

How to make Bird perch

If you build it, they will perch

You and the birds can both benefit from this easy project. The construction of this perch is simple and straightforward, perhaps offering the opportunity to learn a new skill, for those who have not soldered before. Birds that do not normally come to a feeder may come to this perch, which will offer a view unobstructed by foliage, for both you and the bird. To my knowledge there is nothing similar commercially available.

Most interesting, was to watch the Eastern Phoebe, *Sayornis phoebe*¹ go through the repeating ritual of perching, darting off to catch insects and return. Best soul food was watching a breeding pair of Eastern Bluebird, *Sialia sialis*² investigate the suitability of the terrain, while resting on the perch. Robins, Bluejays and Catbirds will all use this perch.

The instructions are intended to be concise for those that follow directions. For those of us who may read the instructions, after completion, to see what the manufacturer's opinion was on how the product goes together, go for it. Nothing here is critical, it is an elevated stick. If soldering intimidates you, try epoxy, if you like the look of polished copper, polish and clearcoat. If there is concern of eye impact, increase the length of the six-foot piece a foot or so, and few would be at risk. Innovate, make it your own and have fun.

Tools

- Measuring tape or rule,
- Tubing cutter, optional, the saw will work fine
- Saw, jig saw with FINE blade, or hacksaw
- Torch, suitably sized
- Drill, hand or power, with small bits
- A flat file, suitable for metalworking
- Level, torpedo style

Materials

- ½ copper tube, type L, 10 feet
- ½ copper tee, (2) required
- Small screws, round head preferred, brass a plus, see below
- Stick, see below

Consumables

- Sandpaper, fine or Scotch-Brite™(suitable for metalworking, not paperbacked flint paper)
- Flux
- Lead free solder

Cost

- ½" copper tube \$13.14, at Home Depot (3 APR 2010)
- ½ "copper tee \$.85 each, at Home Depot (3 APR 2010)

Materials selection.

I chose copper tube, as it is readily available, of adequate strength, well suited for outdoor usage and will oxidize to an unobtrusive color. Half inch type L with a wall thickness of .040", was selected over the thinner wall type M, and its wall thickness of .028" for increased rigidity.³ Alternatively three quarter tube could have been used, but there was a desire to keep the appearance lighter.

The selection of the stick is not critical, about a ½ inch in diameter, with bark removed, 6-12" long moderately straight. As it is not in contact with the ground it will last a few years, and is replaceable. The use of wood for the perch is subjective, it is more natural, and has the potential benefit of more natural photographs. If you can find a Cedar, or Locust it will be more weather resistant, but any type will suffice. If near the shore, an appropriately sized piece of driftwood could be used. Keep in mind the dimensions, longer will affect stability, for birds landing near an end, larger in diameter will be difficult to affix to the tee.



Metal would be more durable, and there is that eighteen inch piece left over, that could be cut into a pair of six inch pieces and soldered into an unmodified tee. Bird's feet will not freeze to it in winter.⁴

The screws are best as roundhead wood screws #4 or #6 in plated steel, 3/8" long would be a good choice, the same in stainless steel the better choice, and in brass the best choice. Roundhead screws as opposed to flathead screws will allow a bit of float in the holes, compensating for any misalignment.

Making the cut

Three cuts, of the tubing, are required, first cut off about four feet from the end of the copper tube. Next cut the four-foot piece to two feet long. One of the two-foot pieces should be cut to six inches long. You should now have four pieces, a six foot, a two foot, a six inch and an eighteen inch piece. The eighteen-inch piece is not used. Deburr all of the cut ends of tubing. These dimensions are very non-critical. The final goal is to have a perch about six feet above grade, with two feet below ground, and a six-inch stub to prevent rotation.

Soldering the first joint

If you have never soldered before, the endnotes have a link to an excellent tutorial on soldering.⁵ The branch of the tee is the leg you can not see through, the run is the one you can see through. A good joint will never be attained, if starting with oxidized copper.

1. Take one of the tees, and prepare the branch of the tee, and one end of the six inch piece for soldering. Solder and clean.
2. Take the tee with it's attached six inch piece and prepare one end of the run, and and one end of the six foot piece for soldering. Solder and clean.
3. Take the other tee and clean the branch of the tee, and the unsoldered other end of the six foot length to be soldered. Orientation does not matter. Solder and clean.

Now we have an assembly that will resist rolling, as we alter the tee.

Altering the tee

On my first couple of prototypes, (still in use) I used a band saw to pre-cut the tee along the axis of the run. Presuming most do not have a band saw in the basement, we soldered the tee first, then do the alterations making it safer to hold. Remove the top half of the tee, so the stick will nest in the bottom

Drill holes, for screws, in the bottom of the tee.

Soldering the remaining joint

1. Prepare the run of the tee (previously soldered to the the six foot piece), and one end of the two foot piece for soldering. Solder and clean.

Mount the stick

Predrill one hole in the stick, using the drilled tee as a guide, avoid drilling through. Install one screw. Predrill the second hole in the stick, using the drilled tee as a guide, avoid drilling through.

Install your perch

Dig a hole, deep enough to keep the stub a couple of inches below ground, put the perch in the hole make some effort to keep it plumb as you back fill the hole.

- 1 http://www.allaboutbirds.org/guide/Eastern_Phoebe/lifehistory
- 2 http://www.allaboutbirds.org/guide/Eastern_Bluebird/id
- 3 http://www.copper.org/publications/pub_list/pdf/copper_tube_handbook.pdf
- 4 http://library.fws.gov/bird_publications/feed.html
- 5 http://www.copper.org/consumers/copperhome/DIY/doityourself_solderingschool.html