

# Maple

**Educator** | **VermontHarvestoftheMonth.org** 

Harvest of the Month provides resources for the cafeteria, classroom, and community to promote the use of local, seasonal foods.



### **Fun Facts**

- Vermont is part of a unique bioregion in the Northeastern US and Canada called the Maple Nation
- Quebec produces over 70% of the world's maple syrup
- Vermont is the largest producer of maple syrup in the United States
- It takes up to 40 quarts of sap to produce one quart of maple syrup
- Other trees besides sugar maples can be tapped for syrup, including red maple, silver maple, and birch, though the sap of those trees usually has a lower sugar content.
- All grades of syrup have the same sugar content. Maple syrup that is produced earlier is lighter in color, and gets progressively darker, as well as tastes more robust, as the season goes on.

### **Maple History and Culture**

Maple syrup comes from sugar maple trees, known as senômozi to the Abenaki. Sugar maple is native across New England, parts of the upper Midwest, and Quebec. In early spring when the days get above freezing but the nights are still below freezing, the trees begin to wake up: Sending energy, in the form of sap, throughout the tree. Many thousands of years ago, the Indigenous people of this region devised a way of tapping into that flow of sap, collecting it in buckets, then boiling it down to get senômozibagw [se-NOH-moh-ZEEbahk], sweet maple syrup and maple sugar. The Abenaki & Mi'kmag people taught this method to early French missionaries in the 17th century, and it became a popular practice of European settlers, a tradition that continues today. Though over the millennia the tools and methods have been updated, we essentially still get syrup the same way. However, the future of maple syrup is in doubt, as rising temperatures and changes in precipitation caused by human-induced climate change is already affecting maple production.

### Sources

- University of Pennsylvania Abenaki Language Glossary: <a href="https://repository.upenn.edu/cgi/viewcontent.cgi2">https://repository.upenn.edu/cgi/viewcontent.cgi2</a> article=1155&context=anthro\_papers
- Massachusetts Maple Producers Association, How Sugar Maple Trees Work <a href="https://www.massmaple.org/about-maple-syrup/how-sugar-maple-trees-work/">https://www.massmaple.org/about-maple-syrup/how-sugar-maple-trees-work/</a>
- Nulhegan Abenaki, *Maple Sugaring* <u>https://abenakitribe.org/maple-syrup</u>
- Travels and Explorations of the Jesuit Missionaries in New France, 1610-1791 https://www.google.com/books/edition/The\_Jesuit\_Relations\_and\_Allied\_Document /6MwxAbXpaHYC?hl=en&gbpv=1&printsec=frontcover

### **Reading Corner**

- *Ininatig's Gift of Sugar:* Traditional Native Sugarmaking by Laura Waterman Wittstock
- At Grandpa's Sugar Bush by Margaret Carney
- Maple Syrup from the Sugar House by Laurie Lazzaro Knowlton & Kathryn Mitter https://www.youtube.com/watch?
  v=kMd|Auvv73|&t=125s
- A Day at the Sugar Camp by Jessica Diemer Eaton
- <u>Kwezens makes a lovely discovery</u>, presented by Leanne Betasamosake Simpson
- The Sugar Bush by Winona LaDuke



## Maple

### **Social Justice Connection**

Did you know that maple products were part of the Free Produce Movement in the 1800's? The idea was to support maple sugaring as an alternative to sugar produced with slave labor. Today, buying maple syrup continues to be a sweet way to invest in local businesses, and advocate for practices that are healthy for laborers and the environment.

Sources:

https://www.huffpost.com/entry/maple-sugar-slavery\_b\_833972 https://foodprint.org/blog/ethical-sugar/

https://www.quakers in the world.org/quakers-in-action/153/Boycotting-Goods-Produced-by-Slaves

Educator | VermontHarvestoftheMonth.org

## **Classroom Connections**

### **Place-Based Education**

### Sugar with a Sugarmaker!

Tap into local expertise. Connect with a local sugarmaker in your area. Extend an invitation to learn together. Look for a community partner who is interested in engaging in an interactive experience with your students. The possibilities are many. Here are just a few:

- an interview with the farmer
- a classroom visit and demonstration of the process of maple syrup production
- a hands-on experience in their sugarbush
- community cooking with maple syrup

Find information on Connecting with Farms and Farmers in this guide from VT FEED (pp 72 -74) https://vtfeed.org/sites/default/files/imce/uploads/Vermont\_FEED\_Guide\_2019\_Community.pdf

### Want more?

Be sure to check out the <u>Extended Harvest</u> <u>Lessons</u> for a deeper dive into all things maple.

### Science

### **Be A Tree**

### **Materials Needed:**

Maple cross-section or image of inside of maple tree

### Procedure:

- Use a cross-section of a maple tree (if you don't have maple, any tree will do) to show students the different layers of the tree, explaining each one's role
- Have groups of students act out the role of each layer:
  - Heartwood: Strong center of the tree, helps it stand tall like our bones do for our bodies; students flex their muscles.
  - Sapwood: Carries water and minerals throughout the tree; students stand in a circle and wiggle fingers up and down to represent the movement of water.
  - Inner bark: Carries food from leaves to the rest of the tree; students pretend to cook/eat.
  - Outer bark: Protects the tree from weather, insects, and disease; students circle around and cross arms to look tough and ward off any pests.
  - Cambium layer: Between sapwood & inner bark; helps the tree grow by adding new layers; students act out building.