

2003

Nebraska Fuelwood Specifications

Follow this and additional works at: <http://digitalcommons.unl.edu/nebforestpubs>



Part of the [Forest Sciences Commons](#)

"Nebraska Fuelwood Specifications" (2003). *Publications, etc. -- Nebraska Forest Service*. 41.
<http://digitalcommons.unl.edu/nebforestpubs/41>

This Article is brought to you for free and open access by the Nebraska Forest Service at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Publications, etc. -- Nebraska Forest Service by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Nebraska Fuelwood Specifications

Species	(1) Ave. M.C. (Green)	(2) Specific Gravity		Density (lbs/cu.ft.)		(3) Weight/Cord (Lbs.)		(4) Heat/Cord (MM BTU)
		Green	20% M.C.	Green	20% M.C.	Green	20% M.C.	
Osage Orange	--	0.76	0.79	64.0	59.1	5120	4728	32.9
Black Locust	0.40	0.66	0.67	57.7	50.2	4616	4016	27.9
Iron Wood	--	-	0.67	-	50.2	-	4016	27.9
Shagbark Hickory	0.60	0.64	0.66	63.8	49.4	5104	3952	27.5
Dogwood	-	-	0.65	-	48.6	-	3888	27.0
Apple	-	-	0.65	-	48.6	-	3888	27.0
Bitternut Hickory	0.68	0.60	0.64	62.9	47.9	5032	3832	26.7
Honey locust	0.56	0.60	0.64	58.0	47.9	4640	3832	26.7
Bur Oak	0.71	0.58	0.63	62.0	47.1	4960	3768	26.2
Mulberry	0.60	0.59	0.62	58.9	46.4	4712	3712	25.8
Red Oak	0.75	0.56	0.59	61.1	44.1	4888	3528	24.6
White Ash	0.45	0.55	0.58	49.4	43.4	3952	3472	24.2
Hard Maple	0.68	0.56	0.59	58.7	41.9	4696	3352	23.3
Green Ash	0.58	0.53	0.55	52.3	41.1	4184	3288	22.9
Black Walnut	0.80	0.51	0.53	57.3	39.6	4584	3192	22.2
Red Elm	-	0.48	0.52	-	38.9	-	3112	21.6
Kentucky Coffeetree	0.55	0.50	0.52	48.4	38.9	3872	3112	21.6
Hackberry	0.63	0.49	0.51	49.8	38.1	3984	3048	21.2
Paper Birch	0.80	0.48	0.50	53.9	37.4	4312	2992	20.8
Black Cherry	0.58	0.47	0.49	46.2	36.6	3696	2928	20.4
American Elm	0.94	0.46	0.48	55.7	35.9	4456	2872	20.0
Eastern Red cedar	-	0.44	0.45	-	32.9	2950	2632	19.8
Sycamore	1.22	0.46	0.47	63.7	35.1	5096	2808	19.5
Silver Maple	0.78	0.44	0.46	48.8	34.4	3904	2752	19.0
Boxelder	-	-	0.44	-	32.9	-	2632	18.3
Ponderosa Pine	0.90	0.38	0.39	45.0	29.2	3600	2336	17.6
Catalpa	-	0.38	0.39	-	29.5	-	2360	16.4
Cottonwood	1.50	0.37	0.38	58.0	28.4	4640	2272	15.8

Butternut	-	0.36	0.37	-	27.7	-	2216	15.4
Black Willow	-	0.36	0.37	-	27.7	-	2216	15.4
Basswood	1.07	0.32	0.33	41.3	24.7	3304	1976	13.8
Buckeye	-	-	0.32	-	24.0	-	1920	13.4

(1) Moisture Content (MC) = green weight - oven dry weight ÷ oven dry weight

(2) Specific Gravity = oven dry weight ÷ weight of the same volume of water as the wood sample volume at designated MC

(3) Based on 80 cu. ft. per cord of solid wood

(4) Assumption: @ 0% M.C., Hardwoods = 8600 BTU/lb and Softwoods = 9300 BTU/lb. To calculate BTU/lb @ 20% MC = (.833 lbs. of wood) (BTU/lb at 0% MC) - (.167 lbs. H₂O) (1210 BTU for H₂O vaporization). Therefore, Hardwoods = 6962 BTU/lb and Softwoods = 7545 BTU/lb. @ 20% MC.