FIREMON LA Form

BURN SEVERITY – COMPOSITE BURN INDEX (BI)

PD - Abridged	Examiners:		Fire Name:			
Registration Code		Project Code		Plot Number		
Field Date mmddyyyy	/ /	Fire Date mmyyyy	/			
Plot Aspect		Plot % Slope		UTM Zone		
Plot Diameter Overstory		UTM E plot center		GPS Datum		
Plot Diameter Understory		UTM N plot center		GPS Error (m)		
Number of Plot Photos		Plot Photo IDs				

BI – Long Form	% Burned 100 feet (30 m) diameter from center of plot =	Fuel Photo Series =

STRATA RATING FACTORS	BURN SEVERITY SCALE							FACTOR SCORES
	No Effect	Low		Moderate		High		
	0.0	0.5	1.0	1.5	2.0	2.5	3.0	
A. SUBSTRATES								
% Pre-Fire Cover: Litter =	**Duff =**		**Soil/Rock =**		**Pre-Fire Depth (inches): Litter =**	**Duff =**	**Fuel Bed =**	Σ =
Litter/Light Fuel Consumed	Unchanged	--	50% litter	--	100% litter	>80% light fuel	98% Light Fuel	
Duff	Unchanged	--	Light char	--	50% loss deep char	--	Consumed	N =
Medium Fuel, 3-8 in.	Unchanged	--	20% consumed	--	40% consumed	--	>60% loss, deep ch	
Heavy Fuel, > 8 in.	Unchanged	--	10% loss	--	25% loss, deep char	--	>40% loss, deep ch	X̄ =
Soil & Rock Cover/Color	Unchanged	--	10% change	--	40% change	--	>80% change	
B. HERBS, LOW SHRUBS AND TREES LESS THAN 3 FEET (1 METER):								
Pre-Fire Cover =			**% Enhanced Growth =**					Σ =
% Foliage Altered (blk-brn)	Unchanged	--	30%	--	80%	95%	100% + branch loss	
Frequency % Living	100%	--	90%	--	50%	< 20%	None	N =
Colonizers	Unchanged	--	Low	--	Moderate	High-Low	Low to None	
Spp. Comp. - Rel. Abund.	Unchanged	--	Little change	--	Moderate change	--	High change	X̄ =
C. TALL SHRUBS AND TREES 3 to 16 FEET (1 TO 5 METERS):								
Pre-Fire Cover =			**% Enhanced Growth =**					Σ =
% Foliage Altered (blk-brn)	0%	--	20%	--	60-90%	> 95%	Signifcnt branch loss	
Frequency % Living	100%	--	90%	--	30%	< 15%	< 1%	N =
% Change in Cover	Unchanged	--	15%	--	70%	90%	100%	
Spp. Comp. - Rel. Abund.	Unchanged	--	Little change	--	Moderate change	--	High Change	X̄ =
D. INTERMEDIATE TREES (SUBCANOPY, POLE-SIZED TREES)								
Pre-Fire % Cover =	**Pre-Fire Number Living =**				**Pre-Fire Number Dead =**			Σ =
% Green (Unaltered)	100%	--	80%	--	40%	< 10%	None	
% Black (Torch)	None	--	5-20%	--	60%	> 85%	100% + branch loss	N =
% Brown (Scorch/Girdle)	None	--	5-20%	--	40-80%	< 40 or > 80%	None due to torch	
% Canopy Mortality	None	--	15%	--	60%	80%	%100	X̄ =
Char Height	None	--	1.5 m	--	2.8 m	--	> 5 m	
Post Fire: %Girdled =			**%Felled =**		**%Tree Mortality =**			
E. BIG TREES (UPPER CANOPY, DOMINANT, CODOMNANT TREES)								
Pre-Fire % Cover =	**Pre-Fire Number Living =**				**Pre-Fire Number Dead =**			Σ =
% Green (Unaltered)	100%	--	95%	--	50%	< 10%	None	
% Black (Torch)	None	--	5-10%	--	50%	> 80%	100% + branch loss	N =
% Brown (Scorch/Girdle)	None	--	5-10%	--	30-70%	< 30 or > 70%	None due to torch	
% Canopy Mortality	None	--	10%	--	50%	70%	%100	X̄ =
Char Height	None	--	1.8 m	--	4 m	--	> 7 m	
Post Fire: %Girdled =			**%Felled =**		**%Tree Mortality =**			

Community Notes/Comments:	CBI = Sum of Scores / N Rated:	Sum of Scores	N Rated	CBI
	Understory (A+B+C)			
	Overstory (D+E)			
	Total Plot (A+B+C+D+E)			

% Estimators: 20 m Plot: 314 m² 1% = 1x3 m 5% = 3x5 m 10% = 5x6 m
30 m Plot: 707 m² 1% = 1x7 m (~2x4 m) 5% = 5x7 m 10% = 7x10 m

After, Key and Benson 1999, USGS NRMSC, Glacier Field Station.
Version 4.0 8 27, 2004

Strata and Factors are defined in FIREMON Landscape Assessment, Chapter2, and on accompanying BI "cheatsheet." www.fire.org/firemon/lc.htm