

The Newsletter of the Friends of Mt. Agamenticus

VERNAL POOLS: Vital Nursery Habitats of Spring

Vernal pools are seasonal bodies of water that are filled by rain and snow melt. They dry up in the summer which prevents predators such as fish from living there. These critical and threatened habitats form the nurseries for several species of amphibians and invertebrates. Species such as blue spotted salamanders and fairy shrimp can only be found in significant vernal pools which means that the vernal pool is habitat for a threatened or rare species or that it has high biodiversity. Wood frogs, yellow-spotted salamanders, spring peepers, barred



Vernal pool in summer

clear or milky colored globs on sticks or rocks, submerged in the vernal pool. These globs should be observed with our eyes in order to protect the growing tadpoles and baby salamanders. When they hatch, you

may see them swimming around eating leaves and insects. By mid-summer, these growing youngsters will be fully formed with legs and lungs, so they can migrate out of the dried up vernal pool.

owls, and spotted turtles are also among the many species that rely on vernal pools for breeding grounds, habitat, and food. The Mount Agamenticus area has the highest density of vernal pool habitats in New England and includes significant vernal pools.

"Big Night" refers to the first or first couple rainy spring evenings, where the temperature falls between 40 and 50 degrees Fahrenheit. Reptiles and amphibians are cold blooded and are in a state of hibernation called brumation during the winter. Big Night is when they emerge from

their brumation spot underground and migrate to the vernal pools and wetlands to breed. On these nights, you can take part in citizen science projects to learn how to safely help them cross the road and collect research data on the hundreds or thousands of amphibians who are moving to the breeding ground where they were born.

Once they have laid their eggs, you may find



Yellow-spotted salamander

Spring peeper

Spring 2023

Pet Waste – A Serious Concern

How fortunate we are to walk the miles of trails at Mount Agamenticus with our dogs! Dogs give unconditional love, provide a sense of purpose and a feeling of validation.

If our four-legged companions are leashed, and dog poop is scooped, bagged, carried out and disposed of properly, it is a small price to pay for the good health of dogs, humans and our water quality.

"No matter where you live, you live in a watershed. A watershed is the area of land where all of the water that is under it, or drains off of it, goes into the same place..."¹ The water we drink in the communities that surround Mount A flows down from "the three hills", collects in Chase's Pond reservoir and the other surrounding ponds, then flows to the ocean through rivers and streams.

If the pandemic has taught us anything, it is that outdoor spaces like Mount A are invaluable to the physical and emotional health of our communities. It also increased our companion dog population. During Covid, "more people in the US adopted dogs—and more people are walking their dogs than ever before."²

"America's 83 million pet dogs produce some 10.6 million tons of poop every year." That's 21,200,000,000 pounds. A single gram of pet waste contains an average of 23 million fecal coliform bacteria which cause disease in humans. Dog waste can also include viruses, and parasites, including harmful E-Coli, Giardia and Salmonella. It also can get into the air we breathe.³

The Center for Disease Control and Prevention confirms that when

infected feces come in contact with the ground, eggs from parasites can live in the soil for years. Roundworms, hookworms, and whipworms are commonly known gastrointestinal parasites that shed eggs in dog feces. Both humans and canines can acquire these diseases.

If not disposed of properly, pet waste flows directly into our streams, creeks, and storm drains without being treated at wastewater treatment facilities and adding excess nitrogen and phosphorus to the environment.⁴ The EPA explains that these allow algae to proliferate in rivers, lakes, streams and ponds, making easy habitat for invasive weeds to grow and using up dissolved oxygen resulting in harm to fish and a myriad of other creatures.⁵

Along with the physical, emotional and social benefits of walking our dogs, responsible owners always carry plastic bags, scoop the poop and dispose of the waste on a regular basis. Statistics show that only 60% of us do this regularly. At Mount Agamenticus, on our own property and public places, let's try and make that 100%!

For ways to dispose of your pet waste on a regular basis, try setting up a dog waste station in your backyard. https://praisethedogs.com/ how-to-choose-a-dog-waste-station-for-home-use/

 York Watershed Trail Map: www.yorkwaterdistrict.org/_files/ugd/204687_7222ef62403841149e21ff9d6acf6690. pdf 2. Dog Waste FAQs, https://praisethedogs.com/us-dog-waste-facts-and-statistics-what-you-dont-know/
Pet Waste Pollution, https://www.livescience.com/44732-eliminating-pet-poop-pollution.html 4. Animal waste contributes excess nutrients to our waterways, https://www.epa.gov/nutrientpollution/isources-and-solutions
Excess nitrogen and phosphorus in the water can have diverse and far-reaching impacts on public health, the environment and the economy. https://www.epa.gov/nutrientpollution/issue#~.text=Too%20much%20 nitrogen%20and%20phosphorus%20in%20the%20water%20causes%20algae,aquatic%20life%20need%20 to%20survive

We love dogs at Mt. Agamenticus, but remember that the "Carry in, carry out" trash policy covers pet waste, too! By picking up and packing out your pet's waste, you're helping to protect wildlife, unique sensitive habitats, and our drinking water supply. It may not seem like leaving just one pile of poop behind matters, but it adds up. Trash (including pet waste) left behind on the trail and in the surrounding area impacts all of us. This graphic shows 70 locations along the Ring Trail at Mount A where waste was left behind in a single week. Each point on the map represents 1-7 piles of bagged or unbagged dog waste. There's not only a potential environmental impact, but a visual impact that immediately affects everybody. With Mt. Agamenticus seeing over 50,000 visitors each year, single actions do make a difference.



MAYORS' MONARCH PLEDGE

A ayors and other heads of local and tribal governments are taking action to help save the monarch butterfly, an iconic species whose eastern populations have declined by 90% and western populations by 99% in recent years. Through the National Wildlife Federation's Mayors' Monarch Pledge, U.S. cities, municipalities and communities are committing to create habitat for the monarch butterfly and pollinators, and to educate residents about how they can make a difference at home and in their community.

The Town of York is pledging to help protect, and increase public awareness of, Maine's native pollinators including the monarch butterfly and their habitats. At



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Mount Agamenticus, the staff installed native plant gardens using monarch-specific species, such as native Milkweed. This year, Milkweed seeds that were collected in Autumn 2022 will be started indoors, then installed in the gardens at the summit.

The annual migration of North America's monarch butterfly is a unique and amazing phenomenon. The monarch is the only butterfly known to make a two-way migration as birds do. Unlike other butterflies that can overwinter as larvae, pupae, or even as adults in some species, monarchs cannot survive the cold winters of northern climates. Using environmental cues, the monarchs know when it is time to travel south for the winter. Monarchs use a combination of air currents and thermals to travel long distances. Some fly as far as 3,000 miles to reach their winter home in the Sierra Madre Mountains of Mexico!

Sources and additional information: https://www.nwf.org/mayorsmonarchportal/Signatories https://www.fs.usda.gov/wildflowers/pollinators/Monarch_Butterfly/migration/index.shtml https://gardenforwildlife.com/

Reasons to Go Pesticide-Free

Some Good Reasons to Go Pesticide-Free in Your Landscape and Garden:

- Pesticide-free yards help protect people and pets as well as pollinators and other beneficial insects.
- All insects are susceptible to pesticides, not just the ones you are trying to eliminate.
- Many native insects are considered "beneficial" because they prey on other insects that are garden pests.
- Birds and other wildlife need insects to raise their young and to supplement other food sources.
- Pesticides not only kill the targeted species, but can enter the bodies of other life forms that feed on them as well.
- Wind and water can spread pesticides to places where they shouldn't be, including our drinking water supplies, the air we breathe and fish habitat.

Sources and more information: https://www.sierraclub.org/maryland/pesticides-free-alternatives https://birdwatchinghq.com/why-you-should-be-pesticide-free/ https://www.nwf.org/Magazines/National-Wildlife/2018/April-May/Gardening/Pest-Control https://www.mainewoodlandowners.org/articles/beneficial-bugs-in-maine https://www.beyondpesticides.org/programs/wildlife https://www.cdc.gov/nceh/multimedia/infographics/pesticide_exposure.html#:~:text=You%20can%20be%20 exposed%20to,management%20and%20avoid%20using%20pesticides.



Photos by Denise Johnson



2023 Spring Mud Season and Durable Surfaces

The weather is warming and we're feeling ready to get outside in the sunshine, but spring is a sensitive time of year for trails and surrounding habitats. How can you protect trails this mud season? Practice Leave No Trace! Leave No Trace is a conservation movement dedicated to teaching responsible enjoyment of the outdoors for the benefit of people *and* the natural environment. Leave No Trace involves a set of seven principles, one of which is to travel on durable surfaces. Durable surfaces include **established trails, rock, gravel, dry grasses**, and **snow**. Here are some other tips:

1. Do more by doing less! Activities like running, biking, and ATV use have a higher impact during mud season. Tires sink into the mud, leaving deep ruts and causing water to pool up. Running impacts the trail more than walking because of the force of your body's weight coming down on the trail. When the ground is wet, go for lower impact activities.

2. Walk single file in the middle of the trail. Bring footwear to match trail conditions. Stick to rocks whenever possible and go through muddy sections to help preserve the natural environment of the trail. Going around muddy areas widens the trail, causes erosion, and negatively impacts roots and vegetation. So, have fun and get muddy!



3. Get involved! Become a Trail Adopter or attend a Community Work Day. The best and most needed time to get out and start caring for trails is in the spring. Clean up downed branches and trees and clear out drainages so water moves more quickly and effectively off trail.

Ignoring your dog's excrement Will affect local water treatment So scoop your poop As you stroll the loop And let's keep a clean environment



Spring photos by Denise Johnson

The Friends of Mount Agamenticus

The Friends of Mount Agamenticus is a volunteer advocacy and stewardship group for the Mount Agamenticus Conservation Program. We assist program staff in carrying out educational, interpretive, community outreach, and public use objectives without compromising the integrity of the region's sensitive ecological habitat.

We are currently seeking Friends that can assist with any of the following tasks:

- Orienting and coordinating with new volunteers
- Researching fundraising opportunities
- Writing grants and newsletter articles
- Developing and managing website and social media

Please email **friends@agamenticus.org** if interested. To learn about additional Mt. A conservation opportunities, please visit our website **agamenticus.org**.



Scan this QR Code to "like" Mount Agamenticus Conservation Region on Facebook!

Newsletter written and designed by the Friends of Mt. A.