



Reviewed December 2010

# Wildlife Damage Management Series



USU Extension in cooperation with:

CNR—Quinney Professorship for Wildlife Conflict Management Jack H. Berryman Institute Utah Division of Wildlife Resources Utah Department of Agriculture and Food USDA/APHIS Animal Damage Control

# Woodpeckers

Terry A. Messmer and Gerald W. Wiscomb

Quinney Professorship for Wildlife Conflict Management
Utah State University Extension Service and College of Natural
Resources
Department of Fisheries and Wildlife
Jack H. Berryman Institute
Utah State University, Logan, Utah

Woodpeckers, flickers, and sapsuckers are all members of the Picidae family. They can be identified by their stout sharply-pointed beaks, stiff tail feathers, and short legs that are equipped with four sharp clawed toes (two toes face forward and two backwards). There are more than 200 different species of woodpeckers in the world, of which about 45 are found in North America. Eleven species of woodpeckers are found in Utah; seven are considered to be common. Common Utah woodpecker species include the northern flicker (*Colaptes auratus*), Lewis' woodpecker (*Asyndesmus lewis*), yellow-bellied sapsucker (*Sphyrapicus varius*), Williamson's sapsucker (*Sphyrapicus thyroideus*), hairy woodpecker (*Dendrocopus villosus*), downy woodpecker (*Dendrocopus pudescens*), and ladder-backed woodpecker (*Picoides scalaris*).

For the most part, woodpeckers are beneficial birds because of the large numbers of insect pests they eat. However, when wood-sided buildings, wooden fences, power poles, and orchards become the focus of their attention, serious damage can occur.

# **BIOLOGY AND BEHAVIOR**

Woodpeckers are usually found in areas dominated by trees; however, they also occur in treeless areas where utility poles and wood-sided houses and other structures provide suitable substitutes for trees. These birds are uniquely adapted to drilling holes or cavities in wood. Their front and rear toe placement and stiff tail feathers enable them to cling to surfaces while they use their beaks to chisel into the object of their attention (Figure 1). Woodpeckers also have bristly-feathers

located around their nostrils. These feathers prevent wood dust from entering their nostrils as they chisel.

While most woodpeckers are primarily insect eaters feeding on tree-dwelling and wood-boring insects, they also



Figure 1. Characteristic woodpecker's chiseling stance.

will eat berries, fruits, and seeds. When looking for insects a woodpecker will tap on the surface while listening for the sounds of insect movements. If they hear an insect they will continue chiseling until the insect is caught. Hollow sounds also may indicate that insects are present, thus encouraging the woodpecker to continue chiseling. The Northern flicker will feed extensively on ants and other insects they find while foraging on the ground. Sapsuckers feed on tree sap, cambium, and insects. They use their bills to chisel small holes around live trees and then use their specially adapted tongue to lap up the sap and any insects attracted to the sap of the tree.

Woodpeckers form pairs in the spring for mating.

Females will lay a clutch consisting of 4 to 8 eggs in a cavity excavated in a tree or other suitable structures such as man-made nest boxes. Both adults usually assist with the incubation and care of the young.

Although woodpeckers are considered migratory, many do not travel long distances. Most of Utah's seven common woodpeckers species are year-long residents of the state.

# **LEGAL STATUS**

Woodpeckers are classified as nongame migratory birds and are protected by the Migratory Bird Treaty Act 1918 and Utah wildlife laws. Before any person may take, possess, or transport any migratory bird or its parts including feathers, eggs, nests, etc., they must secure a permit issued by the U.S. Fish and Wildlife Service and a Certificate of Registration issued by the Utah Division of Wildlife Resources. No federal or state permits are required to scare or harass protected migratory birds that are destroying property or crops, unless the species is threatened or endangered.

# **ECONOMIC STATUS**

Woodpeckers play a vital role in helping to control insect pests. It is only when they extend their foraging or nest building activities to include buildings or other man-made wooden structures that conflicts arise. On a statewide basis, the cost of damage caused by woodpeckers is minimal. However, in individual situations, the damage can be extensive.

# **CONTROL**

#### IDENTIFICATION OF DAMAGE

Woodpecker foraging, nest-building, and territorial activities in urban areas can cause severe damage to wood-sided homes, fences, power poles, ornamental trees, and orchards. Although woodpecker damage can occur year-round, it typically is highest in urban areas during the spring and fall. Spring damage occurs when pairs of woodpeckers are actively looking for insects or nest cavity sites. Fall damage increases as concentrations of adult and young birds flock to localized areas to feed prior to the on-set of winter.

Woodpecker damage can be extensive on houses built of wood, especially, those with cedar wood siding. Houses fitted with reverse board-and-batten siding also are susceptible to woodpecker damage. This type of siding is made from 3/4 or 1 inch thick sheets of cedar plywood. One-inch wide by 3/8 to 1/2 inch deep grooves are cut in the face of the plywood about 1 foot apart. These grooves expose core gaps in the middle layers of the plywood. Leaf-cutter bees or other insects will use these core gaps for egg laying chambers. Woodpeckers will chisel at the cedar siding to get to the insects, its eggs and larva. This type of damage is easily identified by a row of small holes which following the core-gaps (Figure 2).

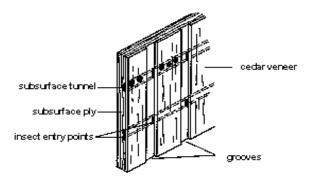


Figure 2. Reverse board and batten siding is very susceptible to damage.

Woodpeckers may also damage homes and other structures when drumming on a surface with their bills to announce their territories. Woodpeckers are essentially songless birds, so they must drum or tap on structures to communicate, set up territories, and find a mate. Drumming usually occurs in the spring and is restricted to structures that will resonate a sound to include siding materials, rain gutters, eaves, chimneys, and T.V. antennas. Drumming on non-wood structures such as rain gutters and antennas generally causes no structural damage but can be annoying to the occupants of the house.

Although sapsuckers usually don't cause structural damage, they can be very destructive to ornamental and fruit trees. A sapsucker will chisel several rows of small holes around a tree trunk or large branch of a live tree and wait for the sap to run so they can lap it up along with any insects that get stuck to the sap (Figure 3). Sapsuckers will return periodically to enlarge these holes and feed on the cambium, inner bark, and fresh sap. Trees that are repeatedly attacked are highly susceptible to disease and insect infestation. Over time the trees may become girdled and die because of sapsucker damage.

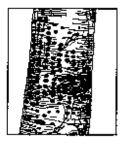




Figure 3. The sapsucker bores neat rows of 1/4inch holes spaced closely together through the bark of trees along and around portions of the limbs or trunk. As these holds fill with sap the sapsucker uses its brushlike tongue to draw it out. These holes are periodically enlarged and portions of the camblum and innbark, together with the fresh sap, are eaten

# METHODS OF CONTROL

#### STRUCTURAL MODIFICATION

Preventing woodpecker damage from occurring is much cheaper than repairing it. Whenever possible, new buildings constructed in or near areas that contain woodpecker habitat should be sided with brick, aluminum, stone or steel. When cedar lap-siding is used, all loose knots should be removed and the holes filled with wood putty. Buildings with reverse board-and-batten siding should have all exposed coregaps plugged with wood putty or caulk. Prior to plugging the core gaps, be sure that any insects, their larva and eggs have been removed. The best way to do this is by running a stiff wire through the core-gap. Once the core-gap has been cleaned it should be plugged immediately.

The key to reducing woodpecker damage is to start control measures when the damage first occurs. Once a woodpecker has established a feeding or nesting territory, it will be much more difficult to manage the situation. Before implementing any control strategy, inspect the area being damaged. If there are any cracks or openings that attract the woodpeckers or provide them a surface to cling to, these should be repaired. In some cases, this may be all that needs to be done to stop any further damage.

If this is not the case or the damage persists after the repairs have been made, then other control measures can be considered. Since individual woodpeckers may respond differently to control measures, more than one method at a time may be required to stop the damage.

# FRIGHTENING DEVICES

Various frightening techniques have proven effective when used early and in conjunction with other methods. When woodpeckers are frightened from one site they may move to another area of the building. This may require using additional frightening techniques for the new area.

#### Visual

Strips of aluminum foil (3 to 4 inches wide and 4 feet long), mylar tape, cloth, plastic, tin can lids, aluminum pie tins, or brightly colored windsocks can be hung over the damaged site. The strips should be attached with heavy string such as fishing line to the house or stiff rods located above the damage site. This will allow the objects to move in the wind and increase reflection from the sun. The movement in combination with reflecting sunlight should discourage woodpeckers from using the site.

Other devices that have been used to frighten woodpeckers include silhouettes or effigies of birds of prey (hawk, falcon, or owl) and balloons with big eyes painted on them. These objects can be hung near the damage site to frighten the birds. Woodpeckers can, however, become habituated to some visual repellents if they do not sense any threat associated with them. To prevent this from happening, move or rotate between different devices.

#### Sound

Sound can also be used to frighten woodpeckers causing damage. Any device that will make loud sounds such as a radio in a window near the damaged site, banging on pots and pans or garbage can lids, or cap pistols can be effective as frightening devices.

Using visual frightening techniques with sound can be more effective. Again, using the techniques when the damage is occurring will increase their effectiveness. Propane cannons have been used in orchards to frighten depredating birds and woodpeckers. Moving the propane cannon on a daily basis also will increase the effectiveness of the device.

#### Exclusion

In some cases exclusion may be the preferred method of control. Light plastic or nylon netting, or hardware cloth (1/4 inch mesh or less) can be effective at eliminating damage by restricting woodpecker access to the area. Attach the netting to hooks from the eave to the side of the building (Figure 4). Netting is often available in a variety of colors. The netting selected should be as close to the color of the building as possible to better blend into the structure.

Metal sheathing also can be placed over damaged areas to provide permanent protection. This sheathing prevents woodpeckers from clinging to the surface. Sheathing can be painted to match the color of the building. However, woodpeckers have been known to peck holes through light aluminum if they can secure a foot-hold.

#### REPELLENTS

# Taste

Some taste aversion chemicals, such as Ro-pel and

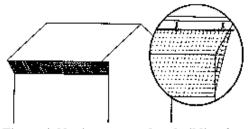


Figure 4. Netting mounted on building from outside edge to eave down to the side of the building. Insert shows a method of attachment using hooks and dowels.

Thiram have been tested on fence posts and utility poles. These chemicals emit odors or have tastes which are objectionable to the birds thus repelling them from areas or structures to which the chemicals have been applied.

#### **Tactile**

Sticky or tacky bird repellents, such as Bird Stop, Roost-No-more, and Tanglefoot, can be smeared on and near damaged areas including tree trunks and limbs to repel woodpeckers, thus preventing further damage. Birds are repelled by the sticky footing. Unfortunately, these products can discolor painted or stained surfaces as well as natural wood surfaces. During warm weather these products may cause streaking. Before applying these products, it is a good idea to test them on small areas of the building that are not visible. To further protect the siding, these products may also be applied to another piece of wood or plywood then fastened to the building over the damaged areas.

#### Sapsucker Damage

Sapsuckers are specialized feeders. Their feeding activity is easily recognized by the rows of holes around the trunks and limbs of live trees (Figure 3). All of the frightening techniques discussed above will work to reduce or eliminate sapsucker damage to live trees. Taste and tactile products can also be applied to tree trunks and limbs where damage has been identified.

Individual sapsuckers usually prefer one tree and continue to return to the same tree to feed. These individual trees can be protected by draping plastic or nylon netting over the entire tree. Parts of trees can also be protected by loosely wrapping hardware cloth around tree trunks or limbs. During winter months, sapsuckers may congregate in orchards and attack several trees. In these situations, it may be best to sacrifice one tree to reduce damage to others.

#### Lethal Control

When nonlethal methods fail to eliminate the damage, it may be necessary to remove the offending woodpecker. Because woodpeckers are federally-protected, a permit will be needed to remove the bird. For information on attaining a permit and the techniques to be used, contact any of the offices listed.

#### **OR FURTHER INFORMATION, CONTACT:**

USDA/ APHIS/ Wildlife Services P.O. Box 26976 Salt Lake City, UT 84126 (Phone 801-975-3307)

Ouinney Professor for Wildlife Conflict Management Fisheries and Wildlife Extension Specialist Department of Fisheries and Wildlife Utah State University Logan, UT 84322-5210 (Phone 435-797-3975)

Utah Division of Wildlife Resources 1594 West North Temple Salt Lake City, UT 84116-3154 (Phone 801-538-4700)

# **Additional Reading**

- Behle, W. H., and M. L. Perry. 1975. <u>Utah Birds: Check-list, seasonal and ecological occurrence charts and guides to bird finding</u>. Utah Museum of Natural History. University of Utah. Salt Lake City, Utah.
- Cleary E., and T. A. Messmer. 1986. <u>Woodpeckers.</u> NDSU Extension Service. North Dakota State University, Fargo, ND. In cooperation with U. S. Department of Agriculture-APHIS Animal Damage Control.
- Henderson, F. R., and C. Lee. 1992. <u>Woodpeckers: Urban</u>
  <u>wildlife damage control.</u> Kansas State University.
  Cooperative Extension Service, Manhattan, Kansas.
- Marsh, R. E. 1994. Woodpeckers in <u>Prevention and Control of Wildlife Damage.</u> Great Plains Agricultural Council Wildlife Resources Committee, University of Nebraska-Lincoln Cooperative Extension Service, Lincoln, NE.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University. (NR/WD/006, 1998)