It's Maple Tapping Season

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There are several species of maples that can be grown in the urban landscape with differing levels of success in western South Dakota. These include sugar maple, silver maple, and boxelder maple. If you are fortunate enough to have one or more of these trees with any size to them in your yard you can tap these trees and make some maple syrup. This week I am sharing some information from Dr. John Ball, our forestry specialist and SDSU faculty member, on tapping maples and making syrup.

We don't have maple syrup producers in South Dakota due to the rarity of sugar maple stands of sufficient size to warrant the effort but you still can produce syrup from the maple tree in your yard. The tree must be a healthy maple tree, do not tap ones that have dead and dying branches nor tap a tree that has decay, long scars or cavities present. The ideal maple tree is one that is stout, a large short trunk and then lots of branches and a big round crown.

Once you have selected a good candidate, measure around the trunk of the tree, its circumference, at about 4 feet from the ground. If the maple tree is at least 32 inches in circumference, it is large enough to tap. You can place one tap in a maple tree that is between 32 and 60 inches in circumference. You can add another tap if the tree is larger than 60 inches and the two taps should be spaced roughly equal distances around the trunk. I do not recommend homeowners place more than two taps in a tree regardless of its size.

Once you determine how many taps you can use, start constructing the taps. Start with a section of 5/16 or 7/16 inch diameter hollow copper tubing and cut it into 2-inch lengths for each tap. Next drill a similar diameter hole about 1 ½ inches into the tree, slanted slightly upward as you drill in, this allows for better flow, and tap the copper tubing about 1 inch into the hole. The best day to drill and place the tap is one that is warm, about 45°F or more, as there is less chance of splitting the wood. Also be sure to use a sharp drill. The hole should be placed about 3 to 5 feet above the ground and no closer than 6 inches to an older tap hole.

Place a one-gallon bucket beneath each tap. You'll probably have to hang the bucket from a nail and put a cover over most of the bucket to reduce debris from collecting in the sap (stainless steel milking pails work great). Once the sap begins to flow it may continue to so for anywhere from two to six weeks. The early season's sap is light and low in sugars. As the season progresses the sap becomes dark and sweet. The season ends when the buds are beginning to expand as the sap become cloudy and less sweet as well as an off-flavor, almost a bitter butterscotch taste. Once the season is over, remove the taps from the tree with a pair of pliers. Do not place anything into the hole and do not use the same hole the next year or drill one directly above or below it in the following year.

During the sap run a single tap may produce anywhere from 1/4 to 1 gallon of sap per day though the sap will not flow every day. If the tree is a sugar maple the sap may be anywhere from 2 to 6 percent sugar. It is typically much less for other maple species. The general rule for

syrup is a ratio of 35 to 1 for sugar maple, meaning 35 gallons of sap will boil down to 1 gallon of syrup. Silver maples it may be more like 40 or 50 to 1 (though there are silver maples with as sweet of sap as sugar maples in South Dakota). Boxelder, a tree that many do not realize is a maple, has an 80 to 1 ratio, not too sweet but sweet enough that the Lakota once tapped these trees for the sugar. I have done it and the finished product is as sweet as that produced from a sugar maple – it is just more work!

Most folks are not going to obtain enough sap from their yard trees to make syrup and boiling it down is not an easy task. The best use for the sap may be for your coffee or cooking. The raw sap can be kept for several days in the refrigerator. I like to use it for my coffee water in the morning. The raw sap adds just enough sweetness for my taste and even gives a slight maple flavor to the coffee (and it's another excuse to drink a gallon of coffee a day).

I hope you enjoyed Dr. Ball's thoughts on tapping maple trees and give this a try if you have an appropriate tree or two. As always you can give me a call at 605-394-2188 or e-mail me at *ricky.abrahamson@sdstate.edu* if you have questions or comments about this article or any other horticultural topics.