

Prothonotary Warbler House

Woodworking plans: cut list, drawings, and step-by-step assembly

This prothonotary warbler box has a 1 1/4" entrance on a 5 1/2" square floor with 8" of depth. It sits near or over water and always gets a wood-block predator guard over the entrance. This design is a classic side-opening box: one side panel swings open on two pivot nails, so you can check the nest and clean it out without taking anything apart.

Design Specs

Spec	Measurement
Entrance hole	1 1/4" round
Floor (inside)	5 1/2" x 5 1/2"
Depth (inside)	8" (floor to underside of roof, measured at the front)
Mounting height	4 to 12 ft
Hole direction	Facing water
Spacing between boxes	235 ft
Location	Within 16 ft of standing or slow water, or over water 3 to 5 ft above the high-water line
Predator guard	Always. 3/4" wood block over the entrance, deepening the hole to 1 1/2"
Fledgling ladder	Shallow horizontal kerfs below the hole, inside

Materials

Item	Qty	Notes
1x6 cedar board (actual 3/4" x 5 1/2")	1 @ 4 ft	Floor, both side panels, and predator guard
1x10 cedar board (actual 3/4" x 9 1/4")	1 @ 4 ft	Front, back, and roof (front and back ripped to 7" wide)
1 5/8" exterior deck screws (coated or stainless)	About 20	Main assembly, plus 1 for the door latch
1 1/4" exterior deck screws (coated or stainless)	4	Predator guard block
6d galvanized finishing nails (2")	2	Door pivots
Exterior wood glue	Optional	Guard block and fixed joints; do not glue the door side

Tools

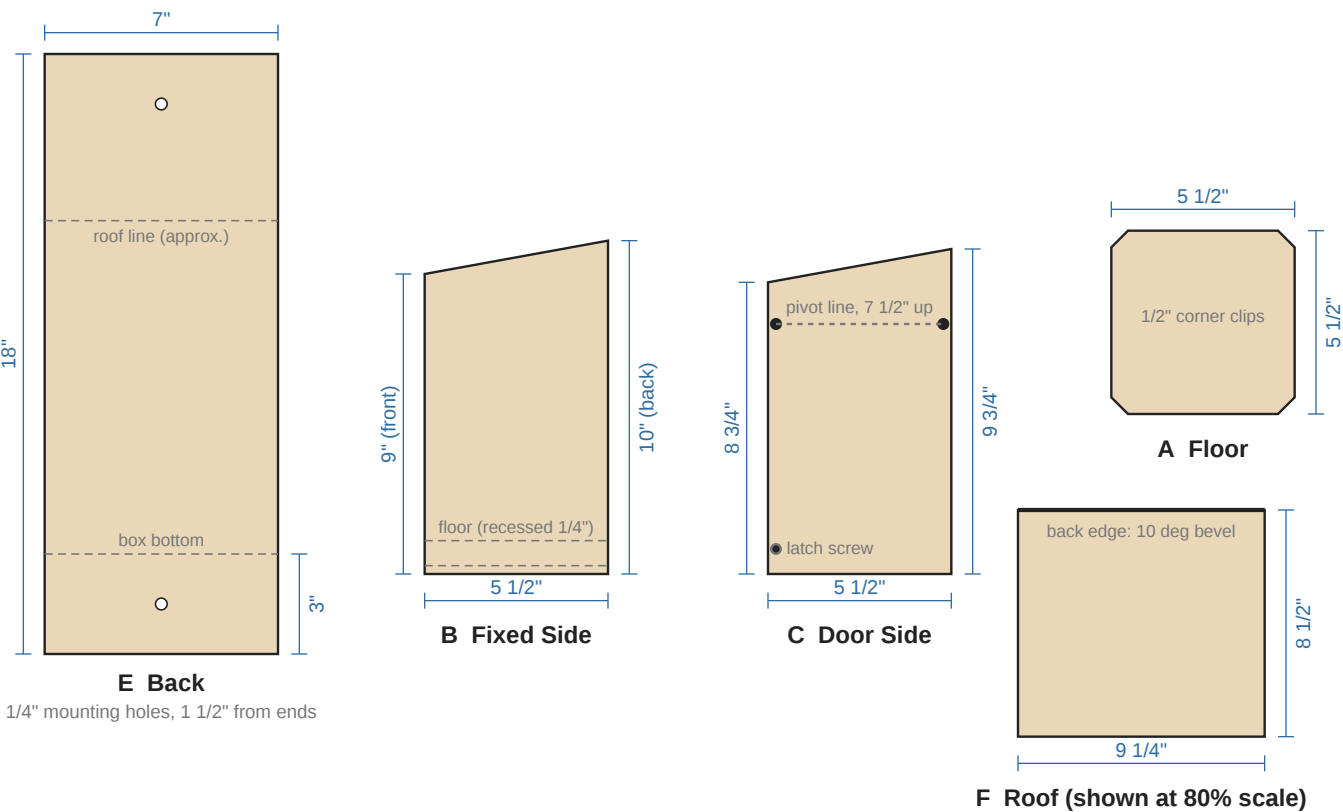
Circular saw or miter saw • Table saw or circular saw with rip guide (for ripping the 1x10) • Drill/driver • 1 1/4" Forstner or spade bit • 3/16" bit for pilot holes • 1/4" bit for mounting holes • Speed square • Tape measure • Pencil • Hammer • Sandpaper

Before you build: Use untreated cedar and leave the inside unfinished. Skip the perch. All dimensions assume actual lumber sizes (a 1x6 measures 3/4" x 5 1/2"). Measure your boards before cutting, since mill sizes can vary slightly.

Cut List

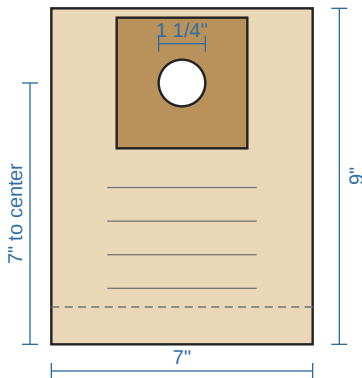
Part	Qty	Size	From	Notes
A Floor	1	5 1/2" x 5 1/2"	1x6	Clip each corner 1/2" for drainage
B Fixed side	1	5 1/2" wide; 9" front edge, 10" back edge	1x6	Top cut at about 10 degrees
C Door side	1	5 1/2" wide; 8 3/4" front edge, 9 3/4" back edge	1x6	1/4" shorter than B for a vent gap
D Front	1	7" x 9"	1x10 ripped	Bevel top edge 10 degrees; 1 1/4" hole
E Back	1	7" x 18"	1x10 ripped	Extends above and below box for mounting
F Roof	1	9 1/4" x 8 1/2"	1x10	Bevel back edge 10 degrees
G Predator guard	1	3 1/2" x 3 1/2"	1x6	1 1/4" hole, lined up with the front

Part Drawings



Drawings are to scale except where noted. Dashed lines show where other parts meet. Cut the 10-degree slope on both side panels first, then use a side panel to set your saw for the bevels on the front and roof.

Front Panel, Entrance Hole & Predator Guard



D + G Front with Predator Guard

Hole: Mark the center 7" up from the bottom edge and 3 1/2" in from either side. Bore through the guard block and front together with a 1 1/4" bit (see step 2), backing the board with scrap to prevent tear-out.

Fledgling ladder: On the inside face, cut four shallow horizontal saw kerfs (about 1/16" deep) below the hole so fledglings can climb out.

Predator guard (G): A 3 1/2" square block of 3/4" cedar with a matching 1 1/4" hole. Mounted over the entrance, it deepens the hole to 1 1/2", which makes it harder for a predator to reach in. It is shown in the darker wood tone on the drawing.

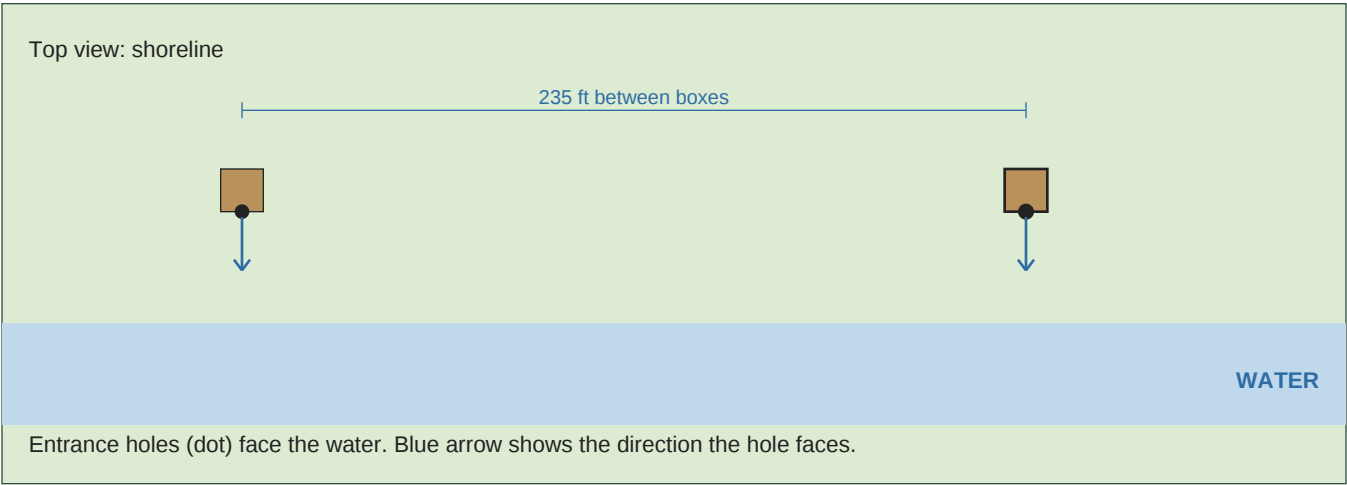
Assembly

- 1 **Cut all parts** per the cut list. Rip the front and back to 7" wide. Cut the 10-degree slope on the tops of both side panels, bevel the top edge of the front, and bevel the back edge of the roof.
- 2 **Drill the entrance hole and predator guard together.** Mark the hole center on the front. Center the guard block (G) over the mark, clamp it, and bore through both pieces at once with the 1 1/4" bit so the holes line up.
- 3 **Attach the guard.** Glue the block to the outside of the front, holes aligned, and drive four 1 1/4" screws through the block into the front, one near each corner. Cut the fledgling-ladder kerfs on the inside face. Clip the four floor corners 1/2".
- 4 **Attach the fixed side (B) to the back (E).** Lay the back flat, set the side's tall edge on it with the side's bottom 3" up from the back's bottom end, and flush with one long edge. Drill 3/16" pilot holes and drive 2 screws through the back into the side.
- 5 **Install the floor (A).** Set it against the fixed side and back, raised 1/4" above the bottom edge of the side. Drive 2 screws through the side and 2 through the back into the floor.
- 6 **Attach the front (D).** Bottom edge flush with the bottom of the fixed side. Drive 2 screws into the fixed side's front edge and 2 into the floor edge. Do not drive any screws on the open side.
- 7 **Attach the roof (F).** Butt the beveled edge against the back so the roof overhangs the front about 2" and each side about 1 1/8". Drive 2 screws down into the fixed side, 2 into the front, and 2 through the back into the roof edge.
- 8 **Hang the door (C).** Slide it into the open side, bottom flush with the box bottom; the 1/4" gap at the top is your ventilation. Sand the edges if it binds. At 7 1/2" up from the bottom, drive one 6d nail through the front and one through the back into the door edges, lined up across from each other. Test the swing.
- 9 **Add the latch.** Near the bottom, drive one screw through the front into the door edge. Back it out when you want to open the box.
- 10 **Drill two 1/4" mounting holes** in the back, centered, 1 1/2" from each end.

Where to Put It

Set the box within 16 ft of standing or slow water, or over water at 3 to 5 ft above the high-water line. Face the entrance toward the water, mount it 4 to 12 ft high, and keep boxes 235 ft apart.

Placement	Guideline
Location	Within 16 ft of standing or slow water, or over water 3 to 5 ft above the high-water line
Mounting height	4 to 12 ft
Hole direction	Facing water
Spacing	Keep warbler boxes 235 ft apart
Predator guard	Always



Mounting Tips

- Mount the box 4 to 12 ft up on a sturdy pole, post, or tree. Over water, keep the box 3 to 5 ft above the high-water line. Bolt it through the two holes in the back.
- Mount the box level. The sloped roof sheds rain forward, past the entrance hole.
- Put the box up before nesting season starts, and use the side door to clean out old nest material once the season ends.