Wood Duck Box Assembly

Before starting check to have all parts to make one, side door complete box. They are:

Plastic Mesh crawl screen (gutter leaf guard)
Front with oval hole cut out
One sideboard
One back board
One side retainer board (~6” with angled edge)
One side opening door board (~16” with angled edge to overlap retainer board)
One bottom board
One roof board

Put all rough-cut sides to the inside. Glue all seams before fastening. (Tite-bond glue recommended, water soluble). When assembled, useful to glue over knots and small splits. In the pictures below, the color red represents glue, blue is possible nail areas and green is drilled holes for short or long decking screws.

Step 1

Staple the mesh crawl screen to the front. Align the top of the screen close to the hole. **DO NOT** pull tight the crawl screen to the front. Meaning, make the screen bow/bubble slightly in the middle to allow the ducklings something to get their feet and bills through. Affixing it tightly would be like making them rock climb up a cliff. Use more staples near the top as this gets the most strain and wear over time.

Step 2

It might be useful to position all boards in a “box” before attaching anything to get a complete perception of how things will come together.

Attach the back board to the sideboard. Glue the joint and nail or screw or use a staple gun as preferred.

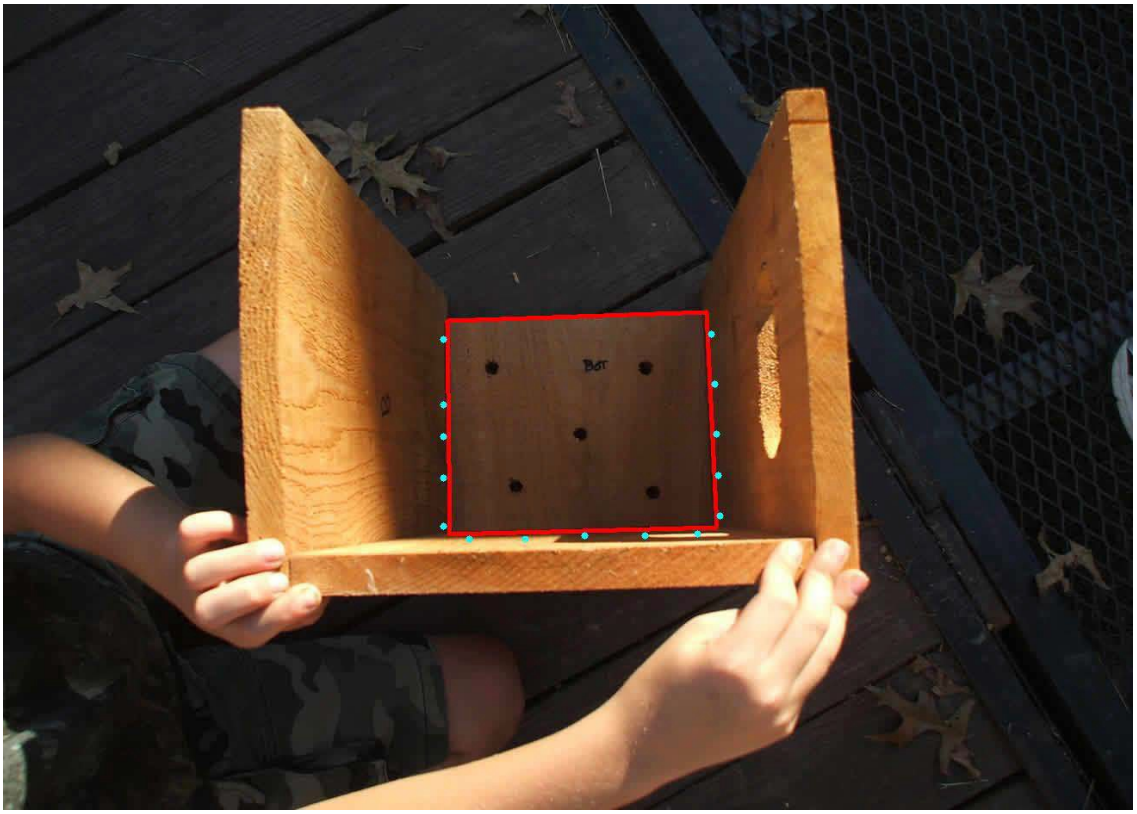
Here, the sideboard is on the left and the back board is on the right. This will place the side door on the opposite side. Be sure to assemble these pieces with the sideboard connected by attaching through the back-board edge. This will ensure the roof and floors fit properly.

Step 3

Attach the front to the side/back assembled in Step 1. Glue the joint and nail. Here the front board attaches to the sideboard, so the side is sandwiched between the front and back boards.

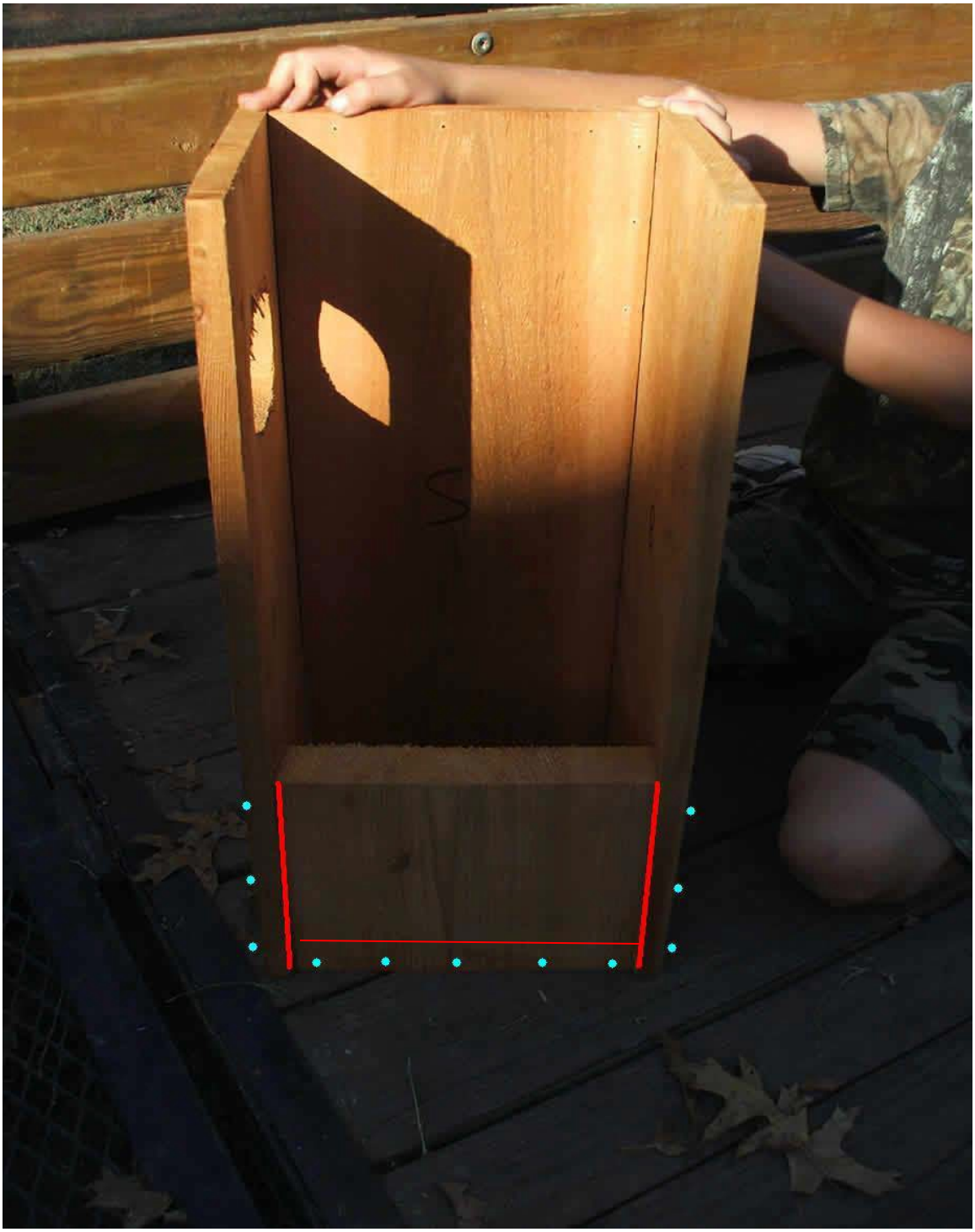
Step 4

Insert the bottom and glue the joints and nail all three sides. Note the weep holes to let water drain out of the box. These holes can be drilled ahead of assembly or after the entire box is made.



Step 5

Insert the side retainer board, glue the joints and nail. Be sure to glue the inside of the bottom board where the retainer board meets.



Step 6

Align the door on the remaining open side. **DO NOT** perfectly align the top of the door with the back and front sides. **LEAVE** approximately 1/8 – ¼ inch space at the top. This will allow the door to swing open without rubbing against the roof when installed. It will also allow you to see if there any bees' nests on the inside roof area!

Once positioned correctly, (use shims if there are not enough hands to hold it squarely into position!). Mark the hinge screw locations on each side **IN EXACTLY THE SAME PLACE**. Drill pilot holes that will be used for the decking screws as hinges. The pilot holes must be drilled straight at a 90-degree angle to the wood or the door will not work and will split! Install 2 ½" screws through front/back boards and into side door which will now open and shut freely if installed correctly. If the alignment is off, simply start again in a different spot and re-drill the pilot holes etc. Do not screw down tight. Leave about ¼" protruding so that if the screws are slightly misaligned you have less chance of splitting the door edges when being opened.

Step 7

If the door fit is too snug before installing. Skip this step until you install the roof. Splay open the sides with shims or by force to create enough space for the door to work. Then install the roof to maintain the proper opening. Many of MWDFI's kit doors have been shaved modestly to facilitate installation.

Step 8

Position the roof so the back is flush (no overhang on the back) and glue the 3 joints (back, side, front). **DO NOT** glue/nail the roof section over the door. Do not leave the rear board seam exposed, make sure it is fully covered to help keep rain out. Also, when installing the box, place it such that it has a slight angle forward. This will also help rain runoff the roof and also help the ducklings exit the box.

Miscellaneous Steps

To make a simple box latch. Pre-drill a hole on the front board and slightly into the door at an approximate 45-degree angle. (Lower green dot in picture of Step 6. Move the location up as necessary to get a good overlap area with the sideboard and the door). Then open the door and using a slightly larger bit, ream the same hole on the side to make it larger. This will allow the latch screw to slide freely in and out so that it is much less effort to screw it into the door. Insert 2 1/2” decking screw and finger tighten only. This screw will keep the side door securely closed and avoid the necessity of using a screwdriver or drill in the field for inspections.

If needed to help lift the door open, install a short decking screw in the lower part of the door. This screw will be used to pull open the door (lower middle green dot in picture of Step 6). Usually there is enough of an overlap (lip) where the upper door section rests on the lower retained board such that no lift screw aid is needed.

The cypress wood will last many many years. Regardless, some prefer to seal the roof sections and floor for added protection.