

# Common Maine Trees

Only the most common trees in Maine are described. Species are listed from most shade tolerant to least shade tolerant. Identifying trees is not discussed. There are many excellent books at your local library or book store that do an excellent job of teaching tree identification; mainly using drawings and pictures. You may also learn tree identification on your computer. Check out the [Dendro on Disk](#) web site. The Maine Forest Service publishes an excellent guide to trees in Maine (call 287-2791). The following defines the categories used to describe each species.

**Tolerance:** Ability to grown in shade

Shade: Can grow underneath a full canopy of trees

Partial: Needs some openings in the canopy to grow (about 50% open)

Sun: Needs more than 50% full sunlight to grow

**Site:** Type of soil and location that the species is most often found. Keep in mind that most trees can grow the fastest on moist, fertile, well-drained sites; but only the best competitors grow there (sugar maple, black spruce, white ash, yellow birch). A sugar maples may be able to take over a fertile site growing poplars, but they will not be able to take over an infertile site of poplars. This results in poplars being commonly found on infertile sites, eventhough they would grow best on fertile sites.

**Regeneration:** Type of soil and site needed for successful regeneration. Includes temperature, moisture, fertility, and shade.

**Longevity:** Average life of tree. Most trees die younger than this number from competition.

**Associates:** Species commonly found growing with this one.

**Pests:** Common insect and disease problems -see the [Protection web page](#)

**Products:** General categories of products made

Lumber: Used for construction

Pulp: Used for making paper products

Veneer: Used to produce high quality thin sheets of wood (only the highest quality trees)

Specialty Products: Miscellaneous products like toothpicks and baseball bats

**Other:** Anything else pertinent or of interest

## Conifers / Hardwoods

### Conifers

[Hemlock](#) / [Fir](#) / [Red Spruce](#) / [White Spruce](#) / [Cedar](#) / [Black Spruce](#) / [White Pine](#) / [Red Pine](#) / [Larch](#)

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#### **Eastern Hemlock** *Tsuga canadensis*

**Tolerance:** Shade

**Site:** cool and moist, along streams and lakes

**Regeneration:** Cool and moist, Encourage regeneration by scarifying the forest floor, Can sprout on

stumps, logs, and moss-covered boulders, Can grow as small tree in shade for more than 200 years and then grow fast when exposed to sunlight.

**Longevity:** 300-1000 years

**Associates:** White pine, red spruce, maple, beech, yellow birch

**Pests:** [Hemlock woolly adelgid](#) and hemlock looper

**Products:** Lumber and pulp

**Other:** Beautiful tree

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### **Balsam Fir** *Abies balsamea*

**Tolerance:** Shade

**Site:** Moist and wet

**Regeneration:** Prolific seeder

**Longevity:** 80 years, fungus rots stem from inside at about 40 years old

**Associates:** Spruces and hardwoods

**Pests:** First to die in a spruce budworm epidemic, fungi that rot wood of standing trees

**Products:** Pulp, Lumber, Christmas trees, and Christmas wreaths

**Other:** Shallow roots make susceptible to windthrow

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### **Red Spruce** *Picea rubens*

**Tolerance:** Shade

**Site:** Moist, best on sandy soils and moist loams

**Regeneration:** Can grow as small tree in shade for more than 200 years and then grow fast when exposed to sunlight. Prolific seeds every 3-8 years

**Longevity:** 300-400 years

**Associates:** Fir and northern hardwoods

**Pests:** One of last trees spruce budworm will kill in an epidemic, spruce bark beetle

**Products:** Lumber, pulp, and Christmas tree

**Other:** Shallow roots make susceptible to windthrow

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### **White Spruce** *Picea glauca*

**Tolerance:** Shade

**Site:** Moist soil, along streams, wetlands rich in calcium (called fens)

**Regeneration:** Fast growing, often used in plantations in Canada

**Longevity:** 200 years

**Associates:** Aspen, birch, fir, other spruces

**Pests:** Spruce budworm

**Products:** Lumber, pulp, and Christmas trees

**Other:**

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### **Northern White Cedar** *Thuja occidentalis*

**Tolerance:** Partial

**Site:** Moist and wet, bogs, swamps, soils rich in calcium

**Regeneration:** Moist organic soil

**Longevity:** 400 years

**Associates:** Fir, hemlock, pine, spruce, larch, black ash, yellow birch, maples

**Pests:** Stems rot in center to create hollow trees

**Products:** Lumber and shingles, decay and weather resistant

**Other:** Favorite browse of deer

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### **Black Spruce** *Picea mariana*

**Tolerance:** Partial

**Site:** Wet; bogs, organic soils (mountain tops) and other nutrient poor sites

**Regeneration:** Layering and seeds. Paper companies plant in Maine because of its fast growth on fertile, well-drained soils. Slow growing on the poor sites it inhabits naturally.

**Longevity:** 250 years

**Associates:** Larch, Poplar, Cedar, Fir, Birches, Other spruces

**Pests:** Serious insect pest is dwarf mistletoe, a plant parasite that cause the top of the tree to look like a witches broom.

**Products:** Excellent pulpwood for high grade paper, lumber, Christmas trees

**Other:** Grown in paper company plantations

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### **White Pine** *Pinus strobus*

**Tolerance:** Partial

**Site:** Wide range, Wet (bogs) and dry, often found on sandy soils where it uses its deep taproot to get to water

**Regeneration:** Prolific seed crop roughly every 7 years, fast growth, often first to colonize old fields, Seedlings are tolerant of shade and saplings are not

**Longevity:** 200+ years

**Associates:** Hardwoods on fertile sites, other pines on dry sites, often taller than main canopy (100' tall)

**Pests:** [White pine blister rust](#) (killing bark disease) and [white pine weevil](#) (kills top shoot which results in a many forks in the main stem)

**Products:** Excellent lumber, furniture, specialty products, and pulp

**Other:** Maine's State Tree, Extremely windfirm

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### **Red Pine** *Pinus resinosa*

**Tolerance:** Sun

**Site:** Sandy soils, shallow soils, often on soils too nutrient poor and dry for white pine; dry, rocky ridges

**Regeneration:** Has often been planted in old fields and areas stripped of topsoil (roadsides) as a land reclamation measure. Good seed crop every 3-7 years

**Longevity:** 350 years

**Associates:** White pine and jack pine

**Pests:** Nantucket pine tip moth and European pine shoot moth

**Products:** Poles, lumber, and pulp

**Other:**

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### **Eastern Larch** *Larix laricina*

**Tolerance:** Sun

**Site:** Cool and wet, bogs; can grow well on dry sites too

**Regeneration:** Layering and seeds. Exotic faster growing varieties are often planted by the paper companies in Maine

**Longevity:** 100-200 years

**Associates:** Black and white spruce

**Pests:** Larch sawfly and European casebearer

**Products:** Pulp and lumber

**Other:** Deciduous conifer, meaning it loses its needles in the winter

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## Hardwoods

[Sugar Maple](#) / [Beech](#) / [Yellow Birch](#) / [Ash](#) / [Red Maple](#) / [Oak](#) / [Black Cherry](#) / [Paper Birch](#) / [Gray Birch](#) / [Poplar](#) / [Pin Cherry](#)

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### Sugar Maple *Acer saccharum*

**Tolerance:** Shade

**Site:** Deep, fertile, moist, and well-drained soils; old fields

**Regeneration:** Heavy seed crop every 2-3 years, stump sprouts, root suckers

**Longevity:** 300-400 years

**Associates:** Beech, hemlock, and yellow birch

**Pests:**

**Products:** Lumber, furniture, syrup, veneer, specialty products

**Other:**

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### American Beech *Fagus grandifolia*

**Tolerance:** Shade

**Site:** Moist soil, uses large amounts of water to grow

**Regeneration:** Root suckers (especially after a disturbance), stump sprouts, large nut crop every 2-3 years

**Longevity:** 300 years -less if infected with beech bark disease

**Associates:** Yellow birch, hemlock, and maples

**Pests:** Beech bark disease has affected most beech in Maine, making it a financially undesirable tree

**Products:** Firewood and specialty products

**Other:** Important mast (beechnut) producer for wildlife, keep uninfected trees as seed source for a new generation of disease resistant beech

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### Yellow Birch *Betula alleghaniensis*

**Tolerance:** Partial

**Site:** Cool, moist soils (northern aspects)

**Regeneration:** Prolific seeder, can germinate in any moist place (logs, stumps, mossy boulders)

**Longevity:** 150-300 years

**Associates:** Beech, hemlock, and sugar maple  
**Products:** Veneer, furniture, lumber, firewood  
**Other:** Chew on a twig as a wintergreen breath freshener

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### **White Ash** *Fraxinus americana*

**Tolerance:** Partial  
**Site:** deep, moist, well-drained soils; fertile upland soils  
**Regeneration:** Seedlings are shade tolerant, fast growth, colonizes abandoned fields, large seed crop every 3-5 years  
**Longevity:** 150+  
**Associates:** Beech, birch, maple, oak, and black cherry  
**Pests:** Ash yellows  
**Products:** Furniture, specialty products, and pulp  
**Other:**

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### **Red Maple** *Acer rubrum*

**Tolerance:** Partial  
**Site:** Wide range, From dry to wet (swamps)  
**Regeneration:** Vigorous stump sprouter, fast growth  
**Longevity:** 70-100 years  
**Associates:** Northern hardwoods, pines, and spruces  
**Pests:** Stem rot  
**Products:** Specialty products, furniture, and pulp  
**Other:**

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### **Northern Red Oak** *Quercus rubra*

**Tolerance:** Partial  
**Site:** Moist and well-drained, best on soils having silt or clay  
**Regeneration:** Prolific sprouter and seeder, large acorn crop every 2-5 years, acorns germinate the spring after they drop from the tree  
**Longevity:** 200-300 years  
**Associates:** White pine and northern hardwoods  
**Pests:** Gypsy moth (repeated defoliation kills the tree)  
**Products:** Lumber, flooring, furniture, specialty products, lobster traps  
**Other:** Important mast (acorn) producer for wildlife

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### **Black Cherry** *Prunus serotina*

**Tolerance:** Sun  
**Site:** Often found in fertile upland soils, well-drained moist loams  
**Regeneration:** Seeds remain viable for years, stump sprouts, seeds are spread by birds (seeds germinate well after passing through bird's digestive tract)  
**Longevity:** 150-200 years  
**Associates:** Oak, ash, maple, pine, and hemlock  
**Pests:** Tent catipillar and ugly-nest catipillar (defoliators), wood fungi

**Products:** Valuable timber for cabinets, fine furniture, and veneer

**Other:**

### **Paper Birch** *Betula papyrifera*

**Tolerance:** Sun

**Site:** Wide range, sandy and gravelly soils

**Regeneration:** Prolific wind blown seeds that require a coarse, cool, moist, mineral soil; stump sprouts; fast growth

**Longevity:** 80 years

**Associates:** Poplar, pin cherry, and gray birch

**Pests:** Bronze birch borer

**Products:** Specialty products (toothpicks), firewood, very valuable in Maine because of presence of specialty mills

**Other:** Aesthetically appealing

### **Gray Birch** *Betula populifolia*

**Tolerance:** Sun

**Site:** Can survive on the most infertile of sites

**Regeneration:** Prolific wind blown seeds, fast growth

**Longevity:** 50 years

**Associates:** Poplar, pin cherry, paper birch

**Pests:** Bronze birch borer

**Products:** Firewood and pulp

**Other:** Usually many crooked stems coming from same base

### **Poplar (Quaking and Bigtooth Aspen)** *Populus tremuloides and grandidentata*

**Tolerance:** Sun

**Site:** Wide range, sandy and gravelly soils

**Regeneration:** Prolific wind blown seeds that require a moist mineral soil and are only viable for 2-3 weeks, root sprouts (especially after cutting), fast growth

**Longevity:** 60 years

**Associates:** Paper birch, gray birch, and pin cherry

**Pests:** Hypoxylon canker (fungus), forest tent caterpillar, beaver

**Products:** Soft, light wood that does not splinter; specialty products; pulp

**Other:** Beaver prefers this tree to build dam because of the lightness of the wood

### **Pin Cherry** *Prunus pensylvanica*

**Tolerance:** Sun

**Site:** Wide range; mineral soils, including sand

**Regeneration:** Seeds remain viable in the soil for 90+ years

**Longevity:** 50 years

**Associates:** Poplar, paper birch, and gray birch

**Pests:**

**Products:** Firewood

**Other:** Considered a weed tree

*(MFS 1995 and Harlow et al. 1991)*

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