



TREES AND SHRUBS

The following was posted by Sarah Vogel, Horticulture and Natural Resources Educator-DeWitt, Macon and Piatt Counties:

Trees and shrubs are valuable elements in both public and private landscapes, and the wise investment of time and careful selection will only increase their value. Though there are several non-native species that do well in our fertile Illinois soils, we encourage the use of native species to promote disease resistance, suitability to native soils, and mitigating the spread of invasive species (even unknowingly).

Factors to take into consideration when choosing a tree or shrub species:

- light requirements
- moisture requirements
- soil pH
- soil drainage

Using the right plant for the right site will factor into the overall health and longevity of a tree or shrub. It can take many years for symptoms of stress to appear, and by then it may be too late (or too large!) to move the tree to a more suitable site.

Determining necessity and time for fertilization:

Though fertilization can help maintain tree vitality, I would first recommend establishing a need and purpose for it. If a soil test is not performed every 3-5 years, then nutrient concentrations may not be known. If we don't know it's needed, why waste product and time applying it? In most landscapes, healthy trees and shrubs do not require fertilizers, especially once they reach their mature size or if they are native species.

It is not recommended to fertilize a tree at planting time, as the tree's energy is directed toward root growth and establishment and nitrogen applications can hinder root growth. If the lawn is already regularly fertilized, there is likely no reason to fertilize trees separately. Additionally, trees and shrubs should not be fertilized during drought conditions. Excessive fertilization can cause permanent damage to trees as well as affect water quality.

If you have completed a soil test, established a need for fertilizer due to a nutrient deficiency or pH issue, and have ensured adequate moisture to tree roots, you can find more information on tree fertilization methods in this great publication from [University of Missouri Extension](#). The best time to fertilize trees, when necessary, is early spring or late fall after leaf drop.

NATIVE TREES IN ILLINOIS

The following was posted by Tami Austin, Illinois Extension Master Naturalist-Jefferson County:

As we drive past millions of acres in mono-crop fields or mow our perfectly manicured yards, it may be difficult to believe that in 1820 Illinois had 22 million acres of prairie land and 14 million acres covered in forest. On these millions of acres were native grasses, flowers, legumes, sedges, bushes, and trees that developed to be perfectly adapted to Illinois climates.

Human development, first for subsistence and agricultural purposes and later for industrial, retail, and housing, brought about the demise of much of Illinois's vast prairies and forest lands. Ironically, many of us now attempt to recreate a small portion of what we've lost in our yards and gardens.

Every spring, we hit the lawn and garden center at our local home improvement store or visit the nearest nursery to purchase plants, including trees for our yards. Most of the plants are non-native species, and many are or have the potential of becoming invasive. According to the National Oceanic and Atmospheric Administration (NOAA), "an invasive species is an organism (plant, animal, fungi, etc.) that causes ecological or economic harm to an environment where it is not native."

A tree frequently serves as the focal point in a yard, whether it is a large stately oak, leafed out in its summer glory, a flashy maple in its various autumn hues, or crabapple in full, fragrant spring bloom. Planting a tree is a long-term investment, unlike annuals or even smaller perennial plants. When choosing a tree, we often base our decisions on color, size, planting location, ease of care, and what is readily available. We don't consider growing native species equally as beautiful and as easy to care for (some much easier) as the non-native ones.

While you may not find downy serviceberry (*Amelanchier arborea*) in your local garden center, a few native Illinois species are readily available. When purchasing a native tree, always check the scientific name to ensure that you get the native tree and not a hybrid or similar foreign species. For example, several varieties of crabapple trees are available, but the sweet or American crabapple (*Malus coronaria*) is the only native crabapple tree in Illinois.

Let's take a look at three tree species that you should be able to find locally or order from a reputable online nursery.

The eastern redbud (*Cercis canadensis*) is one of the first trees to bloom in the spring. Its reddish-purple buds in the forest's understory beckon us deeper into the woods. The relatively small, almost shrub like tree only grows to 20 - 30 feet tall, with a spread of 30 feet. The eastern redbud can add beauty to any yard with its pea-like flowers in the spring, its heart-shaped leaves in the summer that turn yellow in the fall, and its dark brown pods that stay on the tree through winter. The relatively fast-growing tree (13-24" per year) will grow in all soil types, in full or partial sun, and in hardiness zones four to nine.

The red buckeye (*Aesculus pavia*) gets its name from the whitish circle or scar on the large brown seeds that resemble a deer's eye. The buckeye loses its leaves as early as September, so it offers no fall color, but its four to eight-inch erect, red blossoms in April and May more than make up for this. It has palmately compound leaves with five to seven leaflets. Like the redbud, the buckeye is a small tree that only grows to ten to twenty feet high and spreads up to 20 feet. If you are lucky enough to know someone with a red buckeye tree, you can grow one from a seed that will begin blooming in three years. It grows best in well-drained acidic silty or loamy soils in hardiness zones six thru nine. ****The buckeye's leaves and seeds are highly toxic, causing severe illness or death. The tree should not be planted in pastures.* ***

Looking for a more substantial shade tree, then consider a river birch (*Betula nigra*). The river birch grows naturally along waterways and in low areas but will grow almost anywhere in the United States. It is a medium to tall, fast-growing tree, with an average height of 50 feet and a spread of 35 feet. The most noticeable feature of this tree is the cinnamon-colored bark peeling off of its multiple trunks. The tree also produces showy reddish-green male flowers (staminate) catkins and small pine-coned shaped female (pistillate) catkins that attract birds such as redpolls and pine siskins.

Other Illinois native trees to consider:

- Flowering dogwood (*Cornus florida*)
- Washington hawthorn (*Crataegus phaenopyrum*)
- American sweetgum (*Liquidambar styraciflua*)
- Northern red oak (*Quercus rubra*)

There are many other native Illinois trees that you can add to your yard or garden that may not be as easy to find as those mentioned above but can be found with a bit of effort. For more information on planting native species, contact your local University of Illinois Extension office. They will be able to put you in touch with a horticulturist, a master gardener, or a master naturalist who can help you.

NATIVE SHRUBS IN ILLINOIS

The following was posted by Laurie Hendersen, Illinois Extension Master Naturalist-Clinton County:

Bushes and shrubs are mainstays of a landscape design in any property. They can soften hardscapes such as house foundations and patios, stabilize soil and reduce erosion. They can define a property line, provide a wind break, create privacy or serve as a focal point. In any application they can add color or textures and increase curb appeal.

Years ago, “trimming the hedges” was part of normal yard maintenance. Today’s homeowners prefer choices that require minimal maintenance and landscapers and big box stores have responded. Now landscapes in many neighborhoods feature the same shrubs on property after property giving a “cookie cutter” look.

To give a landscape a more distinctive look without inviting more maintenance, homeowners can consider using native alternatives. Native bushes and shrubs evolved to live in local conditions. If matched to their preferred soil and light situations, natives can match or beat exotic varieties for beauty, utility, low maintenance and drought resistance. Following are just a few examples of alternatives.

- **New Jersey Tea (*Ceanothus americanus*)** This attractive, formal shrub grows only 2-4 feet in height. Happy in hot dry sites or in rocky or poor soil, this shrub’s fragrant, white flowers bloom from May to June. Though deciduous, this shrub could be used in place of boxwoods or Japanese spirea. Requiring no trimming or shaping, New Jersey Tea is drought tolerant but should be protected from rabbits and deer until established.
- **Shrubby St. John’s Wort (*Hypericum prolificum*)** A dense shrub with stiff erect stems and shiny, narrow, dark green leaves, Shrubby St. John’s Wort grows 2-5 feet tall and produces showy, bright yellow flowers June to August. It could be used in place of azaleas in foundation beds, as a border, as a hedge or for erosion control. Drought tolerant, it grows in full sun to medium shade and is attractive to butterflies but not usually to deer.
- **Beauty Berry (*Callicarpa americana*)** Beautiful, ornamental shrub growing 3-5 feet tall with an open arching habit, beauty berries are known for bright green foliage and late summer/fall fuchsia berries. These shrubs can be used singly or en masse and would be as beautiful near the entrance of a home as in a border or transition to a woodland garden. They will grow in dry to average soil in full sun to partial shade and may benefit from a protective layer of mulch in the fall.
- **Wild Hydrangea (*Hydrangea arborens*)** A fast growing shrub, growing to 4-5 feet in height, wild hydrangea prefers rich, organic soil that can be dry to moist and is drought tolerant. It prefers light to medium shade but will tolerate deep shade. Large clusters of flat, creamy white, flowers open in June and last many weeks. Not a favorite of rabbits or deer, this shrub attracts butterflies.

- **Ninebark (*Physocarpus opulifolius*)** This large shrub grows 8-9 feet tall and can be grown singly as a specimen, massed in a hedgerow or screen, or used for erosion control. Though it grows best in dry to medium wet, well-drained soil, it tolerates a wide range of conditions including poor soil and tough conditions. This shrub offers multi-season interest. It produces white to pinkish flower clusters (similar to spirea) on arching stems in spring/summer. The foliage turns a variety of colors in fall and in winter, the bark peels away in strips to reveal reddish brown inner bark on mature stems.

Many locally owned nurseries offer native plants and shrubs, though homeowners may have to ask for them. For more information on:

- Other native shrubs: <https://grownative.org/native-plant-database/>
- Garden designs using native plants and shrubs: <https://nativegardendesigns.wildones.org/>
- Suppliers of native plants: <https://grownative.org/resource-guide/>
- Why natives are important: <https://www.audubon.org/content/why-native-plants-matter>

UNIVERSITY OF ILLINOIS EXTENSION TREE AND SHRUB SEARCH

The following website will search for shrubs by name, size, tolerance, exposure, and use: <https://web.extension.illinois.edu/shrubselector/>

The following website will search for trees by name, size, tolerance, exposure, and use: <https://web.extension.illinois.edu/treeselector/>

References:

Austin, T., (April 8, 2022). *Native Trees in Illinois*. University Of Illinois Urbana-Champaign, Illinois Extension. Retrieved from <https://extension.illinois.edu/news-releases/native-trees-illinois> on January 19, 2023.

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