

# 2022 SANTA CRUZ FORESTRY CHALLENGE

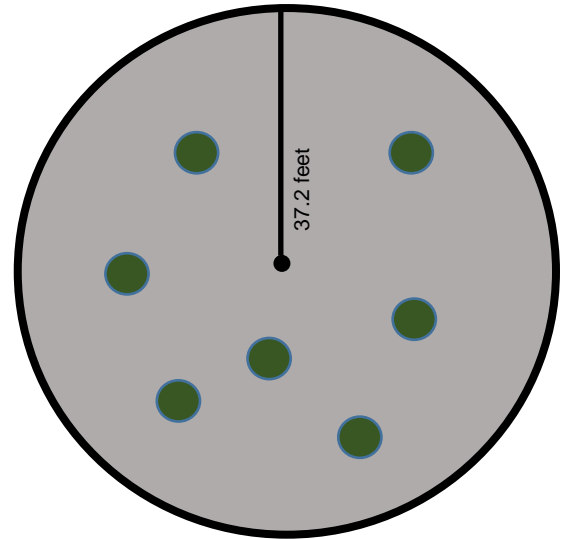
## FIELDTRIP DATA COLLECTION SHEET FOR PLOT #

**Step 1** - Once you have located your plot center, use a logger's tape or 100 foot tape to measure a radius of 37.2 feet (for a 1/10 acre plot). Starting on due north, sweep in a clockwise direction and count each tree within your plot boundary that has a 2 inch DBH or more.

Use the table below to fill in the information collected on the trees in your plot.

Trees per acre = \_\_\_\_\_

(# trees in plot x 10)

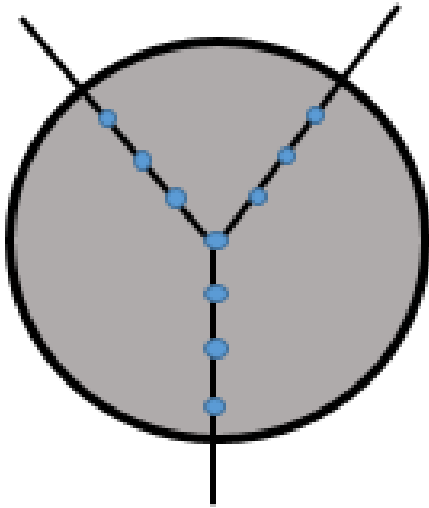


**Step 2** – Use a 40 BAF angle gauge to measure basal area. Hold the end of the chain at your eye, stretch out the chain, and count every tree wider than the short side of the plastic at each tree's breast height (4.5 feet above the ground). Multiply your number by 40 to get the basal area in square feet per acre.

Trees "in" \_\_\_\_\_ X 40 BAF =  
\_\_\_\_\_ sq. ft. / acre

Note: If there are fewer than 5 trees "in", repeat with a 20 BAF angle gauge and multiply the number of "in" trees by 20.

Tree	Species	DBH	Live or Dead
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			



**Step 3** – Use your compass on a random bearing to set three equally separate transects. At plot center and 10, 20, and 30 foot points from plot center, use the densitometer to determine canopy presence/absence and measure the depth of the masticated material underfoot. Fill in the information on the table below. The percent canopy cover is \_\_\_\_\_ and the average depth of material is \_\_\_\_\_ inches.

Point #	1	2	3	4	5	6	7	8	9	10
Canopy Above? Yes or No										
Masticated material depth										

**Step 4** – In a 1/100<sup>th</sup> acre plot (radius of 11.8 feet), count the number of seedlings. If there is a carpet of seedlings, go to a 1/1000<sup>th</sup> acre plot, (radius of 3.7 feet). Circle the size used: **1/100<sup>th</sup> acre** or **1/1000<sup>th</sup> acre**  
 Number of seedlings counted = \_\_\_\_\_ Seedlings per acre = \_\_\_\_\_

**Step 5** – Using an increment borer, take a core sample of the most dominant tree in the plot. Using the ruler in tenths of an inch provided, measure the width in inches (to the nearest tenth inch) of the annual growth rings for the last 20 years. Record it in the space below:

\_\_\_\_\_ = width of last 20 years of growth

**Step 6** – Circle the correct response on these items:

Is there mechanical damage to any of the trees in the plot? **Y / N**

Percent understory vegetation cover: **0 25 50 75 100**

Were conifer limbs pruned up to 8 feet? **Yes No**

**Step 7** - \_\_\_\_\_ Helper’s initials that the data collection is complete

\_\_\_\_\_ Helper’s initials that all flagging has been pulled