American Chestnut

Castanea dentata

Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; ELLIPTICAL shaped; TOOTHED margin with each tooth having a fine BRISTLE TIP;
 4"-9" long; turn yellow in Autumn
- Flowers: white CATKINS; 6"-8" long; bloom in spring & summer
- Fruits: large, brown, spiny BURR that is 2"-2 ½" in diameter; burr contains 2-3 shiny nuts that are flattened on one side; nuts are ½"-1" long & mostly covered with soft hair; ripen in autumn
- Bark: light gray with ridges
- Suffers from the "Chestnut Blight", which is a disease affecting the bark. Most American chestnuts found today are small stump sprouts but, before the blight began in 1904, American chestnut trees where a large tree growing to 100 feet tall. Grows in a ROUND shape.

- NATIVE to Pennsylvania.
- Upland forest.



BURRS

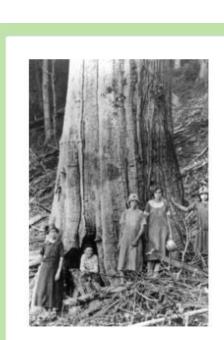


NUTS



CATKINS





Appalachian family with American chestnut tree



American Elm *Ulmus americana*

LEAF

Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; ELLIPTICAL or OVAL in shape;
 DOUBLE SERRATE margins; UNEVEN leaf bases; 6" long; turn golden yellow in autumn
- Flowers: green & red and arranged in dense drooping clusters; 1" long; bloom in spring
- Fruits: rounded SAMARAS; each samara contains a single flattened seed surrounded by an oval, thin papery wing; samaras are deeply notched at the tip; 1/2 " in diameter; ripen in spring
- Bark: light to dark gray; irregularly ridged with deep furrows
- Large size tree reaching 80 feet tall. The dropping crown gives the tree a VASE shape.

- NATIVE to Pennsylvania.
- Moist soils near streams.



FLOWERS





SAMARAS



Eastern Hemlock

Tsuga canadensis

LEAVES

Identification Features:

- EVERGREEN
- Leaves: flattened NEEDLES attached singly to branches; ½" long; needles have 2 white lines on the underside
- Fruits: egg-shaped CONES; ¾" long; 2 small-winged seeds are found under each cone scale
- Bark: gray brown to red brown; thick and roughly grooved when older
- Large, long-lived tree, reaching heights of 70 feet tall. Some old-growth forests have hemlocks that are up to 400 years old! Grows in a PYRAMIDAL shape.

- NATIVE to Pennsylvania
- Cool, moist forests
- State tree of Pennsylvania







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; 3/4" 1 1/4" long; caps are shallow and saucer-shaped, covering 1/4 of the nut; cup scales reddishbrown 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



- NATIVE to Pennsylvania
- Forests
- Parks and neighborhoods



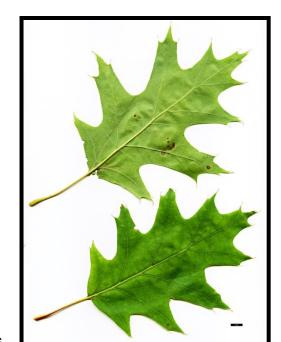








ACORN



Paper Birch Betula papyrifera

LEAF

Identification Features:

- DECIDUOUS
- ALTERNATE branching pattern
- Leaves: SIMPLE; OVATE shaped; DOUBLE SERRATE margins; sharp-pointed at the tip; rounded leaf base; 2"-4" in length; turn golden yellow in Autumn
- Flowers: Male flowers are drooping, brown CATKINS that are 2" long; female flowers are upright, green CATKINS that are 1" long; bloom in Spring
- Fruits: 1"-1½" long STROBILES (small, soft, and cone-like fruit that contains many winged seeds); winged seeds are called NUTLETS; nutlets are 1/12" long; strobiles first green, then turn brown; ripen in Autumn
- Bark: thin, white and peels & curls in paper-like layers from the trunk
- Medium size tree that grows about 60 feet tall. Grows in an OVAL shape.

Habitat:

- NATIVE to Pennsylvania.
- Moist soils.

Male CATKINS



BARK





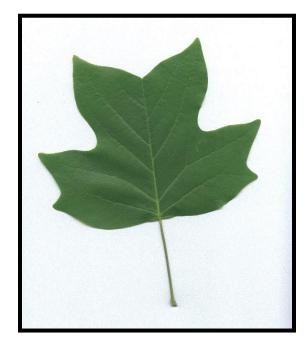
STROBILES

Tulip Tree

Liriodendron tulipifera

Identification Features:

- DECIDUOUS.
- ALTERNATE branching pattern.
- Leaves: SIMPLE; 4 LOBED; leaf shape resembles a cat's face; 4"-6" in diameter; yellow Autumn color.
- Flowers: tulip-shaped; grow high in the trees; 1½"-2" in diameter; greenish-yellow petals with orange bases; bloom in Spring.
- Fruits: cone-like; 2½"- 3" long; made up of winged seeds called SAMARAS; cones held upright in the tree; green at first turning light brown; ripen in Autumn.
- One of the tallest trees in eastern forests reaching up to 100 feet tall. Grows in an OVAL shape.



LEAF

- NATIVE to Pennsylvania.
- Sunny forest spots near streams.











FRUIT

White Ash Fraxinus Americana

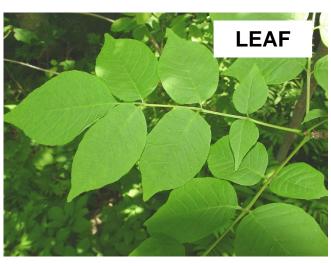
Identification Features:

- **DECIDUOUS**
- OPPOSITE branching pattern
- Leaves: PINNATELY COMPOUND; 7"-12" long; 5-9 ELLIPTICAL to LANCE shaped leaflets; ENTIRE margin; Autumn colors range from yellow to deep purple and maroon
- Flowers: small; green; grow in clusters; bloom in Spring
- Fruits: SAMARAS; 1"-2" long; resemble canoe paddles; ripen in late Summer
- Bark: covered with diamond shaped furrows
- A large tree that can reach 80 feet tall; grows in an OVAL or **PYRAMIDAL** shape

Habitat:

NATIVE to Pennsylvania







FLOWERS



clusters of SAMARAS



single SAMARA