

Barn Owl Box

Description:

Barn owls contribute to rodent and pest control on many farms. This Barn owl box is a basic box that will attract barn owls for a property. Students will use basic woodworking skills as well as measuring skills in order to successfully create this box. This box can be mounted to any surface (i.e., a tree, side of barn, large pole, etc.).

Skills Required:

Students will require basic wood working skills and measuring skills. Also, students will need proper safety and behavior guidance for operating the following equipment: table saw, power drill, and jig saw.

Materials:

- ¾" x 4' x 8' exterior plywood or siding
- 1 5/8" #6 Deck Screws
- 1 ¾" long L-screw
- 1.5" x 1.5" nickel plated, non-removable pin hinges with screws
- Exterior grade (waterproof) glue such as Titebond 2 or Titebond 3.
- ½" wide metal blue blush (flux brush)

Tools Required:

- Safety Goggles/Glasses
- Table saw
- Jig Saw
- Router with 3/8" bit
- Tape measure
- Pliers (slip joint pliers or needle nose)
- Carpenter square or tri-square
- Hand drill
- Drill bits
 - 3/32"
 - 5/32"
 - 5/16"
 - ½"
- Claw Hammer

Bill of Materials:

Complete the bill of materials below for this project. Use the completed bill of materials for your record book budget by entering the name of the project and the total amount as an expense

Size	Description	Units	Qty/Project	Cost/Unit	Order	Amount

Project Price:

Enter the expected price you will receive for the project in your record book budget (income). \$_____

Estimated Construction Time:

4 hours.

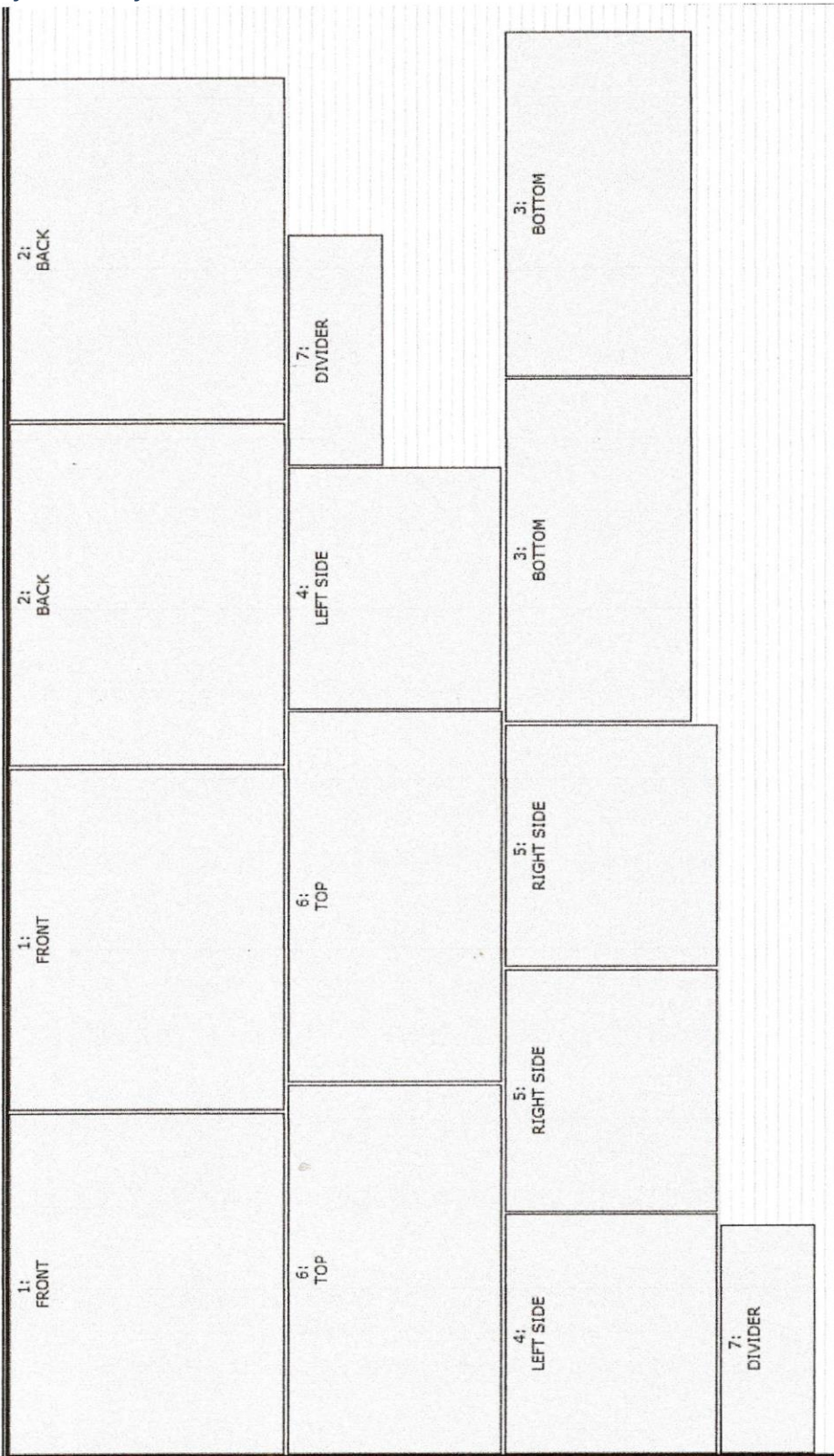
Directions:

1. Cut plywood using the table saw. Before starting consider how you will rip the plywood. Use caution when cross-cutting long pieces.
2. Cut out the owl entrance using the jig saw. A hollow ground blade will work best. The owl entrance hole is an eclipse that has a horizontal axis of 4 ½" and a vertical axis of 3 ¾'. You can use the template provided.
3. Assemble as follows:
 - a. The BACK to the LEFT SIDE (glue it first then screw it together)
 - b. The BOTTOM to the BACK and LEFT SIDE that you just attached (glue then screw)
 - c. The FRONT attaches to the BACK, LEFT SIDE, and the bottom that you just assembled (glue then screw)
 - d. The DIVIDER (glue then screw)
 - e. Attach UPPER RIGHT SIDE (this is part of #5 in parts list)
 - f. Attach the TOP over the open space that is left on top of all of the parts you just assembled (glue then screw)
 - g. Attach CLEAN OUT DOOR with hinges (this is part of #5 on the parts list)
 - h. Insert the CLEAN OUT DOOR
 - i. Attach the TOP DOOR using hinges (part of #6 in parts list)
 - j. Insert TOP DOOR

Cutting List

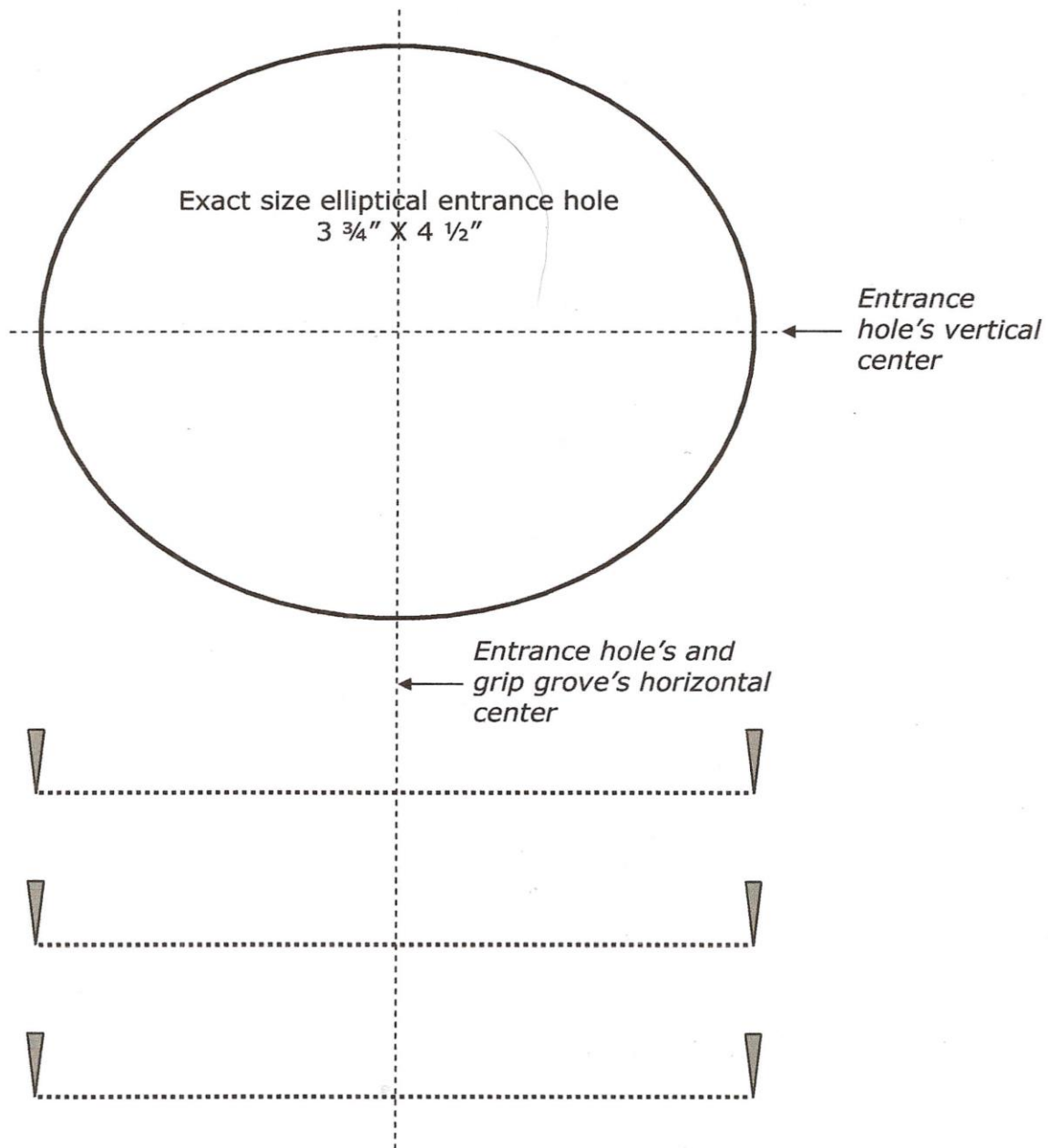
Part #	Description	Copies	Width	Length	Note
1	FRONT	2	16"	22 3/4"	
2	BACK	2	16"	22 3/4"	
3	BOTTOM	2	10 7/8"	22 3/4"	
4	LEFT SIDE	2	12 3/8"	16"	
5	RIGHT SIDE	2	12 3/8"	16 1/8"	Cut into 11" high UPPER RIGHT SIDE and 5" high CLEAN OUT DOOR
6	TOP	2	12 3/8"	24 3/8"	Cut into 7 1/2" long TOP and 16 3/4" long TOP DOOR
7	DIVIDER	2	5 1/2"	15 1/4"	

Plywood Layout



Cutlist for two Barn Owl boxes from a 23/32" thick, 4' x 8' panel. Each TOP and RIGHT SIDE are to be cut into two parts each, so the total length in this table includes the 1/8" saw kerf.

ENTRANCE TEMPLATE

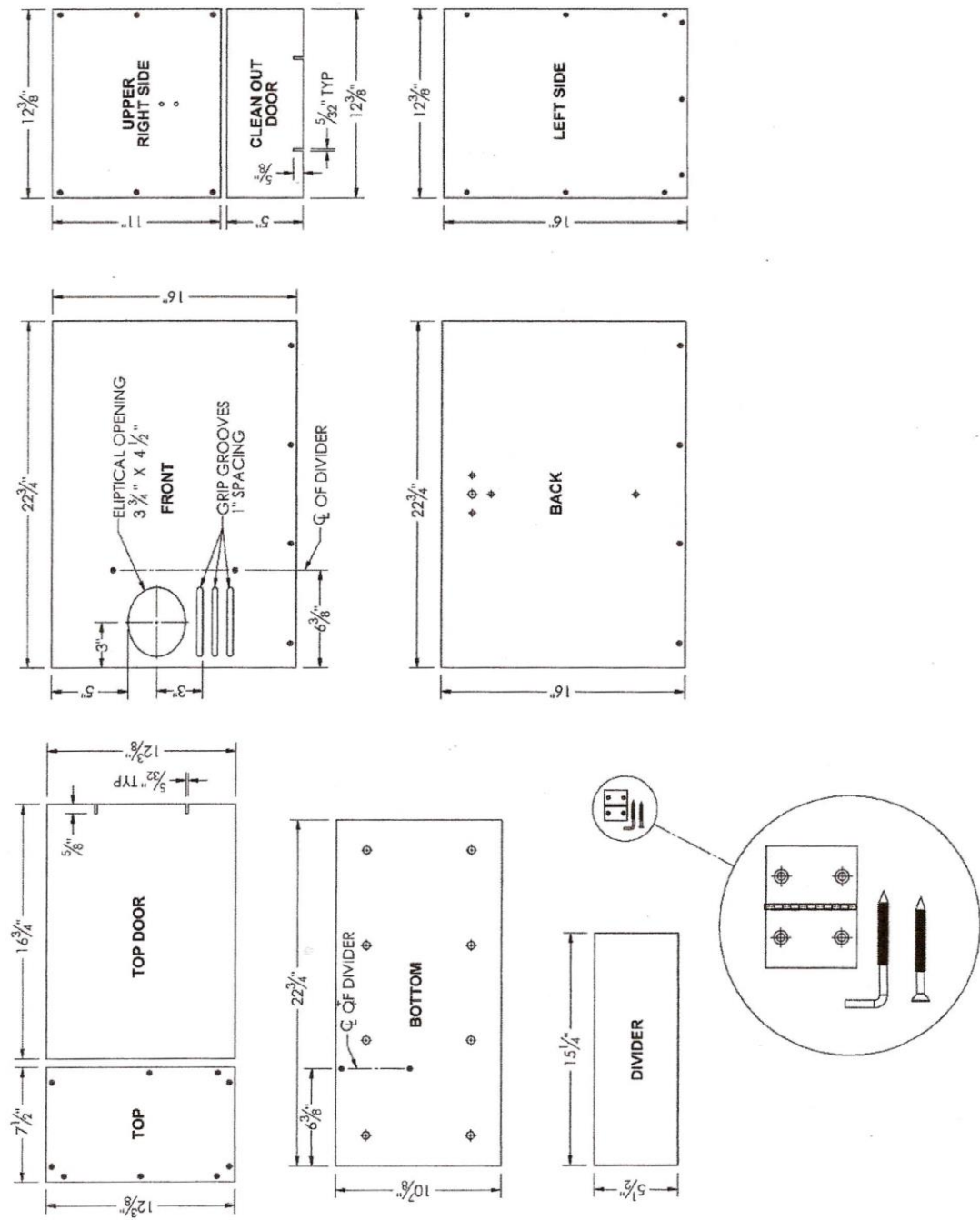


Important Note: Before using this template, you should ensure that it printed correctly. This can be done by verifying that the entrance hole's dimensions as printed are 4.5" in width and 3.75" in height. A possible reason for the dimensions being incorrect originates in your printer's page setup options. This page should be printed with the *Page Scaling* option set to *none* or the *Page Sizing* option set to *Actual Size*.

Photo/Drawing:

Details of Dimensional Drawings

Notes: The metal parts are scaled 4X the size of the wooden parts. The holes in middle of the back are illustrative.





Project Portfolio:

Complete a portfolio for the project that includes:

- A description of the project and the skills you learned building the project. Include the hours spent on the project and the income (if sold). Use the construction log to complete this narrative. Write in complete sentences.
- The Bill of Materials
- The project plan
- 2-8 photos documenting the project at various stages of construction.

This project was created by J. Brown at California State University, Chico in the fall of 2014.