



# SUMMIT VIEW

The Newsletter of the Friends of Mt. Agamenticus

Spring 2019

## The Geology of Mt. Agamenticus

Wilfred B. Bryan

Mount Agamenticus is located within the exposed upper part of the “plumbing system” that supplied lava to a very large volcano that was active about 220 million years ago. The complete structure is nearly circular, with a diameter of about 7 miles, the center being just south of Agamenticus Village in Bracey Swamp. The sharp summit is not “the volcano” as some may speculate; it is, along with Second and Third hills, an erosion-resistant part of one of the circular dikes that once supplied lava to the eruptions. The original volcano may have reached an elevation of as much as 20,000 feet, similar to Mt Kilimanjaro in eastern Africa, assuming a similar angle of surface slopes.

When Agamenticus was active, North America was still attached to Africa and according to current interpretations, a strip of land adjacent to the Maine coast and extending out to the edge of the continental shelf is a piece of Africa that remained “stuck” to North America when the continents began to move apart, forming the Atlantic Ocean.

Mt. Agamenticus is located at the end of a 1000-mile line of conical submarine volcanoes; the oldest of these is located southwest of the Azores island group. This volcanic alignment resembles that of the Hawaiian Islands and the long chain of seamounts that extends northwest from the islands toward Siberia, and which is one of our best examples of a “hotspot trace.” In this interpretation, each island and seamount is like a “puff of smoke” emitted from a fixed rising plume of hot lava as the seafloor drifts slowly over the source. In the Hawaiian example, this concept is generally supported by the increasing age of the islands and seamounts going northwest from the presently active southernmost island.

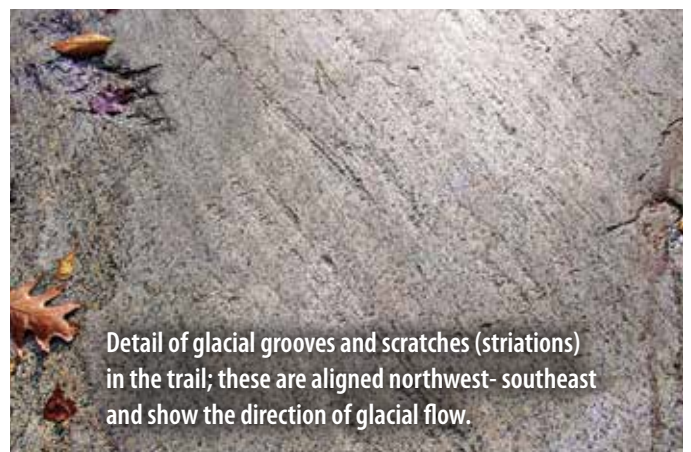
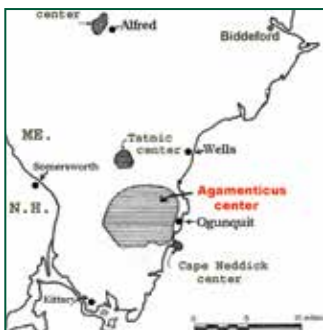
Unfortunately, this model is not well supported by dating of the volcanic structures in New England and Canada. If the “puff of smoke” concept were true here, the oldest “puff” should be near Montreal, the farthest point from the source, and the youngest should be at the seamount closest to the source. The seamounts do get older as they approach New England, but the oldest on-land volcanic centers are in central and northern New Hampshire, while the youngest are found both near

Montreal and in coastal New Hampshire and Maine (Pawtuckaway, Tatnic Hills, Alfred ring dike complex, and Cape Neddick gabbro), and also the Ossipee ring dike complex, located about 60 miles to the north, all dated at about 110-125 million years).

Mt. Agamenticus is a much older volcanic event, apparently erupted before the initial rifting of the Atlantic Ocean. It is only fortuitously located on the alleged hotspot trace. Also, the Canadian volcanic centers are aligned along an east-west line of rifting along the St. Lawrence valley, so may be related to a different magma source and crustal fracture system. These issues and other details of New England volcanic history still remain to be clarified.

Mt. Agamenticus, like the rest of New England, has been covered by at least four major continental ice sheets during the past several million years, but we see direct evidence of only the last glacial episode in most of New England. About 18,000 to 20,000 years ago the ice had advanced as far as the continental shelf and may have covered the Agamenticus region under as much as 5000 feet of ice.

Rock material frozen into the base of the ice acted like a huge sheet of sandpaper as the ice ground its way seaward from northwest to southeast. The effects of the scratching and polishing by the glacier are beautifully exposed on the lower slopes of some of the old ski trails, where soil has been eroded away. Many of the boulders responsible for the grinding and grooving were dropped on the “leeward” side of the mountain and form the boulder fields visible along the Ring Trail on its eastern side of Agamenticus.



Detail of glacial grooves and scratches (striations) in the trail; these are aligned northwest- southeast and show the direction of glacial flow.

# Earth Day Clean Up!



On Saturday, April 27th, we celebrated Earth Day at Mount A with trail and roadside trash clean up, an interactive watershed model, pet pledge and a preview of the upcoming parking and restroom design plan.

Ten volunteers came to help with trash clean up on this volunteer community work day!

Here is what was collected and disposed of:

- 1 Queen Sized Mattress
- 10 Pieces of Pressure Treated Wood
- 1 Wooden Chair
- 9 Full Garbage Bags of Trash
- 4 Full Bags of Cans and Bottles
- 3 Full Recycle Bins of plastic and glass

Thank you to our dedicated volunteers, York Water District, the Town of York, and to Kurgo for providing prizes for our pet pledge!



We are excited to announce that the Friends of Mount Agamenticus group is now a Maine non-profit corporation in the process of applying for 501(c)(3) status. For more information, please visit our website: <http://agamenticus.org/friends-of-mt-a/about/> or contact us via email: [friends@agamenticus.org](mailto:friends@agamenticus.org).

*Please note: since our 501(c)(3) status is pending, deductibility of any contributions will be subject to approval of the organization's application for tax exempt status.*

More news to come soon so watch this space!



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



# Be Aware of Ticks

A wet spring means that ticks are out in Maine in abundance, including here at Mount A. This doesn't mean you shouldn't still enjoy the outdoors and everything the warmer months have to offer, as long as you stay aware and alert.

## Precautions to avoid tick bites:

- Choose light-colored clothing that makes ticks easier to spot. Wear long sleeves and pants; tuck pant legs into socks and your shirt into your pants when walking in woods, brush, or tall grass. Deer ticks attach to clothing and move upward.
- Use an EPA-approved insect repellent.
- Walk in center of trails. Use caution in wooded and bushy areas with leaf litter.
- Do a tick check ANYTIME you have been outside! Inspect your skin, clothing, and pets for ticks and remove them promptly. Don't miss scalp, ears, neck, armpits, behind knees and pelvic region. Have someone else check your back!
- Showering removes unattached ticks that you may not have found. Tumble dry garments on high heat for 10 minutes to kill any ticks remaining on clothes.
- If you spot an embedded tick, use a tick spoon or tweezers to grasp its mouth and pull out with steady pressure. Don't use petroleum jelly, hot matches, or nail polish remover as this can increase the risk of infection. Wash any possible tick bites with soap and water and apply antiseptic.



# WE ❤️ OUR VOLUNTEERS!



## Species Spotlight Turkey Vulture



From Spring to Autumn, you will see them calmly cruising the air currents above Mount Agamenticus on wide, dark wings, perching on the towers or sometimes angling low over the landscape for a closer look at something their keen sense of smell has detected -- Turkey Vultures!

They are one of the largest species of raptors (birds of prey) in Maine, but easy to differentiate from the others due to the signature V shape (dihedral) created by their wingspan during soaring and the "tilting" habit of their flight.

Turkey vultures are drawn to habitats that are common around Mount Agamenticus, including shrublands and open areas at the forest edges, and are valuable members of our "Flying Families." Their nests are created on rocky outcroppings, hollow logs or ground crevices with little or no other materials and usually contain 2 eggs.

At first, the young look nothing like their adult form – instead they are fluffy white with dark heads. Both adults will share in

raising the young vultures who will be able to fly in about 70 to 80 days after hatching. As adults, they will have their signature featherless, red head and a wingspan of approximately 6 feet!

Sometimes they are misunderstood and maligned, but Violet, the Turkey Vulture at the Center for Wildlife has become a welcome addition to their "animal ambassadors" and helps educate the community about the abilities and intelligence of her species.

## The Big A 50K is Not a Running Joke

By Darin Radatz

The ninth annual Big A 50K race was held on Saturday, May 4th, in the Mt. Agamenticus Conservation Region. The course is composed of three 10.35-mile loops starting at the First Hill summit then traverses and summits over Second Hill and Third Hill trails. Footing is technical with plenty of rocks and roots to meander over. The full 50K has approximately 5,787 feet of elevation change.

The Big A 50K was the brainchild of local long-distance runners Rich Collins and Bob Najar about a decade ago. They wanted to create a fun social event for like-minded people that was runner focused and would let people be as competitive as they want to be. The awards for winning the race are personal bragging rights and there is a potluck style BBQ to foster community among the race participants afterwards.

In addition to providing a challenging trail running event, the race is also an important fundraiser for the trail construction and maintenance costs incurred by the Town of York for the trails in the Mt. Agamenticus Conservation Region. The race this year had a record number of starters (with 102) and finishers of the full 50K (42) and was able to fundraise over \$2,000 for the Mt. A Conservation Program!

This event is a great example of partnership between a recreational user group of Mt. Agamenticus and the natural resource management practices of the park. The race is held each year the during the first weekend of May.



## Upcoming Programs & Events

### Wetland Walk

**Saturday, June 8th, 10AM - 12PM**

The Mount A region has the highest concentration of vernal pools in the state and is home to three threatened and endangered species. Join us and the Center for Wildlife with live turtle ambassadors to learn about seasonal life cycles, critical habitats, and the difference between facultative and obligate species. Then hike to nearby vernal pools, ephemeral streams and wetlands. Open to all ages, moderate hike.



### Bat Brigade

**Saturday, June 13th, 10AM - 12PM**

We have some amazing flying mammals that are skilled insect combatants. Learn more about this native and natural mosquito control and their struggle with White-Nose Syndrome. Come meet one of the CFW's bat ambassadors! Optional bat box building workshop to follow. Program is open to all ages; parental guidance required for bat box building. Bat box building requires an additional \$20 materials fee.

Program registration is required. Reserve your spot by e-mail: [fellow@thecenterforwildlife.org](mailto:fellow@thecenterforwildlife.org). Your donation of \$7/person makes these programs possible! Please dress for weather!

### Become a part of our Team and greet visitors! *Become a Learning Lodge Docent*

The Friends of Mt. A are seeking more volunteers to help out in our environmental education facility at the summit. You will greet weekend visitors as they explore the Learning Lodge, answer questions, and promote our current work and conservation goals. If you are interested, please contact the Conservation Office at 207-361-1102 or visit [agamenticus.org](http://agamenticus.org).



## Mt. A Learning Lodge Opens for its 9th Season!

The Mt. Agamenticus summit-top visitor center opens for the season on Saturday, May 25th! The Lodge is open from 11:00am to 3:00pm on Saturdays and Sundays, Memorial Day Weekend through Columbus Day Weekend.

The Lodge is home to a number of educational displays, hands-on activities, and our gift shop. Come visit during the season and learn about the history of Mt. A and the plants and wildlife that call this region home!

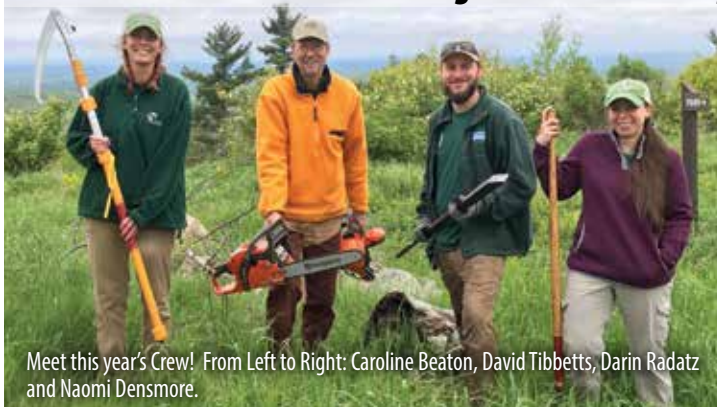
The Kid's Corner in the Lodge is coming into its fifth season. Run entirely by Mrs. J and volunteers with the Friends of Mt. A, projects and programs are funded by generous donations from participating families. Join us on Saturdays for drop-in nature-themed crafts and games. Keep an eye on the Mt. A Facebook page throughout the season for Kid's Corner updates.



## Self-guided StoryWalk™

The StoryWalk™ program combines the benefits of physical activity, time outdoors in nature, literacy and family time by taking children's books and posting them, in pieces, along a recreational path or hiking trail. Discover this spring's feature: *Over in the Forest* by Marianne Berkes and illustrated by Jill Dubin. Then be sure to check back this summer for *What Makes an Opossum Tick* by local author Lyn Smith, with illustrations by Jamie Hogan. Start the StoryWalk™ at the Mountain Road base parking area and then follow the pages along the Ring trail.

## Introducing the 2019 Mount Agamenticus Conservation Team



Meet this year's Crew! From Left to Right: Caroline Beaton, David Tibbetts, Darin Radatz and Naomi Densmore.

### Seasonal Conservation Crew:

**Caroline Beaton** is from Newbury, NH and is studying Environmental Conservation and Sustainability at the University of New Hampshire in Durham.

**David Tibbetts** is a York resident with an education background from the University of New Hampshire studying Environmental Studies and Granite State College with advanced studies in Native Plants and Floristic Inventory.

### The seasonal crew is joined by alum year-round staff:

**Darin Radatz** has been the Mt. A Trails, Grounds & Facilities Supervisor since spring of 2017. He has a BS in Natural Resource Management from Michigan State University.

**Naomi Densmore** has been the Mt. A Outreach Specialist/Park Attendant since summer of 2017. She obtained her BA in Art History from UVM in 2009. She will be finishing up her Master's degree in Museum Studies from Harvard University.