

Harvesting Birch Sap

A delicious way to explore water in spring!

OneTree Alaska is offering two at-home citizen science projects for children in grades K-12 (inquire about younger children). See information below.

The “**Tapping into Spring**” project is providing free birch tapping kits (while supplies last) for families to use at home, through the FNSB School District. The kits are also available to purchase for \$25. Instructions and video tutorials are provided. If you are interested, please read the information sheet below, then contact your teacher (K-12) or Jan Dawe at OneTree Alaska: jcdawe@alaska.edu.



Photo by Andy Padilla

Before all the snow melts, birch trees start producing sap. In the two or three weeks before leaves come out, we can harvest this sweet sap. Watch a video to see how it is done: <https://www.youtube.com/watch?v=Sw9JWSum5fs>

There are two ways you can enjoy birch sap:

- 1) Drink sap straight from the tree. Birch sap tastes similar to water, with a slightly sweet flavor, and is rich in minerals.
- 2) Boil the sap slowly to make birch syrup. Birch syrup tastes great on pancakes, but takes work to produce. If you are ready to try making syrup, contact the staff at OneTree Alaska and they can guide you through the process.





Citizen Science Month at Home

Be a citizen scientist from the comfort of your own home!

OneTree Alaska is offering two projects in honor of Citizen Science Month, each appropriate for students of all ages—plus their families and friends! To participate, let your child's teacher know of your interest by the **end of the day on Monday, April 13, 2020**.

These projects are a collaboration between K–12 teachers, the FNSB School District, and UAF. We want to thank you all for your generous support of STEAM research and education in this difficult time.

Project One: Germination Trials

From January until spring break, seven K–12 classrooms in the FNSB School District worked with a different mother tree growing in OneTree's research plot. They compared the germination rate of their tree's 2018 seed crop with the germination rate of its 2019 seed crop. The experiment was timed so that seeds would germinate close to the end of spring break, so that when the students came back, they could count germinants (tiny seedlings) and analyze their findings.

The advent of coronavirus changed all of this, and none of the students know that the results from their experiments are quite striking. Please help the seven classrooms and OneTree complete this project. The more people who join in, the better the results will be. You don't need to have taken part in the germination trials to participate!

During Zoom meetings each week, we'll look at live seedlings from one or two of the mother trees. These meetings are open to all K–12 teachers, students, and family members working on this project. Seedling counts made by all participants in this citizen science project will be combined to generate statistical findings for the study.

This is the **first time** OneTree Alaska has tried to undertake a citizen science project of this size, and we need your help!

Project Two: Tapping into Spring

Each spring, participants in the **Fairbanks Birch Sap Cooperative** bring thousands of gallons of icy cold birch sap to OneTree's production facility on campus, where they are turned into **award-winning birch syrup**. This year, the Covid-19 outbreak makes it impossible to process sap on campus. But you can do it at home! OneTree Alaska will distribute **two hundred home tapping kits, free of charge**, to K–12 students.

Each Tapping in a Tube kit includes:

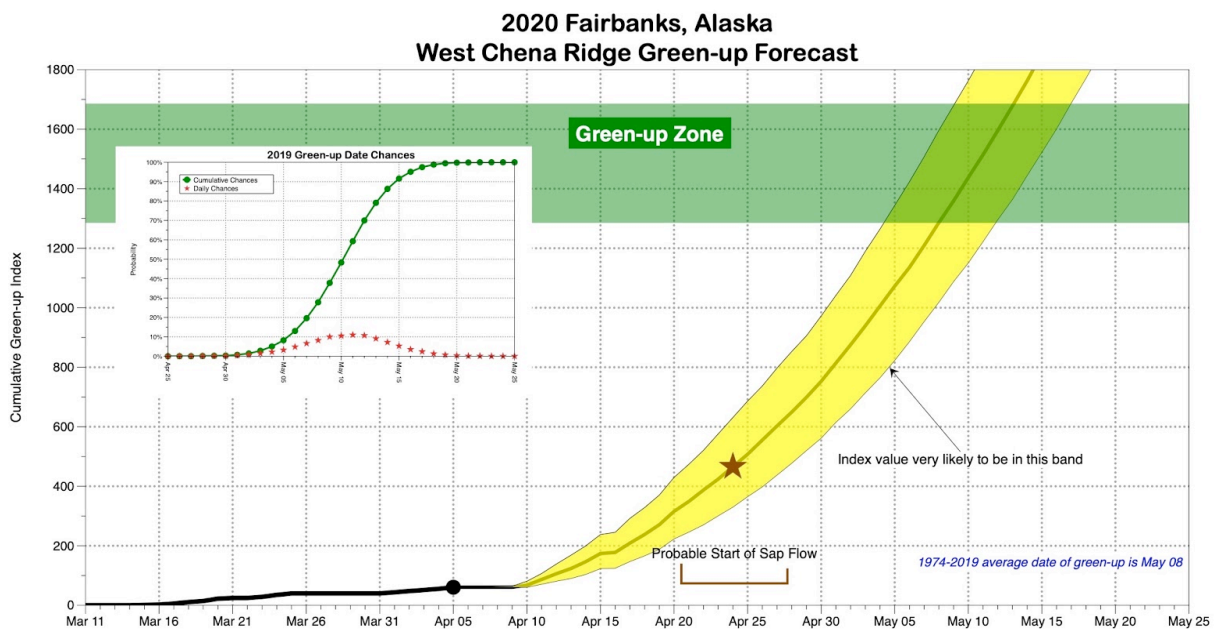
- sap bucket and lid
- spile (i.e., tap)
- 5/16" drill bit
- comprehensive how-to instructions and video tutorials

All you need for this project is a cordless drill, a hammer or mallet for setting your tap in the tree, and, most important, your child's interest. Your student will need a little patience, because the sap season is delayed by our continuing cold weather. The graphic at the bottom of this page shows sap flow is anticipated to begin after April 20.

Those of you tapping for the first time may feel like you're taking a leap of faith, but rest assured: the OneTree Alaska staff and experienced teachers of the OneTree Participatory Teacher-Scientist Action Research Group will support you through the sap season. Check out this how-to-tap-a-tree video made by Chris Carlson: <https://youtu.be/Sw9JWSum5fs>

Choose your own level of involvement with Tapping into Spring! Whether you want to drink your sap or process most of it to syrup, we value your participation. Anticipate spending an average of one to one and a half hours per day when you're boiling your sap. There's loads to learn and lots of fun for the whole family while doing Tapping into Spring at home.

Interested? For more information, **contact your teacher by April 13!**



Graphic courtesy of Rick Thoman, climate scientist at UAF's Alaska Center for Climate Assessment and Policy (ACCAP).