



American Elm
(*Ulmus americana*)

General Description

The state tree of North Dakota. A large vase-shaped tree adapted to a wide variety of sites. No longer recommended because of its susceptibility to Dutch Elm Disease. The largest tree in North Dakota is 62 feet tall with a canopy spread of 74 feet.

ID Facts

Bud Arrangement - Alternate.
 Leaf Type and Shape - Simple, unequal at the base, ovate-oblong.
 Leaf Margins - Doubly-serrate.
 Fruit Type - Winged samara, oval-globose and wafer-like in appearance, notched.
 Crown Height - 45 to 65 feet.
 Crown Width - 30 to 50 feet.
 Bark Color - Dark gray-brown, with broad ridges and deep furrows.

Benefits

Wildlife - Seed, buds, and tender young twigs are used as food by birds and mammals, particularly deer.
 Wood - Used in fine furniture, boxes, barrels, and crates. Good for firewood, but hard to split.
 Medicinal - Extracts of some *Ulmus* species have been used as a demulcent, an astringent, a diuretic, and for inflammation, burns, cold sores and wound treatments.



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#1

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General Description

A medium to large tree native east of the Missouri River in North Dakota. Desirable as a landscape tree for its large stature, shade and aromatic flowers. Fruit with attached pale-green bract, gives tree a two-tone appearance in late summer. The largest tree in North Dakota is 75 feet tall with a canopy spread of 64 feet.

ID Facts

Bud Arrangement - No terminal buds. Lateral buds are alternate.
 Leaf Type and Shape - Simple, broad-cordate or heart-shaped, oblique base.
 Leaf Margins - Coarsely-serrate with long-pointed teeth.
 Fruit Type - Fruit is a pea-sized nutlet about 1/4 inch in size, thick-shelled, and without ribs.
 Crown Height - 50 to 70 feet.
 Crown Width - 30 to 50 feet.
 Bark Color - Gray to brown, broken into many long narrow, flat-topped scaly ridges.

Benefits

Wildlife - Old hollow trees make good den trees for wildlife.
 Wood - Light, soft, and tough. Sold mainly for lumber, dimension stock and veneer; used in making drawing boards, furniture, tongue depressors, and for carving.
 Food - Honey derived from linden flowers is regarded as the best in the world.
 Medicinal - Used for indigestion, hysteria, nervous stomach or palpitations.



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American Linden/Basswood
(*Tilia americana*)

General Description

A medium to large tree which grows best in bottomlands and other moist areas. Has a higher moisture requirement than green ash. Slightly more upright and often narrower in appearance than green ash. The largest tree in North Dakota is 66 feet tall with a canopy spread of 34 feet.

ID Facts

Bud Arrangement - Opposite, with smaller and more rounded lateral buds. The first pair is usually some distance down the twig.
 Leaf Type and Shape - Pinnate-compound, 7 to 11 sessile leaflets.
 Leaf Margins - Serrate with small incurved teeth.
 Fruit Type - Winged samaras are in loose clusters 6 to 8 inches long.
 Crown Height - 30 to 50 feet.
 Crown Width - 15 to 30 feet.
 Bark Color - Gray and smooth when young, later developing shallow fissures and large irregular plates.

Benefits

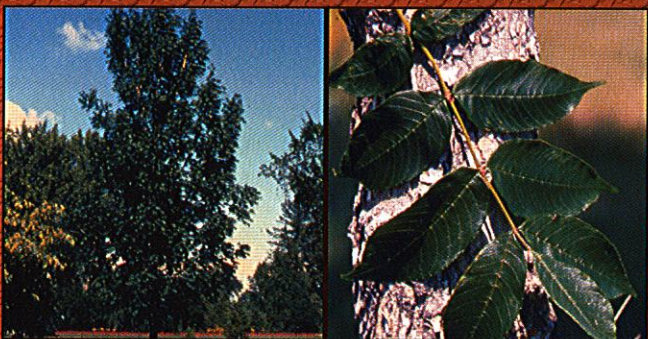
Wildlife - Seeds are eaten by some birds. Younger branches are browsed by deer in winter.
 Wood - Good for firewood, easy to split. Used in making baskets, barrel hoops, and chair bottoms.
 Medicinal - Used for fever, ague, diuretic, purgative properties, sores, itches, treatment of gout and rheumatic complaints.



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Black Ash
(*Fraxinus nigra*)

General Description

A relatively fast-growing, short-lived, medium to tall tree of irregular form. Native to river bottoms, ravines and hillsides. Foliage is very susceptible to phenoxy herbicides. Also called Manitoba maple or ash-leaved maple. The largest tree in North Dakota is 61 feet tall with a canopy spread of 63 feet.

ID Facts

Bud Arrangement - Opposite.
 Leaf Type and Shape - 3 to 7 leaflets per leaf, 5 commonly.
 Leaf Margins - Coarsely-serrated, pointed at the tip, sometimes 3-lobed, with irregular toothed margin.
 Fruit Type - Double-winged samara.
 Crown Height - 30 to 60 feet.
 Crown Width - 30 to 60 feet.
 Bark Color - Dark gray to gray-brown bark with shallow ridges.

Benefits

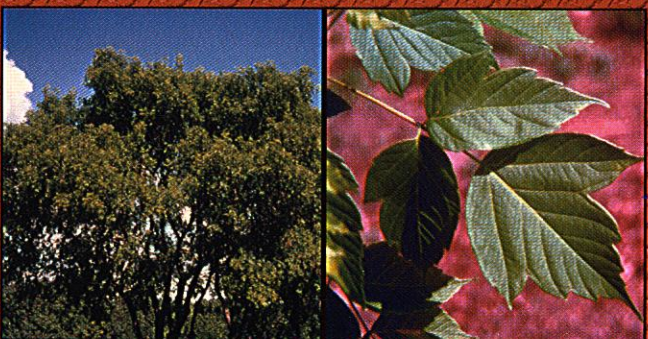
Wildlife - Food and cover for birds and mammals. Older trees often provide good den sites.
 Wood - Crates, boxes, and firewood.
 Food - Sap used by Indians and others to make syrup and sugar.
 Medicinal - Used in cancer research.



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Boxelder
(*Acer negundo*)



Bur Oak
(*Quercus macrocarpa*)

General Description

A large long-lived tree on good sites, with stout limbs forming a broad crown at maturity. Scrubby forms can be found on very dry sites. Native throughout all but the northwest corner of the state. Difficult to transplant because of a deep taproot. Bur Oak is also called Mossycup Oak. Once established trees grow one to two feet per year on favorable sites. The largest tree in North Dakota is 85 feet tall with a canopy spread of 61 feet.

ID Facts

Bud Arrangement - Alternate.
Leaf Type and Shape - Simple, deeply and irregularly lobed, center lobes cut nearly to the midrib.
Leaf Margins - Cuneate or rarely rounded at the base. Lower portion of leaf with 2 or 3 pairs of lobes.
Fruit Type - Acorn, oblong, enclosed 1/2 to 3/4 by a fringed cup.
Crown Height - 40 to 70 feet.
Crown Width - 35 to 60 feet.
Bark Color - Dark gray, with rough, deep ridges and furrows.

Benefits

Wildlife - Excellent tree for wildlife food and cover.
Wood - Used for dimension lumber, veneer, firewood and fence posts.
Food - Native Americans used acorns for food after leaching away tannins and astringent properties with wood ashes.
Medicinal - Used to treat dysentery and as an antiseptic and an astringent by Native Americans.



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General Description

The largest and fastest growing tree in the state. Native to moist soils along streams and wetlands throughout the state. Flood control dams have reduced spring flooding and the success of natural cottonwood regeneration along riparian areas. The largest living tree in North Dakota is 110 feet tall with a canopy spread of 94 feet.

ID Facts

Bud Arrangement - Alternate.
Leaf Type and Shape - Simple leaves, triangular-cordate, acuminate tips, petioles are flattened.
Leaf Margins - Coarsely-dentate with curved teeth, entire near apex and base.
Fruit Type - Capsule, 3 to 4 valved.
Crown Height - 50 to 100 feet.
Crown Width - 40 to 75 feet.
Bark Color - Light-gray when young, turning ash-gray and forming thick, flattened, curved ridges separated by deep furrows on older trees.

Benefits

Wildlife - Hollow trees make ideal den sites for wildlife. Young trees are used by deer, rabbits, mice and beaver for food. Twigs and young branches make good browse. Buds used by grouse.
Wood - Used for making boxes, crates, and pallets.
Food - Native Americans ate the young sprouts and inner bark because of its nutritive value and sweetness.
Medicinal - *Populus* species contain salicin used as an anti-rheumatic drug, a disinfectant, an antiseptic and for eczemas.



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#6

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General Description

A hardy, native, drought and alkali resistant medium to large tree. Since the onset of Dutch elm disease, Green Ash has been over-planted in urban and conservation settings as a replacement for American Elm. The largest tree in North Dakota is 69 feet tall with a canopy spread of 74 feet.

ID Facts

Bud Arrangement - Opposite.
Leaf Type and Shape - Pinnate compound, 5 to 9 stalked leaflets.
Leaf Margins - Sharply-serrate to finely-toothed.
Fruit Type - Samara, 1 to 2 inches long, with wing lanceolate and decurrent to below the middle of the seed.
Crown Height - 35 to 65 feet.
Crown Width - 30 to 40 feet.
Bark Color - Bark is ash-gray to brownish on older branches and furrowed into close diamond-shaped areas separated by narrow interlacing ridges.

Benefits

Wildlife - Seeds are eaten by birds and mammals. Trees provide cover and nesting sites for birds.
Wood - A fine-grained wood suitable for furniture and athletic equipment (bats, handles, etc.).
Medicinal - Used as a diuretic and for sores and itches.



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General Description

A medium-sized tree native to North Dakota. A good replacement tree for the American Elm because of its similar form and adaptability. Gray, unique stucco-like bark. The largest tree in North Dakota is 70 feet tall with a canopy spread of 62 feet.

ID Facts

Bud Arrangement - Alternate, with no terminal bud. Buds are flattened and pressed against the twig, rather inconspicuous.
Leaf Type and Shape - Simple, acuminate-tipped, ovate-oblong.
Leaf Margins - Serrate except at the oblique base.
Fruit Type - A rounded, 1/4 inch pitted fruit called a drupe.
Crown Height - 40 to 60 feet.
Crown Width - 25 to 45 feet.
Bark Color - Grayish with distinct narrow, corky ridges that appear as eroded wart-like projections.

Benefits

Wildlife - Fruit is eaten by many birds and mammals. Excellent tree for wildlife.
Wood - Boxes, crates, and firewood.
Food - Native Americans used fruits to flavor meat in same manner as black pepper.



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#8

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Cottonwood
(*Populus deltoides*)



Green Ash
(*Fraxinus pennsylvanica*)



Common Hackberry
(*Celtis occidentalis*)



Ironwood
(*Ostrya virginiana*)

General Description

Also known as American Hop-hornbeam. A small, slowgrowing tree, found in pockets along rivers in eastern North Dakota. Leaves resemble elm but this tree is a member of the Birch family. The largest tree in North Dakota is 33 feet tall with a canopy spread of 34 feet.

ID Facts

Bud Arrangement - No terminal buds. Lateral buds are alternate.
 Leaf Type and Shape - Simple, oval-lanceolate, acuminate-tipped.
 Leaf Margins - Sharply and doubly-serrate, veins forked at ends.
 Fruit Type - Nutlet, enclosed in a hop-like sack.
 Crown Height - 15 to 30 feet.
 Crown Width - 12 to 25 feet.
 Bark Color - Grayish-brown, with narrow rectangular strips which are free on each end. Bark has a shreddy appearance reminiscent of shagbark hickory.

Benefits

Wildlife - Winter food for pheasants, grouse, rabbits, deer and squirrels.
 Wood - Used for posts, tool handles, and mallets.



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#9

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General Description

A small to medium pine with an uneven crown. Often multistemmed. This tree is less susceptible to salt and winterburn injury than other five-needle pines. Native to a very limited area in southwestern North Dakota from seed carried to this site by early Native Americans. The largest tree in North Dakota is 39 feet tall with a canopy spread of 30 feet.

ID Facts

Bud Arrangement - In whorls, ovoid, and sharply pointed.
 Leaf Type and Shape - Needles in fascicles of five.
 Leaf Margins - Margin entire, apex sharp-pointed.
 Fruit Type - Cone, 3 to 6 inches long; two winged seeds per cone scale.
 Crown Height - 30 to 45 feet.
 Crown Width - 15 to 30 feet.
 Bark Color - Branches are light to dark greenish gray, old trunks are dark gray to dark brown, separated by fissures in rectangular plates or blocks.

Benefits

Wildlife - Used for cover and nesting by morning dove. Used as a food source by a variety of birds, squirrels, and porcupine.
 Food - Seeds were eaten by Native American and early settlers.



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#10

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Limber Pine
(*Pinus flexilis*)

General Description

A large tree native to southwestern North Dakota that is pyramidal when young, becoming irregularly-oblong and open-crowned with age. The largest tree in North Dakota is 73 feet tall with a canopy spread of 26 feet.

ID Facts

Bud Arrangement - In whorls.
 Leaf Type and Shape - Needles in fascicles of 2 and 3, mostly 3.
 Leaf Margins - Minutely toothed and the tip has a sharp point.
 Fruit Type - Cones 3 to 5 inches long with sharp thorn at tip of scales. Two winged seeds per cone scale, triangularshaped, 1/4 inch long, with a wing about 1 inch long.
 Crown Height - 50 to 70 feet.
 Crown Width - 25 to 30 feet.
 Bark Color - Brown-black on young trees, turning yellowish-brown to cinnamon-red, with large, flat, scaly plates with age.

Benefits

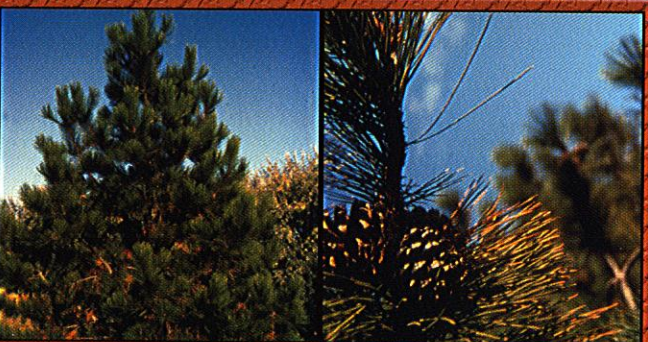
Wildlife - Food and nesting sites for birds. Squirrels eat the seeds. Porcupines eat the inner bark on older trees and eat entire trees and limbs on smaller trees.
 Wood - Principle use is in millwork, including windows, doors, shelving, molding, knotty-pine paneling and dimension lumber. Sap used as glue and source of turpentine oils.
 Food - Native Americans used inner bark and seed as food, sap was used as a chewing gum. Source of pyrene used as a FDA approved flavoring to bread and cakes.
 Medicinal - *Pinus* species have been used as an antiseptic, an expectorant, a poultice to treat boils, rheumatism, backaches and other inflammations.



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Ponderosa Pine
(*Pinus ponderosa*)

General Description

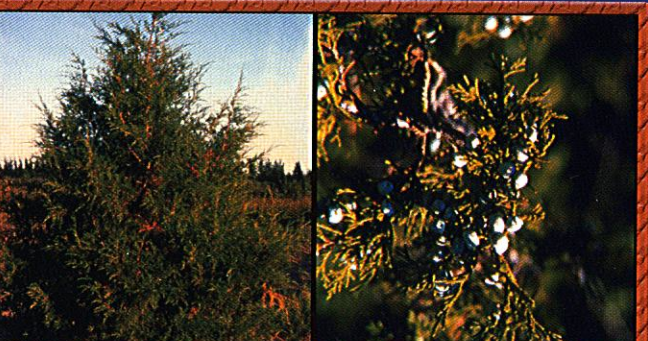
A small to medium tree, typically with a dense pyramidal crown. Native to western North Dakota. Seedling plantings may exhibit a wide variety of forms. Many denser growing cultivars are used as ornamentals. The largest tree in North Dakota has a trunk circumference of 7 feet.

ID Facts

Bud Arrangement - Continuous.
 Leaf Type and Shape - Simple scale and awl-like leaves.
 Leaf Margins - Entire.
 Fruit Type - Cones (typical juniper "berry"), ovoid, and deeply pitted, mature second year; 1 to 3 seeds.
 Crown Height - 20 to 40 feet.
 Crown Width - 12 to 20 feet.
 Bark Color - Reddish-brown coloration to the underbark, shredding bark. Older bark has shallow fissures in a network of flat ridges.

Benefits

Wildlife - Excellent for cover, nesting, and food.
 Wood - Used for fence posts, cedar chests, pencils, and medicines. Heartwood is decay resistant.
 Food - Fruit used in alcohol products.
 Medicinal - Used for cancer treatment, and colds, coughs, sore throats, diarrhea, bleeding, fevers, pneumonia, stomach aches, and topical pain reliever for arthritis. Source of pinene, a terpenoid volatile oil and source of podophyllotoxin, an antibiotic.



Rocky Mountain Juniper
(*Juniperus scopulorum*)



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Quaking Aspen
(*Populus tremuloides*)

General Description

Aspen trees grow fairly straight and become clear of lower limbs over time. Sometimes called Trembling Aspen because their leaves tremble in a light breeze due to their flattened petioles. Most extensive native range of any tree in North America. Rapidly recolonizes disturbed sites (after fire, logging, etc.). The largest tree in North Dakota is 70 feet tall with a canopy spread of 39 feet.

ID Facts

Bud Arrangement - Alternate.
 Leaf Type and Shape - Simple leaves, cordate to broad-ovate.
 Leaf Margins - Margins have small rounded teeth.
 Fruit Type - Very small cottony seeds (average 3 million per pound). Seeds borne in a capsule.
 Crown Height - 25 to 60 feet.
 Crown Width - 20 to 30 feet.
 Bark Color - Varies from chalky white to olive-gray, and becomes rough furrowed on the lower trunk of mature trees.

Benefits

Wildlife - Heavily browsed by deer and other mammals as a winter food source. Grouse utilize large male buds for food.
 Wood - Primarily used for paper, pulpwood, boxes, crates, and pallets.
 Food - Native Americans used the sap as food.
 Medicinal - Used for fever, diuretic, eczemas and wormer. Contains salicin used as an anti-rheumatic drug, disinfectant, and antiseptic.



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Paper Birch
(*Betula papyrifera*)

General Description

A native medium to tall tree which is loosely pyramidal when young, developing an irregular oval crown when mature. Drought stress followed by borer attack often causes decline. The largest tree in North Dakota is 61 feet tall with a canopy spread of 40 feet.

ID Facts

Bud Arrangement - No terminal bud, lateral buds are alternate.
 Leaf Type and Shape - Simple, ovate to narrow-ovate.
 Leaf Margins - Coarsely and doubly-serrate, sharp pointed, rounded at the base, and have 3 to 7 lateral veins.
 Fruit Type - Heart-shaped, winged nutlets attached to tiny oval seeds.
 Crown Height - 30 to 55 feet.
 Crown Width - 20 to 40 feet.
 Bark Color - Smooth bark, marked with horizontal lenticels, is reddish-brown when young, turning papery white with age.

Benefits

Wildlife - Used as food by over 30 types of birds and mammals.
 Wood - Firewood, tooth picks, spools, carving and wood pulp. Sap is used to treat leather. Oil extract used to repel insects.
 Food - Birch wine is made from the sugary sap.
 Medicinal - Used for gout, rheumatism, dropsy, colds, coughs and other pulmonary ailments. It has also been used as a laxative, burn and wound treatment and in cancer research.



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#14

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Flowering Crabapple
(*Malus hybrids*)

General Description

Ornamental crabapples are a group of small flowering trees used for landscape plantings. They are valued for their foliage, flowers, fruit and variations in form and size.

ID Facts

Bud Arrangement - Alternate.
 Leaf Type and Shape - Simple, ovate to elliptical-oblong.
 Leaf Margins - Finely-serrate to irregularly toothed or lobed.
 Fruit Type - A pome with persistent or deciduous calyx. If fruit is less than 2 inches in diameter it is typically classified as a crabapple.
 Crown Height - 10 to 25 feet.
 Crown Width - 15 to 25 feet, except narrow-upright cultivars.
 Bark Color - Gray-brown to reddish-brown.

Benefits

Wildlife - Crabapples provide fair cover and high quality fruit and browse for many birds and mammals. Rodents and rabbits can destroy trees by girdling the stem or trunk.
 Wood - Desirable for smokehouse kindling and firewood.
 Food - Fruit used fresh or processed.
 Medicinal - Used as an antibiotic and for indigestion, dysentery and diarrhea.



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#15

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Siberian Elm
(*Ulmus pumila*)

General Description

A very hardy, fast growing tree with brittle wood which is subject to breakage. Extremely susceptible to insect, disease, and herbicide damage, which makes it an undesirable tree. Often confused with Chinese elm (*Ulmus parvifolia*) which is not hardy in North Dakota. The largest tree in North Dakota is 60 feet tall with a canopy spread of 55 feet.

ID Facts

Bud Arrangement - Alternate.
 Leaf Type and Shape - Simple, unequal at base, elliptic to elliptic-lanceolate.
 Leaf Margins - Nearly simply-serrate.
 Fruit Type - Round winged samara, with the seed in the center of the samara.
 Crown Height - 25 to 50 feet.
 Crown Width - 20 to 40 feet.
 Bark Color - Light gray to gray-brown.

Benefits

Wildlife - Mostly used for nesting sites in windbreaks.
 Wood - Firewood, but difficult to harvest.
 Medicinal - Some *Ulmus* species were used for inflammations, burns, cold sores, and wound treatments.



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Silver Maple
(*Acer saccharinum*)

General Description

A medium to large tree with spreading branches forming a variably rounded to informally spreading crown. A fast-growing tree subject to iron and manganese chlorosis on high pH soils which may cause dieback or eventual death. Often called soft maple because the wood is the softest of the maples used for lumber. The largest tree in North Dakota is 66 feet tall with a canopy spread of 72 feet.

ID Facts

Bud Arrangement - Opposite.
Leaf Type and Shape - Simple, five-lobed with deep sinuses.
Leaf Margins - Ends of lobes sometimes deeply and doublyacuminate lobed.
Fruit Type - Double-winged samara (schizocarp).
Crown Height - 40 to 65 feet.
Crown Width - 30 to 50 feet.
Bark Color - Gray to gray-brown.

Benefits

Wildlife - Browsed by deer and rabbits, seeds eaten by squirrels, fair cover for songbirds.
Wood - Rough lumber, furniture and firewood. Pulpwood production. Twigs boiled to make a black dye by Native Americans.
Food - Sap may be used for maple syrup.
Medicinal - Extracts of some *Acer* species are used in cancer research.



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#17



European Mountain-ash
(*Sorbus aucuparia*)

General Description

A small to medium-sized tree native to northern Europe and Asia. The most widely planted of all the mountain-ash species. This genus is in the Rose family and susceptible to fireblight. Sunscald may also be a problem on young trees. The largest tree in North Dakota is 36 feet tall with a canopy spread of 39 feet.

ID Facts

Bud Arrangement - Alternate.
Leaf Type and Shape - Pinnate compound, 9 to 15 leaflets per leaf.
Leaf Margins - Serrate, usually entire on lower third.
Fruit Type - Small, berry-like pome, clustered.
Crown Height - 20 to 30 feet.
Crown Width - 15 to 25 feet.
Bark Color - Young stems are pubescent, becoming glabrous with gray-brown to coppery-brown sheen when older.

Benefits

Wildlife - Fruits may hang on well into the winter and on some plants appear to be more palatable to birds after they have been subjected to freezing and thawing.
Wood - Furniture and tools.
Food - Fruit processed in jams or jellies, particularly in Europe.
Medicinal - Used for sore throats, coughs and diarrhea. Source of parasorbic acid, an antibiotic.



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#18



Russian-olive
(*Elaeagnus angustifolia*)

General Description

Small tree, sometimes referred to as a large shrub, introduced from Russia. Tolerates saline/alkaline soils. May invade unmanaged bottomlands and moist pastures. Thorny. Silvery leaf color. Leaves retained very late into fall. The largest tree in North Dakota is 43 feet tall with a canopy spread of 63 feet.

ID Facts

Bud Arrangement - Alternate.
Leaf Type and Shape - Simple, oblong-lanceolate to linear.
Leaf Margins - Entire.
Fruit Type - Fruits are drupe-like, 1/4 inch long and pulpy.
Crown Height - 15 to 25 feet.
Crown Width - 12 to 25 feet.
Bark Color - Young branches silvery, older branches a glistening bronzy-brown, pith is brown.

Benefits

Wildlife - Excellent for wildlife, over 50 species use it for food and cover.
Wood - Beautiful wood for small woodwork pieces.



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#19



Colorado (Blue) Spruce
(*Picea pungens*)

General Description

A broad, dense, pyramidal tree with stiff branches horizontal to the ground. Native to intermountain states of the west. Choice specimen tree. The largest tree in North Dakota is 85 feet tall with a canopy spread of 30 feet.

ID Facts

Bud Arrangement - Buds are in whorls.
Leaf Type and Shape - Sharply pointed needles are attached individually on peglike projections called stergmata.
Leaf Margins - Needles are 4-sided.
Fruit Type - Cones 2 to 4 inches long, with papery cone scales that have a truncated edge; small, winged seeds, chestnut brown.
Crown Height - 30 to 65 feet.
Crown Width - 15 to 25 feet.
Bark Color - Bark is scaly or flaky and ash-brown.

Benefits

Wildlife - Nesting sites for birds.
Wood - Used for firewood but burns fast. Good for kindling. Used for Christmas trees.



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#20



Eastern Red-cedar
(*Juniperus virginiana*)

General Description

A small tree with a short trunk and irregular, pyramidal crown native to the eastern United States. Dwarf or compact forms of this juniper are used as ornamentals. The largest tree in North Dakota is 51 feet tall with a canopy spread of 30 feet.

ID Facts

Bud Arrangement - Continuous.
 Leaf Type and Shape - Simple scale and awl-like leaves.
 Leaf Margins - Sawtooth serrations
 Fruit Type - Cones, globose or ovoid, and deeply pitted, typical juniper "berry", mature in one year; 1 to 3 ovate seeds.
 Crown Height - 30 to 45 feet.
 Crown Width - 15 to 30 feet.
 Bark Color - Gray-brown, exfoliating in long strips.

Benefits

Wildlife - Fruit matures in one season. Provides food for birds and mammals. Nesting and winter cover for a variety of birds. Browse for whitetail deer.
 Wood - Used for fence posts, cedar chests, pencils, and medicines. Heartwood is decay resistant.
 Food - Berry-like cones used in alcohol products.
 Medicinal - Native Americans used for coughs, head colds and dysentery.



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#21

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General Description

Medium to tall tree sometimes confused with Silver Maple since the leaves on long shoots are maple-shaped, while leaves on short shoots are more like aspen leaves in shape. The tree is native to central and southern Europe, western Siberia and central Asia. Introduced to North America by early settlers. The largest tree in North Dakota is 65 feet tall with a canopy spread of 50 feet.

ID Facts

Bud Arrangement - Alternate.
 Leaf Type and Shape - Simple, 3 to 5 palmate lobes on long shoots and coarsely-toothed on short shoots.
 Leaf Margin - Coarsely-lobed to sinuate-dentate.
 Fruit type - Dehiscent capsules, seeds bare long, silky.
 Crown Height - 40 to 60 feet.
 Crown Width - 35 to 50 feet.
 Bark color - New stems white hairy, mature stems whitishgray; bark smooth, becoming rough and blackish on lower trunk.

Benefits

Wildlife - Used for cover and habitat. Buds provide food for grouse.
 Wood - Lower class firewood.
 Medicinal - Used for intermittent fevers, diuretic, diarrhea and a source of salicin.



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White Poplar
(*Populus alba*)

General Description

A large low-branching tree forming a broad round-topped crown with slender, drooping branches. Brought over from Europe and central Asia. Widely planted as a yard tree. Its branches shed easily throughout the season and make it somewhat of a nuisance tree in yards.

ID Facts

Bud Arrangement - Alternate.
 Leaf Type and Shape - Simple, lanceolate, acuminate-tipped, and cuneate.
 Leaf Margins - Finely-serrate.
 Fruit Type - Seed attached to cottony hairs.
 Crown Height - 40 to 55 feet.
 Crown Width - 40 to 55 feet.
 Bark Color - One year old twigs are yellow, turning lightbrown with age. Tannish-brown, ridged and furrowed, corky bark.

Benefits

Wildlife - Dense shrub form provides cover to many wildlife species. Buds and twigs are used by upland game and song birds. Fur-bearing mammals feed on buds, bark and wood. Small mammals feed on foliage and catkins. Hoofed browsers feed on twigs and foliage.
 Wood - Fuelwood, pallets, crates, furniture, cooperage, woodenware and carving.
 Medicinal - Early Americans and Europeans used an extract for headaches, fever, gout, and pain. Willow is a source of salicin which is broken down to salicylic acid, the main component in aspirin.



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Golden Willow
(*Salix alba 'Vitellina'*)

General Description

A large pyramidal deciduous conifer with spreading horizontal branches. Needles are densely clustered on short spurs. Needles turn attractive yellow and are shed each fall. The largest tree in North Dakota is 55 feet tall with a canopy spread of 18 feet.

ID Facts

Bud Arrangement - Spirally on short spurs.
 Leaf Type and Shape - Needles are borne in clusters on short shoot spurs, singly on long shoots.
 Leaf Margins - Smooth.
 Fruit Type - Cones, 1 to 2 inches, borne upright on the branch, small winged seed.
 Crown Height - 30 to 60 feet.
 Crown Width - 15 to 25 feet.
 Bark Color - Dark brown, to grayish-brown, and scaly.

Benefits

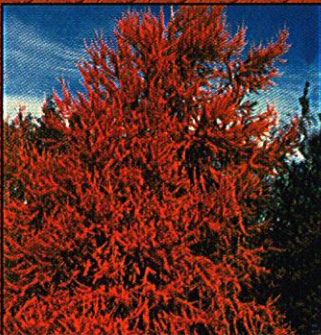
Wildlife - Nesting sites for song birds.
 Wood - Rot resistant heartwood for posts, poles, railroad ties, and mine timbers.
 Medicinal - Used as a stimulant, diuretic and for control of certain skin diseases.



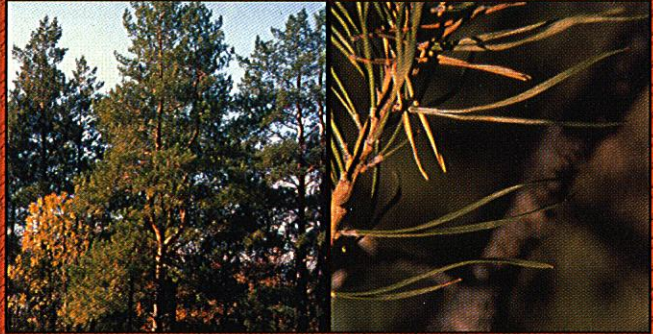
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Siberian Larch
(*Larix sibirica*)



Scotch Pine
(*Pinus sylvestris*)

General Description

A medium to large tree, typically pyramidal when young, becoming more rounded and open with age. Orangebrown peeling bark. Bark is relished by porcupines, which can cause extensive damage. The largest tree in North Dakota is 46 feet tall with a canopy spread of 34 feet.

ID Facts

Bud Arrangement - Buds are in whorls.

Leaf Type and Shape - Two needles per fascicle, usually twisted.

Leaf Margins - Edges are minutely toothed.

Fruit Type - Cone with diamond-shaped scales, 1 to 2 inches long, two winged seeds per cone scale.

Crown Height - 25 to 50 feet.

Crown Width - 20 to 35 feet.

Bark Color - Flaky, peeling, orange-brown in upper two-thirds of mature tree. Thick, grayish or reddish, fissured at the base of the tree.

Benefits

Wildlife - Provides nesting sites and winter cover.

Wood - Not used for dimension lumber. Extensively planted for Christmas trees.

Food - *Pinus* species are a source of pyrone, a sugar substitute.

Medicinal - *Pinus* species are used to treat bronchitis, skin diseases, wounds, and as a source of pinosylvian, an antibiotic.



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