

American Holly

Ilex opaca

LEAF

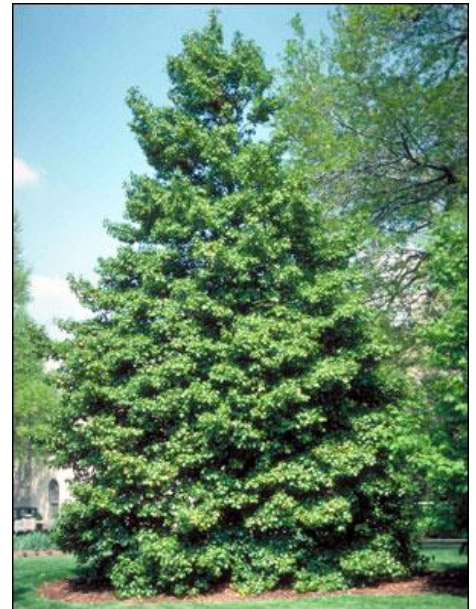


Identification Features:

- EVERGREEN
- ALTERNATE branching pattern
- Leaves: SIMPLE; BROAD; OVAL shaped; dark green and glossy above and paler beneath; leaves feel tough and leathery and have sharp, pointed TEETH; 2"-4" long
- Dioecious, meaning there are male and female trees
- Flowers: small and white; 1"-3"; bloom in Spring
- Fruits: bright red DRUPES; ½" in diameter; ripen in Autumn and Winter
- Bark: light gray; smooth
- Medium size tree that can grow up to 60 feet tall; grows in a PYRAMIDAL shape

Habitat:

- NATIVE to Pennsylvania
- Parks and neighborhoods



Benefits of Planting:

- Ornamental because of the beauty of the dark green leaves contrasting with the red drupes, and pyramidal tree shape
- Provides shade and privacy
- Resistance to deer, wind, salt, and storm damage
- A variety of birds eat the drupes
- Flowers attract a variety of pollinators
- Branches make great nesting sites for birds
- Can be pruned as an attractive hedge
- Holly leaves and drupes are often used in holiday decorations

Drawbacks of Planting:

- Drupes are poisonous to humans, cats, dogs, and horses

FLOWERS



DRUPES



Colorado Blue Spruce

Picea pungens

NEEDLES

Identification Features:

- EVERGREEN
- Leaves: stiff and pointed NEEDLES attached singly to branches; 4-sided; blue-green in color; 1"- 1½" long
- Fruit: cylindrical light brown CONES; up to 4" long; cone scales have irregularly toothed margins
- Bark: furrowed and reddish-brown
- Large size tree growing up to 75 feet tall; grows in a COLUMNAR shape



Habitat:

- INTRODUCED to Pennsylvania; native to the Rocky Mountains
- Parks and neighborhoods

Benefits of Planting:

- Ornamental because of its unique blue-green color year-round and columnar tree shape
- Provides shade and privacy
- Resistance to wind, dry soil, and urban conditions
- Provides food and shelter for a variety of birds



CONE



Common Hackberry

Celtis occidentalis

LEAF



Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; OVATE shaped; TOOTHED margins; leaf tips are slender pointed; base is UNEVEN; upper surface of leaf is rough; petiole is slightly hairy; 2"-5" long; turn yellow in Autumn
- Flowers: small and green; ¼" in size; bloom in Spring
- Fruits: dark purple DRUPES on a long, slender stem; ¼"-½" in size; ripen in Autumn and remain on tree throughout Winter
- Bark: greyish brown with corky ridges and warts
- A medium size tree growing up to 60 feet tall; grows in a ROUND shape



Habitat:

- NATIVE to Pennsylvania
- Grows in a variety of habitat including fencerows, fields, and floodplains
- Parks and neighborhoods



FLOWERS

Benefits of Planting:

- Ornamental because it adds visual interest , beauty to Landscaping and round tree shape
- Rapid growth rate
- Resistance to wind, pollution, and poor soil
- Provides shade
- Winter birds eat the fruit
- Attracts pollinators

FRUIT

Drawbacks of Planting:

- Messy

BARK



Eastern Redbud

Cercis canadensis

LEAVES



Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; HEART SHAPE; ENTIRE margins; 3"-5" long; turn yellow in Autumn
- Flowers: bright rose-colored and pea-shaped; grow in clusters; ½" in size; bloom in Spring before the leaves
- Fruits: light brown pods; pods contain 6 egg-shaped, flattened, brown seeds; pods are 2½"- 3" long; ripen in Autumn and remain on tree throughout Winter
- Bark: dark brown to black; smooth when young and scaly when mature
- Small size tree growing 15-20 feet tall; grows in a VASE shape

Habitat:

- NATIVE to Pennsylvania
- Parks and neighborhoods

FLOWERS



Benefits of Planting:

- Ornamental because of its beautiful spring flowers, yellow Autumn color, and vase tree shape
- Rapid growth rate
- Resistance to deer
- Flowers attract butterflies and other pollinators
- Several birds eat the seeds
- Provides shelter and nesting sites for a variety of birds and mammals

Drawbacks of Planting:

- Short-lived

FRUIT



Eastern White Pine

Pinus strobes

Identification Features:

- EVERGREEN
- Leaves: Soft, flexible NEEDLES in clusters of 5. Each needle is 2½" - 5" long; bluish green in color; needles are 3-sided
- Fruits: Elongated CONES; 5"-8" long; cones do not have prickles but are resinous (sticky); cones are slightly curved; each cone scale holds 2 winged seeds
- Bark: dark brown; grooved and scaly
- Large size tree reaching 50-90 feet high; grows in a PYRAMIDAL shape



LEAVES

Habitat:

- NATIVE to Pennsylvania
- Forests
- Parks and neighborhoods



NEEDLE CLUSTER

Benefits of Planting:

- Ornamental because of its bluish green needles and pyramidal tree shape
- Provides shade and privacy
- Resistance to deer and wind
- Rapid growth rate
- Seeds and needles are eaten by a variety of birds and mammals
- Provides a great nesting site for birds



CONES

Flowering Dogwood

Cornus florida

LEAF



Identification Features:

- DECIDUOUS
- OPPOSITE branching pattern
- Leaves: SIMPLE; OVAL shaped; ENTIRE margin; leaves are clustered towards the tips of the twigs; 3"-5" long; turn bright red in Autumn
- Buds: look like miniature garlic cloves or onions
- Flowers: appear large and white, but the white parts are actually bracts (modified leaves), and the flowers are yellow in the center; 3"-4" in size, including the bracts; bloom in Spring before the leaves
- Fruit: red egg-shaped DRUPES in clusters of 2-5; ½"-¾" in size; ripen in Autumn
- Bark: broken into small blocks like alligator skin
- Small size tree growing up to 25 feet tall; grows in a ROUND shape



BUDS

Habitat:

- NATIVE to Pennsylvania
- Forest understory (grows beneath taller trees)
- Parks and neighborhoods



FLOWER

Benefits of Planting:

- Ornamental because of showy spring flowers, bright red autumn leaf color, and round tree shape
- Flowers attract bees, butterflies, and other pollinators
- Red drupes attract winter songbirds
- Good choice for planting near utility lines, larger buildings or patios
- Resistance to deer, storm damage, and wind

Drawbacks of Planting:

- Frequent disease problems

DRUPES



Ginkgo

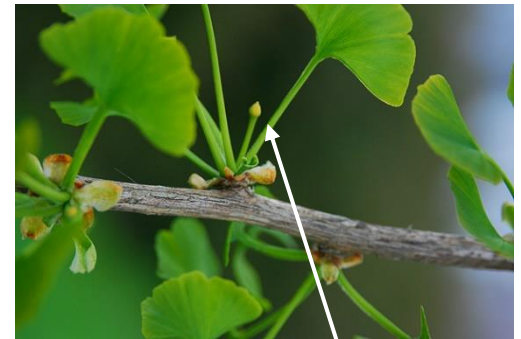
Ginkgo biloba

LEAVES



Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; FAN shaped; WAVY margin; some of the leaves have a central slit, creating 2 lobes to the leaf blade; there are 3-5 leaves gathered in a cluster on a spur (short offshoot from the main branch); veins are PARALLEL; 2"-3" in size; turn yellow in Autumn
- Ginkgos are dioecious, meaning there are male and female trees
- Flowers: both male and female trees have yellow-green flowers; males grow in catkins and female singly on long stalks; less than 1" in size; bloom in Spring
- Fruits: yellow green; plum-shaped; hang in clusters from the spur shoots; 1"-3" in size; ripen in Autumn; mature fruit has a bad odor when crushed that smells like rancid butter or vomit
- Bark: pale brown
- Medium size tree growing 25-50 feet tall; grows in a PYRAMIDAL shape



FEMALE FLOWER

Habitat:

- INTRODUCED to Pennsylvania; native to Asia
- Parks and neighborhoods

Benefits of Planting:

- Ornamental because of the stunning autumn leaf color and pyramidal tree shape
- Unique fan shaped leaves
- Resistance to deer, wind, heat, salt, pollution, and urban conditions

Drawbacks of Planting:

- Offensive odor of the fruit on female trees, only male trees should be planted
- Messy
- Poisonous to humans



FRUITS



Honeylocust

Gleditsia triacanthos

LEAF

Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: once and twice PINNATELY COMPOUND with an even number of OVAL leaflets; leaflets have FINELY TOOTHED margins; leaves are 7"-8" long; turn yellow in Autumn
- Dioecious, meaning there are male and female trees
- Flowers: small, green, and very fragrant; 1"-3"; bloom in Spring
- Fruits: flat and twisted leathery pods containing dark-brown oval seeds; pods are 10"-18" long; pods also contain a gummy pulp; ripen in Autumn
- Bark: brown to almost black; long, narrow ridges separated by deep fissures
- Long, branched, sharp thorns grow on twigs and bark of the native honeylocust; the cultivated variety is thornless
- Medium size tree growing up to 40-50 feet tall; grows in an OVAL or ROUND shape



Habitat:

- NATIVE to Pennsylvania
- Streambanks and floodplains
- Parks and neighborhoods



THORNS



FLOWERS

Benefits of Planting:

- Ornamental because of fragrant flowers, stunning yellow leaf color in Autumn, and oval or round tree shape
- Rapid growth rate
- Provides shade
- Tolerates wet and dry sites
- Resistance to wind, salt, compacted soil, pollution, and most other urban stresses
- A variety of birds and mammals eat the seed pulp

Drawbacks of Planting:

- Female tree are messy
- Thorns present on native variety

SEED PODS



Northern Catalpa

Catalpa speciosa

Identification Features:

- DECIDUOUS
- OPPOSITE or WHORLED branching pattern
- Leaves: SIMPLE; HEART-SHAPED; ENTIRE or WAVY margins; 6"-12" long; turn yellow in Autumn
- Flowers: large, tubular, and bell-shaped; white with yellow & purple spots; 2" in size and grow in clusters; bloom in Summer
- Fruits: green; bean-like seed capsules containing many seeds; seeds are fringed with white hairs; capsules are 8"-15" long; capsules turn brown and split open when ripe; ripen in Autumn and remain on tree throughout Winter
- Bark: pale gray to reddish brown; irregular shallow fissures and scaly ridged bark
- Medium size tree growing 40-60 feet tall; grows in an OVAL shape



LEAF



FLOWERS

Habitat:

- Introduced to Pennsylvania; native to Southern U.S. States
- Parks and neighborhoods

Benefits of Planting:

- Ornamental because of its large, showy, and fragrant flowers; its large heart shaped leaves and oval tree shape
- Provides shade
- Rapid growth rate
- Resistance to drought, pollution, and poor soil
- Flowers are visited by hummingbirds, bees, and butterflies
- Provides wildlife habitat

Drawbacks of Planting:

- Weak wood



FRUIT

Northern Red Oak

Quercus rubra

LEAVES

Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE with 7-11 LOBES with BRISTLE-TIPPED TEETH; smooth, dull green above and paler with tufts of hair beneath; 4"-9" long; turn red in Autumn
- Flowers: male flowers are yellow-green CATKINS; female flowers are spikes; bloom in Spring
- Fruits: ACORNS; $\frac{3}{4}$ " – 1 $\frac{1}{4}$ " long; caps are shallow and saucer-shaped, covering $\frac{1}{4}$ of the nut; cup scales reddish-brown and fuzzy; ripen in Autumn after two growing seasons
- Bark: dark gray or nearly black; divided into rounded ridges between smooth gray streaks
- Large size tree growing up to 75 feet tall; grows in a ROUND shape



Habitat:

- NATIVE to Pennsylvania
- Forests
- Parks and neighborhoods

Benefits of Planting:

- Ornamental because of its beautiful red foliage in Autumn and round tree shape
- Provides shade
- Rapid growth rate
- Resistance to deer, drought, and pollution
- Flowers attract pollinators
- Acorns are eaten by a variety of birds and mammals



CATKINS



ACORN

Norway Spruce

Picea abies

Identification Features:

- EVERGREEN
- Leaves: pointed NEEDLES attached singly to branches; 4-sided; dark green in color; $\frac{3}{4}$ " long
- Branchlets (small branches) droop and hang straight down
- Fruit: cylindrical light brown CONES; 4"-7" long; cone scales have finely toothed margins
- Bark: gray brown
- Large size tree reaching heights of 50-80 feet; grows in a PYRAMIDAL shape



NEEDLES

Habitat:

- INTRODUCED to Pennsylvania; native to Europe
- Parks and neighborhoods

Benefits of Planting:

- Ornamental tree because of its pyramidal shape
- Resistance to deer, wind and pollution
- Provides shade and privacy
- Fastest growing of the spruces
- Provides shelter for a variety of birds and mammals



CONES



Quaking Aspen

Populus tremuloides

LEAF



Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; TRIANGULAR SHAPE; FINELY TOOTHED margins; shiny dark green above and lighter beneath; petioles are flattened; 1"-3" long; turn yellow in Autumn; the slightest breeze will cause the leaves of this tree to tremble, or "quake," thus the name
- Quaking aspens are dioecious, meaning there are male and female trees
- Flowers: long, silvery catkins; 1"-2" long; bloom in Spring
- Fruits: green; cone-shaped capsules containing 10-12 tiny seeds; capsules are ¼" long; ripen in Summer
- Bark: greenish white to cream colored
- Medium size tree growing 40-50 feet tall; grows in an OVAL shape

Habitat:

- Native to Pennsylvania
- Fields and open woods
- Parks and neighborhoods

BARK



Benefits of Planting:

- Ornamental tree because of the stunning combination of Autumn leaf color, bark color, and oval tree shape
- Adds movement and a soft, pleasant sound to the landscape due to the "quaking" leaves
- Rapid growth rate
- Attracts small mammals and songbirds

Drawbacks of Planting:

- Short lived tree



FLOWERS



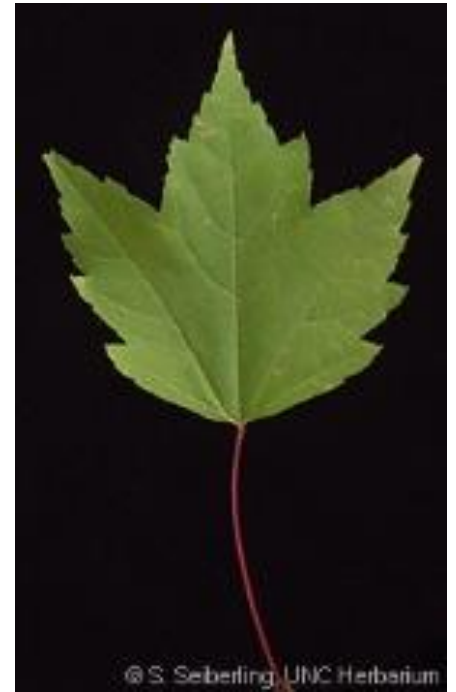
FRUIT



Red Maple

Acer rubrum

LEAF



Identification Features:

- DECIDUOUS
- OPPOSITE branching pattern
- Leaves: SIMPLE; ROUND shape; 3-5 shallow LOBES; coarsely TOOTHED; 2"-6" long; turn bright red or orange in Autumn
- Flowers: small; reddish orange; droop in clusters; ½" in size; bloom in late Winter – early Spring
- Fruits: SAMARAS; horseshoe shaped; wings spread at a narrow angle; red to brown in color; 1" long; ripen in Spring
- Bark: thin, smooth, and light gray when young; older bark may be dark gray and rough with irregular peeling flakes
- Medium size tree reaching 60 feet tall; grows in an OVAL or ROUND shape

Habitat:

- NATIVE to Pennsylvania
- Forests, stream banks, fields, understory
- Parks and neighborhoods

Benefits of Planting:

- Ornamental because of its brilliant red Autumn color and oval or round tree shape
- Rapid growth rate
- Provides shade
- Resistance to heat, drought, pollution, and urban conditions
- Flowers attract a variety of pollinators
- Samaras are eaten by squirrels and birds
- Provides nesting sites for many birds and mammals
- Grows in a variety of soils



FLOWERS



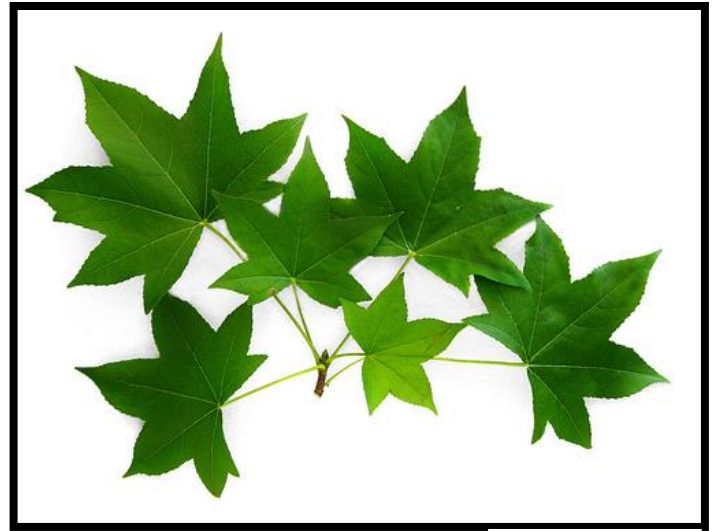
SAMARAS

Sweetgum

Liquidambar styraciflua

Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; 5-7 finely TOOTHED LOBES; STAR shaped; 4"-7½" long; have a pleasant smell when crushed; turn shades of yellow, orange, red, or purple in Autumn
- Flowers: both male and female flowers are tiny, green, and have no true petals; male flowers are upright and female flowers droop; bloom in Spring
- Fruits: woody, brown, spiny "gum balls" that contain tiny brown winged seeds; 1½" in diameter; ripen in Autumn
- Bark: brown to gray; very rough with deep grooves and scaly ridges
- Twigs: gray, aromatic, and have corky wings
- A medium size tree that can grow up to 70 feet tall; grows in an OVAL shape



LEAVES

Habitat:

- NATIVE to Pennsylvania
- Wet woods, swamps, stream banks, and old fields
- Parks and neighborhoods



WINGED TWIGS



FLOWERS

Benefits of Planting:

- Ornamental tree because of unique star shaped leaves, brilliant Autumn colors, and OVAL tree shape
- Flowers attract a variety of pollinators
- Provides shade
- Resistance to deer, wind, drought, and heat
- Rapid growth rate
- Gum balls are eaten by a variety of birds and mammals

Drawbacks of Planting:

- Messy

GUM BALLS



Sycamore

Platanus occidentalis

LEAF



Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE with 3-5 LOBES; light green above and paler with fine hairs beneath; lobes are TOOTHED; 4"-7" across and are wider than long; petiole is hollow at the base; turn golden yellow in Autumn
- Flowers: female flowers are tiny and red; arranged in round clusters; bloom in Spring
- Fruits: light brown, round balls; balls are made up of many seeds surrounded by silky hairs; balls hang singly or in pairs; balls are 1"-1¼" in size; ripen in Autumn and remain on tree throughout Winter
- Bark: mottled; has a brown outer bark peeling to reveal a white, yellow, or green inner bark
- Large size tree growing 70-125 feet tall; grows in an IRREGULAR shape

Habitat:

- NATIVE to Pennsylvania
- Stream banks and floodplains
- Parks and neighborhoods

Benefits of Planting:

- Ornamental tree because of its unique bark and irregular tree shape
- Fast growing
- Provides shade
- Provides a great nesting site for birds
- Resistance to deer, wind, drought, pollution, and urban conditions
- Is best suited for large-scale landscapes

FLOWERS



FRUIT



BARK

