Homework No. 10 – Angle Count Sampling

Point Sampling for Stand Structure Summaries

Rapid assessments for tree-related values are often made using point sampling. In point sampling, the probability of a tree being included is proportional to size; in other words, we sample big trees relatively more than small trees, given their abundance.

Objective

In this assignment, you practice generating stand level summaries from plot level data much like you did in Homework 09. In this case, the data come from a BAF 10 point sample cruise. You need to use pivot tables, and remember some basics of forest measurement.

Instructions

On the class website are plot data from a BAF 10 point sample collected in northern hardwoods forest in the western UP. Generate the following summaries at the stand level, for live trees only.

1) two-way cross tabulations
    a. trees per acre by species and diameter class
    b. basal area per acre by species diameter class

2) one way cross tabulations
    a. trees per acre by diameter class and the 95% confidence intervals
    b. basal area per acre by diameter class and the 95% confidence intervals

Then plot these last two frequency tables as histograms and include error bars to show the confidence intervals.

Product

Submit your answers in professional memo format. You must put your Lab Section on your memo and address the memo to your TA!

Due Date

This assignment is due at the beginning of class on Monday April 21, 2008.

As this is the last homework assignment of the semester, absolutely no late submissions will be accepted. Usual exceptions for documented health or family issues will still apply.