



FOREST STEWARDSHIP COACHED PLANNING

Planning a Forest Inventory

Presented By:

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To effectively maintain forest health and habitat, it is good to have *quantitative* info.

1. Trees per acre (TPA)
2. Average diameter
3. Crown ratios
4. Basal area



Timber

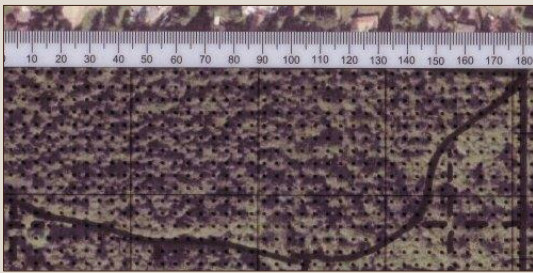
Forest Health



Wildlife

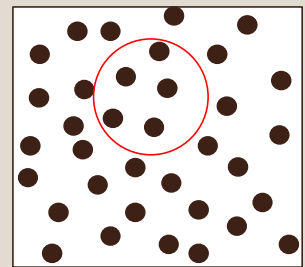


Determine the acreage of each stand.

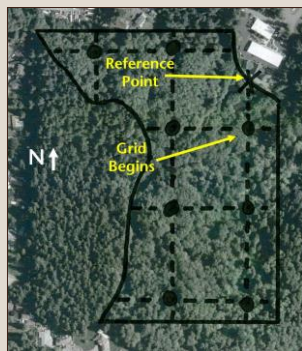


It would be impractical to count every tree, so instead we do *plot sampling*.

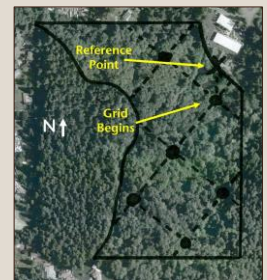
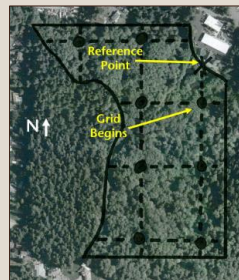
- Minimum 3 plots per stand
- Minimum 1 plot per 10 acres
- More plots = better data



Sampling should be *systematic*.



You may have to adjust your grid to get the desired number of plots.



You will need to use a ruler and your photo scale to determine ground distance on the map.



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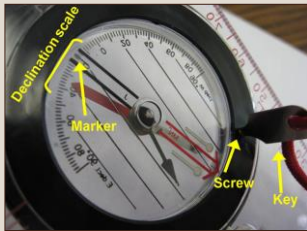
Find your plot locations using a compass and pacing.



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Set your compass declination to adjust for the difference between true and magnetic north.

<http://www.ngdc.noaa.gov/geomag/declination.shtml>



Some compasses do not adjust for declination.

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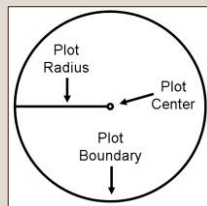
Once you have found your plot center, you are ready to establish your plot boundaries.



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Establish plots that include 5 – 10 (live) trees on average.

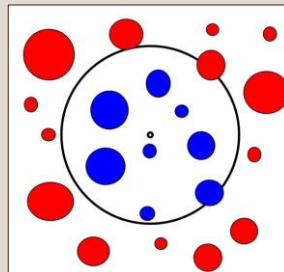
Plot Size (acres)	Radius (feet)
1/5	52.7
1/10	37.2
1/20	26.3
1/30	21.5
1/40	18.6
1/50	16.7



Important: Use the same plot size throughout your stand.

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Flag your plot boundary, identify "in" trees, and record species.



There are 8 "in" trees (blue) in this plot.

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Some basic inventory numbers are good to include in your stewardship plan.

The basics

- Trees per acre
- Average live crown ratio
- Average diameter
- Species mix

More advanced

- Basal area
- Average height
- Volume per acre