DOUGLAS-FIR-HEMLOCK

SIZE CLASS 3

PARTIAL CUT

A SERIES OF 6 LEVELS

Reminders to users:

- 1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- 2. Stumps are not included in residue quantities.
- 3. Rotted residue is that which would come apart or splinter when kicked.



1-DF-3-PC

Residue descriptive code_ 1-DF-3-PC

DATA SHEET

	LOADING		OTI	HER MEASUREMENTS
Size class (inches)	Weight (tons/acre)	(ft ³ /acre	e) Average residue depun	(feet) 0.
0.25-1.0	1.3	85	Average duff and litter depth	1/4-inch diameter and larger (percent)_7 (inches) 1.
1.1-3.0	2.8	224	Sound residue 3.1-inch diameter	r and larger Douglas-fir (percent) 7
3.1-9.0	4.8	356		western redcedar (percent)
9.1-20.0	0	0	Rotted residue 3.1-inch diamete	er and larger (percent)
20.1+	0	ů	Notice 1 carde of 1 - Their erametr	P
Total	8.9	665		ja er
HAI	RVEST INFORMATION		PRECOMMERCIAL THINNING INFORMATION	- FUEL RATING
Net volume on Average stem: Average d.b.! cut (inches Stand age (ye Cutting prese	h. of stems) ears) cription Tree sel od Tractor ent None	7.9 41 12 60	Stems cut/acre Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches) Thinning method Slash treatment	U.S. Forest Service Region 6 fuel type identification
treatment (n		1_		



2-DF-3-PC

	LOADING		ОТ	OTHER MEASUREMENTS				
Size class (inches)	Weight (tons/acre)	(ft ³ /acr	me e) Average residue depth Ground area covered by residue	(feet) <u>0.2</u> 1/4-inch diameter and larger (percent) 68				
0.25-1.0	2.0	. 112	Average duff and litter depth	(inches)1.3				
1.1-3.0	2.1	129	Sound residue 3.1-inch diamete	er and larger Douglas-fir (percent) 96				
3.1-9.0	10.8	733		(percent)				
9.1-20.0	0	0	Rotted residue 3.1-inch diamet	er and larger (percent) 4				
20.1+	0	ő		P				
Total	14.9	974						
HA	RVEST INFORMATION		PRECOMMERCIAL THINNING INFORMATION	- FUEL RATING				
Net volume c Average stem Average d.b. cut (inches Stand age (y Cutting pres	h. of stems) ears) cription_Tree_sel od_Rubber-tired_s ent_None cut or	2.8 35 12 50	Stems cut/acre Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches) Thinning method Slash treatment					



3-DF-3-PC

LOADING			OTHE	OTHER MEASUREMENTS				
Size class (inches)	Weight (tons/acre)	(ft ³ /ac	e Average residue depth Ground area covered by residue 1	I/A inch diameter and langer	(feet) 0.5 (percent) 91			
0.25-1.0	1.7	116	Average duff and litter depth	1/4-Inch diameter and larger	(inches) 2.0			
1.1-3.0	3.6	289	Sound residue 3.1-inch diameter	and larger Douglas-fir	(percent) 47			
3.1-9.0	14:6	1,057		western redcedar	(percent) 2			
9.1-20.0	6.8	728	Rotted residue 3.1-inch diameter	and larger	(percent) 51			
20.1+ Total	0 26.7	2,190		5				
HA	RVEST INFORMATION		PRECOMMERCIAL THINNING INFORMATION	- FUEL RATING				
Net volume co Average stem: Average d.b. cut (inches Stand age (ye Cutting pres	h. of stems)	4,5 44 13 45	Stems cut/acre Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches) Thinning method Slash treatment	U.S. Forest Service Region fuel type identification REMARKS	6 <u>MH</u>			



4-DF-3-PC

Residue descriptive code 4-DF-3-PC

DAT		

	LOADING		ОТНЕ	ER MEASUREMENTS		
Size class Weight (inches) (tons/acre) (ft/acre)			Average residue depth			
0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+	1,9 8.0 21.1 31.9 2.6	108 495 1,546 2,860 281	Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diameter	and larger Douglas-fir	(percent) 83 (inches) 8.2 (percent) 45 (percent) (percent) (percent) 55	
Total	65.5	5,290				
	RVEST INFORMATION		PRECOMMERCIAL THINNING INFORMATION	U.S. Forest Service Region		
Net volume c Average stem Average d.b. cut (inches Stand age (y Cutting pres Yarding meth	h. of stems) ears) cription Sheltery od High-lead ent Fall broadcas) 59.6 S 105 B 22 A 90 A	tems cut/acre tems remaining/acre asal area/acre before asal area/acre after verage d.b.h. before (inches) verage d.b.h. after (inches) hinning method lash treatment	fuel type identification REMARKS	МН	



5-DF-3-PC

	LOADING			OTHER MEASUREMENTS				
Size class (inches)	Weight (tons/acre)	(ft ³ /ac	me re)	Average residue depth Ground area covered by residue 1	// inch diamo	tow and lawson	(feet) 0.9	
0.25-1.0	4.5	260		Average duff and litter depth	/4-Inch diame	ter and larger	(inches) 5.4	
1.1-3.0	18.6	1,146		Sound residue 3.1-inch diameter	and larger_Do	uglas-fir	(percent) 41	
3.1-9.0	16.3	1,201			ch	erry	(percent)_1	
9.1-20.0	10,6	898		Rotted residue 3.1-inch diameter	and langer		(percent) (percent) 58	
20.1+	26.6	2,457		Kotted residue 3.1-inch diameter	and larger		(percent) 30	
Total	76.6	5,962			i i			
HA	RVEST INFORMATION		PRE	COMMERCIAL THINNING INFORMATION		FUEL RATING		
	cruised (M fbm/acruised (M fbm/acre			cut/acre		Service Region identification	6 <u>MH</u>	
Average stem		64		l area/acre before		REMARKS		
Average d.b. cut (inches		24		area/acre after				
Stand age (y	ears)	80		age d.b.h. after (inches)				
Cutting pres	cription_Shelter	wood	Thin	ning method				
Yarding meth	od <u>High-lead</u>			h treatment				
Slash treatm	ent None							
Period since treatment (10						



6-DF-3-PC

	LOADING			OTHER MEASUREMENTS				
Size class Weight 3Volume (inches) (tons/acre) (ft³/acre)			ume re)	Average residue depth (feet) Ground area covered by residue 1/4-inch diameter and larger (percent)				
0.25-1.0	Class Weight (tons/acre) (ft³/acre) -1.0 1.8 122 3.0 2.6 205 9.0 14.4 1,106 20.0 4.5 354 + 64.4 4,882 1 87.7 6,669 HARVEST INFORMATION volume cruised (M fbm/acre) 6.3 Solume cruised (M fbm/acre) 5.7 Solume cruised (M fbm/acre) 46 Bolume cruised (M fbm/acre) Bolume cruised (M fbm/		Average duff and litter depth	/4-inch diameter and larger	(percent) 71 (inches)1.8			
1.1-3.0	2:6	205		Sound residue 3.1-inch diameter	and larger Douglas-fir	(percent) 61		
3.1-9.0	14.4	1,106			white fir	_(percent)_6		
9.1-20.0	4.5	. 354		Rotted residue 3.1-inch diameter	other	_(percent) 2 (percent) 31		
20.1+	64.4	4,882		Kotted residue 3.1-mich diameter	and rarger	(10.00.07		
Total	87.7	6,669			, , , , , , , , , , , , , , , , , , ,			
НА	RVEST INFORMATION	1	PRE	COMMERCIAL THINNING INFORMATION	FUEL RATING	-		
				s cut/acres remaining/acre	U.S. Forest Service Region fuel type identification	6 <u>LM</u>		
Average stem	s/acre cut	46	Basa	l area/acre before	REMARKS			
cut (inches Stand age (y Cutting pres Yarding meth	rears) cription Tree se nod Tractor ment Hand piled &		Aver Aver Thin	l área/acre before l area/acre after age d.b.h. before (inches) age d.b.h. after (inches) ning method h treatment	Material 9.1+ inches in dia result of logging old-growt early 1900's.			

DOUGLAS-FIR-HEMLOCK

SIZE CLASS 1

PRECOMMERCIAL THINNING

A SERIES OF 4 LEVELS

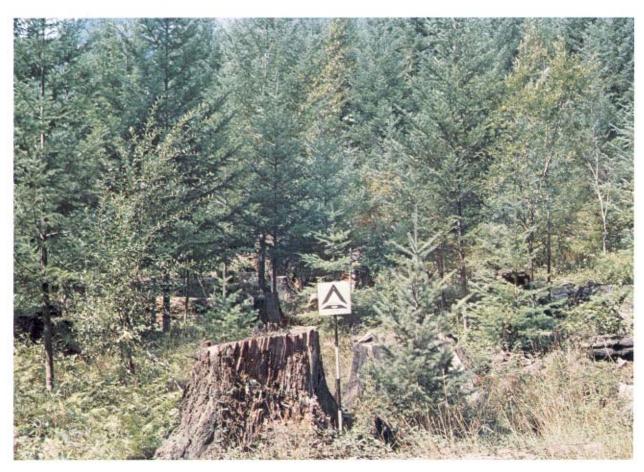
Reminders to users:

- 1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- 2. Stumps are not included in residue quantities.
- 3. Rotted residue is that which would come apart or splinter when kicked.



1-DF-1-TH

LOADING		OTHER MEASUREMENTS				
Size class (inches) Weight (tons/acre) 0.25-1.0 0.4 0 1.1-3.0 0.4 0 3.1-9.0 0 ½/1.4 9.1-20.0 0 ½/6.0 20.1+ 0 ½/10.8	0	0 0 1/117 1/606 1/724	Average residue depth Ground area covered by re Average duff and litter Sound residue 3.1-inch de Rotted residue 3.1-inch	depth iameter	western redcedar	(feet) 0.2 (percent) 33 (inches) 1.3 (percent) 56 (percent) 14 (percent) (percent) 30
Total 0.8 ½/18.2 HARVEST INFORMATION		1,447 PRE	COMMERCIAL THINNING INFORMA	ATION	FUEL RATING	•
Gross volume cruised (M fbm/ac Net volume cruised (M fbm/acre Average stems/acre cut Average d.b.h. of stems cut (inches) Stand age (years) Cutting prescription Yarding method Slash treatment Period since cut or treatment (months		Stem Basa Basa Aver Aver Thin	s cut/acre s remaining/acre l area/acre before l area/acre after age d.b.h. before (inches) age d.b.h. after (inches) ning method <u>Chainsaw</u> h treatment <u>Chipped</u>	1,547 700 196 61 .4	U.S. Forest Service Region fuel type identification REMARKS Residue loadings footnoted prior to thinning.	LL



2-DF-1-TH

	LOADING		,	OTHER MEASUREMENTS				
Size class (inches)	Weight (tons/acre)	Average residue depth	Average residue depth Ground area covered by residue 1/4-inch diameter and larger					
0.25-1.0 1.1-3.0 3.1-9.0	0.7 0 0.9 0 0 1/2.2	41 57 0 ½/2:	O Average duff and litter O Sound residue 3.1-inch	depth		(percent) 61 (inches) 1.0 (percent) (percent) (percent)		
9.1-20.0 20.1+ Total	0 ½/16.3 0 ½/75.0 1.6 ½/93.5	0 ½/1,74 0 ½/8,00 98 ½/9,99	15	diameter	and larger	(percent) 100		
Н	ARVEST INFORMATION	N	PRECOMMERCIAL THINNING INFOR	MATION	-FUEL RATING			
Met volume Average ste Average d.b cut (inche Stand age (Cutting pre Yarding met	years) scription thod ment	e)	Stems cut/acre Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches Average d.b.h. after (inches) Thinning method Chainsaw Slash treatment Hand piled &	6	U.S. Forest Service Region fuel type identification REMARKS Residue loadings footnoted prior to thinning.	LH		
Average d.b cut (inche Stand age (Cutting pre Yarding met Slash treat Period sinc	years) scription		Average d.b.h. before (inches Average d.b.h. after (inches) Thinning method <u>Chainsaw</u>) 47		were p		

^{1/} See remarks.



3-DF-1-TH

	LOADING			OTHER MEASUREMENTS			
Size class Weight (inches) (tons/acre) (ft ³ /ac		lume cre)	Average residue depth Ground area covered by residue 1/4-inch diameter and large		(feet)1 4-inch diameter and larger (percent)		
0.25-1.0	2.1 0	122	0	Average duff and litter dep		(inches)0	
1.1-3.0	2.9 0	181	. 0	Sound residue 3.1-inch diam	meter a	nd larger_Douglas-fir(percent)_	
3.1-9.0	2.7 . 1/2.9	171	1/267			chinkapin (percent)	
9.1-20.0	0 1/10.1	0	1/866	Rotted residue 3.1-inch dia	ameter	(percent)_	
20.1+	0 0	0 "	0	100000 1001000 012 11011 011		P	
Total	7.7 1/13.0	474 1/	1,133				
HV	RVEST INFORMATION	Y	PRE	COMMERCIAL THINNING INFORMATI	ION	. FUEL RATING	
	cruised (M fbm/a				159 219	U.S. Forest Service Region 6 fuel type identification H	
Average stem			Basa	l area/acre before	- 52	, REMARKS	
Average d.b. cut (inches Stand age (y Cutting pres Yarding meth Slash treatn	years) scription		Avera Avera Thin		43	Residue loadings footnoted were present prior to thinning	

 $[\]frac{1}{}$ See remarks.



4-DF-1 -TH

		LOADING			OTHER	MEASUREMENTS	N.
Size class (inches)		Weight ns/acre)	(f	t ³ /acre)	Average residue depth	A death dismatan and language	(feet) 2.3
0.25-1.0	4.1	0	272	0	Ground area covered by residue 1/ Average duff and litter depth	4-inch diameter and larger	(percent) 93 (inches) 1.3
1.1-3.0	5.3	0	422	0	Sound residue 3.1-inch diameter a	nd larger Douglas-fir	(percent) 90
3.1-9.0	1.6	1/14.9	108	$\frac{1}{1}$,072		western redcedar	(percent)7 (percent)
9.1-20.0	0	1/15.5	0	$\frac{1}{1}$,054	Rotted residue 3.1-inch diameter	and larger	(percent) 3
20.1+	0	1/81.5	0	1/5,620			
Total	11.0	1/111.9	802	1/7,746			
H	ARVEST	INFORMATION	1	PRE	COMMERCIAL THINNING INFORMATION	FUEL RATING	
Gross volume Net volume o Average stem	cruised	(M fbm/acre	suite .	Sten	s cut/acre 1,058 s remaining/acre 317 l area/acre before 120	U.S. Forest Service Region fuel type identification REMARKS	6 <u>HE</u>
Average d.b. cut (inches Stand age (y Cutting pres Yarding meth Slash treatm Period since treatment (years) scripti hod nent _ cut o	on	4-	Aver	1 area/acre after	Residue loadings footnoted prior to thinning.	were present

DOUGLAS-FIR-HARDWOOD

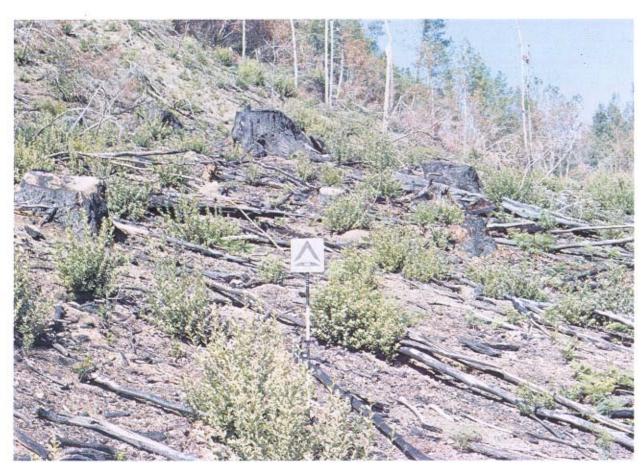
SIZE CLASS 4

CLEARCUT

A SERIES OF 7 LEVELS

Reminders to users:

- 1. The marker in these photos in 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- 2. Stumps are not included in residue quantities.
- 3. Potted residue is that which would come apart or splinter when kicked.



1-DFHD-4-CC

LOADING				OTHER MEASUREMENTS				
Size class Weight (inches) (tons/acre) (ft3/acre)			me e)	Average residue depth (feet) 0.2 Ground area covered by residue 1/4-inch diameter and larger (percent) 55				
0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+ Total	1.1 3.1 3.7 2.5 0	70 252 255 235 0 812		Ground area covered by residue 1 Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diameter	and larger_ <u>Douglas-fir</u> tanoak	(inches) 0 (percent) 32 (percent) 18 (percent) (percent) 50		
HARVEST INFORMATION PREC			PRE	COMMERCIAL THINNING INFORMATION				
Gross volume cruised (M fbm/acre) 46.4			Stems Basa Basa Avera Avera Thin	s cut/acre s remaining/acre l area/acre before l area/acre after age d.b.h. before (inches) age d.b.h. after (inches) hing method h treatment	REMARKS Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where: 1 = <5 ft in height			



2-DFHD-4-CC

LOADING			ОТН	OTHER MEASUREMENTS			
Size class (inches) Weight (ft3/orre) (ft3/orre)		Average residue depth					
0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+ Total	2.0 5.1 8.8 2.6 0 18.5	132 405 577 176 0 1,290	Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diamete	and larger Douglas-fir tanoak	(inches) 0 (percent) 95 (percent) 5 (percent) (percent) 0		
HARVEST INFORMATION			PRECOMMERCIAL THINNING INFORMATION items cut/acre items remaining/acre lasal area/acre before lasal area/acre after iverage d.b.h. before (inches) iverage d.b.h. after (inches) iverage d.b.h. after (inches)	REMARKS Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where: 1 = <5 ft in height			



3-DFHD-4-CC

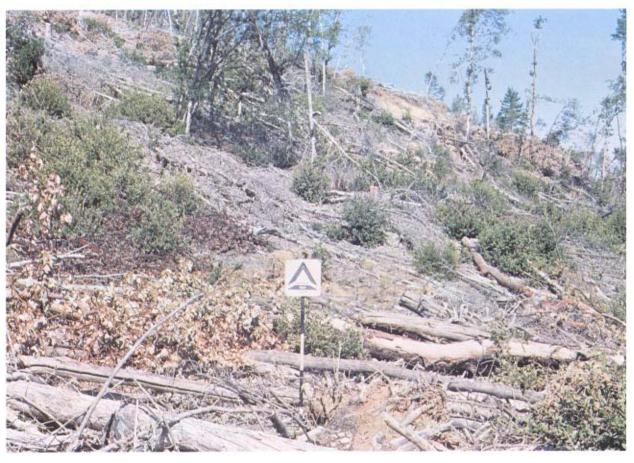
LOADING			0ТН	OTHER MEASUREMENTS			
Size class Weight (inches) (tons/acre) (ft3/acre)		Average residue depth					
0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+ Total	1.3 4.0 16.6 9.6 6.8 38.3	85 321 1,037 795 530 2,768	Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diameter	tanoak (percent) 19 other (percent) 1			
HARVEST INFORMATION			PRECOMMERCIAL THINNING INFORMATION Stems cut/acre Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches) Thinning method Slash treatment	Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:			



4-DFHD-4-CC

LOADING				OTHER MEASUREMENTS			
Size class (inches)	Weight (tons/acre)	(ft ³ /acre)		Average residue depth (feet) 0.			
0.25-1.0	3.7	. 244		Ground area covered by residue 1 Average duff and litter depth	/4-inch diameter and larger	(percent) 81 (inches) 0	
1.1-3.0	6.3	502		Sound residue 3.1-inch diameter and larger Douglas-fir (percei			
3.1-9.0	15.3	968		tanoak (per			
9.1-20.0	12.8	828			other	(percent)1	
20.1+	3.6	239	Rotted residue 3.1-inch diameter		r and larger (percen		
Total	41.7	2,781					
HARVEST INFORMATION		PREC	OMMERCIAL THINNING INFORMATION	- FUEL RATING			
Gross volume cruised (M fbm/acre)		Stems Basal Basal Avera	cut/acre remaining/acre area/acre before area/acre after ge d.b.h. before (inches)	U.S. Forest Service Region 6 fuel type identification MM REMARKS Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where: 1 = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and A = 0-33% understory crown space occupied B = 34-66% " " " " was rated by District Foresters as 3B .			
			ing method				

^{*}Required yarding unmerchantable material (YUM) down to 8 inches, small end and 10 feet in length.



5-DFHD-4-CC

LOADING				OTHER MEASUREMENTS				
Size class (inches)	Weight (tons/acre)	(ft ³ /acr	e) Average	Average residue depth (feet) 0.8				
0.25-1.0	2.7	179		Ground area covered by residue 1/ Average duff and litter depth			(inches) 0	
1.1-3.0	4.8	386					(percent) 54	
3.1-9.0	37.8	2,045		madrone				
9.1-20.0	24.8	1,233	Potted re					
20.1+	10.9	505	No coed 11	estade 3.1-men di	dileter	end ranger	(per centy)	
Total	81.0	4,348				5		
HARVEST INFORMATION P			PRECOMMERCIAL	THINNING INFORMAT	NOI	FUEL RATING		
Gross volume cruised (M fbm/acre) 20.5 Net volume cruised (M fbm/acre) 18.4 Average stems/acre cut 119 Average d.b.h. of stems cut (inches) 18 Stand age (years) 200 Cutting prescription Clearcut Yarding method High-lead Slash treatment None None		Stems cut/acre Stems remaining/acre			U.S. Forest Service Region 6 fuel type identification			
		Basal area/acre before			REMARKS			
		Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches)			Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where: 1 = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and			
		Thinning method	hinning method					
		Stasii treatment						
Period since treatment (cut or	<12				A = 0-33% understory crown B = 34-66% " " C = 67-100% " "	space occupied	
						was rated by District Forest	ers as 3C .	



6-DFHD-4-CC

	LOADING		OTH	OTHER MEASUREMENTS		
Size class Weight (inches) (tons/acre) (ft3/acre		me re) Average residue depth	Average residue depth Ground area covered by residue 1/4-inch diameter and larger			
0.25-1.0	5.6	371	Average duff and litter depth	1/4-inch diameter and larger	(percent) 97 (inches) 0	
1.1-3.0	10.4	833	Sound residue 3.1-inch diameter	r and larger_tanoak	_(percent)_75	
3.1-9.0	51.6	2,847		Douglas-fir other	(percent) 12	
9.1-20.0	13.8	793	Rotted residue 3.1-inch diamete		(percent) 11 (percent) 2	
20.1+	0	0	10000	P		
Total	81.4	4,844				
HARVEST INFORMATION PRE		PRECOMMERCIAL THINNING INFORMATION	- FUEL RATING			
Net volume cruised (M fbm/acre) 38.2		Stems cut/acre Stems remaining/acre Basal area/acre before	U.S. Forest Service Region fuel type identification	6 <u>EE</u>		
Average stems/acre cut Average d.b.h. of stems cut (inches) Stand age (years) Cutting prescription Clearcut Yarding method Slackline Slash treatment None Period since cut or treatment (months) 12		200	Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches) Thinning method Slash treatment	the residue in this photo se The understory hardwood stan logging, using rating criter	ries level. d prior to ia where: space occupied	



7-DFHD-4-CC

	LOADING			OTHER MEASUREMENTS			
Size class (inches)			Average residue depth (feet)1. Ground area covered by residue 1/4-inch diameter and larger (percent) 9				
0.25-1.0	6.5	435 842	Average duff and litter depth Sound residue 3.1-inch diameter a		(inches)	(percent) 95 (inches) 0 (percent) 45	
3.1-9.0	77.5	4,083		Sound Testade Off Them Gramete.	tanoak other	(percent) 39 (percent) 14	
9.1-20.0	16.3	842		Rotted residue 3.1-inch diameter	and larger	(percent) 2	
Tota1	110.8	6,202			5	-	
HA	RVEST INFORMATION		PREC	COMMERCIAL THINNING INFORMATION	FUEL RATING		
Stand age (years) Slackline Slacklin		Stems Basal Basal Avera Avera Thin	s cut/acre s remaining/acre l area/acre before l area/acre after age d.b.h. before (inches) age d.b.h. after (inches) hing method h treatment	U.S. Forest Service Region fuel type identification REMARKS Down and dead hardwoods com the residue in this photo se The understory hardwood stanlogging, using rating criter 1 = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and A = 0-33% understory crown : B = 34-66% " " C = 67-100% " " was rated by District Forest	prise much of ries level. d prior to ia where:		

DOUGLAS-FIR-HARDWOOD

SIZE CLASS 4

PARTIAL CUT

A SERIES OF 6 LEVELS

Reminders to users:

- 1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- 2. Stumps are not included in residue quantities.
- 3. Rotted residue is that which would come apart or splinter when kicked.



1-DFHD-4-PC

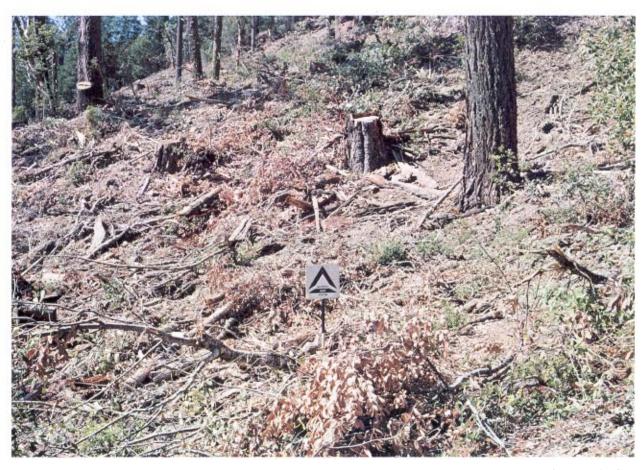
LOADING		ОТНЕ	ER MEASUREMENTS
Weight (tons/acre)	(ft ³ /acre) Average residue depun	(feet) 0.1 L/4-inch diameter and larger (percent) 40
0.7	49		(inches) 0.1
3.4	270	Sound residue 3.1-inch diameter	-
4.0	227	-	Douglas-fir (percent) 11
4.2	415	Rotted residue 3 1-inch diameter	other (percent) 10 r and larger (percent) 63
0	°0	Noticed restrate 5.1- frich drameter	gercenc <u>, 33</u>
12.3	961		A
VEST INFORMATION		PRECOMMERCIAL THINNING INFORMATION	FUEL RATING
uised (M fbm/acre) /acre cut . of stems ars) ription_Overstory d_Rubber-tired s	16.4 9 38 250+ removal	Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches)	Down and dead kardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:
	Weight (tons/acre) 0.7 3.4 4.0 4.2 0 12.3 VEST INFORMATION cruised (M fbm/acre) /acre cut . of stems ars) ription Overstory d Rubber-tired sont Machine piled cut or	Weight (tons/acre)	Weight (tons/acre)



2-DFHD-4-PC

LOADING			OTHE	R MEASUREMENTS	
Size class Weight (inches) (tons/acre) (ft3/acre)		Average residue depth			
0.25-1.0	2.0	132	Average duff and litter depth	Ground area covered by residue 1/4-inch diameter and larger Average duff and litter depth	
1.1-3.0	8.7	693	Sound residue 3.1-inch diameter and larger western white pine		
3.1-9.0	5.1	409			_(percent)_22
9.1-20.0	2.8	235	Rotted residue 3.1-inch diameter	ocher	_(percent) 19 (percent) 2
20.1+	0	"0	100000 7001000 012 11011 01-1101	þ	
Total	18.6	1,469			
HARVEST INFORMATION PR		PRECOMMERCIAL THINNING INFORMATION	. FUEL RATING		
Gross volume cruised (M fbm/acre)		20 20 34 250 wood	Stems cut/acre Stems remaining/acre Basal area/acre before Basal area/acre after Average d.b.h. before (inches) Average d.b.h. after (inches) Thinning method Slash treatment	U.S. Forest Service Region fuel type identification REMARKS Down and dead hardwoods compthe residue in this photo ser The understory hardwood standlogging, using rating criterists = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and A = 0-33% understory crown s B = 34-66% " C = 67-100% " was rated by District Foreste	HH rise much of ies level. prior to a where:

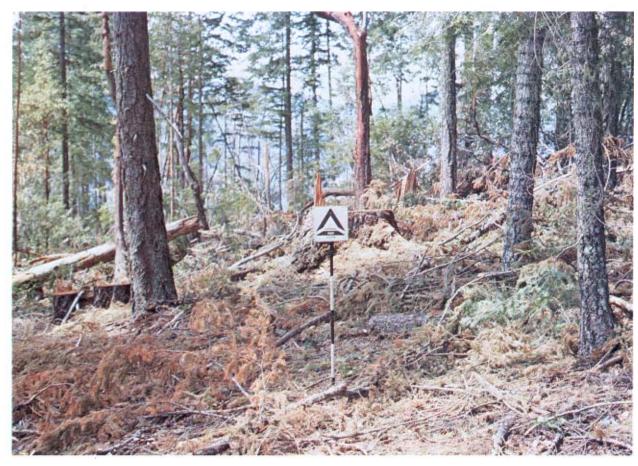
^{*}Required yarding unmerchantable material (YUM) down to 8 inches in diameter, small end and 10 feet in length.



3-DFHD-4-PC

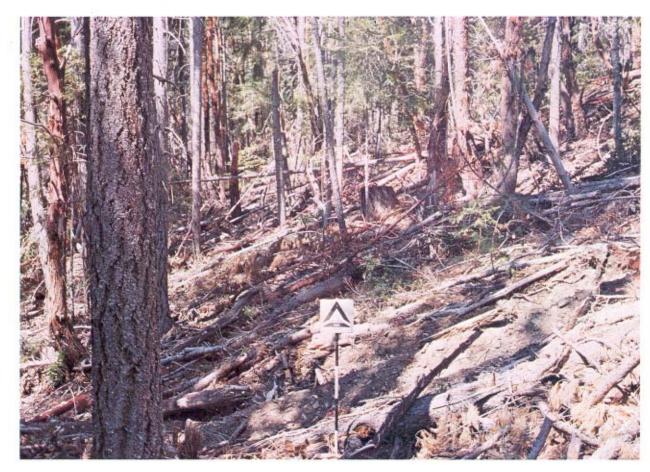
LOADING				OTHER MEASUREMENTS		
Size class (inches)	Weight (tons/acre)	(ft ³ /acre)		Average residue depth	// inch diameter and langer	(feet) 0.5
(inches) 0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+ Total HA Gross volume Net volume c Average stem Average d.b. cut (inches Stand age (y) Cutting pres	(tons/acre) 1.7 8.7 16.9 8.1 0 35.4 RVEST INFORMATION cruised (M fbm/acre s/acre cut h. of stems)	116 693 1,237 730 0 2,776 2re) 35.4 2) 24.1 16 37 250+	PREC Stems Stems Basal Basal Avera Avera Thinn	Ground area covered by residue 1, Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diameter OMMERCIAL THINNING INFORMATION cut/acre remaining/acre area/acre before area/acre before area/acre after ge d.b.h. before (inches) ge d.b.h. after (inches) ing method	and larger white fir tanoak other and larger FUEL RATING U.S. Forest Service Region fuel type identification REMARKS Down and dead hardwoods come the residue in this photo set the understory hardwood stanlogging, using rating criter 1 = <5 ft in height 2 = 5-15 ft in height	(percent) 72 (inches) 0.1 (percent) 51 (percent) 5 (percent) 5 (percent) 25
Yarding meth Slash treatm Period since treatment (ent YUM*	<12	Slash	treatment	2 = 5-15 ft in height 3 = >15 ft in height and A = 0-33% understory crown B = 34-66% " " C = 67-100% " " was rated by District Forest	

^{*}Required yarding unmerchantable material (YUM) down to 8 inches in diameter, small end and 10 feet in length.



4-DFHD-4-PC

	LOADING			OTHER MEASUREMENTS			
Size class (inches) Weight (tons/acre) 3Volume (ft³/acre) 0.25-1.0 5.2 345		Average residue depth (feet)1.					
		Ground area covered by residue 1 Average duff and litter depth	/4-inch diameter and larger	(percent) 95 (inches)1.1			
1.1-3.0	10.7	859		Sound residue 3,1-inch diameter	and larger Douglas-fir	(percent) 78	
3.1-9.0	12.9	785	Rotted residue 3.1-inch diameter		madrone	_(percent) 16	
9.1-20.0	5.7	340			other (percent) and larger (percent)		
20.1+	8.0	532		Noticed Testade 3.1-Then diameter	pr	(per centry	
Total	42.5	2,861					
HARVEST INFORMATION PRE			PREC	COMMERCIAL THINNING INFORMATION	- FUEL RATING		
Stand age (years) Stand method Tractor Slash treatment (months) Stand method Stand m		Stems Basal Basal Avera Avera Thing	s cut/acre s remaining/acre l area/acre before l area/acre after uge d.b.h. before (inches) uge d.b.h. after (inches) uing method n treatment	U.S. Forest Service Region fuel type identification REMARKS Down and dead hardwoods com the residue in this photo se The understory hardwood stanlogging, using rating criter 1 = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and 4 = 0-33% understory crown B = 34-66% " " C = 67-100% " " was rated by District Forest	prise much of ries level. d prior to ia where:		



5-DFHD-4-PC

Residue descriptive code 5-DFHD-4-PC

DATA SHEET

LOADING			OTHE	R MEASUREMENTS		
Size class Weight (inches) (tons/acre) (ft3/acre)			Average residue depth			
0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+ Total	3.0 8.8 29.8 5.8 33.2 80.6	198 703 1,781 397 2,720 5,799	Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diameter	(inches)1.2 and larger madrone (percent) 25 Douglas-fir (percent) 19 other (percent) 22		
Gross volume cruised (M fbm/acre) 35.2 Stand age (years) 150 Cutting prescription Tree selection 35.2 Stand age (years) 150 Cutting prescription Tree selection Tree sele		PRECOMMERCIAL THINNING INFORMATION items cut/acre items remaining/acre iasal area/acre before iasal area/acre after iverage d.b.h. before (inches) iverage d.b.h. after (inches) ihinning method ilash treatment	U.S. Forest Service Region 6 fuel type identification REMARKS Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where: 1 = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and A = 0-33% understory crown space occupied B = 34-66% " " " " was rated by District Foresters as 2C .			



6-DFHD-4-PC

	LOADING			OTHER MEASUREMENTS				
Size class Weight (inches) (tons/acre) (ft ³ /acre)		me 'e)	Average residue depth (feet Ground area covered by residue 1/4-inch diameter and larger (percent					
0.25-1.0 1.1-3.0 3.1-9.0 9.1-20.0 20.1+	2.5 8.7 14.0 31.4 34.2 90.8	166 693 1,055 2,413 2,506 6,833		Average duff and litter depth Sound residue 3.1-inch diameter Rotted residue 3.1-inch diameter	(inches) 0.3 (percent) 57 (percent) 18 (percent) (percent) 25			
HARVEST INFORMATION PR Gross volume cruised (M fbm/acre) 37.4 Ste Net volume cruised (M fbm/acre) 30.9 Ste		Stem	COMMERCIAL THINNING INFORMATION s cut/acre s remaining/acre	U.S. Forest Service Region fuel type identification	6			
	h. of stems) ears) cription Overston od Tractor ent None cut or		Basa Aver Aver Thin	l area/acre before l area/acre after age d.b.h. before (inches) age d.b.h. after (inches) ning method h treatment	REMARKS Down and dead hardwoods com the residue in this photo se The understory hardwood stan logging, using rating criter 1 = <5 ft in height 2 = 5-15 ft in height 3 = >15 ft in height and A = 0-33% understory crown : B = 34-66% "" C = 67-100% "" was rated by District Forest	ries level. d prior to ia where: space occupied		

The PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT SIAIION is to provide the knowledge, technology and alternatives for present and future protection, management and use of forest, range, and related environments.

Within this overall mission, the Station conducts and Stimulates research to facilitate and to accelerate progress toward the following goals:

- Providing safe and efficient technology for inventory protection, and use of resources.
- Developing and evaluating alternative methods and level, of resource management.
- 3. Achieving optimum sustained resource productivity consistent with maintaining a high quality to test

The area of research c encompasses Oregon, Washington, Alaska, and, 10 some cases, California, Hawaii, the Western States, and the Nation. Results of the research are made available promptly. Project headquarters are made available promptly. Project headquarters are at:

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