

Firewood Characteristics of WNC Tree Species

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Common Name	Species Name	SG (oven-dry)	lbs/cord (20% MC)	MBTU/cord (20% MC)	Ease of Splitting	Smoke	Sparks	Coaling	Scent
Pear, Bradford	<i>Pyrus calleryana</i>	0.68	4330	27.9	Hard	Low	Low	Excellent	Fair
Locust, Black	<i>Robinia pseudoacacia</i>	0.66	4203	27.1	Hard	Low	Low	Excellent	Fair
Hickory, Mockernut	<i>Carya alba</i>	0.64	4075	26.3	Hard	Low	Low	Excellent	Excellent
Hickory, Shagbark	<i>Carya ovata</i>	0.64	4075	26.3	Hard	Low	Low	Excellent	Excellent
Persimmon, Common	<i>Diospyros virginiana</i>	0.64	4075	26.3	Hard	Low	Low	Excellent	Good
Hickory, Bitternut	<i>Carya cordiformis</i>	0.60	3821	24.6	Hard	Low	Low	Excellent	Excellent
Oak, White	<i>Quercus alba</i>	0.60	3821	24.6	Medium	Low	Low	Excellent	Good
Oak, Pin	<i>Quercus palustris</i>	0.58	3693	23.8	Medium	Low	Low	Excellent	Good
Oak, Chestnut	<i>Quercus prinus</i>	0.57	3630	23.4	Medium	Low	Low	Excellent	Good
Maple, Sugar	<i>Acer saccharum</i>	0.56	3566	23.0	Medium	Low	Low	Excellent	Good
Beech, American	<i>Fagus grandifolia</i>	0.56	3566	23.0	Medium	Low	Low	Excellent	Good
Oak, Northern Red	<i>Quercus rubra</i>	0.56	3566	23.0	Medium	Low	Low	Excellent	Good
Walnut, Black	<i>Juglans nigra</i>	0.51	3247	20.9	Medium	Low	Low	Good	Good
Holly, American	<i>Ilex opaca</i>	0.50	3184	20.5	Medium	Low	Low	Good	Fair
Sourwood	<i>Oxydendrum arboreum</i>	0.50	3184	20.5	Hard	Low	Low	Good	Good
Maple, Red	<i>Acer rubrum</i>	0.49	3120	20.1	Medium	Low	Low	Good	Good
Pine, Shortleaf	<i>Pinus echinata</i>	0.47	2993	19.3	Easy	Medium	Medium	Fair	Good
Cherry, Black	<i>Prunus serotina</i>	0.47	2993	19.3	Easy	Low	Low	Excellent	Excellent
Sweetgum	<i>Liquidambar styraciflua</i>	0.46	2929	18.9	Hard	Low	Low	Good	Fair
Blackgum	<i>Nyssa sylvatica</i>	0.46	2929	18.9	Hard	Low	Low	Good	Fair
Maple, Silver	<i>Acer saccharinum</i>	0.44	2802	18.1	Medium	Low	Low	Good	Good
Boxelder	<i>Acer negundo</i>	0.42	2674	17.2	Medium	Low	Low	Good	Fair
Poplar, Tulip	<i>Liriodendron tulipifera</i>	0.40	2547	16.4	Easy	Medium	Medium	Fair	Fair
Hemlock, Eastern	<i>Tsuga canadensis</i>	0.38	2420	15.6	Easy	Medium	Medium	Fair	Good
Pine, Eastern White	<i>Pinus strobus</i>	0.34	2165	14.0	Easy	Medium	Medium	Fair	Good

SG = Specific Gravity

MC = Moisture Content

MBTU = Million BTU

Assumptions

Oven-dry SG species values based on USDA Research Note NRS-38

Wood @ 20% MC = 83.3% wood and 16.7% water by weight

Average caloric value of wood @ 20% MC = 6450 BTU/lb based on United Nations Wood Fuels Handbook

85 ft³ of solid wood per 128 ft³ stacked cord