

Simple BIRD HOUSE DESIGN



How elaborate you make your bird house depends on your personal sense of aesthetics. For the most part, all the birds care about is their safety and the right dimensions: box height, depth and floor, diameter of entrance hole, and height of hole above the box floor. Refer to the following chart, keeping in mind that birds make their own choices, without regard for charts. So don't be surprised when you find tenants you never expected in a house you intended for someone else.

Nest Box Dimensions

Species	Box floor inches	Box height inches	Entrance height inches	Entrance diameter inches	Placement height feet
American Robin*	7x8	8	---	---	6-15
Eastern & Western Bluebird	5x5	8-12	6-10	1-1/2	4-6
Mountain Bluebird	5x5	8-12	6-10	1-1/2	4-6
Chickadees	4x4	8-10	6-8	1-1/8	4-15
Titmice	4x4	10-12	6-10	1-1/4	5-15
Ash-throated Flycatcher	6x6	8-12	6-10	1-1/2	5-15

Great Crested Flycatcher	6x6	8-12	6-10	1-3/4	5-15
Phoebes*	6x6	6	---	---	8-12
Brown-headed Pygmy and Red-breasted Nuthatch	4x4	8-10	6-8	1-1/4	5-15
White- breasted Nuthatch	4x4	8-10	6-8	1-3/8	5-15
Prothonotary Warbler	5x5	6	4-5	1-1/8	4-8
Barn Swallow*	6x6	6	---	---	8-12
Purple Martin	6x6	6	1-2	2-1/4	6-20
Tree and Violet-Green Swallows	5x5	6-8	4-6	1-1/2	5-15
Downy Woodpecker	4x4	8-10	6-8	1-1/4	5-15
Hairy Woodpecker	6x6	12-15	9-12	1-1/2	8-20
Lewis's Woodpecker	7x7	16-18	14-16	2-1/2	12-20
Northern Flicker	7x7	16-18	14-16	2-1/2	6-20
Pileated Woodpecker	8x8	16-24	12-20	3x4	15-25
Red-Headed Woodpecker	6x6	12-15	9-12	2	10-20
Yellow- bellied Sapsucker	5x5	12-15	9-12	1-1/2	10-20
Bewick's and House wrens	4x4	6-8	4-6	1-1/4	5-10
Carolina Wren	4x4	6-8	4-6	1-1/2	5-10
Barn Owls	10x18	15-18	4	6	12-18
Screech Owls and					

Kestrel	8x8	12-15	9-12	3	10-30
Osprey	48x48 platform				
Red-tailed Hawk and Great Horned Owl	24x24 platform				
Wood Ducks	10x18	10-24	12-16	4	10-20

*Use nesting shelf, platform with three sides and an open front

Now that you have the correct dimensions for your bird house, take a look at how to make it safe: ventilation, drainage, susceptibility to predators, and ease of maintenance.

Ventilation

Without air vents, boxes can turn into bird ovens. There are two ways to provide ventilation: leave gaps between the roof and sides of the box, or drill 1/4" holes just below the roof.

Drainage

Water becomes a problem when it sits in the bottom of a bird house. A roof with sufficient slope and overhang offers some protection. Drilling the entrance hole on an upward slant may also help keep the water out.

Regardless of design, driving rain will get in through the entrance hole. You can assure proper drainage by cutting away the corners of the box floor and by drilling 1/4 inch holes in the box floor. Nest boxes will last longer if the floors are recessed about 1/4 inch.

Entrance Hole

Look for the entrance hole (and exit) hole on the front panel near the top. A rough surface both inside and out makes it easier for the adults to get into the box and, when it's time, for the nestlings to climb out.

If your box is made of finished wood, add a couple of grooves outside below the hole. Open the front panel and add grooves, cleats, or wire mesh to the inside.

Never put up a bird house with a perch below the entrance hole. Perches offer starlings, house sparrows, and other predators a convenient place to wait for lunch.

Don't be tempted by those beautiful duplexes or houses that have more than one entrance hole. With the exception of purple martins, cavity-nesting birds prefer not to share a house. While these condos look great in your yard, starlings and house sparrows are the only birds inclined to use them.

Accessibility

Bird houses should be easily accessible so you can see how your birds are doing and, when the time comes, clean out the house.

Part of being a responsible bird house landlord is your willingness to watch out for your tenants. Monitor your bird houses every week and evict unwanted creatures: house sparrows, starlings, rodents, snakes, and insects.

Be careful when you inspect your bird boxes. You may find something other than a bird inside. Don't be surprised to see squirrels, a mouse, a snake, or insects. Look for fleas, flies, mites, larvae, and lice in the bottom of the box.

If you find insects and parasites, your first reaction may be grab the nearest can of insect spray. If you do, use only insecticides known to be safe around birds: 1% rotenone powder or pyrethrin spray. If wasps are a problem, coat the inside top of the box with bar soap.

Here's how to check your nest boxes:

Watch the nest for awhile. If you don't see or hear any birds, go over and tap on the box. If you hear bird sounds, open the top and take a quick peek inside. If everything's okay, close the box. If you see problems (parasites or predators), remove them and close the box.

Here's where a bird house with easy access makes the job simple. Most bird houses can be opened from the top, the side, the front, or the bottom.

Boxes that open from the top and the front provide the easiest access. Opening the box from the top is less likely to disturb nesting birds. It's impossible to open a box from the bottom without the nest falling out. While side- and front-opening boxes are convenient for cleaning and monitoring, they have one drawback: the nestlings may jump out.

If this happens, don't panic. Just pick them up and put them back in the nest. Don't worry that the adults will reject the nestlings if you handle them. That's a myth. Most birds have a terrible sense of smell.

If you clean out your nest boxes after each brood has fledged, several pairs may use the nest throughout the summer. Many cavity nesting birds will not nest again in a box full of old nesting

In the fall, after you've cleaned out your nest boxes for the last time, you can put them in storage or leave them out. Gourds and pottery last longer if you take them in for the winter. You can leave your purple martin houses up, but be sure to plug the entrance holes to discourage starlings and house sparrows.

Leaving your wood and concrete houses out provides shelter for birds, flying squirrels, and other animals during winter.

Each spring be sure to clean out all houses you've left out for the winter.

Limiting Predator Access

Proper box depth, roof, and entrance hole design will help minimize predator (raccoons, cats, opossums, and red squirrels) access. Sometimes all it takes is an angled roof with a three-inch overhang to discourage mammals.

The entrance hole is the only thing between a predator and a bird house full of nestlings. By itself, the 3/4" wall isn't wide enough to keep out the arm of a raccoon or house cat.

Add a predator guard a 3/4 inch thick rectangular wood block, to thicken the wall, and you'll discourage sparrows, starlings, and cats.