



Hardin Soil and Water Conservation District 2021 Tree Sale Order Form/Ordering Information

These trees are offered as a low cost source of plant materials for wildlife, timber plantings, windbreaks, and other conservation uses. They are available to anyone without restriction. Because of their low cost, we cannot furnish replacements, nor can we mail or deliver the packets.

You will be notified by postcard as to when and where to pick up your order. This will normally be the middle of April, but weather conditions at the nurseries will determine when the trees can be dug and shipped. Please pick up your order promptly when notified.

Remember, these plants are 2 to 3-year-old transplants and average 18 to 24 inches in height. Most orders will fit in a regular-sized grocery bag. We reserve the right to make alterations in packet content if orders far exceed the supply. **Orders must be received in the Hardin SWCD District Office, at 12751 St. Rt. 309W, Kenton, OH 43326, with payment by FEBRUARY 26, 2021.**

TREE CHARACTERISTICS / REQUIREMENTS (Hardin County is in Zone 5, Temp -10° to -15°)

Species	Type/Zone	Color	H/W	Growth Rate	Spacing
Whitespire Birch	Deciduous/Zones 3-6	Fall: Yellowish/Green	40'/20'	Medium-Fast	20'-30'
Sugar Maple	Deciduous/Zones 3-8	Fall: Red/Yellow/Orange	60'/40'	Slow-Medium	15'-25'
Northern Red Oak	Deciduous/Zones 3-7	Fall: Red/Yellow	60'/70'	Rapid-Vigorous	15'-30'
Swamp White Oak	Deciduous/Zones 4-8	Dark Green Leaflets	60'/60'	Slow	20'-25'
Arborvitae	Conifer/Zone 3-7	Green (Evergreen)	30'/10'	Medium	6'-10'
Blue Spruce	Conifer/Zones 3-7	Blue (Evergreen)	50'/25'	Slow	10'-15'
Norway Spruce	Conifer/Zones 3-7	Green (Evergreen)	80'/40'	Medium-Rapid	10'-15'
Eastern White Pine	Conifer/Zones 3-8	Bluish-Green (Evergreen)	80'/40'	Rapid	10'-15'

Deciduous trees:

Whitespire Birch (*Betula platyphylla* var *japonica*) - The Whitespire Birch is best known for its upright form, non-exfoliating white bark, dark green leaves and attractive yellow fall color. It may naturalize by self-seeding and root suckers to form attractive stands and can also be effective as a landscape tree or privacy screen along property lines.

Planting Requirements: The Whitespire Birch grows to a height of 20-40' and a spread of 10-20', at maturity. This tree grows at a medium to fast rate. Full sun and partial shade are best for this tree, meaning it prefers a minimum of four hours of direct, unfiltered sunlight each day. Soil should remain moist. It produces showy leaves in April and would thrive in naturalized rain gardens.

Potential Problems: Some weakened birches become very vulnerable to the bronze birch borer which kills trees that are stress used by summer heat and humidity. This tree reportedly has some resistance to the borer. Birch leaf miner also cause significant problems. Although this gray birch has some susceptibility to aphids, birch skeletonizer and dieback, these problems are usually considered to be somewhat minor in comparison to the birch borer and birch leaf miner. Plants stressed by insects seem more susceptible to cankers.

Sugar Maple (*Acer saccharum*)- The Sugar Maple is one of America's best-loved trees. In fact, more states have claimed it as their state tree than any other single species-those states being New York, West Virginia, Wisconsin and Vermont. One of its most prominent features is amazing fall color. As the seasons change, the leaves turn vibrant shades of yellow, burnt orange and red.

Planting Requirements: Full sun and partial shade are best for this tree, meaning it prefers a minimum of four hours of direct, unfiltered sunlight each day. It grows in deep, well-drained, acid to slightly alkaline soil and prefers moist soil conditions. It has a medium to fast growth rate, with height increases of anywhere from 13" to more than 24" per year.

Potential Problems: This tree is susceptible to a range of insect pests, although most do not cause serious damage. A water stressed tree is more likely to attract pests than a healthy, well-watered tree. Symptoms of insect infestation include white webs and rolled leaves, and holes in the stalk of leaves.

Red Oak (*Quercus rubra*) - A major timber tree of the Eastern and Midwestern United States. Along with Pin Oak, it is also one of the few oaks that is an important shade tree in the landscape industry, noted for its brick-red autumn color and its rapid and vigorous growth rate. Reaching 60 feet tall by 70 feet wide when found in the open under urban landscape conditions, it may grow taller and more massive in the wild.

Planting Requirements: Red Oak prefers moist, deep, rich, well-drained soils of slightly acidic pH. It adapts readily to dry soils of acidic, neutral, or slightly alkaline pH (some specimens develop chlorosis in high pH soils). It thrives in full sun to partial sun (but is shade tolerant in youth).

Potential Problems: Red Oak is basically problem-free, although it may, on occasion, be subject to the standard army of pests and pathogens that afflict the oaks.

Deciduous trees:

Swamp White Oak (*Quercus bicolor*) The Swamp white oak is a striking tree with attractive peeling bark, especially on young trees, resembles that of the white oak. The leaves are broad ovoid, 12-18 cm (4-3/4-7 in) long and 7-11 cm (2-3/4-4-1/4 in) broad, always more or less glaucous on the underside, and are shallowly lobed with five to seven lobes on each side, intermediate between the chestnut oak and the white oak. In autumn, they turn brown, yellow-brown, or sometimes reddish, but generally, the color is not as reliable or as brilliant as the white oak can be. The fruit is a peduncled acorn, 1.5-2 cm (5/8-3/4 in) rarely 2.5 cm or 0.98 in) long and 1-2 cm (3/8-3/4 in) broad, maturing about 6 months after pollination. The leaves have a two-tone appearance, dark green on top with a silvery-white underside. It grows rapidly and can reach 60 to 80 feet (18 to 24 meters) tall with the tallest known reaching 90ft (27.43 meters) and can live up to 285 years. Transplants well. Seasonally loses leaves.

Planting Requirements: The swamp white oak matures to a height of 50-60 feet and width of 50-60 feet. This tree likes full sun (6 hours direct light daily) and grows well in zones 4, 6, 7, 8. It prefers acid soil, moist and well-drained. Tolerates dry sites, occasional drought, wet sites, occasional flooding, alkaline soil, clay soil, road salt. Planting sites include residential, parks, city parkway, wide median, or restricted sites.

Potential Problems: Prune oaks in the dormant season to avoid attracting beetles that may carry oak wilt. Disease, pests, and problems: anthracnose, occasional powdery mildew, chlorosis in high pH soils, and insect galls.

Conifer trees:

Arborvitae (*Thuja occidentalis*) - Arborvitae is found throughout eastern Canada, New England, and the northern states of the Eastern United States. While it is primarily found in Ohio in urban landscapes, where it often thrives in dry, alkaline soils, it occurs in greatest abundance in the wilds of Ohio when found near acidic bogs. When found in the open, non-compact forms may reach 30 feet tall by 10 feet wide.

Planting Requirements: Arborvitae performs best in moist soils of alkaline pH, but is very adaptable to poor soils that are rocky, sterile, dry or wet, and of neutral to acidic pH. It can be planted just about anywhere there is full sun to partial sun, with minimal aftercare. It is found in zones 3 to 7 in full sun to partial sun, but does not thrive in the southern part of its range.

Potential Problems: The lower foliage and twigs of Arborvitae can also be significantly sheared back in winter by deer browsing, and the flexibility of the softwood and its strong tendency to be multitrunked make it a prime candidate for snow and ice damage. Otherwise, Arborvitae is a healthy and vigorous shrub and tree.

Colorado Blue Spruce (*Picea pungens glauca*) - Planted throughout the United States and Canada as an ornamental evergreen, including all of Ohio. Most trees may easily reach 50 feet tall by 25 feet wide at the base, although in the wild much taller specimens are commonly reached. Perhaps no other evergreen tree is as cherished for home landscapes as Blue Spruce.

Planting Requirements: Colorado Spruce prefers moist, acidic soils that may be organic, sandy, or loamy; the soils must not be poorly drained or wet. It is also adaptable to a variety of less than favorable conditions, including poor, clay, rocky, dry soils of acidic, neutral, or alkaline pH.

Potential Problems: Colorado Spruce is generally a healthy tree, and like most spruces, it suffers needle damage due to feeding by various spider mites. It is especially drought tolerant, including young transplants that have been root-pruned into ball and burlap form.

Norway Spruce (*Picea abies*) - Found throughout all of Ohio and much of the United States and Canada as, perhaps, the most common spruce, rivaled only by Colorado Spruce. It is found as an ornamental tree in urban environments, a windbreak and snow break in both urban and rural areas, and occasionally in pure stands for future harvest in forests. Quickly reaches 80 feet height by 40 feet in spread with its medium to rapid growth rate, and adapts to a variety of harsh soil and sparse moisture conditions.

Planting Requirements: Norway Spruce prefers moist, but well-drained, acidic soils that may be organic, sandy, or loamy. However, it is perhaps the most adaptable common evergreen tree to harsh conditions, including poor, clay, rocky, dry soils of acidic, neutral, or alkaline pH.

Potential Problems: Norway Spruce is generally a very healthy tree, even under harsh conditions.

White Pine (*Pinus strobus*) - Widely distributed throughout eastern North America, including all of Ohio. Commonly transplanted today as a landscape evergreen tree, and is also sold as a cut Christmas tree. Also known as Eastern White Pine, this towering evergreen easily grows to 80 feet tall by 40 feet wide (or larger) under optimum conditions, with a rapid growth rate. Its shape is upright pyramidal when young, but becomes irregular with maturity.

Planting Requirements: White Pine performs best in evenly moist, rich, well-drained, acidic soils in full sun.

Potential Problems: In spite of thriving in many natural settings, White Pine is very susceptible in urban settings to alkaline soil pH (causing chlorosis, resulting in yellowing of the needles and stunting of growth), winter salt spray, air pollution, compacted clay soils, and poor water drainage. Young transplants and saplings are also subject to deer and rabbit browsing in any setting.

