

<http://dendro.cnre.vt.edu/forsite/dtape.htm>
Diameter Tape

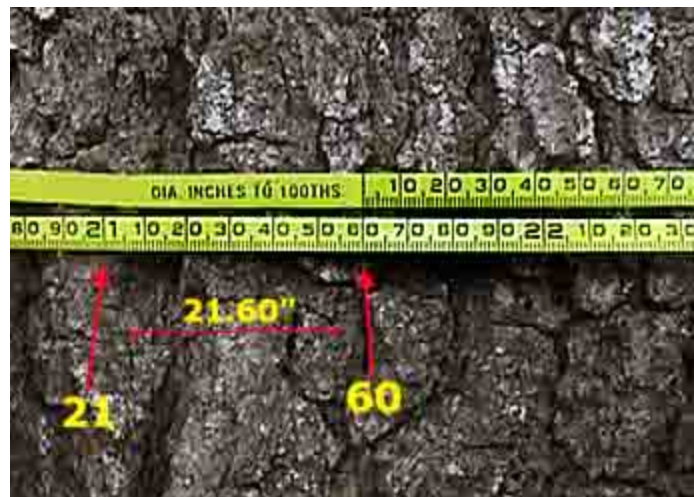


A diameter tape (D-tape) is used by foresters to measure the diameter of a tree. Since trees are swelled at the base, measurements are made 4.5 feet above the ground in order to give an average diameter estimate. The D-tape is wrapped around a tree and is specially designed to convert the tree circumference to tree diameter.



Wrap the D-tape around the tree stem...

and record how many inches around it is.



<http://dendro.cnre.vt.edu/forsite/clino.htm>
Clinometer



A clinometer is used by foresters to measure the height of a standing tree. It works using principles of angles and geometry.

Measurements are read from the inside of the clinometer while pointing it at the top of a tree.



Prism



A prism is used to help determine whether or not an area has too many or too few trees. Using geometry, the number of trees and the size of the trees, this instrument estimates the density of trees in square feet per acre. This information can be used to determine tree volume and proper management strategies.



Looking through the prism causes a portion of the tree trunk to be offset. When the two parts of the tree trunk overlap, the tree is included in the forester's inventory.



When the two parts of the tree trunk do not overlap the tree is excluded from the forester's inventory.

<http://dendro.cnre.vt.edu/forsite/incre.htm>
Increment Borer

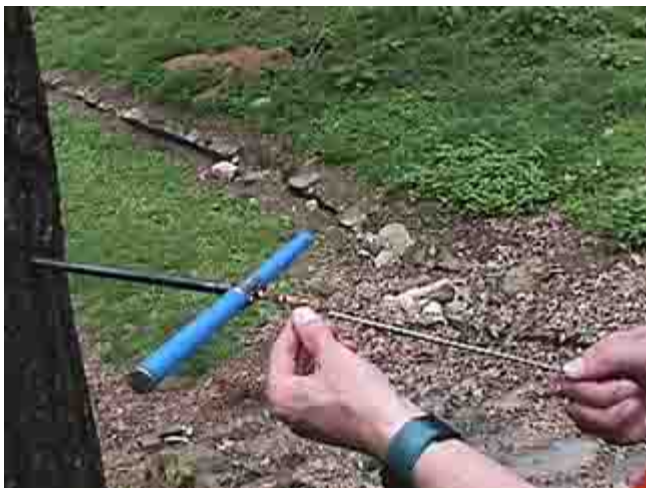


An increment borer is used to determine the age of a tree. The borer is compact so it can fit into a pocket of the vest and is easily assembled.



After boring into a tree, ...

a forester removes a core...



and counts the growth rings - just as you would on a tree stump.

<http://dendro.cnre.vt.edu/forsite/compa.htm>

Compass



A compass is used to determine direction. Often times it is used to determine which direction the slope of a hill faces. This information is useful when deciding which vegetation will grow best on a particular site. A compass really comes in handy if you get lost in the woods.

<http://dendro.cnre.vt.edu/forsite/gpsreceiver.htm>

GPS Receiver



The GPS unit above is a Garmin etrex that provides the user with the necessary tools to obtain latitude, longitude, elevation, and the ability to mark and save routes. GPS is used for a variety of purposes. Its uses are found everywhere from the military to inside peoples' cars as a navigation system.

In the field of wildlife science the GPS unit is used to mark critical points during data collection. The most exciting use of GPS use lies with tracking wild animals. GPS units placed on collars eliminated the labor-intensive task of tracking animals with a radio collar and receiver. GPS collars allow scientists to remain in the office and download information directly from the animal's collar. From this data scientists can determine an animal's home range, or the areas to which it travels during its day, and the particular types of habitat it prefers.