Materials:

- 4" diameter, thin-walled PVC tubing
- Two 4" PVC caps per tube
- PVC glue
- Duct tape
- Recycled newspaper shavings
- Spray Paint
- 3/8" eye screws
- Galvanized wire

Tools:

- Electric Drill
- Electric Saw
- 3-cm circular drill bit
- Small drill bit
- Dremel tool or Sandpaper



Ten day old Carolina chickadee nestlings in a nest tube. Note how the inside of the tube has been roughed up with sandpaper to help nestlings leave the nest.

LOCATION:

- PVC tubes (and wooden boxes) can get hot inside! Place your tube in a shaded area out of direct sun.
- Put your nest box at a height that is easy for you to access. Chickadees seem to have no preference for tall vs. short nest heights.
 Some natural cavities we've found were < 2 feet off the ground!
- Chickadees usually fly to a covered perch before entering the tube. That way, they can scan for predators and avoid giving out the location of their young. They don't like to make long flights straight to the box. Orient your box so that the opening is near a branch or bush that the adults can use for cover.

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How to Build A PVC-tube CHICKADEE NESTBOX



Instructions by Desiree Narango

Modified from Grubb & Bronson. 1995. & instructions by Dan Mennill & Ken Otter



Instructions (Time: About 30 min)

- 1) Trim the PVC tubing into 33cm-long sections with the electric saw
- 2) 8 cm from one end, cut a 3cm-diameter entrance hole with the circular drill bit. Make the entrance hole on the opposite side of any printing on the tube.
- Use the dremel tool or sandpaper to smooth the entrance hole but avoid enlarging it.
- 4) Next, rough up the inside of the tube. This will help the nestlings leave the nest because PVC can be slippery. Rough up the area underneath the hole and all the way down to nearly the bottom of the tube. Wipe down the tube with a wet rag to remove any plastic trimmings.
- 5) Use the small drill bit to drill 8-12 ventilation holes around the tube just above the entrance hole. Use this same drill bit on one of the PVC caps to drill 6-8 holes to help drain excess moisture from the bottom.
- 6) Cover the top of the tube with a piece of duct or painter's tape around the tube. This will keep this area from being painted and make the top cap easier to remove for nest checking.
- 7) Spray paint both caps and the tube to desired color. I decorate my tubes to mimic the markings on birch trees.

- 8) Put the cap with the holes on the bottom of the tube. Use PVC glue to hold it to the bottom.
- 9) Screw in a 3/8" eye screw on both sides of the tube so it will hang evenly.
- 10) Cut a piece of galvanized wire and attach to one side of the eye screw. Hang your tube, and attach to the other side



House Wren building in a nest tube attached to a conduit pole

Alternatively, you can also set up boxes by attaching the tube to a pole. You need ½" conduit pole (cut in half or about 5ft in length), 1 two foot piece of rebar and 1 or 2, ½" metal brackets.

Simply attach the bracket to the backside of the tube, attach the bracket to the conduit pole, hammer the rebar 1ft into the ground, and slide the conduit pole onto the rebar.

- Fill with animal bedding. chickadees prefer nests they can excavate to the desired depth.
- 12) Use Vaseline on the inside of the top cap and place on top. This will help the cap come on and off easily. Now enjoy!

TIPS:

- Chickadees tend to like tubes that are hanging or attached to small diameter trees/poles. Tubes attached to large trees were less likely to be occupied.
- Clean your box! This will help keep out mites, ants and other bugs from occupying the tube, and encourage other pairs to nest. It's best to clean out tubes right after all nestlings have fledged.
- House wren dummy nests: House wrens like tubes too, but sometimes they only build a dummy nest. If you check your tube and there is only a small amount of twigs, that's a wren dummy nest. Remove these twigs so that chickadees are not discouraged. The house wren may decide to still use this tube and will eventually build a larger, sturdier nest made of twigs.
- Put up your nest box the earliest you can! Chickadees start scouting for nest spots even during the winter season and will sometimes roost inside to get out of the cold. You'll have your best chance of attracting chickadees if your box is up before April.