Three Reasons Why Woodpeckers Drill Holes on Houses

Drumming Holes
Many siding types are potential instruments for woodpecker drumming behavior. These include houses with aluminum siding, as well as the trim boards and fascia boards of any wood, brick, and stucco homes. Also attractive to woodpeckers are metal downspouts, gutters, chimneys, and vents. Drumming behavior is often more annoying than damaging, though it can be fun and informative to observe. If you hear a woodpecker banging on your house, you will know it if you hear it -- you may be able to run outside and catch some exciting territorial or breeding behaviors without having to trek through the woods as many people are inclined to do. Listen for any accompanying calls the woodpecker may give and look around for a mate or possible competitor.

Holes made by drumming activities are usually in the form of very small dents in the wood, grouped in clusters along the corners or fascia and trim boards of a house. The holes may sometimes be as large as an inch across, round, cone-shaped, and generally shallow.

Roosting and Nesting Holes
Roosting holes and nesting holes are most often begun in houses that are in close proximity to wooded areas, have natural wood or a dark-colored stain, and have either a clapboard siding, a board-and-batten siding, a tongue-and-groove siding, and less often, resawn shakes and shingles. Woodpeckers are more drawn to redwood and cedar wood types than to composite wood or Masonite. Roosting and nesting holes, though similar in size and shape, are specific to the type of siding in terms of their location on the house.

Holes in cedar clapboards are usually drilled at the seam of two adjacent clapboards. These holes can usually be found dispersed throughout the siding. Holes drilled into board-and-batten siding are usually found on the inverted batten between the two adjacent boards, again often found dispersed throughout the siding, with some preference given to corner excavations. Woodpeckers drilling into tongue-and-groove type sidings show a definite preference to corner holes. These holes are found at the seam of two vertical boards. Resawn shakes and shingles also are more prone to having nesting and roosting holes along corners of the house. Usually these holes are placed between abutting shingles, where the bottom and top of two shingles meet.

When beginning to drill nesting or roosting holes, woodpeckers often make several attempts, initiating an excavation only to leave off and start a new one just inches away from the first, or in an entirely new location on the house. This may be because the specific requirements needed for a nesting site or roosting site are not met, and it is in this way that a house may accumulate multiple holes.

While excavating holes, a woodpecker first digs through the outer siding, followed by the sheathing and then plywood layers, directly into the insulation. It is here that the nesting or
roosting area is hollowed out. It has been speculated that woodpeckers prefer to build their holes in houses for a variety of reasons:

1. The heat that is trapped in the insulation from the house awards extra protection from cold weather.

2. The proximity of the hole to other trees grants extra protection from predators.

3. There may be few to no suitable trees available for nesting or roosting purposes in the outlying areas.

4. Houses are usually made from a soft wood into which woodpeckers can easily dig.

Nesting holes are usually built in the beginning of the breeding season between late April and May. Roosting holes are usually built in the late summer and fall in preparation for winter. Larger holes may be surrounded by smaller half-finished holes, or by clusters of tiny holes at corners, on eaves and on corner boards. These are often the results of drumming activity.

If you consider yourself lucky to have your very own woodpecker nesting hole in your siding, you may want to watch the woodpeckers perform courtship behavior, copulations, and drumming behavior, as these usually take place in close vicinity to the nesting site. Later on, after the eggs hatch, you may be able to see the adults bringing food to the young. Eventually, you may catch sight of your very own nestling peering out at you from the pocket in your house while begging and crying to be fed. Vigilant watchers may even be able to witness the fledging of the young, and to feel proud knowing that they had, in some small part, helped in the rearing of these birds.

**Foraging Holes**

Foraging behavior, too, can be interesting to watch. There are a few siding types that are more susceptible to insect infestation, thereby attracting woodpeckers to hunt for food on the house. Grooved plywood siding, also known as Type 111, mimics the look of boards backed by battens. It is made from sheets of plywood into which vertical grooves are cut in the lumbering process. These grooves expose horizontal gaps in the core of the plywood. Insects such as the leaf-cutter bee and grass bagworm crawl into these gaps to overwinter, pupate, or hide from predators. Woodpeckers searching for insects will create almost perfectly horizontal rows of holes along the siding following the core gaps. Wooden shakes and shingles also have many nooks and crannies that attract insects, thereby enticing woodpeckers. Insects will follow cracks between adjacent shakes upward underneath the overlapping upper shake in order to lay eggs, hide, pupate, and overwinter. Woodpeckers in search of these insects will drill straight lines of vertical holes, anywhere from three to six holes in a line depending on the size of the shake, directly up the middle of one of the overlapping shakes.

**Aluminum/Vinyl Siding**

- Houses with aluminum or vinyl siding are not typically prone to woodpecker damage. However, if the fascia boards of the house are made of wood, they may sustain damage from woodpeckers drumming on the wood in which case there will be very small holes in
clusters at specific points on the fascia boards. The fascia boards may also become infested with carpenter bees.

- If the siding of the house is completely aluminum or vinyl, the primary aggravation may be the sound of a woodpecker drumming on a gutter or chimney. Drumming behavior is probably to establish a territory or attract a mate and will most likely stop once breeding has begun in the spring. Drumming damage is often minimal.

Cedar Clapboards

- If the house has stained cedar clapboards and is located in a wooded region or woodpecker "hot spot" (an area of high woodpecker population and activity), the house is particularly susceptible to damage, especially if the stain is an earth tone such as brown, dark red, or dark green. There can be a few different types of damage:

1. Holes larger than two inches in diameter may be drilled by the woodpecker into the siding, usually between the seam of the two clapboards (Figure 1). Often these holes go through the siding and into the insulation. These are most likely the beginnings of roosting or nesting holes. Smaller, unfinished holes as well as scrapings along the upper board usually surround larger holes.

2. Scrapes and holes on the corner siding or corner boards of the house may be due to drumming or nesting/roosting behavior. Such damage is less often a case of foraging for insects.

3. Holes in the fascia boards may be either the result of drumming, in which case there are usually very small holes in clusters at specific points on the fascia boards, or the result of woodpeckers foraging for carpenter bee larvae.

- If the house has painted cedar clapboards, unless the house is in a woodpecker hot spot, there is often no damage to the siding, especially if the house is painted in shades of white, pastels, or other bright colors. Damage to the fascia boards could be the result of woodpeckers drumming, evidenced by very small holes in clusters at specific points on the fascia boards, or the result of woodpeckers foraging for carpenter bee larvae. Damage may be similar to that described for stained cedar clapboards.

![Figure 1. Woodpecker nesting/roosting attempts on cedar clapboards](image)
Wood Composite

- Woodpeckers do not seem to be attracted to this type of siding, so damage is usually minimal. There may be drumming damage, in which case there are very small holes in clusters at specific points on the fascia boards, or carpenter bee damage to the fascia and/or corner boards. Occasionally a woodpecker will try to excavate roosting or nesting cavities into the hardboards. See Figure 2.

Figure 2. Woodpecker nesting/roosting attempts into hardwood siding

Type 111/ Grooved Plywood

- If the house is made of stained plywood that mimics the look of boards backed by battens (also known as Type 111) and if there are woodpeckers in the area, the house is very susceptible to damage. There is less damage when the plywood is painted. (Type 111 is made from sheets of plywood into which vertical grooves are cut.) These grooves expose core gaps in the middle layers of the plywood. The wood may sustain a few different types of damage:

1. Larger and smaller holes along the corner boards or on the siding of the house, resulting from nesting or roosting attempts, drumming, or insect foraging.
2. Almost perfectly horizontal rows of small holes across the boards. These holes are the result of woodpeckers foraging for insects, such as the leafcutter bee, which use these gaps as egg-laying chambers. (Figure 3)
3. Damage to the fascia boards may be the result of drumming, in which case there are very small holes in clusters at specific points on the fascia boards, or it could be carpenter bee damage.

Figure 3. Woodpecker foraging holes in vertically grooved plywood siding
**Resawn Cedar Shakes**

- If the house is made of stained resawn cedar shakes, especially if the stain or paint is an earth tone, it is susceptible to damage, particularly in a woodpecker hot spot. The damage is usually characterized by large and small holes along the corners of the house, between the bottom of one shake and the top of the next (Figure 4). The damage may be clustered around wires, which are used as perches, attached along the house. These holes look as though they could be roosting or nesting attempts. Smaller holes along the corners could be the result of drumming.

- Holes on the fascia boards could be the result of drumming or woodpeckers foraging for carpenter bees.

![Figure 4. Possible roosting/nesting attempts along with drumming damage on cedar shakes](image)

**Cedar Shakes/Shingles**

- If the house is made of stained cedar shakes or shingles, the house is particularly susceptible to damage, especially in a woodpecker hot spot. (Painted houses often have damage to a lesser extent than stained houses.) Damage is usually characterized by vertical rows of small holes that follow the crack between two bottom shingles up into the overlapping top shingle (Figure 5). This is the result of woodpeckers foraging for insects such as leafcutter bees, which may use these cracks for egg-laying or shelter.

- The damage may also be characterized by large and small holes along the corners of the house, between the bottom of one shake and the top of the next (Figure 6). The damage may be clustered around wires, which are used as perches, attached along the house. These holes look as though they could be roosting or nesting attempts.

- Damage may also be in the form of very small holes along the corners of the house possibly resulting from drumming behavior.

- Holes on the wood fascia boards may be a result of drumming, evidenced by very small holes in clusters at specific points on the fascia boards, or foraging for carpenter bees.
Figure 5. Damage due to woodpecker foraging for insects on cedar shingles

Figure 6. Possible nesting/roosting excavations on cedar shingles

**Tongue-and-Groove/Board-and-Batten**

- If the house is made of stained tongue-and-groove or board-and-batten cedar siding there may be damage to the house, especially if the house is located in woods or in a woodpecker hot spot. (Damage is often to a lesser extent if the house is sided with painted hardboard.) Large, medium, or small holes at the seams of the boards usually characterize damage to these siding types (Figures 7 and 8). There might also be scrapes between the boards. These holes and scrapes may be the result of roosting and nesting attempts.

- There may be smaller holes along the corner boards or fascia boards. These may either be the results of drumming behavior, evidenced by very small holes in clusters at specific points along the boards, or the result of searching for carpenter bee larvae.
Which Insects Are They Looking For?

**Carpenter Bees**

Carpenter bees are often confused with bumblebees. However, carpenter bees are larger, have bright yellow, orange, or white hairs on their thorax, and have shiny black abdomens (Figure 9). Male carpenter bees do not have stingers, they fly around flowers looking for receptive females. Females do have stingers, but rarely sting. Female carpenter bees drill small perfectly round holes the size of a dime into fence posts, wooden fascia boards, wood overhangs, trees, or other wood structures. She drills straight into the wood about an inch or two, and then turns 90 degrees. This portion of the nest becomes the egg chamber. Single eggs are laid into cells constructed within the egg chamber. A mixture of pollen and nectar is placed alongside the egg, and the cell is sealed with chewed wood pulp. The eggs hatch and the larvae develop into adults, chew through the seal, and emerge in late summer.

Males and females overwinter in abandoned nest tunnels and emerge in April or May. Adult
female carpenter bees often return to their place of birth and build their own egg laying chambers extending from previous years' tunnels. A single tunnel one year can become two or three the next. The original entrance hole of the female carpenter bee is usually on the undersides of the wood, there are often large patches of yellowish bee excreta exuding from these holes. Carpenter bee larvae are noisy and tend to attract woodpeckers who will drill holes along the tunnels feeding on the larvae. This activity results in long trenches and holes about 0.5 to 1 inch deep along the wood (Figures 10 and 11).

![Figure 9. Adult Carpenter Bee](image)

**Figure 9. Adult Carpenter Bee**

![Figure 10. Woodpecker damage due to foraging for carpenter bee larva on fascia boards of a house](image)

**Figure 10. Woodpecker damage due to foraging for carpenter bee larva on fascia boards of a house**

![Figure 11. Woodpecker damage due to foraging for carpenter bee larva on cedar trim boards of a house](image)

**Figure 11. Woodpecker damage due to foraging for carpenter bee larva on cedar trim boards of a house**

**Leafcutter Bees**

Leafcutter bees, of the genus *Megachilidae*, are non-aggressive native bees important as pollinators. They nest in large pithy plants such as roses, in soft rotted wood, and in small crevices and cracks within wood. Leafcutter bees are about the size of a honeybee, but darker with light bands on their abdomens. Solitary bees, individual females dig out nesting areas, create nest cells, and provide young with food. After the nest is made, the females collect
fragments of leaves which they cut in a smooth semi-circle about 3/4 inch in diameter from the edge of leaves. These pieces are carried back to the nest and used to line the cells. The cell is provisioned with a mixture of nectar and pollen. The egg is laid, and the cell is sealed. The finished nest cell somewhat resembles a cigar butt.

Leafcutter bees will often develop nest sites within specific types of house siding. These nests then attract woodpeckers who will damage the siding in their foraging. Type 111 siding (vertically grooved plywood) has horizontal core gaps exposed when vertical grooves are cut into the plywood. Leafcutter bees will burrow into these gaps to lay their eggs. Woodpeckers will drill horizontal rows of small holes into the siding following these core gaps in an attempt to feed on the larvae. Cedar shakes have many cracks between abutting and overlapping shakes. Leafcutter bees will follow the crack between two adjacent shakes, upward underneath the overlapping upper shakes in order to lay their eggs. Woodpeckers follow these cracks, drilling vertical rows of small holes into the shakes in their foraging attempts.

**Grass Bagworms**

*Psyche casta*, known commonly as grass bagworms, are another insect type that woodpeckers look for on houses. The larvae of the Psychidae resemble tiny caterpillars. They construct cases made from fragments of grasses and other plant materials and when the larvae pupate, the case or bag is attached to a tree trunk, a wooden fence, or the siding of a house. Woodpeckers will hammer on a house while searching for the treats hidden inside these inch long bags.

The best way to keep woodpeckers from hammering on your house is to begin damage control as soon as you hear the first tap. And you should continue these measures even after the woodpecker has left to ensure that it does not return. Any holes the bird has made in your house should be immediately repaired and painted to avoid attracting more woodpeckers.

**General woodpecker deterrents**

1. **Tactile deterrents**
   - Although some people recommend applying sticky repellents such as Tanglefoot Pest Control, Roost-No-More, and Bird Stop to areas where damage is occurring, we are against using them. These products can get on a bird’s plumage, impairing its ability to fly and stay warm. Moreover, they can darken and stain wooden siding and cause dirt to adhere to the surface where they’re applied.

2. **Visual deterrents**
   - Aluminum foil strips or reflective tape, such as Irri-Tape, manufactured by Bird-X, hung from areas where damage occurs may scare away woodpeckers. The strips should be long enough to hang freely and blow in the breeze.
   - Windsocks hung from house corners serve the same purpose as aluminum foil and may be less intrusive.
• Handheld windmills, especially those with reflective vanes, can be attached along areas of damage. The motion of the revolving vanes may discourage woodpeckers.

• Plastic owls hung from the eaves of a house will generally frighten off woodpeckers for the first few days. However, birds often acclimate to the same visual stimulus in the same exact place every single day. Terror Eyes manufactured by Bird-X, may prove effective as an alternative to plastic owls. This product bouncing from a spring, and the lenticular, holographic eyes follow the bird in any direction. Therefore, the product is actually moving, making it less likely that the birds will become acclimated to it.

3. Sound deterrents

• With an electronic distress call system, a recording of a woodpecker distress call followed by the call of a predator such as a Sharp-shinned Hawk is broadcast through a speaker system at various intervals to frighten woodpeckers away from your house. One example is BirdXPeller Pro, manufactured by Bird-X.

• A movement detector that makes noise when it senses movement can be attached to damaged areas (this will also keep deer away from your garden).

4. Other preventative measures

• To prevent damage under eaves, lightweight nylon or plastic netting can be attached from the overhanging eaves to the siding of the damaged building. One type of netting on the market is BirdNet, manufactured by Bird-X. To keep the birds from reaching through the net, leave at least three inches between the net and the siding.

• Aluminum flashing can be used to cover existing holes or to line the corner or fascia boards of the house. You can paint it to match your siding.

• Setting up a suet feeder in your yard may draw the birds away from your house. Keep the feeder supplied with food throughout fall, winter, and spring when natural food is scarce and the birds are hungriest because of the cold weather. Remove the feeder during the hot summer months because the suet may become sticky and adhere to the bird’s plumage.

• To dull the sound produced by drumming, place padding behind the area where the bird is drumming.

Nesting or roosting woodpecker problem

As long as a nest is not already established, existing holes should be plugged with wood putty. If the birds already have eggs or young, the holes can be sealed after the nestlings have fledged, usually by midsummer. The preventive measures outlined under General Woodpecker Deterrents can then be followed to keep the woodpecker off your house.

Insect prevention

1. Carpenter Bees
If there are long trenches and holes on the wood fascia boards of your house, chances are you’ve got carpenter bees, and the woodpeckers have discovered them. To discourage the woodpeckers, you must get rid of the bees.

- Carpenter bees prefer to drill into either natural or stained wood. If the wood is painted (oil base or polyurethane), there is less chance of infestation, because a hard finish deters bees.
- If you prefer natural or stained wood, spray the area with a preventive insect control such as Cypermethrin.
- If the bees are already established, consider using an insecticide specifically designed to control wasps and bees. It should be sprayed into the entrance holes in late evening or at night when the bees are inside the tunnels. After 24 hours, plug the tunnel entrances with a cork, wooden dowel, or wood putty to keep bees from recolonizing there.

2. Leaf-cutter bees and other insects

- If your house is sided with grooved plywood, painting it will often seal core gaps, preventing insects from tunneling into the wood. If you don’t want to paint your house, caulking along the sides of the vertical grooves can cover entrances to gaps in the core. This is labor-intensive, but it is often the only way to get rid of the insects. Once the gaps are caulked, the damage should be repaired so old holes don’t attract foraging woodpeckers.
- For houses sided with wooden shakes, shingles, or board and batten, the most effective remedy is probably to get an exterminator to spray the outside of your house with insecticide and then replace the damaged shakes or boards. If damage is continuous and extensive, an electronic distress call system may be effective.

Damage prevention for trees

Yellow-bellied Sapsuckers tend to drill for sap in certain ornamental trees, such as the mountain ash. To keep sapsuckers from damaging trees (boring rings of small holes around the bark of the trunk or limbs), wrap a burlap bag or other heavy material around the damaged area. Or you could allow the woodpeckers to use the damaged tree in the hope that they will not move to other trees. Keep in mind that sapsuckers tend to drill into trees that are already diseased or damaged.

Reference -
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http://birds.cornell.edu/wp_about/holes.html

The original has hyperlinks to various other sites for products referred to in this article.