

FORESTRY

DIAMETER TAPE AND CRUISING STICK

Foresters use cruising sticks to measure a tree's diameter and height. These facts are essential to figure the amount of wood in a tree. To measure tree diameter:

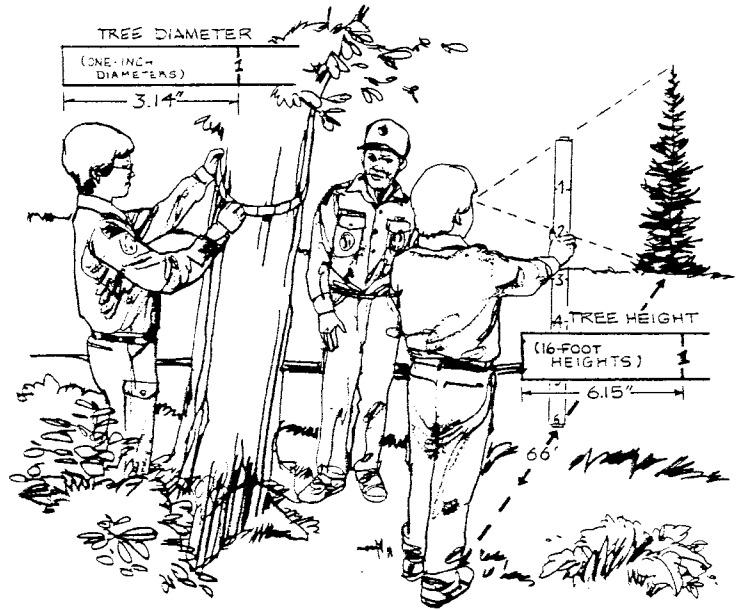
1. Cut a strip of flexible paper about $\frac{1}{2}$ -inch wide and 45 inches long.
2. Begin at one end of the paper strip and make ink marks $3\frac{1}{4}$ inches apart. Number these marks consecutively starting with No. 1 on left end of tape. (Three and one-quarter inches on your tape is equal to one inch of tree diameter.)
3. To measure tree diameter, wrap tape around tree at chest height, $4\frac{1}{2}$ feet above the ground. Diameter of tree in inches will be at the mark nearest where the tape overlaps the zero end.

To measure tree height:

1. Glue a strip of hard paper or cardboard on one side of a yardstick.
2. Begin at one end and make marks 6.15 inches apart with black ink.

3. Label the first mark "1," second mark "2," and so on.
4. To measure tree, stand 66 feet from it; hold arm out horizontally and stick perpendicular to ground at arm's reach, about 25 inches from eyes, as shown. Slide stick up or down until top of stick is in line with top of tree. Without moving head, sight to

bottom of tree (keep stick perpendicular) and note place on stick where line of sight crosses it. The nearest figure is the number of 16-foot lengths in the tree. If the figure is two, as in the illustration, then there are two 16-foot lengths. The tree is 32 feet high—two times 16 feet.



A prominent government official once said that we couldn't afford to gain the vastness of space and lose the earth in the process. The implications of this statement point to the ever-increasing importance of preserving the earth's natural resources in the space age.

Satellites, jet planes, and atomic energy all assume a greater importance each day. But the manpower that produces and operates these machines is still dependent upon the soil of the earth for food. The machines themselves can be produced only with the help of vast supplies of clean water—water that comes in part from well-managed forest watersheds.

Every Scout should know the importance of all natural resources and of the interdependence of forest, range, soil, water, and wildlife.

SCOUTING OUTCOMES

This month's patrol and troop activities should give your Scouts:

- An appreciation for the wonders of nature and possibly a growing feeling of closeness to God.
- A greater understanding of how pollution affects the natural world and how Scouts can help to stop it.
- A strengthened resolve to do their "duty to country" through good conservation practices.
- Growing self-confidence.

ADVANCEMENT OPPORTUNITIES

By the end of the month, all Scouts should have met the majority of their basic nature and camping requirements

through First Class. Depending on troop meeting and camp-out activities, they may also complete all or part of the following rank requirements:

Tenderfoot

- Outdoor—Cooking, camping, hiking, nature
- Citizenship—Flag ceremonies
- Patrol/troop participation—Patrol identification
- Personal development—Scout Oath and Law

Second Class

- Outdoor—Cooking, camping, hiking, nature
- Citizenship—Flag ceremonies
- Patrol/troop participation
- Personal development—Scout Oath and Law

First Class

- Outdoor—Cooking, camping, nature, hiking
- Citizenship—Flag ceremonies
- Patrol/troop participation
- Personal development—Scout Oath and Law

Merit Badges. Older Scouts can concentrate on the Nature, Camping, and Forestry merit badges this month; they should be able to complete many of the requirements. Depending on activities during the campout, they may also complete requirements in Cooking, Hiking, Pioneering, Mammals, Geology, Fish and Wildlife Management, Insect Life, Botany, and Wilderness Survival.