



Building A Wood Duck Nest Box

Introduction

Background:

Wood ducks are native to North America and are found in 48 states. Wood ducks' preferred habitats include bottomland forests, freshwater marshes, and wooded swamps. However, they can be found in rivers, creeks, and streams during migration. Male wood ducks are beautiful waterfowl for they are brightly colored while their female counterparts are shades of brown. These ducks are considered cavity nesters, which means they nest in holes of trees or in nest boxes near or in water. One way to bring this beautiful waterfowl species to your home or property is to build a nest box. The plans in this instruction manual are for a wood duck nest box that you can build, install, and maintain on your own!

What To Expect:

This project can be time consuming depending on whether or not you have the needed supplies and where you decide to place the box after completion. To build the box itself it takes no more than **1-2 hours**. You will need a slab of wood preferably pine or cypress, handsaw or table saw, impact drill, drill bit, jigsaw, wood screws, a mesh wire square, measuring tape, sand paper, staple gun, staples, and a pencil. The construction of the nest box can get messy and suggested to be built either in a garage, workshop, or outside where wood pieces can be cleaned up easily. Once built, you must choose a location to place the box whether on a tree mounted or on its own pole near or in water. By spring, you will hopefully have wood ducks nesting! Also, nest boxes require seasonal maintenance and one must commit to this once their box is in place. It is advised that protection guards be placed around the box to protect it from predators.



WARNING: Kids under the age of 16 should not operate any of the power tools listed. Kids between the ages of 13-16 may operate the listed power tools with the consent of an adult and under their supervision. Adult supervision is advised to be present at all time during build.

CAUTION: This build involves power tools please be careful when operating. Wear protective eye and hand-wear during use.

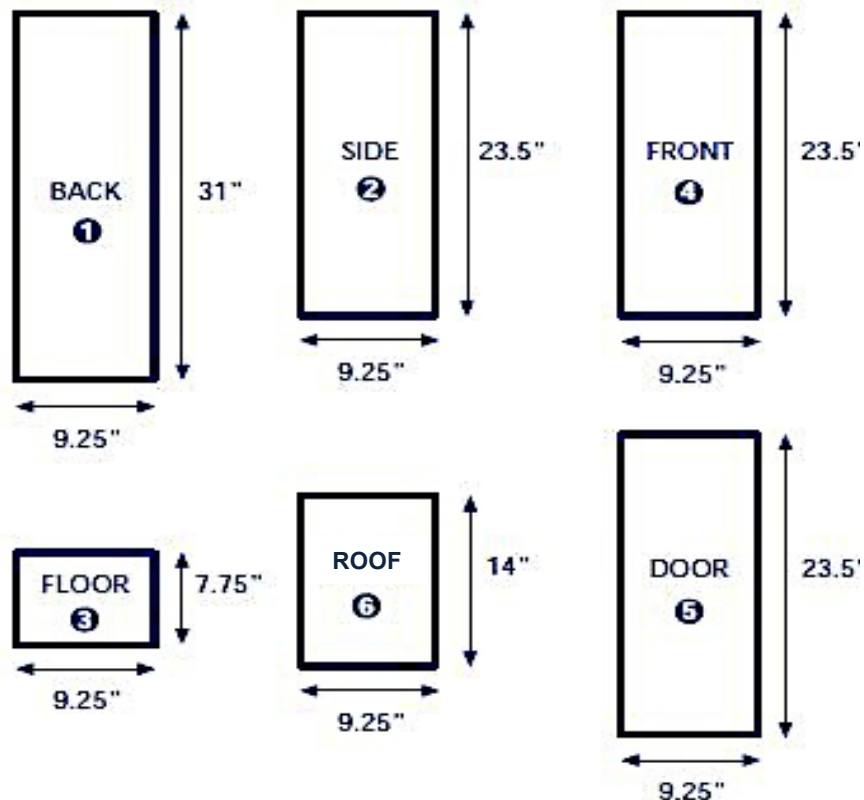
Procedure

Materials Needed:

- Handsaw or table saw
- Jigsaw
- Impact drill ($\frac{1}{2}$ " bit and Philips attachment)
- Staple gun
- Staples
- Wood screws (30 includes some for tree attachment option)
- Wire mesh (7" x 10")
- Sheet of wood (pine or cypress 1" x 10' x 12')
- Measuring tape
- Sandpaper
- Pencil
- Straightedge

Instructions:

1. Use the tape measure, straightedge, and pencil to draw the six pieces of wood that are shown to the right in the sheet of wood.
2. Use handsaw or table saw to cut out each of the six pieces.
3. Sand the edges of each piece of wood.
4. Attach the SIDE piece of wood to the BACK piece of wood using 4 wood screws and the impact drill.
5. Drill 5 ventilation holes into the FLOOR piece. This allows for moisture drainage and airflow.
6. Attach the FLOOR piece to the SIDE and BACK pieces using the impact drill and wood screws. Drill 2 wood screws to attach it to the SIDE and 2 wood screws to attach it to the BACK.



7. Take the FRONT piece of wood, straightedge, and pencil and draw an entry hole for the wood ducks. The hole should be 4" x 3" and be placed $3\frac{1}{2}$ " from the top of the FRONT piece.

8. Use the jigsaw to cut out the entry hole. Sand the entry hole smooth.

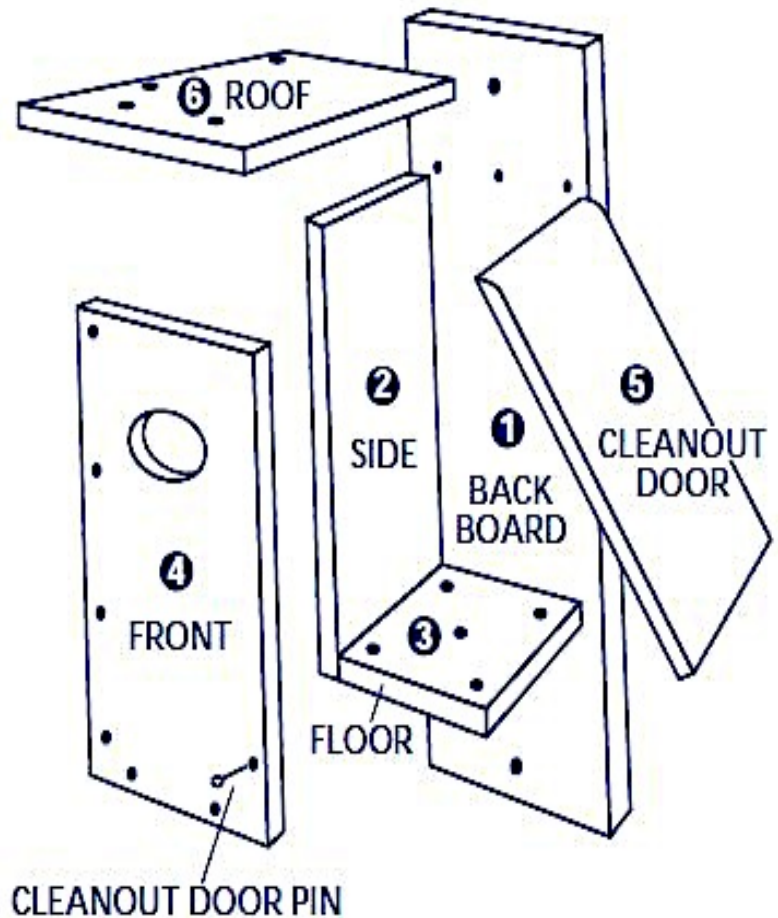
9. Place the mesh wire on the inside of FRONT piece of wood just below the entry whole and staple each corner of the wire mesh to the wood. This mesh acts like a ladder allowing the ducklings to get out of the box once hatched.

10. Attach the FRONT piece to the SIDE and FLOOR pieces using the impact drill and wood screws. Drill 4 wood screws to attach it to the SIDE and 2 wood screws to attach it to the FLOOR.

11. Attach the DOOR piece to the FRONT and BACK pieces using the impact drill and wood screws. Drill 1 wood screw to attach it to the FRONT and 1 wood screw to attach it to the BACK. This creates a hinge door, which allows you to open and clean out the box after each season. You may add a screw for a latch to ensure hinge door stays shut.

12. **DO NOT** attach the roof to the door! Attach the ROOF piece to FRONT, SIDE, and BACK pieces using the impact drill and wood screws. Drill 4 wood screws from the top and 3 wood screws back.

13. **DO NOT** stain or paint the boxes! The nest box should be complete and resemble the image to the right. It is now ready for installation. Add wood shavings as nesting material to the box.



NOTE: The black dots (not including the 5 on the FLOOR piece) in the picture above are the wood screws and location of where they should be placed and drilled. They are all not picture here but the majority of them are.



Picking a Location:

Picking a location to install the nest box is just as important as constructing the nest box itself. Wood ducks require wooded area that contains trees such as oaks and maples that is within 75 to 50 feet of water. Wood ducks preferred habitat is wooded wetlands that holds water year round, but can be found along riverbanks and near ponds as previously stated.

Placement:

You have one of two options for placement of the nest box: attach the box to a tree or place the box on a steel pole. If you decide on the tree route avoid placing the box near thick branches for predators such as raccoons and snakes can use them to gain access to eggs in the box. Also, avoid placing the box on birch trees if you live in an area prone to beavers. Beavers eat birch trees. Attach box to tree with wood screw and impact drill. If you decide to mount the nest box on a pole this will allow for more versatility. Poles allow for the boxes to be placed in water or in wetlands as shown in the picture to the right.

There are a few requirements if you select the pole mount option:

- The pole should be steel
- The nest box should be placed on the pole so it rests at least 5 feet above the water
- Remove branches or twigs out of the way so the ducks have a clear flight path to the entry hole
- The entry hole should face the water
- **DO NOT** place nest box near other nest boxes
 - Wood ducks are territorial and perform egg dumping

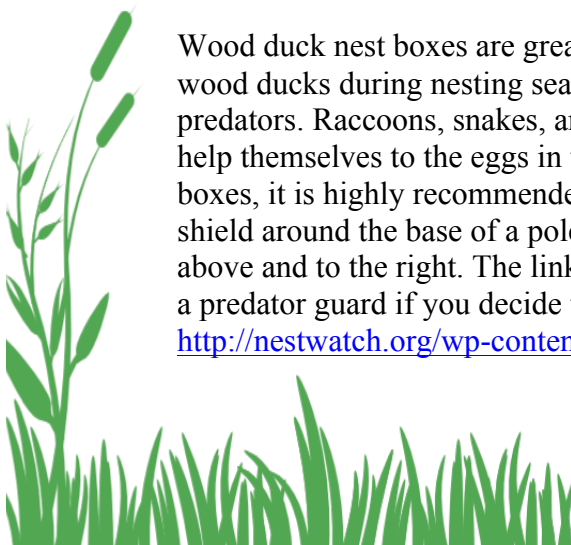


Additional Tips

Predator Protection:

Wood duck nest boxes are great at providing shelter and a home for wood ducks during nesting season; however, these boxes can attract predators. Raccoons, snakes, and squirrels are among the few who often help themselves to the eggs in the nest boxes. To avoid predation on nest boxes, it is highly recommended that you place a plastic or metal cone shield around the base of a pole or tree as demonstrated in the picture above and to the right. The link below will instruct you on how to build a predator guard if you decide to add one.

<http://nestwatch.org/wp-content/uploads/2013/06/guardcon.pdf>



Maintenance:

Nest boxes must be cleaned out during fall and winter months. You must remove old nesting material and replace it with new. Parasites can find their way into the nesting material so it is important to maintain a clean box for the next nesting season. Use wood chips as nesting material. **DO NOT** use sawdust or fine nesting material for these may suffocate ducklings. **DO NOT** use chemicals or cleaning products to clean the nest box. You may use unscented soap and water to clean the box.



Troubleshooting:

There is other cavity nesting bird species besides wood ducks that might inhabit your nest box. If this happens do not disturb or remove the species that selected to nest your box. It is important to note that these species are just as important to the ecosystem as wood ducks are. Let that species nest for that season and hopefully the following breeding season your box will house wood ducks.

Glossary:

Egg Dumping- the method of one female bird laying her eggs in the nest of another bird. This is bad and can result in nest abandonment.



Hopefully you will see this sight come spring!

Audience:

This set of instructions is for the general public instructing them on how to build a wood duck nesting box. The audience mostly likely has some sort of water source such as a pond or river on their property. They also probably have woods on or near their property. The audience would be nature lovers, who are interested in attempting to attract wood ducks to their property. The instructions could be used for educational purposes. A middle or high school class with the help of teachers could construct nest boxes for a conservation project or for a local management area.