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Animal Damage Control

Integrated Pest Management,
Cooperative Extension Service,
North Dakota State University, Fargo, North Dakota
in cooperation with
U.S. Department of Agriculture-APHIS Animal Damage Control

ADC-3

WOODPECKERS

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All woodpeckers, flickers and sapsuckers belong to the family Picidae. These birds have short legs with two backwards pointing and two forward pointing sharp clawed toes and short stiff tail feathers. These characteristics enable them to cling to tree trunks and branches as they use their stout, sharply pointed beaks to dig out insects or excavate nesting cavaties (Figure 1).

Figure 1. Characteristic woodpeckers drilling stance.

Six species of woodpeckers normally breed in North Dakota. The downy wookpecker (*Dendrocopus pubescens*), hairy woodpecker (*D. villosus*), redheaded woodpecker (*Melanerpes erythrocepholus*) and northern flicker (*Colaptes auratus*) are found throughout the state. The yellow-bellied sapsucker (*Sphyrapicus varis*) is found mainly in eastern North Dakota, and pileated woodpeckers (*Dryocopus pileatus*) are found only in the Red River Valley.

For the most part, woodpeckers are beneficial animals because of the large numbers of insects they eat. However, when wood-sided buildings, wooden fence, power poles or orchards are near woodpecker habitat, serious damage can occur.

Cedar lap-siding is favored by woodpeckers because the large loose knots provide ready made starter holes for nest cavity excavation.

Reverse board-and-batten siding is often damaged by woodpeckers in their search for food. This type of siding is made from ¾ or 1 inch thick sheets of cedar plywood. One-inch wide by 3/8 to ½ 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 the core gaps for egg laying chambers. Damage results when woodpeckers dig the insect larvae and grubs out of the core gaps. This types of damage is easy to identify because the woodpecker holes will be in a straight line across the board following the core gaps (Figure 2).

Because woodpeckers are songless, they substitute drumming with their bills on resonating surfaces such as dead tree trunks or limbs to proclaim their territories or to attract and signal their mates. At times they will also drum on eaves, siding, rain gutters, down spouts, and T.V. antennas. Drumming damage to buildings is generally restricted to sound wood and there is no evidence of food searching or nest excavation. Drumming on rain gutters, down-

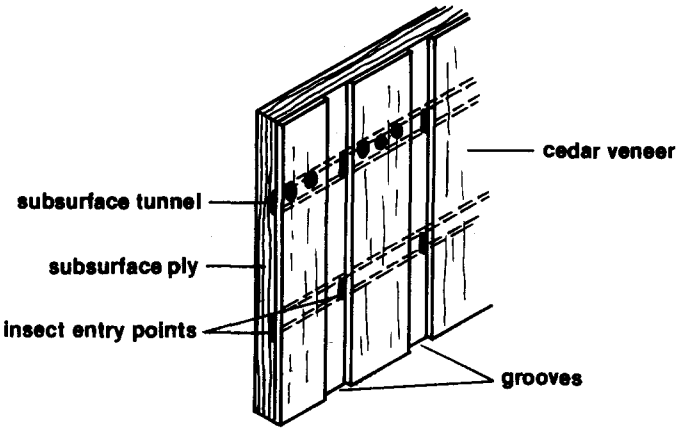


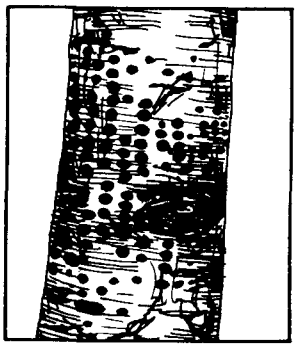
Figure 2. Reverse board and batten siding is very susceptible to damage.

spouts, T.V. antenna, etc. causes little if any structural damage, but can be very annoying to the homeowner.

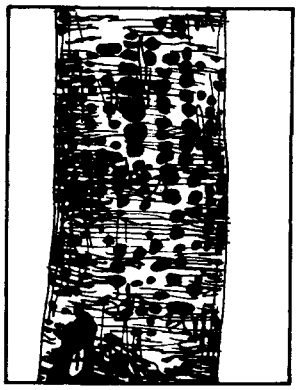
Sapsucker damage is generally restricted to ornamental or fruit trees. Sapsuckers are more specialized in their feeding habits than other woodpeckers. These birds will drill out several rows of holes around the trunks or large limbs on a tree (Figure 3). As sap flows into the holes the sapsucker uses it brush like tongue to draw the sap up along with any insects that were attracted to the sap. Sapsuckers will periodically enlarge the holes and eat portions of the cambium, inner bark and fresh sap. Individual trees that are attacked year after year suffer from reduced vitality and are exposed to further injury from insects and disease. In severe cases individual branches or the central leader of the tree may be girdled and die as a result of sapsucker damage.

Figure 3

The sapsucker bores neat rows of ¼-inch holes spaced closely together through the bark of trees along and around portions of the limbs or trunk. As these holes fill with sap the sapsucker uses it brush-like tongue to draw it out.



These holes are periodically enlarged and portions of the cambium and inner bark, together with the fresh sap, are eaten.



BIOLOGY AND BEHAVIOR

Woodpeckers are dependent on trees for food and shelter and are generally found on the edge of wooded areas. Some have learned to utilize man-made structures for food and shelter and have extended their habitat to include wooden fence posts, utility poles and buildings. Thus, woodpeckers may even be found in areas where trees are scarce.

Most woodpeckers feed on tree-dwelling and wood-boring insects. Flickers will feed extensively on ants and grubs taken on the ground. Although primarily insectivorous, vegetable matter, including berries, fruits and seeds are also eaten. Sapsuckers feed on tree sap, cambium, phloem and insects.

Some species of woodpeckers are migratory, most are not. Of those found in North Dakota, the downy, hairy and pileated woodpeckers are non-migratory living year round in the same area. The red-headed woodpecker, northern flicker and yellow-bellied sapsucker are migrants.

Most species of woodpeckers live in small social groups. They nest in cavities chiseled into tree trunks, branches, structures or power poles. When available, they will use natural or pre-existing cavities. Clutch size is generally from four to eight. Both parents usually assist with the incubation and feeding of the young.

LEGAL STATUS

Woodpeckers are classified under the Migratory Bird Treaty Act of 1918 as migratory insectivorous birds and are protected by both state and federal law. As a result, certain activities affecting them are subject to legal restriction. It is illegal for any person to kill, take, possess, transport, sell or purchase them or their parts, such as feathers, nest or eggs without a permit issued by the U.S. Fish and Wildlife Service. A state permit issued by North Dakota Game and Fish's division of law enforcement may also be required before any woodpecker can be destroyed. A state or federal permit is not required to merely scare or harass a woodpecker that is causing damage.

ECONOMIC STATUS

As with most wildlife, woodpeckers play a vital role in helping to control insect pests that can

adversely effect man's interest. It is only when they extend their search for food or nesting sites to include buildings or power poles that a conflict arises. On a nationwide basis the cost of woodpecker damage to buildings is probably minimal. But, in individual situations it can be very expensive.

CONTROL

Buildings

Prevention of damage during new construction is much cheaper than repairing woodpecker damage. Wherever possible, new buildings in or near woodpecker habitat should be sided with brick, aluminum, stone or steel and not wood. When cedar lap-siding is used, all loose knots should be removed and the hole filled with wood putty. On buildings with reverse board-and-batten siding, all exposed core gaps should be plugged with wood putty. These are time consuming jobs, but they are cheaper than replacing the siding. Mixing Elmer's[1] water based wood filler with a small amount of a water based wood stain will allow filling of the core gaps and knot holes so as to match the finish on the building.

If leaf-cutter bees nest in the core gaps before they can be plugged, the larvae should be killed before the core gaps are plugged. Otherwise, the bees will chew their way out or the woodpeckers will seek out the larvae. The best way of doing this is to run a stiff wire through the core gap. This will remove the bee nest and kill any larvae. Once the core gaps have been cleaned out, they should be plugged at once.

It has been suggested where woodpeckers are damaging insect-infested siding, the use of an insecticide may help reduce damage. This method is of questionable worth. There are no insecticides that will penetrate deep enough to kill insects living deep in the wood. Also, even if the insecticide did work, once it breaks down and loses its effectiveness, other insects will reinvade the siding, necessitating retreatment.

On older buildings, prompt and persistant action is required to deter a woodpecker that is attracted to a particular building. The quicker and more persistant the action taken to frighten the birds away, the greater the chance of success. The use of a combination of scaring techniques is almost always more successful than relying on just one scaring technique or device. Unfortunately, the use of some scaring devices may cause the woodpecker to shift its activity to an unprotected part of the building rather than driving the bird from the area.

Strips of aluminum foil 3 to 4 inches wide and 3 to 4 feet long or similar sized strips of cloth or plastic can be hung in front of the damaged area. Tin can lids or aluminum pie pans tied to heavy string so they will rattle and flash in the sun can also be used. Raptor silhouettes or effigies have been successfully used in some cases.

Banging garbage can lids, clapping boards together, or almost anything else that will frighten birds can be used to try to drive them away. When using any visual or sound repellent, prompt and persistent action is the key to success.

Light fine mesh (¼ inch or less) plastic or nylon netting or hardware cloth can be used effectively to exclude woodpeckers from area they are damaging. There should be at least a 3-inch space between the netting and the building. The netting can be painted to match the building (Figure 4).

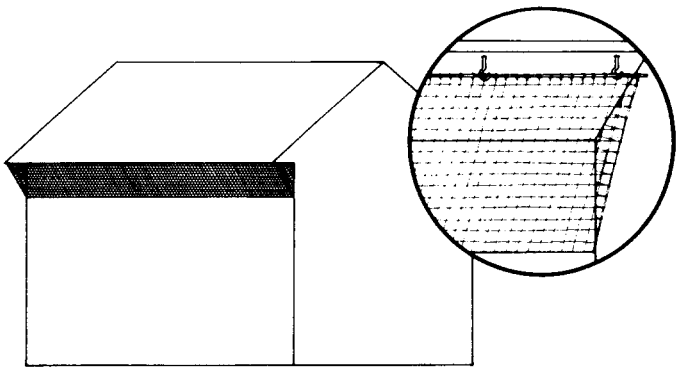


Figure 4. Netting mounted on building from outside edge of eave down to the side of the building. Insert shows a method of attachment using hooks and dowels.

Metal sheathing placed over damaged areas can offer permanent protection from continued damage. Again, the sheathing can be painted to match the building. Woodpeckers have been known to peck through light aluminum if they can secure a foothold to work at it.

Drumming can be discouraged by deadening or dulling the sound with padding or by placing insulation or other material behind the siding at the place where drumming is occurring. This may require removing some of the siding in order to install the insulation. This technique is most effective if it is carried out as soon as drumming starts.

Tactile repellents such as Tanglefoot, Bird Stop, Roost-No-More, etc. can be applied to building siding to discourage woodpeckers. The birds are not entrapped by these materials, but they dislike the sticky footing. These materials will discolor painted, stained or natural wood siding, and some of them

[1]The use of trade names is done only for reader convenience and does not constitute endorsement of the product by USDA/APHIS/ADC or NDSU Cooperative Extension Service, nor is criticism implied of similar products which are not mentioned.

will run in warm weather, leaving unsightly streaks. Before making any application of these materials, they should be tried on a small out-of-the way place first. An alternative method is to apply the material to thin pieces of pressed board which can then be fastened over the damaged area.

Sapsucker Damage

The same sticky repellents mentioned earlier can also be applied to tree limbs and trunks to discourage sapsuckers. Loosely wrapping sapsucker-damaged limbs in burlap, hardware cloth, or plastic will protect the area from further damage. Treating the damaged areas with asphalt-based roofing paint has successfully repelled sapsuckers that were damaging fruit trees. These methods are practical for high value park and shade trees.

Some success has been reported using propane cannons to frighten birds out of orchards. To be effective, at least one cannon per five acres should be used. Also, the location and firing rate of the cannons should be changed daily to reduce bird acclimation to the cannons.

In orchards and forested areas, it may be better to let the birds work on one or two favorite trees. Trying to protect the one or two favorite trees may lessen the damage to the protected trees, but could result in more trees damaged throughout the planting.

Post and Poles

Over the years, a great number of chemicals have been tried by utility companies in an effort to reduce or eliminate woodpecker damage to wood posts and poles. Either they did not work or were not cost effective.

A new chemical, ST-138 (isophrene), is currently undergoing testing by the W.P.R. Company of El Campo, Texas. Whether or not isophrene will prove effective and EPA will grant registration remains to be seen.

At the present time, the only way of preventing woodpecker damage to utility poles is to wrap the pole in sheet metal or heavy screening. In many cases this method is not cost effective.

Some of the structural integrity of poles damaged by woodpeckers can be restored by inserting cement reinforcing rods into the cavities and then filling with an epoxy resin.

Killing

As a last resort, individual woodpeckers may have to be killed (see Legal Status). Shooting or trapping are effective methods of killing woodpeckers.

Air rifles, .22 CB caps or .22 bird shot can be effective at close range. If more range is needed, a .410 gauge shotgun can be used. Extreme caution must be exercised when shooting around buildings. Also, most town and cities have ordinances against the discharge of fire arms within the city limits.

A wood-based rat snap trap, nailed next to the damaged area with the trigger down, is very effective. The trap should be baited with nut meats or suet. If several areas are being damaged, several traps should be used.

Remember that woodpeckers are protected by both federal and state law and permits are required before any woodpecker can be killed.

The first step in securing a permit to kill woodpeckers is to contact the Animal Damage Control Office at the address given below.

There are no toxicants available for controlling woodpeckers.

If further assistance with woodpecker problems is needed, contact the Extension Wildlife Specialist, Stevens Hall, NDSU, Fargo, ND 58105 or the USDA, APHIS, Animal Damage Control Office, 1500 Capitol Avenue, Bismarck, ND 58501.

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