

South Carolina 4-H Forestry Contest Equipment List

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The Standard equipment list has been designed for two things. First, to give the Instructor an understanding of the equipment needed to teach Tree Measurement, Compass & Pacing, and Tree I.D. Secondly, the list shows the Instructor what to buy. All of the quantities are based on a forestry team consisting of 4 members. Under each topic you will find a section detailing the equipment needed to participate in the South Carolina State 4-H Forestry Contest as well as a section of equipment that will aid the instructor. The purchase of the instructor items are not necessary, however they will give the instructor accurate measurements which will aid in the teaching process. All items listed below are found through Forestry Suppliers, which can be reached at: www.forestry-suppliers.com or 1-800-647-5368. Clemson University does not support, nor condone any supplier; you may find comparable supplies from a variety of other sources. Prices indicated are as of November 2009.

1. Compass & Pacing Equipment

Student Item

	Item #	Price
4x Suunto A-10 Azimuth Compass	37177	\$11.25
	+10	\$10.25

Instructors Item

A good 300' tape measure makes measuring distance easy when teaching the pacing portion of this event.

Lufkin 300' (ft, in, 1/8") Fiberglass Tape Measure	39963	\$52.95
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As far as a good compass for the Instructor to use, you can choose from the two below. The National Contest provides and uses Silva Ranger Compasses. However, we will only use them at the State level for Instructors to record accurate numbers for teaching purposes. The mirrored feature coupled with the sighting feature is what makes these compasses so accurate.

Suunto Challenger MCA-D Azimuth Mirrored Compass	37023	\$22.50
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Or

Silva Ranger CL15 Azimuth Mirrored Compass	37036	\$46.95
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If the Instructor is wanting a kit; the below mentioned kit will consist of 30 Suunto A-10 compasses as well as other beneficial information and training aids.

Suunto Compass Instructional Kit	36889	\$279.00
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2. Tree Measurement

<u>Student Item</u>	<u>Item#</u>	<u>Price</u>
4x Tree & Log Scale Stick (International Scale)	59770	\$12.25
	+10	\$11.25

If you currently own Tree & Log Scale Sticks (Scribner or Doyle Scale), that is fine. The diameter and height measurements are the same, just make sure your Forestry Team members use the International Scale Volume Table to look up their Board feet volumes. The Volume Table used at the State Contest will be the same as used at the National Contest. In the National 4-H Forestry Handbook (<http://www.aces.edu/N4HFI/Handbook/Invit05.pdf>) on page 17, you will find the Volume Table to be used.

Instructors Items

An accurate way to measure tree diameter is with a diameter tape. A Logger's Tape will give the Instructor tree diameter on one side of the tape and distance on the other. This tape makes it easy for an Instructor to measure out 1 Chain (1 Chain = 66').

Spencer Logger's Tape Model 975C	39339	\$65.95
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Accurate Tree Height can be obtained with a Clinometer. A Clinometer is a delicate tool, please be advised to be careful and not drop your Clinometer if you decide to purchase one. All Clinometers are not the same, there are many different calibrations they can come in, however this one is the best for measuring tree height.

Suunto Clinometer, Percent & Topography	43895	\$133.00
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3. Tree I.D.

SC Familiar Trees website

www.clemson.edu/extfor/publications/bul117

4. Other Often Overlooked Items

Below are other items that often times overlooked when time for competition.

- 4x Hardhats
- 4x Clipboards
- 4x Calculators for simple addition
- Pencils

The SC 4-H Forestry Contest Rules can be found on the SC 4-H website, however a direct link/address has been provided below.

http://www.clemson.edu/4H/kids_and_families/program_areas/natural_resources/4-HForestryContestHandbook06.pdf