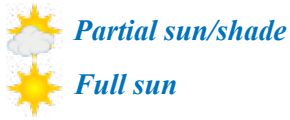


# Happy Trees for the Shore

## 10 Native Trees that Can Handle Fluctuating Water Levels Along the Shoreline

Compiled by Patrick Goggin and Amy Kowalski, Extension Lakes

**T**hose of us living along the shore may have noticed changing precipitation patterns impacting Wisconsin's water resources over the last decade. Experts from the Wisconsin Initiative on Climate Change Impacts (WICCI) Water Resources Working Group found in a 2021 report that, "Rising air temperatures, more precipitation from fall to spring, and more frequent and larger extreme precipitation events are climate impacts affecting Wisconsin's lakes, streams, groundwater, and wetlands."



### Water levels and flooding

More storms with more average precipitation mean flooding problems in areas with permeable soils like lake shorelines, wetlands, or wherever the water table is near the surface. So, if you have waterfront property, especially on a seepage lake, you might be looking for some trees that can tolerate these shifting water levels.

#### Since 1950

- ↑ 3°F daily temp. increase
- ↑ 17% precipitation increase
- ↑ Warmest last two decades
- ↑ Wettest last decade

WICCI 2021 Report

### 10 trees for fluctuating water levels

Trees contribute a great deal to any home landscape: shade, structure, a canopy "ceiling," filter for clean water, carbon absorption, and wildlife habitat. The following 10 trees can handle the fluctuating water level conditions currently found along

Wisconsin's lakes and most grow well in medium to wet, well-drained soils. If you're thinking about planting a tree, or need to replace some that have been damaged by storms or fluctuating water levels, give one of these a try on your shoreline.

#### Tamarack (or American larch)

*Larix laricina*

Tamaracks are deciduous conifers that have clusters of short, bright green needles that turn golden yellow and drop off in late autumn revealing an attractive flaking bark.

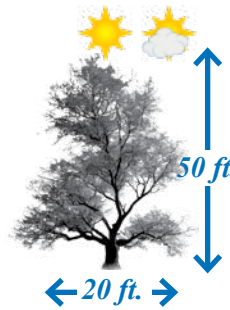


#### Red Maple

*Acer rubrum*

Red maples are very cold hardy and tolerant of a wide range of soils. They grow quickly and their foliage turns from green to a beautiful bright red in autumn.

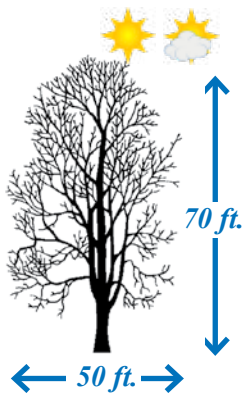
*Toxic to horses and ponies (not humans, dogs, or cats).*



Google "SilviCast" to find the UW-Stevens Point podcast that is "devoted to silviculture: the science, the practice, and the art of forestry."

Illustration by Karen Englebretson





### Silver Maple

*Acer saccharinum*

These fast-growing trees get their name from the silvery color on the bottom of their light green leaves. Their native habitat is floodplains, so they do great in moist soils, with no need for fertilizer, and are tolerant of poor, dry soils

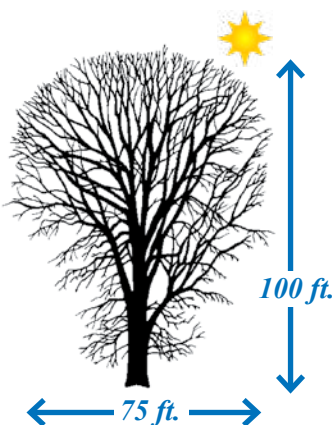
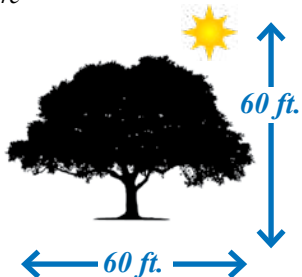
once they are established.

*Weak limbs can mean more clean-up after storms.*

### Swamp White Oak

*Quercus bicolor*

Tolerant of hot weather and sub-zero winters (sound familiar?), Swamp white oaks are full trees that need their space. These oaks have a long life span and can hold up to high winds. The best regular fertilization you can give an established oak tree is to keep its leaves on the ground in the fall, as they add nutrients to the soil when they decompose.



### Eastern Cottonwood

*Populus deltoides*

Cottonwoods are very large, dramatic trees with shiny, delta-shaped leaves and deeply ridged bark. Female trees produce sticky seed buds and

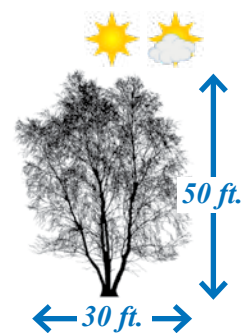
masses of downy white “cotton” that clings to window screens, gathers in gutters and seems to be everywhere. The male cottonwood is an under-used, large, quality tree that does not have the cottony seed. It is a favorite for nesting eagles.

*Newly planted trees should be watered regularly (as much as weekly) in the absence of rain for the first two summers until established.*

### River Birch

*Betula nigra*

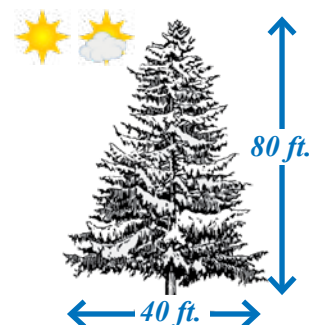
This easy-to-grow tree has beautiful exfoliating white bark that reveals a salmon-red inner layer. It’s a great grower at 36 inches per year, but that also means its life-span is a bit shorter at 30-50 years. River birch prefers semi-aquatic conditions, but also tolerates drier soils.



### White Pine

*Pinus strobus*

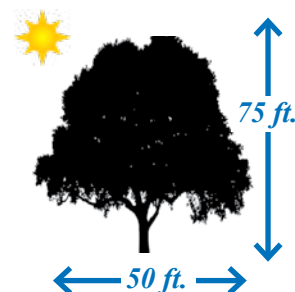
The fine, feathery needles of the white pine make it a great windbreak and shade tree. It attracts many kinds of wildlife and needs plenty of space to stretch its branches. This tall evergreen prefers acidic soil that is moist and well-drained, but is moderately tolerant of soils with a slightly higher pH.



### Northern Red Oak

*Quercus rubra*

Give this tree a good start and it could live hundreds of years! It prefers fertile, sandy, finely-textured soils with good drainage. Northern red oaks are ecologically invaluable, hosting dozens of important pollinators.

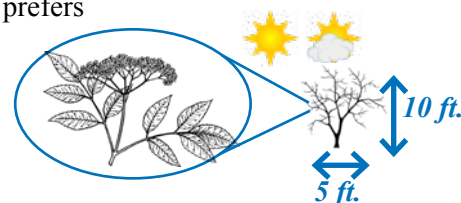


### Elderberry

*Sambucus canadensis*

On the smaller side, this deciduous tree/shrub has bright white flowers and clusters of black berries that can be harvested in September. It tolerates a wide range of soils, but prefers moist, humus ones, and spreads by root suckers to form colonies.

*Toxic to people and pets; fruit is non-toxic to people once cooked.*



### Pussy Willow

*Salix discolor*

Another smaller option is the pussy willow, which is found in meadows, swamps and along lakes and streams with moist to wet soils, but can also grow in drier conditions. You can stick a branch into the soil, and it will produce a fully developed adult in a matter of months! Male pussy willows are noted for producing ornamentally attractive silky pearl gray catkins on leafless stems in late winter to early spring.

