



Site and Wildlife Factors for Small to Medium Sized Fruit Bearing Trees/Shrubs

- ***Viburnum opulus var. americanum* (Highbush Cranberry)**
 - Native habitat of the highbush cranberry is shady, moist places such as stream banks, wet thickets, and old river bottoms. For planting in orchard conditions, the soil should be a well-drained loam or silt loam with good moisture holding capacity and a pH of 6.0 to 7.5.
 - Tolerant of frost, likes sun or semi-shade, and is successful in most soil types but does best in well-drained, moist soil that is rich and loamy. Established plants can tolerate drought, but they are helped by supplemental watering during such periods.
 - Ruffed grouse, pheasants, deer, raccoons, chipmunks, squirrels, rabbits, robins, cedar waxwings, and other songbirds.
- ***Amelanchier arborea* (downy serviceberry)**
 - Grows well in acidic, moist and well-drained soils.
 - In the Midwest common serviceberry grows with boxelder (*Acer negundo*), sugar maple (*A. saccharum*), white oak (*Quercus alba*), black ash (*Fraxinus nigra*), American beech (*Fagus grandifolia*), shagbark hickory (*Carya ovata*), and American hornbeam (*Carpinus caroliniana*). Soils here are well-drained silty clay loam and poorly drained silt loams. Some understory associates include lowbush blueberry (*Vaccinium angustifolium*), penstemon (*Penstemon canescens*), raspberry (*Rubus* spp.), greenbrier (*Smilax* spp.), and witch-hazel (*Hamamelis virginiana*).
 - At least 40 bird species and several dozen mammal species eat the fruit of the *Amelanchier* genus. Mammals that use common serviceberry include squirrels, chipmunks, mice, voles, foxes, black bears, and elk
- ***Sambucus* sp. (black/red elderberry)**
 - Elderberry grows in medium to wet soils and can tolerate clay soils if there is good drainage. If you have poorly drained soils, try planting on a berm to increase the chance of success. This plant tolerates full sun or partial shade, requires soil pH

between 5.5 and 6.5, and can grow across much of Michigan being hardy through USDA Zone 4a.

- Elderberry serves many beneficial functions in hedgerows including providing a canopy which creates cooling shade, contributing to soil structure (particularly along stream banks), and providing food for wildlife.
- Wildlife that feed on elderberry foliage and fruit include game birds, deer, bear, and elk. Butterflies and other insects are attracted to the blooms. Its fruits are eaten by mammals and many species of songbirds. It makes an excellent nesting site for birds and provides cover for quail and pheasants.
- ***Malus sargentii* (roselow sargent crabapple)**
 - Provide Sargent crabapple with an open location in full sun. It prefers an acid soil rich in organic matter but will adapt to most soil types. Although it grows best in a well-drained soil, it tolerates soils that are occasionally wet. The tree has a low tolerance for salt spray, pollution and drought.
 - The fruit is a favorite food of the ruffed grouse, pheasant, woodpecker. Countless other birds rely upon the fruit, seed, buds, nectar, and flowers for food. Deer are drawn to crabapple trees for the fruit and to browse any new growth.
- ***Physocarpus opulifolius* (common ninebark)**
 - Tolerant to a wide range of site conditions.
 - Flowers are at their most colorful in full sun conditions, but color fades in shady conditions for most cultivars.
 - Ninebark is drought tolerant and grows well in harsh conditions (clay or rocky soils).
 - In natural settings, ninebark is commonly found growing in moist soils as a thicket, along streams, in sand or gravel bars, or on rocky slopes and bluffs.
 - Nectar source for native bees, honeybees, beetles, flies, wasps, and butterflies. Songbirds and squirrels eat the seeds and deer browse the foliage.

- ***Viburnum lentago* (nannyberry)**
 - Part shade, sun; moist soil; hardwood forest openings, swamps, fens, wet meadows, lake shores, riverbanks.
 - Mildly resistant to damage by deer. Birds and other wildlife are attracted to fruits and butterflies to the blooms. Larval host for the Spring Azure butterfly.

- ***Cornus sericea* (redosier dogwood)**
 - Sun to part shade.
 - Adaptable to sandy, loam, or clay soils.
 - Average to wet soil; drought tolerant.
 - Adaptable to very poor to well-drained soils; soil compaction tolerant.
 - Soil pH: 6.1 to 8.5.
 - Provides dense cover for wildlife. The white berries are eaten by at least 18 species of birds including ruffed grouse, bobwhite quail, wild turkey and gray catbird. The twigs and foliage are browsed by elk, deer, moose, rabbits and chipmunks.

- ***Prunus serotina* (black cherry)**
 - Black cherry occurs in numerous mesic woods and second-growth hardwood forests in the eastern United States and Canada. It is also common in old fields and along fence rows. It grows on a variety of soil types, textures, and drainages but is most abundant on mesic sites.
 - Shade-intolerant.
 - Black cherry will do well on a number of different soil types, but does best in deep, well- drained soils with a pH between 5.0 and 6.5. Although drought tolerant, this species does best on north- and east-facing aspects which provide moister, cooler environments.
 - Wild black cherry trees support pollinator insects including beetles, flies and bees. Their fruits are eaten by mammals such as foxes, mice, squirrels and bears. Fruits are also eaten and spread by songbirds.

- ***Corylus americana* (American hazelnut)**
 - American hazelnut can tolerate any range of soil pH as long as the soils are moist, well-drained loamy soils. The shrub also prefers full sun and partial sun/shade. It can tolerate occasional drought. It is commonly found in prairies, along forest margins, streams, and roads. The shrub can also be planted to provide screening or as a shrub border.
 - Eaten by squirrels, foxes, deer, northern bobwhite, ruffed grouse, turkey, woodpeckers, pheasants, and deer. The leaves, twigs, and catkins are browsed by rabbits, deer, and moose. The male catkins are a winter food for turkey and ruffed grouse. The dense, low growth habit provides cover and nesting sites for many wildlife species.
- ***Corylus cornuta* (beaked hazel)**
 - This subspecies generally grows on moist to dry roadsides, "waste places", fencerows, pastures, thickets, wood edges, and in the understory of open woodlands and forests.
 - Soil texture, soil moisture content, and light intensity are apparently critical factors in determining where beaked hazelnut can grow.
 - Beaked hazelnut gains greatest biomass in loamy soils, especially loamy sands. Moisture regime is wet-mesic to dry-mesic, with dry-mesic soils preferred. In the northern United States, beaked hazelnut generally grows on mesic sites while American hazel grows on xeric sites, although there are many exceptions.
 - Soils supporting beaked hazelnut are generally moderately to highly rich in nutrients and range from strongly to slightly acid.
 - Beaked hazelnut coverage was greatest on soils with 10% organic matter content, and beaked hazelnut did not occur on sites where soil organic matter content was >53%. Optimum pH range was from 5.7 to 6.3.
 - Used in wildlife habitat plantings to provide cover and nuts, which are eaten by squirrels, deer, grouse and pheasant.

- ***Sorbus americana* (American mountain ash)**
 - Prefers moist habitats from the borders of swamps to rocky hillsides. It is common in openings or in woods, scattered on uplands along edges of woods, roadsides, and under semi-open stands. It will grow well in a stunted form on relatively dry soils.
 - Shade intolerant.
 - Preferred browse for moose and white-tailed deer.
 - The berries of American mountain-ash are eaten by numerous species of birds and small mammals, including ruffed grouse, ptarmigans, sharp-tailed grouse, blue grouse, American robins, other thrushes, waxwings, jays, squirrels, and rodents.
- ***Ilex verticillate* (winterberry holly)**
 - Winterberry grows wild in acidic soils in forested wetlands or along edges of ponds, lakes, and marshes.
 - **Though winterberry fruit is a food source for some wildlife, it can be poisonous to pets and people.**
 - Full sun to part shade.
 - Soil pH 4.5 to 6.5 (acidic).
 - Adaptable to many soil types - sandy, loam, or clay.
 - Moist to wet soils.
 - Tolerates poorly drained and compacted soils.
 - Tolerates Japanese beetles.
 - Sensitive to de-icing salts.
 - Leaves may turn yellow when planted in soil pH is higher than 6.5.
 - Leaf spots and powdery mildew late in the season; these are only cosmetic and non-fatal.
 - Used in wildlife habitat plantings to provide cover and nuts, which are eaten by squirrels, deer, grouse and pheasant.

- ***Aronia melanocarpa* (black chokeberry)**

- Tolerance to a variety of soil textures, densities, pH levels and moisture conditions.
- Because of suckering and its tolerance to wet soils, this species is typically used in mass planting, in naturalized and woodland gardens, for erosion control, in windbreaks and in excessively wet soils
- Plant in full sun; tolerates partial shade.
- Adaptable - sandy to clay soils.
- Soil pH 5.1-6.5; tolerates higher.
- Poorly drained to well-drained; moist to wet soils.
- Tolerant of salt and compacted soil.
- Birds like [cedar waxwings](#), [chickadees](#), [eastern bluebirds](#), [gray catbirds](#) and [tufted titmice](#) might eat black chokeberry's late-season crop. But the shrub offers additional benefits for [berry-loving birds](#), including dense thickets that provide shelter and nesting sites. Butterflies and moths are attracted to the spring flowers, and some coral hairstreaks use the shrub as a host plant.

- ***Crataegus phaenopyrum* (Washington hawthorn)**

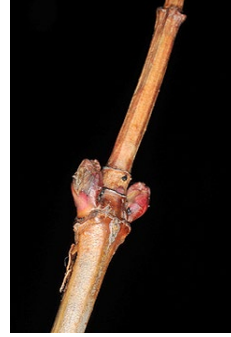
- Prefers full sun. It will grow in partial shade, although this will impact the level of flowering and fruit, It is tolerant of a wide range of soils but prefers moist, well-drained loam.
- pH adaptable.
- Because it is thorny and tolerates extensive pruning, it can be grown as a hedge for a screen or security, planted in small groups, as a specimen in a lawn, or a street tree.

- ***Viburnum dentatum* (arrowwood)**

- Moist well-drained soil in full sun to partial shade. It will tolerate a variety of soil and pH types. Use along a stream, pond or bog, or use as a specimen, foundation shrub or hedge. The flowers and fruits will attract butterflies, bees and songbirds.
- It is a potential host for the Spring Azure butterfly. Its fruits are eaten by songbirds, grouse, wild turkeys and squirrels. Its twigs and leaves are browsed by white-tailed deer.

Appendix

***Viburnum opulus var. americanum* (Highbush Cranberry)**



***Amelanchier arborea* (downy serviceberry)**



Sambucus sp. (American/red elderberry)

Black



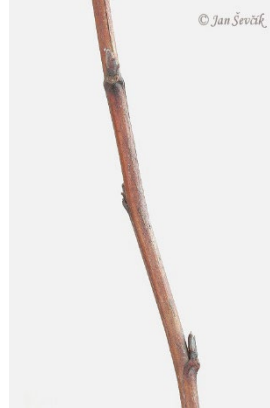
American



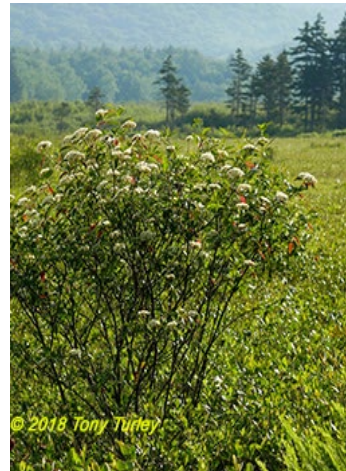
Malus sargentii (roselow sargent crabapple)



***Physocarpus opulifolius* (common ninebark)**



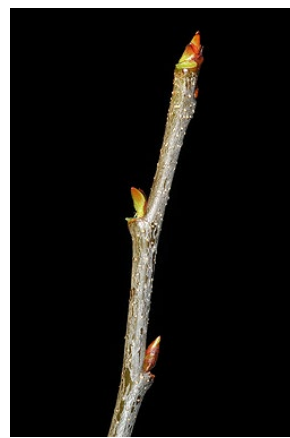
***Viburnum lentago* (nannyberry)**



***Cornus sericea* (red-osier dogwood)**



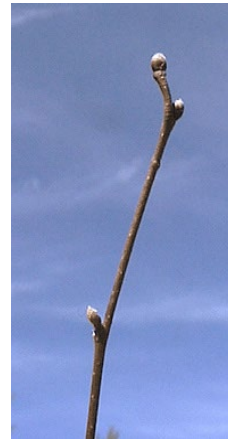
***Prunus serotina* (black cherry)**



***Corylus americana* (American hazel)**



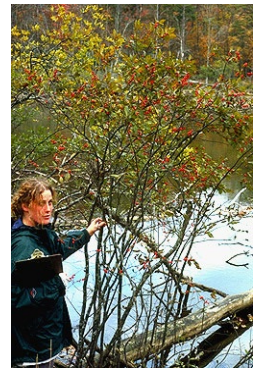
***Corylus cornuta* (beaked hazel)**



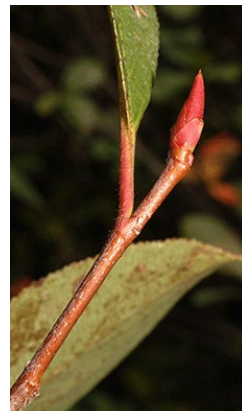
***Sorbus americana* (American mountain ash)**



***Ilex verticillate* (winterberry holly)**



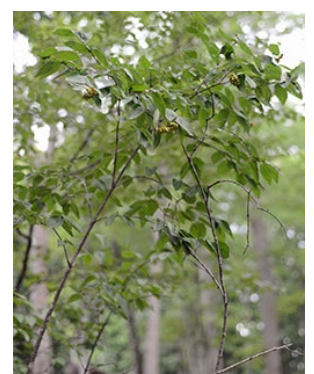
***Aronia melanocarpa* (black chokeberry)**



***Crataegus phaenopyrum* (Washington hawthorn)**



***Viburnum dentatum* (arrowwood)**



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