

Forestry 1001

Fall 2012 -Lab 2

Compassing, Pacing, and Map Work

A. Background

Equipment You Bring: Silva Ranger compass
 Calculator
 Field Notebook (waterproof paper is best)

Equipment Provided: Distance Tape
 Photograph
 Map
 Dot Grid

Reference Reading: Husch, Miller, Kershaw: Chapter 4.

Abilities:

Subject	Skill ID	Description
Stand and Forest Maps		
<i>Woods Navigation</i>	SFM-W1	Measure distances using pacing in the woods
	SFM-W2	Follow a compass bearing in the woods
	SFM-W3	Mark a location using a GPS (next week)
	SFM-W4	Use a GPS to find a location in a stand (next week)
<i>Mapping</i>	SFM-M1	Determine map scale from field measurements, or measurements between two different maps or photos
	SFM-M2	Determine land area using maps and a dot grid or line transect method
	SFM-M3	Be able to locate North on a map or photo from field measurements
	SFM-M4	Be able to determine azimuth and distance between two points on a map or photo

Pace 75m into the woods following this bearing.

Add 180 degrees to the bearing and pace 75m back out. See how close you come to your starting point.

Repeat the process a number of times using a variety of different azimuths until you can routinely closely return to your starting point.

Mark North on Photo & Map

Using the photograph provided and your compass, orient the photo and mark a correctly positioned north arrow on the photo.

Do the same for the map provided.

Calculate Map Scale:

Using features on the photograph and appropriate ground measurements, calculate the photo-scale.

Do the same for the map provided.

Determine the Area of a Stand:

Read and understand the instructions on using a dot grid to calculate stand area.

Using the provided dot grid and map, together with your computed map scale, calculate the area of the candidate stand.

Determine the Bearing and Distance between two points:

Choose a straight line route between two obvious points on the photograph (e.g. road intersections). Pick one point as the starting point and, using your compass and photograph, determine the distance and azimuth of the route.

Tree Identification:

With any remaining time, work with your team and your instructor to practise identifying major tree species. Use your findings to begin refining your dichotomous key.