


MIDDLE TOWNSHIP BIRDHOUSE PROJECT



The Middle Township Environmental Commission is seeking assistance from the Middle Township community with the Bike Path Birdhouse project. We would like to have birdhouses decorated by the residents of our community to be placed along the bike path.

The project is simple:

- * Build and decorate your birdhouse
- * Drop it off to the Construction office

Once we receive 10 birdhouses we will have them installed.

Now the fun begins:

- * Find your birdhouse along the bike path
- * Take a selfie and submit it to Middle Twp, so we can post your hard work to our community.

If you would like information please contact:

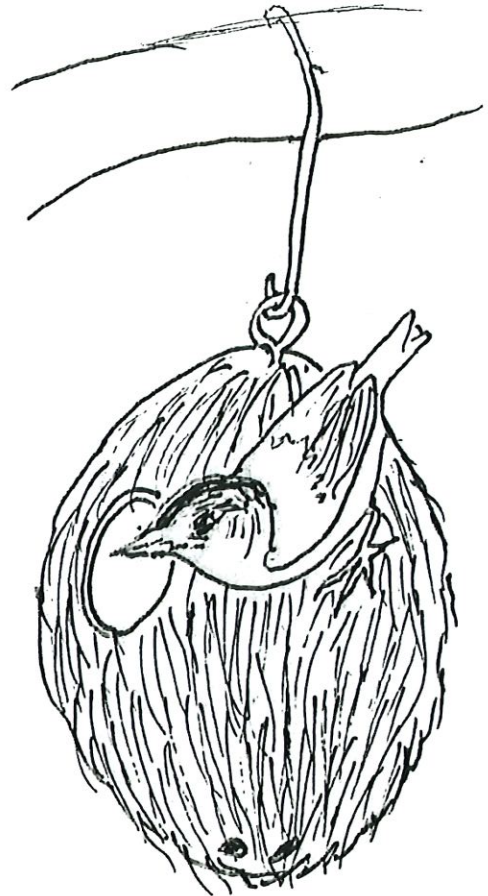
kborn@middletownship.com

COCONUT CABANA

Materials

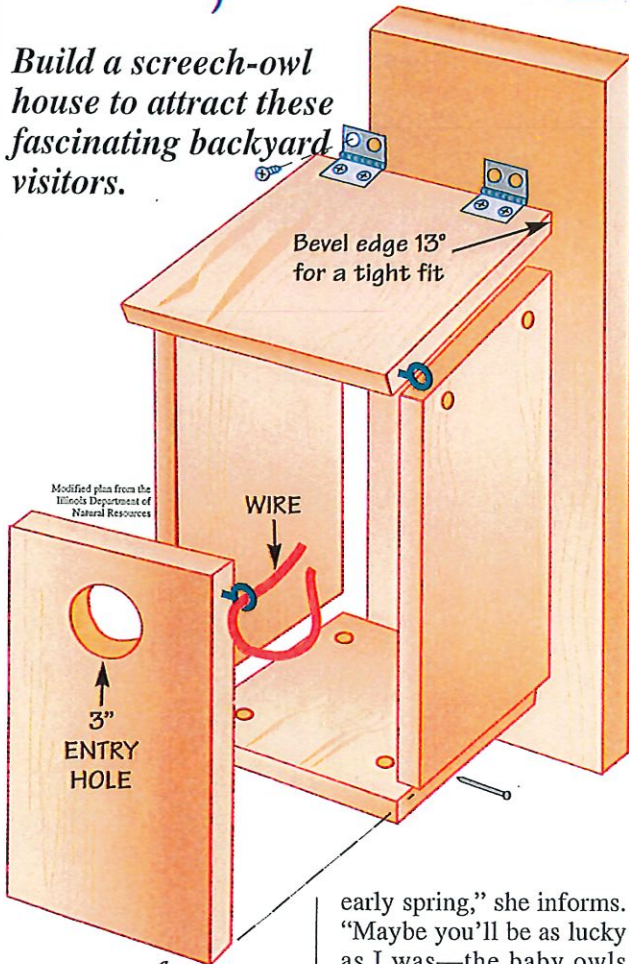
- 1 coconut
- Claw hammer
- 1 medium size (#6) common nail
- 1 thin small (#4) common nail
- 1 1 inch long screw eye
- Pliers (optional)
- Flat-head screwdriver (optional)
- 12 inches of twine or heavyweight picture-hanging wire

1. Locate 3 round depressions, called eyes, at one end of the coconut. Using the hammer and #6 nail, punch a hole in each eye and let the coconut milk drain out into a cup or bowl. (drink or discard)
2. At the other end of the coconut, hammer just the point of the #4 nail into the indentation and remove. Twist the screw eye into the indentation. Use pliers if it is hard to turn.
3. With the hammer and #4 nail, carefully make a series of holes very close together in the side of the coconut forming a circle about 1 1/2 inches in diameter for entrance.
4. Carefully remove the shell inside the circle with the hammer or flat head screwdriver to expose the white coconut meat.
5. Thread the twine or wire through the screw eye and hang on a branch for birds to eat. Once they have finished, leave in place for housing or fill with seeds to eat.



Knock, Knock... Who's There?

Build a screech-owl house to attract these fascinating backyard visitors.



Modified plan from the Illinois Department of Natural Resources

UNLESS you're a night owl, it's rare to see a screech-owl. That's because they're most active when we're sleeping!

But you'll greatly increase your chances of seeing these feathered friends by putting up a screech-owl nest box, relates Marlene Condon of Crozet, Virginia.

"Owls might nest in the box in late winter or very

early spring," she informs. "Maybe you'll be as lucky as I was—the baby owls perched in the opening of the box when they were almost ready to fledge. It was a very special treat!"

Owls will also roost in these boxes in winter. They often peek out or perch on the rim of the entrance hole during the day.

"Seeing them makes the effort of putting up a nest box definitely worthwhile,"

Marlene adds. (For more information about these remarkable birds, see "Top Billing" on pages 14-15.)

One-Board Wonder

The screech-owl nest box is made from an 8-foot-long 1- by 10-inch pine board. Start by cutting the pieces to size as shown in the diagram below.

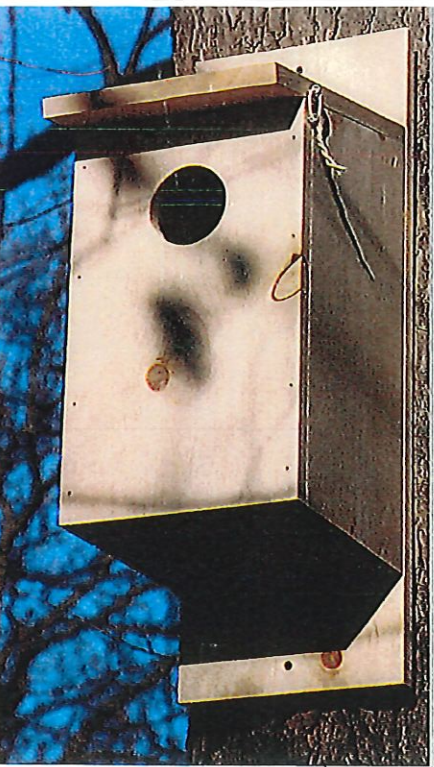
Before assembling, use a compass or trace around a 3-inch-diameter food can to draw the entry hole on the front piece. (We used a 15-ounce can of tomato sauce.) At the edge of the circle, drill a hole large enough to accommodate a saber saw blade. Then cut out the hole.

Also drill a few 1/4-inch vent holes in the side and floor pieces as shown below.

To assemble, attach the front flush to the sides with 1-1/2-inch finishing nails (see illustration above left). Then center the back and nail it on before inserting the floor piece, which you should nail flush to the bottom edges of the front and sides of the box. (Pilot holes will help prevent the wood from splitting.)

Use small hinges to hold the roof in place. This will make it easy to clean out the box after nesting season.

To keep the occupants



RP Photo

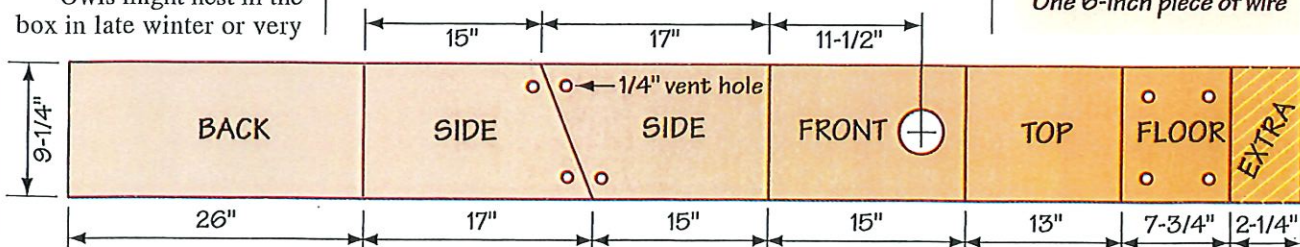
safe from predators, attach one screw eye to the top and another below it on the front piece (see illustration) so that you can wire it shut. Before closing the box, fill the bottom with 2 to 3 inches of wood chips.

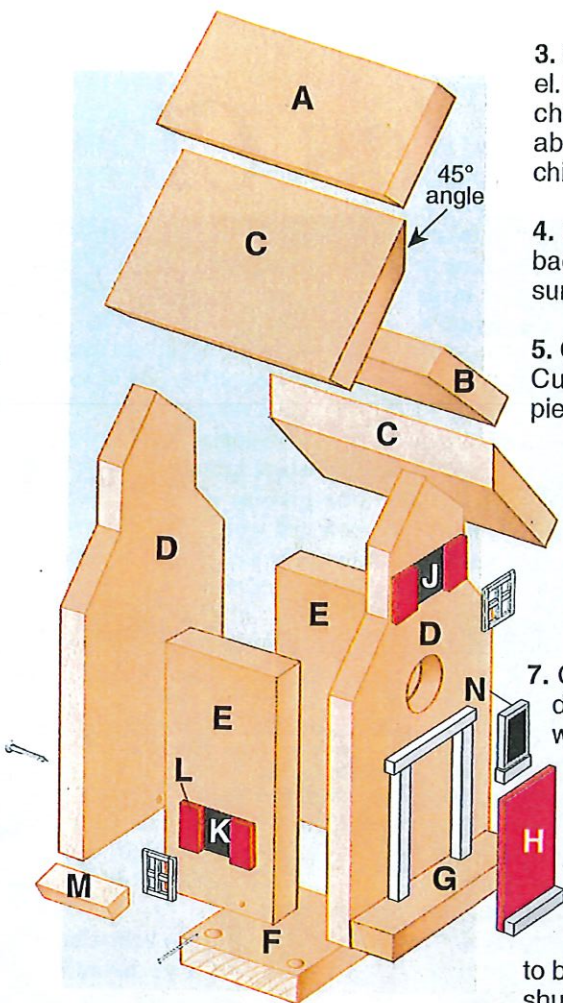
Mount the nest box at least 10 feet high among hardwood trees. Screech-owls prefer habitat at the edges of woods adjacent to gardens, fields or wetlands, where they hunt at night.

To keep squirrels and other animals from using the owl's nest box, mount it on a tall pole with a predator guard.

Here's What You'll Need...

- One 1-inch by 10-inch by 8-foot pine board
- 1-1/2-inch finishing nails
- Two small hinges
- Two screw eyes
- One 6-inch piece of wire





3. Create the windows with a chisel. Start by tapping an outline, then chisel a smooth even surface about 1/16 inch deep. Paint the chiseled-out surfaces black.

4. Nail the sides to the front and back. Set the nails just below the surface.

5. Cut the four roof pieces to size. Cut one edge of the lower roof pieces at a 45° angle.

6. Cut and plane to thickness 1/4- x 1/4-inch-thick trim for the door frame. The window trim is made from wooden matchsticks. Paint the trim on all sides.

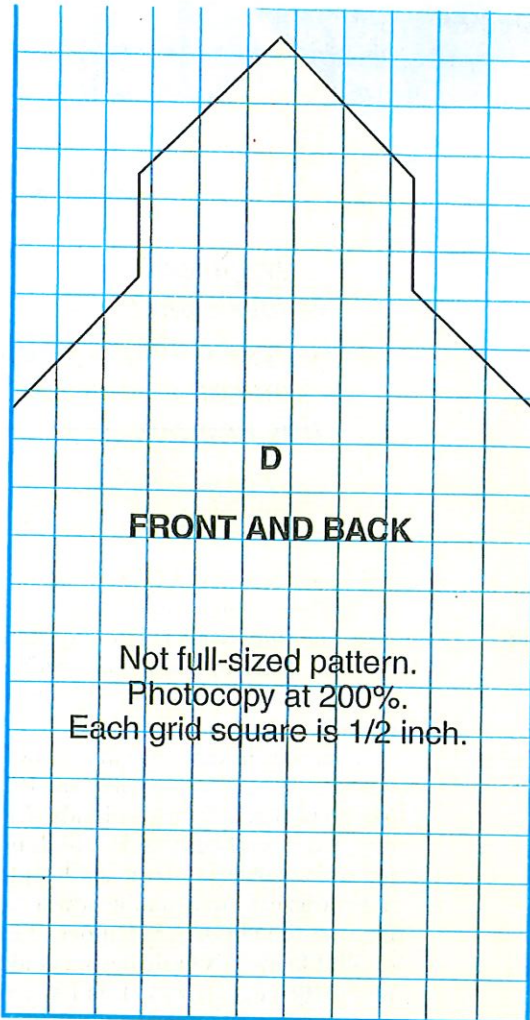
7. Cut wood 1/8 inch thick for the door and shutters (you'll also want to cut the chalkboard at this time if you're making this schoolhouse). It can be planed to 1/8 inch or sawn to this thickness on a band saw. Exact thickness is not important.

Make one piece that is large enough for all the pieces to be cut from it. Cut the door and shutters to size and paint.

8. Glue on shutters, door and all trim pieces. Nail on front porch and add a small step below the door made from a scrap piece of door trim.

9. Cut the birdhouse floor to fit. Drill four 1/4-inch holes near the corners for drainage.

Recess the floor 1/4 inch. Pre-drill a hole on the back wall of the house for a 1-1/4-inch screw, which holds the floor in place. Add additional support to the floorboard by drilling pilot holes about 1-1/8 inches deep on each side for a finishing nail. The



nail heads will stick out so you can remove them when cleaning.

10. Glue on roof pieces. (Note the vent space above the lower roof. This keeps the house cool in summer.) When glue is set, nail in place. Also glue awnings over windows.

11. Drill an entry hole approximately 6 inches above the floor. Use 1-1/8 inches for wrens and 1-1/4 inch for chickadees. Decorate as desired and let dry before hanging it in your backyard. If a bird takes up residence, you've passed the test!

Start Building!

1. Enlarge the front/back wall pattern at top right by 200% on a copy machine (adjust size as necessary if the width of your board is slightly different).

Cut two pieces of board 11 inches long. Tack the two boards together using four 1-1/4-inch brads. Tape the pattern to the boards. Cut out the pattern with your saber saw.

2. Cut the pieces for side walls.

CUTTING LIST

Part	Name	Qty.	Dimension
A	upper roof	1	3-5/8" x 6-3/4"
B	upper roof	1	2-3/4" x 6-3/4"
C	lower roof	2	3-1/8" x 6-3/4"
D	front/back	2	5-1/2" x 10-1/4"
E	side walls	2	4" x 6-3/8"
F	floor	1	cut to fit

OPTIONAL DETAILS:

Part	Name	Qty.	Dimension
G	porch	1	1-1/4" x 5-1/2"
H	door	1	1/8" x 1-3/4" x 4"
J	front window	1	chisel 1-1/4" square
K	side windows	2	chisel 1-1/4" x 1-1/2"
L	shutters	6	1/8" x 3/4" x window height
M	awnings	2	3/4" x 3-1/4" with a 15° bevel on one side
N	chalkboard	1	1/8" x 1-1/4" wide x 1-3/4" high

For painting tips, see our Web site at www.birdsandblooms.com

HERE'S THE PLAN

CHEEP HOUSING

For less than \$5, you can build this easy-to-make birdhouse that will last a lifetime!

FOR simplicity and durability, few birdhouses can outdo or outlast this one made by Herbert Evans of Springfield, Missouri.

"I make five or 10 of them at a time," Herbert proudly states. "Then I give them away to friends and relatives to enjoy."

Using PVC pipe (plastic plumbing pipe) and a few other odds and ends available at just about any hardware store, Herbert built the one pictured here for just \$4.65!

"Everyone likes the way it looks, but the best part is that it's virtually maintenance-free," Herbert adds. "Weather has no effect on it, and it doesn't need to be painted."

It doesn't get any easier than that!

This birdhouse is so simple to make that with a little assistance, even a child can assemble it in minutes. That makes it perfect for classroom, 4-H clubs or Scouting projects.

Here's What You'll Need...

9 inches of 4-inch-diameter PVC pipe

Two 4-inch PVC caps

One 1/4- x 6-inch eyebolt and nut

Two sheet-metal screws

One plastic funnel, at least 6 inches in diameter

One round wooden drawer pull, approximately 1-3/4 inches in diameter

One 1/8- x 1-1/2-inch hexagon-head bolt and nut (optional for the perch)

Even if you're not too handy, go ahead and give it a try. You'll be surprised at how many of these good-lookin' birdhouses you can make in a short time. Soon you'll have your own pipeline of birdhouses ready to be hung.

Let's Start Buildin'

1. Use a saw to cut the 9-inch-long body of the birdhouse from a 4-inch-diameter PVC pipe. A hacksaw (used for cutting metal) works best because of its fine-toothed blade.

Here's a trick to help you cut the pipe straight. Wrap a piece of paper around the pipe, lining up the edge where you want to cut the pipe. Tape the paper so it stays wrapped, then scribe a pencil line following the edge of the paper. When you remove the paper, you'll have a guideline to follow as you're sawing.

2. Drill an entrance hole, locating the center about 6 inches from one end of the pipe. This end will become the bottom of the house. Make a 1-inch hole for wrens, 1-1/8 inches for chickadees and 1-1/4 inches for nuthatches, tufted titmice and downy woodpeckers.

3. An optional perch (see photo above) can be added about 1 inch below the entrance hole (4-1/2 inches from the bottom of the house), but it's not necessary for the birds' sake.

Herbert used an 1/8-inch machined bolt for a perch.

Drill a hole for the bolt and insert it from the inside of the pipe. Hold the head with a wrench or pliers and secure it by tightening a nut on it from the outside of the house. Herbert covered the bolt with black plastic tubing to make it look nice.

4. Saw off the tip of the funnel.

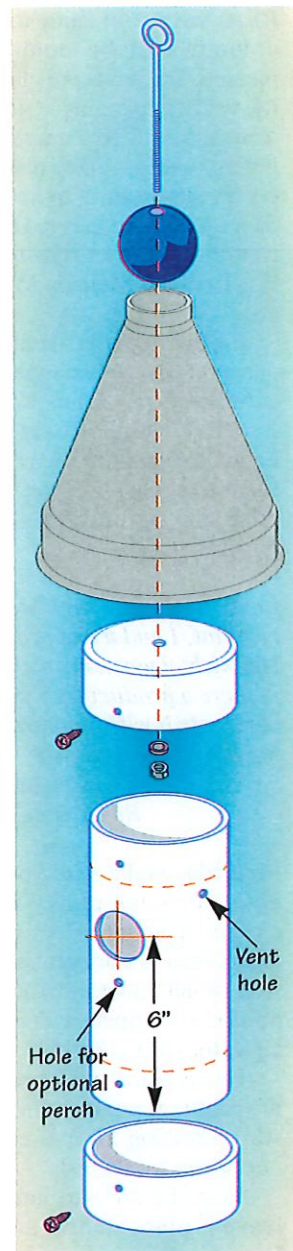
5. Drill a 1/4-inch hole through the center of both PVC caps and the wooden drawer pull (use a vise grip, water-pump pliers or vise to hold this as you're drilling).

6. Place a 4-inch PVC cap at the top of the pipe. Drill a small pilot hole for a sheet-metal screw into the side of the cap and through the pipe. The screw will hold the cap in place.

7. Drill three 1/4-inch holes for ventilation below the PVC cap as shown in the diagram.

8. Thread the eyebolt through the wooden drawer pull, the top of the funnel and the PVC cap. From the inside of the house, tighten a nut on the end of the eyebolt to hold all the pieces together.

9. Now that all the parts are assembled, close the bottom of the pipe with the remaining PVC cap. Again,



drill a pilot hole and secure the cap with a sheet-metal screw.

10. Go ahead and hang your PVC birdhouse—you're set to welcome generations of birds to this durable abode.

At the end of the nesting season, remove the sheet-metal screw in the bottom cap to clean out the house.

As we said, the simplicity of this birdhouse is tough to beat!

Backyard Bit: In the South, eastern towhees may produce three broods in one breeding season.



Start Building...We'll Keep the Coffee Warm!

1. Cut the ends of the birdhouse 4-1/2 inches square from scrap pine boards.

2. Locate the entrance hole in one board by measuring 3-7/16 inches from one corner. (When measuring, place your ruler diagonally from corner to corner and draw a light pencil line.) Be sure to mark the corner from which you're measuring—you'll need to measure from it again in step 4.

3. Drill a 1-inch entrance hole for wrens or the appropriate-size hole for other small birds you'd like to attract.

4. Hold the front and back pieces together in a vise or clamp them together. Locate the perch by measuring 1-1/4 inches from the same corner used in step 2 and mark this spot on the pencil line. Then drill a 1/4-inch hole through the front piece (with the entrance hole) and most of the way through the back. (See "Workshop Wisdom" at right for a helpful hint.)

5. Cut the roof pieces from 1/4-inch plywood or paneling scraps. Cut one piece to measure 5-3/4 inches x 9 inches, and the other 6 inches x 9 inches.

6. Nail the roof pieces to the front and back boards with 1-1/4-inch finishing nails. The large roof piece should overlap the smaller at the peak. (If you're using paneling, the back side should face out.) Leave enough room between the front and back pieces so you can easily insert the coffee can.

7. Clean and dry the coffee can (be sure to watch out for any sharp edges). Drill two 1/4-inch holes in one side of the can for drainage. Drill two more 1/4-inch holes on the opposite side of the can for ventilation.

8. Place the coffee can between the front and back boards.

Cut a 1/4-inch dowel to 8-1/2 inches long and insert it through the perch holes. If the fit is too snug, lightly sand the dowel, which holds the can in place.

9. Attach a chain, hooks or wire for hanging the birdhouse. With any luck, you won't have to wait long for your feathered friends to discover the new home you've provided. Just sit back, have another cup of coffee and enjoy the show.



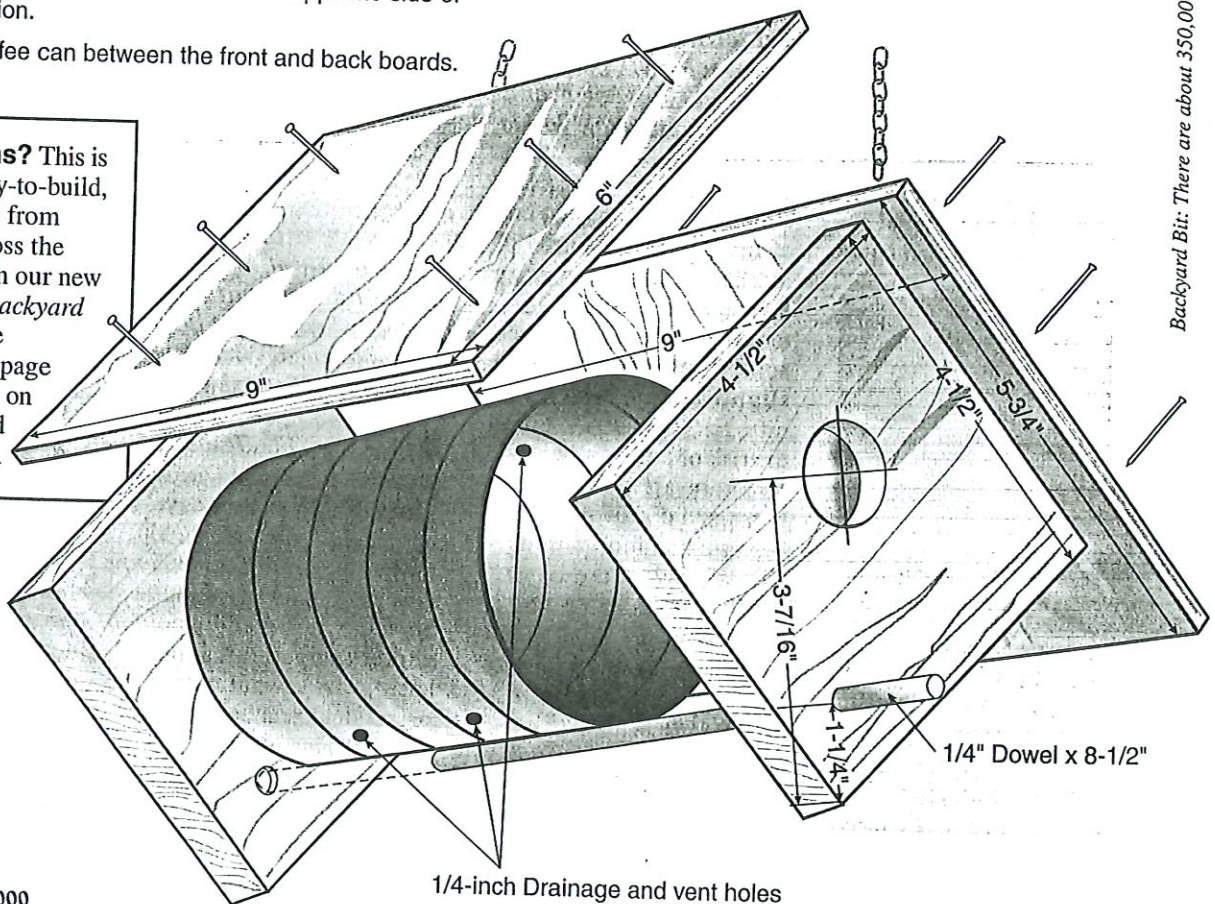
Workshop Wisdom

Drilling Holes Partially Through a Board

IF YOU NEED to drill a hole only partway through a board, here's an easy method to make sure you don't drill too deep.

1. Lay the drill bit against the outside edge of the board to determine the proper depth you need to drill.
2. Mark the depth on the bit with a piece of masking tape, making sure the bottom edge lines up at the depth you should stop drilling. Wrap the piece of tape around the drill bit.
3. Drill the hole into the board, stopping when you reach the bottom edge of the tape.

Want More Plans? This is just one of 60 easy-to-build, step-by-step plans from woodworkers across the country featured in our new *Birds & Blooms Backyard Projects* book. See "Marketplace" on page 65 for more details on this project-packed book.



Backyard Bit: There are about 350,000 species of flowering plants throughout the world.

HERE'S THE PLAN

A Birdhouse for Beginners

With its classic good looks, this one-board birdhouse will fit in anywhere.

WHILE THIS BIRDHOUSE is as simple as it gets, it has a lot going for it. It can be made very quickly...uses minimal materials and tools...and boasts a sleek look that will make any budding woodworker proud to say, "I built it all by myself!"

Looking for More? We have 60 easy-to-build, step-by-step plans like this one in our *Birds & Blooms Backyard*

Projects book. The full-color 180-page hardcover edition measures 8-3/8 inches x 11-1/8 inches. It's \$24.99 for subscribers (\$29.99 regular price), plus \$3.95 for shipping and guaranteed delivery; \$4.50 for two or more books.

Send your order and payment to Country Store, Suite 4461W, P.O. Box 990, Greendale WI 53129. Or, you can call 1-800/558-1013 (mention Suite 4461W). Either way, please specify item 30014.

Here's What You'll Need...

- One 5-foot 1- x 6-inch No. 2 pine board
- 1-5/8-inch galvanized deck screws
- 2-inch galvanized finishing nails

Recommended Tools...

- Power drill
- Appropriate-size spade bit
- Hand saw

Let's Saw That Board!

1. Using the full width of the 1-inch x 6-inch board, cut out the pieces as shown in the board layout below.
2. Drill a centered entrance hole about 2-1/2 inches from the top of the front piece. For eastern and western bluebirds, the hole should be 1-1/2 inches (for areas with mountain bluebirds, use a 1-9/16-inch hole). Chickadees and tufted titmice prefer entrances of 1-1/8 and 1-1/4 inches, respectively.
3. Attach the front to the sides with 1-5/8-inch deck screws. Pre-drill the holes in the front piece to prevent the wood from splitting.
After nesting season when it's time to clean out the birdhouse, remove these screws for easy access.
4. Attach the back to the sides with 2-inch finishing nails. Pre-drill the holes, making sure each one is straight.
5. Cut about 1/2 inch off each corner of the floor for drainage.
6. Recess the floor 1/4 inch up from the bottom of the house, then attach it with 2-inch finishing nails from the sides and back. *Do not nail the floor from the front or you won't be able to open it for cleaning.*
7. Attach the roof to the sides with 1-5/8-inch deck screws.

You're finished—your board is a birdhouse. Nice job!

