Get Ready For Spring
Make a Birdhouse

by Carol A. Heiser
illustrations by Spike Knuth

Got any dead trees standing in your yard? Most people don’t think twice about cutting them down, because these trees are often perceived as aesthetically unattractive. If they only knew how important dead trees are to wildlife! There are many cavity-nesting birds and mammals that seek out holes in trees for shelter or to raise their young. Sometimes the holes are made by woodpeckers, other times by the process of breakage and rotting. A “den” tree might be home to raccoons, opossums, flying squirrels, snakes and bats. Examples of cavity-nesting birds include the nuthatch, brown creeper, wood duck, prothonotary warbler, bluebird, chickadee, owl, purple martin and wren.

If you have a dead tree in your yard that does not pose a threat to people or property, consider leaving it standing. The decomposition process releases many organic nutrients that multiple organisms need. Countless insects lay their eggs in the crumbling wood and bark, and the larvae, which hatch, provide a primary food source for birds, mammals, reptiles and amphibians.

If you don’t have a dead tree in your yard, the next best substitute is to put up a nest box. These are simple to construct and a lot of fun to watch over the spring and summer when birds are raising their young.

For this bluebird and its young, a dead tree not only makes a perfect nesting area, but it offers a place to easily locate food.
Size Matters

The dimensions of the box and the size of its entrance hole should be designed to accommodate the particular bird species of choice. Some examples are listed in the table below:

Construction Basics

+ Use rough-sawn lumber, at least ½” thick (1” is better) to insulate from the heat; cedar is a good choice. Do not use pressure-treated wood.
+ Use galvanized nails with spiral shank or wood screws.
+ Drainage holes in the bottom
+ Vent holes in the top, or a gap between the roof and sides to allow heat to escape

<table>
<thead>
<tr>
<th>Species</th>
<th>Entrance Hole Diameter</th>
<th>Height of Entrance Above Floor</th>
<th>Floor</th>
<th>Height of Box</th>
<th>How Far Off the Ground to Install</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Bluebird</td>
<td>1½&quot; (to exclude starlings)</td>
<td>6’</td>
<td>5’ x 5’</td>
<td>8’</td>
<td>5-10 ft.</td>
</tr>
<tr>
<td>Chickadee</td>
<td>1⅓”</td>
<td>6’ - 8’</td>
<td>4’ x 4’</td>
<td>8’ - 10’</td>
<td>6-15 ft.</td>
</tr>
<tr>
<td>House Wren</td>
<td>1⅓”</td>
<td>4’ - 6’</td>
<td>4’ x 4’</td>
<td>6’ - 8’ (add 2-3” wood shavings in bottom of box)</td>
<td>6-10 ft.</td>
</tr>
<tr>
<td>Tree Swallow</td>
<td>1½”</td>
<td>2’ - 5’</td>
<td>5’ x 5’</td>
<td>6’</td>
<td>10-15 ft.</td>
</tr>
<tr>
<td>White-Breasted Nuthatch</td>
<td>1⅓”</td>
<td>6’ - 8’</td>
<td>4’ x 4’</td>
<td>8’ - 10’</td>
<td>12-20 ft.</td>
</tr>
<tr>
<td>Downy Woodpecker or Tufted Titmouse</td>
<td>1⅓”</td>
<td>6’ - 8’</td>
<td>4’ x 4’</td>
<td>8’ - 10’</td>
<td>6-20 ft.</td>
</tr>
<tr>
<td>Screech Owl or American Kestrel</td>
<td>3’</td>
<td>9’ - 12’</td>
<td>8’ x 8’</td>
<td>12’ - 15’ (add 2-3” wood shavings in bottom of box)</td>
<td>10-30 ft.</td>
</tr>
<tr>
<td>Northern Flicker</td>
<td>2½”</td>
<td>14’ - 16’</td>
<td>7’ x 7’</td>
<td>16’ - 18’ (fill interior to top with sawdust, then tamp it)</td>
<td>12-15 ft.</td>
</tr>
</tbody>
</table>


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Basic Birdhouse

Lumber: One 1” x 6” x 6’

6’ Board

The Entrance Hole Diameter is Important!
1½” for eastern bluebird or tree swallow
1½” great crested flycatcher

Note: For smaller birds, make a smaller house using one 1” x 6” x 4-foot board. The front and sides will then only need to be 8” long instead of 9”, and the back will only need to be 11” instead of 13½”, all other board dimensions the same. Entrance hole diameter for house wren and chickadee is 1½”; use 1½” diameter for nuthatch and flying squirrel.

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Enough roof overhang (ideally 2") to keep rain from blowing into the box
- Paint the roof with a light color to reflect heat and protect it from moisture; do not paint the inside of the box.
- No perch is necessary! Cavity-nesters don’t need them; a perch serves only to give predators like raccoons an easy leg-up.
- Use a predator guard over the entrance, such as an extra thickness of wood or a hardware wire covering that the bird can get through but a raccoon can’t.
- Place a piece of sheet metal around the entrance hole to discourage squirrels from chewing around its edge, which they often do to make the opening larger.
- Mount the bird house on a pole and install a baffle on the pole below it to deter snakes.
- Face the bird house away from the prevailing winds.
- Be sure the side or front panel of the box is hinged so it can be easily opened up for inspection or cleaning.

Location is Everything

Like a prime piece of real estate, the success of a nest box depends on where you put it. Where to put it depends on what you intend to attract...which brings us back to habitat! A “bluebird” house placed in a heavily wooded area is more likely to be used by a chickadee, titmouse or flying squirrel than a bluebird, because bluebirds prefer very open, field-like habitats. A “bluebird” house placed next to a shubby thicket will likely be of interest to a Carolina wren. Mounting a bird house on a building or barn will most assuredly be taken over by a house sparrow, an aggressive exotic species that competes with native cavity-nesters. Therefore, just because a box is called a “bluebird” house or a “chickadee” house, doesn’t mean that these are the only species which might use it! Put your bird house in the correct habitat for the species you want to benefit.

Monitoring and Cleaning

One of the most rewarding aspects of putting up bird boxes is the joy of observing the parent birds raise their young. You can inspect your bird house once a week during the nesting season. Quietly approach the box and wait for the parent bird to leave the nest. Open the box and hold a small pocket mirror inside, over the top of the nest so you can see its contents. Make a quick observation of how many eggs (or young) are present and the general stage of development. Then close the box. The inspection should take no more than a couple of minutes. Birds usually do not abandon their nest if your inspections are very brief and infrequent.

Some species like the bluebird will build more than one nest and raise more than one brood during the breeding season; they are known to raise as many as three sets of young during the season. When you see the first brood leave the box, remove the old nest. This practice will keep the height of the nest material well away from the entrance hole of the box, and can help minimize a build-up of potential parasites. At the end of the season, remove the nest and clean out the box. Or, if you prefer, you could leave the nest in place as a refuge for a cold bird or mammal to use in the winter. Just be sure to clean the box out thoroughly by the end of February, in time for the new breeding season.

Butterfly Boxes are a Hoax!

One other note about nest boxes for wildlife—buyer beware! Those cute little “butterfly houses” are strictly for looks; they are not used by butterflies because butterflies do not seek cavities. Butterflies prefer to hang upside down under tree leaves or under pieces of wood in very loose brush piles. Species that DO use “butterfly” boxes are wasps and spiders, as these are adapted to hide inside structures when laying their eggs.
Learning More...

Books

Woodworking for Wildlife: Homes for Birds and Mammals, by Carrol L. Henderson; c. 1992 State of Minnesota, Department of Natural Resources, St. Paul, MN. The premier guide to building birdhouses, this 111-page spiral bound book is stuffed with 27 different nest box construction plans and detailed information about the birds that use them. Order from Minnesota Bookstore, (651) 297-3000.


Web Sites

The Birdhouse Network, a spring and summer birdhouse-monitoring project of the Cornell Laboratory of Ornithology; at www.birds.cornell.edu/birdhouse/-lots of basics on how to get started, including downloadable plans for various nest boxes and predator guards.


North American Bluebird Society www.nabluebirdsociety.org/

Purple Martin Conservation Association www.purplemartin.org

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