

Shrubs - Plant on 4' spacing



AMERICAN CRANBERRY: Grows to 10', 10' in 10 years. White flowers in May followed by red foliage and scarlet edible berries in fall. Tolerates heavy soil types. Excellent wildlife habitat and makes a good snow catch or screen.



RED TWIG DOGWOOD: Grows to 8', 8' in 10 years. Fast growing native shrub. It has bright red bark and is shade tolerant. Grows best in heavy soils including those that are water soaked.



COMMON NINEBARK: Grows to 10'. Fast growing shrub with white flowers. Grows best in well-drained soils, but will tolerate heavy soils. Has multicolored, peeling bark.



COMMON LILAC: Grows to 10', 10' in 10 years. A large rounded shrub with purple flowers. Is an excellent choice for the snow catch row in windbreaks. Grows well on most soils.



BLACK CHOKEBERRY: Slowly grows to 5-10.' Grows well in most soils. Often used in windbreaks and wildlife plantings. Has showy, spring flowers and bears dark berries that can be used to make jam or jelly.



PEKING COTONEASTER (acutifolius): Mature height of 10' tall and wide. Dark green foliage. Prefers moist, well drained soils. Recommended for use in windbreaks or for habitat plantings. Flowers are attractive to pollinators in the mid-summer and also produces berries that ripen in the fall.



GRAY DOGWOOD: Slow growing to 10'-15'. Produces white flowers in late spring that give way to bluish-white berries that ripen July-October. The stems of flowers are red.

SMALL DECIDUOUS - Plant on 8' Spacing



SIBERIAN CRABAPPLE: Grows to 15-25' in moist, well-drained soils. Needs full sun to reach its potential. Produces berries and flowers that provide forage for wildlife and insects. Often used in windbreaks, riparian plantings and general beautification. .



WHITESPIRE BIRCH: Fast growing that grows up to 30'-40' in sun to partial shade. Leaves are glossy green, turning yellow in the fall. Attracts birds and butterflies and is deer resistant.



AMERICAN PLUM: Small Tree or Large shrub growing 15-25' tall with a broad spreading crown. 2-5 flowered cluster of 5 petaled white flowers. It is very hardy and drought resistance. Excellent for wildlife plantings. Its fruits can also be used in jellies and preserves.

TALL DECIDUOUS - Plant on 16' Spacing



SUGAR MAPLE: A slow grower reaching a height of 50-75'. These trees provide good cover and sap for birds and insects. They prefer wet/moist soils with partial to full sun.



COMMON HACKEBERRY: A semi-fast growing tree that reaches height of 40-75'. Bears fruit that ripens in the fall and often hangs on trees throughout the winter providing food for wildlife. Can grow from the richest to the poorest soils. Is tolerant of moderate amounts of shade.



RED MAPLE: Grows at an approximate rate of 3' per year reaching a height of 65' with a 40' spread. It produces red spring flowers and red seeds. The leaves turn a bright red color in the fall.



AMERICAN LINDEN: Also referred to as the American Basswood, grows to a height range of 60' to 125' with a rounded formed canopy. Pale yellow flowers emerge going to a woody, nut-like berry $\frac{1}{4}$ to $\frac{1}{3}$ " in diameter going from light green to light gray brown. Fragrant flowers attract bees, providing for a great honey crop. Small animals, birds and foxes find the seeds an important food source.



AMERICAN "PRINCETON" ELM: Reaches heights of 50'-70' with a width of 30'-50'. Grows in average, medium moist, well drained soils in full sun. It prefers moist, rich loams, but does adapt well to both wet and dry sites. The Princeton Elm has an excellent resistance to Dutch Elm Disease.



AUTUMN BLAZE MAPLE: Grows to a height of 40'-55' with a width of 30'-40'. It is a fast growing cross between a red and silver maple. Fall foliage shades of orange, red and scarlet giving it the name.

OAKS - Plant on 16' Spacing



RED OAK: Grows to 80' rapidly, 25' in 20 years. Hardy native tree that prefers rich, deep, moist, medium to fine textured soils. Has excellent value for wildlife by providing nesting cover, browse, and acorns. Holds leaves through winter.



SWAMP WHITE OAK: Grows to 70', 20' in 20 years. A hardy, long-lived native tree that prefers moist to wet lowland and swampy soils. It has a moderate growth rate and will take some shade. Use in windbreak if wildlife is a prime concern. Has excellent value for nesting, cover, browse and acorns.



WHITE OAK: Grows to 80'. A very hardy native that is broad and dense. Tolerates most soils but well adapted to heavy soil. Purple-Red fall color with sweet acorns relished by wildlife



BUR OAK: Grows 60-80'. Native to Minnesota, it grows on dry uplands on limestone and gravelly ridges, sandy plains, and loamy slopes. It is tolerant of drought conditions and occasional flooding. It prefers full sun. Bur Oak acorns are similar to white oak acorns, but the cap covers more on a bur oak.

CONIFERS - Plant on 20' Spacing



BLACK HILLS SPRUCE: Pyramidal tree that grows to 40', 20' in 20 years. Short bluish-green needles forming a very dense tree. Prefers moist well-drained porous soils and full sun. Excellent windbreak and wildlife cover.



NORWAY SPRUCE: Pyramidal tree that grows to 75', 30' in 20 years. This is one of the fastest growing of all spruces. Excellent windbreak and wildlife tree that will grow most anywhere except where water soaked. Large cones with attractive drooping branches.



WHITE PINE: Grows to 100', 30' in 20 years. Fast growth rate with a pyramidal shape when young. With age the shape becomes broader. The needles are long (3-5"), soft, and are in fascicles of 5. This tree prefers sandy loam to silt loam soils but will grow on a wide range of soils. Not tolerant of poor drainage and may become chlorotic with high pH.



MEYER SPRUCE: Pyramidal tree grows 50'-75', 20' in 20 years. A tree with solid blue-green needles and dense growth. Appears to resist disease and insects better than the Colorado Spruce. Withstands a wide range of soils and will take shade. Some believe that due to its disease resistance and extreme hardiness, it may replace the Colorado Spruce.

CONIFERS – Plant 8' Spacing



EASTERN RED CEDAR: Pyramidal native tree grows to 30'. A long-lived, winter hardy, and alkali resistant conifer. Shouldn't be planted on extremely wet sites or close to apple orchards, as it is a host for cedar-apple rust disease. It makes a very good windbreak tree with many benefits to wildlife.



NORTHERN WHITE CEDAR: (American Arborvitae): Pyramidal tree grows to 40', 15' in 10 years. Fast grower that prefers sun to semi-shade and moist to wet soils. Tolerant of pruning and will grow into a solid hedge. Also, may winter burn until established.



TECHNY ARBORVITAE: Pyramidal tree that grows to 20', 10' in 10 years. Medium growth rate prefers sun to semi-shade and moist to wet soils. Makes a good hedge with dark green foliage year-round. Use 6' spacing if you want it to close sooner.



NIGRA ARBORVITAE: Fast growing, pyramidal tree growing to 40-60' at full maturity. It's dark green foliage stays green year round. It is great for windbreaks and also can be used to hedges. It is insect and disease resistant.