

Firewood Quality

Hard Woods

Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Alder	Medium-Low	2506	Easy	Fair	Good	Moderate	Slight
Apple	High-Medium	4132	Difficult	Difficult	Excellent	Few	Excellent
Ash , Black	Medium	4132	Easy-Moderate	Fair-Difficult	Good-Excellent	Few	Slight
Ash, Green	High	3590	Easy-Moderate	Fair-Difficult	Good-Excellent	Few	Slight
Ash, White	High	3,689	Easy-Moderate	Fair-Difficult	Good-Excellent	Few	Slight
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Aspen, Bigtooth	Low	2439	Easy	Easy	Good	Few	Slight
Aspen, Quaking	Low	2373	Easy	Easy	Good	Few	Slight
Basswood	Low	2174	Easy	Easy	Poor	Few	Good
Beech	High	3757	Difficult	Difficult	Excellent	Few	Good
Beech, American	High	3793	Difficult	Difficult	Excellent	Few	Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Beech, Blue	High	3890	Difficult	Difficult	Excellent	Few	Good
Birch, White	Medium	3179	Easy	Easy	Good	Moderate	Slight
Birch, Sweet	Medium	4065	Easy	Easy	Good	Moderate	Slight
Birch, Gray	Medium	3179	Easy	Easy	Good	Moderate	Slight
Birch, Paper	Medium	3260	Easy	Easy	Good	Moderate	Slight
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Birch, Yellow	High-Medium	3723	Moderate	Easy	Good	Moderate	Slight
Birch, Black	High-Medium	3890	Moderate	Easy	Good	Moderate	Slight
Buckeye, Horsechestnut	Low	2235	Moderate		Poor	Few	Slight
Boxelder	Low	2797	Easy		Poor	Many	Slight
Butternut (white walnut)	Low	2440	Easy				
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Catalpa	Low	2360	Difficult		Good	Few	Fair
Cherry, Black	Medium	2880	Easy	Difficult	Excellent	Few	Excellent
Cherry	Medium	3184	Easy	Difficult	Excellent	Few	Excellent
Chestnut	Low	2708	Easy			Many	Good
Coffeetree, Kentucky	High	3112	Moderate		Good	Few	Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Cottonwood	Low	2102	Easy	Easy	Good	Moderate	Slight
Dogwood	High	4331	Difficult	Good	Fair	Few	
Elm, American	Medium	3116	Very Difficult	Fair	Good	Very Few	Fair
Elm, Rock	Medium	3860	Very Difficult	Fair	Good	Very Few	Fair
Elm, Siberian	Medium	3020	Very Difficult	Fair	Good	Very Few	Fair

Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance	
Elm, Slippery	Medium	3251	Very Difficult	Fair	Good	Very Few	Fair	
Eucalyptus	Very High	4560						
-Swamp yate				Difficult	Poor	Excellent	Few	Good
-Sugar gum				Difficult	Poor	Excellent	Few	Good
-Tasmanian blue gum				Fair	Fair	Good	Few	Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance	
-River red gum			Difficult	Poor	Excellent	Moderate	Good	
-SA blue gum			Difficult	Poor	Excellent	Few	Good	
Hackberry	High	3319	Easy		Good	Few	Slight	
Hazel	High		Moderate	Moderate				
Hawthorn	High		Moderate	Moderate				
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance	
Hickory, True	Very High	4,327	Moderate	Fair-Difficult	Excellent	Moderate	Excellent	
Hickory, Mockernut	Very High	4332	Moderate	Fair-Difficult	Excellent	Moderate	Excellent	
Hickory, Pignut	Very High	4332	Moderate	Fair-Difficult	Excellent	Moderate	Excellent	
Hickory, Shagbark	Very High	4333	Moderate	Fair-Difficult	Excellent	Moderate	Excellent	
Hickory, Shellbark	Very High	4195	Moderate	Fair-Difficult	Excellent	Moderate	Excellent	
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance	
Holly, American		3387	Difficult					
Honeylocust	High	3832	Easy		Excellent	Few	Slight	
Hophornbeam, Eastern		4266						
Ironwood (Hornbeam)	Very High	4267	Very Difficult	Very Difficult	Excellent	Few		
Laurel, California		3456						
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance	
Locust, Black	Very High	4470	Very Difficult	Difficult	Excellent	Very Few	Slight	
Madrone	High	3925	Difficult	Difficult	Excellent	Very Few	Slight	
Maple, Bigleaf	High-Medium	2980	Moderate	Fair-Difficult	Excellent	Few	Excellent	
Maple, Silver	High-Medium	2981	Moderate	Fair-Difficult	Excellent	Few	Fair	
Maple, Black	High-Medium	3523	Moderate	Fair-Difficult	Excellent	Few	Excellent	
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance	
Maple, Soft	High-Medium	2924	Moderate	Fair-Difficult	Excellent	Few	Excellent	
Maple, Red	High-Medium	3318	Moderate	Fair-Difficult	Excellent	Few	Excellent	

Maple, Sugar	High	3793	Moderate	Difficult	Excellent	Few	Excellent
Mesquite	Very High		Very Difficult	Very Difficult	Excellent	Few	
Mulberry	Medium	3712	Easy		Excellent		Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Oak, Bur	High	3928	Easy	Difficult	Excellent	Few	Fair
Oak, Red	High	3680	Moderate	Difficult	Excellent	Few	Fair
Oak, White	Very High	4200	Moderate	Difficult	Excellent	Few	Excellent
Osage Orange	High	4728	Moderate		Excellent	Many	Excellent
Pecan	High		Moderate		Good	Few	Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Persimmon		4332	Moderate				
Pine, Lodgepole	Low	2610	Easy	Easy	Fair	Moderate	Good
Poplar, Yellow (Tuliptree)	Low	2708	Easy	Easy	Fair	Moderate	Bitter
Sweet Gum	Medium	3115	Difficult	Fair	Fair	Few	
Sycamore	Medium	3115	Difficult	Very Difficult	Good	Few	Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Walnut	High-Medium	3454	Moderate	Fair	Good	Few	Fair
Willow	Low	2438	Easy	Fair	Poor	Moderate	Slight

Soft Woods

Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Cedar, White	Medium-Low	2100	Easy	Easy	Poor	Moderate	Excellent
Cedar, Eastern	Medium-Low	2981	Easy	Easy	Poor	Many	Excellent
Cedar, W. Red	Medium-Low	2100	Easy	Easy	Poor	Many	Excellent
Cypress	Medium	2844	Easy	Moderate		Few	
Fir, Douglas	Medium	3049	Easy	Easy	Fair	Moderate	Slight
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Fir, Balsam	Low	2236	Easy	Easy	Fair	Moderate	Slight
Fir, Grand	Low	2371	Easy	Easy	Fair	Moderate	Slight
Fir, White	Low	2104	Easy	Easy	Fair	Moderate	Slight
Hemlock, Eastern	Medium-Low	2573	Easy	Easy	Poor	Many	Good
Hemlock, Western	Medium-Low	2847	Easy	Easy	Poor	Many	Good
Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Juniper	Medium	3150	Medium		Poor	Many	Excellent
Larch, Western (Tamarack)	High-Medium	3318	Easy-Moderate	Easy-Fair	Fair	Many	Slight
Pine, Lodgepole	Low	2576	Easy	Easy	Fair	Moderate	Good
Pine, Ponderosa	Medium-Low	2573	Easy	Easy	Fair	Moderate	Good
Pine, E&W White	Medium-Low	2303	Easy	Easy	Fair	Moderate	Good

Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Pine, Sugar	Low	2302	Easy	Easy	Fair	Moderate	Good
Pine, Yellow	High-Medium	2610	Easy	Easy	Fair	Moderate	Good
Pinon	High	3000	Easy			Many	
Redwood, Old Growth	Medium	2573	Easy	Easy-Fair	Poor	Many	Slight
Redwood, Second Growth	Medium	2302	Easy	Easy-Fair	Poor	Many	Slight

Species	Heat	Weight*	Ease Of Splitting	Ease Of Starting	Coaling Qualities	Sparks	Fragrance
Spruce, Black	Low	2575	Easy	Easy	Poor	Few	Slight
Spruce, Engelmann	Low	2234	Easy	Easy	Poor	Few	Slight
Spruce, Norway	Low	2240	Moderate	Easy	Poor	Many	Slight
Spruce, Sitka	Low	2506	Easy		Poor		Slight
Yew	High		Difficult	Difficult			Good

*Weight - pound /cord - seasoned wood.
Cord - stack 4' x 4' x 8' feet high (~85 ft³ with air space removed)
Face cords - 4' x 8' x <4' (usually about 16" deep)

Alder: Poor heat output and short lasting. A low quality firewood. Produces nice charcoal that burn steady and is useful for homemade gunpowder.

Apple: Great fuel that bums slow and steady when dry, with little flame, sparking or spitting. It has a pleasing scent. It is easier to cut green. Great for cooking.

Ash: Considered one of the burning wood with steady flame and good heat output. It will bum when green, but not as well as when dry. Easily to saw and split.

Beech: Similar to ash, but only burns fair when green. If it has a fault, it may shoot embers out a long ways. It is easy to chop.

Birch: This has good heat output but burns quickly. The smell is also pleasant. It will burn unseasoned. Can cause gum deposits in chimney if used a lot. Rolled up pitch from bark makes a good firestarter and can be peeled from trees without damaging them.

Blackthorn: Burns slowly, with lots of heat and little smoke.

Cedar: This is a great wood that puts out a lot of lasting of heat. It produces a small flame, a nice scent, and lots of crackle and pop. Great splitting wood. Best when dry but small pieces can be burned unseasoned. Good for cooking.

Cherry: A slow burning wood with good heat output. Has a nice sent. Should be seasoned well. Slow to start.

Chestnut: A mediocre fuel that produces a small flame and weak heat output. It also shoots out ambers.

Douglas Fir: A poor fuel that produces little flame or heat.

Elder: A mediocre fuel that burns quickly without much heat output and tends to have thick acrid smoke. The Hag Goddess is known to reside in the Elder tree and burning it invites death. Probably best avoided.

Elm: A variable fuel (Dutch elm disease) with a high water content (140%) that may smoke violently and should be dried for two years for best results. You may need faster burning wood to get elm going. A large log set on the fire before bed will burn till morn. Splitting can be difficult and should be done early on.

Eucalyptus: A fast burning wood with a pleasant smell and no spitting. It is full of sap and oils when fresh and can start a chimney fire if burned unseasoned. The stringy wood fiber may be hard to split and one option is to slice it into rings and allow to season and self split. The gum from the tree produces a fresh medicinal smell on burned which may not be the best for cooking with.

Hawthorn: Good firewood. Burns hot and slow.

Hazel: An excellent fast burning fuel but tends to burn up a bit faster than most other hard woods. Allow to season.

Holly: A good firewood that will burn when green, but best if dried a year. It is fast burning with a bright flame but little heat.

Hornbeam: Burns almost as good as beech with a hot slow burning fire.

Horse Chestnut: A low quality firewood with a good flame and heating power but spits a lot.

Laburnum: Completely poisonous tree with acrid smoke that taints food and is best never used.

Larch: Crackly, scented, and fairly good for heat. It needs to be seasoned well and forms an oily soot in chimneys.

Laurel: Produces a brilliant flame.

Lime: A poor quality fuel with dull flame. Good for carving

Maple: A good firewood.

Oak: Oak has a sparse flame and the smoke is acrid if not seasoned for two years. Dry old oak is excellent for heat, burning slowly and steadily until whole log collapses into cigar-like ash.

Pear: Burns with good heat, good scent and no spitting. Needs to be seasoned well.

Pine: Burns with a splendid flame, but apt to spit. Needs to be seasoned well and is another oily soot in chimney wood. Smells great and its resinous wood makes great kindling.

Plane: Burns pleasantly, but is apt to throw sparks if very dry.

Plum: Wood provides good heat with a nice aromatic sent.

Poplar: A terrible fuel that doesn't burn well and produces a black choking smoke even when seasoned.

Rowan: A good firewood that burns hot and slow.

Rhododendron: Old thick and tough stems burn well.

Robinia (Acacia): Burns slowly, with good heat, but with acrid smoke.

Spruce: A poor firewood that burns too quickly and with too many sparks.

Sycamore: Burns with a good flame, with moderate heat. Useless green.

Sweet Chestnut: Burns when seasoned but tends to spits continuously and excessively.

Thorn: One of the best firewood. Burns slowly, with great heat and little smoke.

Walnut: Low to good value to burning. It a nice aromatic scent.

Wellingtonia: Poor for use as a firewood.

Willow: A poor fire wood that must be dry to use. Even when seasoned, it burns slowly, with little flame. Apt to spark.

Yew: This burns slowly, with fierce heat. The scent is pleasant. Another carving favorite.