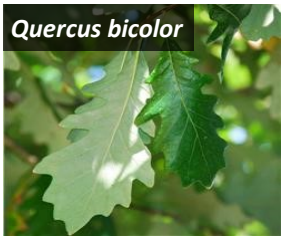
Oaks

Genus Characteristics

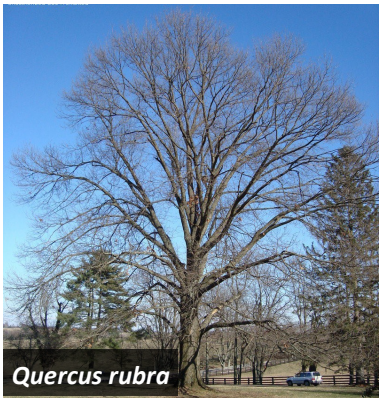
Leaves: Oak leaves are often lobed, but not always. They can be evergreen or deciduous. New growth can take a different shape than older leaves and leaf size will vary depending on sun. Oaks in the red oak family usually have bristles at the leaf tip and end of lobes. Oaks in the white oak family have rounded lobes and no bristles. Buds are clustered at the ends of branches.



Fruit: All oaks produce acorns. Size, shape, and color of acorns and caps are important species indicators. Acorns may not be present, or may be abundant. Most acorns mature through summer and drop in early-mid Autumn.

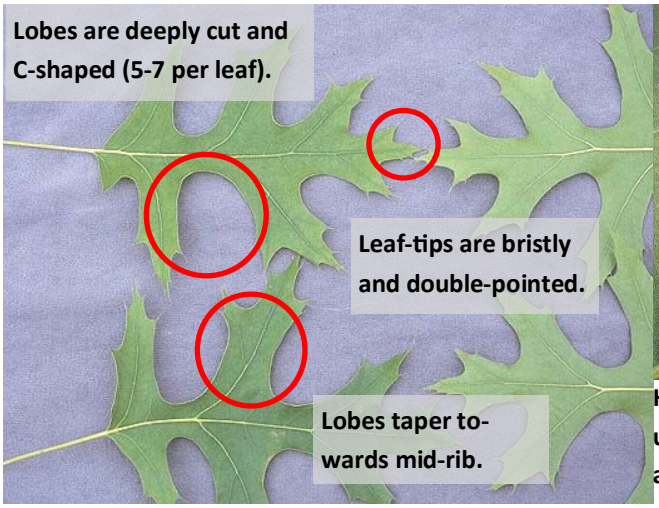
Bark: Bark is usually thick, furrowed, and inconspicuous, with some exceptions. White oaks tend to have plated bark while red oaks tend to have vertical furrows. Coloration and texture varies and other features tend to be more reliable features for species ID.

Form: Oaks are medium to large trees, with some mature oaks reaching significant heights and diameters. Form tends to be broad with a round, open crown, and large limbs, although this can vary by species.



Oaks

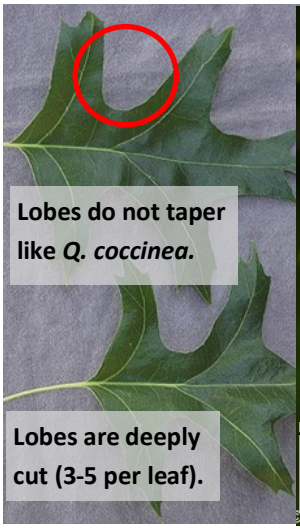
Quercus coccinea—Scarlet oak



Hairs may be present in vein axils on underside of leaf. If seen, they will be tan and more sparse than those of a pin oak.

Acorns are small and round. Cap covers more than half of the nut.

Quercus palustris—Pin oak

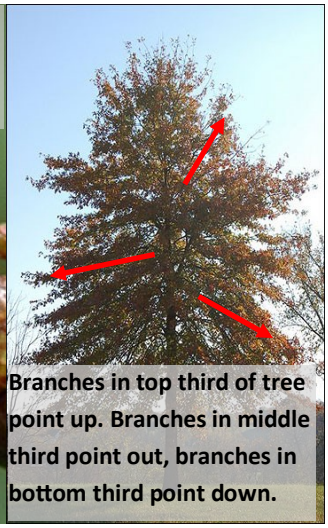


Lobes do not taper like *Q. coccinea.*

Lobes are deeply cut (3-5 per leaf).

Tufts of orange-brown hair are prominent in vein axils.

Acorns are small (0.5in) and spherical with a shallow cap.

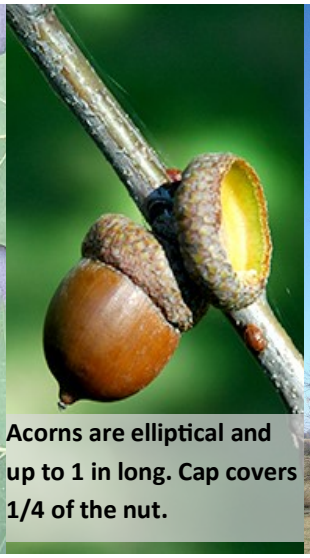


Branches in top third of tree point up. Branches in middle third point out, branches in bottom third point down.

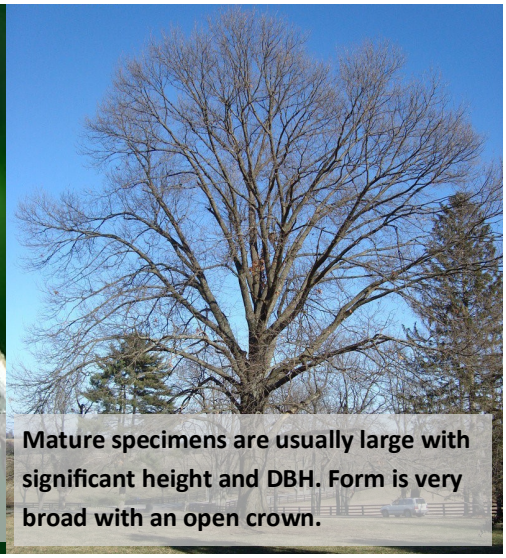
Quercus rubra—Red oak

Lobes do not extend more than halfway to the midrib.

Underside of leaves is pale—hairs are usually not present.



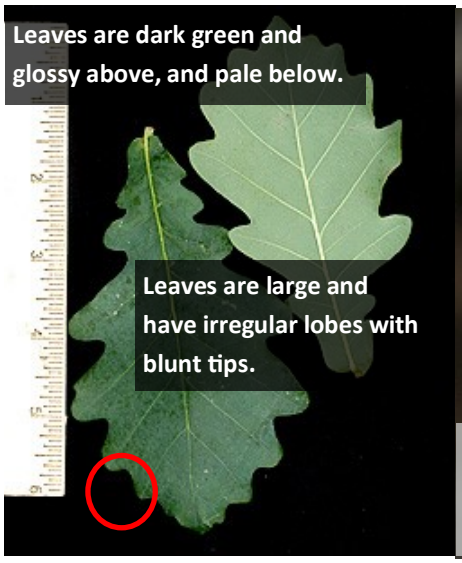
Acorns are elliptical and up to 1 in long. Cap covers 1/4 of the nut.



Mature specimens are usually large with significant height and DBH. Form is very broad with an open crown.

Quercus phellos—Willow oak

Quercus bicolor—Swamp white oak



Quercus garryana—Oregon white oak

There are over 600 species of oak trees. guide showcases just a few of the oaks we might see this summer. If you come across one that you have never seen before, please call staff or the arborist-on-call and take a sample! If Urban Forestry staff is stumped, we'll ask the experts at Hoyt Arboretum.