

Appendix C. Weight of wood (in approximate pounds per cubic foot) at different moisture levels.^a

Species	Moisture content (% oven-dry weight)			Moisture content (% total weight)		
	0%	20%	100%	0%	20%	50%
Coast Douglas-fir	28	34	56	28	35	56
Interior Douglas-fir ^b	29	34	57	29	36	57
Western hemlock	26	31	52	26	32	52
Ponderosa pine	23	28	46	23	29	46
Sitka spruce	23	28	46	23	29	46
Red alder	23	28	46	23	29	46

^a Adapted from *Conversion Factors for the Pacific Northwest Forest Industry* (Institute of Forest Products 1978).

^b Douglas-fir found in California and in all Oregon and Washington counties east of, but adjacent to, the Cascade summit.

Appendix D. Approximate cordwood volume for young Douglas-fir.^a

d.b.h. (in)	Total height of tree (ft)												
	30	40	50	60	70	80	90	100	110	120	130	140	150
6.....	0.02	0.03	0.04	0.05	0.06	0.07							
8.....	0.05	0.07	0.08	0.10	0.12	0.14	0.15						
10.....	0.08	0.11	0.13	0.16	0.19	0.21	0.23	0.26	0.29	0.31			
12.....	0.12	0.16	0.19	0.23	0.26	0.30	0.33	0.36	0.41	0.44			
14.....	0.16	0.20	0.25	0.30	0.35	0.40	0.45	0.49	0.54	0.59	0.64	0.70	
16.....		0.26	0.32	0.38	0.45	0.51	0.57	0.62	0.67	0.74	0.80	0.88	0.90
18.....			0.40	0.48	0.55	0.62	0.70	0.77	0.83	0.90	0.98	1.07	1.17
20.....			0.48	0.57	0.68	0.75	0.83	0.92	0.98	1.07	1.17	1.28	1.39
22.....			0.57	0.66	0.76	0.86	0.96	1.05	1.13	1.24	1.35	1.46	1.60
24.....				0.76	0.87	0.98	1.08	1.17	1.27	1.39	1.50	1.63	1.79

^a Reproduced with permission from *Your Trees—A Crop* (Sullivan, no date). The tree is used to a 4-in top. Cordwood is assumed to be cut in 8-ft lengths.

Example: If a tree is 12 in d.b.h. and 70 ft tall, you can expect to cut about 0.26 cord. You will need 3.8 trees for each cord:

$$\frac{1 \text{ cord}}{0.26 \text{ cord}} = 3.8$$

