

2019 Tree Sale - Descriptions

Habitat-quality Deciduous Trees:

Aronia “Black chokeberry” (*Aronia melanocarpa*)

This hardy, adaptive shrub produces showy white flowers in spring and black berries that attract birds in the fall. It is also rapidly gaining momentum as a new small fruit crop. The blueberry-sized black fruits have the highest known levels of antioxidants of any temperate fruit, five times higher than cranberry and blueberry. While edible as a fresh fruit, *Aronia* berries are much tastier when the fruits have been processed. *Aronia* has been widely grown in Eastern Europe and Russia where it is used in beverages, wine, jelly, and baked goods. *Aronia melanocarpa*, one of two *Aronia* species native to Vermont, attains a mature height of 4 to 8 feet and forms dense plants and colonies. Plants grow successfully in partial shade or full sun, but better flowering, fruiting, and fall color occur in full sun situations.

Birch, White, “Paper” (*Betula papyrifera*)

This fast-growing (70-80') pioneer species grows in clearings and has peeling white bark. It prefers nutrient-rich, well-drained soils and full sun.

Birch, Yellow (*Betula alleghaniensis*)

A medium-tall tree (60-70') of cool, moist forests. When mature it has beautifully peeling, yellow bark, and the twigs smell of wintergreen when broken. Tolerates a wide range of soil conditions, and is shade tolerant.

Black Walnut (*Juglans nigra*)

Black walnut is one of the most highly prized trees of the North American flora -- for its edible walnuts and its exceptionally beautiful wood with darkly patterned grain. It was a dominant and majestic canopy species of primeval midwestern and southeastern forests, attaining heights of 150 feet (50 m) or more. Humans are thought to have brought it north into Vermont, where it is naturalized. Chemicals exuded from its roots may inhibit the growth of other plants.

Butternut (*Juglans cinerea*)

Butternut, or white walnut, is a relatively short-lived tree of rich soils and streambanks. The oily nuts are delicious for humans and wildlife, but do not store well. The wood is light, stable, and easily worked for carving and veneer, but is less prized than its close relative, black walnut. This stock is grown from seed from local butternuts with apparent resistance to Butternut Canker, but the resistance of the seedlings is not proven.

-NEW!- Buttonbush (*Cephalanthus occidentalis*)

Buttonbush has one of the most unique flowers of any shrub. Its pincushion-like white flowers are an important source of nectar for butterflies, moths and bees. Towards fall the flowers develop into button-like seed heads and the leaves turn deep reds and yellows. Ducks and other waterfowl eat the seed heads. Buttonbush can tolerate shade and a variety of soils, and it thrives in wet spots and flooded areas.

Dogwood, Red Osier (*Cornus sericea*)

This rapidly growing, spreading shrub reaches 6-10'. Showy red stems in winter. White berries and young twigs provide food for a wide variety of wildlife. It is favored for streambank stabilization because it is perfectly fine being planted into saturated soil or standing water. Like willows and the other dogwoods, it can be planted as a "live stake."

Elderberry, American (*Sambucus canadensis*)

Elderberry is rapidly gaining popularity for its edible and medicinal qualities. Shrubs are of high value to wildlife and pollinators. This offering is propagated from native, wild plants in Vermont. For a non-native cultivar selected for high

fruit production, see the listing under “Cultivated Fruits and Nuts.” Plants should begin to produce two years after planting. They thrive on moist (not saturated), fertile sites with good sun.

Maple, Red (*Acer rubrum*)

Red maple is one of the most common trees in northeast wetlands. It grows fast and reaches heights of 60-75 feet. It has bright red fall foliage, and its seed, sap and buds serve as food for wildlife.

Maple, Sugar (*Acer saccharum*)

An iconic VT tree of medium-tall height (60-80') preferring rich, moist, well-drained soils. Seedlings are shade tolerant, and in fact they prefer not to be planted in full sun. Maples are an important source of browse and seeds for wildlife, and the sap, of course, is used in syrup production.

Oak, Red (*Quercus rubra*)

Red oak is one of New England's most common and widespread forest trees. It is the tallest and fastest-growing of the oaks, and commonly reaches 65-100 ft in height. It favors sites with deep soils. Humans use the beautiful reddish-white wood for furniture-making, flooring, veneer, and other purposes. Many wildlife make their dens in the hollows of mature trunks, and the acorns are an important food source for deer, woodpeckers, turkey, grouse, waterfowl, and even pigs!

-NEW!- Oak, White (*Quercus alba*)

White oak is named for its light, ash-gray bark and typically grows to 60-80 ft. It is the most commercially important timber oak, recognized for the strength and durability of its wood. In the landscape, it has colorful purplish-red to violet-purple foliage in autumn. For wildlife, white oak acorns are considered choice food for black bear, red squirrel, blue jay, mallard, grouse, and turkey. The leaves, which persist longer than many others, also provide important wildlife cover into the early winter. Their acorns were an important food source for many Native American peoples, being less bitter than other varieties. White oak has good drought tolerance and adapts well to a variety of soil conditions including clays and rocky or shallow soils, though it prefers moisture. Though it is a slower-growing tree, it often occurs in steep, precarious locations like dry upland slopes and ledges or ravines.

Serviceberry (*Amelanchier canadensis*)

Upright, tall shrub (18'+). Its attractive white flowers are usually the very first blooms of spring. Birds love the berries and it makes a good wetland buffer shrub.

-NEW!- Sycamore, American (*Platanus occidentalis*)

American sycamore is generally regarded to be the most massive tree indigenous to eastern North America. In its 200-600 year life, American Sycamore can reach 150 ft tall and set a record at 15 ft in diameter at its trunk. More typically it grows 75-100 ft, or may plateau at as short as 40 ft, and matures with a trunk 3-8 ft in diameter. It is native to lowland areas, typically reaching its largest size along streams, rivers and flood plains. The signature ornamental feature of this huge tree is the smooth, green-brown bark that peels off in irregular pieces to reveal creamy white inner bark. It is a beautiful shade tree, but will drop twigs, large leaves, bark and fruiting balls beneath it. The round seed-balls attract birds, and in earlier times chimney swifts nested in hollow trunks of old, giant sycamores. It is easily grown in a variety of soils, though it prefers consistently moist areas. The best spot for it will have full sun and lots of room to grow and be admired.

Tamarack (Larch) (*Larix laricina*)

American Larch, or Tamarack, is the northeast's only *deciduous* conifer – its needles turn bright yellow and fall off every fall. It grows 40-80 feet over its 150-year lifespan, and does best in cold, wet, poorly drained sites such as swamps and stream edges, and it is somewhat shade tolerant.

***Viburnum*, “American Cranberrybush” or “Highbush Cranberry” (*Viburnum trilobum*)**

Highlighted in 2018 by Vermont's “Bird Diva” Bridget Butler, American Cranberrybush and other *Viburnum* species are excellent habitat for birds. It is no relation to table cranberries, but it gets its name from the fruit's size and bright red

color. The berries hang on the shrub through the winter, making them important food for ruffed grouse and a variety of songbirds. Humans find the berries tart, but edible, and sometimes make preserves with them. The growth form is a dense shrub growing 6-10 feet tall with creamy-white flowers appearing in May to June and leaves that turn scarlet in the fall. It is adaptable to a variety of site conditions.

-NEW!- Willow, Black (*Salix nigra*)

Black willow is a small to medium-sized tree named for its dark ebony bark. It most commonly grows in floodplains and riversides, but it can tolerate drier soils. Birds eat the catkins, and beaver, deer and even livestock eat the leaves, bark or twigs. The willows are among the first plants to provide nectar and pollen to honey bees and other pollinators, after long winters. As an ornamental it makes a beautiful fine-textured shade tree, but it sheds branches easily in storms. All willows are excellent soil-binders, their shallow, fibrous roots helping to prevent the soil of streambanks from being washed away. These same roots can get into drainage systems and sewers, so avoid planting near underground infrastructure. It does best in a persistent wet spot or near water and lives 40-100 years.

Cultivated fruits, nuts and flowers:

Apples (*Malus domestica*)

We offer five varieties of apples – always Cortland, Macintosh, and Liberty, and a rotation of two varieties that are more novel and hard-to-find.

Most apples require cross-pollination to set fruit, so be sure to plant multiple varieties that flower at the same time in the same vicinity. Decorative crabapples that you or a neighbor might already have can provide good pollen, and since bees are the best pollinators for apples be sure your local bee population is not impaired by pesticides.

The rootstock determines the size, shape and longevity of your tree, as well as some elements of disease resistance. We sell most of our trees on “semi-dwarf” rootstock, because these trees begin bearing fruit just two to three years after planting and keep a shorter stature that makes pruning and harvesting easier. Semi-dwarf trees often require staking during establishment. Trees grown on “standard” rootstock grow into classically-sized, long-lived trees, and they tend to be more winter-hardy and disease resistant. Plant standard-sized trees 25-35 feet apart, and semi-dwarf trees 12-25 feet apart.

Cortland – semi-dwarf root stock

Cortland ripens from mid-September to early October, typically 2-3 weeks before Macintoshes, and it is winter hardy in locations throughout Vermont. It produces large fruit with dark red skin under laid with stripes. When cut open the fruit is crisp, white and resists browning. It has a tart, tangy flavor that is excellent for eating, cooking and cider. Vigorous, long lived tree is annually productive and starts bearing early. Cortland does not require cross pollination and provides excellent pollen to other trees.

Liberty – semi-dwarf root stock

Liberty is the most disease resistant apple ever developed, making it an ideal backyard tree. It is winter hardy throughout Vermont and ripens in early October. The fruit is a medium to large, McIntosh type fruit with 90% red blush. The flesh is crisp, juicy, and light yellow with a sprightly flavor. It is great for eating fresh, cooking and canning and stores until February. The hardy, spreading, vigorous, productive tree bears fruit annually. It tends to set a heavy fruit load, so thinning ensures good-sized apples at maturity. It is resistant to scab, fire blight, mildew and cedar-apple rust; no spraying needed.

Macintosh – semi-dwarf root stock

Considered an all-purpose apple, Macs are perfect for cooking, cider and eating fresh. They ripen in late September and have tart flavor and tender white flesh. The trees produce heavily and the apples are typically large, round and red. It does not require cross-pollination but does better with it.

-NEW!- “Pear Apple” – standard root stock

Named for its pear-like flavor, the Pear Apple is an East Montpelier heirloom. The light green, almost fully-russeted apples ripen in October. Their flesh is very firm, sweet and flavorful – great for fresh eating or for pies. It is a hardy, vigorous grower.

-NEW!- Pristine – standard root stock

Pristine is an easy early apple for the home orchard. Apples ripen in August and are crisp, very sweet, and yellow. They are excellent for fresh eating and baking, and store for a couple weeks at room temperature – better than many other early-season apples. If picked before it's fully ripe, it tastes like a Granny Smith.

Blueberries (*Vaccinium cyanococcus*)

Because blueberries yield better with cross-pollination, we sell our plants in pairs of one Bluecrop and one Patriot. You may specify if you would like only one of these varieties. Blueberries prefer acidic soil with pH between 4.5 and 5.5

Bluecrop

This mid-season blueberry is the leading commercial variety grown, valued for its high yields of large, firm bright blue berries that grow in large clusters. The berry ripens in July and its flavor is superb, fresh or frozen. Bluecrop is known for its hardiness, vigor and consistent production. It self-pollinates but will yield larger crops if it is planted near another variety. The plant grows 4-6 feet tall.

Patriot

This variety is big and bountiful – the largest early-season blueberry. The fruit ripens in June and has an outstanding flavor fresh, baked, frozen and in preserves. It tolerates moisture, including clay soils. Patriot is cold hardy and disease-resistant to root rot. It is self-pollinating, but it will yield larger crops if you plant two or more. The plant grows 3-5 feet tall.

-NEW!- Cherry, North Star Sour (*Prunus cerasus*)

This tart cherry is great for juice, dessert and preserves. It is a heavy producer that will give you large red, tart fruit with a medium-firm texture. It will grow to a height of 10-12' and a width of 8-12'. The tree is cold-hardy to Zone 4 and disease resistant to brown rot and leaf spot. White flowers bloom as early as April and cherries will be ready to pick in mid-to-late June.

Elderberry, Cultivated (*Sambucus nigra*)

These are two of several newer elderberry varieties from Denmark selected for excellent fruit production. (For a variety with higher wildlife benefits and more vigorous in wilder, wetter parts of your property, choose the “habitat-quality” native elderberry instead.) These cultivated plants are vigorous, producing long shoots from soil level one growing season and bearing fruit the next. Remove shoots after bearing so they may be replaced by the next year's growth. This makes the plant easy to prune and manage as a bush. Large fruit clusters with good flavor ripen in August each year. Berries have very high anthocyanin content, a powerful antioxidant. Two varieties are required for cross pollination in a ratio of 1 pollinator : 5 fruiting.

We are selling the variety selected for fruit production as well as its favored pollinator. You may specify the ratio you want in your order, otherwise we will choose for you.

Grapes, Concord (*Vitis labrusca*)

Grapes thrive in well-drained soil and full sun. These vines need an arbor, trellis, or fence for support. Grapes are self-fertile. The Concord was developed in Concord, MA in 1849. The grapes have a dark blue or purple skin and large seeds. They are excellent for fresh eating, wines, juices and jellies.

Hazelnut, hybrid (*Corylus x.*)

These vigorous, suckering shrubs excellent for hedges and windbreaks. They begin to produce sweet, oil-rich nuts in just 3-6 years. Because the heavy pollen does not carry far on the wind, plant at least two within 4-10 ft of each other.

-NEW!- Hops (*Humulus lupulus*)

Hops is a perennial bine that bears cones in its second year and continues to fruit for 25 years or more if properly cared for. Hops is the primary ingredient that gives ales their citrusy flavors and bitterness, and the variety we offer grows successfully at UVM's research farm in Alburgh and at commercial hopyards across the state. Hops bines grow over 20 ft tall, so be prepared to trellis them on a south-facing building, arbor, or trellis. For information on growing hops, attend the hops workshop at the NOFA-VT winter conference February 17th, the Vermont Hops Conference February 21st, or contact UVM Extension's John Bruce (524-6501 or john.bruce@uvm.edu.)

Lilac (*Syringa vulgaris*)

Lilac is a favorite ornamental because of its brilliant and fragrant spring blooms. While the joy it brings to spring is a reason to love it, it provides little benefit for wildlife or pollinators.

Raspberries (*Rubus idaeus*)

Encore – summer bearing

Encore is vigorous, sturdy, upright, nearly spineless and has excellent winter hardiness. Berries are large with very cohesive drupelets and good raspberry flavor. Encore is a late-season summer-bearing raspberry, great for extending the summer raspberry-picking season and offers the high yields required by commercial growers.

Joan J – fall bearing

Joan J is a high-yielding, thornless, early primocane raspberry variety. The fruit is large and holds its size well. Berries are firm, easy picking (they release well) has a true raspberry flavor. The fruit will store or freeze well, as it is drier. Can begin fruiting as early as July and continues through the fall.

Strawberries (*Fragaria x ananassa*)

Honeoye – early-to-mid season

Honeoye strawberry combines winter hardiness, high productivity, good appearance and color, together with an excellent, firm, large-sized berry. The large berries are easy to pick and freeze well. Honeoye bears fruit one year after planting in the early-to-mid season, typically early June, and continues to produce high yields over a long season. For optimum flavor and productivity, grow this vigorous plant in medium to light soil.

Sparkle – mid-to-late season

Sparkle is an heirloom strawberry recommended for beginners and excellent for jam and freezing. It has been known for flavorful, high-quality, attractive fruit for over 60 years. An extremely vigorous variety, Sparkle is an excellent choice for home gardeners and pick-your-own operations in northern Vermont. Berries are small-to-medium, so for best fruit size keep the bed from overcrowding. Sparkle is resistant to Red Stele, a disease of the roots that can occur in clay-rich or waterlogged soils. This strawberry bears fruit one year after planting in the mid-to-late season, typically late June.

Evergreens:

Cedar, Northern White “Arborvitae” (*Thuja occidentalis*)

Many people choose Northern white cedar for privacy screening because of its dense growth form, year-round greenery, and responsiveness to shaping. For a low-maintenance hedge, plant trees three feet apart. It is naturally a smaller (30-50') evergreen tree of coastal bogs and swamps, where it grows in dense stands. It is extremely tolerant of shade and saturated soil, but it will grow faster in well-drained locations with full sun. Its fissured, fibrous bark, thick trunk, and broad base, make it strikingly beautiful. The wood is lightweight and rot-resistant. During harsh winters deer prefer it for both browse and shelter, and it provides important habitat for white-throated sparrows, kinglets, and a variety of warblers.

Fir, Canaan (*Abies balsamea*)

Technically an ecotype of bracted balsam fir, it may be a hybrid between Fraser fir and balsam fir. The main difference between balsam and Canaan, besides that Canaan prefers more temperate climates, is the bracts are longer and are visible on the closed cone.

Fir, Balsam (*Abies balsamea*)

This northern native evergreen (40-60') is an excellent addition to buffer zone plantings or drier portions along the edges of wetland areas. It tolerates low-fertility, acidic sites, and does well in both dry and wet areas. It provides winter cover for birds and small mammals, and makes for a favorite Christmas tree.

Fir, Fraser (*Abies fraseri*)

The Fraser fir, which comes from the southern Appalachians, is very similar to Vermont's native Balsam fir. The branches turn slightly upward and have good form and needle-retention. The needles are dark blue-green in color and smell wonderful.

Pine, Eastern White (*Pinus strobus*)

This widespread and widely planted tree grows quickly on a variety of dry to wet soils. Virgin stands of this long-lived tree (to 450 years) once covered New England. Its soft wood is exceptionally useful for construction, and it is also sometimes used as a Christmas tree. It provides important winter habitat for songbirds such as chickadees, pine warblers, and pine grosbeaks.

Spruce, Colorado Blue (*Picea pungens*)

Native to the Rocky Mountains, Colorado Blue Spruce is a columnar or conical evergreen conifer with densely growing horizontal branches.

Spruce, White (*Picea glauca*)

White spruce is a cold climate species, one of the first to colonize after glaciers recede. The waxy coating on its needles gives it a blue-green appearance. It is the most commercially important timber species in the far north woods, used for wood fiber, house logs, and musical instruments. In backyards it is important winter shelter for birds, and in forests it provides cover for moose, martens, and lynx. And, of course, it makes a perfect Christmas tree.

-NEW!- Mushroom growing spawn & supplies:

Winecap mushroom sawdust spawn (*Stropharia rugosa-annulata*)

Winecap features a white stalk with a port wine colored cap. These crisp, slightly nutty flavored mushrooms are great for braising, sautéing and grilling. Winecap is also a natural soil builder, weed suppressor and attractive landscape ornamental. Choose a partially-shaded area of bare soil or existing mulch, preferably free from weeds or sod. Shrub beds, alleys between asparagus rows, blueberry beds, or under apple trees that have been mulched (not sprayed!) all work well. One 5.5 lb bag of sawdust spawn will inoculate a 50 sq ft. area Spread slightly aged hardwood chips or sawdust directly on the soil, sprinkle sawdust spawn over it, gently rake it in, and cover with an additional 1-2 inches of chips. Water as needed to prevent drying. Depending on weather it may begin fruiting as soon as six weeks, it may fruit in the fall, and should continue for another year or two.

Shiitake mushroom plug spawn (*Lentinula edodes*)

Shiitake mushrooms are grown on logs. While trees are dormant, harvest hardwood logs 36-40" long and 3-8" in diameter. Store them where they'll stay clean until you receive the spawn. Drill holes in the logs, and hammer spawn plugs into holes (use about 50 plugs per log.) Seal with wax. Set off the ground in the shade and prevent from drying out. The spawn will take about a year to fully colonize the logs, and then begin to produce mushrooms the following year. The strain we're selling fruits naturally in the spring and fall, saving you the hard work of submerging the logs in cold water that some strains require. It grows large, thick, first flush mushrooms and heavy yields, making it a great choice for new growers.

Wax for sealing shiitake plugs

Use this food grade wax to cover each plug of spawn in its hole and protect it from drying out or contamination. This wax is pliable at room temperature, so no need to melt it. Simply take a pinch and press it over the top of each plug.

Wildflower seed mixes:

Butterfly and hummingbird garden wildflower mix

These flowers offer ideal forage for pollinators in a beautiful mix of annual and perennial wildflowers. It stars cornflower (bachelor's button), rocket larkspur, bigleaf lupine, white beardtongue, and others.

Riparian buffer wildflower mix

A diverse mix of upland and wetland grasses, forbs and shrubs with extensive wildlife and pollinator value. Provides food and cover for many of our songbirds, pheasants, deer and turkey. It stars deertongue (or Tioga), indiagrass, big bluestem, and blackeyed susan, among others.

Wetland wildflower mix

The diverse species provide pollinator habitat and erosion control in wet meadows. It stars fox sedge, blue vervain, swamp milkweed, sensitive fern, joe-pye weed, and others.

Not offered this year:

***Acer saccharinum*, Silver Maple**

Silver maple is a classic floodplain tree found along many of Vermont's major rivers. It tolerates regular flooding and is found on a range of soil conditions, but it is commonly found on well-drained alluvial soils. It has a shallow, wide-spreading root system, which can create pavement upheaval if planted near roads or sidewalks. Its broad canopy creates a significant amount of shade to streams, and its abundant seeds are a valuable food source for birds and small mammals.

***Quercus bicolor*, Swamp white oak**

Swamp white oak occurs in a variety of soils from silty clays to sandy loams, but does best in deep, acidic soils that are moist-to-wet in full sun. It has a moderate to rapid growth rate, reaches 60-80 feet in height, and can live for over 300 years. A two-layer root system allows it to grow well in areas that are flooded in spring but markedly drier in summer. The acorns are important food for squirrels, white-tailed deer, beaver, black bear, and a variety of birds.

Oak, Bur (*Quercus macrocarpa*)

Bur oak, also called mossycup oak, is one of the most majestic of the native North American oaks. It is a medium to large sized white oak that typically grows 60-80' (less frequently to 150') tall with a broad-spreading, rounded crown. Acorn cups are covered with a mossy scale or bur near the rim, hence the common names. Bur oak prefers full sun and moist, well-drained loams, but adapts to a wide range of soil conditions. Its deep tap root gives it good drought tolerance. Bur oak may take up to 35 years to bear a first crop of acorns.

***Ilex verticillata*, Winterberry**

Winterberry holly is aptly named for the abundant shiny red berries that adorn this small tree throughout the winter, made all the more striking when the deciduous leaves have dropped. Grows well near wetlands and vernal pools. Berries provide critical food for birds in winter, and the shrubs provide cover for nesting during summer.

***Prunus virginiana*, Choke cherry**

Choke cherry is a great shrub for birds, which love its small, red-to-black fruits. Clustered white flowers appear in late May to June, with the leaves. It prefers rich, relatively moist soils but can do well in poorer and drier sites. It grows 5-25 feet and lives 40-60 years.

***Salix spp.*, Shrub Willows (5 species mix)**

This is a mix of five of the most common native species of shrub willows: Pussy Willow, Silky Willow, Heart-leaved Willow, Slender-leaved Willow, and Bebb Willow. Like most willows, these take root very easily and their strong, interlacing roots are good for stabilizing streambanks. Besides habitat for shrub-nesting birds, willows provide important food sources for butterfly larvae.

Apple, Dayton – standard root stock

Dayton apples ripen as early as August, and the lovely red apples are best eaten right off the tree. It is very hardy, vigorous, and disease resistant, making it an excellent home-garden tree. The apples are firm, sweet and juicy, with classic apple flavor that is only mildly acidic. We are offering these trees on "standard" root stock, so plan on a full-sized, long-lived, vigorous tree that will bear fruit five-to-six years after planting.

Blueberry, Duke

Duke blueberry is an early-season variety that is high-yielding and hardy. The attractive fruit is medium to large, light blue, and slightly tart. Berries maintain their uniform quality better than most other varieties. Duke grows upright to a height of 4-6 feet.

Reliance Peach, *Prunus persica*

Reliance Peach trees are very hardy with a heavy crop production. It is great for cold climates (up to zone 4, all but the highest areas of VT's NEK) and produces a medium-large, orange-red fruit that ripens in early August. The peaches are soft and juicy with a sweet, classically peachy flavor, and they are great for canning. The tree will grow 12-20 feet tall and bears pink flowers in early spring.