Tree of the Month July-August 2017

## Burr Oak, Quercus macrocarpa

text and photos by: Lesley Bruce Smith, ISA Certified Arborist

The Burr Oak, or *Quercus macrocarpa*, is one of our absolute favorite trees. It's magnificent stature is a



Distinctive Burr Oak Bark



stand out in the native Illinois prairie. It has a really thick, sometimes several inches, tough craggy bark that just can't be mistaken for any other species and that same bark makes it able to survive the prairie fires that raged across the Illinois plains in earlier days. It's why we still see it's rugged architecture against the winter skies. It's profile and winter silhouette is unmistakable as well. Personally, I think the leaf structure is among the most interesting and definitive of all native Illinois trees. Like many Oak species it has tough leathery leaves that match it's bark and which will remain in the landscape long after falling from the

tree, gently leaching it's life giving minerals and biomass back into the environment giving it's progeny all the nutrients needed for healthy growth. Those distinctive leaves also have a beautiful soft silvery back that when the wind blows, create a delightful dance of color between the silver grey and green (Arborsmith's company colors). It's

acorns are also very distinctive with their fuzzy caps, and well loved by both the squirrels and wild boars/pigs.

The Burr Oaks are in the white oak family and like all oaks create a lot of tannins. Tannin is a naturally occurring polyphenol that is found in plants, seeds, bark, wood, leaves and fruit skins. Approximately 50% of the dry weight of plant leaves are tannins. As all sommeliers know, the "oaky finish or oak like aroma" that some of our favorite wines exude come from both the grape and the oak barrels in which the wine is stored and aged. Tannin adds both a bitterness and astringency as well as "complexity" to wine. The tannins can also come from oak chips and



Silver Grey and Green of the Burr Oak leaves

oak staves which have become "more affordable" but that is hard to say because Oak



A beautiful Cabernet in the leaves of a Burr Oak tree

barrels can last up to 70 years and the tannins dissolve through contact. Oak tannins are also used in fiber dyes. The British Navy depended on large oaks and had pretty much used up their supplies by the American War of Independence. They thought poorly of American Oaks until the impregnable USS Constitution, affectionately called *Old Ironsides* by US sailors, which required fifteen hundred American oaks to build. The *USS Constitution* is the oldest commissioned ship in the world that is still afloat to this day!

So the next time you raise a glass of your favorite Cabernet you can thank an Oak tree and remember that many oaks helped preserve our nation.