

The Newsletter of the Friends of Mt. Agamenticus

Summer 2019

AWESOME OPOSSUMS By Sarah Kern, M.Ed., Education and Outreach Department Lead, Center for Wildlife

There are several dozen different species of opossum around the world. The most notable in this area is the Virginia opossum (*Didelphis virginiana*) the only marsupial (pouched mammal) found in North America. These amazing animals are often very misunderstood and feared when in fact they should be your favorite neighbor. Not only are they nature's clean-up crew, dining on carrion and leftovers, but they are also known to eat 5,000 ticks a week! Virginia opossums are often white-gray in color, with a long, rat-like

tail. They are not rodents, but rather are marsupials. They have more teeth than any other mammal: 50! Another fun fact about Virginia opossums is that their body temperature is generally lower than other mammals. Because of this they are very highly unlikely to contract rabies.

A female opossum gives birth to helpless young as tiny as honeybees. Babies immediately crawl into the mother's pouch, where they continue to develop. As they get larger, they will go in and out of the pouch and sometimes ride on the mother's back as she hunts for food. Opossums may give birth to as many as 20 babies in a litter, but fewer than half of them

survive. Some never even make it as far as the pouch. The Virginia opossum lives in a wide-variety of habitats including deciduous forests, open woods and farmland. The Virginia opossum is nocturnal however it is normal to see them out during the day as well. They use their keen sense of smell to locate food. They are scavengers and eat just about anything, including lots of different plants and animals like fruits, insects, and other small animals. They are also known to eat garbage and carrion. Because garbage and carrion tend to accumulate on roadways, opossums are unfortunately frequent victims of road mortality.

 Wilbur
 Sarah Kern

Sarah Kern

Adapted well to the presence of humans, opossums appear to be extending their geographic range and have observed as far north as Canada. As solitary animals, their population density in the wild is not very high (one animal per ten acres). Some of the biggest threats to their population include habitat loss and being hit by cars. Simply not throwing apple cores or other food items out of our car windows is a

Virginia Opossums are fairly common and have a wide

range that spans across the US and Central America.

first step in helping scavengers. Also, not using rodenticide or pesticide as those can poison the wild friends as well. Working to live with our wild neighbors instead of trapping and relocating.

Here at the Center for Wildlife, we treat dozens of Virginia opossums every year. Many come in as orphans after their mom has been hit by a car and others for a variety of other reasons. Our current non-releasable opossum ambassador, Ophelia, came to the Center in 2018 from our partners at Squam Lake Science Center in Holderness. She had been hand reared by humans and is no longer able to live in the wild due to the fact that she is habituated. Ophelia is an absolutely wonderful ambassador for her species, allowing for members of the public to see these amazing animals up close and to connect with them. One of our past opossum ambassadors, Wilbur, was the inspiration for the current StoryWalk® book at Mt. Agamenticus, What Makes Opossums Tick? by Lyn Smith. We hope

that you enjoy your hike while enjoying the wonderful story about awesome opossums.



Fifty-five years ago scientists gave a name to a phenomenon as old as the Earth itself. Our early ancestors recognized it without thinking, and most of us today have inherited the ability to detect it, if not the affinity for it. The smell of rain – "petrichor" (pe-trahykawr)¹

The word is a combination of the Greek word petra, meaning "stone", and ch r, "the fluid that flows in the veins of the gods" from Greek mythology, created by Australian scientists, Isabel (Joy) Bear and Richard Thomas.²

Several things contribute to the smell of rain. Oils, basically fatty acids, secreted by plants during dry spells (why they do this is still a wonderful mystery) cling to rocks, soil, clay, and pavement. These break down into compounds that create a pungent odor when rained on and are released into the air. Secondly, there are bacteria which live in the soil and produce a compound called geosmin. When rain moistens the soil it creates a strong, very pleasing, earthy scent. Geosmin can be detected by human noses at very low levels. It is responsible for a strong earthy odor in wines and the earthy taste of beets.

In 2015 scientists at the Massachusetts Institute of Technology released a super slow motion video of the petrichor process. "Using high-speed cameras, the researchers observed that when a raindrop hits a porous surface, it traps tiny air bubbles at the point of contact. As in a glass of champagne, the bubbles then shoot upward, ultimately bursting from the drop in a fizz of aerosols."³

Ozone is yet another contributor to the scent of rain. It is born of the split of oxygen and nitrogen molecules by lightning that recombine into nitric oxide. This in turn interacts with other chemicals in the atmosphere to form ozone, which smells faintly like chlorine. Carried upon the winds, it heralds the oncoming storm. Many animals can predict oncoming rain, from ants to cows, and humans are included. Keep your nose to the wind and celebrate the scent of the gods!

1 Nature journal of March 7, 1964, by CSIRO scientists Isabel (Joy) Bear and Richard Thomas. 2 http://theconversation.com/the-smell-of-rain-how-csiroinvented-a-new-word-39231 3 http://news.mit.edu/2015/rainfall-can-releaseaerosols-0114 Petrichor is now a board game: https://www.boardgamegeek. com/image/4022395/petrichor



Trash Talk: The Dirt on Microtrash By Caroline Beaton, 2019 Mount A Conservation Crew Member

t's time to get down and dirty and discuss a sort of stinky issue: trash. When asked to think about nature, litter is not usually something that pops into mind, at least not for me. We sincerely hope that it is not something that visitors associate with Mt. A either. However, as Mt. A has grown more and more popular, transitioning from a hidden gem to a popular tourist destination, the area has become victim to litter. As one of the people that don gloves each morning, taking my bucket and tongs around the summit and parking areas to collect left behind tid bits of garbage, I know that microtrash has become a huge problem at Mt. A.

Microtrash refers to any small bits of trash, including, but not limited to, bottle caps, cigarette butts, can tabs, broken glass, and rubber bands. These are things that can be mistaken as a food source and ingested by many of our cute furry and feathery friends that help make Mt. A the amazing and diverse community that it is now. Not only does microtrash disturb the peaceful atmosphere for human visitors, but it also imperils our animal visitors, such



as the groundhogs, porcupines, deer, and cedar waxwings that have all been sighted at the summit.

So, before you squish that cigarette butt into the ground or let that wrapper corner flutter away into the wind, think of the porcupines. Remember folks, it's the little things (maybe even the micro things) that count.

Species Spotlight Common Milkweed , Asclepias syriaca

Common Milkweed is as much a part of summer in New England as fireflies and blueberries! Who can forget their fragrant flowers on roadside stalks of green and silky seed parachutes on the late summer breeze? Did you also know that Monarch Butterfly larvae (caterpillars) feed exclusively on the leaves of the milkweed and that they derive a chemical toxin from it that makes them distasteful to predators?

According to the Natural Resources Conservation Service (NRCS), "The Monarch butterfly is one of the most familiar butterflies in North America; because Monarch butterflies are always on the move, they need to have the right plants at the right time along their migration route."

The NRCS, which is part of the United States Department of Agriculture, is working with agricultural producers in the states along Monarch Butterfly migration routes from Mexico to Canada to help increase the supply of milkweed plants and protect pollinator habitat.

"Milkweed not only provides food for Monarchs, it also supports other pollinators such as honey bees that are vital to agriculture," states the NRCS. "Milkweed also provides homes for beneficial insects that control the spread of destructive insects."

The New England Wildflower Society names 3 other milkweed species in addition to the Common Milkweed; all are important for pollinators and habitat diversity.

In mid to late Summer, visit our new pollinator garden at Mount Agamenticus where you will find Monarchs and other pollinators all over the attractive orange flowers of the Butterfly Milkweed species!



Pollinator Garden

Have you been wondering what the flagged and fenced-off plants up on the summit are? In May, we were joined by 6th graders from Bonny Eagle Middle School in a volunteer project to plant Common Milkweed. The stalks we planted will flower next season, and are the beginnings of a new Monarch Waystation on the summit. Monarch Waystations are places that provide milkweeds and nectar sources necessary for monarchs to produce successive generations and sustain their migration. Additional complimentary nectar sources at Mount A include native New England Aster and Butterflyweed. You can learn more about Monarch Waystations (including how to plant your own!) at MonarchWatch.org.



Butterfly Milkweed

Shaun Dillon

Newsletter written and

designed by the Friends of Mt. Agamenticus.

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Upcoming Events and Programs:

Saturday, August 10th | 9:00am-12:00pm | Summer Stroll and Simple Tree ID – Learn the common names of popular tree species on a gentle stroll following the Big A and Ring trails. We will take a second look at leaf evidence, bark, buds, seeds, and more to assist in identification. The Center for Wildlife will be joining us for a live animal ambassador demonstration including their resident porcupine ambassador, Henry! Come and learn about Henry's favorite foods like black birch, oak, hemlock, maple, and of course acorns! Program and walk open to all ages; may break into two levels base on sign-ups. Your donation of \$7/person makes this program possible.

Saturday, August 17th | 9:00am-12:30pm | Community Work Day: Bridge Building – Light refreshments after. Please plan to bring your hiking/work boots, water and work gloves. Work Day Registration: dradatz@yorkmaine.org.

Saturday, August 21st | 9:00am-12:30pm | Third Annual Trail Challenge

Saturday September 28th | 10am-1pm | Eyes Like a Hawk – The summit can be a great place to watch the annual hawk migration. Come to the Learning Lodge to

watch the Center for Wildlife present an environmental education program about Maine birds of prey with their live raptor ambassadors. Come meet this amazing animals up close and learn about their natural and personal history. Open to all ages. Bring your binoculars! Your donation of \$7/person makes this program possible.

Program Registration: fellow@thecenterforwildlife.org



SPECIAL EVENT: September 21st MOUNT A TRAIL CHALLENGE 1Mi/5K Run/Walk

York Parks and Recreation Department and the Friends of Mount A present the Third Annual Mount Agamenticus 5K and 1-Mile Trail Challenge. This event is geared toward improving overall health, wellness and connections in our community. The event features a 5K and a 1-mile trail challenge that participants can run or walk. The 1-mile course traverses the Big A Universal Access trail and can accommodate all capabilities and fitness levels, while adjoining trails offer even greater challenges for those navigating the 5K.

This is not a typical road race. It is a personal challenge you make with yourself whether you are new to trail running, recovering from an injury, or just want to improve or maintain your fitness level. This event is even timed by the York Track & Field Program, traditional stop-watch style! Though prizes are given to the top male and female 5k finishers, the true reward is establishing or beating your own personal record. The motto is "Run it, walk it, hike it, just complete it!"

Pre-registration deadline is Wednesday, September 18th. Those registered by August 9th will receive a race shirt. Race day registration will ONLY be available if spacing allows. Parking is limited. The first 50 to register will receive premium summit parking passes. All runners are eligible for raffle prize

Then let's celebrate all of your accomplishments afterward at SOME Brewing Company! Stay tuned for information about the after party!

Volunteers are needed! Volunteers are very much needed to help make this event a success. For more information about the Mount A Trail Challenge, to view course maps, register for the races or to *volunteer* please visit www.agamenticus.org or call 207-361-1102.

You may register online, or at the Parks and Recreation Office, 200 US Rte. 1 at Goodrich Park

COST:	5K: \$20.00 per individual / \$16 for Seniors and
	Children 12 years & under
	1-Mile: \$15.00 per individual / \$12 for Seniors and
	Children 12 years & under
	Mount Agamonticus Summit

LOCATION: Mount Agamenticus Summit

DATE: Saturday, September 21st TIMES: 7:45am for Check-In & Day-of Registration 5K starts at 9:00 a.m. 1-Mile starts at 9:30 a.m. Awards/Raffle winners announced at 10:00 a.m.



Did You Know? By Katie Brodeur, Center for Wildlife Resident Environmental Educator

Scavengers tend to get a bad reputation for being gross or dirty, like the carrion they eat, but nothing could be further from the truth! Opossums are particularly fastidious groomers, and will clean themselves after every meal to make sure there is no trace of their meal left on their fur. As it turns out, we humans benefit greatly from the opossums painstaking grooming regimen. Opossums are terrestrial mammals, and spend most of their time waddling around the forest floor sniffing out food. As you can imagine, they can pick up quite a lot of ticks using this mode of transportation, and one study found that opossums actually eat up to 90% of the ticks that attempt to attach to them! Each time an opossum grooms itself they pick off and eat any ticks or insects that were trying to hitch a ride. Luckily for us, this can add up to thousands of ticks per season! That's one thousand ticks that aren't landing on ourselves, or our families, and potentially spreading disease. Keep up the great work, marsupial friends!



Adopt a Native Plant Bed at Mt. A!

s your group or organization looking for a volunteer opportunity? Mt. A is seeking seasonal volunteers to help us care for our native plant beds! Native plants are adapted to local environmental conditions, provide vital habitat, help maintain species diversity, and are kept in check by natural succession.

Volunteers will "adopt" a summit plant bed and take responsibility for its upkeep (weeding, mulching, etc.). Once trained, adopters can work at their own pace and on their own schedule throughout the season. A time commitment of one complete growing season required (approx. May-Sept). Tools and gloves will be available to those who need them!

