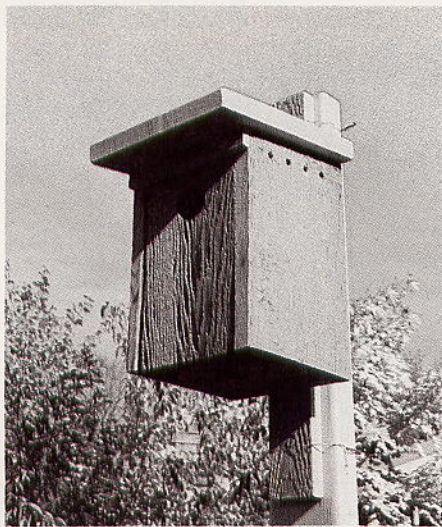


BIRDHOUSE



One of the easiest projects in this book, this birdhouse—or nesting box—meets the requirements for dryness, ventilation, and safety from larger birds.

Construction: The front corners of the floor are cut at an angle for ventilation. Four holes in each side and an opening beneath the roof at the back give cross ventilation. The entrance is high enough so that predators cannot reach the baby birds. Access through the removable front makes it easy to clean out an old nest in preparation for another tenant. The front is held in position by cleats and is secured with just one screw.

The cedar lumber used is weather resistant, so it does not need finishing. Redwood can be substituted. Paint the roof with off-white latex; it will reflect heat and make the box cooler inside.

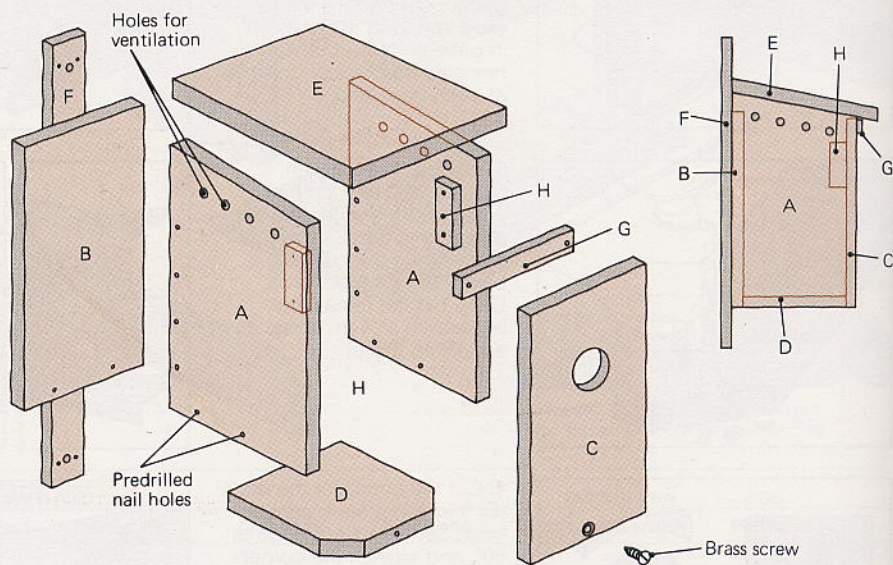
Placement: Most songbirds prefer a relatively open, sunny area. The edges of woods, a field, or a clump of trees are good spots. Woodland birds, such as chickadees, nuthatches, and titmice, prefer shaded areas. Bluebirds, for which this house was built, nest in open country

fields (not suburban lawns), and they prefer a box mounted on a post 5–10 feet above the ground. Locate the box where the morning sun's rays can reach it. Other species will occupy a box on a tree or building. Where cats are numerous, ring the tree or post with a metal baffle.

Mount the box by driving screws or nails through the large holes in the mounting strip. For added security, run wire through the small holes in the strip and wrap it around the tree or post.

Put the box out by March when birds start looking for nesting sites—earlier in some areas. Birds are particular about not having another family of the same species nearby, but you can lure several species to your yard by setting out boxes built to different specifications (see chart opposite). Place the boxes at least 25 feet apart. Bluebirds are a special case: they do not like to be closer than 300 feet to any other birds.

If you clean the box as soon as the fledglings have left, you may get a second brood in one season. Your box may even serve as a winter storm shelter.

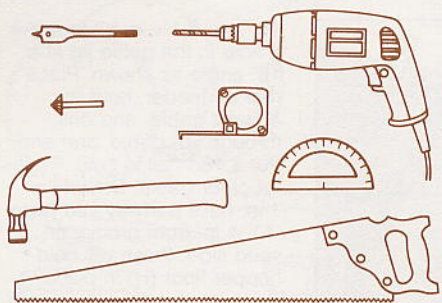


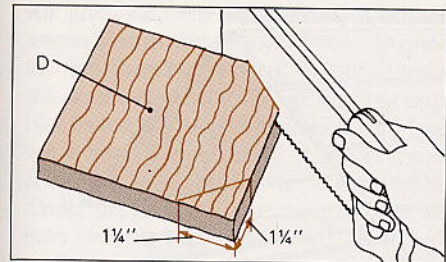
Parts list

Part	Name	Quantity	Thickness	Width	Length	Material
A	Side	2	3/4"	6 1/2"	10"	Cedar
B	Back	1	3/4"	5"	9 5/8"	Cedar
C	Front	1	3/4"	5"	8 1/2"	Cedar
D	Floor	1	3/4"	5"	5"	Cedar
E	Roof	1	3/4"	7 1/2"	9"	Pine
F	Mounting strip	1	3/4"	2 1/4"	19"	Cedar
G	Exterior cleat	1	3/8"	1"	6 1/2"	Cedar
H	Interior cleat	2	3/8"	3/4"	2 3/4"	Cedar

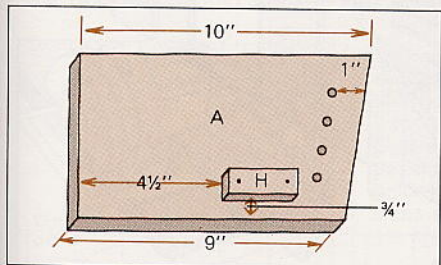
Tools and materials: Drill with 1/16" twist bit, 1 1/2" spade bit, and countersink. Crosscut saw, hammer. Steel tape rule, protractor, pencil. Pine 3/4" x 7 1/2" x 9", rough, unplaned

cedar 3/4" x 7 3/8" x 48". Three 1 1/4" No. 8 brass flathead wood screws. Twenty-five 5d galvanized steel common nails, four 2d galvanized steel common nails.



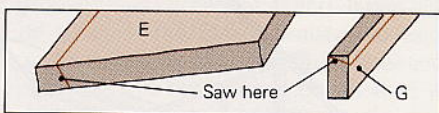
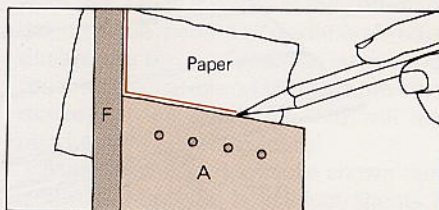


1. Cut all pieces to size. (For the cleats, split a 1-in.-wide piece of cedar.) Holding the floor (D) so that the grain will run from side to side in the finished box, measure 1/4 in. from each front corner. Draw diagonal lines, and saw off the triangles.



2. Drill four 1/4-in. holes 1 in. below the top of each side (A). Nail the interior cleats (H) on the inside 3/4 in. from the front edges and 4 1/2 in. above bottom edges; use 2d nails.

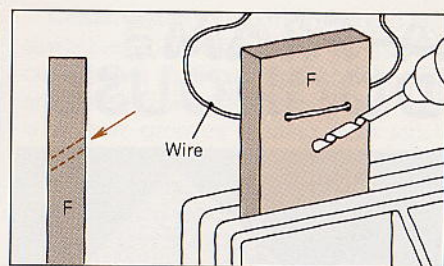
3. Drill entrance in front (C) with 1 1/2-in. spade bit. Center the bit 6 3/4 in. above the bottom edge of the front.



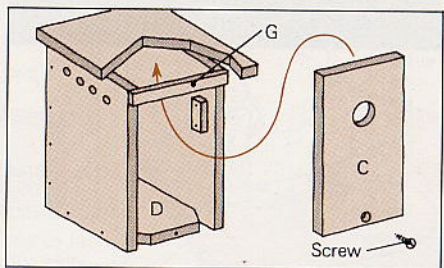
4. Trace angle of side (A) to mounting strip (F) on paper as shown; transfer that angle to the back edge of roof (E) and top edge of exterior cleat (G). Saw angle. Paint the roof with two coats of off-white latex on all sides, allowing paint to dry between coats.

5. Pre-drill holes with a 1/16-in. twist bit in the sides (A) and the back (B) where nails will enter. Glue and nail with 5d nails from the sides into the back and then from the back and sides into the floor (D).

6. Pre-drill holes for nails in roof (E). Glue and nail with four nails driven into each side (A). Paint the top of the roof. Nail the exterior cleat (G) across the front, driving nails into the leading edges of sides.



7. Drill a 1/8-in. hole in mounting strip (F) 2 in. from each end. Slant top hole downward. Drill 1/16-in. holes on either side of those holes 1/4 in. from edge of strip for wire (see text). Glue, nail, and screw strip to back so that it extends 4 3/4 in. beyond bottom of box.



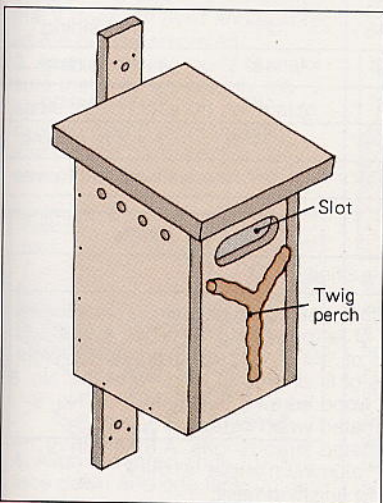
8. Drill and countersink a hole for screw in front (C) centered 3/8 in. from bottom edge. Position front under exterior cleat; drill through hole for pilot hole in floor (D).

Variations

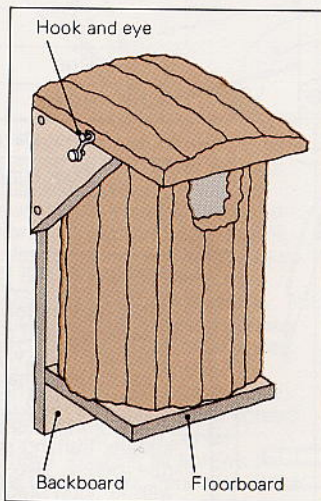
A nesting box made to the specifications in the *Parts list* is suitable for bluebirds; tree swallows may occupy it too. Other species have different requirements as shown in the box at right. Modify the basic box according to these dimensions and the variations shown below to attract other species to your yard. The list includes the more common birds native to North America that are cavity nesters and therefore will use a man-made box. The depth of the cavity is measured from the box floor to the roof at the front of the box; entrance height is from the floor to the center of the hole.

Species	Floor of cavity	Depth of cavity	Entrance height	Entrance diameter	Above ground
Chickadee ✱	4" x 4"	8"-10"	6"-8"	1 1/8"	6'-15'
Titmouse ✱	4" x 4"	8"-10"	6"-8"	1 1/4"	6'-15'
Nuthatch ✱	4" x 4"	8"-10"	6"-8"	1 1/4"	12'-20'
House wren	4" x 4"	6"-8"	1"-6"	7/8"	6'-10'
Violet-green swallow	5" x 5"	6"	1"-5"	1 1/2"	10'-15'
Tree swallow	5" x 5"	6"	1"-5"	1 1/2"	10'-15'
House finch	6" x 6"	6"	4"	2"	8'-12'
Flicker	7" x 7"	16"-18"	14"-16"	2 1/2"	6'-20'
Downy woodpecker ✱	4" x 4"	8"-10"	6"-8"	1 1/4"	6'-20'
Hairy woodpecker ✱	6" x 6"	12"-15"	9"-12"	1 1/2"	12'-20'
Screech owl ✱	8" x 8"	12"-15"	9"-12"	3"	10'-30'
Saw-whet owl ✱	6" x 6"	10"-12"	8"-10"	2 1/2"	12'-20'
Wood duck	10" x 18"	10"-24"	12"-16"	4"	10'-20'

✱ Requires log-type nesting box.



Wren house. Wrens build nests with long sticks; a slot entrance makes it easier to get the sticks into the box. Cut the slot with a saber saw or keyhole saw. Make the slot 2-2 1/2 in. long and 7/8 in. high for a house wren, 1 in. high for a Bewick's wren, and 1 1/2 in. high for a Carolina wren. The box dimensions and height above the ground are the same for all three (see chart above for house wren). Wrens like a perch, but do not use one for most other species; it will invite predators.



Log nesting box. Some species (see chart above) will use a box only if it resembles a hollow in a tree. Choose a log 2 in. larger in diameter than the floor dimensions. Saw a slab off one side for the roof. Saw the top of the log so that it is 1 in. lower in front than in back. Drill the entrance hole with an expansion bit. Hollow the interior with a chisel. Nail and glue the log to the back and floorboards. Put at least 1 in. of sawdust or wood chips inside. Nail box directly to main trunk of a tree.