## An easy way to mount the SECU (Newell) bluebird nest boxes By Suzy Spencer (draft last updated 3/9/21)

## Materials:

Note: other sizes of screws will work as long as they are not too long, in which case they would go through the body of the box into the living area where they can poke the birds. The SECU bird boxes are made of 1" lumber, not ¾". The optional entrance reducers are ¾" thick. Wood screws would be better than sheet metal screws if you can get ones that won't rust.

- One 5 ft long ½" EMT pipe (Lowe's sells these already cut to this length; you could get a 10' piece and cut in half but it's hard to cut).
- One 5 ft long ¾" EMT pipe (also sold by Lowe's).
- One 12-18" long ¾" EMT pipe to attach the box to (you have to have this cut by an electrician friend that has a special saw or can try to yourself). The length will depend on how high you want to mount the box.
- Two EMT 2-hole straps for 3/4" EMT pipe (very important to get the one for EMT pipe so it is snug and the pipe will not slip
- One EMT set screw coupling. There are two kinds: one with a dull finish (labeled as a set screw coupling) and one with a shiny smooth finish (labeled as a steel set screw coupling). See picture on the right. The smooth ones give a tighter fit but I have not used them long enough to know how they hold up over time.
- Four #8 x 1" stainless steel screws to attach the straps to the back of the nest box.
- Piece of scrap wood to protect the end of the pipe when pounding. Don't pound metal on metal or the end may deform and make it harder to slip the ¾" pipe over it.
- Nest cup to fit the inside of the box with no gaps around the sides. A small Folgers coffee container cut to ~2.5-3"" high works. There are also peat garden planting cups that you can use if they are not too small.

## Optional but recommended:

- Two #10-24 x  $\frac{1}{2}$ " stainless steel pan phillips machine screws to replace the screws in the set-screw coupling (optional).
- Paint and paint brush (optional). I paint my boxes but some don't. They will not last as long if you don't. Another option is covering the roof of an unpainted box with a shingle or some protective material.
- An entrance predator guard made from a ¾" x 3.5" x 4.5" piece of wood (basically a 1"x 4" cut in 4.5" pieces) to extend the opening (optional). If you paint these, don't paint the inside of the hole.
- Two #8 x 1.5" stainless steel screws to attach the entrance guard to the front of the box. (optional depending on if are installing an entrance predator guard).

## Tools:

- Drill for making pilot holes for screws; drill bits (a good one for the #8 screws is 9/64")
- Sledge or other heavy hammer to pound the ½" pipe into the ground (using a piece of wood to protect the end of the pipe don't pound metal on metal or the end will deform and make it harder to slip the ¾" pipe over it.)
- Phillips head screw driver
- 1.5" diameter keyhole saw bit (for optional entrance reducer)
- Hand saw to cut wood for entrance reducer and mounting board (optional)

Mount the short piece of EMT pipe to the back of the box using the two straps and 1" screws (drill pilot holes first). See the picture on the left below. Note that I have cut off the top and bottom parts of the mounting board flush with the edge of the box so it looks different from what they look like coming straight from SECU. This is not required but it prevents any future users of my boxes from mounting them on trees. Mounting boxes on trees makes it easier for predators like snakes to get into the box.

Mount the optional entrance guard to the front of the box using the 1%" screws. See the picture in the middle. If you use one, be aware that you may not be able to completely open and close the door depending on how that particular box was put together so test the position before you attach it. When making these, cut the wood about 3.5" x 4.5 " and use a keyhole saw (not a drill bit) to make the 1%" hole as close to the edge as you can so you can open and close the door more easily. The screws are lower so they will miss the metal entrance cover (although the metal is soft and can be drilled through).



Back showing straps.



Front showing entrance guard.



2 types of couplings.

Locate where you want to install the nest box. Using the scrap wood to protect the end of the pipe, pound the ½" EMT pipe into the ground until it feels secure. Try to get this as vertical as possible.

Slip the  $\frac{3}{4}$ " EMT pipe over the  $\frac{1}{4}$ " pipe that has been hammered into the ground. Attach the coupling securely to it. Push the pipe into the ground a couple of inches to prevent pivoting or you can wait to do this after the box is attached.

Get the box (with the small pipe attached) and insert the end of the pipe into the other end of the coupling that is on the ¾" pipe. Secure the screws. If it is wobbly, you can use a small piece of plastic (like a black plastic coffee container) to make a small shim.

Put the nest cup in the box and secure the entrance with the nail that came with the box.

Enjoy!