

*Barron County
Soil & Water Conservation
Department*



TREE PROGRAM

Barron County Soil & Water Conservation

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- Each year the Soil & Water Conservation Department purchases approx. 35,000 trees to sell them at cost to residents of the county. This program compliments the WDNR tree program. The department owns two tree planters and a brush mower for previous plantings and coordinates their use through the WDNR Forestry Department. Orders are taken January through March for pickup towards the end of April. Phone 537-6315 to place your order.

CARE ON ARRIVAL

■ CARING FOR TREES ON ARRIVAL

Bundles should be opened as soon as trees are received, and roots should be moistened. Plant the trees as soon as possible.

If unable to plant upon receipt of trees, store in a cool area away from the sun and wind, loosen wrapping, and make sure trees are slightly moist by watering the moss around the roots.

When planting, either by hand planting bars or machine planting, be sure the roots are deeply secured in the ground and the soil around the trees is firmly packed.

INFORMATION ON PLANTING

IMPROVE YOUR PLANTING SUCCESS

Following these simple steps will help improve your planting success:

Site Preparation:

Your trees will get off to a better start if you spend time prior to planting reducing or removing grass, weeds and brush. If not controlled, these items can reduce the ability of the trees to take hold.

Decide desired end result and determine quantity of trees needed:

Christmas tree harvest:

Plant 6 ft apart (1100 – 1200 trees per acres).

Windbreaks:

Plant 6-8 ft. apart. Divide the length of row desired by 6 or 8 and figure number of trees needed. (12-16 trees per 100 linear feet).

Information on Planting cont

Reforestation:

Plant 8-10 ft. apart (500-700 trees per acre)

Ornamental plantings:

4'X5' planting requires about 2,200 seedlings per acres. A 5'X5' planting requires about 1,700 seedlings per acres (1 acres = 43,560 sq. ft. – allow for access rows)

Determine tree type:

You must consider soil type, sun conditions, water drainage and other locational factors and match them with type of tree that thrives under those conditions. Not all trees do well under all conditions.

Timing your planting:

We suggest you try to schedule delivery so that you can plant your trees as soon as possible after their arrival. If you can't start planting upon arrival, store the trees in a cooler or other cool area out of the sun and wind. Open them slightly and make sure trees are slightly damp.

Information on Planting Cont.

Plant trees properly:

Again – plant your stock as soon as possible after receipt of trees. You can plant by hand using a heavy spade or spud, or you can use a machine. In either case, make sure the roots are deeply secured in the ground and the soil around the tree is firmly packed.

Bigger seedlings and transplants

With full root masses need special attention during planting to avoid J-rooting. Nothing will save a tree that is poorly planted.

Site maintenance:

Be sure to control weeds with herbicides and/or mowing after planting. The weeds compete with the trees for nutrients, moisture and fertilizer and can affect their growth if not controlled. Discuss your options with your local chemical dealer.

Harvest time:

If you're planting to harvest your crop, keep in mind that natural occurrences (late frost, dry conditions, disease) can all affect growth rate. In general, the more care (fertilizer, weed/pest control, water) the trees receive, the sooner they'll grow to a harvestable size. The type of tree you select will also affect harvest time.

TREES AVAILABLE

NORWAY PINE (*Pinus Resinosa*)

GRAY DOGWOOD (*Cornus Racemosa*)

WHITE SPRUCE (*Picea Glauca*)

AMERICAN HIBUSH CRANBERRY (*Viburnum trilobum*)

BALSAM FIR (*Abies Balsamea*)

SHADBLO SERVICEBERRY (*Amalanchier Canadensis*)

WHITE PINE (*Pinus Strobus*)

AMERICAN PLUM (*Prunus Americana*)

NORTHERN RED OAK (*Quercus Borealis*)

BLACK CHERRY (*Prunus serotina*)

BUR OAK (*Quercus borealis*)

RED OSIER DOGWOOD (*Cornus Serecia*)

NANNYBERRY (*Viburnum Lentago*)

NORWAY or RED PINE (Pinus resinosa)

*Norway Pine Christmas Tree
with close-up of branch*



NORWAY OR RED PINE

Features

Soil Conditions	Tolerates poor conditions such as dry, acid, sandy or rocky soils
Height	Reaches heights of 70 - 120 feet; trunk 1 - 2 feet in diameter
Growth	For the first 50 years they average 1 foot a year
Crown/Spread	Form is pyramidal when young, with age developing an oval crown
Shade Tolerance	Very cold hardy, Full sun, and fairly drought tolerant
Limitations	Not tolerant of compacted or poorly drained soils. May become chlorotic in high pH soils
Disease	Usually disease free and insects don't bother them

NORWAY OR RED PINE

Features cont.

Food/Shelter	Makes a good wind break when combined with spruce. Mature trees make marginal wildlife cover
Leaf/Needles	Evergreen 4 - 6 inches long; 2 in a bundle, dark green
Fruit/Cone:	2 - 4 inches long, egg shaped, shiny light brown, usually in clusters of 3 - 4; start producing cones at age 15 - 25 and only produce a small amount every three to seven years
Flower	Catkin appearance; gray and powdery early spring
Bark	Reddish-brown or gray with broad, flat scaly plates
Use	Is an ornamental and shade tree; used for general construction, millwork and pulpwood.

Norway or Red Pine Pictures



Cone: 2-3.5" long; egg-shaped; shiny light brown; usually in clusters of 3-4

Needle: evergreen: 4-6" long; 2 in a bundle; dark green



Flower: catkin appearance; gray and powdery, early spring



WHITE SPRUCE (*Picea glauca*)



WHITE SPRUCE (Picea Glauca)

Features

Soil Conditions	Good growth requires a dependable supply of well-aerated water, yet species will tolerant a wide range of moisture conditions.
Height	Matures at 60 - 70 feet
Growth	large tree with narrow crown, branches spread slightly downward
Crown/Spread	Relatively uniform, conical crown
Shade Tolerance	
Limitations	Grow best in mixed stands, rarely grows in pure stands.
Disease	

WHITE SPRUCE (Picea Glauca)

Features Cont.

Food/Shelter	Good winter cover for wildlife
Leaf/Needles	Four sided ;stiff and sharp; arranged spirally on twigs; distinctive odor; foul when young but pleasant when older. Less than one inch long, green to bluish green in color. Needle tips are pointed but not sharp
Fruit/Cone:	Cones are about 1.5 to 2.5 inches long, cigar shaped, light brown in color. Scales are rounded with entire margins. Winged seeds are enclosed by the woody scales of the mature female cone. Maturing in the fall.
Flower	Monoecious, males reddish but turning yellow; females purple; appearing in May
Bark	Trunk bark thin,, gray-brown in color, smooth, later flaky or scaly
Use	Modern - lumber, pulp; traditional saplings; snowshoe frames, bows; rein; glue to fasten skins onto bows and arrowheads onto shafts; decayed wood: tanning hides; bark: baskets, cooking pots, trays

White Spruce Pictures



seed cones - light brown, purplish; scales are rounded and smooth; open when dry
pollen cones - pale red

BALSAM FIR (*Abies Balsamea*)



BALSAM FIR (*Abies Balsamea*)

Features

Soil Conditions	Very Hardy, Prefers a rich, acidic soil and requires ample moisture,
Height	Range 40 - 75'
Growth	A Wisconsin native conifer. Performs best in cool climates.
Crown/Spread	Small to medium-sized tree with narrow, spire-like crown
Shade Tolerance	Shade Tolerant
Limitations	Not very tolerant of drought
Disease	No serious insect or disease problems

BALSAM FIR (*Abies Balsamea*)

Features Cont.

Food/Shelter	Excellent food and cover for numerous wildlife species
Leaf/Needles	Flattened needles, shiny above and silvery-blue below, 3/4 inch long, blunt or notched at end.
Fruit/Cone:	Cones are upright 2 - 3 1/2 inches long, oblong to cylindrical, green with purple tinge, with bracts shorter than the scales. Cones are deciduous with seed dispersal in Mid September.
Flower	Monoecious; males occur on undersides of leaf axils, purple to yellow brown; females occur in upper crown, inconspicuous.
Bark	Dull green to gray, smooth except for numerous fragrant resin blisters
Use	Popular Christmas tree.

Balsam Fir Pictures



WHITE PINE (Pinus strobus)



WHITE PINE (Pinus Strobus)

Features

Soil Conditions	Tolerates poor conditions such as dry, acid, sandy or rocky soils, but prefers loam soils. Avoid clay and wet soils.
Height	Range 80' to 110'
Growth	A Wisconsin native conifer
Crown/Spread	20' - 40'
Shade Tolerance	Shade tolerant when young. Intermediate
Limitations	Not tolerant of wet soils
Disease	White Pine Blister Rust

WHITE PINE (Pinus Strobus)

Features Cont.

Food/Shelter	Food for voles, mice, chipmunks, white tail deer, wild turkey, morning dove and more. Provides shelter for Eagles, woodpeckers, bats, wood duck, morning dove, robins, raccoons, blue jay, gold finch and many more.
Leaf/Needles	Needles soft, flexible, pale red-brown, with rusty hairs when young; aging gray and smooth. Only five needle pine native to eastern North America.
Fruit/Cone:	Cones slender and thorn less, 3" - 10" long and tapering; each scale usually bears two winged seeds as do all native pines.
Flower	Buds heavily resinous and sticky, aromatic.
Bark	Bark darkening and thickening as tree ages, smooth and gray on young growth, becoming gray-brown, deeply furrowed with broad ridges of irregularly rectangular, purple-tinged scaly plates.
Use	Construction, pulp, furniture, door frames, boats coffins, matches, paneling, crates, masts on boats and Christmas Trees.

White Pine Pictures



NORTHERN RED OAK (Quercus Borealis)



NORTHERN RED OAK (*Quercus Borealis*)

Features

Soil Conditions	Grows best in moist to semi moist loam soils. Will grow in drier soils, but not as vigorously.
Height	Matues up to 75'
Growth	Relatively fast growing (for oaks) 8"- 10" trunk diameter in 40 years. Very winter hardy and drought resistant once established.
Crown/Spread	A medium to large tree that develops a short trunk and round crown when open grown.
Shade Tolerance	Does best planted when planted in open to semi shaded areas.
Limitations	Susceptible to oak wilt. To prevent the spread of oak wilt, plant Red Oaks well apart to minimize root grafting and do not prune from April through July.
Disease	Gypsy moth, oak decline

NORTHERN RED OAK (*Quercus Borealis*)

Features Cont.

Food/Shelter	Acorns are consumed by a variety of wildlife. Rabbits, deer, and moose browse on stems and foliage. Attracts: mice, voles, squirrels, deer, turkey, water fowl and many other birds
Leaf/Needles	Alternate, simple 5 - 8 inches long, oblong in shape with 7 to 11 bristle-tipped lobes. Glossy dark green foliage and excellent orange to red fall color.
Fruit/Cone:	Acorns are 3/4' to 1' long and nearly round. The cap is flat and thick, covering about 1/4 of the acorn. Matures in 2 years, ripens August to late October.
Flower	Staminate flowers borne on catkins Pistillate flowers borne on spikes (April or May)
Bark	On young stems, smooth. Older bark develops wide, flat-topped ridges and shallow furrows.
Use	Used for flooring, furniture, cabinets, paneling, timbers, agriculture implements, boats, pulpwood.

Northern Red Oak Pictures



BUR OAK (*Quercus Borealis*)



BUR OAK (Quercus Macrocarpa)

Features

Soil Conditions	Can tolerant in a variety of soil conditions
Height	70 – 80 feet
Growth	Moderate growth rate
Crown/Spread	Impressive crown
Shade Tolerance	Can grow with shade or full sun, but prefers lots of sun.
Limitations	Because of the length of the tap root, transplant as saplings and in the spring.
Disease	Few insects can cause damage to the Bur Oak

BUR OAK (Quercus Macrocarpa)

Features Cont.

Food/Shelter	The acorns are eaten by many birds and mammals, including squirrels, rabbits, ground squirrels, mice, deer, wood ducks and blue jays. Red-tailed hawks, screech owls, fox squirrels nest in Bur Oak trees.
Leaf/Needles	Broad, flat, simple, pinnately lobed, smooth, without bristle tips, main vein ends at lobe, end lobe large.
Fruit/Cone:	Acorn
Flower	Flowering occurs between April through June
Bark	Bark is thick and fire resistant
Use	Used for cabinetry, barrels, hardwood flooring, and fence posts. Highly desirable tree for windbreaks.

BUR OAK



RED OSIER DOGWOOD (Cornus Serecia)



RED OSIER DOGWOOD (Cornus Serecia)

Features

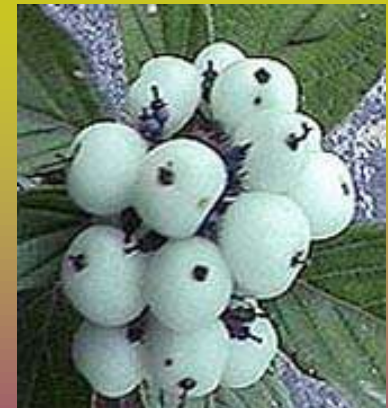
Soil Conditions	Grows best along the edges of swamps or moist areas in Forest. Tolerates flooding.
Height	Matures at 5 - 7 feet, but can grow to around 15' tall.
Growth	Plant 2 - 3 feet apart and 4 feet away from fence lines, cement or buildings. Has a fast grow rate in moist conditions
Crown/Spread	Small to medium size scrub with numerous stems forming thickets up to 15 feet tall but generally shorter. Spread 7 - 9 feet wide
Shade Tolerance	Needs moderate to full sunlight.
Limitations	Not suited for dense clays.
Disease	Minor disease concerns, more concerned about deer and mice eating the buds.

RED OSIER DOGWOOD (Cornus Serecia)

Features Cont

Food/Shelter	Excellent fall food source for numerous songbird, deer, upland game birds, and bear. Dense thickets provides cover.
Leaf/Needles	Opposite, simple, accurately veined, 2 - 4 inches ling, somewhat narrow, green above, pale below.
Fruit/Cone:	They first bear fruit at 3 - 4 years of age. Maturing in August to September.
Flower	Small and many creamy white from May to June followed by attractive white fruits and spectacular maroon fall leaves.
Bark	Red to green with numerous lenticels. Later developing larger cracks and splits and turning light brown. In the winter the stem is red
Use	Natives of meadows, riparian zones and forest openings; recommended for restoration of moist sites like streams. Very extremely winter hardy. For making Baskets

Red Osier Dogwood Pictures



GRAY DOGWOOD (Cornus Racemosa)



GRAY DOGWOOD (Cornus Racemosa)

Features

Soil Conditions	Can tolerate a variety of soil conditions including shade.
Height	10 – 12 feet tall
Growth	moderate
Crown/Spread	Small to medium sized shrub with numerous stems forming thickets.
Shade Tolerance	Well adapted to either full sun or light shade.
Limitations	Not tolerant of wet soils,
Disease	Frequently infected by leaf spot which detracts from the appearance

GRAY DOGWOOD (Cornus Racemosa)

Features Cont.

Food/Shelter	Birds eat fruit
Leaf/Needles	Opposite, simple, 2 ½ - 5 inches long, dark green above lighter below.
Fruit/Cone:	Small, white and are borne on red pedicels in late fall
Flower	Creamy white flowers in the late spring and white berries on red pedicels in late summer, fall color is a deep maroon
Bark	Light gray and smooth when young. Becoming irregular with blocks
Use	Great for shore line restoration, forms thickets

Gray Dogwood Pictures



AMERICAN HIBUSH CRANBERYY (Viburnum Trilobum)



AMERICAN HIBUSH CRANBERYY

(Viburnum Trilobum)

Features

Soil Conditions	Grows best in moist to well drained soils, but will do well in moderately drained soils.
Height	Matures at 12' and is very winter hardy. Average height is 6 – 10'
Growth	moderate
Crown/Spread	Depends if planting for a hedge of windbreak or as an individual tree.
Shade Tolerance	Shade tolerant, but best colors on flowers if plant in full sun light
Limitations	Seeds don't germinate until the second spring following the ripening of the fruit.
Disease	This plant has no serious pests. Possibility of leaf beetle.

AMERICAN HIBUSH CRANBERYY

(Viburnum Trilobum)

Features Cont.

Food/Shelter	Good wildlife food and cover plant for mammals and birds. Twigs are eaten by deer, moose and beaver. Fruits are a staple winter food for ruffed grouse and are Eaten sparingly by pheasants and at least five species of songbirds. Makes a good wind break.
Leaf/Needles	Leaves are opposite, 3 lobed maple-like leaves and range from 2 – 5 inches long. In the fall the leaves become scarlet.
Fruit/Cone:	Bright red fruits. Ripens in September and October. Fruit hangs on branches all winter.
Flower	Creamy white flower, which appears in late May and early June, measure 3 – 4 inches across.
Bark	Gray-brown in color and waxy
Use	Humans find the fruit tart but edible and excellent as a preserve or sauce.

AMERICAN HIBUSH CRANBERRY



SHADBLO SERVICEBERRY (Amalanchier Canadensis)



SHADBLO SERVICEBERRY (Amalanchier Canadensis)

Features

Soil Conditions	Widely adaptable to a variety of soils, even heavy clay.
Height	6 – 15 feet
Growth	Moderate
Crown/Spread	10' across, dense bushy spread
Shade Tolerance	Full Sun – Partial Sun
Limitations	
Disease	Japanese Beetles, leaf spots and rust may be a problem

SHADBLO SERVICEBERRY (Amalanchier Canadensis)

Features Cont.

Food/Shelter	Sweet edible fruit
Leaf/Needles	Alternate, simple elliptic to oblong 1.5 – 2.5 inches long, 1 inch wide, finely and Uniformly toothed, wooly when young becoming glabrous. Fall color yellow to red or orange
Fruit/Cone:	It produces a red berry that changes to black.
Flower	White flower on 2 – 3” raceme. Blooms late March petals are obovate.
Bark	Gray-silver bark, striped, glabrous, young stems, small lenticels, imbricate buds, conical in shape buds are reddish purple.
Use	The reddish purple buds add some character to the plant in the winter, Look nice with an evergreen background

Sadblo Serviceberry Pictures



AMERICAN PLUM (Prunus Americana)



AMERICAN PLUM (Prunus Americana)

Features

Soil Conditions	A Wisconsin native scrub, grows best in well drained soils
Height	Reaches a height of 15 feet
Growth	moderate
Crown/Spread	Broad crown, rounded and irregular
Shade Tolerance	Shade intolerant, full sun to part shade. Very winter hardy.
Limitations	Moderate drought tolerant.
Disease	There are no known serious insect problems, plum pocket and black knot are Common diseases, but are generally not serious.

AMERICAN PLUM (Prunus Americana)

Features Cont.

Food/Shelter	Highly important as a wildlife cover and food. Valuable for bird nesting loafing and roosting. Whitetails and mule deer browse in the twigs and foliage.
Leaf/Needles	Leaves are alternate, broadly oval in shape with sharply tapering tip, and sharply, often doubly toothed edges – 2 – 4 inches long on slender stalks, dark green above, pale and smooth below.
Fruit/Cone:	Fruits are red to yellow about 1 inch in diameter
Flower	White, 5 petaled about 1 inch across are borne singly or in clusters at the junction of a stem and leaf. Matures in July.
Bark	The plants numerous stems are grayish and become scaly with age; its branches are more or less, pale and spiny with sharp-tipped twigs.
Use	Windbreaks, wildlife, recreation and beautification and Eutnobotanic (eaten fresh or in sauces.

American Plum Pictures



BLACK CHERRY (*Prunus Serotina*)



BLACK CHERRY (Prunus Serotina)

Features

Soil Conditions	Adapted to a wide variety of soil conditions
Height	Known as a small tree but can grow up to 80'.
Growth	Rapid
Crown/Spread	Irregular crown
Shade Tolerance	Full sun light
Limitations	The thin bark makes it highly susceptible to girdling, and it is usually killed or top-killed by fires of moderate severity.
Disease	The eastern tent caterpillar and the cherry scallop shell moth defoliate the tree and can cause loss and mortality. The fungal disease “black knot” is common on black cherry – it causes elongated, rough, black swelling on the twigs, branches, and trunk.

BLACK CHERRY (Prunus Serotina)

Features Cont.

Food/Shelter	The fruits are important food for numerous species of passerine birds, game birds, and mammals, including the red fox, black bear, raccoon, opossum, squirrels, and rabbits. Low palatability for browse.
Leaf/Needles	Dark green on top and light green on bottom. Leaves grow up to 5' long and 2' wide. Leave turn yellow to red in the fall
Fruit/Cone:	Fruits are small and turn from orange to red to black.
Flower	Flowers are small and clustered in columns. Bloom is in April and May.
Bark	The bark of Black Cherry is dark gray and scaly. As the tree gets older, the bark gets rougher.
Use	Valued wood in making cabinets and furniture. Fruit has been used to flavor rum and brandy. Pitted fruits are edible and are eaten raw and used in wine and jelly.

Black Cherry Pictures



NANNYBERRY (*Viburnum Lentago*)



NANNYBERRY (Viburnum Lentago)

Features

Soil Conditions	Grows well in moist to dry conditions with a variety of light conditions
Height	Can grow up to a height of 15
Growth	Slow
Crown/Spread	Irregular to rounded crown
Shade Tolerance	Shade Tolerant tree
Limitations	Grows larger when has more space
Disease	Viburnum Leaf Beetle is not a current problem here in Wisconsin. The beetle will not kill the plant, but will decrease aesthetic value.

NANNYBERRY (*Viburnum Lentago*)

Features Cont.

Food/Shelter	Fruits are sweet and edible and are eaten by many of species of birds and wildlife
Leaf/Needles	Leaves are simple, opposite, and ellipse to egg-shaped with finely toothed margins. They are 2 – 4” long and hairless.. Mature foliage is dark glossy green, becoming maroon to red in the fall
Fruit/Cone:	Berry-like fruits (drupes) are blue-black and form hanging clusters from July to September.
Flower	Small, creamy-white, flowers in flat-topped clusters appear May-June
Bark	Gray-brown, initially smooth but later becoming irregularly scaly
Use	Landscape plantings as shrub borders, taller barriers, hedges, and windbreaks

Nannyberry Pictures

