

Winter Bluebird Projects

How To Make A Raccoon/Predator Baffle For \$10 or Less

By Kurt Hagemeister

As bluebirders, we all know the critical importance of keeping our nesting boxes safe from climbing predators. This can be a challenge in areas with lots of snakes, raccoons, opossums, and various rodents. Waxing or greasing the pole can be effective. But often it will wear off over time or simply be ineffective against a persistent and strong raccoon.

The metal stove pipe-type predator baffle has proven to be very effective in most areas of the country. It is usually a 6 to 8 inch diameter cylinder made of sheetmetal with a top that has a mounting collar of some sort to hold it firmly on the pole just below the nest box. This baffle works because most raccoons and mammals that can shimmy up the pole can not get their legs around the cylinder. Also, they can't dig their claws into the metal to get a grip to be able to climb over it either. Finally, the solid metal top with no gaps deters snakes and smaller animals from climbing up inside the baffle to get past it.



One big challenge for bluebirders is to be able to put these baffles on all their nest box poles at an affordable cost. To buy a commercially made baffle can cost upwards of \$30 or more. Below is a step by step procedure for making one for \$10 or less from material you can purchase at a home center or hardware store that is just as good as the commercial baffle. And it isn't very hard to make either!

The baffle is made from a 24" long round section of 6" to 8" diameter galvanized steel ducting (sometimes called stove pipe too). 6" works fine most of the time, but if you have unusually large raccoons in your area, the larger diameter may be useful. It is supported on the nesting box pole by a collar made from a PVC pipe reducer (or adapter) that is a transition from a large diameter pipe to a smaller one. The key here is to use a reducer where the inside diameter of the smaller end matches as closely as you can to the diameter of the pole you're using. These instructions assume a 1/2" electrical conduit pole.

Tools Required:

Power drill/driver, medium Phillips screwdriver, a 1" hole saw bit capable of cutting through metal (or a pair of small tin snips), measuring tape, and a 5/32" drill bit.

(NOTE: The above tools and instructions below assume you are mounting this baffle to a 1/2" electrical conduit pole. If you are using a thicker pole, use a larger diameter hole saw that matches as closely as possible to the outside diameter of the pole. And then you'll need a slightly larger PVC adapter to match the pole outside diameter.)



Materials:

- 1 24" long, 6" diameter galvanized steel stove pipe
- 1 stove pipe cap 6" diameter
- 1 ¾" by 1: Sch. 40 Piping adapter PVC (to make the baffle mounting collar)
- 3 ¾" #10 machine screws Phillips head
- 4 ½" #8 Hex Sheet metal screws



PVC Adapter with threaded end

Steps:



1. Using the measuring tape, find the center of the stove pipe cap and mark it with a pencil.

2. Drill a pilot hole in the center if the hole saw does not have a bit in the center. If it does, drill the 1" hole. If using tin snips, you'll need to still drill the pilot hole, but probably a little larger to get the snips started. Then, cut the hole size as closely to 1" as possible.

3. Join the Stove Pipe section together along the pre-formed locking seam. Then, insert the stove pipe cap into the non-crimped end of the stove pipe section. The top of the cap should be almost flush with the top of the

stove pipe. Then, secure both pieces together with the 4 ½" sheet metal screws installed equidistantly around the top.

4. Now, take the PVC pipe adapter and drill three (3) 5/32" holes around the larger diameter section equally spaced. The holes should be drilled straight toward the center axis of the adapter. See the picture to the right.

5. Screw in the three ¾" machine screws into the holes, but not all the way yet.

6. Now you're ready to install the baffle on the pole. Put the baffle collar (adapter piece made above) on the pole from the top so the threaded end is up and the flat wider part is about where you want the top of the baffle to be. (This should be up pretty close right below the bottom of the nesting box). Tighten the screws so the collar is tight on the pole.

7. Lower the baffle over the top of the pole so the threaded part of the collar goes through the hole in the top. If you used a hole saw, you may have to rotate the baffle to "screw" it onto the collar. This will help keep it a little more secure. In either case, just let the baffle rest on the flat part of the collar. That's it!



The baffle will flop around some on top of the collar. But, this is a good thing as it makes it harder for animals to hang onto the baffle as it flops around. If you'd like to secure it more, get a 1" inside diameter conduit locknut used in electrical box construction and install it from the top over the ¾" inside threaded part sticking above the top. It will help tighten the baffle top against the collar shelf below.



Conduit locknut

Final Tip: If you'd like your baffle to blend in more in the yard, you can always spray paint it black with an exterior, rust-protecting paint like Rustoleum.