Lumber Notes

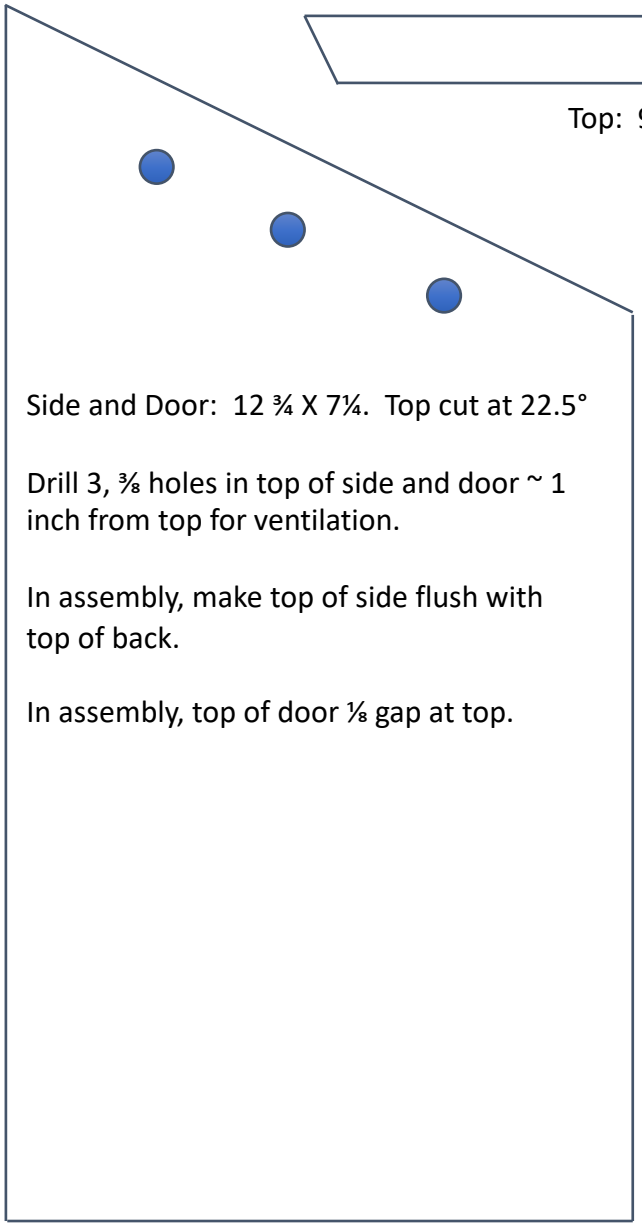
- The plan calls three common sizes of cedar lumber: 1X6, 1X8, and 1X10
  - Each size is slightly smaller in reality than the advertised width.
  - 1X6 is nominally ¾ X 5.5; 1X8 is nominally ¾ X 7.5; and 1X10 is nominally ¾ X 9.5
  - Cedar lumber tends to be a little thicker than ¾, but is somewhat variable in width, with variation of up to 1/8 in. common.

- If you have the opportunity to select the wood yourself as apposed to the yard worker grabbing pieces off a stack, take these precautions:
  - Avoid any board with significant splits or cracks or have “loose” knots
  - Avoid boards that are warped – significant end to end warp or twists.
  - Avoid boards that are significantly cupped across the width of the board
  - Measure or compare the width of the boards to get them as uniform as possible

- All of these cautions are intended to minimize material waste and to ease construction of the boxes.

Back: 5 ½ X 18 flat. Top end cut at 22.5°. Drill 3, ⅜ holes in top of back, ~1 in from top.

Top: 9 ¼ X 14 ½ flat. Each end cut at 22.5°

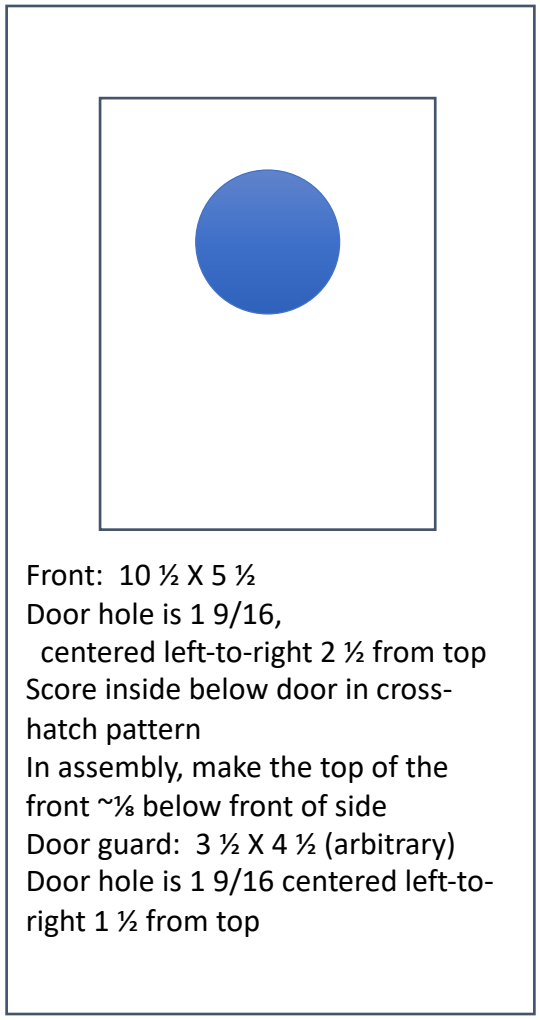


Side and Door: 12 ¾ X 7¼. Top cut at 22.5°

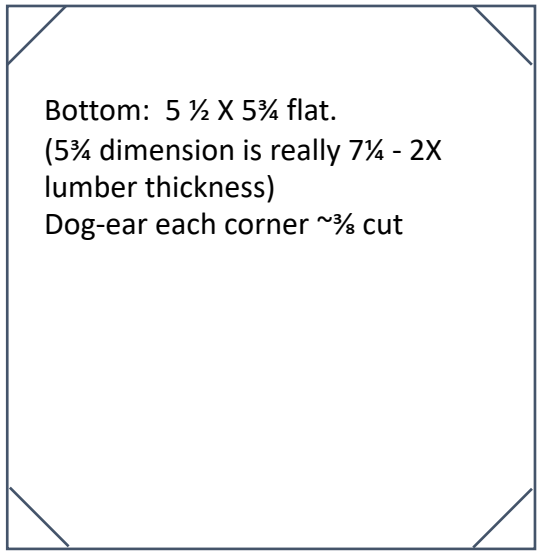
Drill 3, ⅜ holes in top of side and door ~ 1 inch from top for ventilation.

In assembly, make top of side flush with top of back.

In assembly, top of door ⅛ gap at top.



Front: 10 ½ X 5 ½
Door hole is 1 9/16,
centered left-to-right 2 ½ from top
Score inside below door in cross-hatch pattern
In assembly, make the top of the front ~⅛ below front of side
Door guard: 3 ½ X 4 ½ (arbitrary)
Door hole is 1 9/16 centered left-to-right 1 ½ from top



Bottom: 5 ½ X 5¾ flat.
(5¾ dimension is really 7¼ - 2X lumber thickness)
Dog-ear each corner ~⅜ cut

All stock is ¾ cedar or redwood
All dimensions are in inches.
Drawing is ~1/2 scale

More detailed cut instruction on following pages

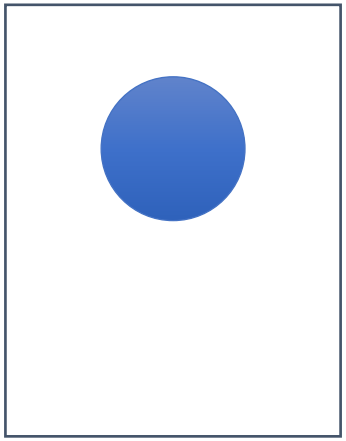
Back

Back: 5 ½ X 18 flat. Top end cut at 22.5°. Drill 3, ⅜ holes in top of back, ~1 in from top.

Out of an 8 foot 1X6 board, You can get 5 backs. The scrap from this can be used for hole guards or bottom.

Cut is pairs – that is, cut a length of board that will be long enough for 2 backs, 36 1/8 inches. Change the setting on the saw to cut the 22.5 degree angle and cut each double segment to make 2 equal-sized backs. Alternatively, you can cut the pieces square and then trim each board with the angled cut.

Front



Front: 10 X 5 ½
Door hole is 1 9/16,
  centered left-to-right 2 ½ from top
Score inside below door to form a ladder for the fledgling birds
In assembly, make the top of the front ~⅛ below front of side
Door guard: 3 ½ X 4 ½
Door hole is 1 9/16 centered left-to-right 1 ½ from top

Out of an 8 foot 1X6 board, You can get 9 fronts. The scrap from this can be used for hole guards.

Each cut is a square, 90 degree cut.

Hole guards are also square cuts. I usually cut them from scraps and short pieces left from cutting the larger pieces. Cut the available stock to 4 ½ inches and then 3 ½ inch segments to make the board.

To bore the hole, mark the center of the board and measure from the top to find the center of the hole. Use a 1 9/16 forstner bit to drill the hole. This size is not commonly found in bit sets and is usually ordered aa an individual bit if you need to order one. A bit this large also requires the use of a drill press.

Top

Top: 9 ¼ X 14 ½ flat. Each end cut at 22.5°

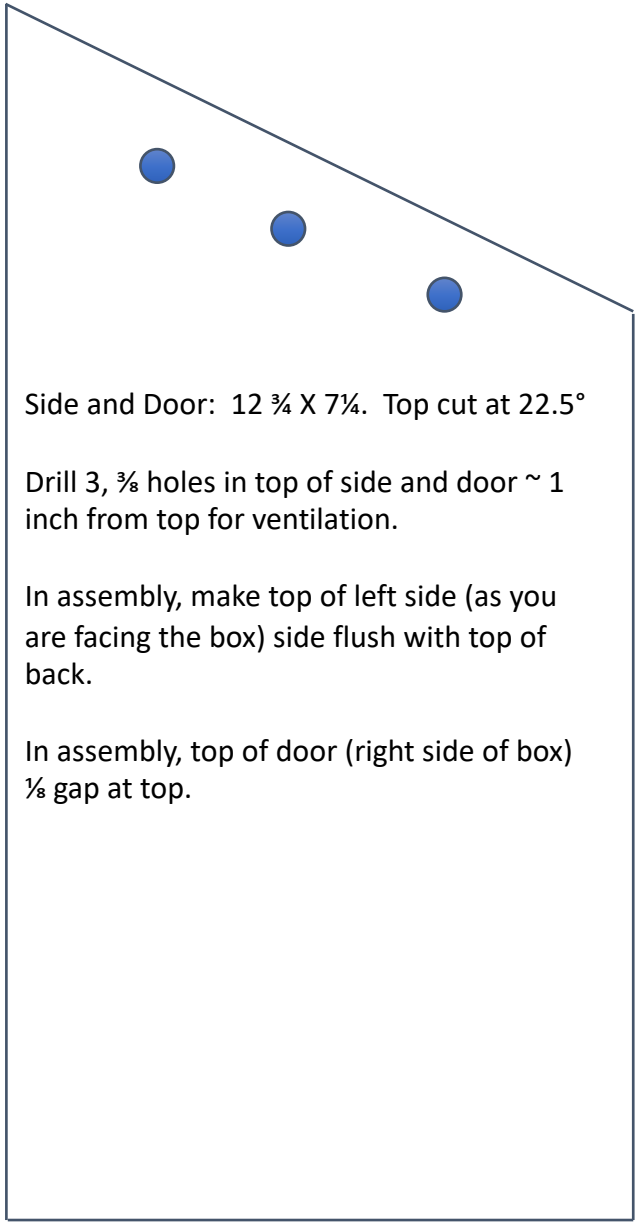
Out of an 8 foot 1X10 board, You can get 6 backs. The scrap from this can be used for hole guards.

Cut the end of the board to a 22.5 degree angle and cut each top board at the same.

Sides

Out of an 8 foot 1X8 board, You can get 4 door sets – 8 doors using the cut approach below. The scrap from this can be used for hole guard.

Cut is pairs – that is, cut a length of board that will be long enough for 2 sides, 22.75 inches. Change the setting on the saw to cut the 22.5 degree angle and cut each double segment to make 2 equal-sized backs.



Side and Door: 12 ¾ X 7¼. Top cut at 22.5°

Drill 3, ⅜ holes in top of side and door ~ 1 inch from top for ventilation.

In assembly, make top of left side (as you are facing the box) side flush with top of back.

In assembly, top of door (right side of box) ⅛ gap at top.

Bottom

The bottom is actually a critical piece to keep the box square in assembly and makes the box easy to assemble.

Out of an 8 foot1X6 board, you can get 16 bottoms. The scrap from this can be used for hole guards.

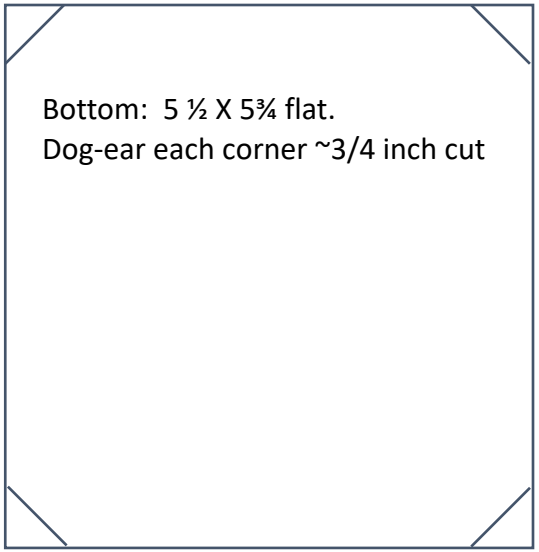
This is a simple square cut. You will need to set up a jig to cut the corners evenly, at a 45 degree angle.

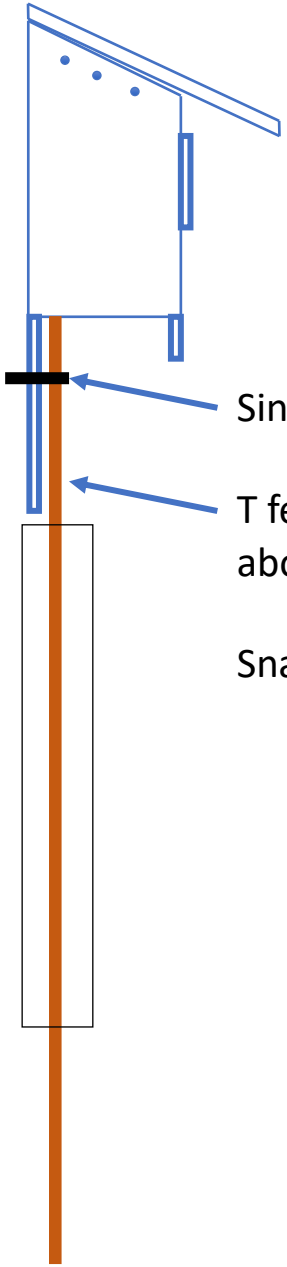
This is here the consistency of the 1X6 board width comes in play. We are cutting the back, front and bottom out of 1X6 stock. If these are significantly different widths, then construction will be a little more difficult.

Also, the dimension of the bottom front-to-back (with the grain) is critical to make the front even with the sides of the box. The dimension shown is 5 ¾. You will need to calculate this as:

width of the side – 2X thickness of the 1X6 used for the front and back

I often need to adjust the length (with the grain) of the bottom to make the front fit correctly during construction.





Single 2” U-bolt. ¼” is adequate. Drill 2-holes spaced for bolt 2-3” below floor.

T fence post. Mount as high off the ground as practical. We use 6 foot posts, and bury about 18 in.

Snake Guard is on next page

Snake Guard

Our thinking about snake guards continues to evolve to better assure that the nests are safe from snake predation. Current thinking is that a loose-fitting snake guard is a better choice.

The snake guard is a 4 in. PCV drain pipe, 2 feet long. This is drain (also called a vent pipe) with very thin wall construction. It is much lighter than a Schedule 40 PVC pipe that is meant to handle pressurized systems. You can expect to pay about $10-12 for a 10-foot pipe. A 10-foot pipe will provide 4 snake guards. The pipe can be cut on a chop saw with a 12 in blade.

A wire-mesh top for the pipe is constructed using a form and ½ inch galvanized wire mesh. It takes a specialized form to make one of these covers.

The assembly is held together and attached around the pole using 16 gage galvanized wire (or similar). 1/4 in holes are drilled across from one another at the top of the pipe – the wire is threaded through he wire mesh and the hole in the pipe and twisted to secure the assembly. The other end of the wire is attached to the u-bolt so that he snake guard swings freely about 1 inch blow the bottom of the box back.