



## Introduction

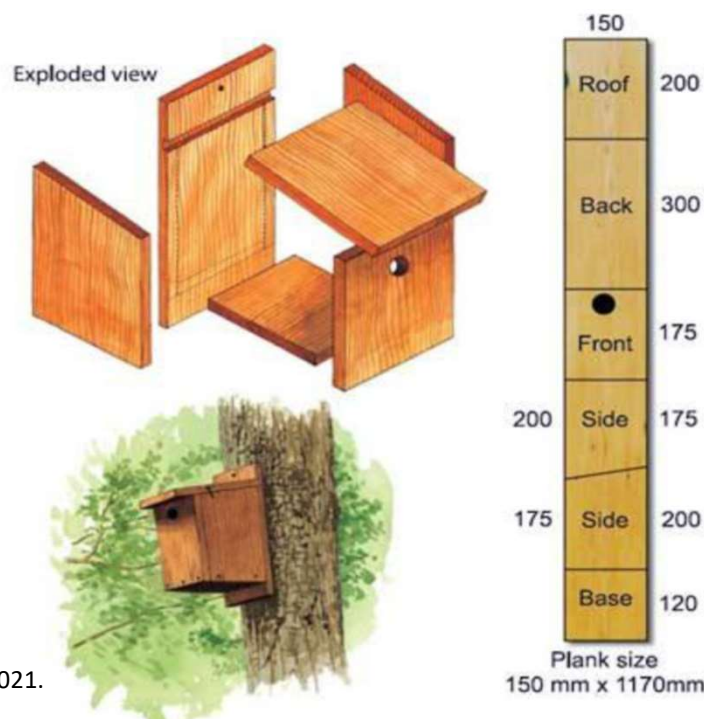
Installing a bird box encourages a bird to nest in an area. The Nashwaak Watershed Association Inc. encourages people living in the watershed to install bird boxes to create habitat for local songbirds and ducks. We also install them at our forest restoration sites. we encourage people to geotag their bird boxes and share their location with us, as well updating us on bird activity observed at the boxes. It is important to clean the boxes out regularly so that birds will use them again. This is facilitated by the removal of the roof panel in the box, which is secured by a single screw.

The hole on the front of the box varies depending on the type of bird you are looking to attract (see table below). We recommend not going larger than 1 ½ as European starlings (an invasive species) tend to invade the nests of other songbirds.

For construction, we use a 4' x 6" board of either pine or rough-cut cedar. The wood must not be treated as this can be poisonous to birds. For the same reason we also do not recommend sealing or painting the wood. Extra wood is used to cut a predator guard that is mounted over the entry hole to the bird box. This prevents unwanted, larger birds or raccoons from accessing the next, and stops woodpeckers from enlarging the opening.

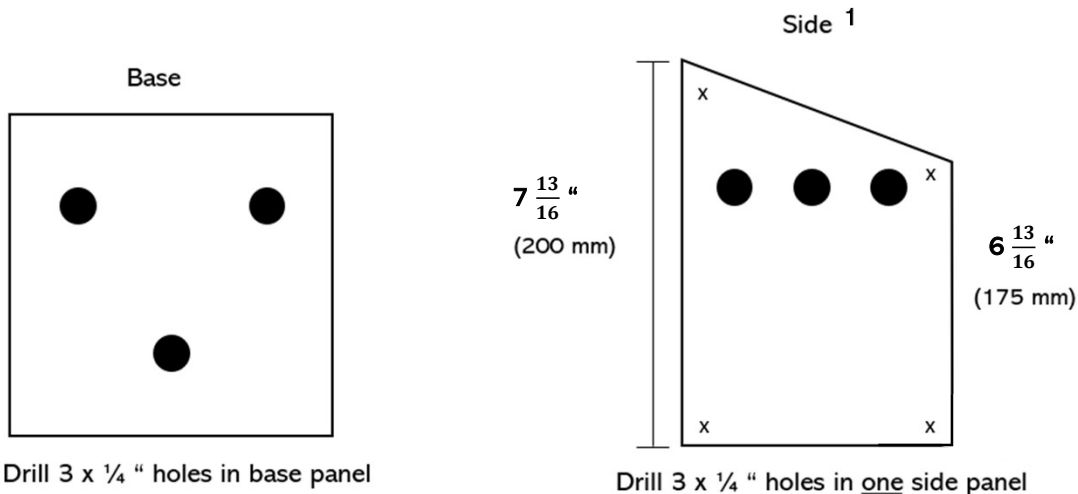
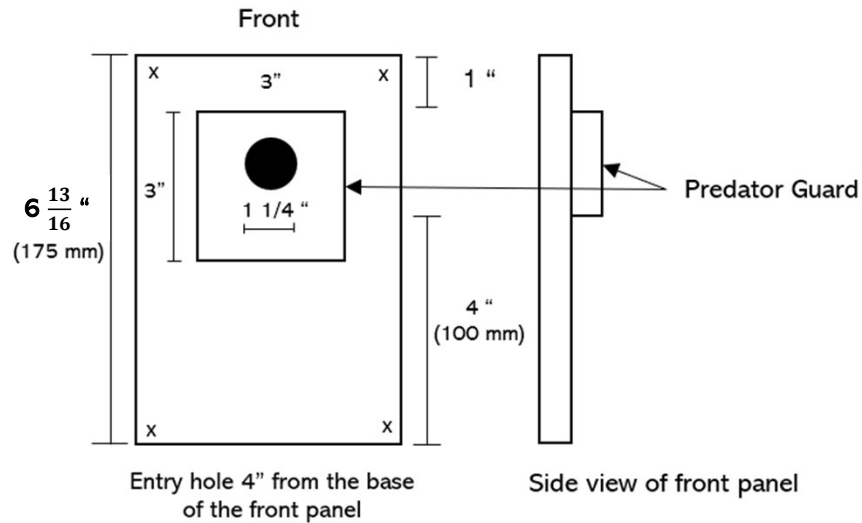
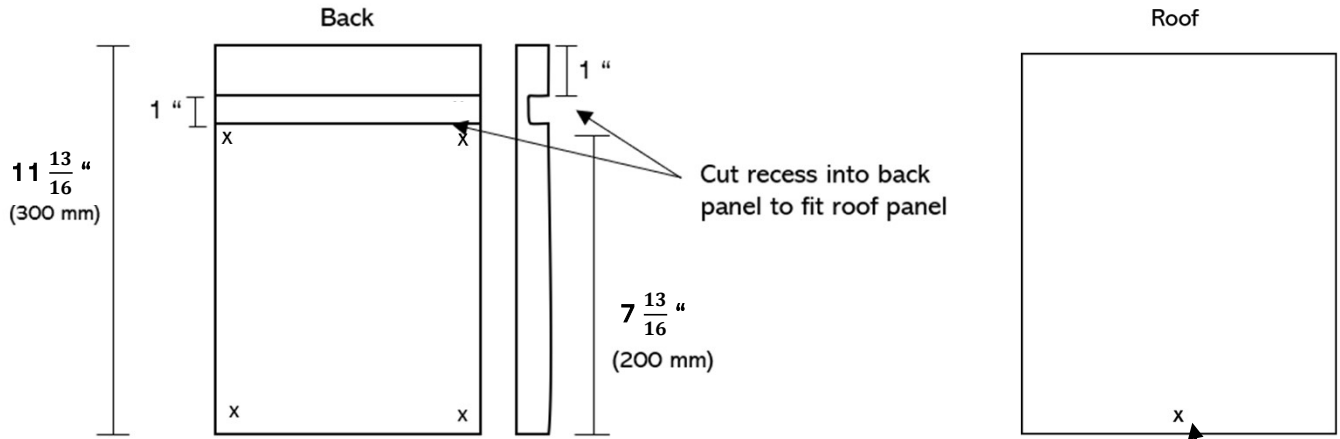
Kerf marks or cuts should be made on the front and back of the front panel. This allows young birds to climb out of and return to the nest more easily.

Bird Species	Diameter of Hole (inches)	Height above Ground (Feet)
Bluebird	1 ½	5 - 10
Chickadee	1 1/8	6 - 15
Titmouse	1 ¼	6 - 15
Nuthatch	1 - 1 ¼	6 - 10
Bewick's Wren	1 ¼	6 - 10
Carolina Wren	1 ½	6 - 10
Swallow	1 ½	10 - 15
Downy Woodpecker	1 ¼	6 - 20
Hairy Woodpecker	1 ½	12 - 20
Crested Flycatcher	2	8 - 20
Flicker	2 ½	6 - 20
Red-Headed Woodpecker	2	12 - 20
Barn Swallow	Open Sides	8 - 12
Phoebe	Open Sides	8 - 12
Robin	Open Sides	6 - 15

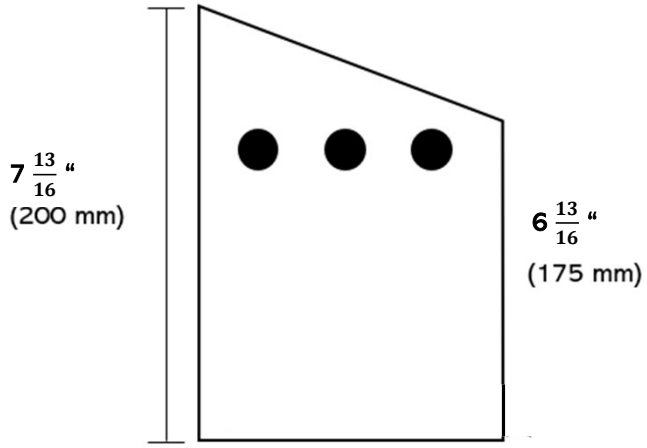


**Notes:**

- Drill three small holes in top of one of the side panels for ventilation.
- Drill three small 1/4 inch holes in the base to allow for drainage.
- Use an extra piece of wood to cut a 3 x 3 inch predator guard – drill/glue this piece to the front panel of the birdhouse BEFORE drilling the entry hole. Then drill the entry hole through both pieces.
- Drill pilot holes (x in diagram) in panels to facilitate assembly.
- Below the entry hole on the front & back of the front panel, make several kerf cuts to allow birds to enter and exit the nest more easily. On the front panel, these can be made on the predator guard.
- The pilot holes on the side panels are different for each side. On one panel there are only two holes at the top to allow it to swing open and facilitate cleaning of the birdbox.



Side 2



Drill 3 x  $\frac{1}{4}$  " holes in one side panel

Side view of side panel

