

## **Forest Snapshot Workshop**

Forests Through Time and Space Fall/ Winter, 2004/05

### **Objectives**

To practice the techniques outlined in the *Measuring Forests* handout and become familiar with the tools and methods needed to quantify various attributes of a forest.

### **Tools needed**

- Angle gauge or wedge prism
- DBH tape
- Field tape
- Corner stakes (4)
- Compass
- Field guides
- Clinometer

Record all the data in the data sheet below.

### **Measuring tree height**

To practice measuring tree height, we will go out into Red Square and measure the height of the clock tower using the methods outlined in the *Measuring Forests* handout.

Measure the horizontal distance from the base of the clock tower to your spot (the further away you are, the greater your accuracy).

Using a clinometer, measure the angles to the top and bottom of the tower.

### **Variable plot sampling**

Use both a prism and an angle gauge to count the number of trees. Record the BAF. Count three plots with each. Average the three plots (record average to three decimal places) and multiply by the BAF to get the basal area per acre.

### **Fixed plot Sampling**

Lay out a 0.05 acre plot. Locate the corner (or center) of your plot. If you are using square plots, use a compass and tape to lay out the four corners of the plot. Mark the corners with stakes. If you are using a circular plot, use the tape to measure the radius and mark the outer edge of the plot in several places with stakes.

Using a DBH tape, measure all the trees in your plot.

Estimate the canopy cover

Assess the shrubs and herbaceous layers. Don't worry if you don't finish all the identification for these layers in this workshop.

Name	
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Date	
Location	

**Tree height**

Horizontal dist	
Angle to top	
Angle to bottom	

Variable plot data	Tree counts in each plot										Average	BA/Acre	
	1	2	3	4	5	6	7	8	9	10			
BAF=													
BAF=													

**Fixed plot data**

**Overstory Trees**

Species	DBH

**Sapling/ Tall**

**Shrub Layer**

Species	Abundance

**Shrub Layer**

Species	Abundance

**Herbaceous Layer**

Species	Abundance

**Moss Layer**

Abundance