Directions for Slash Activity

1. Randomly determine a point at which to begin their sample plot. To do this, wander a ways into the plot. Then, to determine an azimuth, look at the watch and prepare to walk in the direction that the second hand points toward at that given moment. Determine a technique for randomly generating a value for the number of paces to walk in that direction (e.g., take the tallest person and ask them their birthday, then take the same number of paces as the day they were born). Mark the point with a flag.

2. From that point, use the meter tape and the compass to measure 6.63 meters north, and mark that spot with another flag. From there, measure 6.63 meters west and place a flag, then 6.63 meters south and place a flag. The resulting flags mark the corners of a square sample plot that is 1/10 of an acre in surface area.

3. Sample all trees that lie in the sample location and are greater than 1 inch in diameter at breast height (DBH). For trees that lie partially in the plot and partially out (the borderline of the plot transects the bole of a tree) count every other tree.

4. For each tree in the sample plot, measure DBH using the DBH tape, and determine species using the tree finder. Record DBH and species of each tree in the data table provided.

5. Rotate jobs (i.e., species identifier, DBH measurer, recorder of data, and recorder of which trees to include and which were already sampled) amongst group members.

6. Calculate the *estimated slash per tree* by referring to the FS Slash Weight Table (appendix b), and record on data table.

7. Estimate and record the *total slash per sample plot* by taking the sum of the *estimated slash per tree* values.

8. Estimate and record the *total slash per acre* by multiplying the *total slash per sample plot* by 10.

9. Move to sample area 2 and repeat



DRH	Spacias	Estimated Slash par Tree		
DDII	Species	Estimated Stash per Tree		
	Total Estimated Slash per			
	Sample Plot (sum of			
	Estimated Slash per Tree			
	values) \rightarrow			
	Total Estimated Slash per			
	Acre (Slash per Sample Plot			
	$x 10$ \rightarrow			

Data Recording Table: Sample Area 1



DDU	<i>a</i> .	
DBH	Species	Estimated Slash per Tree
	Total Estimated Slash per	
	Sample Plot (sum of	
	Estimated Slash per Tree	
	values) \rightarrow	
	Total Estimated Slash per	
	Acre (Slash per Sample Plot	
	$x 10) \rightarrow$	

Data Recording Table: Sample Area 2

Reflection Questions

1. Which sample area (per acre) was estimated to contain more slash weight?

2. How did the areas differ in the nature of the slash present (location, size, concentration, etc.)?

3. How might the differences in slash affect the ecology of the sample areas?

4. What flaws did you discover/might you expect from random sampling methods like the one used in this activity?



D.b.h. (inches)	Species							
	PP	LP	WL-WP	DF	GF	AF	WC-WH	ES
				Po	unds		111111	
1	1.3	1.1	1.8	3.1	3.7	8.6	2.2	2.8
2	5.7	4.3	5.5	9.4	11.3	12.4	7.3	9.3
3	13.3	9.4	10.7	18.0	21.9	18.8	14.5	18.6
4	24	17	17	29	35	28	24	30
5	39	26	24	41	51	40	35	45
6	58	37	33	55	69	55	48	61
7	80	51	42	71	90	73	63	80
8	106	67	53	89	113	94	79	101
9	137	85	64	109	139	119	97	125
10	171	106	76	130	168	149	117	150
11	210	127	89	153	200	182	139	178
12	254	150	103	178	236	221	162	208
13	302	174	117	204	275	265	188	240
14	354	200	133	233	317	314	215	275
15	411	228	149	263	364	370	244	312
16	473	258	166	295	416	433	274	352
17	540	289	183	329	471	485	307	395
18	611	322	202	375	532	542	341	439
19	688	356	221	424	581	603	378	487
20	770	392	241	476	631	667	416	538
21	856	430	261	532	683	735	456	591
22	949	469	283	591	736	805	499	648
23	1,050	510	305	654	790	879	543	708
24	1,150	553	328	720	846	957	590	771
25	1,260	597	351	790	903	1.040	639	837
26	1,370	642	375	864	962	1,120	690	907
27	1,490	690	400	941	1,020	1,210	743	980
28	1,620	739	426	1,020	1,080	1,300	799	1,060
29	1,750	789	452	1,110	1,150	1,390	857	1,140
30	1,880	841	479	1,200	1,210	1,490	917	1,220
31	2,030		506	1,290	1,280	· · · · ·	980	1,310
32	2,170		535	1,390	1,340	1	1,040	1,410
33	2,330		564	1,490	1,410		1,110	1,500
34	2,490		593	1,590	1,480		1,180	1,610
35	2,660		624	1,700	1,550	i i	1,260	1,720
36	2,830		655	1,820	1,620		1,330	1,830
37	3,010		686	1,930	1,700		1,410	1,950
38	3,190		719	2,060	1,770		1,490	2,070
39	3,390		752	2,190	1,850		1,570	2,200
40	3,580		786	2 320	1 920	1	1 660	2 330

Slash Weight Per Tree Table

M Numbers within the lined space are within limits of data sampled.

PP-ponderosa pine, LP-lodgepole pine, WL-WP-western larch and western white pine, DF- Douglas fir, GF-grand fir, AF-subalpine fir, WC-WH-western redcedar