

### Fuelwood Monitoring on Wilderness Campsites

Site Number: \_\_\_\_\_ Date: \_\_\_\_\_ Name: \_\_\_\_\_

Center ring: 0-5 meters	Count of pieces			Diameter & Length, each piece
Transect #	Fine (< ½") [2 m]	Small (½ - 1") [3 m]	Medium (1-3") [5 m]	Large (>3") [5 m]
1				
2				
3				
4				
5				
6				

Middle ring: 5-10 meters	Count of pieces			Diameter & Length each piece
Transect #	Fine (< ½") [2 m]	Small (½ - 1") [3 m]	Medium (1-3") [5 m]	Large (>3") [5 m]
1				
2				
3				
4				
5				
6				

Outer ring: 10-15 meters	Count of pieces			Diameter & Length each piece
Transect #	Fine (< ½") [2 m]	Small (½ - 1") [3 m]	Medium (1-3") [5 m]	Large (>3") [5 m]
1				
2				
3				
4				
5				
6				

Distance to first 10 pieces between 1 and 3" diameter and >30 cm in length. (Six transects, spaced at 60-degree intervals, 1.5 meters wide).

1.	3.	5.
2.	4.	6.

Control

Center ring: 0-5 meters	Count of pieces			Diameter & Length each piece
Transect #	Fine (< 1/2") [2 m]	Small (1/2 - 1") [3 m]	Medium (1-3") [5 m]	Large (>3") [5 m]
1				
2				
3				
4				
5				
6				

Notes:

### Instructions for monitoring fuels:

1. Find the centerpoint of the site, preferably a place where you can create a 15 m radius circle that doesn't go in the water or in the rocks.
2. Assess the "inner ring"
  - Randomly select six transect bearings.
  - Measure fuels along each transect beginning at the center point, according to the worksheet. The transect is a vertical "plane" – count wood that is suspended above the ground. Count only dead material.
  - Fine fuels over first 2 m
  - Small fuels over first 3 m
  - Medium and large fuels over full 5 m
  - Diameter and length of each piece of large material
3. Assess the "middle ring"
  - Randomly select six transect bearings.
  - Beginning at 5 meters (and extending to 10 meters), repeat process of measures
4. Assess the "outer ring"
  - Randomly select six transect bearings.
  - Beginning at 10 meters (and extending to 15 meters), repeat process of measures
5. Measure the distance to the first 10 pieces of material of fire-appropriate size (1-3")
  - Select a random transect and create 6 evenly-spaced transects
  - Pace out to the point at which your transect (armspan width) crosses 10 pieces of wood of the desired size.
6. Identify a control area
  - Select a place outside the gathering range of any campsites.
  - The site should be as similar as possible to the campsite, in terms of overstory, vegetation, and topography.
  - Measure wood within a 5 meter circle (as for the inner ring on the campsite).
  - Measure the distance to the first 10 pieces of wood as for the campsite.

#### Problems/issues:

- Natural variability (forest pockets) in subalpine areas.
- Is it important to compute volumes?
- Can be time consuming if you count fine fuels.