Tree Sap is a food
- Many trees produce an edible sap. While mostly water, sap contains sugars and many vitamins and minerals. Traditionally enjoyed as a beverage, sap has many uses.
- Sap has been as a food for thousands of years in cultures all over the world utilizing many species of trees. Sap has been used by animals as a food for millions of years. Examples in human history include: many species of maple (Asia, N. America), birch (Asia, N. Europe, N. America), and palm trees (SE Asia, E. Africa).

Trees Species you can Tap in Western Pennsylvania
- Maples - Sugar, Red, Silver, Norway, Box Elder
- Birch - Black & Yellow
- Walnut - Black and Butternut

When to tap
- Maples + Walnuts
  - Anytime it is below freezing at night and around 40 degrees during the day. Between leaf drop and the buds open. **December to March.**
  - The main season is in Western PA is **February**
- Birch
  - **April** - Soil temperatures start to warm up above freezing
  - Forest floor starts to green up with life

How to tap
1. Identify a healthy tree more than 12” in diameter
2. Drill into the tree about inch inch deep - Use a ½” or 7/16” drill bit.
   - Drill at an upward angle (so sap can flow out using gravity)
   - Drill deep enough so the tap doesn’t fall out. Don’t go more than ~1.5” deep.
   - Note: Sap wood is the outside layer!
3. Tap your spile into the tree with a hammer
4. Watch the sap flow! Now hang your bucket or can on a string to collect your sap.

Cooking with sap!
- The easiest way to use sap is to cook with it. Use sap in place of water when you cook.
  - Try cooking sap with: Carrots and vegetables, Baked Beans, Polenta, Soup, Sweet Potatoes, Roasted chicken, and beef.
  - Try making your favorite beverages with sap: coffee, tea, even beer
Urban Maple Sugaring

Where to tap trees
- If you are lucky you may have a tree in your yard. Some ideas to find trees to tap:
  - Begin by learning winter tree ID (classes, books)
  - Ask your neighbors if you can tap their trees.
  - Look around spaces you have access to that may have maples: school, work, church, community garden, cemetery.
  - Ask for permission before you tap.

How to boil sap into syrup
- You’ll Need a few things
  - Spiles, sap buckets, sap barrels
  - A Boiler and fuel
- Sap is ~2% sugar. Boiling concentrates the sap to 67% sugar. This takes a long time. 40 gallons (or more) of sap will turn into 1 gallon of syrup. That’s 39 gallons of water to evaporate, it’s a good idea to do this outdoors.
- Concentrating sap into syrup can take 8 - 12 hours depending on your boiler, wood, and attention.

Resources:
- The Tree Identification Book, George W.W. Symonds
- The Sugarmakers Companion, Machael Farrel