



A NorCal Project ...
**A Crappie
(not crappy!)
Portable Antenna**

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Campsite with Crappie Doublet. Although somewhat difficult to see in the photograph, the center pole is set up in front of the tent and one end pole is visible on the left.

"Are you going to use this for fishing or ham radio?" asked the sporting goods salesman. "I'm a fisherman," I said, "but this is for ham radio." "Well," he said, "I've sold lots of these, and I haven't sold one yet for fishing."

Obviously I'm not the first to use a telescoping crappie pole for amateur radio. However, the applications I've seen have been for portable verticals such as Nor-Cal's St. Louis Vertical (www.norcalqrp.com). With 2 ½ watts, I figured I could use something more efficient than a vertical. Besides, I didn't like the idea of messing with all those radials that a vertical requires.

What I had been searching for was a relatively efficient, very portable antenna for my QRP rig. I found the solution in Nor-Cal's short doublet. After almost beaming a neighboring camper while throwing a line over a tree to suspend the antenna, though, I knew I also needed a portable, self-supporting structure. Besides, I rarely seem to find a tree in the right place.

What follows, then, is a short doublet or center-fed Zepp supported in an inverted V formation by three telescoping fiberglass fishing poles. They are lightweight, collapse to less than four feet, and even have an eyelet at the end to attach the wires.

I've long been a fan of parallel-fed doublets or Zepps; in fact, an 80M-length Zepp is my primary low-band antenna at the home QTH. They are multi-band, have very little loss in the feedline and for portable use, the lead is less bulky than coax - and especially with the feed lines used here: zip cord or twinlead. The only downside is that a tuner is required. However QRP tuners can be so tiny that they hardly take up any space at all; the Nor-Cal BLT (Balanced Line Tuner) that I use is only about 4x3x1.5" , has a built-in SWR indicator, tunes easily, and only costs \$29. Besides, in its clear box it's downright cute.

For the antenna and feed, one option is to use a 50' role of small speaker wire (I use 24AWG from Radio Shack) or 2-conductor computer cable. [\(1\)](#) Measure off 22 feet, and mark this point. Take a brass snap swivel (fishing equipment again!), thread a small cable tie through the eye and around the wire at the 22-foot point, then pull it tight. This will be the suspension point for the center of your doublet.

Now split the 22-foot end of the wire. This will give you two 22-foot radiators for each side of your 44-foot doublet. The remainder is your feedline. This should give you basically the same basic antenna pattern on all bands, 10-40M.

If it makes you feel better, you can use 28' of twinlead for your feedline combined with two 22-foot radiators. I have one with each type of feedline and they both work, but I haven't made any comparisons.

Terminate the two radiators with snap swivels and the antenna is done. You can roll it on a small reel, throw it in the bag with your rig, and you are ready to roll.

If you don't want to be dependent upon finding a suitable tree, however, you can take your own supports - and use them as walking sticks as you hike to your destination.

South Bend's "Sunny Day" (SD-20) 20-foot telescoping crappie pole makes a great center support; these may be hard to find locally but are available by mail order (\$20 plus shipping) through the internet. Two of Zebco's 10-foot telescoping crappie poles (about \$6 from Walmart) hold up the ends. You can clip the snap swivels to the eyelets conveniently placed on the tip of these poles.

To anchor the poles, use tent stakes (long steel spikes with green plastic tops, available from Walmart). For use with the two end poles, trim the protrusions off two stakes so that the plastic ends just slip inside the larger or bottom end of the poles. To carry them, unscrew the cap and insert the stakes, point first, into the pole, then replace the cap. In use, you hammer the stakes into the ground, then set the pole over them.

For the center pole, remove the plastic part from the stake, then cut a wood block so that it just fits snugly inside the pole. Drill a hole through the wood block so that it can slipped onto the stake in place of the plastic part that you removed. Driven into the ground, this stake will support the center pole although for additional stability you may want to also anchor it several feet up against your picnic table or tent.

To erect the antenna, extend the center pole, then clip the center snap swivel to the top of the pole. I'd suggest you use a wire tie or Velcro strip to hold the lead-in against the pole about a foot or two below the top, and perhaps again a bit farther down. This takes some of the weight off the top and keeps the tip from bending so much. Drive the stake in the ground, then set the pole over it.

Extend the two end poles, attach the end snap swivels, then set them up at an angle away from the center pole, again driving the stakes into the ground and setting the poles over them.

Hook the lead-in to the tuner, twirl a couple of knobs, and you're on the air with an antenna that's a lot more efficient and versatile than most of the antennas commonly available for portable use. Take along some string, a hook and a couple of worms and when the band drops out, you can always go fishing.

Parts list:

50' Zip cord (or 44' of hookup wire and 28' of 300 ohm TV twinlead)

1 South Bend "Sunny Day" SD-20 telescoping crappie pole (available from National Sport Supply, P.O. Box 14, Random Lake, WI 53075; phone 920-994-9218; \$19.99 plus \$4.95 shipping).

2 Zebco CC10T or similar 10' fiberglass telescoping poles (Walmart).

3 Brass snap swivels for fishing lines.

3 Tent stakes (Walmart or camping supply store; comes in packet of 4)

1. ¹ I am indebted for the basic doublet instructions to Jerry Parker, WA6OWR, from Nor-Cal (drawing in part from an article in *World Radio* by Cecil Moore, W6RCA).