

FMH-19

**FOREST PLOT FUELS INVENTORY DATA SHEET**

Page \_\_\_ of \_\_\_

Plot ID: \_\_\_\_\_

B / C (Circle One)

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

Burn Unit: \_\_\_\_\_

Recorders: \_\_\_\_\_

Burn Status: Circle one and indicate number of times treated, e.g., 01-yr01, 02-yr01

00-PRE \_\_\_ Post \_\_\_-yr01 \_\_\_-yr02 \_\_\_-yr05 \_\_\_-yr10 \_\_\_-yr20 Other: \_\_\_-yr\_\_\_; \_\_\_-mo\_\_\_

Transect lengths, in feet: 0-0.25: \_\_\_\_\_ 0.25-1: \_\_\_\_\_ 1-3: \_\_\_\_\_ 3+s: \_\_\_\_\_ 3+r: \_\_\_\_\_

	# of intercepts			Diameter (in)		Litter and Duff Depths (in)					
	0-.25"	.25-1"	1-3"	3+s	3+r	L	D	L	D		
	(1-hr)	(10-hr)	(100-hr)	(1,000-hr)							
<b>Transect 1</b>						1			25		
Compass						5			30		
Dir. _____°						10			35		
Slope ___%						15			40		
Tag 1A						20			45		
& 1B											
<b>Transect 2</b>						1			25		
Compass						5			30		
Dir. _____°						10			35		
Slope ___%						15			40		
Tag 2A						20			45		
& 2B											
<b>Transect 3</b>						1			25		
Compass						5			30		
Dir. _____°						10			35		
Slope ___%						15			40		
Tag 3A						20			45		
& 3B											
<b>Transect 4</b>						1			25		
Compass						5			30		
Dir. _____°						10			35		
Slope ___%						15			40		
Tag 4A						20			45		
& 4B											

**Note:** See reverse for definitions and tally rules

## Definitions

**Litter**—Includes freshly fallen leaves, needles, bark, flakes, fruits (e.g., acorns, cones), cone scales, dead matted grass, and a variety of miscellaneous vegetative parts. Does not include twigs and larger stems.

**Duff**—The fermentation and humus layers; does not include the freshly cast material in the litter layer, nor in the postburn environment, ash. The top of the duff is where needles, leaves, fruits and other cast-off vegetative material have noticeably begun to decompose. Individual particles usually are bound by fungal mycelia. The bottom of the duff is mineral soil.

**Downed Woody Material**—Dead twigs, branches, stems and boles of trees and shrubs that have fallen and lie on or above the ground.

**Obstructions Encountered Along Fuel Transects**—If the fuel transect azimuth goes directly through a rock or stump, in most cases you can run the tape up and over it. If the obstruction is a tree, go around it and pick up the correct azimuth on the other side. Be sure to note on the FMH-19 on which side of the bole the tape deviated so that it will be strung the same way in the future.

## Litter and Duff Measurement Rules

- If the transect is longer than 50 ft, do not take additional litter and duff measurements.
- Do not take measurements at the stake (0 point); it is an unnatural structure that traps materials.
- At each sampling point, gently insert a trowel or knife into the ground, until you hit mineral soil, then carefully pull it away exposing the litter/duff profile. Locate the boundary between the litter and duff layers. Vertically measure the litter and duff to the nearest tenth of an inch.
- Refill holes created by this monitoring technique.
- Do not include twigs and larger stems in litter depth measurements.
- Occasionally moss, a tree trunk, stump, log, or large rock will occur at a litter or duff depth data collection point. If moss is present, measure the duff from the base of the green portion of the moss. If a tree, stump or large rock is on the point, record the litter or duff depth as zero, even if there is litter or duff on top of the stump or rock.
- If a log is in the middle of the litter or duff measuring point, move the data collection point one foot over to the right, perpendicular to the sampling plane.

## Tally Rules for Downed Woody Material

- Measure woody material first to avoid disturbing it and biasing your estimates.
- Do not count dead woody stems and branches still attached to standing shrubs and trees.
- Do not count twigs and branches when the intersection between the central axis of the particle and the sampling plane lies in the duff.
- If the sampling plane intersects the end of a piece, tally only if the central axis is crossed.
- Do not tally any particle having a central axis that coincides perfectly with the sampling plane.
- If the sampling plane intersects a curved piece more than once, tally each intersection.
- Tally uprooted stumps and roots not encased in dirt. Do not tally undisturbed stumps.
- For rotten logs that have fallen apart, visually construct a cylinder containing the rotten material and estimate its diameter.
- When stumps, logs, and trees occur at the point of measurement, offset 1 ft (0.3 m) perpendicular to the right side of the sampling plane.
- Measure through rotten logs whose central axis is in the duff layer.