

Black Oak (*Quercus velutina*)

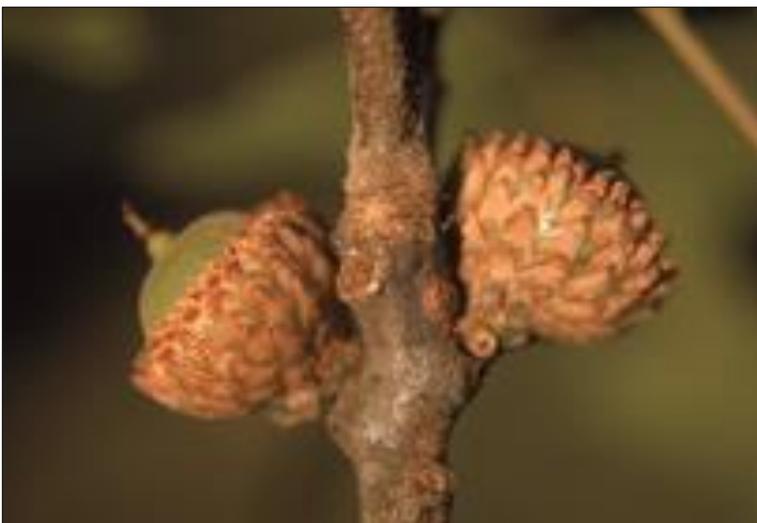
Tree Appearance

- Form - ovoid to irregular
- Mature Height and Spread (ft.):
 - open setting - 50 to 60 x variable
 - forest - 75 to 100 x $\frac{3}{4}$ of the hgt.
- Fall Foliage - reddish brown
- Root Pattern - deep taproot and lateral roots
- Growth rate - medium

Habitat Requirements

- Soil - coarse sandy loams to fine clay heavy loams
- Soil Moisture - prefers moist; tolerates droughty conditions
- Drainage - well to excessive
- Light - sun to partial shade

Urban Tolerance: Resistant to drought, heat, and road salt. Sensitive to soil compaction.



Chestnut Oak (*Quercus prinus*)

Tree Appearance

- Form - globular
- Mature Height and Spread (ft.):
 - open setting - 60 to 75 x 75+
 - forest - 60 to 75 x 75+
- Fall Foliage - orange/red-brown
- Root Pattern - deep taproot
- Growth Rate - slow
- Especially notable bark

Habitat Requirements

- Soil - coarse to fine loams
- Soil Moisture - average to dry
- Drainage - average to well
- Light - full sun

Urban Tolerance: Resistant to drought, heat, and road salt.

Sensitive to soil compaction.
Large acorns have high wildlife food value



Chris Evans, Illinois Wildlife Action Plan, Bugwood.org



Pin Oak (*Quercus palustris*)

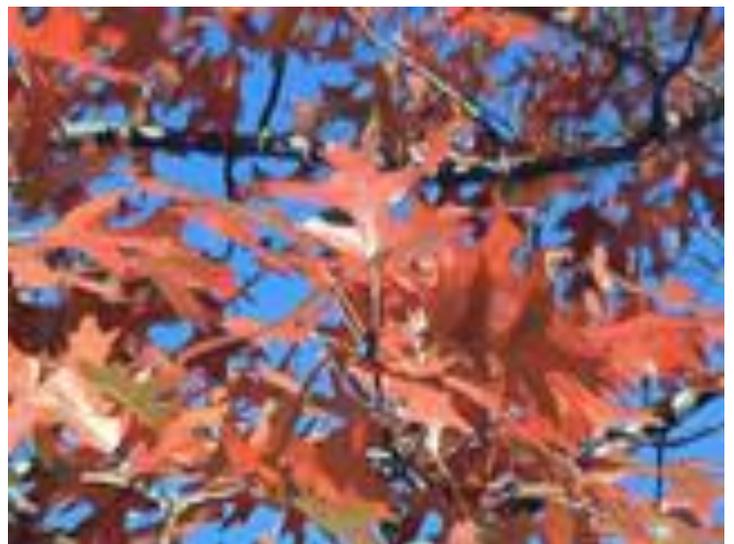
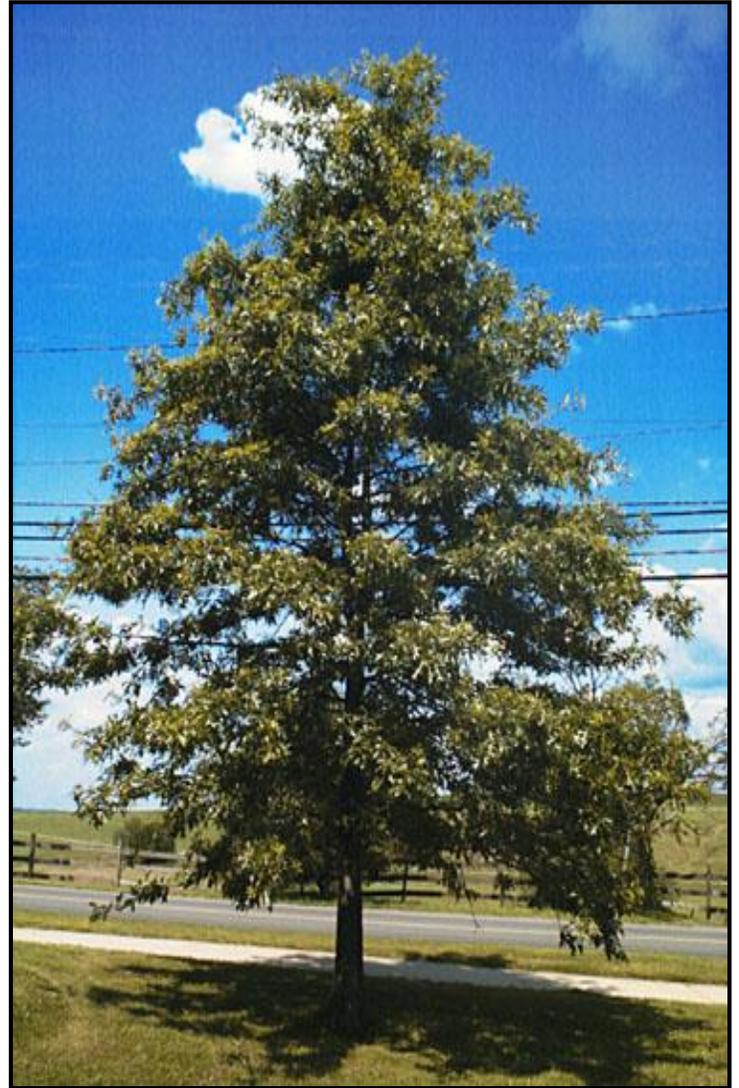
Tree Appearance

- Form - conical
- Mature Height and Spread (ft.):
open setting - 50 to 75 x 2/3 hgt
forest - up to >100 ft. tall
- Fall Foliage - scarlet
- Root Pattern - shallow fibrous
without a distinct taproot
- Growth Rate - fast to medium

Habitat Requirements

- Soil - silty, clay loam. Does well in compacted clay soils.
- Soil Moisture - wet to average; flood tolerant.
- Drainage - poor to well
- Light - full sun to partial shade

Urban Tolerance: Resistant to air pollution, drought and heat, soil compaction, and road salt.



Pitch Pine (*Pinus rigida*)

Tree Appearance

- Form - irregular to globular
- Mature height - 50 to 75 feet
- Spread - $\frac{3}{4}$ of height
- Fall foliage - all seasons dark yellow green
- Root Pattern - short taproot
- Growth Rate - fast

Habitat Requirements

- Soil - coarse sandy loams and gravels
- Soil Moisture - average; tolerates droughty
- Drainage - well to excessive
- Light - very intolerant of shade

Urban Tolerance: Resistant to heat, drought, and road salt. Sensitive to soil compaction and ozone pollution.



Eastern Redbud (*Cercis canadensis*)

Tree Appearance

- Form - globular
- Mature Height and Spread (ft.):
 - open setting - 20 to 30 x same
 - forest - 20 to 35 x same
- Fall Foliage - yellow
- Root Pattern - shallow fibrous
- Growth Rate - slow

Habitat Requirements

- Soil - wide range of sandy and silty clay loams
- Soil Moisture - moist to dry
- Drainage - well to moderate
- Light - full sun for best flowering

Urban Tolerance: Resistant to heat and drought; very sensitive to road salt.



Red Maple (*Acer rubrum*)

Tree Appearance

- Form - ovoid/globular
- Mature Height and Spread (ft.):
open setting - 40 to 60 x $\frac{3}{4}$ hgt.
forest - 75 to 100 x $\frac{3}{4}$ hgt.
- Autumn Foliage - many shades of red
- Root Pattern - very shallow, wide spreading fibrous
- Growth Rate - medium to fast

Habitat Requirements

- Soil - coarse to fine sand and silty loams
- Soil Moisture - wet to average
- Drainage - very poor to well
- Light - sun to full shade

Urban Tolerance: Resistant to air pollution, soil compaction; somewhat resistant to drought and heat. Sensitive to road salt.



N. Red Oak (*Quercus rubra*)

Tree Appearance

- Form - globular
- Mature Height and Spread (ft.):
 - open setting - 60 to 75 x $\frac{3}{4}$ of hgt
 - forest - 75 to 100 x same
- Fall Foliage - russet-red to golden yellow brown
- Root Pattern - deep, lateral spreading; negligible taproot
- Growth Rate - medium

Habitat Requirements

- Soil - prefers clay loams; tolerates heavy clays.
- Soil Moisture - medium moist
- Drainage - moderately well
- Light - tolerant of light shade

Urban Tolerance: Resistant to air pollution and road salt. Sensitive to soil compaction. Moderately sensitive to drought and heat.



River Birch (*Betula nigra*)

Tree Appearance

- Form - columnar
- Mature height - 50 to 75 ft.
- Spread - equal to height
- Fall foliage - yellow
- Root pattern - shallow fibrous
- Growth rate - fast
- Especially notable bark

Habitat Requirements

- Soil - Coarse to fine sands and clays
- Soil moisture - wet to average
- Drainage - poor to moderately well
- Light - full sun

Urban Tolerance: Resistant to drought and soil compaction



Scarlet Oak (*Quercus coccinea*)

Tree Appearance

- Form - irregular
- Mature Height and Spread (ft.):
 - open setting - 70 to 75 x $\frac{3}{4}$ hgt.
 - forest - up to 100 x $\frac{3}{4}$ hgt.
- Fall Foliage - scarlet
- Root Pattern - deep taproot with coarse laterals
- Growth Rate - fast

Habitat Requirements

- Soil - sandy loams to heavy clays
- Soil Moisture - average to dry
- Drainage - well to excessive
- Light - full sun

Urban Tolerance: Resistant to drought, heat, and road salt.
Sensitive to soil compaction.



Sugar Maple (*Acer saccharum*)

Tree Appearance

- Form - ovoid/globular
- Mature height - 75 to 100 ft.
- Spread - 2/3 to equal to height
- Autumn foliage - golden orange, yellow, and red
- Root pattern - shallow to moderately deep, fibrous
- Growth rate - slow

Habitat Requirements

- Soil - coarse to medium, sandy and silt loams
- Soil moisture - moist to average
- Drainage - moderately well to well
- Light - sun to partial shade

Urban Tolerance: Sensitive to drought, heat, soil compaction, and road salt.



Swamp White Oak (*Quercus bicolor*)

Tree Appearance

- Form - ovoid
- Mature Height and Spread (ft.):
 - open setting - 50 to 60 x 2/3 hgt.
 - forest - 75 to 100 x 2/3 hgt.
- Fall Foliage - yellow bronze
- Root Pattern - shallow fibrous
- Growth Rate - medium to fast
- Especially notable bark

Habitat Requirements

- Soil - fine sandy clays and loams
- Soil Moisture - wet to moist
- Drainage - poor to very poor
- Light - sun or partial shade

Urban Tolerance: Resistant to soil compaction, drought, heat, and road salt.



White Oak (*Quercus alba*)

State Tree of Maryland

Tree Appearance

- Form - globular
- Mature Height and Spread (ft.):
open setting - 75 to 100 x 100+
forest – up to 100 x 100+
- Fall Foliage - burgundy
- Root Pattern - deep taproot, deep laterals.

Habitat Requirements

- Soil - coarse to fine sand or clay loams, heavy clays
- Soil Moisture - prefers moist, tolerates dry.
- Drainage - well to excessive
- Light - sun to partial shade

Urban Tolerance: Resistant to road salt. Intermediate to drought and heat.

Especially sensitive to soil compaction.



Eastern White Pine (*Pinus strobus*)

Tree Appearance

- Form - conical/ovoid
- Mature Height and Spread (ft.):
 - open setting - 50 to 80 x $\frac{3}{4}$ hgt.
 - forest - 75 to 100 x $\frac{1}{2}$ hgt.
- Autumn Foliage - green
- Root Pattern - weak taproot, coarse laterals.
- Growth Rate - medium

Habitat Requirements

- Soil - coarse to fine loams
- Soil Moisture - moist to average
- Drainage - average to well
- Light - sun, partial shade

Urban Tolerance: Sensitive to soil compaction, drought, heat, and road salt. Intolerant of flooding. Still, a choice native conifer.

