

# Building a duck nest box



Wood ducks, goldeneyes, hooded mergansers, common mergansers and buffleheads 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 nesting box. Here are plans for a nest box that you can build, install and maintain. The design may even attract other cavity-nesting birds such as kestrels, tree swallows, great crested flycatchers or screech owls.

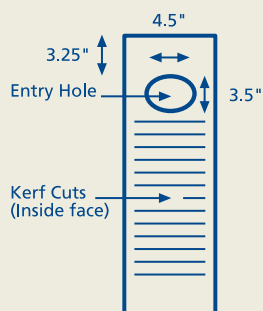
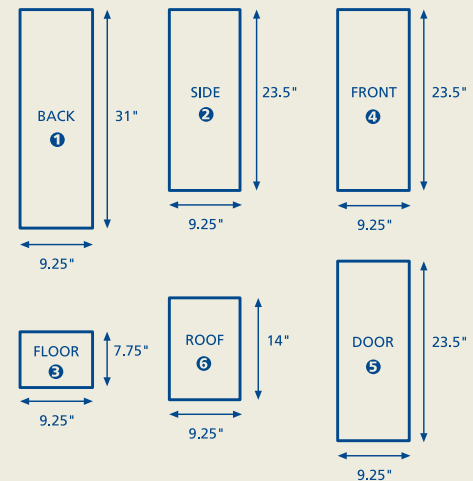
## Cedar is ideal

Cedar lumber is recommended because it is naturally resistant to weather and insects. You can also use any materials you have available such as pine or plywood (Ducks Unlimited Canada (DUC) staff in British Columbia indicate that plywood boxes better withstand the region's temperature extremes). The box pictured uses 10.5 linear feet of 1" X 10" (3/4" thick by 9 1/4" wide) lumber that is rough on one side (for the inside of the box).

## Procedure

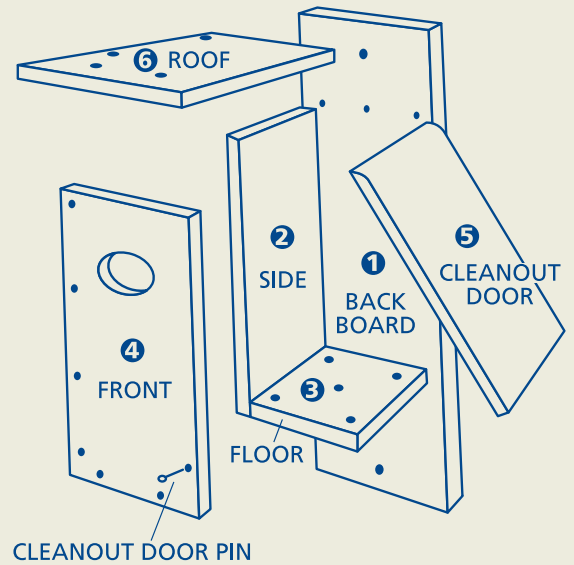
**Tools needed:** handsaw or table saw, drill and 1/2" bit, jigsaw, screwdriver, sandpaper, pencil, measuring tape, straight-edge.

- 1 Measure and cut your wood to produce the six pieces. Number your pieces as shown (right).
- 2 Attach the back (1) to the side (2) using four screws fastened from the back of the box (see expanded view on the next page).
- 3 Drill five 1/2" drainage holes in the floor (3). Attach 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, left).
- 5 Score the inside face of the front (4) using a saw. The horizontal slots will provide toeholds when the ducklings are ready to climb out.

- 6 Attach the front (4) using six screws.
- 7 Round the top, outside edge of the door (5). See expanded view (right). 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.
- 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 in the box for nesting material.



## Finishing touches

DUC does not recommend applying a finish to cedar boxes. A finish might help to extend the life of a plywood box. If applying a finish to your nest box, use a non-toxic wood preserver or a light shade of earth-tone paint. Ducks will find your box by seeing the contrast in colour caused by the entry hole. Do not apply finish inside the box.

Cavity-nesting ducks do not carry nesting materials, so 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 shavings at your local pet or farm supply store. Do not use sawdust – it can suffocate ducklings.

## 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. To increase the chances of your nest box being used by waterfowl, locate it in an area attractive to cavity-nesting ducks. You'll often see these birds using wooded wetlands that contain water year-round (or at least throughout the summer). You can also find 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 or above the water.

- + **Good placement:** a dead tree at the water's edge
- + **Better placement:** a solid dead tree in the water
- + **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. If beavers are about, don't place nest boxes on poplar or white birch trees – beavers eat these trees.

You can also mount your nest box to a steel pole. Make sure poles are fixed solidly in the soil or marsh bottom, to ensure that the nest box is stable. Drill two holes in the pole to accommodate a predator guard (see next page).



## Let us know!

Are you a youth building a nest box? Let us know, you could be recognized as a **Wetland Hero**.



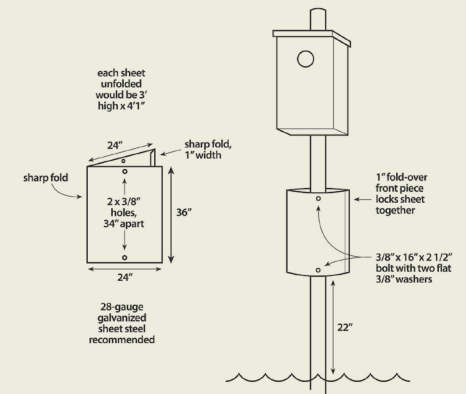
- Boxes should be placed above typical high water levels and at a height that will allow you to access the box for monitoring and maintenance (about 4 to 6 feet above land or water). In terms of distance inland, try to keep close to the water.
- Clear an unobstructed flight path to your nest box by removing 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.

## Predator guards

A predator guard will help improve the chance of a successful hatch by preventing egg-eating raccoons from entering your nest box.

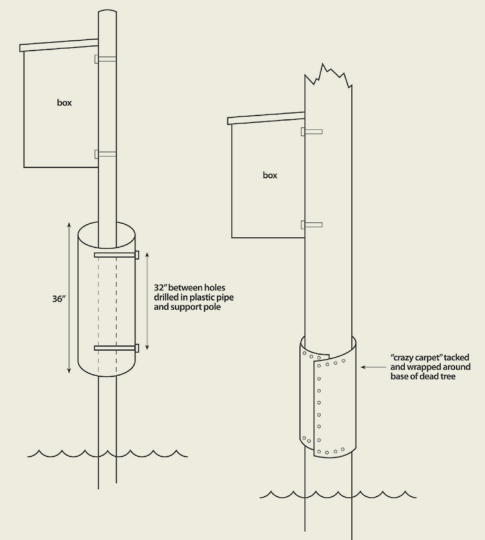
### Steel Sheet Sandwich (36" X 49" sheet of 28-gauge steel)

- 1 Fold the sheet in half along its 49" length, creating a front and back, each 24" wide.
  - 2 Along one 36" side, make a 1" fold towards the inside centre.
  - 3 Drill two holes, 34" apart (see diagram, right).
  - 4 Place your guard so it surrounds the pole or tree trunk. Slip the unfolded side under the 1" fold. Using vice-grips, bend the corners in to lock these pieces and prevent the guard from opening.
- **Pole mount:** bolt the guard into place about 2" below the nest box.
  - **Tree mount:** nail the guard in place – if the tree is alive, check the guard often to ensure tree growth hasn't popped the guard off.



### Plastic Pipe Guard

A metal or plastic pipe (stove pipe, sewer pipe) drilled at the top and bottom, then bolted to the tree or pole, makes an effective predator guard (see diagram, right). To prevent rodents from crawling through, place a crumpled piece of chicken wire between the pole and the guard.



### Plastic "Crazy Carpet" Guard

A new use for children's inexpensive plastic snow riders located in any toy store. Wrap the carpet (see diagram, far right) around the tree and tack it in place. Be sure to provide room to grow if you place this guard on a living tree.

## 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, there is a good chance they'll return in following years. When you put up a nest box, you're 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 scope out potential nesting sites for next spring. This is also a good reason to keep your boxes in top condition – you never know when somebody might pop in!

