

Spring 2024 Newsletter

Hello Refuge Friends!

Spring means we are back outdoors in our pollinator gardens and working with Refuge Partners on various projects. It's a time when we focus our efforts on getting things done, and this Spring we achieved tremendous progress on many of these efforts which we're happy to share with you!

Most articles in this newsletter were written by AmeriCorps Cape Cod member, Grace Vachon. Grace is wrapping up her term with us and has been an amazing resource for the Refuge Partners as well as a prolific writer. Grace's contributions to our Spring Newsletter include well-researched articles about **Vernal Pools**, the restoration of the **Quashnet River Valley**, a Spring AmeriCorps work day to cleanup our**Pollinator Gardens**, our "Creature Feature" about **Raccoons** on Cape Cod, and ongoing coverage of our live streaming webcam of Rachel and Carson and their 3 nestling in an **Osprey Nest** at the Waquoit Bay Reserve, now in its third season! Grace has also been actively writing and creating videos for our **Walk for the Wild** event coming in October.

AmeriCorps member Luke Hudson contributed an article about an AmeriCorps project helping to restore the **Coonamessett Reserve.**

Thanks to Grace and her fellow AmeriCorps Cape Cod team members for their contributions over the past year!

We're also making progress working with the Town of Mashpee to establish a Mashpee NWR **Visitor Center**. An upcoming meeting of the MNWR partners will focus on the details of negotiating a lease agreement with the Town as we continue to work to bring this to fruition after nearly 30 years of consideration.

Several upcoming activities and volunteer opportunities are listed below. We welcome all FMNWR members to get involved!

Scroll down to read more or **download** and print the entire newsletter for later enjoyment.

Thank you for your continued support of our vibrant organization!

Glenn Davis President Friends of Mashpee NWR

P.S.: If you haven't already renewed your membership, and/or want to get more involved in the Friends organization, see the mail-in form on the last page (or <u>click here</u> to donate online). More information is always available on our website, with up-to-date info on upcoming events and other Refuge news. Thank you again for your support!

Vernal Pools: Life Beneath the Surface

A large puddle of water in the middle of the forest might not seem like much, but if you take a minute, sit quietly, and watch; you will notice that this seemingly unremarkable puddle is teeming with life. These puddles are called vernal pools, and some vernal pools can even be classified as wetlands. However, they differ in that they do not continuously receive water from another source. Rather, they fill with water from snowmelt and rainfall in the fall or spring, hold



this water for a period of time, and then dry out in late summer. This cycle of filling with water and then drying out occurs every year. Fish cannot live in vernal pools since they are only filled with water for part of the year, making them safe breeding sites for amphibians like frogs and salamanders. Amphibians will migrate from larger wetlands or upland areas to vernal pools to deposit their eggs. The young then leave the pool in summer or early autumn before it dries out. Other organisms like fairy shrimp and insect larvae also make their home in vernal pools.



Two cool frog species that can be found in the Mashpee Wildlife Refuge are wood frogs and spring peepers, and both use vernal pools for breeding. Spring peepers are known for their raucous chorus of high-pitched "peeps" that can be heard throughout the spring months. Listen for this chorus to know that spring is here. Wood frogs migrate from their woodland habitats to vernal pools in the springtime, where they produce large, gelatinous masses that can contain up to a thousand tiny eggs. During the breeding season beginning in March, listen for

their "quacking" call. Wood frogs have an interesting adaptation that allows them to withstand extreme cold. If they freeze, they survive by producing glucose which prevents ice crystals from penetrating their cells and killing them. As a result, they can withstand sub-zero temperatures in cold climates.

However, frogs are not the only amphibian that produce egg masses. Salamanders like the spotted salamander also do. If you find a vernal pool this spring, look closely and see if you can spot any egg masses beneath the water's surface. They will most likely be attached to vegetation like reeds and logs. Wood frog and spotted salamander egg masses may appear similar at first glance, but there are clues that you can use to distinguish between them. A key difference is the presence of a gelatinous coating around the outside of the mass. Spotted salamander eggs masses have



Spotted Salamander. This image is licensed under CC B.Y. 2.0.

this coating while wood frog egg masses do not, making wood frog egg masses appear lumpy. Also, wood frog eggs tend to be laid in large, communal rafts. Once the offspring emerge from all of these tiny eggs, they will leave the vernal pool before all the water is gone for the season. Vernal pools are important since they serve as safe nurseries for amphibians. However, they are threatened by land development, and it can be difficult to protect them. If a vernal pool is part of a protected and recognized wetland system, it is protected. Unfortunately, small or isolated vernal pools may be overlooked and left unprotected, even if they provide important breeding habitat. But even these vernal pools can become certified as a means of protection. To certify a vernal pool, any person can submit a request to Mass Wildlife's Natural Heritage and Endangered Species Program. Another way to protect vernal pools is also to conserve the habitats surrounding them, since the animals that migrate to them every spring use these habitats as well. All in all, vernal pools are much more than random puddles of water in the middle of the forest. Rather, they are teeming with abundant life and need protection.

Additional Resources and Images:

Learn more about vernal pools and their protection: <u>Vernal-Pools Fact-Sheet (Mass</u> Audubon)

Learn how to identify egg masses- Egg Mass Identification Guide

See this video of Wilson Acuna with the U.S. Fish and Wildlife Service talking about vernal pools and egg masses. This was taken during our Walk for the Wild route walk on April 2nd. <u>Wilson at Vernal Pool 4 2 24 (youtube.com</u>)



Spotted salamander egg mass. Spotted salamander egg masses are coated with a gelatinous coating unlike those of the wood frog. As a result, they appear more smooth. These egg masses were spotted on the Walk for the Wild route walk on April 2nd.



Mysterious green egg masses. These were also spotted during the Walk for the Wild route walk. We are unsure what animal these come from, but they do look very cool.

Article Written by Grace Vachon Photos by Gave Vachon; some sourced from Creative Commons

AmeriCorps at Connamessett Fields Helps

USGS Mill Pond Effort

On Monday, March 25, 2024, AmeriCorps Cape Cod took their talents to Coonamessett Fields in Falmouth to serve with Mark Kasprzyk of the Falmouth Conservation Commission. The team was led by program Supervisors Caroline Lawrence, Henry Torpey and Leonel Lainez, as well as fellow member Luke Hudson. Team members from Pocasset, Barnstable and Wellfleet took on the large project of removing invasive trees, including black locust stumps and various spindle trees! Sawyers Claire Williams, Michelle Morrison, Samuel O'Neill, Sarah



Lawson and Savannah Gray took on the task of felling various trees with help from the Supervisor trio, along with flush cutting trunks to improve mower access.



This large-scale invasive tree removal created lots of open space for native plant species to grow and flourish! Other members, including Emily Gilot, Grace Vachon, Hannah VanDivier and Jennifer Clifford, tackled the side project of removing large patches of catbrier. Debris from this effort was piled on the trail to be mowed over to clear up lots of space! Sawyers and the Supervisors jumped in to help transport downed trees into a DPW truck to be repurposed.

On top of creating more open space to benefit Falmouth, this project proved significant for local wildlife. With approval from the Wampanoag Tribe and Mashpee Conservation Commission, the U.S.Geological Survey (USGS) needed logs to begin construction at Mill Pond's herring ladder exit. USGS contacted the Friends of Mashpee National Wildlife Refuge who contacted the Falmouth Conservation Commission and AmeriCorps Cape Cod, all of whom collaborated on the project at Coonamessett Fields.





It was an amazing joint effort! While primarily helping to clear plantlife and create open space, sawyers from both AmeriCorps Cape Cod and Falmouth ConCom were providing the USGS with fresh logs. The logs were transported to the Mill Pond herring ladder to be repurposed as a new sheltered area for the herring to school in Mill Pond before completing their migration to Mashpee-Wakeby Pond. This project also provided benefits for several bird species, including Blue Herons, Night Herons and Ospreys, by providing them with a new hunting area away from the fast currents seen in the fish ladder structure!

At the end of the day, the members and the Supervisors reflected on the project, and in spite of the cold and windy conditions, all had a great time and were proud of the service they provided. Although the project was physically taxing, with lots of heavy lifting and

difficult trees, smiles were on everyone's faces when efforts were finished! Mark Kasprzyk was extremely happy with the results, and had nothing but positive remarks for AmeriCorps' teamwork and upbeat attitudes throughout the day!





Written by: Luke Hudson: AmeriCorps Cape Cod Photos by: Mark Kaspryzk and Jason Sorenson

Pollinator Garden Work With AmeriCorps Cape Cod

This past Monday, April 1st, was a day to remember. For AmeriCorps Cape Cod, it was our first day back to service after Easter weekend. For the Friends, it was their first day of work this year on the pollinator gardens. The Friends usually do a light clean up and add new plants and seeds to these pollinator gardens and prepare them for the growing season. Pollinators are plants that attract species like birds, bees, beetles, butterflies, and bats who transfer nectar between plants. This movement of nectar stimulates plant growth. Since they are so full of life, these gardens provide excellent wildlife habitat. Luckily for



me and the other members, AmeriCorps was recruited by the Town of Mashpee Conservation Department to assist the Friends with their pollinator garden cleanup this year.



We started the day at Jehu Pond Conservation Area, and our tasks included raking leaves to expose bare soil spots to plant and seed with native perennials and removing tree limbs that had fallen all winter.

We selectively piled this debris at the edge of the garden to create a "rabbitat." A "rabbitat" is a manmade pile of debris that provides a safe haven from predators and mimics the brushy, dense habitat preferred by New England cottontails. Since they are endangered, New England cottontails benefit from

having habitat created.

The seven hardworking AmeriCorps members also spent time tediously removing a pesky weed called mugwort. Mugwort

can spread rapidly if not controlled. Its root system can penetrate really deep into the ground and is very difficult to remove entirely.





Our other two work sites were the Red Brook trailhead and the Pickerel Cove trailhead. At both, we also exposed the bare spots by removing leaves and other debris to make way for planting and seeding. At all three sites, we laid down wildflower seed and planted some native plants including narrow leaf mountain mint, common milkweed, spicebush, highbush cranberry, and maple leaf viburnum. Some wildflower species that we seeded included starflowers, perennial lupines, daisies, and Mexican sunflowers. Unexpectedly, the town was doing some tree work near Jehu Pond while we

were working there, and they were able to provide us with some wood chips to lay over the front of the gardens. The purpose of wood chips is to prevent the further spread of weeds like mugwort into the garden. When we arrived back at Jehu to complete the last of our work for the day, we were shocked at the ginormous pile of wood chips that they had left for us.





There was only one shovel, but we made do with the several rakes that we had and went to work moving and smoothing down the wood chips. Lucinda pushed the wheelbarrow back and forth between the two gardens, and MaryKay had the genius idea of filling some canvas bags with wood chips so that it would be easier to move them long distances. This task took us to the end of the day. When we were finally done, we were impressed that the once towering mounds of wood chips were now flat and neat. During our "after action report," AmeriCorps expressed how fun and rewarding it was to work with the Friends. One AmeriCorps member even said that that it was nice to be putting in plants for a change, as oppose to cutting them down. I agree that this project was a refreshing change of pace. Thank you to the Friends for a fun service day!

Article Written by Grace Vachon

The Osprey are Back!

The Osprey are back! Carson (possibly) was spotted on March 17th. He returned from a long trip that began in South America and ended in Cape Cod. Did you know that Osprey can travel thousands of miles during a single migration? Visit <u>this</u> page throughout the year to view current live cam footage, watch highlights from the previous two years, and leave your thoughts or observations in the comment section. Video from the camera will also be streaming



live in the WBNERR visitor's center. Stay tuned for social media updates and additional website posts!

Article Written by Grace Vachon

As of this date, there are three fast-growing nestlings. Don't miss the exciting live action throughout the season!

The Restoration of the Quashnet River Valley

About the Quashnet River Valley

The Quashnet river winds through the towns of Mashpee and Falmouth for about five miles, starting at John's Pond in Mashpee and eventually becoming the Moonakis River and emptying into Waquoit Bay. It is located within the Mashpee National Wildlife Refuge and is a popular spot for recreation including hiking and fishing. Native brook trout are a popular species with anglers, and these fish need cold water streams and gravel substrates for spawning (laying their eggs). These sea-run brook trout, also known as



"salters," spawn in rivers and streams in the fall, migrate into salt water for the winter, and then swim back upstream in the spring. When the water becomes too warm in the Waquoit Bay estuary for the Quashnet brook trout, they swim back upstream. According to Fran Smith, cold water streams are defined as anything less than 68 degrees Fahrenheit, and anything over about 70 degrees is dangerous for the fish. During spawning, they push the gravel away with their tails, lay their eggs, and then push the gravel back over them. The Quashnet provides crisp, flowing water that is ideal for these hardy fish, as well as an abundance of food like glass shrimp and insects. In addition to brook trout, it also supports other wildlife like herring, eels, heron, otter, and songbirds.

History and Degradation

When it was untouched by the hands of developers, the Quashnet supplied important resources to the Wampanoag tribe and provided ideal habitat for salter brook trout. However, deforestation and development would be the first step towards its eventual degradation. Developments included saw and grist mills that prevented trout and herring from migrating. Then, cranberry growers moved into the area around 1895 and converted the Quashnet into a large system of cranberry bogs, which involved filling in the river



with sand to provide a surface on which to plant and grow cranberries. Many of the growers also used harmful pesticides. However, the cranberry industry took a major hit in the 1950s due to flooding, a devastating hurricane, and a herbicide leak in 1959. As a result, many of the growers abandoned their bogs.

The building of the cranberry bogs and their eventual abandonment had a devastating impact on the Quashnet and its brook trout population. Excess sediment reduced stream flow and caused the river to become shallower and wider. There was also an overgrowth of brushy vegetation, including a shrub called sweet gale. The sweet gale and other brush formed a canopy over the river, and eventually collapsed into it, creating barriers to water flow and fish passage. The collapse of vegetation also pulled sediment from the river's banks into the water. The abundant sediment and vegetation choked the river and prevented sea-run fish from migrating, which led to declines in brook trout populations. In short, "one of the finest trout streams on Cape Cod" had become a "brush-choked remnant of ancient times" (Keay).

Restoration and Additional Projects

Work began in the late 1970s to restore the Quashnet to its previous condition and bring back the native brook trout. Trout Unlimited, the group that has spearheaded these efforts, is a national organization dedicated to conserving and protecting cold-water trout and salmon fisheries. In 1973, biologist Joseph Bergin from the Massachusetts Department of Fisheries and Wildlife took part in a study where he looked into the water guality and trout stocks of the Quashnet. However, he had difficulty capturing fish due to excess vegetation and sediment in the water. As a result, he began partnering with Trout Unlimited to clear an 800-foot section of the river. However, the group found that once they started clearing the river, they could not stop, and the project since has turned into an over 40-year endeavor. Francis Smith from Trout Unlimited, along with a group of dedicated volunteers, have been a part of restoration efforts from the very beginning. When speaking with Fran about his experience leading the restoration, he told me that all of the work has been done by hand without the help of machines like excavators and bulldozers. It has also been an all-volunteer project. To achieve their goals, Trout Unlimited volunteers have put substantial amounts of time into removing brush like sweet gale, planting grasses to stabilize the riverbank, planting trees to provide shade and reduce water temperatures, and installing devices like deflectors and artificial underwater banks to provide cover for fish and eliminate excess sediments. As a result of these efforts, brook trout populations have increased from one trout for every 100 feet to about a couple hundred for the same amount of distance. Additionally, Trout Unlimited has been involved in scientific research on brook trout including electroshocking surveys and PIT tagging. Electroshocking allows them to capture fish for study, and the PIT tags monitor the fish's movements.

The Quashnet has faced challenges since the restoration efforts began, including the failure of a berm in 1999 that was meant to contain chemical pollution from the Massachusetts Military Reservation. The failure of the berm had similar effects to the conversion of the river into cranberry bogs, such as slowed water flow, river widening, overgrowth of vegetation, increases in water temperature, and a loss of trout habitat. However, dedicated volunteers are still meeting regularly to restore the upper portion of the river, and the project is still very much alive and well. Various development projects have also threatened the Quashnet, such as the proposed building of condominiums and a high school, but Fran and other dedicated individuals have strongly opposed these efforts.

Although the Quashnet River has received a large amount of attention, it is not the only project which has sought to convert old cranberry bogs into suitable wildlife habitat, a process called "rewilding." In 2016, work began to convert two cranberry bogs near the

Child's River into wetland habitat, and more recently in 2023, there was a proposal to transform the 6.5-acre Chop Chaque cranberry bog near Santuit Pond in Mashpee into wetlands. These projects will entail the removal of culverts, dams, excess sediment, and vegetation. In the past, natural wetland environments were destroyed to create commercial cranberry bogs, and the hope is that converting abandoned bogs into wetlands will return lost wildlife habitat. The fact that so much has been done to transform unused land shows that improving the natural environment is a priority for many. With the aid of concerned citizens and dedicated volunteers, these projects should continue to produce successful results.

Additional Resources:

-Would you like to help restore the upper Quashnet? Visit this page to learn more: <u>https://www.capecodtu.org/quashnet-restoration/</u>

-Research at the Reserve presentation about brook trout and the Quashnet River: <u>https://www.youtube.com/watch?v=6jOolj8J_rw</u>

-Cape Cod Trout Unlimited Newsletter: Contains monthly updates about the restoration of the Upper Quashnet and can be accessed by visiting this link: https://www.capecodtu.org/newsletter/

Sources and Credits:

-Much of the information contained in this article was sourced from The History of the Quashnet River Valley by Donald Keay and a 1988 article from Trout Magazine titled "Quashnet River Restoration"

-Thank you to Fran Smith for talking with me and providing me with additional insight and resources

-Thanks to Tim Lynch for letting me use images from Cape Cod Trout Unlimited's website

Article Written by Grace Vachon

Creature Feature Mammals of the Mashpee National Wildlife Refuge

About Raccoons

Informally known as "trash pandas," raccoons are known both for their cuteness and their mischief. They have round, gray bodies with a coat of thick fur and bushy tail, as well as a pointed nose and a characteristic black "bandit" mask across their eyes. This mask is said to reduce the sun's glare. They vary in size and usually weigh between 12 and 36 pounds. Their front paws have five toes which can easily grab onto and hold



This image by Charles Patrick Ewing is licensed under CC BY 2.0.

objects. Their diet usually consists of insects, berries or fruits, bird eggs, and small mammals like mice and squirrels. Raccoons are opportunistic feeders, meaning that their diet is determined by what is available at the time, and food availability can be impacted by factors like weather conditions and season. They are also omnivores, meaning they feed

on both plants and animals.

Although occasionally active during the day, they are mostly nocturnal and crepuscular. Nocturnal means active at night, and crepuscular means active at dawn and dusk. Found throughout the contiguous United States as well as parts of Europe and Asia, they are fairly common and inhabit a variety of habitat types including forests, wetlands, and urban or suburban areas. In fact, it is not uncommon for raccoons to nest on or in man-made structures like chimneys, attics, or barns. These structures are where they often raise their families. After a 63-day gestation period, female raccoons give birth to a litter of between 3 and 7 cubs, with an average of 4 cubs per litter. The mating season usually occurs from January to March, and females usually give birth in the spring. From the time that they are born until the age of about 9 to 10 months, cubs remain in the nest with their mother before heading out on their own. Although they are adorable, they are also hunted for their fur and meat. The Mashpee National Wildlife Refuge allows hunting on almost 300 acres of the property, and raccoons are one of the several species that are part of the hunting season.



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Human Wildlife Conflicts and Rabies on Cape Cod

Human-wildlife conflicts occur when humans have negative interactions with wildlife, sometimes leading to retaliation against problem animals. Examples of common conflicts include disease, property damage, and the killing of pets or livestock. Since raccoons are commonplace in residential and agricultural areas, they are often the source of many conflicts here on the Cape and across the country. Raccoons can be extremely destructive. They will get into trash and compost bins, feed on

agricultural crops like corn and fruit, kill and eat livestock, and cause damage to homes and lawns. Also, they can cause harm to wildlife by raiding nests and feeding on the eggs of protected birds and turtles. Although frustrating, these conflicts can be easily mitigated by keeping garbage and other sources of food like pet food inside or in a closed container. Make sure that garbage cans are closed and avoid putting trash out for collection the night before. Protect livestock like chickens and rabbits by placing them in houses or fenced-in pens. Electric fencing is particularly effective in deterring predators. Vulnerable wildlife can be protected by placing fencing around nesting sites. For instance, you may have seen protective fencing around piping plover nesting sites on beaches. Such fencing is meant to deter both animal and human threats.

However, disease is a conflict that is harder to control. Raccoons are a vector species for several zoonotic diseases, including rabies and raccoon roundworm. Zoonotic diseases are illnesses that can be transferred from animals to humans and vice versa. Rabies is a viral disease that attacks the brain and spinal cord of mammals. A certain appearance or pattern of behavior is never a guarantee that an animal has rabies, but the disease may cause infected animals to act in an overly aggressive manner or to be less fearful of humans. They may also display physical symptoms like foaming at the mouth. The disease is spread through saliva when one animal bites another. It is fatal in humans if a vaccine is not administered in a timely manner.

Cape Cod has been diligent in controlling

the spread of rabies through the Cape Cod Oral Rabies Vaccine Program (CCORV). This is where edible packets containing a rabies vaccine are distributed near woods, wetlands, and other areas where wildlife are likely to find them. In the spring and summer months, volunteers work to distribute thousands of these packets both on the ground and in the air, which are coated with fish meal to attract wildlife.

Although humans and pets rarely experience adverse effects from swallowing the packets, it is best practice to remove them from public view if you find



Keep raccoons like this one out of your trash cans be keeping them secure! This image is licensed under CC BY 2.0.

an uneaten one. The program began in 1994 as a collaboration between the Massachusetts Department of Public Health, the Tufts Cummings School of Veterinary Medicine, and the U.S. Centers for Disease Control and Prevention after rabies was first detected in Massachusetts in 1992. The goal of the CCORV was to distribute vaccines along the Cape Cod Canal to create an anti-rabies barrier between Cape Cod and the rest of the state. In 2004, an infected raccoon was found in Bourne, indicating that the barrier had been broken and that rabies was now a real threat to the Cape. By 2006, rabies had been detected in every town on the Cape. In response, the CCORV has since expanded its efforts beyond the Cape Cod Canal to include towns like Barnstable, Falmouth, and Sandwich. These efforts have helped to drastically reduce instances of rabies on the Cape, and there have only been a few reported cases, including a man that died from a rabid bat bite in Marstons Mills, since its initial spread in the mid-2000s. These promising results of the CCORV demonstrate that it has served its purpose in slowing the spread of rabies on the Cape.

Given that rabies is difficult to detect and control, you may be wondering what responsibility you have in keeping Cape Cod rabies free. The simplest thing you can do is to avoid wild animals like raccoons. You can admire them from a distance, but do not touch or feed them. If you suspect that an animal may be infected with rabies, contact the police or your local animal control office immediately. To avoid being bitten, do not attempt to capture and move the animal yourself. Also, be sure to vaccinate your dogs against rabies as required by Massachusetts state law. Beyond individuals, wildlife rehab centers can also do their part to prevent rabies spread. According to Priya Patel, the medical director and veterinarian at Cape Wildlife Center in Barnstable, they vaccinate all high-risk animals before releasing them, report human or pet exposure to the state public health department, and work closely with the USDA and Cape Cod Rabies Task Force to send in dead animals for testing. Overall, raccoons are amazing animals with so many cool features and traits, but they can still be dangerous, and it is important to be conscious of how you can prevent dangerous zoonotic diseases.

Additional Resources:

-What is a raccoon latrine: <u>https://www.cdc.gov/parasites/baylisascaris/resources/raccoonLatrines.pdf</u>

-Tips on preventing human-wildlife conflicts from Wild Care in Eastham: <u>https://www.wildcarecapecod.org/preventing-wildlife-conflicts/</u>

Article Written by Grace Vachon

Upcoming Events and Volunteer Opportunities

- <u>Tuesday, June 25th</u>, 10:30am Presentation about the Mashpee National Wildlife Refuge at the Mashpee Senior Center*
- <u>Thursday, July 11th</u> Mashpee Wampanoag "Preserve our Homeland" (POH)
 Camp. Since 2017, the Friends have participated in an all-day, hands-on educational/scientific day with tribal youth, staff, and Refuge partners to assist creating new pollinator gardens, learn archery, and observe how forestry land practices change the landscape through fire management to restore and maintain important wildlife habitat. Volunteers also needed to help with kids crafts!
- <u>Tuesday, July 15th</u>, 10:30am Presentation about the Mashpee National Wildlife Refuge at the Mashpee Senior Center*
- <u>Monday, August 5th</u>, 10:30am Presentation on Raising Monarch Butterflies at the Mashpee Senior Center*
- <u>Monday, August 12th</u>, 10:30am Presentation on Climate Change on Cape Cod at the Mashpee Senior Center*
- <u>Sunday October 13th</u>.Save the Date for our third annual "Walk for the Wild" 5k challenge. This years walk will explore Refuge trails from Quashnet School to Attaquin Park in Mashpee. Registration will open later this summer.

*Please contact the Mashpee Senior Center for details and registration for these talks.

Please check our website for other upcoming events, activities and volunteer opportunities. Also, don't miss the Town of Mashpee Interpretive Nature Tours on Saturday mornings (see our <u>events calendar</u> for detail)!

2024 Friends of Mashpee NWR Board of Directors:

Glenn Davis, President MaryKay Fox, Treasurer Lucinda Keith, Clerk Neil Barkin F Thomas Fudala, Historian Nancy Church Katelyn Cadoret Tania Lewandowksi

Membership Form

YES! I want to support the Mashpee National Wildlife Refuge - enclosed are my dues as

checked below.			
Name:			
Phone: (H)		(C)	
Street:		_	
Town:	State:	ZIP Code:	
Email:			

Enclose payment for the membership - please make checks payable to:**FMNWR** *Mail to:* **FMNWR, P.O. Box 1283, Mashpee, MA 02649**

Thank you!

- [] Junior (18 and under) \$10
- [] Individual \$25
- [] Family \$50
- [] Conservation Friend \$100
- [] Wildlife Sponsor \$200
- [] Refuge Sponsor \$500+
- [] Lifetime Gift \$1000
- [] Corporate Gift \$_____
- [] Other \$_____

Donate Online

Volunteer Form

I would be interested in the following opportunities listed below:

- [] Stewardship Projects
- [] Newsletter Editor
- [] Native Pollinator Gardens
- [] Education Talks/Walks, Events at Schools
- [] Volunteer & Membership Coordinator

The Friends meet monthly on the first Tuesday at 5pm on Zoom. Please join us and get involved with Refuge projects, Friends group, pollinators, and community events! If interested, email us at info@friendsofmashpeenationalwildliferefuge.org for a Zoom invite.

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