## NORTHERN RED OAK



Northern red oak is important to the Ohio timber industry, providing strong hardwood used in the production of beams, railroad ties, furniture, flooring, and more. A popular shade and ornamental tree, northern red oak is noted for its distinct red-brick autumn foliage and rapid growth rate. Northern red oak acorns mature earlier in the season than most oaks and are enjoyed by many forms of wild-life as a result. Northern red oak prefers moist, deep, rich, well-drained soils of slightly acidic pH and full to partial sun. Other than cosmetic blemishes from insect feeding, this native oak is basically problem-free.

**LEAF:** Broadly teardrop shaped with seven to 11 bristle-tipped lobes, 4-9 inches long, up to 6 inches wide with smooth surface, dull green above but paler with small tufts of reddish-brown hair in vein-axils beneath. Sinus deoths vary between trees from shallow to nearly mid-rib.

**TWIGS AND BUDS:** Terminal buds are clustered. Twigs are greenish or reddish brown, smooth when mature. Buds are pointed, light brown, and smooth.

FRUIT OR SEED: Acorns are ¾ to 1¼ inches long; the cup shallow, saucer shaped, covering ¼ of the nut. Scales reddish-brown, narrow, tight, and sometimes fuzzy on the edges. The acorns develop over two growing seasons, ripening in early summer and late autumn.

**BARK:** Immature bark is smooth and light gray, maturing to dark gray or nearly black with shiny flattened ridges resembling ski tracks.

SHAPE: Rounded.

MATURE HEIGHT: 70-100 feet.

## YELLOW POPLAR



Also known as tuliptree or tulip poplar, this tall native tree is found throughout Ohio and named for its distinct tulip-shaped flowers and leaves. Yellow poplar grows rapidly and frequents moist woodlands, especially on lower slopes. It is planted as a fast-growing ornamental tree, and its lightweight, olive-green wood is often used as a base for veneer. It prefers moist, well-drained soil but adapts to drier soils of neutral to alkaline pH. Yellow poplar can suffer from a variety of pests and diseases, with magnolia scale and yellow poplar weevil being the most significant pests. Its interior leaves will yellow when the soil is too dry.

**LEAF:** Alternate, simple, 5 to 7 inches in size, generally four-lobed, with squared off, broadly notched tips, changing from bright green to vibrant yellow in autumn.

**TWIGS AND BUDS:** Twigs are green to purplish in summer; reddish-brown and shiny in winter. Winter terminal buds are flattened, smooth, with non-overlapping scales, and they resemble a duck bill. Spongy, white diaphragmed pith.

**FLOWER:** Bloom in May and June, with large tulip-shaped flowers with six greenish-yellow petals and a splash of orange at the base. Provide nectar for hummingbirds.

**FRUIT OR SEED:** At first green, turning light brown when ripe in autumn; upright cone-like, 3 inches long, aggregate of winged seeds. Serve as food for birds, squirrels, and mammals in winter.

**BARK:** Immature smooth gray bark becomes striated (with vertical lines) before it develops the deep fissures and tall, interlacing ridges that characterize the mature bark of this species. Young trees are dark green and smooth, older trees are dark gray and furrowed.

**SHAPE:** Symmetrical and pyramidal; known for its long, straight trunks lacking lower branches.

MATURE HEIGHT: 80-120 feet.

## FAMILY TUPELO

## BLACKGUM Nyssa sylvatica



Also known as black tupelo, this native tree is found in all of Ohio except for the driest northwestern counties. This tree is known for its glossy, dark green summer foliage, characteristic blocky bark, and stunning red fall color. Its hard-to-split wood is used for lumber, veneer, boxes, and pulpwood. Black tupelo prefers moist, well-drained, rich, deep, acidic soils and full to partial sun but adapts surprisingly well to dry, average, alkaline soils and partial shade. This tree has several minor diseases and pests, including black leaf spot. Stunting of growth and chlorosis of foliage will occur if this species is planted in alkaline soils.

**LEAF:** Alternate, simple, 2-5 inches long, elliptical to slightly obovate leaves with entire and slightly thickened margins, dark green and shiny above, often downy beneath, turning mostly bright red but occasionally shades of yellow, orange, and purple in early autumn.

**TWIGS AND BUDS:** Small twigs are smooth, short, grayish to reddish brown; pith white and diaphragmed. Leaf scars have three clearly visible bundle scars. Buds are round, pointed and multi-colored, ¼ inch long.

**FRUIT OR SEED:** A dark blue drupe, ½ inch long, single seeded with thin flesh, borne singly or in a cluster, ripening in autumn. Eaten by many forms of wildlife.

**BARK:** Immature bark is brown to gray-brown, with light furrows and a ridged to shingled appearance. Mature bark is medium gray, smooth to scaly, and has distinctly flat-topped blocks with deep crevices in-between and can fissure into quadrangular blocks called alligator bark on very old trunks.

**SHAPE:** Uptight oval, irregular canopy. Branching on young trees tends to stand at right angles to the trunk.

MATURE HEIGHT: 40-80 feet.