SUMMIT VIEW

The Newsletter of the Friends of Mt. Agamenticus Spring 2022

MAPLE NATION AND CLIMATE CHANGE

Below-freezing nights and warm days in Maine's long, slow spring signal Maple trees that it's time to awaken. Here in the Northeast, it's maple sugaring time. Weather conditions are inextricably tied to maple sap production. The freeze-thaw process draws the sap up from the roots, while positive pressure makes it flow out once a hole is drilled. The sugars in the sap come from the carbohydrates that were stored during the previous season. These are converted to starch when the weather cools in the autumn, then hydrolyzed to sucrose in the spring. It takes approximately 40 gallons of sap to produce one gallon of syrup.

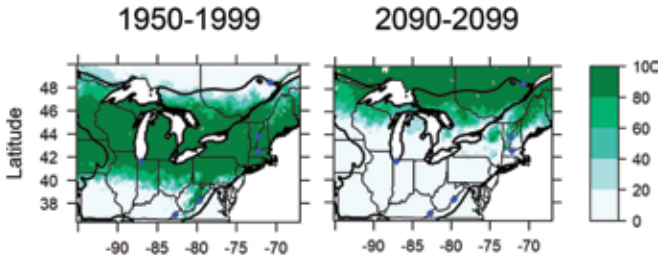
Indigenous peoples of the Northeast view Maples as cultural and ecological keystones, symbols of their region and leaders among trees. About 500 years ago they collected maple sap and to process it into sugar, they dropped red hot stones into it held in a vat carved from a log. It was an important staple, source of nourishment and all-purpose seasoning. The Northeast range of maples was the same region as the first peoples' land who called themselves "Maple Nation". The USDA now labels it the Northeast "Sugar-Bush".

European settlers learned of the Maples' gifts and brought their iron kettles to the process of syrup production. Today, large commercial producers use plastic vacuum tubing systems including reverse osmosis units to vastly speed up the process.

Tapping maple trees for sap is one of the few wild-harvested agricultural products remaining in North America and has become part of the cultural fabric of the Northeast where Vermont, New York and Maine are the top syrup producers. But habitat loss, logging, climate change, pests, pathogens, pollution, even de-icing road salts are affecting the health of Maples and quality of sap.

There are three species of maple that sweet sap are commercially collected from: Sugar Maple (Acer saccharum), Red Maple (Acer rubrum), and Black Maple (Acer nigrum). Research has revealed that 36 out of 158 wild species of maple trees face extinction in the near future. Within the last few years, scientists have seen an "alarming loss" of Maple forest habitat.

Under climate change, both plant and animal species are moving northward where their ideal habitats are situated. For Maples, suitable habitat is in *temperate forest* soils, not northward in *boreal forests*. By 2100, the region of maximum maple syrup flow will be hundreds of miles north benefiting producers in Canada. In the Eastern U.S., tapping season will be 2-3 weeks earlier with less sap per tap, declines in sugar, and a warming future may not allow syrup production at all.



RESOURCES: The Red List of maples | IUCN; What are the impacts of climate change on maple syrup production and can we manage for them? (uvm.edu); Perceptions of U.S. and Canadian maple syrup producers toward climate change, its impacts, and potential adaptation measures - PMC (nih.gov); Maple Nation | Dr. Robin W. Kimmerer's Maple Nation Presentation; 0616climatechange.pdf (mapleresearch.org); Maple Syrup Industry Adapting to Climate Change | U.S. Geological Survey (usgs.gov); Climate Impacts | ACERnet (umass.edu); NECASC Maple Project .pdf (umass.edu); Maine Maple Producers Association - MMPA

Mount Agamenticus Visitor Use Survey Results 2021

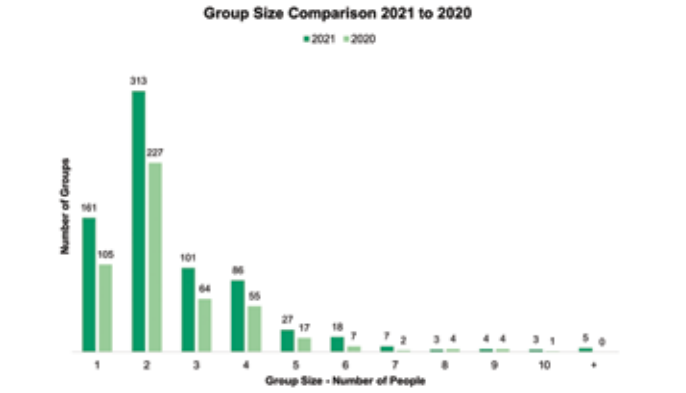
The Mount Agamenticus Visitor Use Survey is a tool that allows us to collect and analyze data on who is visiting Mount A and offers us a chance to receive direct visitor feedback. Data is gathered annually to allow for the analysis of changing trends. This year, we made some minor changes, but continued to track where visitors are from, how often people visit, and what activities they do on the mountain. We received an additional 115 online surveys, bringing the total survey count to 728 representing 1,908 visitors. Like last year, we conducted surveys in person and chose to provide an online option, available to subscribers of our e-mail list and as a QR code that visitors could scan from designated access points. Thank you to everyone who spoke with us directly or who filled out the survey online. We greatly appreciate your feedback, suggestions, and support!

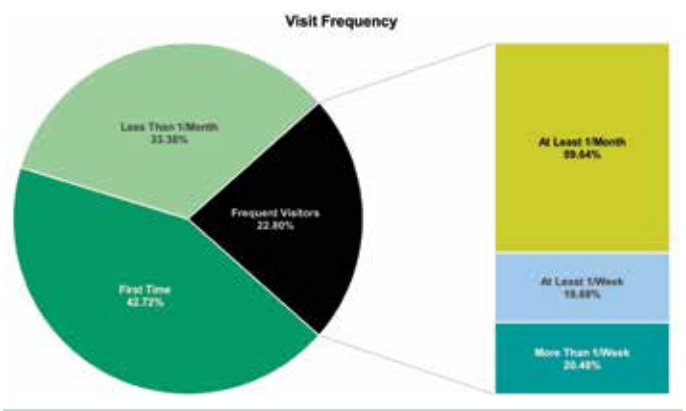
In-person surveys were conducted during the last two weeks of July into the first week of August, and our online survey was available from August through October. From three in-person survey sessions per day for seven days at two locations (Base and Summit of First Hill), we spoke with 1,567 visitors in 613 total surveys. We received an additional 115 online surveys, bringing the total survey count to 728 and individual visitor count to 1,908. This is an increase of 209 surveys over last year, which was the first year we offered an online option. Unless otherwise noted, results for this report are calculated based on total surveys, rather than individual visitors. It should be noted that all survey questions are optional and that no personal identifying information is collected from online or in-person surveys.

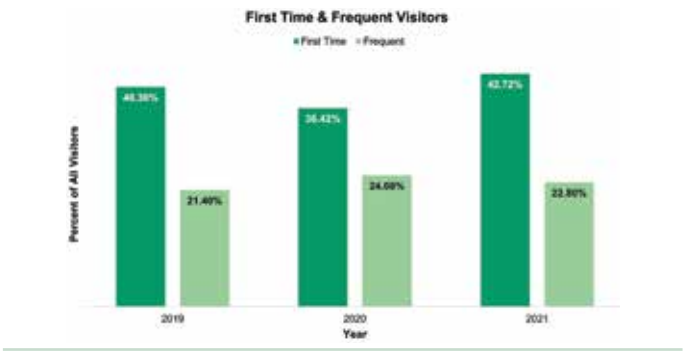
At the end of our time surveying each group, we asked them for any additional comments, questions, or suggestions. Each year, we received a wide variety of answers. While some visitors and trail users did offer criticism or had concerns, the majority of the comments we received were positive. Utilizing an online survey in addition to our in-person survey sessions allowed an additional opportunity for people to provide comment while remaining anonymous.

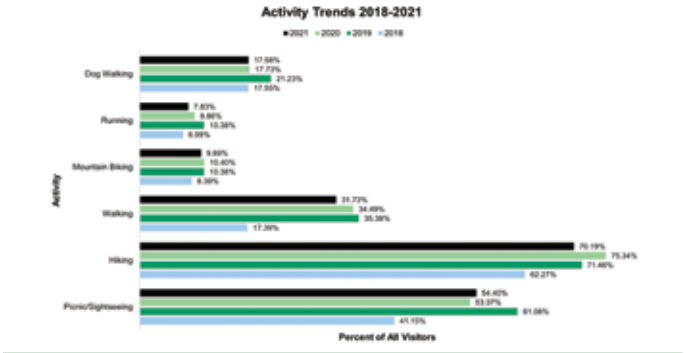
This year, we received a handful of comments expressing interest in specific-use trails, as well as several concerns about fees, overcrowding, and dog waste on the trails. A few frequent users expressed concerns about trail erosion and drainage problems, and some visitors who were new to Mount A noted that blazing, signage, and our trail map could use improvement. Many visitors simply asked us to "keep up the great work," while others appreciated more specifically our efforts in accessibility and preservation of public history. Visitors were divided about our "Carry In/Carry Out" trash policy as well as the upcoming parking project.

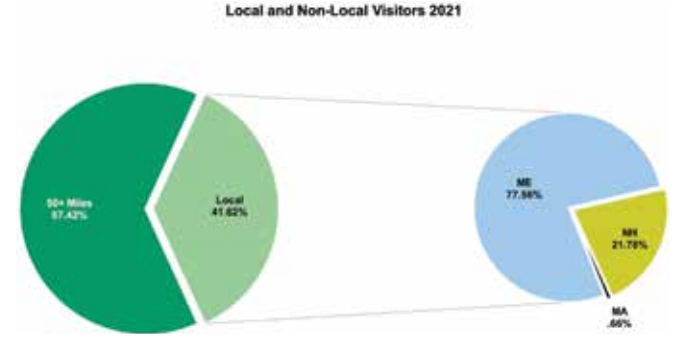
This year continued to challenge us in many ways, but the challenges showed us that places like Mount Agamenticus continue to be important. Our yearly survey is only a snapshot of our estimated 50,000 plus yearly visitors. Mount Agamenticus is frequented not only by many vacationers, but by local visitors that love coming as often as they can. As always, we are surprised by the number of people who are finding their way to the mountain for the first time, and we hope that they will return for many years to come. We will continue our efforts to provide all-important recreational access to the outdoors while maintaining a delicate balance with habitat and water quality.











Species Spotlight Beneficial Bats!

Bindi and Bobbi are non-releasable ambassadors at Center for Wildlife.

Big Brown Bat, *Eptesicus fuscus*

Big brown bats are one of the most common species of bat found in Maine. During the winter, big brown bats go into a state of torpor, inactivity. Though it is not exactly the same as hibernation, it is similar. They spend the winters in their hibernaculum, where the colony of bats will cuddle up together and rest. Bats found in Maine are insectivores, and without active mosquitoes or other bugs in winter, bats must go into this dormant state in order to survive.

Bats become more active in the spring and will have one or two pups in May, June, or July. Many of us are familiar with the sight of bats flying above us on a warm summer evening as we're sitting around the firepit, but did you know that they aren't actually trying to scare you or eat you? They are trying to help! The FDA estimates that bats provide 3.5 billion dollars in free insect control for us, resulting in benefits for human and ecosystem health. Of the 1,000+ mosquitoes a bat could eat in a single night, how many of those mosquitos are carrying diseases that humans can catch such as EEE, Zika, or West Nile? As an insectivore, bats also help farmers reduce the amount of insecticides sprayed on their crop.

Do you have bats living in your attic and would prefer them to find a new home? Big brown bats will often move into bat boxes, which can be homemade or bought at the store. Bats should not be disturbed or excluded during the winter since there isn't any food available for them. There is a very short window in spring from when they "wake up," to when pups are born beginning in May, so mid-August to mid-October is the best time to exclude them and fill an entrypoint, after they have left for the evening to go hunting.

- Kristen Brewster-Melvin, *Center for Wildlife Resident Environmental Educator*

Why are bird eggs different colors?

According to Dr. Curt Stager, most of them start out pretty much white, which is the color of the chalky material (calcium carbonate)—that the eggs are made of; colors come later in development when glands in the oviduct deposit color onto the eggs as they pass through to be laid.

Different colors of eggs come from different breeds of birds, it's not diet related, it's mostly a genetic thing. There are two basic chemicals, one for green or blue and one for red or brown, that make up the colors which can vary widely from almost black (Emu eggs) to metallic (Tinamous in South America).

Supposedly, the process is as mechanical as if there were little paintbrushes—if the egg isn't moving very much, it's going to make a dot (speckle) and if it's moving faster through the tube, it'll make little streaks or more elongated marks.

Birds that don't have plain white eggs will often be ones that build their nests on the ground and the eggs will have speckles on them. You could say that's maybe for camouflage, which would make sense to us, but predators that hunt by scent are not foiled by this, so there might be other reasons, too.

Northern cardinal nest with eggs.

It's really just like a dye or a coloration that gets put onto the eggshell as its coming through the developmental track inside the bird; however, it also makes the shell a little stronger. Additionally, if a bird's diet doesn't have enough calcium in it, they tend to make more speckled eggs.

With a lot of species, such as guillemots, murres and other seabirds that live on cliffs, there are millions of them together on exposed bluffs. The birds can apparently recognize the unique speckle patterns to identify which is their egg and which is their neighbor's egg, so they really are like family signatures.

Excerpted from October 26, 2017 interview with Martha Foley and Dr. Curt Stager on North Country Public Radio, Canton, NY; used with permission.

Robin Ohrt

Steller's Sea Eagle from Asia Visits Maine 12/31/21– 03/5/22

Its epic journey took it from Russia to Alaska to Texas, Nova Scotia, Mass, Maine and recently back to Nova Scotia. Go to the link below to view a great video of the Steller Eagle's visit to Georgetown, Maine!

www.bing.com/videos/search?q=RARE+BIRD+ALERT%3a+STELLER%27S+SEA-EAGLE+-+Maine+Audubon&docid=608004920868209121&mid=CE852C93DC4FC7A065A7CE852C93DC4FC7A065A7&view=detail&FORM=VIRE

Linda Cunningham

PROGRAMMING & EVENTS

For more information and the full list of programs and events, please visit agamenticus.org.

Upcoming Workdays:

May 21 | Spring Trail Maintenance
June 4 | National Trails Day & Intro to Trail Adoption

Workdays run from 9:00am-12:30pm. Space is limited, so registration is required. Please e-mail bjankowski@yorkmaine.org to sign up! Full details are available at agamenticus.org.

Upcoming Programs:

May 14 | 10am-12pm | Pollinator Playdate *(meet at Mt. A summit)*
June 18 | 10am-12pm | Beginner Bird Hike *(meet at CFW)*

Spaces are limited for our joint programs with our friends at the Center for Wildlife. Please visit thecenterforwildlife.org to register.

Youth Intro to Hiking and Leave No Trace

Grades K-3: Saturday, May 21; June 25 | 9am - 12pm
Grades 4-6: Sunday, May 22; June 26 | 9am - 12pm

Mount Agamenticus Nature Journal Club

Meets the third Sunday of each month May-October | 9-11am

Bring your Group to the Learning Lodge!

For the 2022 season, the summit Learning Lodge and Gift Shop will be open to the public on most Saturdays and Sundays from 12-4pm from Memorial Day weekend to Indigenous Peoples Day. The Lodge is also available during the week for scheduled group visits and guided programming. To learn more about the educational options available, fill out our Group Registration form located at agamenticus.org or reach out via our Contact form. We'll be ready for school groups indoors starting mid-May and will continue to schedule through the end of October! *The Lodge is not currently available for events or functions.*

Newsletter written and designed by the Friends of Mt. A.
Scan here to **Like Mount Agamenticus Conservation Region** on Facebook!

2nd Annual Mt. Agamenticus Plein Air Paint Out - *Save the date!*

We are excited to have you join us for our 2nd annual Mt. A Plein Air Paint Out, Saturday, July 30, 2022 (Rain Date July 31st) as part of the York Days festivities.

Members of the public are encouraged to spectate as regional artists paint at various locations around Mt. A to include the summit with its beautiful 360-degree panoramic vista. Artists will be creating and preparing wet paint mounts from 7am - 4pm. The public is also invited to an Opening Reception and Wet Paint Sale at York Art Association from 5pm - 7pm that evening. The artwork will continue to be on display and sale thru August 31st. The York Art Association is located at 394 York Street.

Last year nearly 20 artists from across New England participated. Registration for the 2nd Mt. A Plein Air Paint Out will be open soon for interested artists. We hope to see you at this truly LIVE art event!

This event is is made possible thanks to the generosity of sponsors including Rotary Club of York, Maine and several other local organizations and businesses.