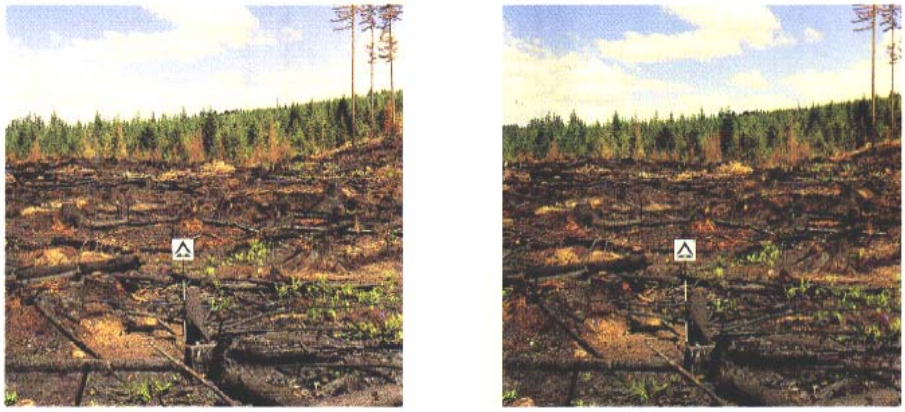
DOWN AND DEAD WOODY FUEL LOADING

Size class (inches)	Load (tons/acre)	Mean diam.[a] (inches)	
		sound	rot
0.0-0.25	0.2	0.1	
0.26-1.0	.3	.5	
1.1-3.0	3.8	1.7	
Subtotal 0-3 in	4.3		
3.1-9.0	14.7	5.9	6.0
9.1-20.0	16.7	11.2	12.8
>20.0	4.7		22.4
Subtotal >3 in	36.2	7.4	10.2
TOTAL	40.4		

[a] Mean diam.=quadratic mean.

STEREO PAIR: 2-DFWH-POST-05



ADDITIONAL FUEL INFORMATION

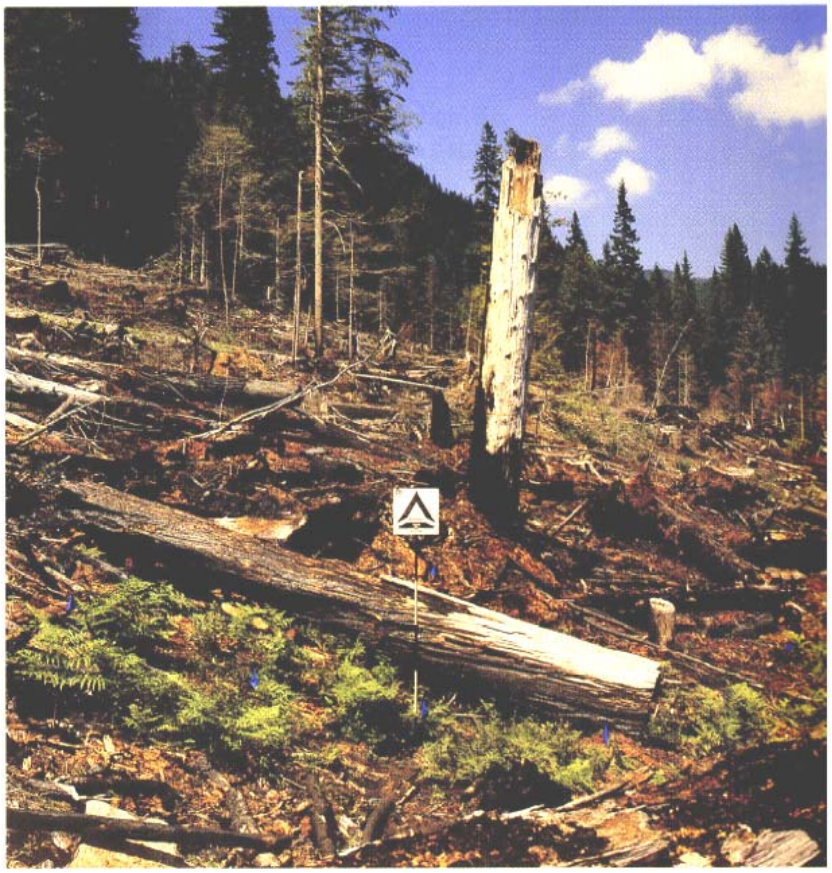
Sound residue >3-inch diameter:	70%	Average residue depth:	0.3 ft
Rotted residue >3-inch diameter:	30%	Average duff depth:	3.0 in

Percent residue >3-inch diameter is based on number of logs.

DOWN AND DEAD WOODY FUEL LOADING

Size class (inches)	Load (tons/acre)	Mean diam.[a] (inches)	
		sound	rot
0.0-0.25	0.5	0.1	
0.26-1.0	.9	.5	
1.1-3.0	4.0	1.7	
Subtotal 0-3 in	5.3		
3.1-9.0	6.9	4.8	7.8
9.1-20.0	24.2	15.1	14.2
>20.0	64.0	28.0	25.1
Subtotal >3 in	95.1	14.0	16.5
TOTAL	100.4		

[a] Mean diam.=quadratic mean.



STEREO PAIR: 2-DFWH-POST-06

ADDITIONAL FUEL INFORMATION

Sound residue >3-inch diameter:	62%	Average residue depth:	0.5 ft
Rotted residue >3-inch diameter:	38%	Average duff depth:	5.6 in

Percent residue >3-inch diameter is based on number of logs.

DOWN AND DEAD WOODY FUEL LOADING

Size class (inches)	Load (tons/acre)	Mean diam.[a] (inches)	
		sound	rot
0.0-0.25	0.2	0.1	
0.26-1.0	.4	.5	
1.1-3.0	2.0	1.7	
Subtotal 0-3 in	2.6		
3.1-9.0	10.6	5.4	5.7
9.1-20.0	12.0	11.2	14.4
>20.0	80.6	32.1	40.6
Subtotal >3 in	103.2	11.5	24.9
TOTAL	105.8		

[a] Mean diam.=quadratic mean.

STEREO PAIR: 2-DFWH-POST-07

ADDITIONAL FUEL INFORMATION

Sound residue >3-inch diameter:	82%	Average residue depth:	0.4 ft
Rotted residue >3-inch diameter:	18%	Average duff depth:	2.6 in

Percent residue >3-inch diameter is based on number of logs.

Ottmar, Roger D.; Hardy, Colin C.; Vihnanek, Robert E. 1990. Stereo photoseries for quantifying forest residues in the Douglas-fir-western hemlock type in the Willamette National Forest. Gen. Tech. Rep. PNW-GTR-258. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 63 p.

A series of stereo photographs displays a range of residue loadings for harvested units in the Douglas-fir-western hemlock cover type common to the Willamette National Forest. Postburn residue levels are also represented for the Douglas-fir-western hemlock types. Information with each photo includes measured quadratic means and weights for various size classes, woody fuel depth, and duff depth. The stereo photo series is designed to help forest managers appraise woody residue after both timber harvest and treatment with fire in forest types not previously represented by a photo series.

Keywords: Residues, fuel loadings, slash, residue measurements, Douglas-fir *Pseudotsuga Menziesii,* western hemlock, *Tsuga heterophylla.*

The **Forest Service** of the U.S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives - as directed by Congress - to provide increasingly greater service to a growing Nation.

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