Bur oak (Quercus macrocarpa) is a deciduous, medium to tall tree native to much of North America. Bur oaks can have a broad, spreading crown and reach over 100 feet tall with thick trunks. They are long-lived and can reach over 400 years old. Like all oaks, bur oaks have an alternate branching pattern. They thrive in rich, deep lowland soils but can also grow in acidic upland habitats with more stunted height.

Leaves are lobed, and variable, with shape varying on a single tree. Top sides are darker, shiny green while bottom sides are lighter green and hairy. In autumn the leaves turn yellow to brown.

Bark is thick and gray to brown. As bur oaks age their bark becomes irregularly scaled.

Bur oaks bloom May - June and are monoecious (male and female flowers on the same tree). Male flowers are borne in catkins (drooping stalks of flowers) that are slender and hairy with green to brown flowers. Female flowers have short stalks and are reddish and very hairy. Research suggests that while bur oaks can self pollinate, cross-pollination between trees has higher germination rates.

Like all oaks, bur oak fruit matures into acorns in the autumn. Bur oaks vary in size and shape but are notable for their large caps that are heavily fringed. These are some of the largest acorns produced by any oak.

Acorns are consumed by many wildlife species including birds, bear, small mammals, and deer. Large ruminates browse bur oaks. Mature trees serve as habitat for birds and small mammals.

Bur oak's species epithet, macrocarpa, comes from the Greek macros (large) karpa (fruit).

Tree of the Month is a collaboration between BEAT, the City of Pittsfield, Pittsfield Tree Watch, and the MA Department of Conservation & Recreation's Greening the Gateway Cities Program. Find out more at thebeatnews.org.
QUERCUS macrocarpa.
Ower Cup White Oak.