

Evergreen Shrubs¹

Name ²	Cold Hardiness Zone ³	Soil / Climate	Pests / Diseases & Other Problems	Size ⁴	Exposure	Flowers ⁵ / Fruit ⁵ / Foliage	Additional Features
<p><i>Buxus</i> spp.</p> <p>Boxwoods</p> <p>Buxaceae Boxwood Family</p>	4A-9B	Prefers moist, cool sites, but will grow on most soils regardless of pH so long as they are not too wet or too dry; mulching is recommended.	<p>No serious insect or disease problems.</p> <p>Boxwood bight, caused by a fungus, is a potential problem should this disease find its way to Minnesota.</p> <p>Winter injury can sometimes be a problem on exposed sites during severe winters.</p> <p>Deer and rabbit resistant.</p>	<p>H: 2-5'</p> <p>S: 2-5'</p>	<p>Full sun to partial shade.</p> <p>Must be in winter shade</p>	<p>Flowers – small, petalless, greenish-yellow, insignificant, but fragrant; attractive to bees; insect pollinated.</p> <p>Bloom Time – spring (May).</p> <p>Foliage – broadleaf evergreens; leaves small, broadly oval to elliptical, opposite, variously light to dark green, becoming yellowish-green to brownish-green in winter.</p> <p>Fruit – a 3-celled capsule; green becoming tan and containing shiny, black seeds; insignificant; matures in late summer (September).</p>	<p>Introduced from Asia, Europe, and northern Africa; form is upright-oval to rounded; tolerates pruning and can be kept small by shearing; a number of named cultivars (cultivated varieties) have been selected based on size, form, foliage characteristics, and cold hardiness; the species is propagated by seeds and stem cuttings and the cultivars by stem cuttings.</p>
<p><i>Buxus microphylla</i> var. <i>koreana</i> (Korean littleleaf boxwood) and its cultivars and several cultivars resulting from crosses between this species and <i>Buxus sempervirens</i> (common boxwood; also called English boxwood) are the best choices for Minnesota landscapes (e.g., 'Glencoe' (Chicagoland Green®*), 'Green Gem', 'Green Mound', 'Green Velvet', 'Saskatoon', 'Wilson' (Northern Charm™*), and 'Wintergreen'); common boxwood is more commonly grown in warmer areas (Zones 6 and above), but isn't reliably hardy in Minnesota.</p>							
<p><i>Juniperus</i> spp.</p> <p>Junipers</p> <p>Cupressaceae Cypress Family</p>	3B-7B Some hardy to Zone 2	<p>Adaptable; prefers moist, well-drained soils, acidic or alkaline, but will grow on almost any soil so long as it is well-drained.</p> <p>Tolerant of air pollution, drought, and high pH (alkaline) soils.</p> <p>Intolerant of flooding.</p>	<p>Few pests are serious, but Phomopsis blight (<i>Phomopsis juniperovora</i>) and spider mites can sometimes be a problem.</p> <p>Some species (mainly <i>Juniperus scopulorum</i> and <i>Juniperus virginiana</i>) are susceptible to cedar/apple/hawthorn rust which alternates between junipers and apples/hawthorns as alternate hosts (the spores produced on junipers infect apples and hawthorns and vice versa); apples and hawthorns that are not</p>	<p>H: 1-20'</p> <p>S: 3-20'</p>	Full sun.	<p>"Flowers" – male and female strobili (cones) usually produced on separate trees (dioecious; individual trees male or female); male pollen cones small, yellowish-tan, catkin-like with 6-12 scales, and produced at the tips of the previous year's branchlets (although not expanded, the cones are visible in the fall of the previous year and during the winter and can be fairly showy when they open to shed their pollen in the spring); female seed cones insignificant, yellow-green,</p>	<p>Widely distributed throughout the Northern Hemisphere and into northern Africa; 13 species are native to North America and three to Minnesota; the native species and introduced species from Europe and Asia are most commonly planted in Minnesota; typically have a single trunk, but branches close to the ground and can appear to have multiple stems; bark reddish-brown, exfoliating (peeling) vertically in strips; form is</p>

			resistant can be defoliated, but the junipers are generally not harmed.			<p>at the tips of the previous year's branchlets; wind pollinated.</p> <p>“Bloom Time” – spring (May).</p> <p>Foliage – needle-leaf evergreens; individual needles live for 4-6 years; needles green to bluish-green, opposite or in whorls of three; two types of leaves are produced – sharp, needle-like, juvenile leaves are produced on young plants and sometimes on vigorous shoots of older plants and overlapping, scale-like leaves are produced on older plants; foliage sometimes and variously becomes maroon to purplish-brown in the winter.</p> <p>“Fruit” – female cones (strobili) are berry-like, green to blue-green, waxy, and contain 1-3 seeds; mature in fall (August/September), but never open.</p>	<p>variable – columnar, broadly-pyramidal, rounded, spreading, and prostrate; many named cultivars have been selected based on form and foliage and fruiting characteristics; the species are propagated by seed and the cultivars by stem cuttings and grafting.</p>
<p>The junipers that are most commonly planted in Minnesota landscapes include <i>Juniperus chinensis</i> (Chinese juniper), <i>Juniperus communis</i> (common juniper), <i>Juniperus horizontalis</i> (creeping juniper), <i>Juniperus procumbens</i> (Japanese garden juniper), <i>Juniperus sabina</i> (savin juniper), <i>Juniperus scopulorum</i> (Rocky Mountain juniper), and <i>Juniperus virginiana</i> (eastern redcedar); <i>Juniperus communis</i> (var. <i>depressa</i> – ground juniper, dwarf juniper, or prostrate common juniper), <i>Juniperus horizontalis</i>, and <i>Juniperus virginiana</i> are native to Minnesota.</p>							
<p><i>Pinus mugo</i></p> <p>Mugo Pine</p> <p>Swiss Mountain Pine</p> <p>Pinaceae</p> <p>Pine Family</p>	3A-7B	<p>Quite adaptable; prefers moist, loamy, well-drained soils, but will grow on most soils so long as they are well-drained.</p> <p>Tolerates drought and vulnerable to flooding.</p>	<p>Susceptible to a variety of pest problems, but, with the exceptions of sawfly larvae and scale, most are usually not serious enough to warrant control.</p>	<p>H: 3-20’</p> <p>S: 3-25’</p>	Full sun.	<p>“Flowers” – male and female strobili (cones) produced on the same tree (monoecious); male pollen cones yellow; female seed cones purple-tinged; wind pollinated.</p> <p>“Bloom Time” – spring (May).</p> <p>Foliage – a needle-leaf evergreen; leaves (needles) medium to dark green in pairs, sometimes becoming yellowish-green in winter; needles live for five years or more.</p> <p>“Fruit” – female cones (strobili) small, green, becoming gray-brown when</p>	<p>Introduced from the mountainous areas of central and southern Europe; size and form are highly variable – prostrate, mounded, irregular, or pyramidal; several named cultivars have been selected based primarily on size and form (mainly smaller, more compact plants); the species and varieties are propagated by seed and the cultivars by grafting.</p>
<p>Mugo pines sold by nurseries and garden centers are often seed produced and can be quite variable in habit and mature size; as a result these plants can grow to sizes much larger than expected if they are not regularly pruned (sheared) to maintain their size. In addition, although not covered here, shrub forms of other species of pines (<i>Pinus</i> spp.), as well as other needle-leaf evergreens like firs (<i>Abies</i> spp.), hemlocks (<i>Tsuga</i> spp.), and spruces (<i>Picea</i> spp.), are also used in designed landscapes; these selections are often referred to as dwarf conifers.</p>							

						mature; mature and open in fall (August/September) to release the winged seeds; empty cones persistent.	
<p>Rhododendron spp.</p> <p>Azaleas & Rhododendrons</p> <p>Ericaceae Heath Family</p>	4A-7A	<p>Most perform best on organic, cool, moist, but well-drained, acidic (low pH) soils.</p> <p>Generally intolerant of alkaline (high pH) soils and heat and drought.</p>	<p>Quite a few, but most are not serious; powdery mildew, leaf spots, aphids, and spider mites are most common.</p>	<p>H: 3-8’</p> <p>S: 3-8’</p>	<p>Full sun to partial shade; best in partial shade and especially during the winter in cold climates.</p>	<p>Flowers – very showy, white and various shades of yellow, orange, pink, and rose, in dense, terminal clusters (racemes or corymbs); fragrant; insect pollinated.</p> <p>Bloom Time – spring (May/June).</p> <p>Foliage – broadleaf evergreens; leaves light to dark green, alternate.</p> <p>Fruit – a capsule; green, becoming brown; insignificant; matures in fall (August/September).</p>	<p>Native to many parts of the world, most of the species grown in Minnesota are native to Asia and eastern North America; none are native to Minnesota; form is upright oval to rounded; the genus <i>Rhododendron</i> includes both deciduous and evergreen species (azaleas tend to be deciduous and rhododendrons evergreen, but in both cases there are exceptions; see the deciduous shrubs list for deciduous species); the species are propagated by seeds and stem cuttings and the cultivars by stem cuttings and tissue culture.</p>
<p><i>Rhododendron</i> ‘P.J.M.’ (‘P.J.M.’ rhododendron), a hybrid selection resulting from a cross between <i>Rhododendron carolinianum</i> and <i>Rhododendron dauricum</i>, is the evergreen species that is most commonly planted in Minnesota landscapes; the flowers are lavender-pink and open in May; if the growing conditions are otherwise ideal (acidic, moist, but well-drained soils), this species is hardy in Zone 3B; the leaves have a plum-purple color during the winter; interestingly, the leaves roll up longitudinally when temperatures drop below freezing.</p>							
<p>Taxus spp.</p> <p>Yews</p> <p>Taxaceae Yew Family</p>	4A-7B	<p>Prefer moist, sandy loam soils, but will grow on most soils regardless of pH (acidic or alkaline) so long as they are well-drained.</p> <p>Tolerant of air pollution and fairly drought tolerant once established.</p> <p>Intolerant of flooding.</p>	<p>Mites, aphids, scales, and others, but no pests of major concern.</p> <p>Browsed on by deer during mid to late winter.</p>	<p>H: 3-4’</p> <p>S: 8-10’</p>	<p>Full sun to shade, but requires winter shade.</p>	<p>“Flowers” – male and female strobili (cones) usually produced on separate plants (dioecious; individual plants male or female); male pollen cones small, catkin-like, rounded, yellow with only a few scales in the axils of the leaves; female seed cones small, green, insignificant with a single scale; wind pollinated.</p> <p>“Bloom Time” – spring (April/May).</p> <p>Foliage – needle-leaf evergreens; leaves evergreen (individual needles live for 3-7 years), flat, dark green, borne singly in a spiral pattern around the stem, but oriented horizontally in two flat rows on each side of the stem.</p>	<p>Native as an understory species in forests in Europe, Asia, and North America including Minnesota; <i>Taxus cuspidata</i> (Japanese yew; several cultivars) and <i>Taxus × media</i> (Anglo-Japanese yew; specifically the cultivar ‘Tauntonii’) are the species that most often planted in Minnesota (both of these species can grow to 20’ tall and 20’ wide so it is important to select the smaller, spreading selections when a shrub is desired); the species is propagated by seed and stem cuttings and the cultivars by stem cuttings.</p>
<p><i>Taxus canadensis</i> (Canada yew; also called Canadian and American yew) is native to east-central North America including Minnesota, but is uncommonly planted in designed landscapes; it is hardy to Zone 2A and is often found on north-facing slopes in the wild; grows 3-6’ tall and 6-9’ wide; unlike other species it can be found in swamps; it is a favorite of deer and is very susceptible to winter browning (winter burn) unless it is planted where it will be shaded during the winter.</p>							

						“Fruit” – the single scale of the female cones (strobili) enlarges to produce a fleshy, red, cup-like structure that partially surrounds the single, black seed; matures in fall (August/ September); attractive to and eaten and dispersed by birds.	
<p><i>Thuja occidentalis</i></p> <p>Eastern White Cedar</p> <p>Arborvitae Northern White Cedar Eastern Arborvitae American Arborvitae</p> <p>Pinaceae Pine Family</p>	2B-7B	<p>Adaptable; prefers moist, well-drained, sandy or sandy loam soils, but tolerates a variety of soils regardless of pH (acidic or alkaline).</p> <p>Fairly drought tolerant once established.</p> <p>Winter browning (winter burn) can sometimes be a problem on exposed sites.</p> <p>Tolerates clay soils, high pH (alkaline) soils, and flooding.</p>	<p>No serious insect or disease problems.</p> <p>Browsed on by deer during mid to late winter.</p>	<p>H: 3-20’ S: 3-20’</p>	Full sun.	<p>“Flowers” – male and female strobili (cones) produced on the same tree (monoecious) near the tips of the branches; male pollen cones small, yellowish-green; sometimes tinted purple; female seed cones greenish-yellow with 8-10 scales; wind pollinated.</p> <p>“Bloom Time” – spring (April/May).</p> <p>Foliage – a needle-leaf evergreen; leaves evergreen (live for 2-4 years), scale-like, medium to dark green, opposite, arranged in flat, delicate, fan-like sprays; older needles noticeably turn yellow and eventually reddish-brown before dropping in early fall.</p> <p>“Fruit” – female cones (strobili) greenish-yellow, becoming light brown when mature; mature and open in late summer to early fall (August/ September) to release the winged seeds.</p>	<p>Native to east-central North America including Minnesota; the species is commonly found in swamps and along the shores of lakes and streams in the wild, but is also found in a variety of other environments; typically has a single trunk and a pyramidal to rounded form; eastern white cedar can reach heights up to 65’ so it is important to choose the smaller selections (cultivars) when a shrub is desired; the species is propagated by seed and the cultivars by stem cuttings.</p>
<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> <p>There are hundreds of named cultivars (cultivated varieties) that exhibit a wide variety of sizes, forms, and foliage colors (various shades of green and yellow); the cultivar ‘Techny’ is very hardy and resistant to winter burn, broadly pyramidal (12-15’ tall and wide), and one of the best selections for Minnesota landscapes.</p> </div>							

¹ Evergreen Shrubs – Woody plants (trees, shrubs, and woody vines) are often classified as being evergreen (species with leaves that live for more than one growing season and, therefore, retain a portion of their leaves during the winter (only the oldest leaves are lost each fall) or deciduous (species that lose all of their leaves each year in the fall and produce a new set of leaves each spring), but these classifications are not perfect as the species included in these two groups can vary significantly from each other based on other characteristics; for example, while all of the shrubs on this list are evergreens (plants that retain green leaves during the winter as compared to deciduous species which lose all of their leaves at the end of the growing season;), some are needle-leaf evergreens, some are broadleaf evergreens, some are angiosperms (flowering plants that produce seeds that are enclosed within a fruit), and some are gymnosperms (non-flowering plants that produce naked seeds); specifically, members of the genus *Buxus* (boxwoods) and the genus *Rhododendron* (azaleas and rhododendrons) are broadleaf evergreens and angiosperms while all of the other species on this list are needle-leaf evergreens, gymnosperms, and conifers (cone-bearing); this is a list of evergreen shrubs (shrubs that retain leaves during the winter); shrubs are generally defined as short-statured woody plants (typically 20’ tall or shorter) that usually, but not always, have multiple stems rather than a single trunk.

² Name – Botanical and Common Name(s).

³ Cold Hardiness Zones – USDA Cold Hardiness Zones; Zone 1 / < 50°F, Zone 2 / -40 to -50°F, Zone 3 / -30 to -40°F, Zone 4 / -20 to -30°F, Zone 5 / -10 to -20°F, etc.

⁴ Size – H = Height; S = Spread.

⁵ Flowers / Fruit – Woody plants (trees, shrubs, and woody vines) are classified as angiosperms or gymnosperms depending on their reproductive morphology and whether their seeds are borne naked or within a fruit; angiosperms (covered seeds) are flowering plants whose seeds are produced within a fruit (a ripened ovary) while gymnosperms (naked seeds) do not produce true flowers or fruits as their seeds are naked and are not enclosed within a fruit; both angiosperms and gymnosperms are represented on this list.

Notes:

This is only a partial list (6) of the native and introduced species of evergreen shrubs that can be planted in Minnesota landscapes; a complete list would include over 20 species and many named cultivars (cultivated varieties).

The crown sizes listed represent a typical range for each species, but individual plants may be bigger or smaller depending on their genetics and location, as a result of cultivar differences and varying light and soil (fertility and moisture) conditions, respectively; shrubs that are growing under forest canopies or are shaded by neighboring trees or structures in designed landscapes tend to be taller and have a more open habit (less dense) as a consequence of shading and stretching for light.

Be aware that no plant species are completely immune to attack by insects or diseases so some damage should almost always be expected. Also, remember that native plants, including evergreen shrubs, are important components of native ecosystems and serve as food sources for a variety of native insects, animals, and micro-organisms (e.g., specific to Lepidoptera – butterflies and moths – the pines alone are known to support over 200 species and the spruces over 150 species; the spruces can also support populations of spruce budworms which are eaten by birds, and the pines and larches are favorites of caterpillar-like sawfly larvae, which are related to ants, wasps and bees (Hymenoptera) and are also a favorite food of birds; while these insects may often be considered pests in designed landscapes, they, just like the plants they feed on and the fruits and seeds those plants produce, are also important components of native ecosystems as food and ecosystem engineers.

Resources:

Dirr, M.A. 1990. *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation, and Use*. Fourth Edition. Stipes Publishing Co., Champaign, IL

Dirr, M.A. 2011. *Dirr's Encyclopedia of Trees and Shrubs*. Timber Press, Inc., Portland, OR.

Smith, W.R. 2008. *Trees and Shrubs of Minnesota: The Complete Guide to Species I*. University of Minnesota Press, Minneapolis, MN.

Snyder, L.C. 2000. *Trees and Shrubs for Northern Gardens (new and revised edition)*. Anderson Horticultural Library, Minnesota Landscape Arboretum, Chanhassen, MN.

Talamy, D.W. 2007. *Bringing Nature Home*. Timber Press, Inc., Portland, OR.