

How to Build A Barred Owl House



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Building an owl house with these instructions requires the use of tools that are capable of injuring or even causing death. By virtue of using these instructions, you agree to hold the author(s), contributor(s), distributor(s), and any other party involved in the creation and publishing of this book, harmless in all cases. You also agree to use this book at your own risk, and agree that you will not hold author(s), contributor(s), distributor(s), and any other party involved in the creation and publishing of this book, liable for any damages, or injuries.

Searching for owls appears to be a safe and simple hobby. But, with the fate of life, injury or death can occur while owling. Methods suggested in this book can lead to injury or death. People have been blinded while owling. People have fallen off cliffs. And, numerous people have received injuries while owling. By virtue of using these instructions, you agree to hold the author(s), contributor(s), distributor(s), and any other party involved in the creation and publishing of this book, harmless in all cases. You also agree to use this book at your own risk, and agree that you will not hold author(s), contributor(s), distributor(s), and any other party involved in the creation and publishing of this book, liable for any damages, or injuries.

Items Needed to make your Barred Owl House:

Tools you will need:

- Hand Saw, or Circular Saw, or Jig Saw, or Table Saw, or Radial Arm Saw
- Jig saw or coping saw
- Drill
- Hammer
- Screw Driver
- Tape measure or ruler
- Straight edge
- Stapler or staple gun (for optional siding)

Materials you will need:

- (1) 4' x 4' x 3/4" plywood (1/2 sheet of plywood)
- (2) Metal Tee (Simpson's Tie or other mfg - look in the wood section of Home Depot or Lowe's)
- (2) metal hanger bolts (3/8" by 6" long or longer) & (4 washers) & (4) 3/8" nuts (or wing nuts)
- (2) Compression Springs (from a door retainer kit)
- (4) 1/2" x 1-1/2" bolts, nuts, and washers
- Glue (Elmers glue, wood glue, or other waterproof glue)
- (20) 1-5/8" Stainless screws or 1-5/8" galvanized screws or 2" ring shanked stainless nails
- (1) hinge & (6) #12 3/4" screws for hinge
- Aluminum or copper or vinyl flashing (optional)
- (50) 3/4" roofing nails for optional flashing or use a stapler
- Pulley and 50' of rope
- Wood chips - mini nuggets

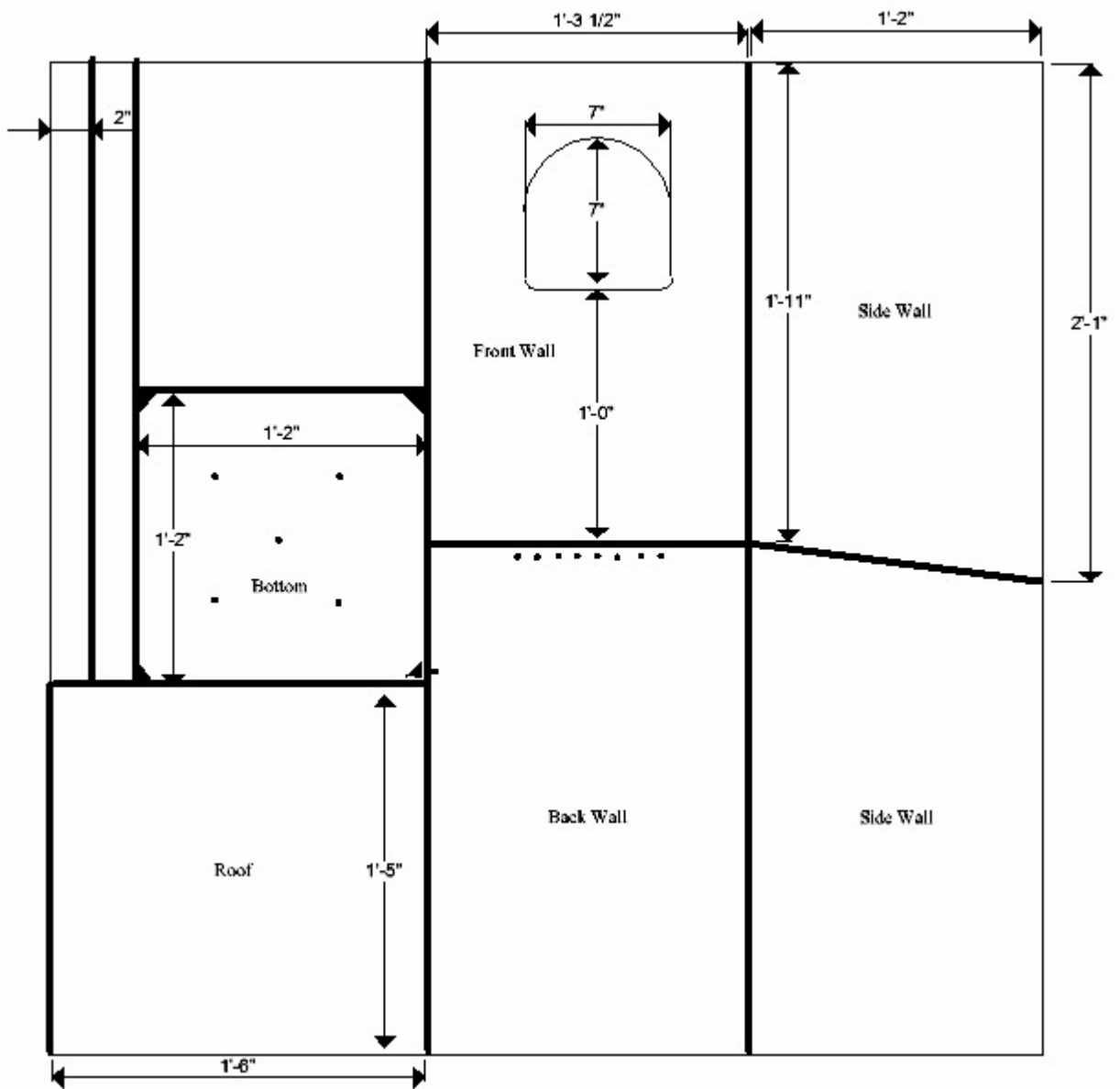
The 4'x4'x3/4" plywood will probably be the harder item to get home. I prefer to use birch plywood over standard plywood. Birch plywood tends to be flatter, and not warped. Home Depot, Lowes, and many lumber yards will cut the plywood in half for you. This makes it much easier to handle. Make sure it will fit into your car before purchasing it.

The Metal Tee can be hard to find. You can find it in the lumber section of Home Depot or Lowes. If you can't find it ask where the Simpson Strong Ties are. Most workers know the name well. The Metal Ties come in two sizes, and either size will work.

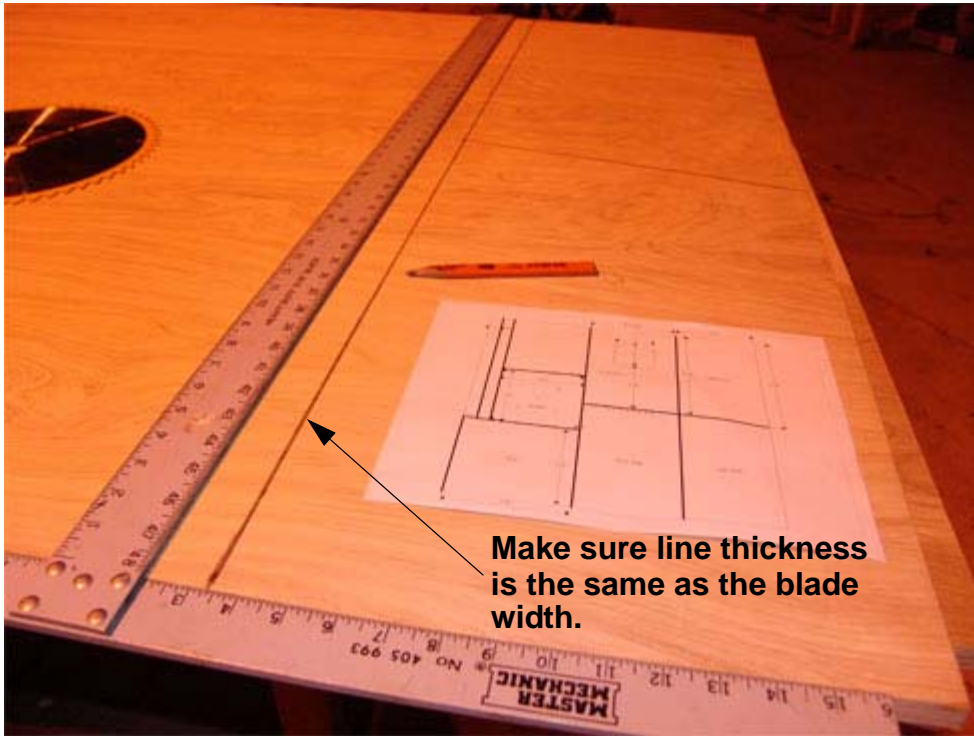
The steel hanger bolts are a specialty bolt. But, they can be found at Lowes, Home Depot, or your local hardware store. One side it has wood threads that look like a lag bolt thread and on the other end it has machine bolt threads. 8 inch hanger bolts work the best, but are hard to find. If you can get a local hardware store to order them for you, this will make it much easier to hang the owl house.

The best place to get the compression springs is from a screen door (or storm door) retainer kit. The kit has a small chain and a compression spring. There is a picture of the kit on page 21.

If you have questions or comments, please refer to the Owlers Forum on www.owlpages.com.



The drawing above will work for any 4'x4'x3/4" sheet of exterior plywood.

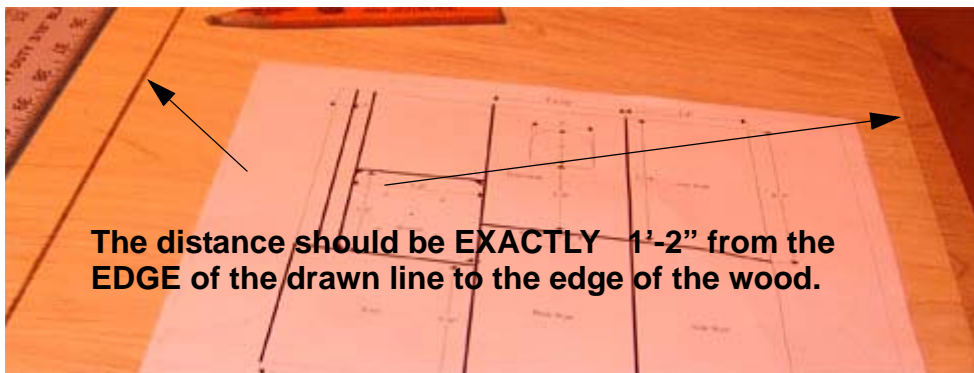


Make sure line thickness is the same as the blade width.

STEP #1: Mark out the drawing onto the plywood, and cut the pieces.

Tip: Make sure that you make the line the same thickness as the saw blade you will be using. If you are not sure, then hold the blade up to the line and mark the line slightly larger than the blade width (kerf). If this is too difficult, you can cut the side walls first, and THEN mark the front and back walls for cutting.

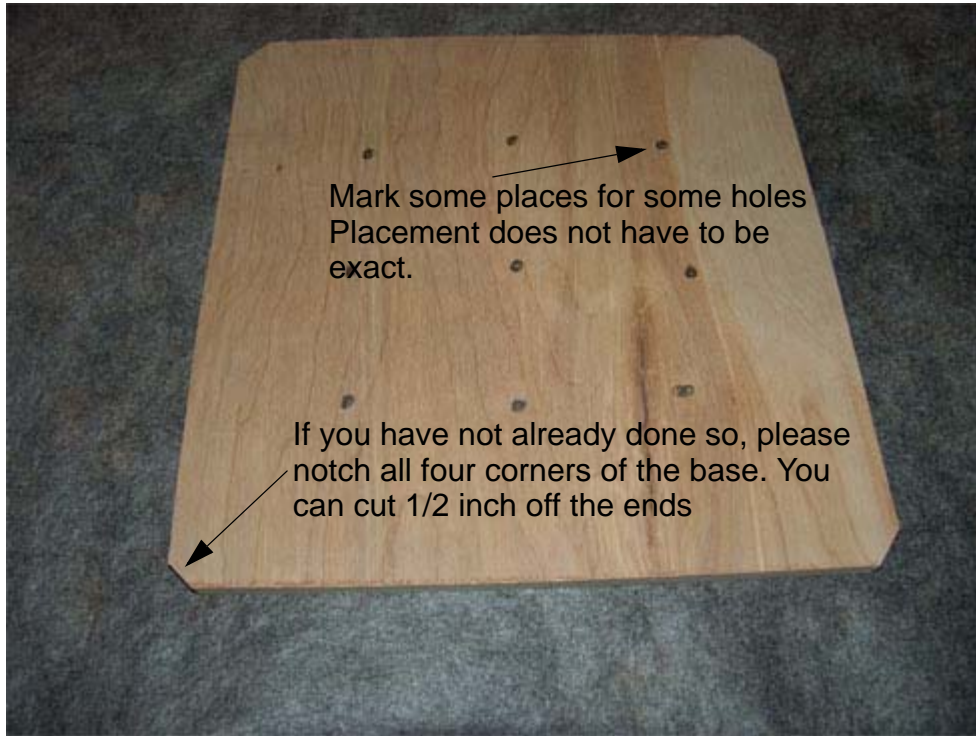
Remember: Measure TWICE - Cut ONCE!



The distance should be EXACTLY 1'-2" from the EDGE of the drawn line to the edge of the wood.

Safety Tip: When you cut the wood, make SURE that there is nothing under the plywood line where you are going to cut. If you are using a circular saw, NEVER stand in back of the saw while cutting. If you can get a helper to hold the piece of plywood that is being cut off, this will make it safer and easier.

STEP #2: Cut water drain holes in the bottom.



You can use any type of drill bit to drill the holes. The drill bits should be 3/8" to 5/8" wide. If the drill bit is too small, it will clog up and not drain water. If the drill bit is too large it will allow snakes to enter from the bottom.





This is how your bottom should look after you have finished drilling the holes.



STEP #3: Cut the entry hole on the front wall.

You will need a 1' ruler or straight edge and a protractor. If you don't have a protractor, you can use a string tied to a pencil.



Draw an X from all corners. This will provide you with the center of the hole. You can then use a protractor or a string to draw the top oval. Now you are ready to cut the hole.



There are basically four ways to cut the entry hole.

(1) you can use a bench jig saw like the one in the picture.

(2) You can use a electric saber saw.

(3) You can use a hand coping saw. Can be purchased for a couple of dollars. (see picture).

(4) You can use a circular saw and use plunge cuts to cut a rectangle box opening. Then use a hand saw to cut the corners.



The picture on the left is a hand coping saw. It will take 15 minutes to cut the hole, but it will do the job.

Note: Save the cut out piece. You will need it for the next step.

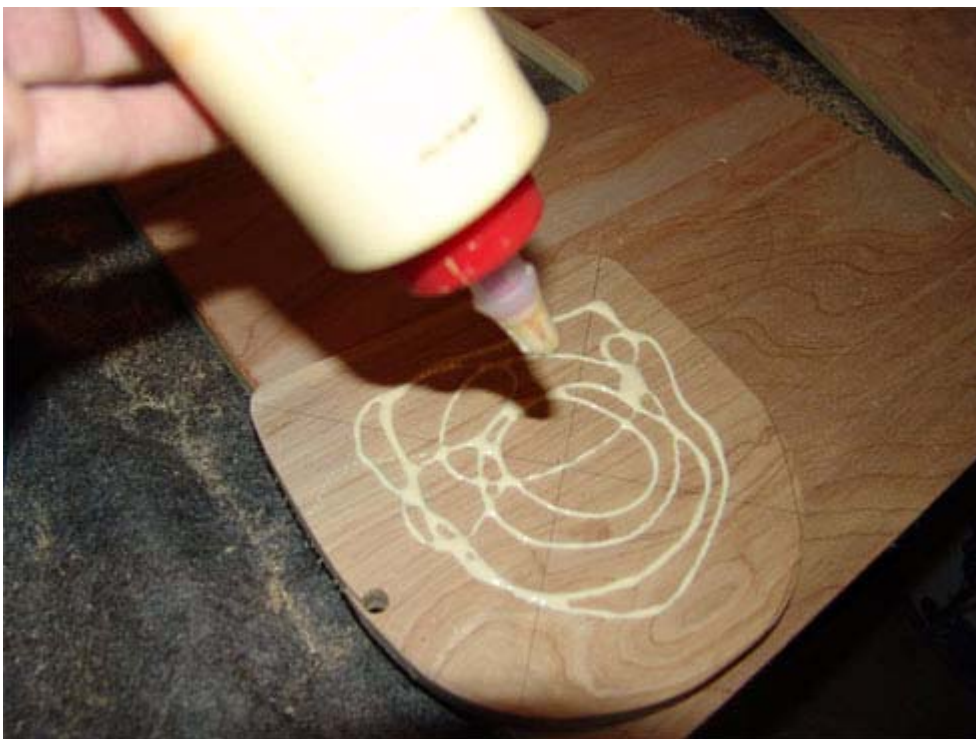


STEP #4: Create a climbing ladder for the owlets. We use the scrap cutout piece from the previous step.

Here are a couple of ways to cut the notches:

(1) use a Radial Arm Saw, Table Saw, or router. If you use this method cut the notches **BEFORE** you attach it to the face wall.

(2) Use a circular saw or hand saw. If you use this method attach the piece **BEFORE** you cut the notches.



Apply glue to the **BOTTOM** of the ladder, and attach the piece below the opening.

If you are going to cut the notches with a circular saw or hand saw then clamp the piece onto the face wall and let the glue cure overnight **BEFORE** cutting the notches. If you don't have a clamp, then use something heavy to hold the piece down. Make sure the pieces does not move after setting something heavy on top. The next day you can then cut the notches. If you are using a circular saw, make sure that you lower the base plate so that it cuts about 1/8" into

the wood. Otherwise, you will end up cutting the latter in half. If you use screws to attach the ladder, make sure that you remove the screws before using a circular saw.



If you made the notches with a radial arm saw, table saw, or router, then screw the latter into place with 3 screws (1-1/4 to 1-1/2" long).

Safety: Absolutely do NOT install the screws if you are going to cut the notches with a circular saw. OR, remove the screws before cutting the notches with a circular saw.



STEP #5: Assemble the Owl house.

TIP: It helps to have a second person to help you with this step.

Setup with side walls with floor in place.

Common Mistake: Make sure that the floor fits well. If the floor is too big, you will not be able to get the sides to fit flush. If the floor is too big, cut one or more of the floor sides until it fits snug, but not too small.



Add glue to the side, and spread it out before adding the front wall.

The preferred glue would be waterproof woodworkers glue. You can also use Elmers white glue.

You can spread out the glue with your finger or a paper towel.



Nail the sides together. The best nails to use are stainless steel ring shanked nails. You can also use galvanized or stainless steel screws.

Make sure that the sides are flush and aligned from top to bottom of each side.

Repeat for all sides.



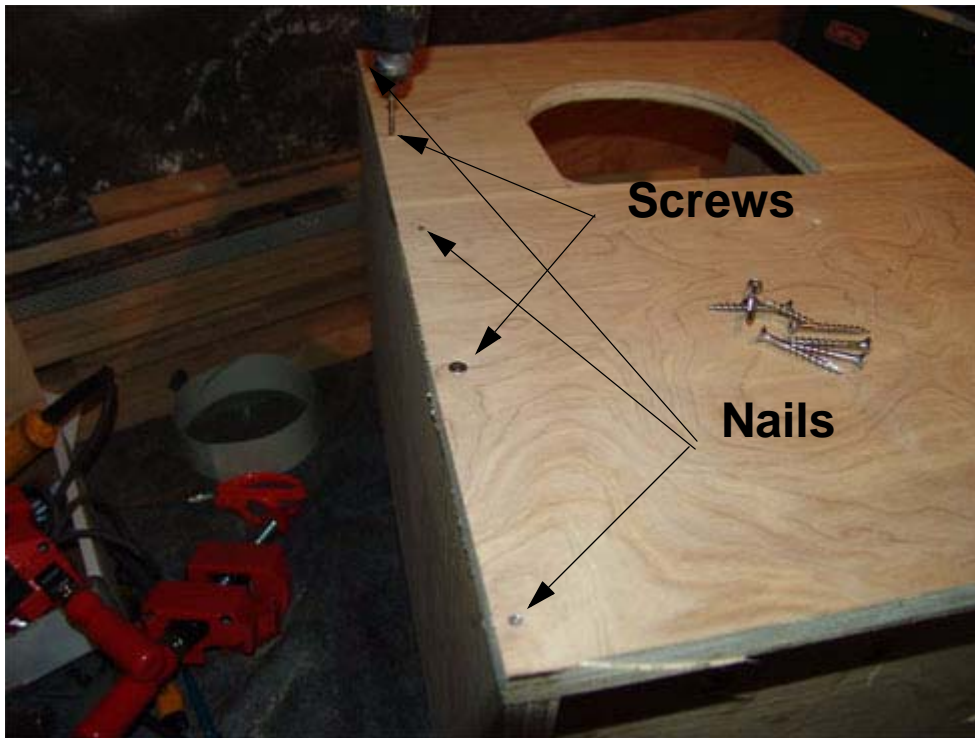
Check the alignment on the sides and the top and bottom. If it is not right pull the sides apart and redo the step. Otherwise you will have problems later.



Turn the box 180 degrees and attach the back side the same way you attached the front side.

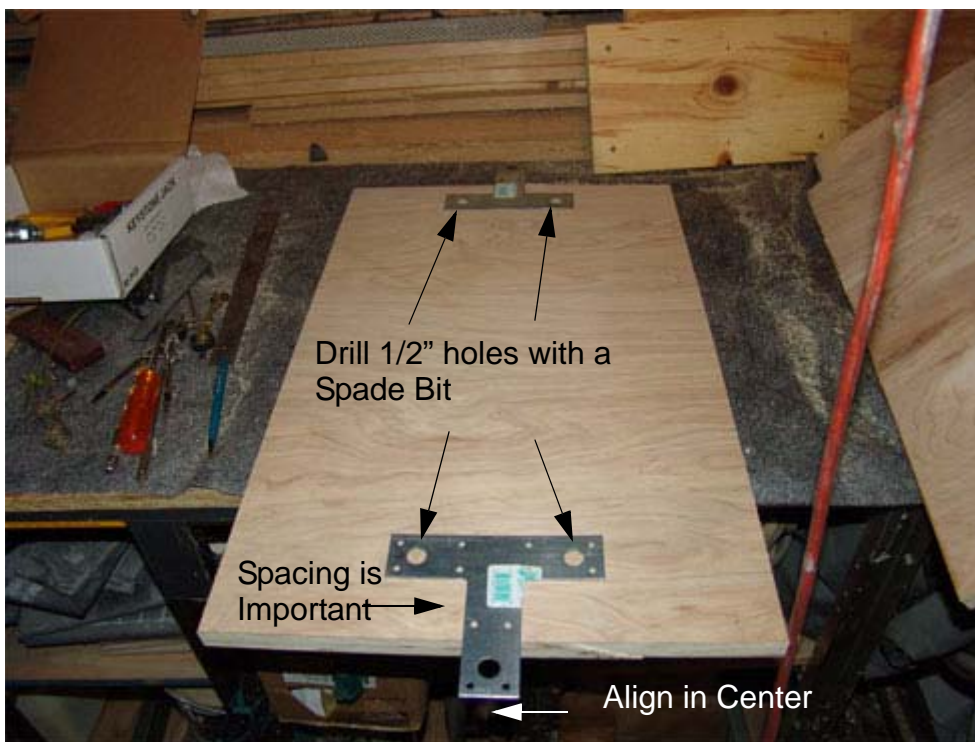
Have someone help you push the sides together so that you get a flush fit. Again, make sure the top and bottom are aligned correctly.

Don't forget to add glue to both edges.



Here I am adding some stainless steel screws to make sure that the box will last as long as possible.

I generally use 5 screws & nails per edge (20 screws & nails for all sides).



STEP #6: Add hanging brackets to the back of the owl house.

The brackets shown in the picture are Simpson Strong-Ties. You can find these in Home Depot or Lowes. They do come in two sizes, and you can use either size. On this owl house I used the smaller brackets.

Important Note: Alignment of the brackets is very important.

Make sure the brackets are aligned in the center of back board.

I generally use 1 inch of spacing for the edge of the bracket to the edge of the board for the TOP bracket. I generally use 2 inch of spacing for the edge of the bracket to the edge of the board for the BOTTOM bracket. Remember that the roof must clear the top bracket hole. Otherwise, you will not be able to hang the owl house.

Drill 1/2 Inch holes with a spade bit with a drill. I use 1/2 x 1-1/2 inch machine bolts. I use 1/2 inch washers .



Optional Step: If you plan on adding some type of siding (Aluminum, copper, or vinyl) now is the time to add it to the back side.

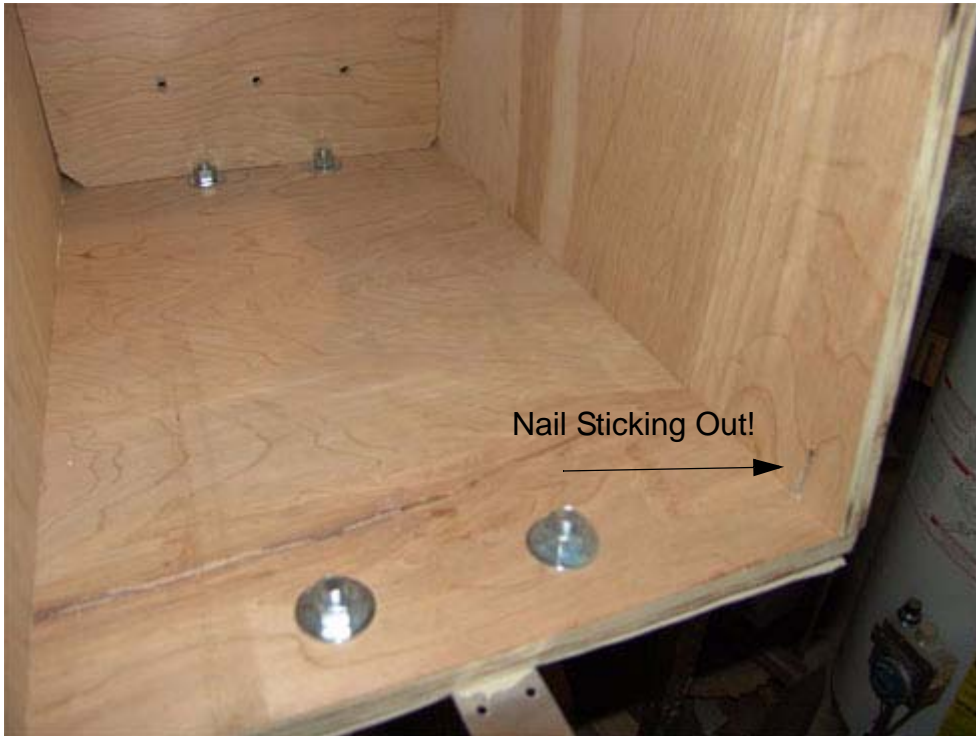
This owl house is getting vinyl siding. I add the vinyl siding **AFTER** I have drilled the holes. I tack the vinyl siding onto the back with short nails (3/4" long) or staples. I then drill the vinyl siding from the back side of the back wall.

You can do this step before you assemble the house, or after you assemble it. Most people find it easier to do it after assembling the box.



I then insert the bolts and add a washer and nut to the other side. I then tighten the nuts and bolts.

We use the siding for three purposes. **FIRST**, it provides weather protection. Barred Owls will use the house for many generations. **SECOND**, the smooth siding prevents raccoons, snakes, and other predators from preying on the eggs and owlets. **THIRD**, the shiny surface attracts owls.



Inspect the interior of the owl house to see if any nails or screws are sticking out.

If you find them sticking out on the interior, remove them with a screw driver or hammer. The little owlets lives will depend on well you do this.



Here is the finished product of this step.

Notice: The bottom is not permanently attached at this point.

STEP #7: Attach the roof.

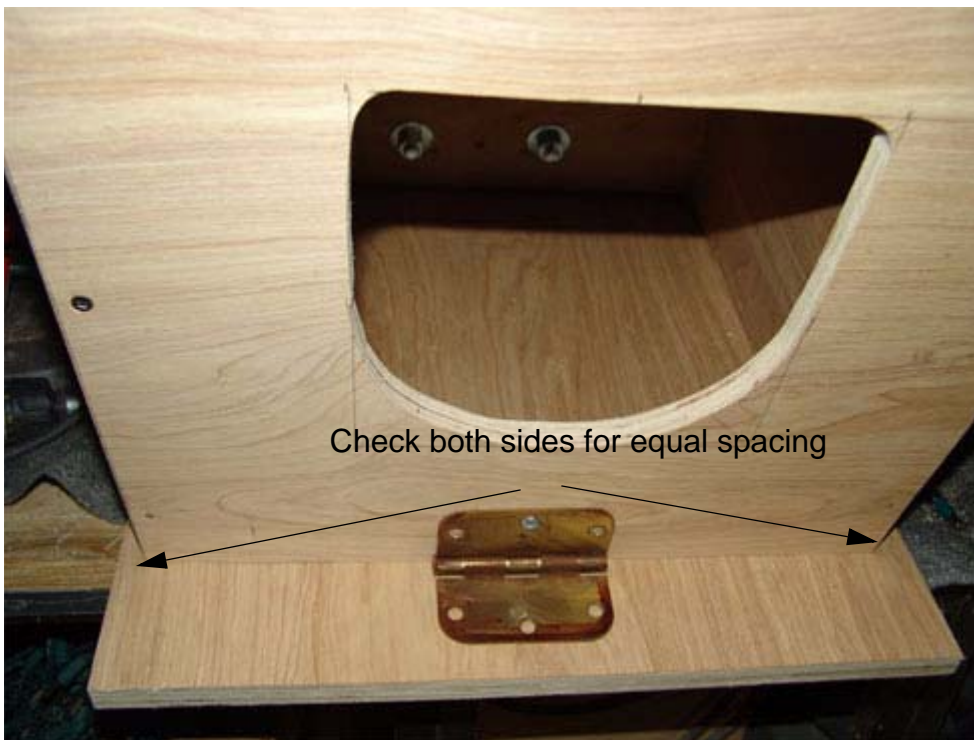
You can use any hinge. The hinge we used to build this owl house was used.

Important Note: Make sure you use 3/4 inch long screws. If the screws are too long, they will stick into owl house. If they are too short, the hinge will be too weak.



The easiest way to attach the hinge is to turn the owl house upside down. Place the hinge in the middle.

Important Note: Before you add the screws to the hinge, make sure that the sides are equal and the back of the roof is up against the metal T Bracket.





Before you put the screws into the hinge, make sure that the back of the roof is right up against the metal T bracket.

Insert the #12 3/4" screws into the hinge.



This is the finished product of this step that shows the roof opened up.



This is the final step with the roof closed.



Step #8: Secure the bottom.

With some of the scrape pieces, cut them and attach them like pictured. This will keep the bottom from falling out when the house starts to rot.

Step #9: Optional step - Add weather protection.

In this case, we are using vinyl. We add it to the top, sides, and back. But, we do not add it to the front (We do not want the owl's talons to get caught between the vinyl and wood).



Here we are adding the vinyl to the sides.





Step #10: Optional Step - Add a perch bar.

In this case, we used a dead branch to create a perch bar.



Step #11: Attach a locking latch.

The locking latch keeps predators from opening the lid and snatching the eggs or owlets. Raccoons can be quite crafty, and are quite capable of opening the roof if the locking latch is not installed.



Step #12: Attachment bolts for attaching the owl house to the tree.

Pictured are 2 hanger bolts. The best hanger bolts are 8 inch hanger bolts. 8 inch hanger bolts are hard to find. 6 inch hanger bolts will work, and easier to find.



Compression springs are hard to find, so the best ones can be obtained from (2) door retainer kits. Door retainer kits can be purchased from any hardware store.

Remove the metal rods from the springs and dispose of the rods. Keep the rest of the hardware for the next step.

The end result is pictured on the right.

The compression springs will allow the tree to grow and expand without destroying the owl house.



Step 13: Attach a chain (from door retainer kit) that can be used to lift the owl house up the tree.

We use the left over hardware from the door retainer to make the chain lifter.

Attach the metal brackets into the side walls.

Step #14: - Protect the side walls with parafin was to prevent bees from building nest inside the box.

Wasp and Hornets are the two most common bees to build nest in the owl box. Bees can sting and kill the owlets.

Now we are ready to hang the owl box.



Step #15: Selection a location for your Owl House.

Try to selection a location that is 30-200 feet from a water source. A water source can be a lake, pond, river, stream, swamp, or water hole. Even a dribbling stream will work.

You do NOT want to place it so close to a water source that the owlets drop out of the box and fall directly into the water. They will drown if you do this.

Try to keep the owl house 100+ feet away from a house or building.

Try to keep the owl house away from roads. Barred Owls fair very poorly with cars. They tend to fly very low and have a high incidence of car impacts.

Try to place the owl house facing north, or in a location that is protected from the sun. This is more important in the southern part of the United States.

Don't worry about squirrels taking over the owl house. If a Barred Owl decides it wants the owl house, when squirrels are using the house, the owls will either evict or eat the squirrels.

Male Barred Owls are the ones who pick the nesting location. Males like to roost in a nearby tree. If you have a conifer tree nearby, this will help attract them to using the owl house.

The best time to hang a Barred Owl house is November. In November the bees are hibernating, and Barred Owls will have 3 months to find the house.

Try to pick a tree that is 1 foot or larger in diameter.

The Barred Owl House should be in dense woods, but the entry hole should be fairly open for easy flying to entry hole by the male barred owl. Remember, the woods may not seem very dense in the Fall.

Barred Owls will rarely nest on mountain tops. But, you can find them in the foot hills near mountains.



Step #16: Create rigging to lift and hang the owl house.

We usually pick something strong that we can put around the tree and hang from a branch to lift the owl house. We use a rope and pulley to easily lift it.

It doesn't have to be a chain, but must be strong enough to support the heavy owl house (30-40 pounds). If you use a rope, make sure that the knots are good enough. You would not want the knots to untie while you are hanging the owl house. Safety first!



Chain wrapped around the tree.

Make sure the chain goes around the TOP of a branch. This will keep it from falling down to the ground.

We then hook up the pulley and rope.

We then install the top hanger bolt into the tree. (Attach about 1-1/2 feet below the pulley)

We drill a hole in the tree for the top hanger bolt. For a 3/8" hanger bolt, we use a 5/16" drill bit to drill the hole. When drilling the hole in the tree, remove the drill bit after drilling 3/4" into the tree and remove any saw dust. This will make it easier to drill. To install the hanger bolt, screw two 3/8" bolts onto the hanger bolt, and tighten them against each other. Then use a wrench to screw the hanger bolt into the tree. Do NOT install the bottom hanger bolt at this time. We will do this AFTER we have hung the owl house.



Before we lift the owl house we want to attach the owl house stabilizers. This will help keep the house from swaying on the tree.

You also need to add tree bark chips to the bottom of the owl house. It should be about 5-6 inches deep. Do NOT use sawdust. You can get the bark chips from a nursery or Home Depot.



Attach the rope to the chain on the back of the owl house.

Safety Tip: Never EVER stand under the owl house while rising or attaching the owl house. If something should break, you don't want to be injured or killed by the owl house falling on you.

This is at least a 2 person job. So get someone capable of helping you.

If you do not feel confident doing this, hire a tree firm to hang the house for you. Falling off the ladder is very

easy.

Also do not hang the owl house on a windy day. The wind will move the tree, and could cause you to fall from the ladder.

Always double check everything before lifting the house. **Safety always comes first!**



Your ladder needs to be on the left or right side of where you are going to lift the owl house.

Once you have lifted the owl house, climb the ladder and lift the owl house onto the top hanger bolt. Grabbing the opening of the owl house seems to be the easiest way to handle the owl house while trying to slip the metal bracket onto the hanger bolt. Once you have slipped the owl house onto the hanger bolt, attach the compression spring, and screw on the washer/bolt.

Now you can drill the bottom hole and attach the bottom hanger bolt. Attach the compression spring and bolt.

You do not want to tighten the bolts all the way down. The owl house will NOT be rigid on the tree.

I like to use wing nuts instead of standard hex nuts. Both have their pros and cons.



Here is a picture of the bottom hanger bolt installed.



Here is the finish project!

You don't want to visit the owl house every day. This can scare them away.

Male Barred Owls will sometimes drap dead squirrels over branches near a suitable nest, so if you do see this, it is a sign that a Male Barred Owl is interested in your house.

Once they start to use the house, they will return to your house for the rest of their lives. Even their offspring will use it if their parents are killed. If you have to

replace the owl house or tree years from now, they will take to the new owl house or location if it is located near the first house.