### Winterberry Holly (Ilex verticillata)

Native Range: Eastern Unites States Zone: 3-9 Height: 6 - 12 ` Spread: 6 - 12 ' Bloom Time: June to July Bloom Color: Greenish-white Sun: Full sun to part shade Water: Medium to wet Maintenance: Low Suggested Use: Hedge, rain garden Flower: Insignificant Fruit: Showy Tolerate: Erosion, Clay soil, wet soil, pollution





#### Culture

Easily grown in average, acidic, medium to wet soils in full sun to part shade. Adaptable to both light and heavy soils, but prefers moist, acidic, organic loams. Good tolerance for poorly drained soils including wet boggy or swampy conditions (this species is native to swampy areas of Eastern North America). Winterberries are dioecious (separate male and female plants). Only fertilized female flowers will produce the attractive red berries that are the signature of the species. Generally one male winterberry will be sufficient for pollinating 6-10 female plants. Flowers appear on new growth. Prune to shape in early spring just before new growth appears.

### **Noteworthy Characteristics**

A deciduous holly that is native to eastern North America, it typically occurs in swamps, damp thickets, low woods and along ponds and streams. This is a slow-growing, deciduous shrub with an upright-rounded habit that typically grows 6-12' tall. Mature specimens in the wild can reach upwards of 15'. Often suckers to form large thickets or colonies. Elliptic to obovate, toothed, dark green leaves (2-3" long). Fall color is usually negligible, but in some years leaves may turn attractive shades of maroon. Relatively inconspicuous greenish-white flowers appear in the leaf axils in late spring. Flowers, if properly pollinated, give way to a crop of bright red berries (1/4" diameter) in late summer to fall. Berries are guite showy and will persist throughout the winter (hence the common name) and often into early spring. Berries provide considerable impact and interest to the winter landscape.

#### Uses

Year round interest, highlighted by the showy display of red berries in winter. Mass or group in shrub borders, foundations, native plant areas or bird gardens. Hedge. Excellent shrub for moist soils in low spots or along streams and ponds.

#### Spicebush (Lindera benzoin)

Native Range: Eastern North America

Zone: 4-9 Height: 6 – 12' Spread: 6 – 12' Sun: Part shade Water: Medium Maintenance: Low Bloom Time: March



Bloom Color: Greenish yellow Suggested Use: Hedge, rain garden Flower: Showy, fragrant Leaf: Good fall color Fruit: Showy Attracts: Birds, butterflies Tolerate: Deer, Drought, Heavy Shade, Clay Soil, Wet Soil, Black Walnut





#### Culture

Easily grown in average, medium, well-drained soils in part shade. Fall color is best with more sun. Tolerates full shade, but habit becomes more open and wide-spread-ing. Also tolerant of full sun, but good soil moisture is required.

### **Noteworthy Characteristics**

Lindera benzoin, commonly called spicebush, is a native deciduous shrub with a broad, rounded habit which typically grows 6-12' (less frequently to 15') high in moist locations in bottomlands, woods, ravines, valleys and along streams. Clusters of tiny, apetalous, aromatic, greenish-yellow flowers bloom along the branches in early spring before the foliage emerges. Dioecious (male and female flowers on separate plants), with the male flowers being larger and showier than the female ones. Flowers of female plants give way to bright red drupes (to 1/2" long) which mature in fall and are attractive to birds. Female plants need a male pollinator in order to set fruit, however. Drupes are very attractive, but may be hidden by the foliage until the leaves drop. Thick, oblong-obovate, light green leaves (to 5" long) turn an attractive yellow in autumn. Leaves are aromatic when crushed. The larva (caterpillar) of the spicebush swallowtail butterfly feeds on the leaves of this shrub.

#### Uses

Shrub borders, shade or woodland gardens, moist areas along streams or ponds, native plant gardens or naturalized plantings.

### Sweet Bay Magnolia (Magnolia virginiana)

Native Range: Eastern Unites States Zone: 5-10 Height: 10 – 25 ' Spread: 10 – 25 ' Bloom Time: May to June Bloom Color: Creamy white Sun: Full sun to part shade Water: Medium to wet Maintenance: Low Suggested Use: Flowering tree, rain garden Flower: Showy, fragrant Tolerate: Clay soil, wet soil, pollution



#### Culture

Easily grown in acidic, medium to wet soils in full sun to part shade. Prefers moist, rich, organic soils, but, unlike most other magnolias, tolerates wet, boggy soils. Also does quite well in heavy clay soils.

#### **Noteworthy Characteristics**

*Magnolia virginiana*, commonly called sweet bay magnolia, is native to the southeastern United States north along the Atlantic coast to New York. In the northern part of its cultivated growing range, it typically grows as either a 15-20' tall tree with a spreading, rounded crown or as a shorter, suckering, open, multi-stemmed shrub. Features cup-shaped, sweetly fragrant, 9-12 petaled, creamy white, waxy flowers (2-3" diameter) which appear in mid-spring and sometimes continue sporadically throughout the summer. Shiny green foliage is silvery beneath. Foliage is semi-evergreen to fully deciduous in our region. Cone-like fruits with bright red seeds mature in fall and can be showy. No serious insect or disease problems

#### Uses

Excellent specimen tree for lawns or tall multi-stemmed shrub for shrub borders. Use in foundation plantings, near patios or on the periphery of woodland areas. Often planted in parks. Will grow in wet soils such as those found in low spots or near ponds/streams.

#### Fringe Tree (Chionanthus virginicus)

Native Range: Eastern United States Zone: 3-9 Height: 12 – 20 ' Spread: 12 – 20 ' Bloom Time: May to June Bloom Color: Creamy white Sun: Full sun to part shade Water: Medium Maintenance: Low Suggested Use: Flowering tree Flower: Showy, fragrant Leaf: Good fall Fruit: Showy Attracts: Birds Tolerate: Clay soil, air pollution, black walnut



#### Culture

Easily grown in average, medium, well-drained soil in full sun to part shade. Prefers moist, fertile soils. Seldom needs pruning. Tolerant of air pollution and adapts well to urban settings. Intolerant of prolonged dry conditions.

#### **Noteworthy Characteristics**

*Chionanthus virginicus*, commonly called fringetree, is a deciduous, native shrub or small tree with a spreading, rounded habit that typically grows 12-20' tall and most often occurs in rich, moist woods and hillsides, moist stream banks, limestone glade margins and rocky bluffs and ledges. Common name refers to the slightly fragrant, spring-blooming flowers which feature airy, terminal, drooping clusters (4-6" long) of fringe-like, creamy white petals. Male and female plants flower. Male flowers are showier. Female flowers give way to clusters of olive-like fruits which ripen to a dark, bluish black in late summer and are a food source for birds and wildlife. Wide, spear-shaped leaves (to 8" long) turn yellow in autumn.

#### Uses

Grow in groups or as specimens in lawns or in shrub or woodland borders. Also may be used in native plant gardens or near streams or ponds. Can be spectacular in full bloom.

Autumn Brilliance Serviceberry (Amelanchier x grandiflora 'Autumn Brilliance') Hybrid between two species of North American Serviceberries Native Range: Eastern North America

Zone: 4-9 Height: 15 – 25 ' Spread: 15 – 25 ' Bloom Time: April Bloom Color: Creamy white Sun: Full sun to part shade Water: Medium Maintenance: Low Suggested Use: Flowering tree Flower: Showy Leaf: Good fall Fruit: Showy Attracts: Birds Tolerate: Wide range of soils





#### Culture

Easily grown in average, medium moisture, well-drained soil in full sun to part shade. Tolerant of a somewhat wide range of soils, but prefers moist, well-drained loams. Root suckers are common, and if not removed, will result in a shrubby growth habit for the plant.

#### **Noteworthy Characteristics**

Amelanchier × grandiflora is a hybrid cross between two species of North American serviceberry, namely, A. arborea (downy serviceberry) and A. laevis (Allegheny serviceberry). This is a small, deciduous, usually multi-trunked understory tree or tall shrub which typically matures to 15-20' tall. Flowers bloom in April followed by edible fruits (3/8'' diameter) in June (hence the sometimes used common name of Juneberry). Berries resemble blueberries in taste and may be used in jams, jellies and pies. Finely-toothed leaves emerge with bronze tints in spring, mature to dark green from late spring throughout summer before finally turning brilliant red to orange-red in fall. 'Autumn Brilliance' has brilliant orange-red fall color (hence the cultivar name). This cultivar reportedly has excellent disease resistance.

#### Uses

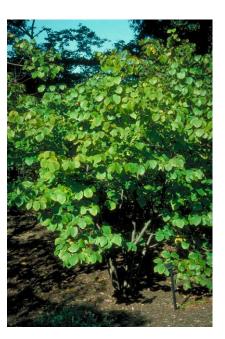
Attractive understory tree/shrub for lawns, shrub borders, woodland margins or native plant areas. Shrub forms can be grown as tall informal hedges or screens. Good plant for bird gardens (birds love the berries).

#### Witch Hazel (Hamamelis virginiana)

Native Range: Eastern North America

Zone: 3-8 Height: 15 - 20 \ Spread: 15 - 20 ' Bloom Time: October to December Bloom Color: Yellow sometimes tinged w/orange or red Sun: Full sun to part shade Water: Medium Maintenance: Low Suggested Use: Hedge, Naturalize, Rain Garden





#### Culture

Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Best flowering in full sun. Prefers moist, acidic, organically rich soils. Tolerates heavy clay soils. Promptly remove suckers to prevent colonial spread. Little pruning is required. Prune in early spring if necessary.

#### **Noteworthy Characteristics**

Flower: Showy, fragrant

Tolerate: Deer, erosion, clay soil

Hamamelis virginiana, known as common witch hazel, is a fall-blooming, deciduous shrub or small tree that is native to woodlands, forest margins and stream banks in eastern North America. It typically grows 15-20' tall with a similar spread in cultivation, but can reach 30' tall in its native habitat. Stem-hugging clusters of fragrant bright yellow flowers, each with four crinkly, ribbon-shaped petals, appear along the branches from October to December, usually after leaf drop but sometimes at the time of fall color. Fertilized flowers will form fruit over a long period extending through winter and into the following growing season. Fruits are greenish seed capsules that become woody with age and mature to light brown. Each seed capsule splits open in fall of the following year, exploding the 1-2 black seeds within for up to 30 feet. Oval to obovate, medium to dark green leaves (to 6" long) with dentate to wavy margins turn quality shades of yellow in fall. Plants of this species are usually the last native flowering plants to bloom in Pennsylvania each year.

#### Uses

Shrub borders, woodland gardens. Screen or tall hedge.

#### Eastern Redbud (Cercis canadensis)

Native Range: Eastern North America Zone: 4-8 Height: 20 – 30 ` Spread: 20 – 35 ` Bloom Time: April Bloom Color: Pink Sun: Full sun to part shade Water: Medium Maintenance: Low Suggested Use: Flowering tree, street tree, naturalize Flower: Showy Leaf: Good fall Attracts: Butterflies Tolerate: Clay soil, deer, black walnut



#### Culture

Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Part shade is best in hot summer climates. Performs best in moderately fertile soils with regular and consistent moisture. Avoid wet or poorly drained soils. Since this tree does not transplant well, it should be planted when young and left undisturbed.

#### **Noteworthy Characteristics**

*Cercis canadensis*, commonly called eastern redbud, is a deciduous, often multi-trunked understory tree with a rounded crown that typically matures to 20-30' tall with a slightly larger spread. It is particularly noted for its stunning pea-like rose-purple flowers which bloom profusely on bare branches in early spring (March-April) before the foliage emerges. This tree is native to eastern and central North America. Flowers (to  $\frac{1}{2}$ " wide) bloom in clusters of 4-10. Flowers are followed by flattened leguminous bean-like dry seedpods (2-4" long) that mature to brown in summer. Each pod has 6-12 seeds. Pods may remain on the tree into winter. Leaves turn pale yellow to greenish-yellow in fall.

Keep the tree vigorous by regular watering, fertilization and pruning out dead branches as needed. Deer tend to avoid this plant.

#### Uses

Specimen or small groups. Lawns, shrub borders, woodland margins, or along patios. Street tree or lawn tree. Attractive in naturalized settings.

#### Black Gum or Tupelo (Nyssa sylvatica)

Native Range: Eastern North America Zone: 3-9 Height: 30 – 50 ' Spread: 20 – 30 ' Bloom Time: May to June Bloom Color: Greenish white Sun: Full sun to part shade Water: Medium to wet Maintenance: Low Suggested Use: Shade tree, street tre Flower: Insignificant



Suggested Use: Shade tree, street tree, rain garden Flower: Insignificant Leaf: Good fall Attracts: Birds Tolerate: Clay soil, wet soil, black walnut



#### Culture

Easily grown in average, medium to wet soils in full sun to part shade. Prefers moist, acidic soils. Tolerates poorly-drained soils and can grow in standing water. On the other end of the spectrum, tolerates some drought and adapts to some dry-ish soils. Long taproot precludes moving established trees.

### **Noteworthy Characteristics**

*Nyssa sylvatica*, known as Black Gum or Tupelo tree, is a slow-growing, deciduous, native tree which occurs in a wide range of soils. It is primarily a lowland tree found in low wet woods, bottomlands and pond peripheries, but also can be found on dry rocky wooded slopes and ravines. A stately tree with a straight trunk and rounded crown (more pyramidal when young) that typically grows 30-50' tall. Small, green-ish-white flowers appear in spring on long stalks (female flowers in sparse clusters and male flowers in dense heads). Although flowers are not showy, they are an excellent nectar source for bees. Fruits mature to a dark blue and are attractive to birds and wildlife. Spectacular scarlet fall color.

#### Uses

Excellent ornamental shade tree for lawns or street tree. Also grows well in moist woodland gardens or naturalized areas or in low spots subject to periodic flooding or in boggy areas. Although slow-growing, it still needs to be sited in an area which affords plenty of room for future growth, particularly since it is so difficult to transplant.

### Red Maple (Acer rubrum)

Native Range: Eastern and Central North America Zone: 3-9 Height: 40 – 70 ' Spread: 30 – 50 ' Bloom Time: March to April Bloom Color: Red (sometimes yellow) Sun: Full sun to part shade Water: Medium to wet Maintenance: Low Suggested Use: Shade tree, street tree, rain garden Flower: Showy Leaf: Good fall Attracts: Bees, birds, squirrels and other wildlife by providing food, shade and nesting habitat Tolerate: Wet soils, black walnut, air pollution

### Culture

Easily grown in average, medium to wet, well-drained soil in full sun to part shade. Tolerant of a wide range of soils, but prefers moist, slightly acid conditions. Very cold hardy.

### **Noteworthy Characteristics**

Acer rubrum, commonly called red maple, is a medium-sized, deciduous tree that is native to Eastern North America from Quebec to Minnesota south to Florida and eastern Texas. It typically grows 40-60' tall with a rounded to oval crown. Emerging new growth leaves, leafstalks, twigs, flowers, fruit and fall color are red or tinged with red. Quality of red fall color on species plants is variable. Flowers on a given tree are primarily male or female and appear in late winter to early spring (March) before the leaves. Fruit is a two-winged samara.

#### Uses

Plant as a specimen tree for the lawn, street or park.

### White Oak (Quercus alba)

Native Range: Eastern United States

Zone: 3-9 Height: 50 - 80 \ Spread: 50 - 80 ' Bloom Time: May Bloom Color: Yellowish areen Sun: Full sun Water: Dry to medium Maintenance: Low Suggested Use: Shade tree, street tree Flower: Insignificant Fruit: Showy





Attracts: Bees, birds, squirrels and other wildlife by providing food, shade and nesting habitat

Tolerate: Drought, clay soil, dry soil, shallow rocky soil, black walnut

### Culture

Best grown in rich, moist, acidic, well-drained loams in full sun. Adapts to a wide variety of soil conditions with good drought tolerance. Slow growing but majestic. Plant this tree for your children and grandchildren.

### **Noteworthy Characteristics**

Quercus alba, commonly called white oak, is a large deciduous native tree of the white oak group. Grows to 50-80' tall in cultivation and taller (to 100') in the wild. Pyramidal when young, but matures into a substantial tree with a wide-spreading, rounded crown. Insignificant yellowish-green flowers in separate male and female catkins appear in spring shortly after the leaves emerge. Fruits are oval acorns (to 3/4" long) with warty-scaled cups. Leaves (4-9" long) have 7 to 9 deep rounded lobes. Leaves emerge pinkish in spring, but mature to dark green. Variable fall color ranges from browns to quality shades of dark red. White oak grows over much of eastern North America and is an important hardwood timber tree. Widely used in landscapes.

#### Uses

Large shade tree, street tree or lawn tree. Needs a large space in which to grow