At a recent meeting of maple producers in New England, I asked the question “how many people would never tap a red maple?” Half the audience raised their hands. Why do so many sugarmakers reject this species for sap collection—is it fear of buddy sap, low sugar content, or bad tasting syrup? The existing resource in the Northeast is hard to ignore, it is huge and expanding according to recent US Forest Service data. In Vermont there are reported to be over 40 million live red maples at least 10” dbh, while Maine, Pennsylvania and New York have far greater numbers of trees this size. For many sugarmakers, red maple deserves a second look.

There are several reasons why red maple is now so abundant (some people call this species “soft” maple, but that term could also be used for silver maple, which is usually confined to river banks and swamps). Red maple is fast growing, and will usually outstrip the growth of hardwoods such as sugar maple and beech in abandoned farm fields. Human caused events—the introduction of chestnut and elm blight, high grading, which is the removal of more valuable timber species, and fire suppression, as fire is more damaging to red maple than most hardwoods—have all caused red maple to become more competitive in our forests. Red maple is characterized as resistant to ozone and acid rain, and in some areas where air pollution contributes to mortality of mature sugar maple, the canopy is being replace by red maple. Although it is susceptible to several unsightly but less damaging leaf diseases, insect defoliation is usually less severe in red maple than in sugar maple. Forest tent caterpillars avoid it altogether. Keeping red maples in a stand adds to its diversity, which has recently been shown to reduce overall insect and disease attacks compared to a stand of pure sugar maple.

Red maple and sugar maple differ in several other respects. Sugar maple is usually confined to moist but well-drained soils, while red maple will develop a root system suitable for almost any site—from dry ridges to swamps and bogs. Sugar maple may live to 300+ years, while red maple rarely exceeds 150 years. Red maple flowers almost every year (the brilliant red visible early in the spring before the leaves emerge) and the seeds fall in the late spring; sugar maple flowers less frequently and the ripe seeds drop in the fall. Red maple stumps often sprout to yield a clump of poles from the same base; often these have defects and are not destined to become full sized trees. Large wounds, as well as branch stubs are more readily subject to decay in red maple than in sugar maple. Sugarmakers who tap red maple report that tapholes usually close rapidly, but spouts driven hard can cause a considerable split in the cambium above and below the hole. Red maple branches break more readily from wind and ice.

So what about red maple as a tree for sap collection? I spoke to several people whose sugarbushes consist of a large proportion of this species, and concluded that there are few if any generalizations that can be made. Some described their syrup flavor as “more maple,” some as “more caramel;” all claimed that their customers were very happy with it, and the differences in flavor seem to echo the vast differences also found among sugar maple syrups from different soils and regions. Haven King, who buys syrup all over the Northeastern US and Canada for Maple Grove Farms of Vermont, told me that some of the best syrup he tastes comes from sugarbushes that are mostly red maple. Sugarmakers had varying descriptions of the niter produced from boiling red maple sap, with the yearly range from white to black, light to heavy—just as is typical with sugar maple. No one described problems with buddy sap; apparently most red maples shut down as the buds begin to open, or the sap turns buddy at about the same time as sugar maple. Sugar content was typically lower, but only by a couple tenths of a degree brix. Some stands of red maple ran
earlier than sugar maple stands, some did not. Syrup made from a predominance of red maple is often a bit darker than sugar maple syrup, but not dramatically so. Sugarmakers who collected with buckets described some red maples, those having very shaggy bark, as poor sap trees, while other trees were often very high yielding. Trees growing in a swampy area often have large heartwood centers, necessitating shallow tapholes.

Many maple producers are poised to expand their operations, given the increasing prices for syrup. With the vast amount of untapped red maple in northeastern forests, in some states exceeding sugar maple in numbers of tapable trees, it makes sense to take advantage of this species. While tapping a stand that is largely red maple may scare some people, there is no reason to avoid these trees when they occur in your woods.

A handsome red maple in the sugarbush at the UVM Proctor Maple Research Center.