

MN Department of Agriculture

Minnesota Agriculture in the Classroom Website

Commodity: Maple Syrup

A Native American Food

Native Americans were the first to use the maple tree's sap.² Tribes across the Great Lakes and New England areas knew how to turn it into an important food product. They made syrup and sugar and used it to cure meat or sweeten medicines. It gave them nutrients in their diet, like calcium and iron. And they traded it with other tribes and Europeans too.³

In Minnesota, people from the Ojibwe and Dakota tribes have been making maple syrup and sugar for centuries.⁴ Traditionally, they cut the trees with an axe and put in a hollow twig as a spout.⁵ They hung birch bark buckets below to collect the dripping sap. They could freeze the sap and remove ice at the top. They would boil it to release more water. This condensed the sap into a golden syrup. If they cooked the syrup more, it became sugar. This would last all winter long.⁶

Native Americans passed on their knowledge of the maple tree's sap to others. And with the metal pots that came with Europeans, the heating process changed too. Soon more people were making the sweet syrup so many love to eat.

See how Dakota people traditionally made maple syrup and how they make it today:

https://youtu.be/OSsi_Jo9bRI?si=nRwN_HY6DfHNbQ0W

² https://files.dnr.state.mn.us/education_safety/education/schoolforests/activities/wolf-ridge-maple-syruping.pdf

³ <https://www.americanindianmagazine.org/Indigenous-origins-of-maple-syrup>

⁴ <https://www.mnopedia.org/thing/maple-sugaring-and-ojibwe>

⁵ Sumac twig, <https://www.mnopedia.org/thing/maple-sugaring-and-ojibwe>

⁶ <https://www.mnopedia.org/thing/maple-sugaring-and-ojibwe>

Sweet Maple Trees

All trees make sap, but not all sap is sweet! Different kinds of maple trees can be used. But in Minnesota, four kinds of maple trees are the main ones used to make the sweet sap that's good for syrup.

Sugar Maple

This tree makes the sweetest sap!

Red Maple

Silver Maple

Boxelder Maple

Turning Sap into Syrup

What do you need to add to sap to make it into syrup? Not one thing! You just need to take water away.

In Minnesota, sap begins to flow when temperatures start to rise after the cold winter. This is in February, March, or April.⁷ Here are the steps to turning that clear sap into golden syrup.

1. First you need to drill a hole into the tree using a 5/16-inch drill bit. Angle your hole up and don't drill too deep—1.5–2 inches will do! Then you add a spout where the sap will flow out. Next, hang a bucket under the spout to catch the sap. Large producers use tubes to send sap to a large collection tank. With three or four gallons of sap, you can start making syrup. Store your sap in a cold place until you are ready to make it into syrup.
2. To do so, the sap must boil in a pot outside. This releases water as steam, and the sugary part of the sap gets thicker.⁸ Large producers use a machine to take out some

⁷ https://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/maple_syrup/maple_syrup.pdf, <https://extension.umn.edu/goods-your-woods/homemade-maple-syrup#sap-producing-maple-trees-in-minnesota-1953210>

⁸ https://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/maple_syrup/maple_syrup.pdf

water before they boil the sap.⁹

3. After the sap has thickened into syrup, it has to be cleaned. You need to filter the syrup. This removes dirt or hard bits that you should not eat. At home, you can pour the syrup through cheesecloth.¹⁰
4. Large producers will check the quality. They grade it for color, clarity, density, and taste.¹¹ Then it goes into clean jars in a cool place to store for later.

Tap into the Fun of Making Maple Syrup

<https://www.youtube.com/watch?v=lxPOaQJ4xm0&t=1s>

Grades of Maple Syrup

Not all maple syrup is the same. It varies in color and taste. So, producers group syrup into grades. Darker syrups have a stronger taste. Lighter syrups have a milder taste. Here are the four grades of maple syrup.

Golden¹²

This is the lightest syrup. It usually comes from the beginning of sap season. It has a golden color and a hint of maple and vanilla flavors.

Amber

This syrup has more of a reddish color. It has more of a maple flavor. It is what people usually want for their pancakes.

Dark

With a darker red color, this syrup has a stronger flavor. You can taste much more maple in this grade.

⁹ <https://vermontmaple.org/how-maple-syrup-is-made>

¹⁰ https://files.dnr.state.mn.us/destinations/state_parks/activities/maple_syruping/diy_maple.pdf

¹¹ <https://vermontmaple.org/how-maple-syrup-is-made>

¹² <https://extension.unh.edu/blog/2022/03/making-grade-color-flavor-maple-syrup>

Very Dark

This grade is almost dark brown in color. Its maple flavor is very strong. It is a good choice if you want to cook with maple syrup.

Using Maple Syrup

You can use maple syrup in many ways. But people often think of breakfast foods for this sweet ingredient. It's great drizzled over pancakes, waffles, or French toast. It sweetens hot cereals and cinnamon rolls. It's also added to bacon and breakfast sausage.

Maple syrup makes a great glaze as well. It can be brushed on meats, like ham or turkey. It's tasty on salmon too.

And it goes well with fruits and vegetables. You can make salad dressing with it or mix it with butter to add to steamed vegetables. It's also great drizzled onto a fruit salad or mixed into baked beans.

Some people use maple syrup instead of sugar or honey. They bake with it or mix it into their tea or coffee. You can add it to lemonade or pour it on ice cream sundaes too! This ingredient can sweeten all kinds of foods.

Try this simple recipe for a tasty snack!

[Maple Candied Nuts](#)

Minnesota's Maple Syrup

Around 100,000 to 125,000 taps are set each year in Minnesota.¹³ Together they produce close to 26,000 gallons of syrup.¹⁴ Most producers are smaller businesses, with just 2,500 to 3,500

¹³ 100,000: <https://www.mnmaple.org/facts> ; 125,000: <https://minnesotagrown.com/wp-content/uploads/MapleSyrupFinal-1.pdf>

¹⁴ https://www.uvm.edu/sites/default/files/Agriculture/maple/2024_NASS_Maple_report.pdf

taps each year. But there are a few larger producers who keep around 20,000 taps flowing.¹⁵

Minnesota does not make as much maple syrup as other states, like Vermont or Wisconsin. Yet, the state's sap is a bit sweeter than other states. It has around 3% sugar content, while other states have around 2%. No one knows why Minnesota's sap is sweeter, but it means that producers do not need to collect as much to make their syrup.¹⁶

And you don't need to be a large producer to make maple syrup. Lots of people just look in their backyard to find some maple trees. Making maple syrup is a fun hobby anyone can try!

Maple Syrup Fun Facts

- How much sap do you need to make a gallon of maple syrup? Around 40 gallons!¹⁷
- The time that sap flows is called the "sugar season." It lasts about four to six weeks.¹⁸
- Each tap hole releases around 10 gallons of sap in a sugar season.¹⁹
- How big does a maple tree need to be? At least 10 inches in diameter to be tapped without hurting it.²⁰

¹⁵ <https://minnesotagrown.com/wp-content/uploads/MapleSyrupFinal-1.pdf>

¹⁶ <https://minnesotagrown.com/wp-content/uploads/MapleSyrupFinal-1.pdf>

¹⁷ <https://vermontmaple.org/how-maple-syrup-is-made>

¹⁸ <https://www.massmaple.org/about-maple-syrup/>

¹⁹ <https://www.massmaple.org/about-maple-syrup/>

²⁰ <https://www.mnmaple.org/faqs>