

## Modified Kinney Tree Swallow House Plans

Here are plans I modified from those found on <http://www.sialis.org/kinney.htm> pages. The reason I have slightly changed the dimensions is because of the difficulty in finding lumber that matches the dimensions listed on the site. While the original dimensions could be cut with modern woodworking equipment (like a table saw, band saw, etc...), these modified directions might be easier for the hobbyist or do-it-yourselfer with only hand tools available.

### Materials Needed for House:

Wood- (Untreated pine is fine if painting, cedar if not painting)

- 1"x 8" two feet long
- 1"x 12" twenty inches long
- 1"x 10" three feet long
- 1/2"x 1/2" three feet long

Hand saw (human or electric)

Jigsaw or coping saw

Drill (Hand or power)

Bits-

- 1 1/2" (for large entrance hole)
- 1" (for three smaller feeding holes)
- 5/8" (for optional guarding perch hole)
- 1/4" (for ventilation holes)
- 1/8" (for pre-drilling screw holes)

1 1/4" exterior grade screws

1" hinges

T Square

Tape measure

Protractor or angle measure

### Optional Guarding Perch Materials:

32" of 1/2 inch copper pipe

1 half inch copper "T"

3 half inch end caps

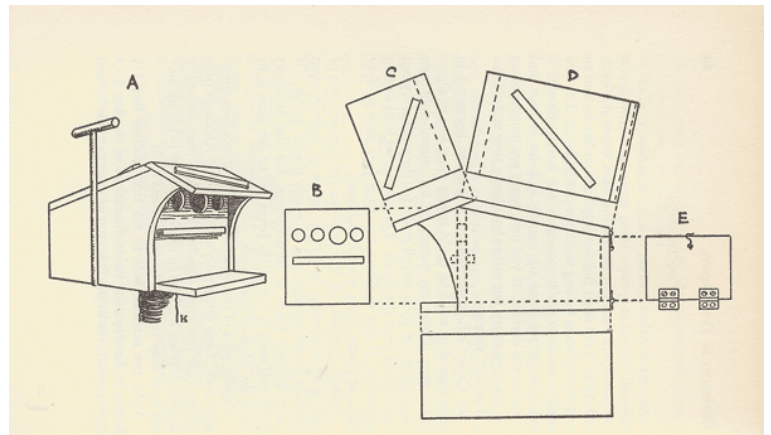
Lead free solder

Torch (I prefer MAPP to propane)

Flux

1 half inch copper fastener

Pipe cutter



Original Plan Design



Modified Plan Design and Tools

Instructions:

Step 1-

Mark and cut the 1"x 8" board at the following lengths:

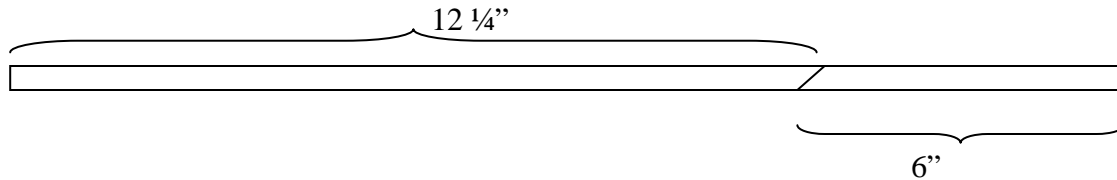
- Back Board (E)- 4 ½"
- Bottom Board- 11 ¾"
- Front Board (B)- 8"

Step 2-

Mark and cut the 1"x 12" board at the following lengths at a 45° angle:

- Top Back Board (D)- 12 ¼"
- Top Front Board (C)- 6"

\* *Note: the measurements above are to the longest side of the 45 degree cut*

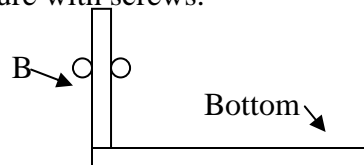


Step 3-

Measure board B (front) 5 ½" from the bottom on the 8" length. Mark this height for center of the entrance and feeding holes. Space the four holes evenly across the 5 ½" mark, with the 1 ½" entrance hole in one of the middle positions. Drill the holes. Cut two 7" pieces from the ½"x ½" wood and attach ledges below the holes on the inside and outside of board B. I placed mine about an inch below the holes. (I actually used bamboo pieces instead of the ½"x ½" board). Pre-drill the screw holes with the 1/8" bit for the ledges and board B and secure with screws.

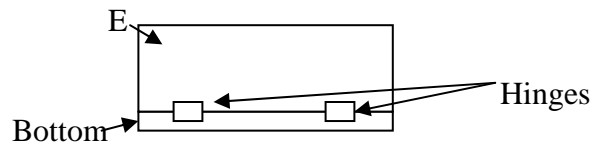
Step 4-

Attach board B to the bottom board with B above the bottom. Pre-drill holes through bottom board and secure with screws.



Step 5-

Attach board E (back) with 1" hinges. It might be helpful to temporarily secure it with a screw to hold it in place while adding the hinges.



#### Step 6-

To lay out the sides, the roof needs to be in place. The issue with this is that board E (back) will need to swing out and cannot be screwed to the roof. There are two possible solutions that I found. The first involves securing the pieces of the roof to the frame with large clamps. If you have a couple of these, you can hold the roof pieces on and trace the side pieces. I didn't have clamps large enough, so I temporarily held them together with pre-drilled holes and screws. I used one in the middle of board D (top back) to board E. I also used one in the middle through boards C, D, and into B.

Once the roof is temporarily in place, lay the house on its side on top of the 1"x 10", lining up the bottom of the house with the bottom edge of the 1"x 10". Trace *inside* the roof and *outside* of E (back) and B (front).

To create the curve from the front of C (top front roof) to the bottom of B (front), I just hand drew it. You can make this straight if you don't have a jig or coping saw.

Cut out the first side piece, trace it again on the 1"x 10" and cut out the other side.

#### Step 7-

Remove the roof and attach the side pieces to the frame by pre-drilling and securing with screws through the bottom.

#### Step 8-

Attach the roof to the sides by pre-drilling and securing with screws to the sides. Begin with board D. Then add board C as shown in the original plan.

*\*Note- instead of the recommended hook and eye latch in the original, I secured the opening board E with a screw from the top (the same hole used to temporarily hold on the roof- see step 6). This will not allow it to be easily opened for monitoring, but is also less likely to be rattled or accidentally opened. It can still be easily opened for cleaning when birds are not present.*

#### Step 9-

Cut two pieces of ½"x ½"

- Piece 1- 10"
- Piece 2- 12"

#### Step 10-

Attach these cleats using pre-drilled holes and screws. The 10" piece attaches at an angle to board C and the 12" piece attaches to board D also at an angle. The purpose of these cleats is to provide a foot hold for landing or roosting birds in high wind.

## Optional Guarding Perch-

### Step 11-

Cut the copper tube into three pieces

- 1 piece 20"
- 2 pieces 6"

### Step 12-

Solder, epoxy, or glue one end cap to one end of the 20" piece.

### Step 13-

Decide where you want the perch to be on one side of the assembled house. Use the 5/8" bit, drill a hole through the overhand of the roof and as close to the side of the house as possible. It is important that the hole be drilled perpendicular to the bottom of the house.

### Step 14-

Insert the 20" piece cap end down through the hole in D and secure with copper fastener to side of the house. The roof will hold it in place at the top and the fastener at the bottom.



### Step 15-

Add "T" to top of the 20" piece and secure.

### Step 16-

Add the two 6" pieces, secure, and finish with end caps.

You can now paint the finished house on the outside if you used pine. Do not paint the inside of the house. You could also paint the pieces prior to assembly if you so desire.

Painting is not needed if cedar is used.

For mounting suggestions, visit <http://www.50birds.com/MPb050806112.htm>

This sight also has plans for a single hole nest box.