



A NEWSLETTER

from the

CAPE ANN VERNAL POND TEAM

Spring 2023

www.capeannvernalpondteam.org

Email: cavpt@yahoo.com

Rick's Flock by Victoria Rolf

I have watched Rick, for more than ten years, work his beautiful magic at the Cape Ann Vernal Pond Team events throughout Eastern Massachusetts. Now I work primarily behind the scenes, and because of that I don't always get to see the wonderful starry-eyed sparkles that happen at our shows.

There was one particular day last fall that I want to share with you. My husband and I took our fifteen year old daughter and two of her friends to Magtoberfest in Magnolia. She has known Rick for more than a decade, and has attended Cape Ann Vernal Pond Team activities ever since she was a little tyke. She loves wildlife, catching every snake and bug and turtle with her bare hands, somewhat to the dismay of other kids. I brought her to the festival so she could share her wonder of nature with her friends.

I parked on a secondary street and we strolled over to the event. It was a beautiful sunny day and absolutely perfect for a fall festival. We could hear the music from the car and saw the bustling of people on our walk up to Lexington Ave. The compact little street scene was idyllic. From the food trucks to the ware vendors, it was all beautifully spread out on the street and sidewalks. Down on the Magnolia Library and Hesperus Avenue end of the street, the band and

dancing and craft brewers held a full house. The festival goers were relaxed and happy.

We walked to the Vernal Pond Team booth and said hello to Rick, who was helping a visitor handle a snake. In my periphery I observed something that I initially didn't understand. At that moment it was beyond my comprehension. There were at least fifteen young kids, and by young I mean from 4 to 12 years old, all spread out on the sidewalks. They were buzzing about, chattering to themselves and each other, excitement palpable,

with snakes on every-single-one of the children's bodies. There was not one adult nearby. When I got a little closer, I saw that the children themselves were lovingly and skillfully handling the animals for which they were entrusted. The interactions with each other, and with the snakes were sweetly mesmerizing. Each child had something different happening. Two children stood staring at their snakes while gently rubbing the skin of their charge. One boy looked like he had just found rue freedom. One girl looked frozen, totally still, hanging on like she was in shock. Some children assumed the honor of holding more than one snake at a time, and were loath to give them up. Two confident young girls assigned themselves as handlers in charge, every now and then following Rick's call for another snake.

The children were taking initiative to show the various festival visitors that came by how to hold the snakes. I thought my daughter was a one-of-a-kind, loving the snakes, tadpoles, and frogs so much. But seeing all these young children in action, giving their snakes over to my daughter and her friends, and the festival goers, lightened my heart and helped me see they were very much like her. It was one of the most beautiful child experiences I had ever seen, empowering and brave. What's more, I saw a deep caring and respect for the animals.

My experience of watching these young kids, during this one event, in the span of one hour, is just a teensy-weensy snapshot of what the Cape Ann Vernal Pond Team does. These beautiful children sprouted a few more feathers and had the most amazing magical adventure. Rick's herding instincts and his dogged determination to share all of his special creatures with the children, has given our little corner of the world a fighting chance at survival. It gives me comfort to know that our future is in the hands of this young flock.



Don't try this at home.

We select snakes for our activities that are friendly. Not all snakes are.

Photos by Rick Roth
and Victoria Rolf

Why Snakes?

by Rick Roth

A lot of people wonder why the Cape Ann Vernal Pond Team (CAVPT) does all these snakes shows. Well... long before I knew about vernal ponds, I was obsessed with snakes, like since the age of 5 when I caught



*Toodeloos in Gloucester
Photo by Victoria Rolf*

a brown snake on my way home from kindergarten. Much to the horror of my teachers, I would often bring snakes to show-and-tell in grade school. And most of my life I have been doing snake shows in some form or another.

When the CAVPT started in 1990 we mostly did vernal pond shows. But, being a snake man and the fact that many of our members loved learning about and handling snakes, I decided to expand our offerings and make Snakes of New England and the World one of our programs. It soon became more popular than our Intro to Vernal Ponds program. Visitors can directly interact with the snakes and most first-timers are surprised at how they feel. They're expecting slime or something equally unpleasant, but snakes are not like that. The cool, smooth tactile sensation is quite unusual and has an interesting affect on people. They are unlike our vernal pond shows where it's really not good for the frogs and salamanders



*Rockport Library at
Millbrook Meadow
Photo by Mordecai Mateo*

to be handled by visitors because they absorb liquid through their skin and could pick up contaminants we carry around on our hands all the time. Our snake shows provide an unusual opportunity to handle a living animal.

So, our snake show has become the most popular activity we offer and we've created a lot of awareness about the most reviled and misunderstood animal on the planet. During

our shows, people see little kids holding snakes and they think to themselves — how hard can that be? It makes them want to step

up and try it. We try to provide the right setting so that people feel comfortable...and can overcome their fear.

You could argue that our snake shows are not really a vernal pond thing... snakes do benefit from vernal pool habitat, but so do an awful lot of other animals. So, should we stop doing snake shows because they're popular, uh...no. Because the shows draw people in, it creates awareness about our Team and some of our other activities, like vernal pond field trips.



*Riverfest in Sudbury
Photo by Rick Roth*

Meanwhile, some of my snakes were growing out of their caging. And, evidently, I am unable to stop myself from acquiring new snakes. So a decision was made to construct new large luxury accommodations, carefully handcrafted by skilled artisans. Ok they weren't... but I did spend 50 years at my real job as a carpenter, and I kind of know my way around the toolbox. They're not examples of fine cabinetry, but are utilitarian by design, with thermostatically controlled heat, removable parts for easy cleaning and a branch for climbing. When you have 60 something snakes, the cages need to be easy to clean.

Then, I refurbished the older cages... repainting the trays and sanding and varnishing the branches, they get moldy if you don't. This undertaking required quite a bit of logistical maneuvering of snakes into temporary quarters until their cages were finished.

The Cape Vernal Pond Team gives our visitors a rare and crazy cool opportunity to get up close and personal with our reptiles... most people never have the chance to do that.



*Main Street Block Party Gloucester
Photo by Rick Roth*



*Sudbury Valley Trustees at Wolbach Farm
Photo by Daniel Russell*

Did You Know...

by Nathan Mineo

Did you know that we are surrounded by Native American history? I'm sure we are all familiar with Cape Ann's glacial history. It's hard to miss all those big rocks (glacial erratics) and boulder fields (glacial moraines) when walking through the woods. They are, of course, the remnants of the last glacier to cover the area we call home. However, most of us know very little about the more than 12 thousand years that followed the melting of that glacier and preceded European colonization.



Back in my early high school days, my friends and I somehow found out that there was an "Indian burial ground" in South Woods, Rockport. We even learned of its approximate location and apparently found the information credible enough to spend many hours and many days tromping through cat briar and underbrush in an attempt to find this burial site (foolishly thinking we would be able to identify it). Decades later, I have come to find out that there is in fact a Native American burial site in South Woods, and in the vicinity of where we were looking. In fact, there are many known Native American burial sites across Cape Ann. They are the burial sites of the Pawtucket, the last native inhabitants of Cape Ann.

The Pawtucket have called Cape Ann and much of Northern Essex County home for about the past 750 years. The Pawtucket are part of the Pennacook people of New Hampshire's lakes region, and they spoke a dialect of Algonquian. Cape Ann and Essex County provided the Pawtucket with a wide variety of wild resources, but they were primarily farmers with much of their movement and settlement around Essex County dependent on their agricultural needs. In fact, the already cleared land of this area was one of the main attractions that prompted European colonists to start settling here. And like the European settlements that supplanted them, Pawtucket settlements in this area were year-round, not seasonal as has been claimed in the past.

The Pawtucket's main village in Gloucester was called Wanasquam. Just North of Pole Hill, Wanasquam was nestled in between the Mill and Annisquam rivers. Pole Hill holds great spiritual significance and was designed and used by the Pawtucket as an "astronomical observatory". Those same glacial erratics we notice today were noticed by the Pawtucket as well, and the Pawtucket found them to have significant spiritual power. Many of our most familiar places in Rockport, Gloucester, Manchester, Essex, and the rest of Essex County were settlements, camps, corn fields, and places of spiritual significance. Much of that history has been lost to time and development, some has been excavated and preserved, but some

can be seen in the landscape if you know where and how to look.

Almost all of the information above comes from Mary Ellen Lepionka's *Indigenous History of Essex County, Massachusetts*. I strongly encourage you to visit the capeannhistory.org website and read the history she has put together. I found the Algonquian creation story particularly fascinating and insightful.

Historic Ipswich's website (historicipswich.org) also has a lot of information, *Indigenous Peoples of the North Shore*.



Masconomet's grave. Sagamore Hill, Hamilton MA.
Photo by Nathan Mineo

Masconomet was Sagamore of the Pawtucket in this area during colonization. Sagamores were not chiefs, but served more as governors of an area. Their authority generally came from a birthright, but was not absolute. Agawam was a Pawtucket village located on Castle Neck, Ipswich, and the people were also referred to as "Agawam".

Rainy Nights and Flashlights

Every spring Cape Ann Vernal Pond Team members lead Nighttime Field Trips to vernal ponds to see the amphibian breeding activity. Most people have no idea what vernal ponds are or even that vernal ponds exist, but there are hundreds of them on Cape Ann. A vernal pond is a fishless confined basin depression with no permanent inlet or outlet and a unique ecology. Vernal ponds provide more food for countless forest species than any other type of wetland. Our focus is on educating the public to understand more about this special habitat.

We encourage you to check out a Nighttime Vernal Pond Field Trip if you haven't already. Why at night? Because some of the breeding species are nocturnal and migrate and mate at night. Why all wet? Because some amphibians travel as far as a mile to reach a pond in the spring but only when the ground is wet. If we get a good night, it's an amazing spectacle and really the fun part of vernal ponding.

This is a fun family event. We generally head out about 9pm and stay for 1-2 hours. People drive their own car to the woodlands so they can leave whenever they're ready. Put your rain gear, boots and flashlight on the hook by the door. To be sure you don't miss our e-blasts about our field trips and activities, sign up at cavpt@yahoo.com.



Spotted salamander emerging - by Nathan Mineo at Ravenswood in Gloucester



Photo credit Susan Boyé

Visit our website to review our Field Trip Guidelines. While you're there check out our awesome Activity Photographs from previous Nighttime Vernal Pond Field Trips. Learn a thing or two about what you might see out there... or what you're missing if you don't go.



Animal Whisperer

By Mordecai Mateo

My love for snakes first started when my grandmother brought me downtown to the Gloucester Sidewalk Bazaar. I was five. This man had a tent set up and there were snakes of every size and color. He let me hold them!!! Every year we went to see the snakes. I couldn't wait to see "the snake guy". I learned his name was Rick. By about the 9th year, Rick was used to me showing up, and he asked me if I wanted to help. Of course I did!!!

I am now officially part of the Cape Ann Vernal Pond Team. I go to as many events as I can. This past summer I was all over the place. One of my favorites was the Square One Mall in Saugus, where there were a lot of people who had never seen a snake. The Sidewalk Bazaar and the Block Parties in Gloucester always have a ton of people that love to hold snakes, just like I did when I was five. I have gone to the Saugus Iron Works. We went to Hamilton Wenham where a summer camp came and saw the snakes. Magtoberfest, Rockport, Sawyer Free Library were some of the many shows I volunteered at. This summer I even made a road trip in the new van Silver Streak, with Rick to Sudbury. That was a fun day.

My favorite snake is Evilyn because she is iridescent. I love showing her to people and telling them all about her. Working with the snakes is very peaceful. I have met so many volunteers who share my love of snakes. Volunteering has gotten me out of the house and I have traveled to many new places.

I am currently attending Gloucester High School and will someday be working with some kind of animal, or be a graphic artist. My grandmother likes to call me the animal whisperer, because no matter the animal, they respond to me. Thank you to Rick and Colleen, who have always supported me, encouraged me, and shown me the ropes. Cape Ann Vernal Pond Team is one big family!



Volunteer Mordecai Mateo
YMCA Kids at West Parish School
photo by Lisa Olson

Underwater Ballet

by Rick Roth

I was a little surprised that we have never featured fairy shrimp in our newsletter. I think this might be a good year to do it.

I saw zero fairy shrimp in 2022, likely because the summer of 2021 was very wet and their eggs didn't hatch as a result. Now the summer of 2022 was a drought. The eggs must dry out, and studies show they can last for decades and still hatch when they get wet.

Fairy shrimp are back-swimming, filter feeding crustaceans that grow to 1 1/2". By the time we see fairies during our springtime field trips, they are pretty much full grown. The ones here on Cape Ann, *Eubranchipus vernalis*, are sort of a brown orange gold color that makes them difficult to see against the leaf litter at the bottom of the pool. Their movement can give them away and they have a somewhat conspicuous whitish V-shaped mark on their forked tails. They suck water through filters and eat particles that they strain out of the water... bacteria, algae, protozoa and detritus.



Photo: Judy Semroc

Photo by Judy Semroc at VernalPools.me

Fairy shrimp floating on its back

A single female can lay eggs multiple times in the early spring and produce hundreds of eggs. They have a visible brood pouch at about the midpoint of their body, which is nearly transparent. If you look closely you can see the individual eggs, at least as small as the head of a pin. They kind of swish around in there. I'm guessing it's so the eggs all get the same amount of something - sunlight? oxygen?...I don't know. I googled it and could not find an answer. So, if anyone does know, please tell me. I'm curious.

Fairy shrimp are an important vernal pond food source for predators, including adult insects such as predaceous diving beetles and giant water bugs. Insect larvae, like dragonfly, as well as some tadpoles, toads, salamanders, ducks and other birds come to the pools looking for them. Fairies that survive predation will often die by May when the water gets too warm for them, around 50 degrees.

Because viable eggs must dry out in order to eventually hatch into fairy shrimp, they can easily be relocated on the feet of birds, survive ingestion by other animals and be windswept to nearby pools. My fairly educated guess is that less than 40% of Cape Ann ponds have fairy shrimp. We love to find fairy shrimp on our field trips. When you see a bunch of them in one place it looks like an underwater ballet, complete with pirouettes and somersaults. They are only active in the daytime, but at night, if you shine a flashlight into the water, it will trick them into thinking

it's daytime and they will start to magically appear out of the leaf litter. They call them fairy shrimp because they are cryptic by nature. Some years they show up and some years they don't. So...I was expecting a banner year in 2023, but as of February 7th, I haven't seen any and I should be seeing them by now...

Fairy shrimp update: Later in February I started to see some fairies in a few of our pools.



Photo by Victoria Rolf

Fairy shrimp in a vernal pool. Their white forked tail provides contrast making them easily visible.

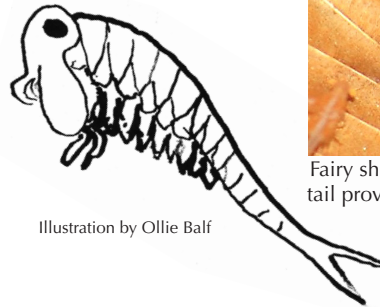


Illustration by Ollie Balf



Photo by Vernal Pool Association

Vernal pool fairy shrimp, *Eubranchipus vernalis*. The male (upper right) has a large clasper on his head. The mature female (lower left) has a brood pouch at the base of her abdomen.



Delaney's
PIZZA

332 Main St., Gloucester
978-282-7878

Delaney's Pizza Mogul Ron Delaney



We regret to inform you of the passing of Ronald Delaney on December 26, 2022. He was a great guy and made a great pizza, and was known as the "Pizza Guy" of Gloucester. Ron was known for his generosity and he was an avid supporter of our Team...he came to our benefit concerts and gave us pizza to power our Newsletter Committee for more than ten years. We'll miss you Ron. Delaney's is still open for business

Last Year We...

- Led our usual Nighttime Vernal Pond Field Trips
- Intro to Vernal Ponds Presentations:
Rockport Garden Club
Sawyer Free Library, Gloucester
Harold Parker State Forest with Scout Troops, North Andover
Shannah Montessori, Magnolia
- Vernal Pond Exhibit:
Halibut Point State Park for Rockport Elementary 6th Grade
- Presentation about the Cape Ann Vernal Pond Team:
New England Wildlife Center for New England Herpetological Society, S. Weymouth
- Conducted Blue-spotted Salamander Survey:
Manchester Essex Conservation Trust at Cedar Swamp (33days)
- Snakes of New England and the World Presentations:
Rockport Middle School
Sudbury Valley Trustees at Wolbach Farm
Sawyer Free Library, Gloucester
Hamilton Council on Aging
Rockport Public Library at Millbrook Meadow
Riverfest, Concord
Lincoln Land Conservation Trust at Lincoln School
Cambridge Block Party
TOHP Burnham Public Library, Essex
Cub Scout Pack 185 of Wellesley
and two Birthday Parties
- Snakes of New England Exhibits:
Mass Reptile Expo., June, Hanover
Mass Reptile Expo., November, Hanover
- Snakes of New England and the World Exhibits:
Belle Island Marsh Reservation, East Boston
Breakheart Reservation, Saugus
Magtoberfest, Magnolia
Square One Mall, Saugus
Saugus Public Library at Saugus Iron Works
Cape Ann Time Bank Artisans Market, Gloucester
Maritime Gloucester Heritage Day
Gloucester Block Parties (3 evenings)
Gloucester Sidewalk Bazaar (2 days)
Gloucester Halloween Party for Kids
- Miscellaneous Events:
CapeAnnCosmos.com - Cape Ann Vernal Ponds Interview
WickedLocal.com - Mini Snakes of New England and the World Photo Essay
- Had over 60 Volunteers and thousands of volunteer hours



Strider drawing by Ollie Balf

CAVPT thanks the following organizations and foundations for their generous support:

- | | |
|---|---|
| • The Echo Charitable Foundation | • Toad Hall Bookstore |
| • Combined Change, Comb Family | • Gloucester Cultural Council |
| • New England BioLabs | • Sam Park & Company |
| • New England Herpetological Society | • The Bellevue Fund |
| • Barnes Group Foundation | • The William P. Wharton Trust |
| • Cape Ann Savings Bank Giving Department | • New England Grassroots Environment Fund |
| • The EnTrust Fund | • Cell Signaling Technology |
| • The Norcross Wildlife Foundation | • Captain Planet Foundation |
| • GoodSearch | • The Boston Foundation's Belinda Fund |
| • Sweetwater Trust | • Brace Cove Foundation |
| • TD Bank | |

A Heartfelt Thank YOU !

What an incredible year we had, none of which would have been possible without recognizing the cornerstone of the Cape Ann Vernal Pond Team... our tireless and dedicated Volunteers. Whether it was working at our shows, breaking through the ice to check salamander traps, or helping to keep Richard organized... our Volunteers are simply the BEST! We couldn't do it without YOU!

We received financial support from You throughout 2022 - our members, individuals and organizations. You have given so generously to help us meet our financial goals. These contributions allowed us to reach students, families and interested citizens. Your support and continued commitment keeps our Team moving forward on our Mission.

Our Mission... the Cape Ann Vernal Pond Team is a non-profit volunteer organization dedicated to vernal pond conservation and education since 1990. Our focus is vernal ponds. The issue is the preservation of wildlife habitat, which is ultimately about the health of the planet.

The Echo Charitable Foundation (TECF)

We would like to sincerely thank TECF for challenging us with an incredible Matching Funds Campaign. Because of your generosity we met our goal of raising \$25,000. TECF matched your donations and what a gift that was. Because of You and TECF, we are planning great things and are working hard to increase our presence in the community. TECF and CAVPT share a common goal of environmental protection and stewardship, and we are grateful for the gifts from TECF of our Toyota Sienna van and Matching Funds Campaign of \$25,000.

We thank you, The Echo Charitable Foundation, from the HEART...for providing us with this generous funding...what a tremendous opportunity for our Team.



New England BioLabs Foundation

Last year New England BioLabs provided us with a grant that specifically supports our animals, to help us take care of them. We are fortunate that they care about the welfare of the creatures and the environment that they live in. The assistance they provided increased our outreach by allowing us to focus on our programs, vernal pond certifications, and other conservation efforts. Their continued support over the years for our local organization, has helped us make our little neck-of-the-woods a better place. What a gift!

New England BioLabs Foundation - We are a private foundation whose mission is to foster community-based conservation of landscapes and seascapes and the bio-cultural diversity found in these places. We recognize that the natural and cultural values of landscapes and seascapes are inextricably linked, and that indigenous and local communities play a fundamental role in their stewardship.

Combined Change

In late December we were nominated and awarded a very generous donation from the Combined Change Donor Advised Fund. We asked them to please help share our JOY by telling us more about how and why they chose CAVPT.

In their words...

In honor of Marilyn Comb, members of the Comb Family have selected your organization for its outstanding commitment to making our planet a better place to live. The family was happy to support the work you are doing this year as an organization local to us, working in a subject of personal interest to many family members.

We are so appreciative of the Combined Change donation and support of the Cape Ann Vernal Pond Team's Mission to make the world a little better place for everyone through education and conservation.

If we value wildlife, we must protect vernal ponds.....

Cape Ann Vernal Pond Team

Membership Benefits:

Subscription to our annual newsletter
Email updates of activities and events
Cool membership level gifts
Guided field trips to local vernal ponds
The satisfaction of knowing you are helping preserve these unique and vital habitats
Website: capeannvernalpondteam.org

Programs & Activities:

Vernal Pond Certifications
Certification Workshops
Intro to Vernal Ponds Presentation
Vernal Pond Scout's Patch Program
Daytime & Nighttime Vernal Pond Field Trips
Presentations & Exhibits
Snakes of New England & the World Presentation

Salamander linoleum cut by Isabel Natti

Colleen's Corner

by Colleen Anderson

Have you wanted to reduce the amount of household waste you use, but wondered if alternative products work as well? I did, so I decided to give some of them a shot. Here is a list of items that I feel are really worth trying!

Who Gives a Crap - us.whogivesacrap.org and yes it is a .org

A lot of popular toilet paper brands cut down old growth trees to make their TP and we just flush it away. Old growth trees hold carbon in the ground. I saw an article for "Who Gives a Crap". They're an Australian company offering 100% recycled TP or Bamboo TP. Bamboo is a fast growing grass that is wonderfully suited for this purpose. It's soft and absorbent. They have stopped using any single use plastic packaging, which is great. Roughly 40% of the global population doesn't have access to a toilet so "Who Gives a Crap" donates 50% of their profits to help build toilets and improve sanitation in the developing world. Now that's awesome!

Debbie Meyer Green Bags - www.debbiemeyershop.com or local store
Although I generally don't like to use plastic, "Debbie Meyer Green Bags" are one product that I think is still worth using, and so far I haven't found an alternative that I like better. I saw them in a store over a year ago and thought why not? They cost about \$10 for 20 bags and they are reusable. WOW have I been impressed! That delicious package of strawberries that costs a lot lasts over a week in the fridge. I've used them for a variety of fruits and veggies and I see a big difference in how long everything stays fresh. The outer package explains the use and care.

E-Cloth - www.e-cloth.com or local store

I don't know what made me give these "E-cloths" a try, maybe they were on sale at Ace. Boy am I glad I did. Imagine you can wash your windows squeaky clean with just water. Well you can. All you do is wet the waffle cloth with water and wipe the window dry with the microfiber cloth. That's it! I haven't tried all the other varieties of "E-Cloths", but they might be onto something.

Support the Cape Ann Vernal Pond Team. Become a member or renew today!

Membership and donations can also be completed on our secure website, www.capeannvernalpondteam.org

Membership levels

- ☐ **Family - \$35.00 (USD)**
Subscription period: 1 year
Yearly membership to CAVPT for a family (2 adults and children)
Gift includes a CAVPT decal & bumper sticker
*Please list names of adults and names/ages of children
- ☐ **Family - Lifetime - \$350.00 (USD)**
Subscription period: Unlimited
Lifetime membership to CAVPT for a family (2 adults and children).
Gifts include CAVPT decal & bumper sticker, Vernal Pond Field Guide
Shirt or hat
*Please list names of adults and names/ages of children
- ☐ **Individual - \$20.00 (USD)**
Subscription period: 1 year
Yearly membership to CAVPT for an adult (17 years and older)
Gift includes a CAVPT decal & bumper sticker
- ☐ **Individual - Lifetime - \$200.00 (USD)**
Subscription period: Unlimited
Lifetime membership to CAVPT for an adult (17 years and older).
Gifts include CAVPT decal & bumper sticker, Vernal Pool Field Guide,
Shirt or hat
- ☐ **Junior (under 16) - \$10.00 (USD)**
Subscription period: 1 year
Yearly membership to CAVPT for juniors (16 years and younger)
Gift includes a CAVPT decal & bumper sticker

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capeannvernalpondteam.org

You can use our secure website to make your donation online. It's quick and easy!

If sending a check, please fill out the following:

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Please detach this form and mail your donation to:

Cape Ann Vernal Pond Team
366 Main St. #2
Gloucester, MA 01930



CAVPT is a 501(c)(3) nonprofit organization. Your contribution is tax deductible.

Cape Ann Vernal Pond Team
366 Main Street #2
Gloucester, MA 01930

Return Service Requested



The Need for Protection...

The temporary nature of vernal ponds often belies their importance. Countless plants and animals live in vernal ponds. Insects, amphibians, reptiles, birds and mammals visit to drink, feed, breed and nest. Some species, such as spotted salamanders, wood frogs and fairy shrimp are totally dependent on this habitat.



Wood frog floating in vernal pool
Dennis P. Quinn, *Of Pools and People*

How to Protect...

The best way to protect vernal ponds is to own the property. The next best way to protect them is to certify ponds with the Natural Heritage & Endangered Species Program. Certification applications are now done online and include photographs and field observation data. To learn more go to www.capeannvernalpondteam.org or check out the Vernal Pool Association's website at www.vernalpool.org



Block print by Isabele Natti

Butterfly print by Isabele Natti