Great Swamp Watershed Association
Maker Workshop Series -
Cavity Nesting Bird Box instructions
Make at home Screech Owl or Kestrel Box Step by step How to
Who might use this nest box?

- Eastern screech owls readily use artificial cavity nesting boxes, and although it is late for the breeding season for this year, they are utilized for roosting off season.
- Kestrels can also be attracted to boxes if hung in suitable habitat.
- Flying squirrels love these cavity nesting boxes, and with a little husbandry grey squirrels can be discouraged from using.
What will I need to build the box?

- Bird box kit – or plans contained at the end of this how to if you wish to make additional boxes
- Phillips head screwdriver – larger and smaller heads –(we don’t recommend using a drill as it is easy to over tighten and risk splitting the wood)
- A hard surface to construct on- either a step or cutting board work
- An extra pair of helping hands is useful!
- Patience!
Step by step Instructions

• Lay out all the wooden pieces.
• There are six pieces of wood, and they are marked as TOP, BOTTOM, BACK, SIDE and DOOR (FRONT).
• The holes have been pre-drilled and countersunk which helps with construction, and the outside of the box has been primed ready to be painted whatever color you prefer - we recommend a dark color with an exterior latex or acrylic paint, so the box is both preserved and camouflaged. Dark green or brown are good choices but have fun! You can do this!
• The plan wood faces in, the white painted pieces face out on the completed box.
• You will note there are also five kinds of hardware -
  A 13 coated screws
  B 8 small screws for the hinge plates
  C 2 folding hinges – outside has countersink around hole
  D 1 black eye bolt
  E one latch fastener eye bolt
STEP 1

- Attach one of the sides to the back, making a right angle with the two pieces.
- Ensure the predrilled holes line up and set two screws in place.
- Using the Philips head screwdriver hand tighten the two screws working from the back of the box. Continue tightening until the head of the screw is within the countersunk recess.
STEP 2

• Add the second side piece using another two screws in the same way as the first.

• A second pair of hands can help press the pieces together in the correct alignment so you can keep the screws straight as you tighten them.
STEP 3

• Attach the bottom to the box with two screws from each side.
• The bottom of the box sits inside the edges of the side.
• The bottom has four drainage holes drilled through the base to allow rainwater to leave, keeping the interior of the nest dry.
STEP 4

• Attach the front/door with the hole at the top.

• Note that the hinges have a right and wrong side. They should sit with the countersink facing out.

• Use 4 small screw for each hinge to attach the door.

• The door hinges for easy cleaning of the nest box at the end of each nesting season.
STEP 5

- Repeat with the second hinge, ensuring good alignment as you tighten the screw.
- A helper can ensure the box door stays in alignment at this point.
STEP 6

• Add the eye bolt into the pilot hole on the edge of the door.
• Screw the eye bolt in tightly enough to have the hole horizontal.
• Add the eyebolt and fastener to the side of the box in the corresponding pilot hole. Ensure the latch piece faces downwards so it stays closed when fastened.
• It can be helpful to insert the screwdriver into the eye bolts to help in tightening them without hurting your fingers.
STEP 7

• Finally, place the top on the box and add the final four screws.
• Take a final tighten on all the fasteners and screws to ensure that they are all hand tightened.
• Celebrate!!!
• The box is now ready for painting prior to installation.
• Prepare the nest box for installation.

Paint the outside to the color of your choice using a latex or acrylic exterior paint. This will protect the box for many years to come and help camouflage it as you install it. Ensure the hinge of the door is not over painted.

Do not paint inside the box.
Mounting Instructions

- If you are trying to attract screech owls, the box should have 1-2” of pine shavings or dry leaves added. Screech owls do not add their own nesting material, and this will protect the eggs. Do not use sawdust or cedar shavings—pet stores and hardware stores sell shavings.

- Mount the box 15-30’ high but below tree canopy height, with a clear flight path to the entrance hole. Owls will nest near human habitation but place the box ideally 20’ from the house, but where you can keep an eye on it. (however, we have had success with an owl box mounted on the side of our chimney!!) Use a large tree, along a woodland edge, or on a telescoping pole…You can attach predator guards (sheet-metal wrapped around the tree or post) above and below the box to deter grey squirrels.

- Choose a shady south or west facing location facing location. Do not face north.

- Kestrels prefer open fields in a sunnier area with clear flight path approaches/ They enjoy sitting on the roof of the box.

Drill mounting holes through the top edges of the box to mount and install with aluminum nails, alternatively mount the box by resting it on a couple of small L brackets or a piece of scrap wood easily obtainable from hardware stores.
Cleaning the Box

• You can use an ice scraper to clean out the box.

• Clean the box each year prior to the nesting season in later fall ready for the nesting spring- in early March
Plans for building additional boxes
Next Steps and Additional resources

• We hope that you will send us a photo of you both building and of your finished nest box installed- let us know who uses it this year!

• If you are hooked and want more information on how you can encourage birds to nest on your property, check out the fantastic resources at the Cornell lab of ornithology's nest watch site.

• https://nestwatch.org/learn/all-about-birdhouses/