**Part 1: Forest Plot Sampling** **(30 minutes)**

Protocol: Measure all aspects requested below on your assigned plot. Then, calculate the stand-level density metrics as listed. Finally, accurately map the locations for each plot tree on the diagram; be sure to label the tree numbers as they were on your plot. Use the space on the back of this sheet to show all of your work in making your calculations.

Plot ID: \_\_\_\_ Plot Radius: \_\_\_\_\_\_\_\_ Plot Area: \_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tree Number** | **Azimuth** | **Distance (0.01 m)** | **DBH (0.1 cm)** | **Live Crown Ratio** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Metrics:

Trees per hectare: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Basal area per hectare (m2): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Median DBH: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Live Crown Ratio: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

N

**Part 2: GPS Navigation** **(30 minutes)**

Protocol: Using the GPS device provided, follow the steps below to navigate around campus. Make sure that Position format is **UTM UPS** and Map Datum is **NAD83**.Also, the distance should be **Metric** and elevation should be **Feet**.

**Tasks**

1. Walk over to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Record the following:

Easting: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Northing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Elevation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Navigate to this location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is here…????

1. Navigate to this location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is here…????

1. Navigate to this location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is here…????

1. Navigate to this location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is here…????

1. What is the azimuth and distance from your point #5 back to your starting point?
2. **Calculate the area** around \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Procedure: Press Menu twice, then select “Tracks.” Clear all other tracks. Then, while still on the Track Log page, press Menu again. On this menu page, select “Area Calculation.” If the map shows and SAVE is written at bottom, press save and then delete the track. Go through the menu again to select area calculation. Now you should see START on the bottom of the screen, and you can select that to get started.

Calculated area in \_\_\_\_: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_