

# Characteristics of Common Western Virginia Trees

Common name	Scientific name	Shade tolerance T: tolerant I: intermediate NT: not tolerant	Years to seed maturity	Other regeneration method(s)	Growth rate F: fast I: intermediate S: slow	Life span <sup>3</sup> S: short I: intermediate L: long VL: very long	Tolerance of poor aeration <sup>4</sup> T: tolerant I: intermediate NT: not tolerant
<b>Other Alternate Branching Hardwoods</b>							
Blackgum	<i>Nyssa sylvatica</i>	T	1	sprouts <sup>1</sup> , suckers <sup>2</sup>	F, slows down	I	I
Yellow poplar	<i>Liriodendron tulipifera</i>	NT	1	sprouts	F	L	NT
Yellow birch	<i>Betula alleghaniensis</i>	I	1	sprouts	I	I	I
Black birch	<i>Betula lenta</i>	I	1	sprouts	I	I	NT
Cucumber tree	<i>Magnolia acuminata</i>	I	1	sprouts	F	S	NT
American basswood	<i>Tilia americana</i>	T	1	sprouts, suckers	F	I	NT
American sycamore	<i>Platanus occidentalis</i>	I	1	sprouts	F	VL	T
Persimmon	<i>Diospyros virginiana</i>	T	1	sprouts, suckers	S	I	I
Sassafras	<i>Sassafras albidum</i>	NT	1	sprouts, suckers	I	I	NT
Black cherry	<i>Prunus serotina</i>	NT	1	sprouts	F	I	NT
American beech	<i>Fagus grandifolia</i>	T	1	sprouts	S	VL	T
Black locust	<i>Robinia pseudoacacia</i>	NT	1	suckers, sprouts	F	S	NT
<b>Pines</b>							
Table Mountain pine	<i>Pinus pungens</i>	NT	1	serotinous cones <sup>5</sup>	I	I	NT
Shortleaf pine	<i>Pinus echinata</i>	NT	1	sprouts after fire	I	I	NT
White pine, eastern	<i>Pinus strobus</i>	I	1		F	I-L	NT
Virginia (scrub) pine	<i>Pinus virginiana</i>	NT	1		F	S	NT
Loblolly pine <sup>6</sup>	<i>Pinus taeda</i>	NT	1		F	I	T
Pitch pine	<i>Pinus rigida</i>	NT	2	sprouts after fire	S	I	T
<b>Other Softwoods</b>							
Eastern red cedar	<i>Juniperus virginiana</i>	NT	1		S	S-I	I
Eastern hemlock	<i>Tsuga canadensis</i>	T	1		S	VL	I

**Notes:**

<sup>1</sup> Sprouts: sprouts from stump following disturbance, such as cutting.

<sup>2</sup> Suckers: sprouts from roots following disturbance, such as cutting.

<sup>3</sup> Life Span: S (short) = 0-100 yrs; I (intermediate) = 100-200 yrs; L (long) = 200-300 yrs; VL (very long) = 300+ yrs.

<sup>4</sup> Roots' ability to tolerate a limited supply of oxygen due to saturated soils.

<sup>5</sup> Seed cones require extreme heat to release seeds.

<sup>6</sup> Not native to western Virginia.



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Forest management is a complex process. Silviculture—a system in which healthy communities of trees and other vegetation are established and maintained for the benefit of people—uses forest ecology to guide complex management prescriptions that mimic forest disturbances and processes. Silvics—the natural characteristics of trees—play an important role in prescribing effective silviculture.

The tables contained in this publication describe some important silvical characteristics of trees common in Virginia's mountains. Landowners and foresters can use this information to make silvicultural decisions that achieve forest-management objectives.

For instance, it is important to know which trees are shade-intolerant, because they will require adequate sunlight to grow. Regenerating these trees requires silvicultural prescriptions that will open up enough of the forest's canopy to allow sufficient light to penetrate. Another example related to forest regeneration is sprouting potential. Trees that sprout from stumps or sucker from roots (see descriptions below tables) may be regenerated by these means rather than planting seeds and/or seedlings.

## References:

Burns, Russell M., and Barbara H. Honkala, tech. coords. 1990. *Silvics of North America: 1. Conifers; 2. Hardwoods*. Agriculture Handbook 654. Washington, D.C.: USDA Forest Service.

Common name	Scientific name	Shade tolerance T: tolerant I: intermediate NT: not tolerant	Years to seed maturity	Other regeneration method(s)	Growth rate S: slow I: intermediate F: fast	Life span <sup>3</sup> S: short I: intermediate L: long VL: very long	Tolerance of poor aeration <sup>4</sup> T: tolerant I: intermediate NT: not tolerant
<b>Alternate Branching Hardwoods</b>							
<b>White Oaks</b>							
White oak	<i>Quercus alba</i>	I	1	sprouts <sup>1</sup>	S	VL	NT
Chestnut oak	<i>Quercus prinus</i>	I	1	sprouts	S	L	NT
<b>Red Oaks</b>							
Black oak	<i>Quercus velutina</i>	I	2	sprouts	I	I	NT
Northern red oak	<i>Quercus rubra</i>	I	2	sprouts	Mod.–F	L	NT
Scarlet oak	<i>Quercus coccinea</i>	NT	2	sprouts	F	I	NT
<b>Hickories and Walnuts</b>							
Shagbark hickory	<i>Carya ovata</i>	I	1	sprouts, suckers <sup>2</sup>	S	L	I
Mockernut hickory	<i>Carya tomentosa</i>	NT	1	sprouts	S	L	NT
Pignut hickory	<i>Carya glabra</i>	I	1	sprouts	S	VL	NT
Bitternut hickory	<i>Carya cordiformis</i>	NT	1	sprouts	I	I	T
Butternut	<i>Juglans cinera</i>	NT	1	sprouts	F	S	NT
Black walnut	<i>Juglans nigra</i>	NT	1	sprouts	F	I	NT
<b>Opposite Branching Hardwoods</b>							
Striped maple	<i>Acer pensylvanicum</i>	T	1	sprouts	S	S	I
Red maple	<i>Acer rubum</i>	T	1	sprouts	F, when young	S	T
Sugar maple	<i>Acer saccharum</i>	T	1	sprouts	I	VL	NT
Flowering dogwood	<i>Cornus florida</i>	T	1	sprouts	F, slows down	S	I
Green ash	<i>Fraxinus pennsylvanica</i>	I	1	sprouts	I	I	I
White ash	<i>Fraxinus americana</i>	I	1	sprouts	I	I	NT

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