

Fixed Area Plot Sampling

By David R. Larsen

In fixed area plot sampling, we assume that the plot area is representative in the remainder of the area of interest. Usually statistics about the stand are reported on the standard unit of measure (e.g., acres in English units and hectares in metric units). The consequence of the above assumption is that if, for example, we measure one tree in a 1/4 acre plot we assume that there are four trees just like the one we measured per acre.

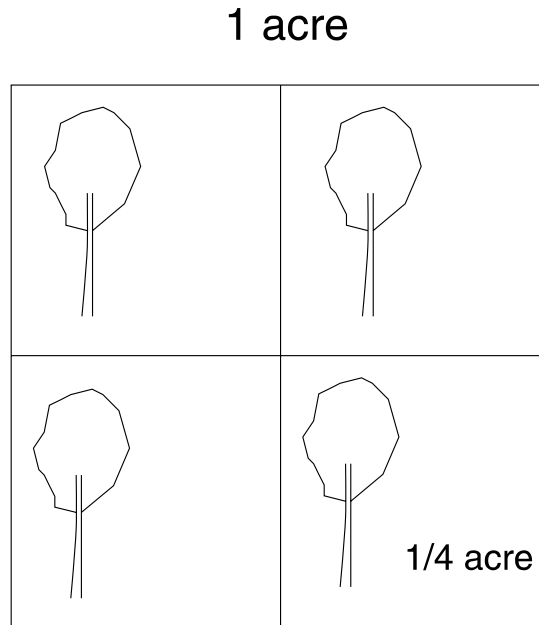


Figure 1. Illustration of the meaning of a fixed area expansion factor

This kind of sampling is the easiest to calculate as the expansion factor or TPA multiplier is the reciprocal of acre fraction. In this method, we spend most of the time measuring the tree sizes that are most frequent in the stand. Commonly, small trees are most frequent in forest so this method will give you a better picture of the numbers and size of small trees.