

Homework No. 6 – Not So Simple Sampling

Instructions

Forests with unusual pest damage present fire hazards, because of the accumulation of dead woody fuels. In this assignment, you will practice sampling techniques to estimate properties of a number of attributes of a fuels salvage treatment.

Download data representing a sample of loads from forwarders operating in a salvage operation in a northern forest. The volume of each log was measured by the field crew and summed to get the total volume in each load. The field crew also noted the number of logs in each load that were classified as either softwood or hardwood.

You're the analyst. Provide the following four estimates along with confidence intervals. As always, use a value for $\alpha = 0.05$.

- [1] What was the average volume, in ft^3 , of a harvested log?
- [2] What was the total volume harvested in the salvage, given the total number of loads harvested was 167?
- [3] What proportion of the harvest was hardwood?
- [4] A forwarder is considered "fully loaded" if it contains at least 260 ft^3 . What was the proportion of loads that were "full"?

Product

Submit your answers in professional memo format.

Due Date

This assignment is due at the beginning of class on Monday March 16, 2009.