

Densiometer

A densiometer is an instrument used for taking measurements of canopy cover. The following includes directions to construct and use the densiometer.

Required Materials

- 4 cm diameter by 7.5 cm long tube (toilet paper tubes, construction paper, PVC pipe)
- 34 cm of thread or dental floss
- metal nut or washer
- tape

Construction

1. Gather the required materials for each densiometer.
2. Attach (with tape) two threads at right angles across the diameter of one end of the tube to form a crosshair. Leave a slight end hanging at the bottom of the tape so you can tighten the threads if they loosen.
3. Attach (with tape) an 18 cm piece of thread with a metal nut or washer hanging loosely from it across the diameter of the other end of the tube (opposite the crosshairs).

Directions for Use

1. Look up through the densiometer, making sure the densiometer is vertical and the metal nut/washer is directly below the intersection of the crosshairs at the top of the tube.

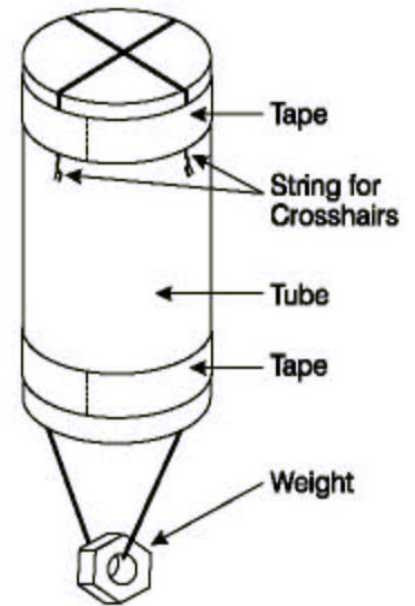


Figure LAND-P-10: Homemade Densiometer

Correct Way To Hold A Homemade Densiometer



Incorrect Way To Hold A Homemade Densiometer



2. If you see vegetation, twigs, or branches **touching the crosshair intersection**, you would record this as “+” meaning that there is canopy.

3. If you **do not** see vegetation, twigs, or branches **touch the crosshair intersection**, you would record this as “-” meaning that you saw the sky above the intersection of the crosshairs.

- **What if the entire circle I see through the densiometer is full of vegetation, but there is no vegetation at the crosshairs?**

This is a sampling question. The intersection of the crosshairs is the sample location. Therefore, this would be a (-).

4. Take 10 samples. Multiply number of “+” by 10 to find percentage of canopy cover.

