

The Newsletter of the Friends of Mt. Agamenticus

Fall 2024

# Eighth Annual Mount A Trail Challenge

The eighth annual Mount Agamenticus 5K and ■ 1 Mile Trail Challenge took place on Saturday, September 21st. Thanks to the participants, volunteers, donors and supporters who helped make this year's Challenge a success! We're looking forward to year number 9, so save the date for September 20, 2025 and bookmark the race page: agamenticus.org/annual-trailchallenge/.

If you're looking for a new challenge, this "race" might be for you! Participants run, hike, roll or stroll

Any previous participants who beat their own personal Trail Challenge record, on either course, can receive a Mount Agamenticus Conservation Region logo pin! In 2024, we had over a dozen people earn a new personal record! New runner this year? We hope to see you back in 2025; new year, new you, new pin! As always, all funds raised go right back into Mount A conservation & education efforts!



## Tips on Viewing the Next Aurora: Viewing the Aurora Depends on Four Important Factors

- 1. Geomagnetic Activity: If the geomagnetic field is active, then the aurora will be brighter and further from the poles. Geomagnetic activity is driven by solar activity and solar coronal holes and thus it waxes and wanes with time. The level of geomagnetic activity is indicated by the planetary K index or Kp. The Kp index ranges from 0 to 9.
- For Kp in the range 0 to 2, the aurora will be far north, quite dim in intensity, and not very active.
- For Kp in the range of 3 to 5, the aurora will move further from the poles, it will become brighter and there will be more auroral activity (motion and formations). If you are in the right place, these aurora can be quite pleasing to look at.
- For Kp in the range 6 to 7, the aurora will move even further from the poles and will become quite bright and active. At this geomagnetic activity level, it might be possible to see the aurora from the northern edge of the United States.
- For Kp in the range 8 to 9, the aurora will move even further towards the equator and it will become very bright and very active. These are the events that create the best aurora and the extended auroral oval will be observable by the most people. At these levels, aurora may be seen directly overhead from the northern states of the USA.

It should be noted that the relationship between Kp and auroral latitude are approximate and represent averages. There will be times when these relationships do not hold up exactly.

There is an approximate relationship between Kp and the equatorward extent of the auroral oval. This relationship holds true in geomagnetic latitude, not geographic. At

- Kp = 0, the equator ward edge of the auroral oval is approximately 66 degrees. And it moves equatorward about 2 degrees for each level of Kp. So for Kp = 1, the aurora would move down to 64 degrees, for Kp=2, it would move to 62 degrees, etc... until reaching Kp of 9 at 48 degrees magnetic latitude.
- 2. Location: Go towards the magnetic poles. The north magnetic pole is currently about 400 km (250 miles) from the geographic pole and is located in the islands of north east Canada. Find a place where you can see to the north ( or south if you are in the southern hemisphere). Given the right vantage point, say for example on top of a hill in the northern hemisphere with an unobstructed view toward the north, a person can see aurora even when it is 1000 km (600 miles) further north. It should be noted that if you are in the right place under the aurora, you can see very nice auroral displays even with low geomagnetic activity (Kp = 3 or 4).
- 3. It must be dark: Go out at night. Get away from city lights. The full moon will also diminish the apparent brightness of the aurora (not the actual brightness). One caveat that people often neglect to think of is that the high latitudes where aurora occur are also latitudes where it doesn't get dark in the summer. So combining a summer vacation to the arctic with aurora watching usually doesn't work. The aurora may still be there but it is only visible when it is dark.
- 4. Timing: Best aurora is usually within an hour or two of midnight (between 10 PM and 2 AM local time). These hours of active aurora expand towards evening and morning as the level of geomagnetic activity increases. There may be aurora in the evening and morning but it is usually not as active and therefore, not as visually appealing.

The best seasons for aurora watching are around the spring and fall equinoxes. Due to subtleties in the way the solar wind interacts with Earth's magnetosphere, there is a tendency towards larger geomagnetic storms, and thus better auroras, to occur near the equinoxes. However, the number of hours of darkness decreases (increases) rapidly near the spring (fall) equinox so this caveat must be considered for those traveling to see the aurora. Below are maps showing the most southern extent of where aurora might be observable for different levels of the geomagnetic Kp index (and the NOAA G scale). It should be noted that the aurora can often be observed hundreds of kilometers (miles) equatorward of the actual

Link to the NOAA page showing map images and the information on this page:
https://www.swpc.noaa.gov/content/tips-viewing-aurora
NOAA Use Policy and Permissions Info:
https://www.omao.noaa.gov/image-licensing-usage-

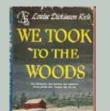
aurora so these figures do not indicate where the

aurora may be but rather the point from which it

may be observed.

nttps://www.omao.noaa.gov/image-iicensing-usage-info#:~:text=NOAA%20still%20images%2C%20audio%20 files,permission%20extends%20to%20personal%20 webpages.





### "We Took to the Woods", An Autobiography by Louise Dickinson Rich Reading Corner Recommendation by Gail McCarthy

From the book's synopsis: "In her thirties, Louise Dickinson Rich took to the woods of Maine with her husband. They found their livelihood and raised a family in the remote backcountry settlement of Middle Dam, in the Rangeley area. Louise made time after morning chores to write about their lives. First published in 1942, We Took to the Woods became an instant bestseller. It's more than a simple nature study; it portrays a cherished dream awakened into full life. Written with warmth, enthusiasm, and humor, it is a book to stir the imagination."

I have much less experience in the deep woods of northern Maine than many, but enough to understand the jargon and vividly envision what Louise describes; it was almost like being there. Remembering that this book was set in the 1930's, parts of Louise's answer to "Don't you ever get bored?" blew my mind.

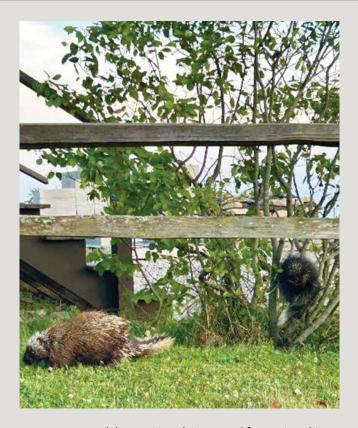
# Summer Sunsets with Porcupines - by Colin Jefferis, Park Ranger

Just when the sunlight is turning an early evening orange, and the wind on Mt. A blows a little cooler, the mountain's resident porcupines mosey up to the summit to start their evening meals. One would think the porcupines have alarm clocks, given their punctual arrival to the summit by 7 each evening. The porcupines are very nonchalant, arguably because their quills make them formidable prey with few natural predators. However, these critters make excellent company on the summit. Looking out from the summit's central viewing platform around sunset, one can easily see four or more porcupines walking the summit, checking for food, and sometimes even taking a nap, as is the one pictured above. These critters instill a sort of calm, steady feeling in me, knowing that they will always be there, at the same time each night.

However, porcupines still like their distance. I have found that if I start a vehicle engine during their golden hours on the summit, their quills will prick up and they slowly turn to look at me, disappointed that I have interrupted the peaceful sounds of evening on their mountain. Most people visiting the summit will keep their distance from the porcupines and say to their family 'Stay back! We don't know how far they can shoot their quills!' I always laugh to myself a little when I hear these comments, as porcupines can't shoot their quills. However, I let the people believe this rumor so that the porcupines can have their space for their evening strolls. Everyone needs a lot of space to walk after eating, right? Mt. A visitors and staff alike love taking pictures of the porcupines from a respectful distance. I personally have at least 10 selfies with the porcupines just from this summer (maybe I should make a scrapbook).

To make the state of porcupine affairs even more exciting for the evening sunset viewer, a baby porcupine has made an





appearance around the summit with its parent. I first ran into this little porcupine on the Fourth of July, during our extended hours for the fireworks in Ogunquit and York. I nicknamed this one, 'emo porcupine' due to its black color. A week later, I watched as the curious little porcupine began to climb the lodge steps, and I thought to myself, 'oh no I am going to have to make a skilled and strategic porcupine-porch-extraction-plan (PPEP),' but luckily it climbed back down the steps after getting halfway up. A few days later, the parent stood guard outside the conservation office as the baby porcupine attempted to climb into a shrub to eat the leaves. I had seen the parent do the same a few minutes earlier. The baby made it only a few feet off the ground, but nonetheless it delayed my evening tasks, as the parent gave me the stink eye when I tried to walk past. This porcupine climb is pictured above, where you can see the parent on the ground and the black baby porcupine in the bush.

The porcupines have become a little sparser as the summer has gone on. My theory for this decrease in the frequency of their summit strolls is that the hotter temperatures have killed off most of the grazing material on the summit for the porcupines. One or two porcupines will occasionally appear now in shadier, grassy areas. Nonetheless, if you decide to come up to the summit of Mt. A to watch the sunset throughout the summer months, I hope you get to see a porcupine (from a safe viewing distance of course). Say hi to the Agamenticus Park Ranger too while you're up here, otherwise they end up just like me, talking to the porcupines.

Collin Jeffries was a 2024 Field Season Park Ranger at Mount Agamenticus.

# Maine Natural Communities and Landscaping Tips

Whether you have visited or lived in Maine a short time or a lifetime, you are probably aware of the diverse landscapes and natural resources of our beautiful state.

The Mount Agamenticus (Mt. A) Conservation Region has the distinction of being home to common habitats, or natural communities, that you may see in your area of the state, as well as rare ones.

To put it simply, natural communities are groupings of species that live together in a natural setting, along with their physical environment and the processes that affect them.

You may have noticed areas around Mt. A where plants tend to grow naturally together in the environment depending upon the site conditions (for example, light, moisture, elevation and soil) and how these sites can attract different types of birds, insects and animals.

These observations can be used to do some simple landscaping around the home that can make things more pleasant for us and our wild neighbors; you may also save money by following these tips too!

The Maine.gov website has abundant information regarding this topic and the importance of protecting the habitats that people, pets and wildlife need to survive and thrive. For more information, visit: https://www.maine.gov/dacf/php/pesticides/yardscaping/landscape/habitats.shtml.

Another great resource is Wild Seed Project; a nonprofit dedicated to repopulating our landscapes with native plants, https://wildseedproject.net/.

Finally, for a deep dive into these subjects, you can also download a PDF from the Maine Department of Agriculture here: https://www.maine.gov/dacf/mnap/publications/natural\_landscapes\_maine2018.pdf.

## FALL PROGRAMS & EVENTS

Mark your calendar for upcoming programs and events this fall! Full details can be found at agamenticus.org.

### Sunday 11/3 Guided Three Hill Hike with Great Works Regional Land Trust 9am - 3pm

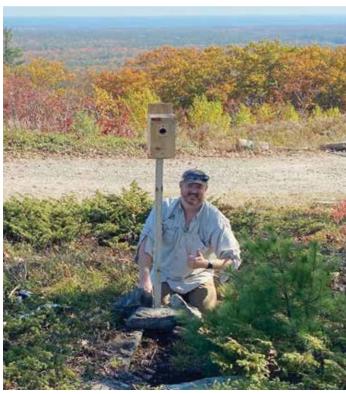
Enjoy the last of the fall foliage season and explore Mt. A's vast trail network and habitats with Great Works Regional Land Trust and Mt. A guides for a full day of hiking. We will ascend all three of the area's hills including the elusive Third Hill. Moderate to difficult hike (7 miles, mixed terrain). For more information and to register: gwrlt.org.

### Sunday 11/17 Guided Hike from Mt. A to Highland Farm Preserve 9am - 2pm

York Land Trust has partnered with the Conservation Program, York Water District, and Kittery Water District to offer this hike from the summit of Mt. Agamenticus to Highland Farm Preserve. There is no minimum age requirement, but prior hiking experience is highly recommended. Moderate to difficult hike (5 miles, mixed terrain). For more information and to register: yorklandtrust.org.

#### Saturday 12/21 Solstice Sunrise Walk 6 - 7:30am

Welcome the first sunrise of winter at the summit of Mount Agamenticus! We'll bundle up and observe the sleepy shrubland together with a quiet walk or snowshoe of the Big A trail. Hot drinks provided. More information and registration will be posted soon: agamenticus.org.



Replacing summit birdhouses.



October 19th Summit Shrubland Volunteer Community Workday.

