

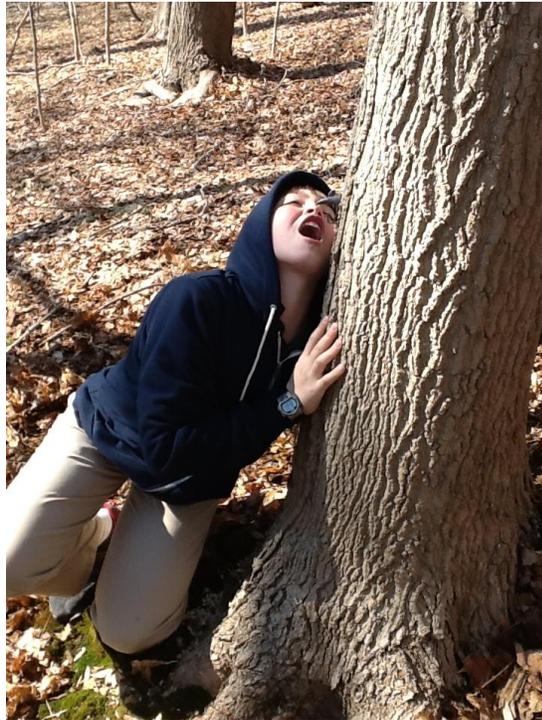
Tapping into the Taste of Real Maple Syrup

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The yearlong focus of GWCS' Seventh Grade science curriculum is Life Science (Biology). At this time of year, students are working their way through the Kingdoms of Life: Archea (Archaeobacteria), Eubacteria ("true" bacteria), Protista, Fungi, Plantae, and, of course, Animalia. Earlier this year, when studying cells and cell function, students learned about photosynthesis in plant cells - how plants use water, carbon dioxide and the energy from sunlight to make glucose - simple sugars. Plants and the other organisms that use photosynthesis (some bacteria and some protists) can make their own food! On this field study, the whole class (students and teachers) got to both see and taste the results.



The 7th grade traveled to the Wissahickon Environmental Center in Fairmount Park for a maple sugar lesson. First students had to find a good candidate to tap. After learning about how to ID maple trees in the winter by their branch pattern and bark, they found a maple tree that was large and healthy. Everyone helped to drill the hole. The students saw first-hand the difference between bark and sapwood as the chips fell away from the hole. Once the spile (the spout-like "faucet" for the sap) was set, sap immediately began to drip out! Everyone got a chance to catch a drip or two on their tongues. Even though it was mostly water, it was delicious! Amazingly, it takes 40 gallons of sap to make 1 gallon of syrup.

Next, the class hiked to the outdoor stove where a large pan of sap was being boiled down. We had a taste test, comparing real 100 percent maple syrup to a name-brand "pancake syrup" containing no maple at all. Almost everyone was able to tell the difference, and preferred the real thing. Finally the students had to earn mini-pancakes with real maple syrup by answering maple questions - everyone won!

It was a cold, brisk day, but that is when the sap runs best: after a night with below-freezing temperatures, and plenty of sunshine during the day. Once the buds open up, the maples need all their sap for themselves, so the maple sugar season is over. The brief season for tapping the trees and gathering sap lasts only from February into early March. Seventh Grade "tapped" into the perfect time of year for this field study.

