

Native Fruit Tree Planting and Care Guide

Guide Purpose: This guide contains information regarding the appearance, planting, and care of five different native fruit trees available for purchase at Ney Nature Center’s Tree Jamboree. The bibliography at the end of this document cites several sources consulted to support the guide’s creation.

Table of Contents

American Plum	2
Black Cherry	3
Chokecherry	4
Hackberry	6
Nannyberry	7
Bibliography	9

American Plum

Scientific Name: *Prunus americana*

Family: Rosaceae (rose)

Average height: Across multiple sources, the average height of the American Plum tree ranges from 10 to 25 feet.

Average lifespan: American Plum trees live a relatively short lifespan, averaging from 15 to 30 years.

Leaf, flower, and berry appearance: The leaves on American Plum trees are simple, about 2 to 5 inches long, and alternately arranged. Each leaf has single toothed, also known as serrated edges, a teardrop, or ovate, shape, and tops and bases that come to even points. During the summer, the leaves are dark green, then transition to a classic orange-yellow throughout fall months. In addition to the colorful leaves, mature American Plum trees produce stunning clusters of fragrant white flowers during the springtime. As the tree continues to mature, it will produce ripe plums around August and September. These bright red plums can be used in jellies and jams.

Bark appearance: Across their lifespan, American Plum trees have reddish brown bark. As the trees mature, the bark could naturally peel in scale-like patterns. Additionally, due to the large, whitish horizontal marks, or lenticels, on the bark, this tree can often be confused as Common Buckthorn, an invasive plant.

Planting instructions: When it comes to deciding where to plant an American Plum seedling, it is important to pick a sunny spot since these trees can tolerate small amounts of shade, but do not prefer it. Having the right soil is less of an issue for American Plums. While they prefer well-drained soil, they will tolerate any watering and soil conditions.

Before obtaining a new tree seedling to plant, it is important to consider an appropriate spot for the tree and then check for underground utility and gas lines before digging. Once the site is deemed safe to plant, a seedling can be brought to the location. Until its official planting, the seedling of any tree needs to have consistently damp and cool roots to ensure the plant's survival. At the safe planting site, dig a hole that is big enough to hold all of the seedling's roots. Clear out any leaves or unnecessary debris before placing the seedling into the hole. Ensure that the damp roots go straight down into the hole, but are not twisted around each other or bunched up in any way. When covering the roots with soil, do not bury the seedling too deep. The top, main order root, typically the largest one, should be about once inch under the surface. Finally, as the tree grows and the seasons change, continue to monitor it to decide on best practices for mulching, wrapping, and watering.

American Plum trees are hermaphroditic, meaning that a single tree possesses both reproductive parts necessary for self-pollination. Even with that in mind, the fruits produced by trees planted in groups or where insect pollinators are established could be of a higher quality. If the case of two or more American Plum seedlings being planted in the same area arises, they must be planted more than eight feet apart from each other.

Hardiness zone: At the time of its publication in 2023, the USDA Plant Hardiness Zone Map places southern Minnesota in zone 4b. Strong growth for American Plum trees happens within this range as they prefer zones three to eight.

Care: If American Plum trees become stressed or wounded, they have the tendency to produce root suckers. These are offshoots that come from the main plant's roots and eventually have the potential to grow into a full plant above ground. As this, mixed with growth from fallen plums happens, the single tree would develop into a thicket, or group of several trees. On one hand, the thicket style of growth is great for wildlife shelter and

feeding while also supplying a wind break. On the other hand, if space is limited, developing a thicket would not be ideal. Depending on the desired outcome, root suckers can either be removed immediately by hand, shears, or lawnmowers, or they can be left to grow.

Occasionally, the Eastern Tent Caterpillar (*Malacosoma americanum*) will feed on leaves and fruits of American Plum trees. These hairy, blue, black, and white caterpillars can be naturally discouraged from feeding on a tree by the removal of their nests. As their name suggests, these caterpillars create tent-like webbing structures in trees. When these are removed by hand, the caterpillars will no longer have a place to live in the tree.

Black Cherry

Scientific Name: *Prunus serotina*

Family: Rosaceae (rose)

Average height: Across multiple sources, the average height of a Black Cherry tree ranges widely. While some sources measure the tree's maximum height at 75 to 80 feet, the Minnesota Department of Natural Resources reports an overall shorter height range of 30 to 60 feet. It is helpful to note that the Black Cherry tree is the largest native cherry species in North America, so the wide range of height differences are accurate, but reflect different growing conditions.

Average lifespan: Black Cherry trees live moderately long, with an average lifespan of about 100 to 150 years. Some records report impressive, lengthened lifespans of 200 to 250 years old.

Leaf, flower, and berry appearance: Black Cherry leaves are simple, alternately arranged, and about two to six inches long. Each leaf has very finely toothed, or serrated edges, a narrow oval, lance-like shape, and a rounded base. The leaf comes to a sharp point at the tip and sometimes even curves inward toward the rest of the plant. During the summer, the leaves appear dark green on the top and lighter green with fine hairs on the underside. Then, in the fall, the leaves transition to a vibrant yellow or reddish color. In addition to the colorful leaves, Black Cherry trees produce abundant clusters of white flowers during the springtime. These flowers have five round petals and a sunny orange center. As the tree matures, it will eventually produce small, pea shaped cherries. At first, in late summer, the cherries are a reddish purple color, but turn darker, almost black, as the year draws closer to fall. With the exception of the single seed, the cherries are edible for humans, but will be bitter unless cooked.

Bark appearance: The bark of a Black Cherry tree is typically a reddish brown color, but tends to darken and gray as the tree matures. While an immature tree's bark is very smooth with some horizontal white lenticels, the mature tree's bark becomes very unique in its rough and ragged appearance. Mature trees develop scaly bark that looks almost like burnt potato chips peeling off the tree.

Planting instructions: When it comes to deciding where to plant a Black Cherry seedling, it is important to determine whether the planting site has the tree's preferred soil type. These trees grow best in medium to coarse textured loamy soil that is well-drained. They do not do well in soil conditions that tend to be overly wet or overly dry. Additionally, proper sun levels are essential to the growth of a Black Cherry tree. Planting locations must offer the trees full sun to partial shade.

Before obtaining a new tree seedling to plant, it is important to consider an appropriate spot for the tree and then check for underground utility and gas lines before digging. Once the site is deemed safe to plant, a seedling can be brought to the location. Until its official planting, the seedling of any tree needs to have consistently damp and cool roots to ensure the plant's survival. At the safe planting site, dig a hole that is big enough to hold all of the seedling's roots. Clear out any leaves or unnecessary debris before placing the seedling into the hole. Ensure that the damp roots go straight down into the hole, but are not twisted around each other or bunched up in any way. When covering the roots with soil, do not bury the seedling too deep. The top, main order root, typically the largest one, should be about once inch under the surface. Finally, as the tree grows and the seasons change, continue to monitor it to decide on best practices for mulching, wrapping, and watering.

Black Cherry trees are hermaphroditic, meaning that a single tree possesses both reproductive parts necessary for self-pollination. Even with that in mind, the fruits produced by trees planted in groups or where insect pollinators are established could be of a higher quality. If the case of two or more Black Cherry seedlings being planted in the same area arises, they must be planted several feet apart from each other to allow for full canopy growth.

Hardiness zone: At the time of its publication in 2023, the USDA Plant Hardiness Zone Map places southern Minnesota in zone 4b. Strong growth for Black Cherry trees happens within this range as they prefer zones three to nine.

Care: Throughout a Black Cherry tree's lifespan, it is susceptible to ice and animal damage. To help ease some of the winter stress put on a tree, their trunks can be covered with a protective wrap. These wraps prevent animals and ice from girdling the tree, which strips the tree of its bark and eventually leads to total tree death. While this method protects the trunk, it does not protect the higher branches from ice damage. As the tree grows, it is important to practice good pruning techniques that remove co-dominate leading branches or branches that do not have a strong connection to others or to the trunk. If these branches are not removed, heavy ice and snow could easily break them, causing damage to the rest of the tree.

Black Cherry tree branches can also be monitored to check for black knot disease. This fungal infection presents itself as dark colored tumor-like growths on the branches of many fruiting trees. Some Black Cherry trees are tolerant of the fungus, and will show no symptoms other than the presence of the mass. If this is the case, the fungus does not need to be pruned away. On the other hand, if the tree is not tolerant of the fungus, it will start to show symptoms of early decay and death in the nearby branches and leaves. When these symptoms appear on an intolerant Black Cherry tree, the branch that is host to the mass can be pruned, or cut away from a spot at least four inches below the infection. To prevent further spread of the fungus, pruning must be done during the late winter months.

Chokecherry

Scientific Name: *Prunus virginiana*

Family: Rosaceae (rose)

Average Height: Across multiple sources, the average height of the Chokecherry tree ranges from 15 to 25 feet.

Average lifespan: Chokecherry trees live a relatively short lifespan, averaging from 20 to 40 years.

Leaf, flower, and berry appearance: The leaves on Chokecherry trees are simple, about 2 to 4 inches long, and alternately arranged. Each leaf has finely toothed, also known as serrated edges, an oval shape that widens over the halfway point, and a tip that comes to a sudden sharp point. During the summer, the leaves are a shiny dark green on the top and a lighter green on the bottom. They transition into a yellow-orange color throughout fall months. In addition to the colorful leaves, mature Chokecherry trees produce small, white, five petaled flowers starting in May. As the tree continues to mature, it will produce ripe fruits that are a dark reddish purple, nearly black. These fruits are edible but quite bitter, making them better suited for jams, jellies, and baking.

Bark appearance: Across their lifespan, Chokecherry trees have dark grayish brown bark. The bark on more mature trees might darken to a nearly black color. At all ages, the bark's texture is smooth and sometimes develops fine scales. Additionally, the tree can develop white marks, or lenticels, that roughen with age.

Planting instructions: When it comes to deciding where to plant a Chokecherry seedling, it is important to pick a sunny spot since these trees can tolerate partial shade, but do not prefer it. Chokecherry trees are less specific about their soil preferences. They do well in any watering and soil conditions. While varying soil conditions do not prevent growth, one source, the Minnesota Department of Natural Resources, reported different growth styles depending on soil condition. According to their findings, Chokecherry trees planted in loam soils grow as tall shrubs, while Chokecherry trees planted in dry sand soils grow as shorter bushes.

Before obtaining a new tree seedling to plant, it is important to consider an appropriate spot for the tree and then check for underground utility and gas lines before digging. Once the site is deemed safe to plant, a seedling can be brought to the location. Until its official planting, the seedling of any tree needs to have consistently damp and cool roots to ensure the plant's survival. At the safe planting site, dig a hole that is big enough to hold all of the seedling's roots. Clear out any leaves or unnecessary debris before placing the seedling into the hole. Ensure that the damp roots go straight down into the hole, but are not twisted around each other or bunched up in any way. When covering the roots with soil, do not bury the seedling too deep. The top, main order root, typically the largest one, should be about once inch under the surface. Finally, as the tree grows and the seasons change, continue to monitor it to decide on best practices for mulching, wrapping, and watering.

Chokecherry trees are hermaphroditic, meaning that a single tree possesses both reproductive parts necessary for self-pollination. Even with that in mind, the fruits produced by trees planted in groups or where insect pollinators are established could be of a higher quality. If the case of two or more Chokecherry seedlings being planted in the same area arises, they must be planted more than twenty feet apart from each other.

Hardiness zone: At the time of its publication in 2023, the USDA Plant Hardiness Zone Map places southern Minnesota in zone 4b. Strong growth for Chokecherry trees happens within this range as they prefer zones two to seven.

Care: If Chokecherry trees become stressed or wounded, they have the tendency to produce root suckers. These are offshoots that come from the main plant's roots and eventually have the potential to grow into a full plant above ground. As this happens, the single tree would develop into a thicket, or group of several trees. On one hand, the thicket style of growth is great for wildlife shelter and feeding while also supplying a wind break. On the other hand, if space is limited, developing a thicket would not be ideal. Depending on the desired outcome, root suckers can either be removed immediately by hand, shears, or lawnmowers, or they can be left to grow.

Occasionally, the Eastern Tent Caterpillar (*Malacosoma americanum*) will feed on leaves and fruits of Chokecherry trees. These hairy, blue, black, and white caterpillars can be naturally discouraged from feeding on

a tree by the removal of their nests. As their name suggests, these caterpillars create tent-like webbing structures in trees. When these are removed by hand, the caterpillars will no longer have a place to live in the tree.

Chokecherry tree branches can also be monitored to check for black knot disease. This fungal infection presents itself as dark colored tumor-like growths on the branches of many fruiting trees. Some Chokecherry trees are tolerant of the fungus, and will show no symptoms other than the presence of the mass. If this is the case, the fungus does not need to be pruned away. On the other hand, if the tree is not tolerant of the fungus, it will start to show symptoms of early decay and death in the nearby branches and leaves. When these symptoms appear on an intolerant Chokecherry tree, the branch that is host to the mass can be pruned, or cut away from a spot at least four inches below the infection. To prevent further spread of the fungus, pruning must be done during the late winter months.

Hackberry

Scientific Name: *Celtis occidentalis*

Family: Ulmaceae

Average height: Across multiple sources, the average height of the Hackberry tree ranges from 40 to 70 feet.

Average lifespan: Hackberry trees live moderately long, with an average lifespan of about 150 to 200 years.

Leaf, flower, and berry appearance: The leaves on Hackberry trees are simple, about 2 to 4 inches long, and alternately arranged. Each leaf has sharp, single toothed, also known as serrated edges, a long tapering tip, and an uneven base. During the summer, the leaves are dark green, then transition into a bold yellow throughout fall months. While the summer and fall leaves represent the visual standard of many fruiting trees, the mature springtime flowers offer visual diversity. Male flowers on this plant do not have petals; instead, they appear as clusters of 4 to 6 green or yellow colored sepals. Female flowers present fuzzy white petals with a green center, or ovary. Then, as the tree continues to mature, it will produce small ripe berries. At first, the berries are green, but as they ripen during the fall months, they turn a deep purple color. The berries are sweet and edible to both humans and wildlife. Additionally, many berries remain on the tree into the winter, offering a feeding option for birds and other wildlife.

Bark appearance: Hackberry trees have visually unique bark throughout their entire lifespan. Before maturity, the tree bark appears to have a bumpy wart-like texture. Then, as the tree matures, these bumps become defined narrow, corky ridges that look somewhat like an automotive tire. In every stage of its life, Hackberry tree bark is gray in color.

Planting instructions: Hackberry trees have a wide range of preferred planting practices, making them versatile trees for a number of locations. This tree is relatively shade tolerant, but does need a minimum of six hours of sunlight each day. In addition to their flexible sunlight preference, a Hackberry tree can tolerate the whole range of soil textures, from sandy to clay, and drainage levels, from dry to wet.

Before obtaining a new tree seedling to plant, it is important to consider an appropriate spot for the tree and then check for underground utility and gas lines before digging. Once the site is deemed safe to plant, a seedling can be brought to the location. Until its official planting, the seedling of any tree needs to have consistently damp and cool roots to ensure the plant's survival. At the safe planting site, dig a hole that is big enough to hold all of the seedling's roots. Clear out any leaves or unnecessary debris before placing the seedling into the hole. Ensure

that the damp roots go straight down into the hole, but are not twisted around each other or bunched up in any way. When covering the roots with soil, do not bury the seedling too deep. The top, main order root, typically the largest one, should be about once inch under the surface. Finally, as the tree grows and the seasons change, continue to monitor it to decide on best practices for mulching, wrapping, and watering.

Hackberry trees are monoecious, meaning that a single tree possesses both reproductive parts necessary for self-pollination. While some fruiting tree flowers have both male and female parts within the same flower, Hackberry trees have two completely different flowers, one male and one female. Both wind and insect pollinators assist in more successful Hackberry pollination where single trees or groups are planted.

Hardiness zone: At the time of its publication in 2023, the USDA Plant Hardiness Zone Map places southern Minnesota in zone 4b. Strong growth for Hackberry trees happens within this range as they prefer zones three to nine.

Care: Eriophyid mites occasionally feed on Hackberry trees. This feeding causes the tree to increase hormone production, which in turn creates galls. In Hackberries specifically, these galls appear as groups of branches and twigs twisted together, creating what is called a witch's broom. The galls and the insects do not impact the tree's overall health, but do diminish its visual appearance, especially in winter. In order to prevent the growth of galls, the appropriate herbicide must be applied to the tree while the mites are initially active, not after a gall has formed.

Nannyberry

Scientific Name: *Viburnum lentago*

Family: Caprifoliaceae (Honeysuckle)

Average height: Across multiple sources, the average height of the Nannyberry tree ranges from 10 to 25 feet.

Average lifespan: Nannyberry trees live a relatively short lifespan, averaging about 40 years.

Leaf, flower, and berry appearance: The leaves on Nannyberry trees are simple, about 2 to 5 inches long, and oppositely attached. Each leaf has finely toothed, also known as serrated edges, an elongated oval shape, and a tip that comes to a sudden sharp point. During the summer, the leaves are a shiny dark green on the top and a lighter green on the bottom. They transition into a brilliant dark red purplish color throughout fall months. In addition to the colorful leaves, mature Nannyberry trees produce small, cream colored, five petaled flowers during springtime. These flowers form clusters about 2 to 3 inches wide at the end of branches. As the tree continues to mature, it will produce sweet, edible fruits with a single seed. At first, these fruits are green, then, as they ripen, they look purplish red and eventually bluish black.

Bark appearance: Across their lifespan, Nannyberry trees have dark colored bark. The bark is dark brown, but tends to gray with age. Younger trees have many visible whitish horizontal marks, or lentils, on the bark, causing Nannyberry trees to often be confused as Common Buckthorn, an invasive plant. As the bark ages and thickens, those marks become less visible. Instead, pieces of the aged bark appear square, making a checkerboard-like pattern.

Planting instructions: When it comes to deciding where to plant a Nannyberry seedling, it is helpful to pick a mostly sunny spot, since these trees prefer sunny conditions. They can also tolerate partial shade. Nannyberry

trees have slightly more specific planting recommendations when it comes to soil conditions. They prefer well-drained soil that is fine or medium textured. They will not do well in coarse textured soils. _

Before obtaining a new tree seedling to plant, it is important to consider an appropriate spot for the tree and then check for underground utility and gas lines before digging. Once the site is deemed safe to plant, a seedling can be brought to the location. Until its official planting, the seedling of any tree needs to have consistently damp and cool roots to ensure the plant's survival. At the safe planting site, dig a hole that is big enough to hold all of the seedling's roots. Clear out any leaves or unnecessary debris before placing the seedling into the hole. Ensure that the damp roots go straight down into the hole, but are not twisted around each other or bunched up in any way. When covering the roots with soil, do not bury the seedling too deep. The top, main order root, typically the largest one, should be about once inch under the surface. Finally, as the tree grows and the seasons change, continue to monitor it to decide on best practices for mulching, wrapping, and watering.

Nannyberry trees are hermaphroditic, meaning that a single tree possesses both reproductive parts necessary for self-pollination. Even with that in mind, the fruits produced by trees planted in groups or where insect pollinators are established could be of a higher quality. If the case of two or more Nannyberry seedlings being planted in the same area arises, they must be planted more than twenty feet apart from each other.

Hardiness zone: At the time of its publication in 2023, the USDA Plant Hardiness Zone Map places southern Minnesota in zone 4b. Strong growth for Nannyberry trees happens within this range as they prefer zones three to seven.

Care: The Viburnum clearwing borer (*Synanthedon viburni*) may present an issue for Nannyberry trees. These tree pests follow very similar lifecycle and harm patterns as the Emerald ash borer. Pest larva will burrow into the stems of Nannyberry trees and chew out the wood, eventually killing the tree. This activity can be spotted by sawdust around the trees, exit and entry holes, and unfortunately, death of infected branches. While these pests can be managed in similar ways to Emerald ash borer, the most homeowner-friendly way to prevent them is to avoid causing stress to Nannyberry trees. Maintaining healthy bark, branch attachments, and watering schedules will improve the overall quality and safety of the tree.

Additionally, if Nannyberry trees become stressed or wounded, they have the tendency to produce root suckers. These are offshoots that come from the main plant's roots and eventually have the potential to grow into a full plant above ground. As this happens, the single tree would develop into a thicket, or group of several trees. On one hand, the thicket style of growth is great for wildlife shelter and feeding while also supplying a wind break. On the other hand, if space is limited, developing a thicket would not be ideal. Depending on the desired outcome, root suckers can either be removed immediately by hand, shears, or lawnmowers, or they can be left to grow.

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