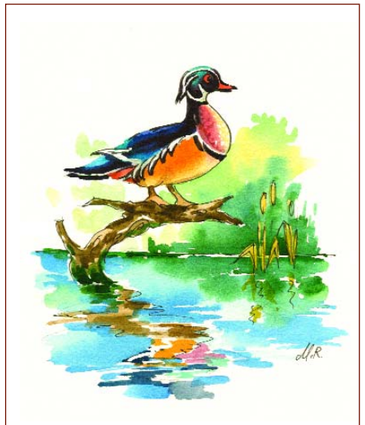
HOW TO: BUILD A WOOD DUCK NEST BOX

SIMPLE PROJECTS FOR CONSERVATION

While most waterfowl nest on the ground, wood ducks prefer depositing their eggs in the holes of mature trees. But this preference for lofty digs means that the ducks lose their nesting sites whenever forests are cleared, which explains the drop in America's wood duck population over the last century.

Fortunately, wood ducks aren't picky about artificial substitutes and will readily adapt to nest boxes. Thousands of wood duck nest boxes have been erected over the past 50 years by conservationists looking to counteract loss of forests and wetlands. Try building one yourself.



Materials:

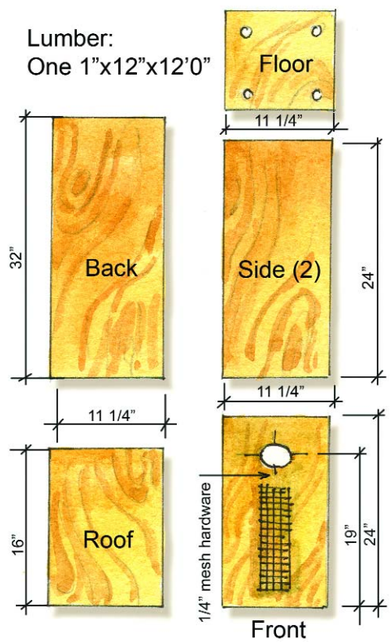
- 1" x 12" x 20' board of lumber, preferably rough on one side. Use weather-resistant, untreated wood such as cedar, cypress, pine, or spruce.
- Hand saw or table saw
- Drill and 1/4" drill bit
- Jigsaw or hole drill
- At least 30 galvanized nails or screws, size 8d
- Two 3" galvanized hinges
- Hammer
- Sandpaper
- Measuring tape
- Hardware mesh (optional)
- Support pole (such as 4" x 4' cedar post or 2" metal pole
- 3' x 3' galvanized sheet metal
- Tin snips
- Leather gloves

1. Cut the wood

Measure the lumber in order to saw it into six segments; note that a 12" width of lumber actually measures 11 1/4". The pieces are: back 32" x 11 1/4"; two sides 24" x 11 1/4"; front 24" x 11 1/4"; floor 9 3/4" x 11 1/4"; roof 16" x 11 1/4". Drill four or five 1/4" drainage holes in the floor piece. Drill holes on the top and bottom of the back board for securing to support post.

2. Prepare the front piece

Make a hole (3" high x 4" wide) in the front piece using a jigsaw or hole drill. The center of the hole should sit 19" up from the base of the piece. Roughen or score the wood below the hole to make the surface easier to climb for the ducklings, or create toeholds by attaching a strip hardware mesh.

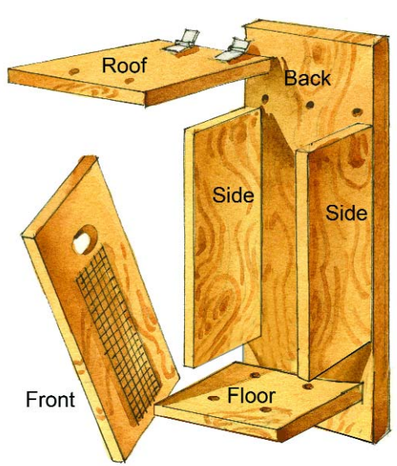


3. Assemble the box

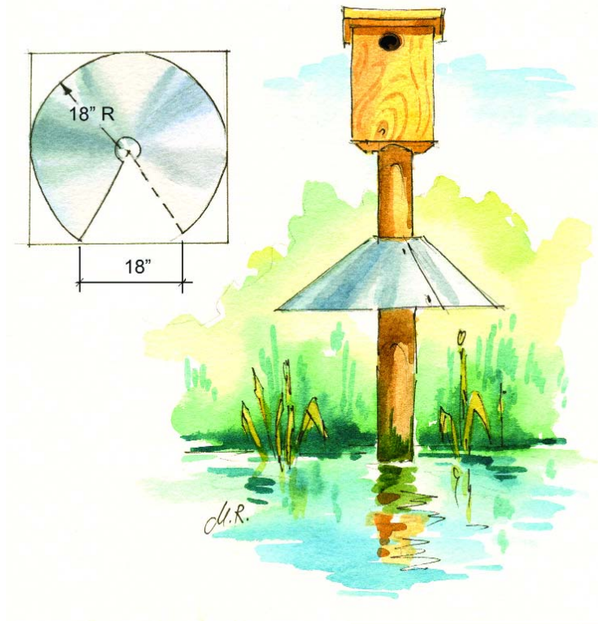
Attach the front to the two sides using nails or screws. Attach the bottom next, and then the back, allowing the back board to extend above and below the box (for securing to the pole). Attach the roof piece to the back board using the two hinges; this will enable you to access and clean the nest box.

The nest box does not need to be painted or finished, but if you want to apply a finish, use nontoxic wood preserver or earth-tone paint—and only on the outside surface.

Place a 4" layer of wood shavings in the box for nesting material. **Don't use sawdust;** it will suffocate the ducklings.



ILLUSTRATIONS BY **MARIA RABINKY**



4. Making a cone guard

A cone guard helps to keep snakes, raccoons, and other predators out of the nest box. Cut out a 3' circle from the sheet metal using tin snips and leather gloves. Make a slot to the middle, and then cut out a center circle that's 1" greater in diameter than the support pole. Drill 5/16" holes in the sheet for 1/4" bolts or rivets to secure in a conical shape.

Slip the cone guard over the pole before attaching the nest box to the pole. Secure it below the nest box using bolts or mounting blocks.

5. Installing the box

Late winter is the best time to erect the nest box. Locate a wetland that has both open water and vegetation (shrubs, trees, aquatic plants). Place the box near enough to the water for the ducklings to reach it readily, or in the water, at least 4' above flood level.

Anchor the support pole so that it sits solidly in the ground or pond bottom. The entrance hole must face an area that allows for unobstructed flight. Avoid placing the box near any branches that might be accessed by predators.

If using more than one nest box, don't place them closer than 600' from each other in order to maximize the chance that each box is used and goes unharmed by competitors.

6. Checking the box

Plan on checking the box at least once before the beginning of nesting season, and then at least once a month during the nesting season. After nesting is complete, old nests must be cleaned out, as well as those of invasive species such as European starlings. Boxes may also be used in the winter by screech owls or other desirable species.