

FIELD DAY ANTENNAS

- Pros and Cons to help you choose what you want to use.
1. VERTICALS $\frac{1}{4}$ wave
 - **Pros** Easy set up and usually self supporting. Low takeoff angle, so good longer distance contacts. Omni directional
 - **Cons** Vertical polarization is more susceptible to man made noise. Need to have ground plane radials.
 - Discussion?
 2. DIPOLES AND INVERTED V TYPES
 - **Pros** The standard antenna easy to build and tune for a specific band. Horizontal polarization, so less problem with man made noise.
 - **Cons** Need center and end supports. Need to be 0.06 wavelength above the ground best results for a 40m antenna this need to be about 26 ft., 20 m antenna needs to be 13 ft. They are usually mono band.
 - Discussion?
 3. BEAM TYPES
 - **Pros** they have high gain are directional and reject noise from the side and back well.
 - **Cons** they have to be placed on a tower or other tall structure. They need to be rotatable for direction. Setup requires a lot of planning.
 - Discussion?
 4. RANDOM WIRE
 - **Pros** Easy set up. Can use whatever supports are available. Inverted L configuration works well. Can work over many bands.
 - **Cons** Susceptible to RF. Need a 9:1 UNUN and a common mode choke for best result. Need end supports. Depending on the length, they work on some bands better than others. They need a counterpoise.
 - Discussion?
 5. END FED HALF WAVE
 - **Pros** Need only one support. They are a dipole antenna fed from the end, so no counterpoise is needed.

- **Cons** They need a 49:1 or 64:1 BALUN due to the high impedance at the feed point. They could need a common mode choke. They are mono band.
- Discussion?

This is by no means all that there is to know about these different types of antennas, but it is a starting point to help you decide what would work best for you. I would invite all of the members to search the Internet and You Tube to gain more in depth information on each type of antenna.