

Useful Tools for Measuring - Tree Heights, Distances

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The heights of trees and buildings are very important when doing wind site assessments. There were several methods described in the Site Assessor training manual including “the girl scout method, triangulation, and using a stick of a given height.

There is also a tool is available to measure tree heights called a clinometer. Go to the *How to use a clinometer* document to read about it and for the website info if you wish to order one. The model number is #43830. It is about \$130, but it does qualify as a tax write-off for your business. There are also clinometers at other websites and on e-Bay.

Here are two ways to get tree height from other small wind site assessors:

Craig Tarr, Energy Concepts, Inc., WI:

If you have a solar pathfinder, just use the angle chart vs. the time / month chart, and follow the directions at the www.solarpathfinder.com website to get tree height.

Roger Dixon, Skylands Renewable Energy, LLC, NJ:

When doing a site assessment, I take directional pictures (all major and minor compass directions) and have my camera with me. I put a surveyors stick against the tallest obstacle (mine is 8’ long when extended and telescopes into itself for travel), then step back with my camera, frame the entire height of the obstacle and snap a pic. I print it out at home, then adjust a compass to the height of the surveyor’s stick in the pic and walk it up the paper until I get to the top of the obstacle. If it takes five moves to get to the top, $5 \times 8' = 40'$ tall. 12 “walks” up the paper is 96’, etc. It isn’t an exact measurement, but it is very close. My forester and his clinometer get the same heights as I do with my method. No need for me to buy one.

Range Finders

Another useful tool is a *Range Finder*. It is like a spotting scope that you aim at a distant obstacle and it will show you the distance in yards or meters. These are available at hunting stores (about \$150-\$200). Again, not necessary, but it does save the time of pacing out the distance to the tree base or for determining the length of the wire run. Also useful for determining if obstructions are within 500’.