

Minnesota Grown Maple Syrup

A Local Sweet Treat

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It's maple syrup season in Minnesota! Stu Peterson of [Camp Aquila Pure Maple Syrup](#) and President of the Minnesota Maple Syrup Producers' Association gave us insight into Minnesota's maple syrup industry, how maple sap is collected and made into syrup, and shared his favorite uses of the sugary treat. You can find [over 30 maple syrup producers](#) in the Minnesota Grown Directory!

Meet the Farmers



Stu and Corinne Peterson
Camp Aquila Pure Maple Syrup
Dent, MN

Stu and Corinne's maple syrup has received numerous awards including first place in 2013 from the North American Maple Council, first place in 2013 in the Minnesota Maple Association Syrup Competition, and a blue ribbon in 2011 at the Minnesota State Fair.

Camp Aquila Pure Maple Syrup

Before Camp Aquila was purchased by Stu and Corinne Peterson in 1983, it was a boys' summer camp. The camp's owner wanted to ensure that whoever he sold the land to would not "cut it up and develop it." When they purchased the land, they invited the DNR to develop a forest stewardship plan because 60-70% of the land was heavily wooded, and they determined it would be a great opportunity for a sugar bush (a maple sugaring operation). The thought of tapping their own maple trees really appealed to Stu and Corinne and after the idea ruminated for some years, they tapped their first 50 maple trees in 2000. They stayed at 50 taps until they built their own dedicated sugar house, purchased a commercial evaporator, and got a license for production. Today, Camp Aquila Pure Maple Syrup taps around 1,300 maples annually and sell most of their syrup wholesale to stores in Minnesota.

The Science of Sap and Syrup

Stu gave us a lesson on the basics of sap collection and syrup. Maple sap is collected in spring when nights get below freezing and days are warm. These freeze-thaw cycles cause the sap to "run" and makes it easy to collect. Because sap flow is so dependent on temperature, maple syrup production begins in the southern part of the state and moves north as the season progresses. It continues to flow as tree buds begin to form, and then begins to slow. However, the chemistry of the sap begins to change when the tree buds and produces a syrup with an off-flavor that is less valuable on the market. When maple sap first begins to run, the syrup produced tends to be much lighter and darkens as the season continues. This change in color also indicates a change in taste. Lighter syrup will have a more delicate, subtle flavor and as it darkens, flavors deepen and become stronger.

Sap is the only ingredient in pure maple syrup. After it's collected, all the water is evaporated until only the sugary syrup is left. Typically, it takes around 40 gallons of sap to produce one gallon of syrup. Camp Aquila can usually collect anywhere from five to seven gallons of sap per tree during the season. The amount they collect varies tremendously on the weather. During their least productive year, Camp Aquila collected an average of two gallons per tree, and their best year yielded an average of 10 gallons per tree. Camp Aquila uses a nonpermanent gravity system to collect their sap.

Larger commercial operations will use a vacuum to extract sap from their trees, doubling the amount of sap they collect. Vacuum systems don't technically suck sap from the trees, but lowers the pressure in the tubing and encourages sap flow. They are no more damaging to the tree than a gravity system. A main cause of excessive harm to a tree while sugaring is too many taps. Camp Aquila and most other producers adhere to the standard of a single tap in each tree per year and two if the tree is large. Four to five taps in a tree was previously used as the standard, but is now considered to be harmful.



Minnesota Maple Syrup

Maple syrup can only be produced in a specific region in North America and nowhere else in the world. Minnesota is lucky to be one of 19 states in the U.S. and 3 Canadian provinces that can produce maple syrup. The state is not included in the USDA National Agriculture Statistics Service's annual maple survey, so it's difficult to report hard numbers on how many producers are in Minnesota, the number of maples tapped, and how much maple syrup is made. Stu speculates there are probably around 125,000 or more taps in Minnesota producing roughly 35,000 gallons of syrup including hobbyists and professionals. With a gallon of pure maple syrup retailing for around \$75, it's a two to three million dollar industry.



Based on these numbers, describes Minnesota maple syrup as a boutique industry. Commercial operations tend to be smaller and maintain an average of 2,500-3,500 taps or fewer like Camp Aquila. Additionally, there are many hobbyists making maple syrup just for themselves and do not sell it. The largest maple sugaring operations in the state (there only a couple) maintain around 20,000 taps—comparatively smaller than maple states to the east. The largest commercial operations tend to exist in the more eastern states like Vermont and New York. In some cases, a sugar bush in Vermont taps more trees than all the producers in Minnesota combined.

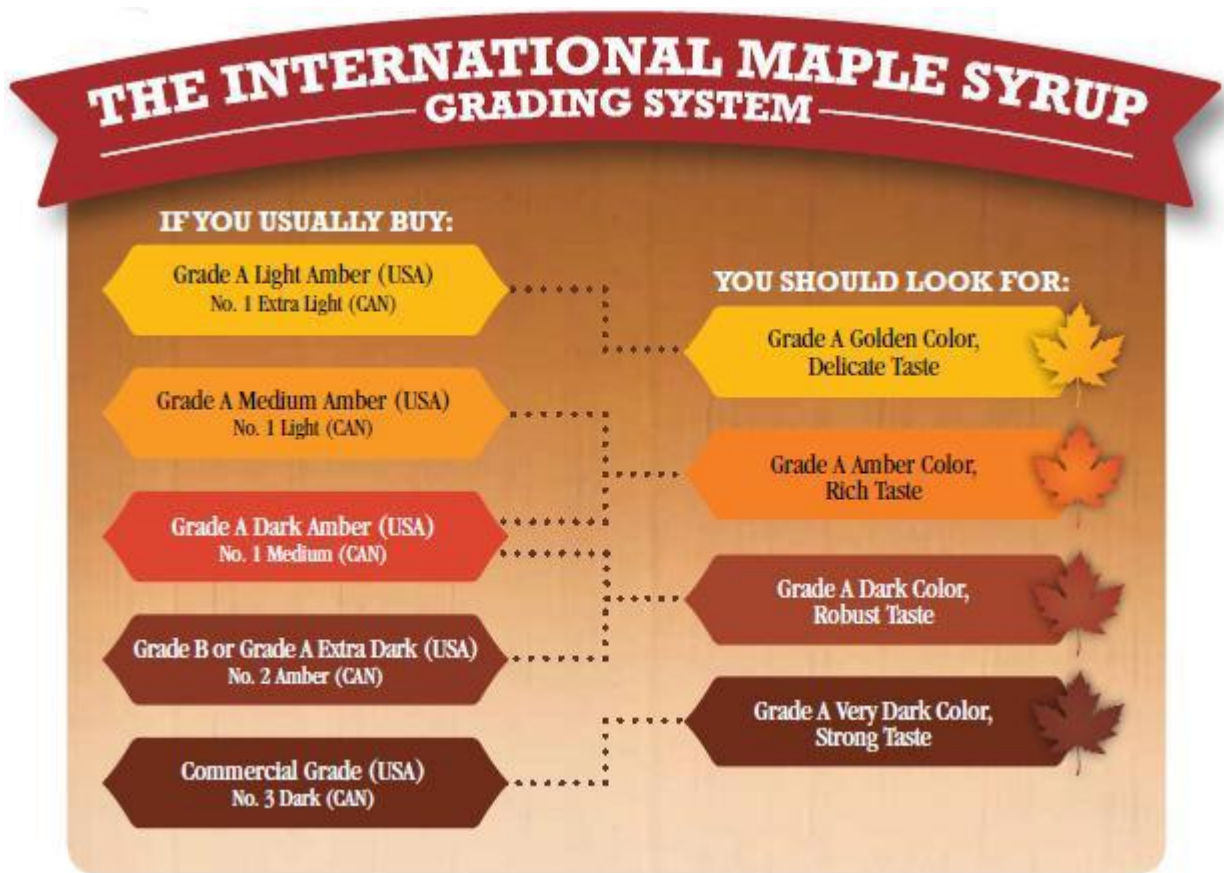
Minnesota maple syrup has a peculiar advantage to the maple syrup produced in other states. The sugar content of Minnesota maple sap tends to be higher than other states; though no one is quite sure why. Most maple states out east tend to collect sap with a 2% sugar content, while Minnesota producers like Camp Aquila Pure Maple Syrup consistently collect sap with a 3% sugar content. This higher sugar content decreases the amount of sap it takes to make a gallon of syrup.

New Grading System

Last year, both the U.S. and Canada adopted a new grading system for maple syrup to better differentiate flavors. Previously, maple syrup was graded: Grade A light amber, Grade A medium amber, Grade A dark amber, Grade B, and Substandard Grade. Grade B was popular for cooking and baking because of its deep, rich flavor and was raised to Grade A in the new grading system. All maple syrup is now considered Grade A and is still differentiated by color and flavor.

Grade A golden color is described as having a delicate taste, equivalent to the previous Grade A light amber. Grade A amber color is said to have a rich taste, Grade A dark color has a robust flavor and Grade A very dark has a strong flavor.

This



infographic from Anderson's Maple Syrup shows how the old grading system translates into the new grades.

Enjoying your Minnesota maple syrup

Maple syrup is more than a simple pancake topping and can be added to many recipes as a sweetener while adding its signature flavor. Stu gave us lots of ideas for using maple syrup in everyday meals. For breakfast, Stu replaces refined brown sugar with his maple syrup as a sweetener in oatmeal. In addition to maple syrup, he enjoys adding dried cherries or cranberries, a dash of cinnamon, banana slices, and a small pat of real butter to his oatmeal.

He also adds it to his “secret sauce” he uses for a glaze when grilling or drizzles over an entrée and says it’s particularly delicious with burgers, pork and salmon. We were fortunate enough to be let in on Stu’s secret recipe: one part Camp Aquila Pure Maple Syrup, one part honey mustard (his favorite brand is Space Aliens), and one third Masterpiece Original Barbeque sauce. For sweet a side dish enhancement, Stu suggests topping your sweet potatoes or squash with maple syrup, pepper, and butter.

For dessert, try a Camp Aquila sundae. It includes a scoop of fresh French vanilla ice cream sprinkled with cinnamon, a couple table spoons of Camp Aquila Pure Maple Syrup, and top with whip cream, chopped nuts, and a cherry.

Looking for more recipes or information on Minnesota maple syrup production? Visit the Minnesota Maple Syrup Producers’ Association at www.mnmaple.org.