

Field Reference Site
Descriptive and Observation Plot
Tree and Shrub Transect Data Collection Protocol
4/10/2014

Tree Cover Transects: (Only for Tree life form plots.) Tree canopy cover transects are optional, but may be used by Government inspectors for quality assurance purposes.

Lay out four 50-foot transects from the plot center in each cardinal direction (200 feet of total transect). Use the same layout configuration as was used for identifying/flagging the plot boundaries from the plot center. No adjustment is made for magnetic declination. If the slope of a transect is greater than 10 percent it should already be corrected for slope and identified/flagged accordingly. Run each transect (north, east, south, and west) from the plot center to the previously identified/flagged plot boundary using tapes. Do not allow the vegetation to deflect the alignment of the tape.

Measure and record the transect intercept length (in horizontal feet) of live tree canopy cover by tree species (for all tree sizes combined: trees, saplings, seedlings). See the *Key to Forest and Woodland Dominance Types* for a list of species to include. For determining intercept length on taller or leaning trees, it may be helpful to use a densitometer to determine vertical projection of the tree crown edge. Round and record the total measured intercept length to the nearest foot for each cardinal direction. Calculate canopy cover per species and all tree species by averaging the total intercept length from the north, south, east, and west transects. Round to nearest percent.

Shrub Cover Transects: (Only for Shrub life form plots.) Shrub canopy cover transects are optional, but may be used by Government inspectors for quality assurance purposes.

Lay out four 50-foot transects from the plot center in each cardinal direction (200 feet of total transect). Use the same layout configuration as was used for identifying/flagging the plot boundaries from the plot center. No adjustment is made for magnetic declination. If the slope of a transect is greater than 10 percent it should already be corrected for slope and identified/flagged accordingly. Run each transect (north, east, south, and west) from the plot center to the previously identified/flagged plot boundary using tapes. Do not allow the vegetation to deflect the alignment of the tape.

Measure and record the number of feet of live canopy cover intercepted for each species within each 10-foot transect increment in each cardinal direction. See the *Key to Shrubland Dominance Types* for a list of species to include. Round the estimate to the nearest 0.5 foot for each 10-foot increment. Gaps within a single plant, flowers, and flower stalks should be counted as part of the shrub. Total the estimates to determine percent cover of each species for each transect. Total all shrub species percentages to determine the shrub canopy cover for each transect. Calculate the overall shrub canopy cover by averaging the total shrub cover from the north-south and east-west transects.

Field Reference Site - Descriptive and Observation Plot
Tree and Shrub Transect Data Form

1- Reference Site & Plot ID#: _____ 2- Names: _____ 3- M/D/YY: _____ - _____ - _____

4- Tree Cover Transects – Horizontal Intercept Length

Plant Code	North (feet)	South (feet)	East (feet)	West (feet)	Total intercept length	Average cover (total/200')
Others Combined						
Total Timber	--	--	--	--		
Total Woodland	--	--	--	--		
Total (all tree spp)	--	--	--	--		
Total horiz. transect length	50	50	50	50	200	--

5- Shrub Canopy Cover – Horizontal Intercept Length

Transect North/South - Horizontal Distance

Plant Code	0-10'	10-20'	20-30'	30-40'	40-50'	50-60'	60-70'	70-80'	80-90'	90-100'	Total
Others Combined											
Total N/S Shrub CC											

Transect East/West - Horizontal Distance

Plant Code	0-10'	10-20'	20-30'	30-40'	40-50'	50-60'	60-70'	70-80'	80-90'	90-100'	Total
Others Combined											
Total E/W Shrub CC											
Overall Shrub CC											