**Build a Duck Nest Box**

Wood ducks, buffleheads, barrow’s goldeneyes, common goldeneyes, hooded mergansers and common mergansers are all cavity nesting ducks. They build nests in abandoned woodpecker holes or natural tree cavities caused by disease, fire or lightning. These ducks will also use a constructed nest box. Here are plans for a nest box that you can build, install and maintain. The design, which is used by the Ducks Unlimited Greenwing program, may even attract other cavity nesting birds such as kestrels, tree swallows, great crested flycatchers or screech owls.

**CEDAR IS IDEAL**

Cedar lumber is recommended because it is naturally resistant to weather and insects. You can also use other lumber such as pine or plywood. Boxes made of plastic or metal are not preferred. Avoid treated lumber. The box pictured uses 10.58 linear feet of 1" x 10" (3/4" thick by 9 1/4" wide) lumber that is naturally resistant to weather and insects. Cedar is ideal for these birds because it is naturally resistant to weather and insects. You can also use other lumber such as pine or plywood. Boxes made of plastic or metal are not preferred. Avoid treated lumber.

**FINISHING TOUCHES**

Ducks Unlimited does not recommend applying a finish to cedar boxes. A finish might help to extend the life of a plywood box. If you decide to apply a finish to your nest box, use a nontoxic wood preserver or a light shade of an earth-tone paint.

The ducks will find your box by seeing the contrast in color caused by the entry hole. Do not apply finish inside the box.

Cavity nesting ducks do not carry nesting materials. It’s important to help them out by placing four to six inches of wood shavings in the bottom of the box. You can find wood shavings at your local pet or farm supply store. Do not use sawdust. It can suffocate ducklings and holds moisture.

Every year in the fall, after the nesting season has completed, or in the winter, clean out old nesting material from the box and replace it with a fresh layer of wood shavings. This annual cleaning needs to be a part of your long-term maintenance commitment once you place your nest box. Avoid the urge to look into the box during spring and summer.

**NEST BOX MAINTENANCE: A LONG-TERM COMMITMENT**

Once a cavity nesting bird starts using your box, you’ll likely see many broods raised over the years. Nesting sites for these birds are limited in number. When they find a good nesting site, they will return in following years. When you put up a nest box you are committing yourself to maintaining that box. Fall and winter are the best times to remove old nesting material, tighten any loose screws and mounts, and add new wood shavings.

If you don’t have any ducks using your box over the summer, don’t worry. Waterfowl biologists have seen waterfowl migrating in the fall and looking for potential nesting sites for next spring. This too is a good reason to keep your boxes in top condition. You never know when someone might be popping in!

**PLASTIC PIPE GUARD**

Metal or plastic pipe (nove pipe, sewer pipe) drilled at the top and bottom and bolted to the tree or pole makes an effective predator guard. To prevent small rodents from crawling through, place a crumpled piece of chicken wire and bolted to the tree or pole makes an effective predator guard. T o prevent small rodents from crawling through, place a crumpled piece of chicken wire and bolted to the tree or pole makes an effective predator guard.
### Finding the Right Place

Now that you’ve completed construction of your nest box, you need to consider where to install it. Be sure to place the box in a location that will be convenient for monitoring and annual maintenance.

**WHERE TO FIND TENANTS**

To increase the chances of your nest box being used by waterfowl, it should be located in an area attractive to cavity nesting ducks. You’ll see these birds using wooded wetlands that contain water year round or, at least, throughout the summer. You’ll also see them using trees along riverbanks and lake shorelines.

**POSITIONING YOUR NEST BOX**

Nest boxes can be mounted on tree trunks or on steel poles beside the water.

- **GOOD PLACEMENT:** a dead tree with a solid dead tree in the water
- **BETTER PLACEMENT:** a dead tree at the water’s edge
- **BEST PLACEMENT:** boxes on poles near standing, flooded, dead trees

Live trees can be used for mounting boxes, but keep a close eye on your box. Growing trees may loosen mounts and make boxes less attractive to the birds.

**TREE TRUNKS**

Live and dead trees are suitable. If beavers are around, don’t place nest boxes on poplar or white birch trees. Beavers eat these trees. Also, avoid placing the box where stiff branches are close to the box. Raccoons can climb these branches and gain access to the box.

**STEEL POLES**

Make sure the poles are fixed solidly in the soil or marsh bottom, to ensure that the nest boxes are stable. Drill two holes in this pole to accommodate a predator guard (see last page).

- **Boxes should be placed above typical high water levels and at a height that will allow you to access the box for monitoring and maintenance (about 4 to 6 feet above land or water).** In terms of distance inland, try to keep your box close to the water.
- **Clear an unobstructed flight path to your nest box by removing branches that might be in the way.**
- **The entrance hole to the box should face the water.**
- **You can tip the box forward a little bit to help the ducklings reach the entrance.**
- **Ducklings prefer privacy.** Don’t mount boxes close to human disturbance or close to other nest boxes.

### Procedure

**Tools and Materials Needed**

- hand saw or table saw
- drill and 1/2” bit
- jigsaw
- screwdriver
- sandpaper
- measuring tape
- pencil
- measuring tape
- straight-edge
- pencil
- sandpaper
- screwdriver
- jigsaw
- drill and 1/2” bit
- handsaw or table saw

1. Measure and cut your wood to produce the six pieces. Number the pieces as shown. See exploded view.
2. Attach the back (1) to the side (2) using four screws fastened from the back of the box. See exploded view.
3. Drill five 1/2” drainage holes into the floor (3). Attach the floor by fastening two screws through the back and two through the side.
4. Draw the entry hole on the front (4) using a pencil (4 1/2” x 3 1/2” oval). Drill a pilot hole and cut out the entry hole using a jigsaw. See detailed view. Proper entry hole dimensions are critical.
5. Score the inside face of the front (4) with a sandpaper (5). See exploded view. Fasten the material measurements. Three pieces. Number the pieces as shown. See exploded view.
6. Attach the front (4) using six screws.
7. Round the top outside edge of the door with sandpaper (5). See exploded view. Fasten the door at the top with one screw from the front and one from the back. The two screws form the hinge and allow the door to open. Pin the door shut with a nail from the front or add a latch.
8. Attach the roof (6) using four screws from the top and three screws from the back (be careful not to screw into the door). The box is now ready to install. Don’t forget to put a 4–6 inch layer of wood shavings into the box for nesting material.

**EXPLDED VIEW—not to scale!**

- BACK
- SIDE
- FRONT
- FLOOR
- ROOF
- DOOR
- CLEANOUT DOOR

**MATERIAL MEASUREMENTS—not to scale!**

- BACK 31” 9.25” 9.25” 23.5”
- SIDE 7.75” 9.25” 23.5”
- FRONT 14” 9.25” 23.5”
- FLOOR 9.25” 9.25” 9.25”
- ROOF 9.25” 9.25” 9.25”
- DOOR 9.25”

**DETAILED FRONT VIEW—not to scale!**

- Entry Hole
- Kerf Cuts (Inside face) or Hardware Cloth

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