

Plant Community Assessment Program (PCAP) Methods

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The PCAP crew split up into groups of about 4 people, and each of these groups typically sampled 1 plot per day. Most plots were made up of a 2 x 5 array of 10 x 10 m modules, so total area for a plot was 20 m wide by 50 m long. Of these modules, 4 were designated “intensive” and underwent more thorough sampling than the other modules, consisting of additional procedures like assessing cover class for each species present. Additional methods are briefly described below:

Soil chemistry

All soil chemistry values were obtained with laboratory testing on soil samples collected in each intensive module (typically four total per plot) and pooled to obtain a single estimate of soil properties for each plot. To collect soil samples, soil cores were taken with a soil corer and a small amount of the core was placed into a plastic bag and labeled. All four cores were included in a plot’s soil sample.

Canopy cover

Densiometer readings were taken in each intensive module. To take readings with the densiometer (a forestry tool consisting of a convex or concave mirror that reflects a wide area of tree canopy), a point was chosen at random within each intensive module and readings were taken in each cardinal direction (N, S, E, W) while standing at this point. Each directional reading corresponded to the ratio of canopy to open sky visible in the densiometer, estimated using a grid system on the densiometer.

Substrate depth

Litter and organic layer depths were measured in the intensive modules. Using a tape measure, these layers were identified in each of the plot’s intensive modules, and estimated to the nearest mm.

Disturbance

On a scale of Very Low to Very High, disturbance levels were visually assessed for different types of disturbance. These assessments took into account disturbance across the entire plot, not within each of the intensive modules.