



MAPLE SUGARING

Participants tap maple trees and turn it into syrup for their community.

Much like the syrup it produces, the process of Maple Sugaring itself makes things stick together. The routine of extracting sap, boiling it down, and bottling it up is as extensive as it is elaborate, which gives participants a chance to team up over and over again. And by the time the season ends, participants have the chance to display their hard-won expertise, not through a test that they take but by what they give to their community: the syrup itself, of course, as well as an irresistible reason to celebrate together.

TCFD OUTCOMES

This activity is aimed at helping individuals excel in the following categories:

- Motor Skills
- Socialization
- Community

PLANNING A WORDWORKING CLASS

- 1** Tap the tree.
- 2** Harvest the sap.
- 3** Prepare the maple syrup.

THINGS TO CONSIDER

Access to maple trees: Norway maple, sugar maple, and black maple are going to produce the highest volume and concentration of sap.

A Adaptations:

Pre-Teaching: Exposure to maple sugaring can start in the comfort of a classroom or residence.

- Preview the process by reading relevant social stories or books about maple sugaring.
- Practice logging the weather in your location by encouraging participants to look up the forecast for the day and answer questions like: "Is today a good day to tap the maple trees?"
- Bring a drill, spile, and even a tree stump indoors to practice drilling holes and sticking in the spile before venturing outside.

Adapted Tools: If a participant is not able to lift the collection bucket, a sump pump can help transfer sap from one container to another instead.

SAFETY



Consider safety when encouraging participants to use maple sugaring tools like drills and mallets.



Encourage participants to dress warmly, drink lots of water, and use sunscreen.



MATERIALS CHECKLIST

Maple Sugaring Equipment

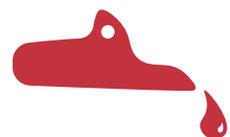
- Cordless Drill
- Rubber Mallet
- Jars for storing syrup
- Covered Bucket for Collecting Sap
- Bin for boiling
- Funnel
- Spile (aka the "tap")
- Candy Thermometer or Hydrometer
- Wool Filter for Boiled Sap
- Containers for Transporting Sap



HOW TO MAKE MAPLE SYRUP

Tap the Tree: Depending on the location and weather, most likely starting in February, a pattern of freezing and thawing temperatures (below freezing at night and 40-45°F during the day) will build up pressure within the trees, priming the sap to start flowing from the tap holes. To coax out the sap, look for a substantial root or branch on the side of the tree that gets the most sun. Drill a hole, and “tap” the tree by inserting the spile. Attach a covered bucket to the spile in order to keep bugs and water out of the sap. As a point of reference, each tree should yield about 10 gallons of syrup per season. Since it takes 40 gallons of sap to make a single gallon of syrup, seven to ten trees should produce enough syrup to make the work worthwhile without spreading your operation too thin.

 Skilled and safe participants can use the drill themselves to bore a hole for the spile. To create a visual cue for when to stop drilling, wrap a piece of tape around the drill bit – participants will know the hole is deep enough when they can no longer see the tape.



 If we could do everything for ourselves, we’d miss out on the experience of teamwork. Rather than focusing on what seem like limitations, combine participants’ abilities in order to get the job done. Participants can...

- Use a rubber mallet to hammer in the spile
- Hang the covered bucket on the spile
- Hold the funnel
- Pour the sap from the collection bucket into the transport containers

Harvest the Sap: As sap continues dripping, check on the buckets several times a week until they fill up, and then transfer the sap into larger containers to await boiling. A funnel with a screen filter can remove any sediment, bugs, or twigs from the sap before it is sealed for storage at 38°F or colder (note: be sure to use it within seven days of collection).

 Hand-eye coordination, spatial awareness, and integrated movement are required to do tasks such as unhooking and rehooking buckets from the trees.

 For participants who are not able to complete hands-on tasks, group leaders can involve everyone by explaining and demonstrating the process as they go or by asking or answering questions (“Which tool do we use to drill the hole?” “Is the bucket full or empty?”).



Prepare the Maple Syrup: Once enough sap is collected, it must be boiled to about 219°F so that only the sugar remains behind. One way to do this is to build an outdoor fire. Utilize a candy thermometer or hydrometer to determine when the sap has reached its boiling point and then immediately remove it from the heat. Purify the hot sap by straining it through a cheese cloth or commercial wool filter.



 The whole boiling process takes about eight hours, so participants can help by adding wood to the stockpile. Picking up and carrying wood strengthens fine and gross motor skills, and the challenge of identifying the appropriate wood in the first place sensitizes participants to the environment around them.

Harvest Festivities: During the maple sugar season, groups can visit or host a “Sugar House” for a tour and demonstration. Another way to mark the end of sugaring season and showcase the participants’ hard work might be to host a Maple Festival or Pancake Breakfast.

 Maple sugaring has long been a social activity, with a community working together to transform sap into syrup. Hosting a celebration or giving away the maple syrup as a gift extends this tradition and fosters a sense of camaraderie.

