

# CSE Plot Description

Observer: \_\_\_\_\_  
 Recorder: \_\_\_\_\_  
 Latitude (dd.ddddd): \_\_\_\_\_  
 Longitude (ddd.ddddd): \_\_\_\_\_  
 Elevation (ft): \_\_\_\_\_

Administrative Unit: \_\_\_\_\_  
 Project Unit: \_\_\_\_\_  
 Macroplot: \_\_\_\_\_  
 Date (DD/MM/YYYY): \_\_\_\_\_  
 Time: \_\_\_\_\_

Macroplot Sizes		
Size (Acres)	1/100	1/10
Radius (Feet, Decimal Feet)	11.78	37.24
Radius (Feet, Inches)	11' 9"	37' 3"

Hill Slope (where steepest): \_\_\_\_\_ %  
 Aspect (circle one):    **N**   **E**   **S**   **W**  
 Aspect azimuth: \_\_\_\_\_ °  
 Mag Declination: \_\_\_\_\_ °

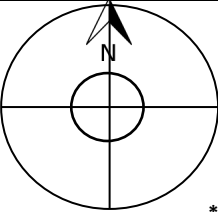
Describe Witness Tree(s):  
  
 \*\*Draw location of tree on plot\*\*  
 Color of Flagging Used: \_\_\_\_\_

Photo Azimuths: (1) of whiteboard at PC. (1) from 75 feet N looking south to PC (4) from PC in all four cardinal directions; (1) from each Brown's transect looking toward PC.  
 ORDER TAKEN: \_\_\_\_\_

Comments/Description of Plot:

List by Species	AERIAL COVER (%) (ENTIRE 1/10th acre plot)				
	Estimate Aerial Cover % for Species by Lifeform				
	Tree	Shrub	Forb/herb	Gramanoid	Cactus
TOTALS					

Tree Canopy Cover (%) (densiometer)

GROUND COVER (%) (ENTIRE 1/10th acre plot) (must total 100 %)						
Plant basal	Bole	Litter	Bare soil	Rock (>2.5in)	Gravel (< 2.5 in)	Total (%)

\*\*FOR CSE, SMALL PLOT INCLUDES ALL SEEDLINGS OR SAPLINGS <5 INCHES DBH/DRC.\*\*

Species	Condition (Live, Dead, Sick)	Small Plot (1/100th Acre only) - Tree Regen, Shrubs & Cacti				
		Height classes—Seedlings (feet)				
		> 0 - 0.5'	> 0.5—1.5'	> 1.5' - 2.5'	>2.5' - 3.5'	>3.5' - 4.5'

Species	Condition (Live, Dead, Sick)	Small Plot (1/100th Acre only) - Tree Regen, Shrubs & Cacti				
		Diameter classes—Saplings (inches)				
		> 0 - 1"	>1-2"	>2-3"	>3-4"	>4-5"



Precisions:  
 Slope: ±5 percent  
 Vegetation cover : ±1 class estimation or ±10%

# CSE Surface Fuels

Observer	_____
Recorder	_____

Macroplot:	_____
Date (DD/MM/YYYY):	_____
Time:	_____

CSE Brown's Transects are 50 feet long, starting at PC.

Class	Count From	Total Length
1-hr, 10-hr	44' to 50'	6
100-hr	38' to 50'	12
1000-hr	0' to 50'	50

Class		Diameter (in)
FWD	1-hr	0 to 0.25
	10-hr	0.25 to 1.0
	100-hr	1.0 to 3.0
CWD	1000-hr and greater	3.0 and greater

### Decay Class Description

- 1 All bark is intact. All but the smallest twigs are present. Old needles probably still present. Hard when kicked
- 2 Some bark is missing, as are many of the smaller branches. No old needles still on branches. Hard when kicked
- 3 Most of the bark is missing and most of the branches less than 1 in. in diameter also missing. Still hard when kicked
- 4 Looks like a class 3 log but the sapwood is rotten. Sounds hollow when kicked and you can probably remove wood from the outside with your boot. Pronounced sagging if suspended for even moderate distances
- 5 Entire log is in contact with the ground. Easy to kick apart but most of the piece is above the general level of the adjacent ground. If the central axis of the piece lies in or below the duff layer then it should not be included in the CWD sampling as these pieces act more like duff than wood when burned.

Fine Woody Debris (1, 10, 100 hr fuels)	Transect	Azimuth	Slope	1 - Hr Count	10 - Hr Count	100 - Hr Count	Comment
	1	0°					
	2	180°					

Coarse Woody Debris (1000 hr fuels)	Transect	Log No.	Log Diameter	Decay Class	Length (feet)	Comment	

Litter & Duff	Transect 1	15'	30'	38'	44'	45'
	Litter Depth (in)			N/a	N/a	
	Duff Depth (in)	N/a	N/a			N/a
	Transect 2	15'	30'	38'	44'	45'
	Litter Depth (in)			N/a	N/a	
	Duff Depth (in)	N/a	N/a			N/a



# CSE Tree Data

Plot Number: \_\_\_\_\_

Date: \_\_\_\_\_

Observer/Recorder: \_\_\_\_\_ Page \_\_\_ of \_\_\_

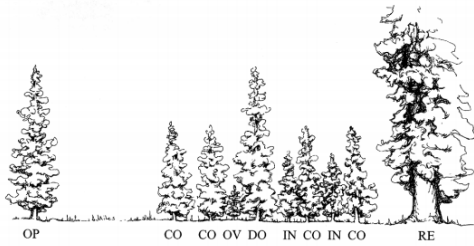
Tree #	Cond	Species	DBH	DRC	Number Stems	Total Tree Ht	LiCrBHt	Crown Ratio	Crown Class	Damage/Disease	Decay Class	Comment



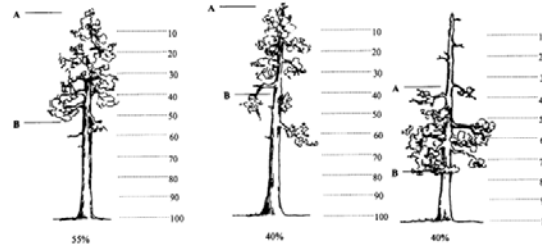
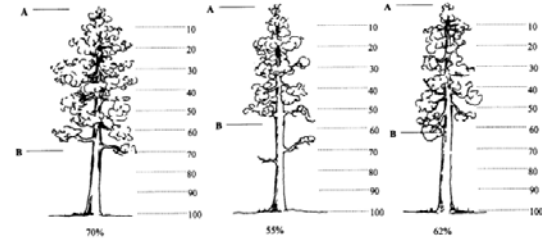
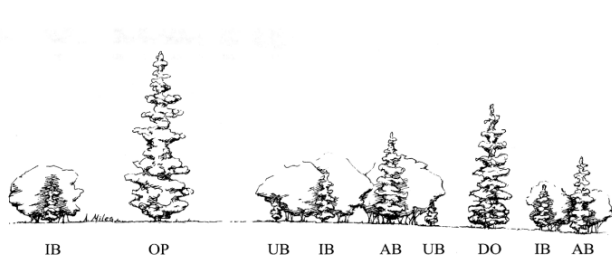
CSE Tree Sheet Column	Description	Examples	Warnings
Tree #	Order of trees in plot, starting clockwise from N line, moving around plot like spokes of a wheel	1, 2, 3	Stay in order!
Condition	Condition of tree	L, D, S	If sick, identify why; If dead, record decay class of snag
Species	Species of tree, recorded using USDA PLANTS code	PIED, PIPO, JUSC, POTR	
DBH (in)	Diameter at breast height (4.5 feet); used for single-stem species	10.1, 4.2	CSE Plots only record trees over 4.5 ft, with DBH $\geq$ 5 inches, if tree would be measured at DBH
DRC (in)	Diameter at root crown (close to ground); use only on PIED, JUXX, or QUXX with <2 stems	7.4, 5.5	CSE Plots only record trees over 4.5 ft, with DRC $\geq$ 5 inches, if tree would be measured at DRC
Number of stems	Order of the stems measured	1, 2, 3, 4	
Total Tree Ht (ft)	Height of tree from ground to top of tree (whether top is live or dead); use rangefinder or clinometer	70, 15, 5	
LiCrBht, Live Crown Base Ht (ft)	Height from ground to base of live crown (not necessarily on bole of tree)	6, 21, 50	Live trees only
Crown Ratio	Length of live crown divided by the total tree height	50%, 65%	Live trees only
Crown Class	Two-letter code that describes the relative position of the tree crown with respect to the competing vegetation	CO, DO, OP	See Reference Sheet for Classes
Damage/Disease	Recorded using categories in reference sheet in the following format: <b>Category/Agent/Tree Part/Severity</b>	10/000/BO/1	See Reference Sheet for Categories
Decay Class	A number between 1 and 5, similar to the decay classes used for CWD	Class 2, Class 3	Snags only; See Reference Sheet for Decay Classes
Comment	Otherwise observation about the tree, including whether or not it is a witness tree	<i>Nest in tree</i>	Note if this is your witness tree



Crown Class Illustration



Brush Cover Crown Class Illustration



Crown Ratio →

Code	Name	Description
OP	Open-grown or Isolated	Tree crowns receive full light from above and from all sides. In even-aged stands, these trees have their crowns well above the general canopy.
DO	Dominant	Tree crowns receive full light from above and partly from the sides. Crowns extend above the general level of the crown cover of others of the same stratum and are not physically restricted from above, although possibly somewhat crowded by other trees on the sides. In even-aged stands, dominant trees rise somewhat above the general canopy.
CO	Codominant	Tree crowns receive full light from above, but comparatively little from the sides. Crowns form a general level of crown stratum, are not physically restricted from above and are crowded by other trees from the sides. In even-aged stands, codominants form the general canopy level.
IN	Intermediate	Tree crowns occupy a definitely subordinate position and are subject to strong lateral competition from crowns of dominants and codominants. They receive little direct light from above through small holes in the canopy, but no light from the sides.
OV	Overtopped	Tree crowns receive no direct light from above or from the sides and are entirely below the general level of dominant and codominant trees.
RE	Remnant	Trees that remain from a previous management activity or catastrophic event. The tree is significantly older than the surrounding vegetation. Remnant trees do not form a canopy layer and are usually isolated individuals or small clumps. This definition is from the Region 6 Inventory and Monitoring System field procedures for the Current Vegetation Survey.
AB	Leader Above Brush	The terminal leader of the tree is above the surrounding brush while the middle or lower crown may be within the brush canopy.
IB	Leader Within Brush	The terminal leader and upper crown of the tree is within the brush canopy.

Code	Name	Description
UB	Leader Overtopped by Brush	The crown of the tree is completely overtopped by the surrounding brush. Brush cover crown classes only apply to isolated or dominant trees with brush competition; therefore, brush cover crown class codes are used as modifiers for open-grown or dominant trees. Competition from adjacent trees is more important than competition from shrubs if they both occur. Generally, brush cover crown codes are used in stands where overstory tree competition is absent.

### Snag Decay

Code	Bark	Heartwood Decay	Sapwood Decay	Limbs	Top Breakage	Bole Form	Time Since Death
1*	Tight, intact	Minor	None to incipient	Mostly Present	May be present	Intact	≤5 years
2	50% loose or missing	None to advanced	None to incipient	Small limbs missing	May be present	Intact	>5 years
3	75% missing	Incipient to advanced	None to 25%	Few remain	Approx. 1/3	Mostly intact	>5 years
4	75% missing	Incipient to advanced	25%+	Few remain	Approx. 1/3 to 1/2	Losing form, soft	>5 years
5	75%+ missing	Advanced to crumbly	50%+ advanced	Absent	Approx. 1/2+	Form mostly lost	>5 years

\*Implies recent mortality, within the last 5 years.

### Snag Decay Classes

