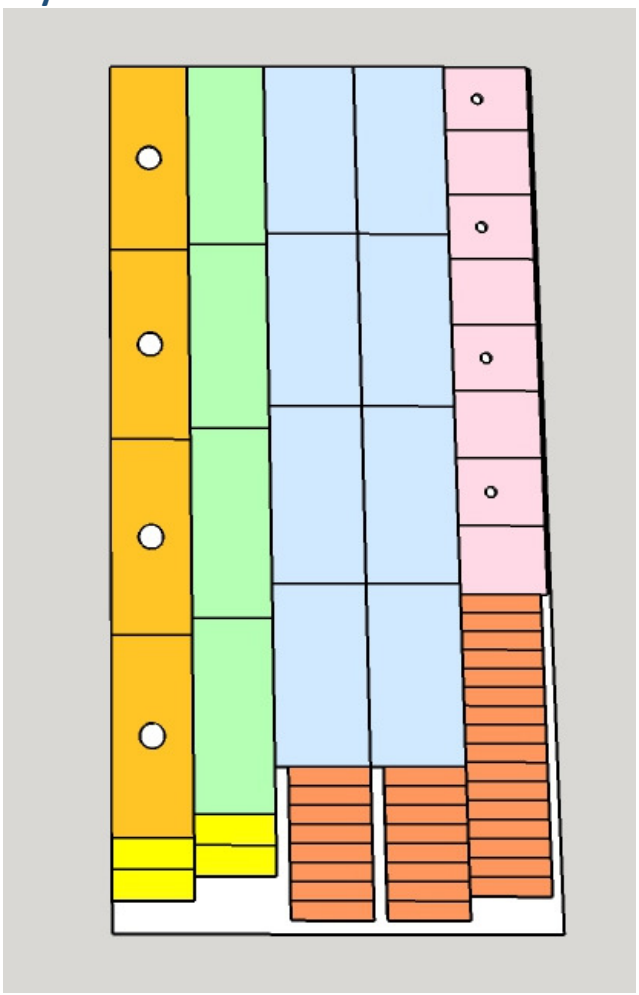
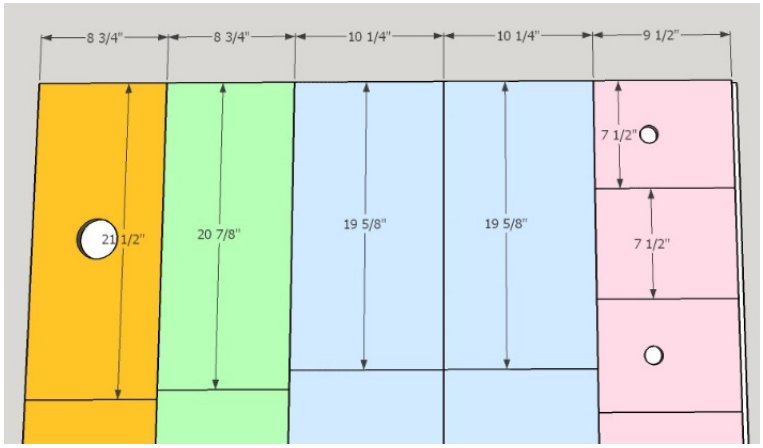
BUILDING A 5-FRAME LANGSTROTH DEEP NUC BOX

DIMENSIONS FOR 5/8" PLYWOOD

Layout of Parts

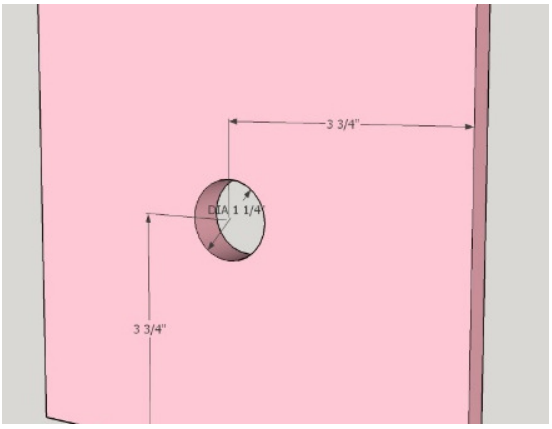




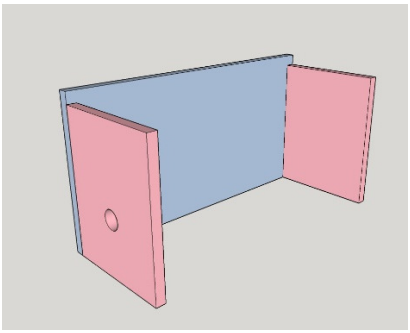
The drawings above show the basic layout for the parts for four nuc boxes cut from one 4'x 8' sheet of 5/8" plywood. Other thickness of plywood or lumbar can be used but the dimensions of the ends would have to be adjusted to keep the box interior size the same.

Assembly Box

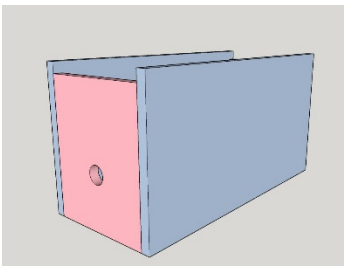
Drill an entrance hole in half of the end pieces. Measure 3 ¾" from the end and side; drill a hole 1 ¼" in diameter. (hole dimension is not critical)



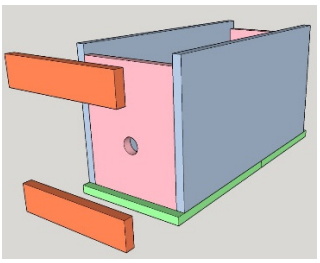
Attach one front end and one back end to one of the sides. Apply glue to the joint and fasten with staples, nails or screws. Note that the front is oriented such that the entrance hole is closer to the bottom than the top. Also note that the ends are flush with the bottom of the side but not the top.

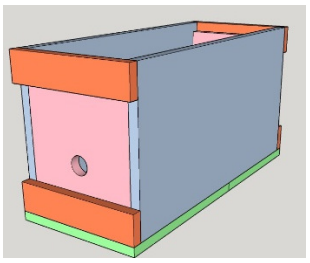


Attach the second side as with the first using glue and fasteners. Check to make sure that the box is square.

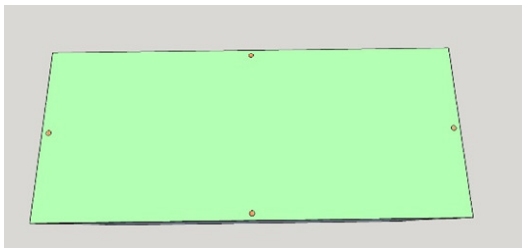


Attach two cleats to the front of the box, one flush with the bottom of the sides and one flush with the top of the sides. Repeat the process for the back of the box.



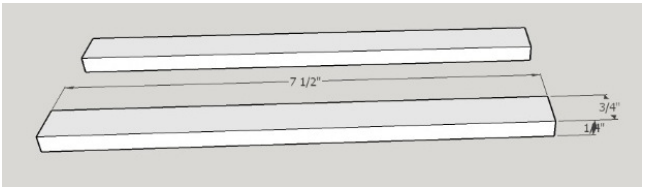


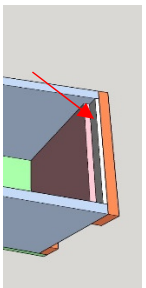
Turn the box upside down and place a bottom on the box. The bottom should be roughly flush on the edges with the sides and the cleats on the ends. Measure to the middle of the sides and ends of the bottom and use screws to fasten the bottom to the box. <u>Do not glue!</u>



Cut two spacer strips for each nuc box. Strips should be 7 ½" long, ¾" wide and ¼" thick. The strips are placed on the inside ledges of the box, flat against the inside face of the cleats. Glue and staple the strips in place.

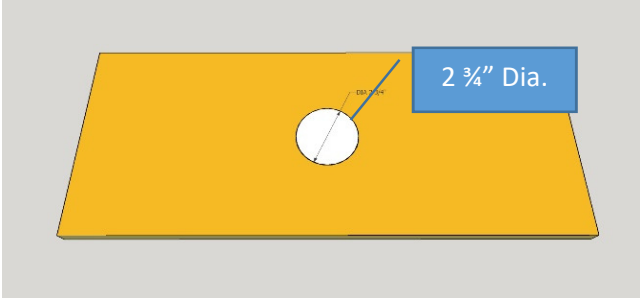
This finishes the box.



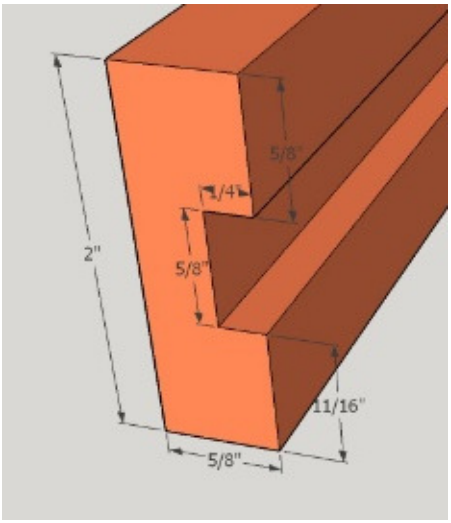


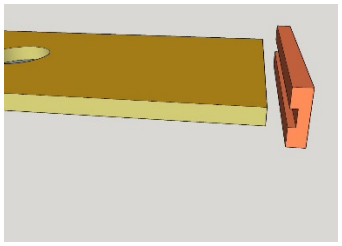
Assemble the Lid

Draw two lines on a lid, from opposite corner to opposite corner to locate the center of the lid. Drill a 2 ¾" hole in the center of the lid. This size of hole will snugly fit a standard mason jar feeder lid. Modify the hole size if your feeder size is different. Save the cut-out circle of wood.

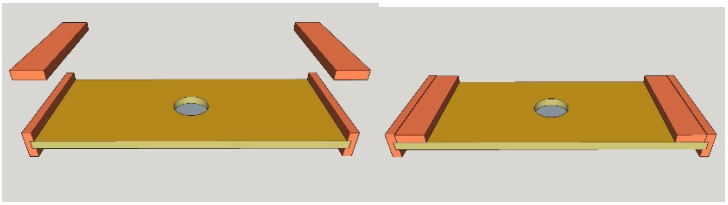


For each lid, two of the cleats need to have slots cut as shown on the right, to fit on the ends of the lid. A dado head cutter or router works well for these cuts. The slots make the ends on the lid more durable, however the lid can be made without cutting slots. However if that is done the length of the lid should be shortened by ½".

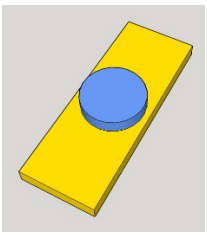


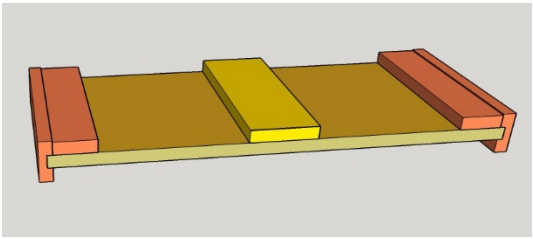


Attach two cleats to the top of the lid with glue and staples as shown on the right. The cleats should be flush with the end cleats and the sides of the lid.

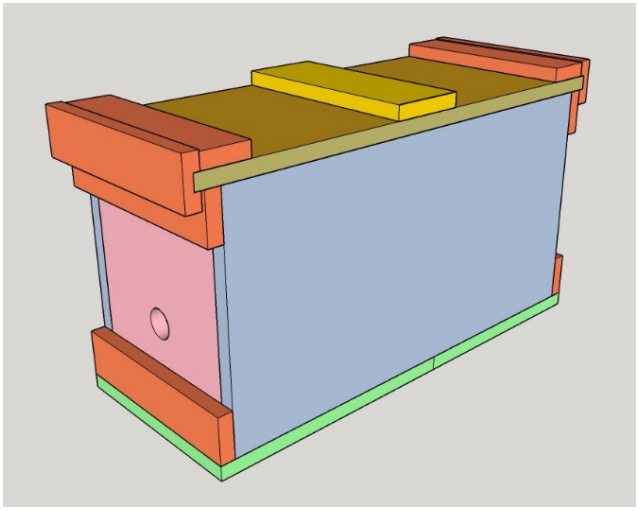


Take the cut-out disc from the lid and attach it to the feeder cover with staples and glue. The cover goes over the feeder hole as shown on the right. This will not be a tight fit but will serve to keep rain out of the box when a feeder is not in place.





Finished Box



A small piece of #8 (1/8" holes) mesh can be stapled over the feeder hole on the inside of the lid. This keeps the bees from flying out when the feeder is changed or removed.

An entrance disc can be attached over the entrance to make it easier to close the nuc up for transportation. The entrance hole is positioned to allow a 4 3/4" entrance disc to fit on the front of the box.

The completed nuc box must be painted or waterproofed in some way. Uncoated plywood does not hold up to the weather very well. Several coats of good exterior latex paint will protect the box – pay special attention to the edges of the wood, especially any voids in the edges.

This box is designed to allow several nuc boxes to be stacked to make double-deep nucs. Remove the screws from the bottom of the upper box (this is why it is not glued) to allow the boxes to be stacked.