



Winter/Spring 2011

A NEWSLETTER

from the

CAPE ANN VERNAL POND TEAM

Website: www.capeannvernalpond.org

Email: cavpt@yahoo.com

THE CAVPT IS A HOPELESSLY NON-PROFIT VOLUNTEER ORGANIZATION DEDICATED TO VERNAL POND CONSERVATION AND EDUCATION SINCE 1990.

CAVPT Hosted Its First Annual Benefit Concert and Auction

DID YOU KNOW...

by Nathan Mineo

Did you know that eastern red-spotted newts never have to stop and ask for directions? This is because they can't get lost. You're probably thinking to yourself, "Why, do they have some sort of built in compass or something?" Yes and better! Not only can newts detect magnetic north, they can, in a sense, "see" the magnetic field of the Earth. That gives newts the ability to orient themselves (as if with a compass) and the ability to determine their geographic position (as if on a map).



Photo by Cheryl Briscoe

Scientists have done some pretty fun experiments with newts, trying to mess around with their ability to orientate and home. Most of the experiments involve subjecting the newts to various light conditions (short waves, long waves, no light, full light). One experiment even filtered certain wavelengths of light by gluing blue caps on the heads of some newts! The point of all these experiments was to figure out what mechanism enables the newts to navigate. The conclusions, as you might expect, are rather complicated and still aren't fully understood.

As it turns out, light plays a large role in the newt's detection of the magnetic field. In fact, the newt's compass is, in part, light-dependent. Newts have extraocular photoreceptors (regions of the brain that receive certain wavelengths of light), which mediate their magnetic compass response. It's proposed that newts use this complex light-dependent compass combined with a non-light-dependent compass to detect the Earth's magnetic field and from that form a map with coordinates similar to latitude and longitude, thereby enabling them to know where they are, even if they have been moved, and find their way home. So, simply put, newts NEVER need to ask for directions.

Multiple sources.



Kestrel Educational Adventures Update

As many of you may know, Kestrel Educational Adventures is a non-profit offering place-based educational programs to schools on Cape Ann and the North Shore. Kestrel began offering programs in 2002 as the school outreach arm of the Cape Ann Vernal Pond Team. It is now a separate organization with a close relationship with CAVPT.

Founder Jessica Kagle has stepped down as Program Director and handed the keys to the creative and visionary Shannon McHone. Shannon is a recent alumnus of Antioch New England Graduate School, and a former education intern at Kestrel. Jessica continues to be involved with Kestrel as a volunteer and a consultant.

The mission of Kestrel has changed somewhat, as we have moved towards working to help schools improve education by using wildlife and nearby natural places to teach academics. Over the past year, the Kestrel team focused our energy on deepening existing relationships with schools and students. We spent lots of time consulting with teaching staff and principals, designing programs to suit each school's needs, and connecting our partner schools with a place of study within walking distance of the school.

Some of our favorite projects this year included connecting every

grade level at Rockport Elementary with an element of the local woods to study, welcoming additional schools in Beverly into the ecosystem movie project, and doing a school-wide four day study of the school site with Eastern Point Day School. Most of our projects this year included student-centered creative portions: storytelling, skit design, murals, and other projects. We also continued our osprey monitoring project and made a feast with the Conservation Club using ingredients we grew or gathered. During the summer, we took our first Conservation Club camping adventure to the Mohawk Trail State Forest in the Berkshires.



Kestrel Program Director, Shannon McHone

We spent much of the summer putting together some movies, including a ten minute film about Kestrel that had its premier showing this fall at the Cape Ann Community Cinema.

All this for less than \$50,000 a year!

An Evening with Charlie Farren and Jon Butcher

First Annual Benefit Concert & Auction for the Cape Ann Vernal Pond Team



Alex pretends to be fascinated as Rick offers suggestions about how to run a ticket booth. Cora is transfixed by Tracy's Vulcan mind meld.



Jon and Charlie making great music



Rick Doucette instructs the eager crowd on the finer points of the silent auction....



....and the crowd goes wild for the big yellow kayak



Ron Camille and his family give the vernal pond display two thumbs up!

We'd like to thank all the wonderful people who made generous donations and helped make this a successful and fun event.



Ooohhhh.....snacks!!!



It was a hoppin' good time!

CALENDAR of upcoming stuff...
check out our website at
www.capeannvernalpond.org

Last Year We...

- Led our usual nighttime vernal pond field trips
- Worked on vernal pond certification
- Presented "Intro to Vernal Ponds" at:
Parker River Watershed Association, Byfield
Harvard Lecture Series, Harvard
- Presented "Vernal Ponds" at:
Sawyer Free Library, Gloucester
Toad Hall Bookstore, Rockport
- Held a Vernal Pond Certification Workshop for:
Parker River Watershed Association
- Presented "Under a Frozen Pond", a kid's program at:
The Peabody Essex Museum, Salem
- Presented Snakes of "New England and the World" at:
Great Brook Farm, Carlisle
Earthfest at Lynn Woods
Rockport Elementary School, Rockport
Harold Parker State Forest, North Andover
Bradley Palmer State Park, Hamilton
Halibut Point State Park, Rockport
Riverfest 2010, Wolbach Farm, Sudbury
The Trustees of Reservations Discovery Center,
Ravenswood Park, Gloucester
Cub Adventure Day Camp, Bolton
Sawyer Free Library, Gloucester
Borderland State Park, North Easton
Cape Ann Farmers' Market, Gloucester
Lincoln Public Library, Lincoln
Nashua River Watershed, Groton
- Presented Snake Exhibits at:
Essex County Greenbelt's Fall Festival
Gloucester Sidewalk Days
Brookwood School Sustainability Fair, Manchester
- Presented Vernal Pond/Snake Exhibits at:
The Ecological Landscape Association in conjunction
with the New England Herpetological Society
Gloucester Pride Stride - had walkers, too!
- Presented "Native New England Snakes" for:
Tiger Cub Safari, Danvers
- A few CAVPT members worked on vernal pond surveys
with Dan Wells of Hyla Ecological Services. The
result was 12 certified pools in West Gloucester.
Paid for by the EnTrust Fund.
- Had a wicked-scary pumpkin-carving event at the
Red Barrel Pub in Essex

Snider drawing by Ollie Balf

Field Trips

Rainy nights and flashlights

Every spring CAVPT members lead nighttime field trips to the ponds to see the amphibian-breeding activity. Check your flashlights, get new batteries and put your rain gear on the hook by the door. To avoid habitat destruction and critter disturbance, we limit the number of participants on each trip. We also ask that you leave your dog at home. Interested? Email us at cavpt@yahoo.com.

FEATURED CREATURE

Spotted Turtle

SCIENTIFIC NAME: *Clemmys guttata*

SIZE: Adults average about 3 1/2" to 5 1/2" long.

RANGE: Eastern U.S. (more or less)

DIET: Crustaceans, mollusks, spiders, earthworms, and aquatic insects, occasionally frogs, tadpoles, small fish, carrion and vegetation.



Photo by Ron Canille

We found this spotted turtle last spring in a vernal pond in West Gloucester while working on vp surveys with Dan Wells of Hyla Ecological Services. She was at the bottom of the pool under 18" of water. The growth rings on her shell indicate she is 18 years old.

DESCRIPTION:

- Habitat: Unpolluted small shallow bodies of water such as woodland streams, wet meadows, bog holes, vernal ponds, marshes, and swamps.
- Breeding: March to May
- Reproduction: Deposits eggs on land in June or July. Average clutch size is 2 to 5 eggs. Incubation period of 70-83 days; hatching in late August. Overwintering in the nest may occur.
- Populations are declining due to habitat destruction (development, and draining and filling of wetlands), overcollecting, and roadkill.
- It can take 7 to 10 years for a spotted turtle to reach sexual maturity. They are not particularly long-lived for a turtle - maybe 25 years. Their populations are not likely to bounce back unless measures are taken to protect the turtles and the habitat.
- Wanders over land to different wetlands. May breed in one, feed in one or more others, and overwinter in yet another. Hibernates in muddy wetland bottoms under the ice. May aestivate during the hottest months of summer.

Reference: *Amphibians and Reptiles of New England, Habitats and Natural History*. DeGraaf and Rudis

The Whale Center of New England

Thanks to The Whale Center of New England for the use of their bulk-mailing permit. Did you know The Whale Center also helps to conserve amphibious animals? Seals spend a large portion of time on land and are considered amphibious mammals. If you see a seal on land please call The Whale Center at 978-281-6351. They will assess the seal's health and collect data for a national database. Learn more at www.whalecenter.org.



Sierra Magazine, Jan/Feb 2011

Check out the great article about who we are and what we do, written by local freelance journalist Sara Martel: www.sierraclub.org/sierra/201101/act.aspx



Photo by Evan Richman

ELA Award

The Ecological Landscaping Association presented CAVPT and the New England Herpetological Society an award for The Most Innovative Exhibit at the 2010 ELA Conference & Eco-Marketplace.

Check out this website article for more information: www.thereiminder.com/localnews/springfield/ecological/landscap

In Memoriam



Daniel Pierson

Cape Ann naturalist Dan Pierson worked with CAVPT on some of our earliest vernal pond certifications. He contributed to the conservation of Cape Ann's wetlands and wildlife habitat through his observation, research and mapping.

Dan took me on a field trip in Dogtown to see 'his' spotted turtles, some of which he observed for many years. He was a good friend to the wildlife on Cape Ann.

R Roth

Ollie Balf

Ollie Balf was a teacher at Montserrat School of Visual Design for many years. He heard about CAVPT from our Executive Director, Rick Roth, when Rick was at Ollie's house doing his 'real' job, carpentry. He was intrigued and offered to do some illustrations for our newsletter if we wanted him to - which we did. They are strategically placed amongst the pages of this newsletter. Hope you enjoy them as much as we do.



The beautiful marbled salamander *Ambystoma opacum* is a vernal pond obligate species. State listed as Threatened, marbleds are uncommon in Massachusetts.



Vernal pond survey in West Gloucester, April 2010, with Dan Wells of Hyla Ecological Services. Ron (left) gets the GPS coordinates, Rick (right) walks the perimeter of the pool counting egg masses. Dan (behind camera) takes the picture.

GoodSearch: A painless way to give to your favorite Vernal Pond non-profit! Install the GoodSearch toolbar (<http://www.goodsearch.com/> - easy!), select Cape Ann Vernal Pond Team as your charity, and start surfing. CAVPT earns one cent for every search (if 100 people do two searches every day CAVPT earns \$730 in a year!). Worried about search results? Don't be: GoodSearch is powered by Yahoo.

Also at no cost to you: GoodShop.

Shop online at your favorite stores, save and give. What could be better!? You'll get special deals at Best Buy, Staples, Land's End, and hundreds more; retailers donate a portion of your purchase to CAVPT. *Everybody wins!*

Grants & Donations

In 2010 We Received Grants From:

- *The EnTrust Fund*, \$5000
- *New England Grassroots Environmental Fund*, \$1000
- *New England BioLabs*, \$500
- Thanks to all of you who responded to our first annual appeal letter with your generous donations.

Remembering George

Long time CAVPT newsletter mascot and environmental activist, George, "The Cat", Briscoe, departed for the big litter box in the sky this past November at the ripe old age of 19. George would join us during our newsletter meetings, lying regally by the fire and often looking askance at the antics of the esteemed newsletter committee. In his later years, when his eyesight failed, he would sometimes lurch through the room, ricocheting off furniture that had been moved from where he expected it to be, and staggering through pizza plates left on the floor. Yet he always managed to find his way to the fireplace where, even in his kitty blindness, he still managed to look askance at us. He will be greatly missed, and we give a big kitty salute to George the Cat.



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

What a CAVPT membership offers:

- A really neat CAVPT car decal
- Subscription to our annual newsletter
- Email updates of vernal pond activities and events
- Guided field trips to local vernal ponds
- The satisfaction of knowing you are helping preserve these unique and vital habitats

Our programs & activities include:

- Vernal pond certification
- Exhibits & presentations
- Daytime & nighttime field trips
- Certification workshops
- Posters
- "Vernal Ponds" video
- Website: capeannvernalpond.org
- Scout patch program
- Snakes of New England & the World

Salamander linoleum cut by Isabel Natti

For school programs, including Ponds in the Classroom, contact our sister organization, Kestrel Educational Adventures: www.kestreleducation.org.



Photo by Colleen Anderson

The funding for our programs is provided by:

- Corporate gifts
- Grants
- Sale of our merchandise
- Donations from community members like you
- Memberships

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

The EnTrust Fund • The Norcross Wildlife Foundation • New England Herpetological Society • Sweetwater Trust • GoodSearch • Toad Hall Bookstore Gloucester Cultural Council • The Bellevue Fund • Sam Park & Company New England BioLabs • New England Grassroots Environment Fund • TD Bank

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

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 ultimately is about the health of the planet.



Photo by Lynne Holton

Red eft, land stage of the red-spotted newt. They get away with their conspicuous coloration due to their toxic skin

CAVPT is a 501(c)(3) non-profit organization
www.capeannvernalpond.org

Name _____

Street _____

City, State, Zip _____

(address required if paying by credit card)

Phone _____ Email _____

☐ Send me email updates about field trips and events

☐ Lifetime Membership \$200

Annual Membership

☐ Individual \$20 ☐ Family \$35 ☐ Junior (under 16) \$10

☐ Additional donation \$ _____

☐ Check enclosed: \$ _____ Payable to: Cape Ann Vernal Pond Team

☐ Charge my credit card (Visa, MC, Amex, Discover)

CC # _____

exp date ____/____ CVV code (on back of card) _____

Signature _____

(required if paying by credit card)

Please detach this form and mail with your donation to:

Cape Ann Vernal Pond Team
P.O. Box 12, Rockport, MA 01966





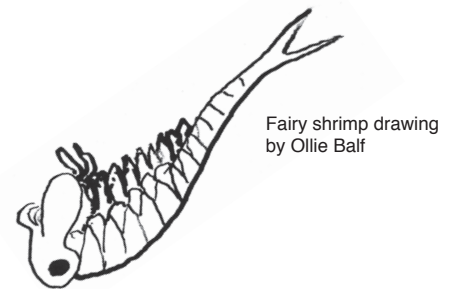
Return Service Requested

Cape Ann Vernal Pond Team
P.O. Box 12
Rockport, MA 01966

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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.



Fairy shrimp drawing
by Ollie Balf



Photo by Nathan Mineo

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 application reports include photographs, maps and field observation forms. To learn more go to www.capeannvernalpond.org or check out the Vernal Pool Association's website at www.vernalpool.org



Come see us this spring! CAVPT leads nighttime field trips to witness the annual migration and breeding of wood frogs and spotted salamanders...see inside, or our website, for more details.