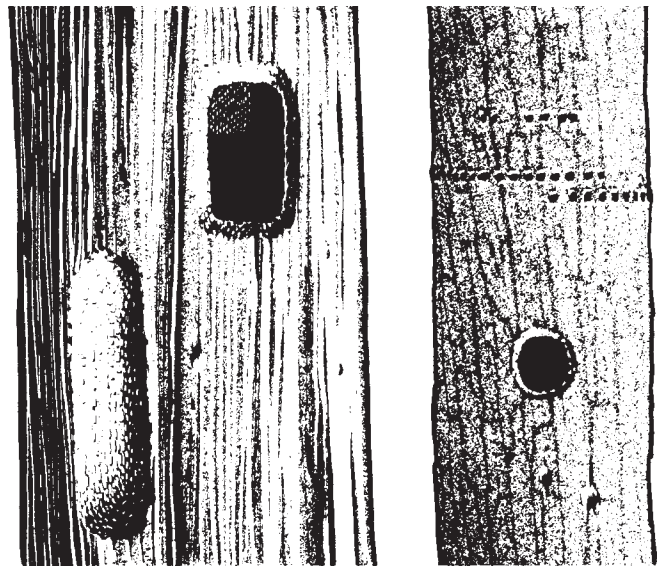
In colder climates of northern Europe, Canada, and the Colorado Rockies, nest holes usually face south or east, increasing exposure to the sun.

Once a suitable cavity has been made, the female lays from three to eight white eggs on a bed of splinters or wood shavings. Woodpeckers are indeterminate layers; that is, if the eggs are removed, the female will continue to lay eggs. Both sexes take turns incubating the eggs, with the male usually incubating all night. Eggs hatch in about two to three weeks. At this point, the young are pink, naked, blind, and very small. They open their eyes after about eight to ten days. The amount of time they are cared for by the parents varies widely from species to species, but most leave the nest between three to four weeks of age.

## Feeding

Woodpeckers are famous for drilling into trees in search of insects, but they also are fond of berries and nuts. Sapsuckers eat the sap, inner bark, and cambium of trees, in addition to insects such as ants, beetles, and wasps that are on the trees. However, woodpeckers are not restricted to trees for food. Flickers, for example, spend much of their feeding time on the ground.

Many species of woodpeckers store acorns for the winter. Red-heads will stuff a hole full of acorns, then cover the hole with wet splinters. The splinters dry, forming a seal over the hole. Some red-heads have been observed “storing” acorns in holes that go straight through tele-phone poles. The acorns go in one side and fall out the other, but the birds do not seem to notice and continue putting more acorns in the hole. Occasionally, they have been found pushing acorns through holes in the attics of houses, in an attempt to fill that large space with the acorns.



**Figure 2.** Woodpecker feeding and nest holes (from left to right): pileated feeding hole (8 to 15 inches long), pileated nest hole, sapsucker feeding holes (lines on top), nest holes of red-headed (2 inch diameter), and feeding holes of downy woodpeckers (bottom).

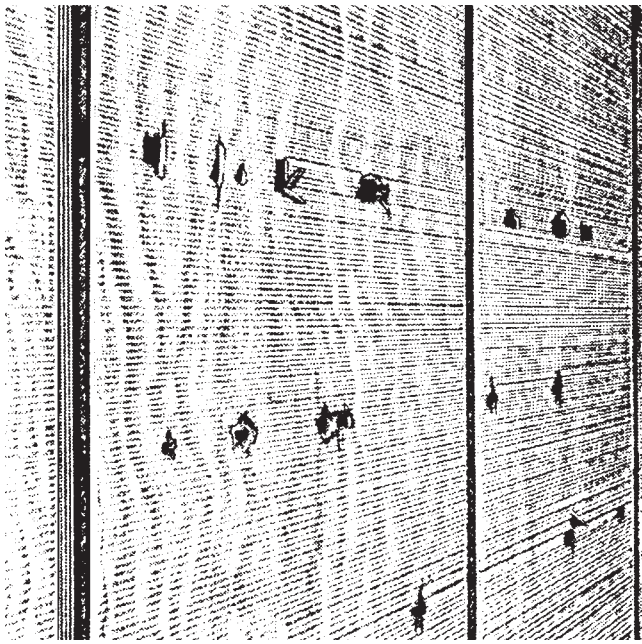
## Drumming

Woodpeckers are unique in the animal world in that they are the only creatures (besides humans) to be true instrumentalists. No other known bird, mammal, or insect instinctively makes a sound with something other than a part of its body. Woodpeckers make their noise on a number of objects, including trees, branches, drain spouts, street lights, TV antennas, silos, or anything else that resonates loudly.

Woodpeckers drum for several reasons. First, it is a territorial signal, similar to most other birds' singing. It also may serve to attract a mate. Because of this, drumming activity is at its highest in spring, although fall drumming is not uncommon.

It also is thought that some drumming may be used to locate food. The birds tap on a tree and then listen for any movement of insects inside. This saves the bird the effort of drilling into countless trees only to find them empty. They know to drill only when they hear some sort of sound inside. In a similar manner, they will tap on potential nest trees to find the one most suitable.

There also is speculation that drumming is a form of exercise or play to pass the time between feedings. Some woodpeckers can drum exceedingly fast.



**Figure 3. Feeding holes made by woodpeckers in plywood house siding. The holes are in a straight line, following hidden tunnels in the siding that are infested with the larvae of the small, harmless leaf-cutting bee.**

### **Economic Importance**

All woodpeckers can be a nuisance, though problems with pileateds are very uncommon due to their scarcity. Species that can survive in suburban areas, such as downies and hairies, can be a problem. Drumming can be annoying, and the holes in house siding can have more serious consequences (figure 3).

Yellow-bellied sapsuckers can be a problem for orchards or ornamental or shade trees where they may girdle and kill trees. Sapsuckers leave distinct rows of 1/4-inch holes in trees. They make sample drillings in several trees, pick the ones they like, and then concentrate their efforts on these chosen trees, also called their "orchard." Sapsucker holes have been reported in over 275 species of trees and vines in the United States and Canada. The holes provide access for fungi, bacteria, and other diseases and parasites. Running sap can be unsightly on ornamental trees and can attract bees and hornets.

However, like most wildlife species, woodpeckers have positive as well as negative interactions with humans. One study in Mississippi showed that common flickers ate 64 percent of overwintering corn-borer larvae. The next year, the flickers ate 82 percent of the larvae. Downies and hairies also are noted for consuming huge numbers of forest pest insects, especially beetle larvae and ants.

### **Control**

When damage from woodpeckers is determined to be of such a nature that control is necessary, a variety of measures can be applied. All species of woodpeckers can be controlled in similar ways, though individual birds may react differently.

The best time to take action is as soon as possible after the woodpeckers start showing signs of becoming a problem. They can be very persistent, and the longer they are allowed to stay, the harder they are to remove.

Some house siding is made of plywood with vertical grooves in it. A small insect, the leaf cutter bee, lays eggs in tunnels left open by these grooves, and the larvae that hatch are what many of the woodpeckers are seeking (figure 3). If you are re-siding your house, avoid this type of siding. If you already have this type of siding, caulk the edges of the grooves to fill the open tunnels. This is rather labor-intensive but may save your siding. Woodpeckers are also especially fond of cedar siding for reasons not yet clear.

Some possible methods for reducing drilling or drumming on a house include the following (figure 4):

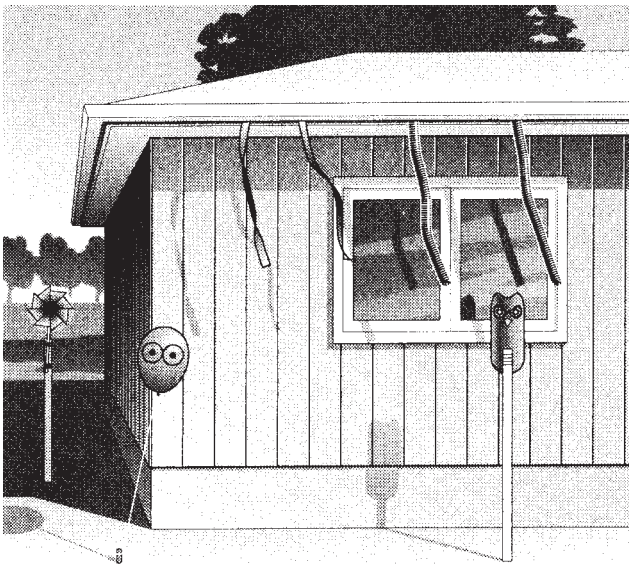
1. Hang several aluminum foil strips (about 3 inches by 3 feet), pie plates, or Christmas garland (about 3 foot strips) from the eaves of the house near the affected area. The noise and/or movement often may scare the birds away. Pinwheels attached to the side of the house work the same way. While somewhat unattractive, they may be successful in keeping the birds away.
2. Shout or wave a broom at the birds. This may prove to be useful, but must be done early and very persistently several times a day for several days. Also, cap guns or pot-banging may be useful.
3. Place hawk, owl, or snake models (or even helium balloons with large eyes painted or drawn on them) near the area. These may be useful, but may attract blue jays and other birds that see the models as real enemies. To be most successful, the model must be moved every few days.
4. Place aluminum sheeting (available from newspaper printers or as "flashing" at lumber and hardware stores) over the affected areas. For this to be an effective deterrent, this must be done very soon after the bird has started to be a problem.

5. Paint sticky substances such as Tanglefoot or Roost-no-More (available at many hardware and garden stores) below the pecked area. The birds are not trapped, but dislike the sticky feeling. These repellents may run or discolor paint or stain. An alternative would be to paint a board with the repellent, then nail this board to the building near the affected area.

6. Put beef suet or other attractive food items clear of the damaged area to entice the birds away from the building. This may or may not work, as not all damage is due to food gathering. There are drawbacks to this, too. First, suet should not be used in warmer months, as it can be potentially harmful. Second, if it gets on the heads and feathers of birds, it can cause matting and eventual feather loss. Finally, the birds may become dependent on your handouts for food.

Once the nuisance woodpeckers are gone, or to keep them from becoming a problem in the first place, “woodpecker proof” your house. This can be done in two ways.

1. To prevent further damage under eaves, attach a lightweight nylon or plastic net to the overhanging eaves and to the side of the damaged building. Be sure to leave at least 3 inches of space between the net and the building to prevent the birds from reaching through the net.



**Figure 4. Common scare tactics used to scare woodpeckers from feeding on house siding include pinwheels, balloons with “eyes” painted on them, foil strips or shiny garland hanging from the eaves, and models of owls.**

2. Metal sheeting (aluminum flashing) can be used to cover holes and then can be painted to match your siding. The birds may then move on to an unprotected area of the building, so persistence is again important.

To prevent or reduce sapsucker damage to trees, try these ideas.

1. Wrap a burlap bag or other heavy material around the damaged area.

2. Spread sticky repellents such as Tanglefoot or Roost-no-More around the affected area.

3. Surrender to the sapsuckers preferred trees their “orchard,” within a forest or orchard. It may prove easier to give these chosen trees to them. Otherwise, they will seek out and damage even more nearby trees.

There are no chemicals registered for use against woodpeckers. No currently available olfactory or taste retardant substances have been proven effective. Similarly, at the present time, no insecticides to kill insects in wood have proven very effective in controlling woodpecker damage.

If all else fails and the damage is determined to be severe enough, the offending bird may have to be removed by lethal means. Nailing wooden-based mouse or rat snaptraps adjacent to the damaged area may be useful. Be sure to check traps often, and dispose of the dead birds properly. **When using traps make sure they are out of the reach of children and pets.** Shooting the offending bird with a slingshot, air gun, or BB gun may also be useful. Check with local police authorities on the use of firearms in your area, whether urban, rural town, or field. Lethal control may not be totally effective in some cases, as new birds may move into the space vacated by the dead ones.

**Remember: All woodpeckers are protected by federal law and state laws. A permit from the U.S. Fish and Wildlife Service and a state permit are required before any lethal action can be undertaken.** Check with your local conservation officer for more information and to obtain permits.

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