A publication of the Stony Brook-Millstone Watershed Association, central New Jersey's first environmental group.

WELLSPRING

Your water. Your environment. Your voice.

Transforming Our Trails

Imagine walking from your local park clear through to another community. Think it's impossible?

Well whether you're looking for a leisurely stroll, regional trek, or a carbon-free alternate commute, the Stony Brook-Millstone Watershed Association is hard at work improving the depth and breadth of hiking options in our area.

"Expanding regional connection is vital," said Jim Waltman, Watershed Association Executive Director. "Community partnerships help build a shared appreciation of our



The Watershed Reserve boasts more than 10 miles of hiking trails.

natural resources and bring towns together to help protect our environment."

This winter, work continues on the Watershed Association's section of the Lawrence Hopewell Trail on the Watershed Reserve. The Lawrence Hopewell Trail is a system of 20 miles of multipurpose trails that run through public and private lands in Lawrence and Hopewell townships.

Our section of the trail along Wargo Road will soon provide a connection between the existing trail at Bristol-Myers Squibb, the Princeton Farms neighborhood, and beyond. We're also actively working on completing a connection from Pennington's Kunkle Park to Hopewell Borough Park.

In addition, our more than 10 miles of foot trails on the Watershed Reserve will be getting an upgrade.

In early 2008, the Watershed Association adopted a master plan for the Reserve. This plan calls for our trails to be organized more thematically, with clear points of origin and destination. This organizing concept, along

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FROM THE EXECUTIVE DIRECTOR

Shad in our 'Shed?

Carl Alderson and Dave Bean are passionate about American shad.

Alderson is a fisheries biologist with the National Oceanic and Atmospheric Administration and Bean works for the NJ Department of Environmental

Protection. The two are convinced that shad and their cousins in the herring family can be restored to the Raritan River Basin, including the Millstone River and its tributaries.

Shad are anadromous, which means that they spend most of their life at sea before migrating up rivers to spawn. To survive, they need both healthy freshwater and marine habitats and free passage between the two.

The fish are harmed by ocean pollution, polluted runoff in streams and rivers, and dams. Overfishing has become a larger and larger problem as ocean trawlers consume more and more fish.

With shad stocks crashing throughout much of their range, fishery biologists are seeking opportunities to make more spawning habitat available for the fish. To do so requires breaching dams, constructing "fish ladders" around dams that cannot be breached, and improving water quality.

Currently, three dams prevent shad and other migratory fish from returning in any significant numbers to the Millstone River.

The Calco Dam, a 206-foot former utility structure that extends five feet out of the water, is located on the Raritan River about two miles downstream from the Raritan's confluence with the Millstone. The dam currently blocks most shad attempting to make their way up the Raritan River, although a 15-foot wide "notch" in the dam allows some fish to pass when river flows are high.

Smaller dams at the Manville Canal Causeway and at Blackwells Mills on the Millstone

block shad that make it past the Calco Dam (although I've met people who swear that they've seen shad in the Millstone further upstream).

Alderson and Bean think shad would do fine in the Millstone River, assuming that current impediments to their migration can be removed and that the water quality in the river does not deteriorate. They've asked the Watershed to help investigate the feasibility of restoring shad to the Millstone and I have enthusiastically agreed.

Something happens to a river when its native fish are gone. A part of the river's soul is lost too. The loss of robust American shad runs from the Millstone happened so long ago that no one even knows to mourn. Fortunately, there are people like Carl Alderson and Dave Bean who can inspire us to dream.

Shad in our 'Shed? That would be something!



Timberlane Takes Over Watershed Reserve

In October, the entire sixth grade class from Timberlane Middle School in Hopewell—more than 300 students in all—took part in a two-week intensive educational experience at the Watershed Reserve.

A partnership between Watershed Association teacher-naturalists and Timberlane staff, students took part in a variety of activities —everything from team building and survival techniques, to water chemistry and writing poetry—building lasting connections to classmates and the environment.



STREAMWATCHING

Focus: Royce Brook Subwatershed

StreamWatch employs the watchful eyes and willing hands of more than 80 volunteers to monitor key indicators of stream health, including aquatic life, nutrients, dissolved oxygen, temperature, pH, erosion, canopy cover, and many other features. With 36 chemical and 14 biological sites, the coverage is extensive throughout the Stony Brook-Millstone Watershed.

Each year we host an AmeriCorps Watershed Ambassador to supplement the work of our staff and volunteers. The Watershed Ambassador, a position funded by the New Jersey Department of Environmental Protection, helps us promote watershed education and perform monitoring. Twenty such ambassadors are employed throughout the state.

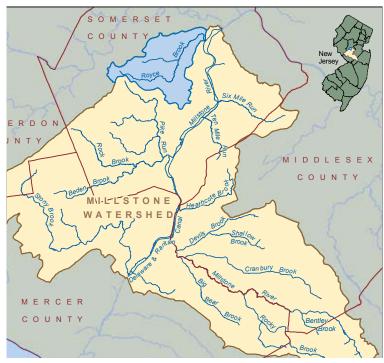
During 2007 and 2008, the Watershed Association's Watershed Ambassador performed biological and visual stream assessments in the Royce Brook subwatershed. The Royce Brook subwatershed contains portions of Hillsborough Township and Manville Borough in the northern part of the Stony Brook-Millstone Watershed (see map).

Biological assessments found a moderate level of stream impairment, meaning insects and crustaceans that need clean water are declining. Visual assessments pinpoint a lack of streamside vegetation as one possible cause of this impairment. Native streamside vegetation is important to provide shade, limit erosion by holding soil in place, and absorb pollutants before stormwater

enters streams.

In many areas, the streamside vegetation consisted of mowed lawns. Mowed lawns do not provide shade and increase the chance of pollutants, such as fertilizers and pesticides, entering the stream.

There were also many new developments occurring throughout the subwatershed. New development increases the amount of impervious cover, which increases the rate at which water flows over land and enters streams. This in turn can increase flooding and erosion meaning pollutants such as pet waste, fertilizer, motor oil and



sediment are washed into our streams, instead of percolating into the soil.

In addition to monitoring, the Ambassadors play another important role in improving watershed health by educating students and residents on actions we can take to reduce pollution. These include using the proper amount of fertilizers, reducing pesticide use, and cleaning up after pets. To learn more about what you can do, visit our Web site at www.thewatershed.org and click on "Become River-Friendly!"

StreamWatch is made possible with the generous support of Janssen, the Mary Owen Borden Foundation and the New Jersey Water Supply Authority.

Royce Brook Subwatershed Scorecard

AMOUNT OF IMPERVIOUS COVER	
NITROGEN POLLUTION	
PHOSPHORUS POLLUTION	
AQUATIC LIFE	
LOSS OF STREAM-SIDE HABITAT	

* Rankings based on data from NJ DEP Land Use/Land Cover flyover reports and Watershed Association data and scientific methodologies.

RANKINGS Good

StreamWatch Data Detect Change in West Windsor Water Quality



StreamWatcher Andrew Kulley

This summer StreamWatch Volunteer Andrew Kulley noticed that his water samples at North Post Road on Duck Pond Run in West Windsor were yielding unusual results. Nitrates were high and dissolved oxygen was low relative to readings at other Duck Pond Run locations.

Andrew reviewed the results with his colleagues on the West Windsor

Environmental Commission, and they discussed possible causes for the unusual readings, including the possibility of sewage leaking from some source and fertilizer run-off.

A few weeks later, a neighbor reported a fish-kill in the stream. Prompted by this, the township Department of Public Works discovered a broken sewage pipe where it crosses Duck Pond Run.

"It likely had been leaking before it broke (although the odor was not strong). I suspect that a sewerage leak would account for the anomalous results I observed," Andrew noted.

Fortunately, after repairs to the pipe and a heavy rain, the nitrate and oxygen levels are once again consistent with the rest of Duck Pond Run.

"It likely had been leaking before it broke (although the odor was not strong). I suspect that a sewerage leak would account for the anomalous results I observed."

Andrew recently started monitoring Duck Pond Run as one of our CATs (Chemical Action Teams). Andrew also helped organize this year's stream cleanup in West Windsor. Thank you for being the eyes and ears of our Watershed!

Reaching Beyond the Watershed

Each quarter, we keep you informed of our work in the 265-square-mile region that is the Stony Brook-Millstone Watershed. However, we often have an impact that extends beyond the physical borders of our watershed. One example: our Watershed Institute.

The Watershed Institute seeks to strengthen and connect citizen-based watershed organizations throughout New Jersey by hosting workshops and providing technical assistance and tailored advice. Since 2003 the Institute has also administered a small grant program.

Funds for the 2008 grant program, to be passed through to the watershed groups, were provided by the Geraldine R. Dodge Foundation and the New Jersey Department of Environmental Protection.

We are pleased to announce the recipients of the 2008 Watershed Institute Grants! In its sixth year, the grant program provided \$83,950 in funds for projects such as rain garden installation, educational forums, and water quality monitoring activities. The awardees are:

Bergen Save the Watershed Action Network Raritan Baykeeper, Inc. Great Swamp Watershed Association Shark River Cleanup Coalition Hackensack Riverkeeper, Inc. South Branch Watershed Association Musconetcong Watershed Association South Jersey Land & Water Trust Pequannock River Coalition Teaneck Creek Conservancy

Visit the Institute's Web site at www.thewatershedinstitute.org for more information on the grantees.

VOLUNTEER/FEST SPOTLIGHT

Lori Citrone

Lori Citrone is one busy woman—wife, mother, Watershed Association Trustee, event coordinator extraordinaire, the list goes on an on. With so many responsibilities one might get overwhelmed, but not Lori. How does she do it?

"What I love about the watershed is that it helps balance my life, feed my soul," she said. "Life moves so fast, but at the watershed the changing of the seasons, the flow of our rivers and streams, slows things down and helps keep you grounded in the human rat race."

Serving her second term on the Board of Trustees, Lori's great love of nature drew her to the Watershed Association and keeps her coming back for more.

"I grew up on a farm in Pennsylvania and really wanted my three daughters to have that same experience, so when my husband Neil and I came to Pennington and found out about the Watershed Association it was a natural fit."



From left, Hopewell Township Mayor Vanessa Sandom, Mercer County Executive Brian Hughes, Hopewell Borough Mayor Paul Anzano, and Watershed Association Executive Director Jim Waltman at the 2008 Watershed FEST.

Introduced to the board by Trustee Peter Gibson, Lori saw an immediate fit for her creative side in planning the Watershed Association's largest fundraising event of the year—the Watershed FEST.

Co-chair of the event for several years, Lori took on the challenge of chairing H2Whoa!, the 2008 Watershed FEST, solo. Held Saturday Sept. 27 at the breathtaking 860-acre Watershed Reserve, the event highlighted the importance of water as one of our most treasured and fragile natural resources while grossing more than \$134,000 to support



H2Whoa! Watershed FEST Chairwoman Lori Citrone of Pennington and FEST Committee member Loretta DeRochi of Skillman.

the Watershed Association's critical science, education, conservation and advocacy efforts.

"H2Whoa!'s success is a tribute to the generosity of this community and critical nature of the Watershed Association's important mission," Lori said. "Special



Advisory Board member Kim Otis and Trustee

thanks go out to the dedicated volunteers and staff who made this event possible, our corporate and individual sponsors, and to all those whose generous donations made H2Whoa! a resounding success."

In total, close to 300 friends of the Watershed Association dressed in finery and wellies enjoyed an evening of great food, music and fun.

The event—a tented evening Nelson Obus at the FEST, under the stars—began at 6:30 p.m. with silent auction, cock-

tails, hors d'oeuvres and live music by Stringsville. At 8 p.m., attendees enjoyed dinner served by Chambers Walk of Lawrenceville, featuring local produce and wine as part of the "slow food" movement. After dinner, Matthew Reilly of Pennington walked away as winner of the Watershed FEST Raffle taking home the Kymco People S 200 Scooter, and bidding began on a wide range of great trips, tickets, jewelry, restaurant packages and more during the live auction.

The Watershed FEST's 2008 corporate sponsors were Bristol-Myers Squibb Company, N.T. Callaway Real Estate, LLC, Church & Dwight Co., Inc., Farewell Mills Gatsch Architects, LLC, Janssen Pharmaceutica, Inc., PNC Bank/ PNC Wealth Management, and PSEG.

Photos of the FEST this page courtesy of Ed Livernoche.

Kingsford Room Goes 'Green'

The Irving B. Kingsford Community Room has received some important upgrades. The new bathroom and kitchenette are the latest in the Watershed Association's attempts to use the most environmentally responsible approaches and technologies available within our means.

The Americans with Disabilities Act-compliant bathroom features an U.S. Environmental Protection Agency WaterSense-rated dual-flush toilet, a metered delivery sink faucet, and flooring made of a biodegradable product called Marmoleum, which is made of natural materials. The kitchenette also features an aerator faucet to help us conserve water.

We are excited with the results and encourage all to take a look and let us know what you think! The Kingsford Room is available to rent for meetings and events. Please call the Watershed Association at (609) 737-3735 for more information.



Community and environmental leaders hard at work during an environmental summit in the Irving B. Kingsford Community Room.

Save the Date!

Our 3rd Annual Watershed-wide Stream Clean-ups will take place throughout the Stony Brook-Millstone

Transforming Our Trails continued from page 1

with specific resource and construction evaluation, will be applied to reroute, rebuild and better interpret the existing trail system so that it can be more efficient, user-friendly and educational.

At the Watershed Reserve, all of our trails are open to the public dawn until dusk. The trails on the reserve, with the exception of our portion of the Lawrence Hopewell Trail, are specifically for pedestrians, great places to access the quiet of the outdoors, study nature, take photos, and watch wildlife.

Our trail system was derived initially from existing farm roads on the property, paths of least resistance. As the trails became increasingly important for teaching purposes, some trails were added, others have fallen out of use.

To keep our trails in shape, we instituted Trail Watch—a program of volunteer trail service. Trail Watch volunteers walk their trails once a month and do a stellar job of calling attention to on-trail maintenance issues: fallen trees, mowing needs, dumping, unauthorized use by all terrain vehicles, mountain bikes and horses.

If you are interested in contributing to the on-going maintenance of our current trails and learning more about what is to come, please join us for Fall Field Day on the Reserve, Saturday, November 22, 2008. Check our Web site www. thewatershed.org for more information.

Meet & Greet Your Watershed Neighbors!

Come meet your watershed neighbors and be a part of a community of people helping to protect clean water and the environment.

Stay tuned in the new year for details about a Watershed Meet & Greet in your town. Check our Web site www.thewatershed.org or contact Community Advocacy Coordinator Anneli TerryNelson for more information at aterrynelson@thewatershed.org.

SPEAKING OF NATURE

Outfoxed

by Jeff Hoagland

Children are hoping for a snow day, imagining their favorite snow activities—snow forts, snow angels, snowball fights and sledding. I too am hoping, so that I can join in their merriment. I must also go tracking.

I started tracking in my childhood to learn about the animals around me. Tracking now also serves as a form of meditation. Given the blank pages of a fresh snowfall I try my best to unravel the mysteries and uncover the stories of my neighbors. My favorite neighbor is the red fox.

Snow is welcome all winter but February brings the best tracking snow. In February mammals are hungry, courting and mating, therefore very active. I wake early at the edge of dawn, before the kids. The ground is covered and the snow still falling. Time to head out . . .

The music of falling snow accompanies the muffled crunching of my boots. I cross the paths of deer stitched into the meadow. I consider following their tracks back to their beds—green oval patches in the snow—but I continue onward. That's when I find the fox tracks.

I stare down at crisp tracks—four toe pads, nail marks, and the chevron-shaped heel pad. The falling snow gives me a way to measure their freshness. Almost no snow in the tracks—they are very recent. I look up and carefully scan the meadow and surrounding hedges. No fox.

Excitement percolates in me but I remind myself to drop the chatter of my human existence. It is time to just be, as best as possible, the shadow of what I am about to track.

There are two sets of fox tracks running parallel here. They are mates, rambling across the weedy meadow—meandering, splitting, returning, and playing tag and follow-the-leader. Then, suddenly there is urgency in the tracks—they break into a run in nearly opposite directions. I am closer than I thought, maybe 200 yards away—but my human carelessness has alerted them—they are still out of sight.

I follow the set of tracks that heads towards the forest. Flowing across the landscape along the edge of the forest I slip into the cedars and oaks where the fox begins to

In the snow
Imprint of our bodies
Valentine's Day

showcase its catalog of maneuvers. The fox slides through double-trunked trees, follows a small stream, sprays a tussock of grass, walks atop fallen trees, leaps over a variety of obstacles including the stream. It investigates two groundhog burrows, even leaves fresh scat on the doorstep of one. It crosses a snow bridge.

Soon I am dodging multiflora rose. The fox weaves its way through the thickening patches. Distracted by my limitations, I am no longer moving as the fox. I skirt the thickets to pick up the tracks on the other side but the fox fools me repeatedly, predicting my actions, doubling back and heading off in the other direction. I try to muscle my way through the thickets but begin collecting thorns in my clothing and twigs in my frozen, tangled hair.

I spend a good part of the morning simply "outfoxed". I struggle with this a bit, before I humbly come to terms. This fox has given me a tour and insider's view of some of the most impressive (gag!) multiflora rose thickets I have ever seen. He has easily eluded me.

I continue onward, determined to live out this lesson with as much humility as possible. I am far behind with no hope of finding the foxes but I need the reminder of who I am, who the fox is. I want to learn more.

Belly down in the snow, I am crawling, snaking through a little seam in one more rose thicket. As my head inches out of the thicket, hands burning from the cold and the thorns, I find before me the melted imprints of two foxes in the snow.

RUN OF THE RIVER: HEATHCOTE BROOK

A River Runs Through It

Have you ever wondered how clean your stream is? Or how safe it is for children and pets to play there? In general, a good rule of thumb is to keep your loved ones out of streams for two to three days following big rainstorms. Why?

Between rainstorms, pollution such as fertilizers, pesticides, and wildlife and pet waste, accumulates on the land and roads. When it rains all of these contaminants get carried by rainwater directly into our streams or indirectly into our waterways via stormwater pipes. This can temporarily result in high concentrations of unhealthy elements such as fecal coliform or other bacteria.

Usually streams should be cleaner during the dry periods between storms, but there are a few exceptions. Case in point: Heathcote Brook.

Supported by a New Jersey Department of Environmental Protection grant, Watershed Association staff recently completed a study of bacteria in Heathcote Brook. We sampled for fecal coliform after less rigorous sampling by the DEP in 2002 and 2004 suggested there was a problem.

The DEP has set standards for fecal coliform for swimming or wading at a geometric average of less than 200 colonies per 100 milliliters of water for Heathcote Brook. Standards for boating at Heathcote Brook are a maximum of 770 colonies per 100 milliliters.

The Watershed Association sampled seven sites along the stream under both dry and wet weather conditions, allowing staff to determine the impact of stormwater runoff on water quality.

Two hot spots became apparent. One site (HCB1) is located near the headwaters behind the Red Roof Inn at Route 1 South and New Road in South Brunswick, just downstream of a trailer park.

The other site (HCB5) is located on Carters Brook, a tributary to Heathcote Brook behind Carter Brook Lane, also in South Brunswick. At this site sewer pipes closely parallel the stream. If not properly maintained or leaking, they could be a potential source of bacteria entering the stream.

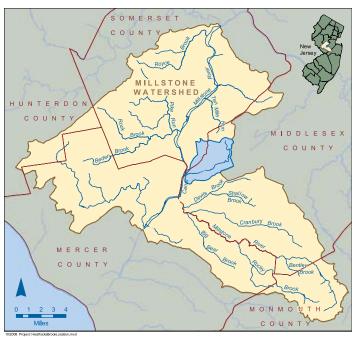
During dry weather all but one sample at these two sites violated the swimming standard, but only one at each site violated the boating standard, with a range from 48 to 1,200 colonies per 100 milliliters.

However, during wet weather all samples at both sites violated both swimming and boating standards, ranging from 1,800 to 20,000 colonies per 100 milliliters.

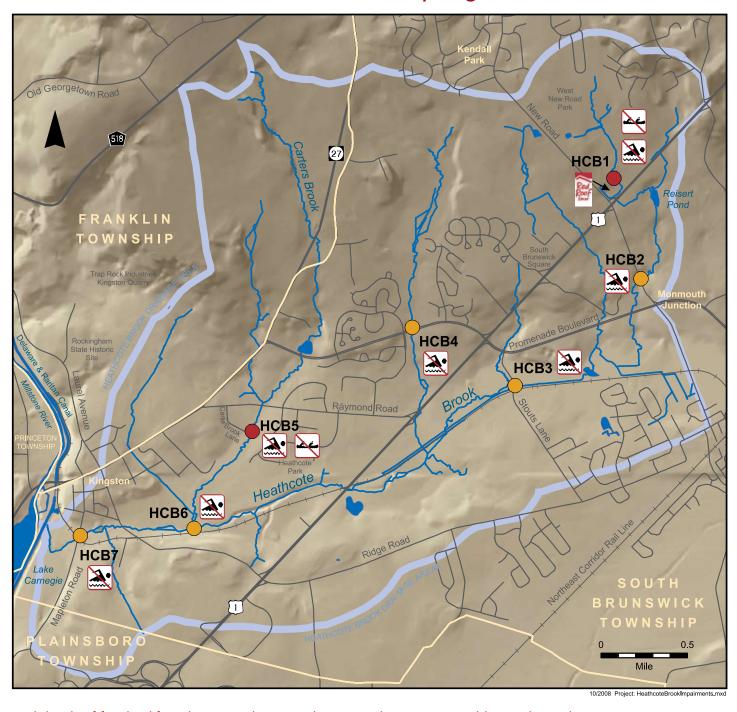
The Watershed Association sampled seven sites along the stream under both dry and wet weather conditions, allowing staff to determine the impact of stormwater runoff on water quality.

These high levels indicate that fecal coliform at these sites came from more than just polluted runoff. The effects of failing septic systems and leaking sewer pipes would be amplified by wet weather due to the addition of stormwater to those systems.

Additional monitoring needs to be done to determine the integrity of the sewer or septic systems related to the trailer park and to the pipes adjacent to Carters Brook. If these systems are failing, as is suspected, their repair could significantly improve water quality in the Heathcote Brook watershed, making it a safer place for children and pets.



Heathcote Brook Sampling Results



High levels of fecal coliform bacteria along Heathcote Brook point to a problem with nearby septic systems and sewer pipes.

HCB5—Potential leaking sewer pipes.

HCB1—Potential sewage problems at trailer park.



Fails the state standard for swimming or wading



Fails the state standard for boating

Events Calendar—Winter 2008–09

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M = Stony Brook-Millstone Watershed Association current member

NM = Non-member

Registration is required for all programs, unless stated otherwise.

Space is limited. All programs meet at the Buttinger Nature Center, unless stated otherwise. Please call (609) 737-7592 to register. Payment is accepted by cash, check, VISA, MasterCard or Discover and can be dropped off at the Nature Center or mailed to: Education Programs, 31 Titus Mill Road, Pennington NJ 08534.

Refund Policy

A full refund will be made if notice of cancellation is received at least 48 hours before a program.

Call (609) 737-7592 to cancel. No refunds or credits will be given after that time.

Watershed membership is not refundable.



Families and Adults

DECEMBER 6

Holiday Open House

Saturday, 12:30 PM-3 PM; Families and Adults; FREE Help us celebrate the upcoming holidays at the Buttinger Nature Center. Meet the staff and get a close look at our displays and animals. Music, refreshments, children's crafts and a hike are included in the afternoon's fun. Receive 20 percent off on your Nature Shop purchases that day.

JANUARY 10

Weeds in Winter

Saturday, 10 AM–12 PM; Adults and older teens; FREE Join Education Director Jeff Hoagland on a winter morning walk in search of last season's weeds and wildflowers. We will learn to identify a wide variety of these plants in winter, enjoying their exposed form and architecture. This program is co-sponsored by Washington Crossing Audubon Society.

JANUARY 10

We've Got It in the (GREEN) Bag

Saturday, 10 AM-12 PM; Families and adults; Fee per family \$10M/\$15NM includes one blank, heavy-duty canvas bag; Additional bags available for \$5 each

Think reusable, think green! Explore the creatures and collections of the Buttinger Nature Center and gain inspiration for designing and painting your own heavyduty canvas tote bag for carrying your groceries. One bag is included with this program but additional bags are available at cost. Join the fun and shop in style!

JANUARY 31

Groundhog Day

Saturday, 1:30-3:30 PM; Families; FREE

Celebrate Groundhog Day at the Watershed Reserve with naturalist Tammy Gotsch. We'll visit several groundhog burrows and learn about the natural history of these furry weather forecasters. If the weather allows, we'll play a game about hibernation. This program is co-sponsored by Washington Crossing Audubon Society.

FEBRUARY 7

Geocache Event-Winter Wonderland

Saturday, 10 AM–1 PM; Families and adults; FREE Geocachers new and old will enjoy the fun and adventure of this event-cache on the Watershed Reserve. Watch for more details at www.geocaching.com or contact the Nature Center (609) 737-7592.

FEBRUARY 22

Tracking the Winter Woods on North Stony Brook Greenway

Sunday, 9:30–11:30 AM; Families and Adults; Fee: FREE Explore the fields and forests of the North Stony Brook Greenway with Education Director Jeff Hoagland in search of animal tracks and trails. Learn about tracks and track patterns and read the stories they tell. By examining tracks and a variety of other animal signs, participants will discover some animal homes while learning about their diverse lifestyles. Among the residents we hope to learn about are the meadow vole, raccoon, red fox and wild turkey. This program is co-sponsored by Sourland Planning Council.



FEBRUARY 28

Maple Sugar Brunch and Hike

Saturday, two sittings: 9:30–11:30 AM or 11 AM–1PM; Families and Adults; Fee: Watershed members \$15/adult, \$12/child under 12 years old; Non-members \$20/adult, \$17/child under 12 years old; FREE all children under 3 years old Bring your entire family to the Watershed Reserve to learn about our maple sugaring process. This program includes a demonstration of tree tapping, sap collection/boiling and a brief discussion of the ecology and history of maple sugaring. Included in the event is a pancake brunch, complete with buttermilk pancakes, bacon, fruit, coffee/tea, juice and hot cocoa, as well as homemade Watershed syrup. Please register for either the 9:30 or 11 a.m. brunch sitting. Registration is required, sorry NO day of event walk-ins. Full payment is required at time of registration.

MARCH 4

Woodcock Watch

Wednesday, 6 PM; Families and Adults; FREE

Discover the local harbinger of spring, the woodcock, with Education Director Jeff Hoagland. Near the end of winter, woodcocks return from the south with the males performing their highly unusual courtship flight to impress females. Join us at dusk as we watch and learn more about their fascinating life. This program is co-sponsored by Washington Crossing Audubon Society.

MARCH 28

Build a Birdhouse

Saturday, 10 AM-12 PM; Families; Fee per birdhouse: \$12 Experience the joy and excitement of watching a bird raise its family by building your own birdhouse with one of our naturalists. As we walk the Reserve property, we will examine several natural bird homes and discover some of the truly strange places birds will build their nests. Each participant can construct their own birdhouse from a kit and take it home.

APRIL 4

Vernal Pools of the Sourland Mountains

Saturday; 10 AM–12 PM; Families and Adults; FREE
Vernal pools are an often overlooked and unique feature in some of our field and forest ecosystems. These pools are filled with water during the spring breeding season and harbor a variety of life including amphibians, insects, reptiles, plants and other wildlife. Join naturalist Allison Jackson on this hike and explore vernal pools in the Sourland Mountains, learning about life cycles and the food web, perhaps encountering wood frogs or spotted salamanders as well as a variety of other native creatures. This program does not meet at the Buttinger Nature Center. This program is co-sponsored by the Sourlands Planning Council.

APRIL 6 & 7 AND 8 & 9 APRIL 11

Nature Camouflage Egg Hunt

Saturday, 10 AM; Families (children 3-11 years old)
Fee per child: \$7M/\$10NM; No charge for adults
Join our Naturalists for the ultimate egg hunt challenge.
Wander through the fields and forests of our Nature
Reserve to see how many naturally dyed eggs you can
discover. What else will we find along the way? Claim
a special prize for finding the 'golden egg'.

APRIL 24

Frog Slog

Friday, 8 PM; Families and Adults; Fee: \$8M/\$12NM Discover the secret life of frogs on this special night hike at the soggy and sonic landscape of the Watershed Association's pond. Learn where and when to find different frogs and toads and learn how to distinguish one frog "song" from another. Come with sharp ears, sharp eyes (and a flashlight), and be prepared for wet, frog-slog conditions. This program does not meet at the Buttinger Nature Center.



Children's Programs MARCH 6, 13, 20 & 27

Movin' Naturally-Yoga for Preschoolers

Children 3–5 years old; parent must stay with child under 4 years old

Fridays, 3:30–4:15 PM; *Fee per session*: \$10M/\$15NM or *Fee per series*: \$35M/\$60NM

Experience nature by becoming part of it. In this yoga inspired series taught by naturalist/yoga instructor Allison Jackson, children will explore nature through creative movement, activities and games. Wear comfortable clothing for moving outdoors. Please bring a yoga mat.

MARCH 14

Boy Scouts of America 'Bird Study' Merit Badge

Saturday, 10 AM-1 PM; Boy Scouts 11 years and older; Fee per scout: \$10

Join Education Director/BSA Merit Badge Counselor Jeff Hoagland for this half-day workshop, designed to help Boy Scouts earn the Bird Study merit badge. Out on the trails scouts will learn to observe and identify a variety of birds, discovering the secret lives of our feathered friends.

APRIL 6 & 7 AND 8 & 9

Spring Mini-Camp

Two-day sessions; Monday/Tuesday or Wednesday/ Thursday; 9:30 AM-4 PM

Extended day available 8:30 AM-5:30 PM at extra cost; Children 6-12 years old

Fee per child: \$130M/\$170NM; Extended day fee: \$20 per child per day

Join the Watershed Association Teacher Naturalists on a two-day adventure in field and forest during spring school vacation. Our activities will focus on the arrival of spring. We will bushwhack through the Reserve in search of nesting voles and geese, watch for emerging wildflowers, insects and amphibians. We might visit the Pond or Stony Brook to look for the last signs of winter and the beginning of a new season. Bring your lunch daily. Sessions are conducted outdoors. Choose either Monday/Tuesday or Wednesday/Thursday. Registration is required, no day of event walk-ins. Full payment is required at time of registration.

APRIL 14 & 15

Spring Mini-Camp

Tuesday/Wednesday; 9:30 AM-4 PM;

Extended day available 8:30 AM-5:30 PM at extra cost; Children 6-12 years old

Fee per child: \$130M/\$170NM; Extended day fee: \$20 per child per day

Join our Teacher-Naturalists on a two-day adventure in field and forest during spring school vacation. Our activities will focus on the arrival of spring. We will bushwhack through the Reserve in search of nesting voles and geese, watch for emerging wildflowers, insects and amphibians. We might visit the Pond or Stony Brook to look for the last signs of winter and the beginning of a new season. Bring your lunch daily. Sessions are conducted outdoors. Registration is required, no day of event walk-ins. Full payment is required at time of registration.

Tiny Tot Walks

(Ages 18-36 months, child must be walking and accompanied by adult)

10:00-11:00AM: Fee per child: \$7M/\$10NM Join Pam Newitt on an outdoor adventure with your budding naturalist as she leads toddlers on explorations of the natural world.

MARCH 19 APRIL 17

Winter Preschool Series

Children 3–5 years old; parent must stay with child under 4 years old

Tuesday, 10:00-11:30AM and 1:00-2:30PM; Wednesday, 1:00-2:30PM

Fee per session: \$13M/\$20NM or Fee per series: \$73M/\$120NM

There are 2 six-week winter series; register for one or both series, or sessions individually.

Series I

JANUARY 6 & 7

Story Time Winter

Spend a wintry day with us listening to nature stories. Bring a blanket to curl up with and a teddy bear to hug. The children will also make crafts to accompany each story. As always we'll have new stories and crafts this year.

JANUARY 13 & 14

Tracks and Trails

Pull on your woolies, and come explore the Watershed trails looking for the tracks and trails by the animals that are active in this chilly season.

JANUARY 20 & 21

Winter Winds

Brrr! Discover the cold and powerful wind in this longwinded program. Blow bubbles to see which direction they go. Make wishes with winter seeds. We will even make a wonderful wind device to take home!

JANUARY 27 & 28

Birds of Prey Play

E-A-G-L-E-S, ravens, and hawks are not just football teams. They are large majestic birds that have some something in common. They are all raptors, or birds of prey. Come join us as we learn about these beautiful birds. It will be Super (bowl) !!!!

FEBRUARY 3 & 4

Happy Chinese New Year!

Join us as we welcome in the year of the Ox! We will learn about Chinese New Year, why it is celebrated, and we will take part in a celebration of our own.

FEBRUARY 10 & 11

Reptiles are Fun

After listening to a story, the children will meet our resident reptiles in the Nature Center. A fun reptile craft will complete the program.

Series II

FEBRUARY 24 & 25

Summer Down Under!

Look out your window and what do you see? Piles of snow, grey of sky, bare of tree? A journey far across the ocean we will take. To Australia!!! Follow me mate!!!

MARCH 3 & 4

The Secret World of Rodents

Here I come to save the day! Mighty Rat is on the way! No. Mighty Shrew is on the way! No again. Mighty Mouse is on the way! Yes, I new it was a rodent! In this program we will look into the secret world of rodents and see what they eat, where they sleep, and what they do throughout the day.

MARCH 10 & 11

Super Seeds

Discover the variety of small packages that seeds come in. Take a hike on the trails searching for those super seeds, and make a craft to take home.

MARCH 17 & 18

Cozy Homes

Is your home cozy in the winter? We will hike the trails comparing our homes to those of the animals that we find. We'll even make a craft to take home.



How long can you stay under water? Some animals spend their entire lives under water. In this program, we will learn what it takes to stay under water for a lifetime. We will even take a look at some of the creatures that call the deep sea their home and come up with some of our own.

MARCH 31 & APRIL 1

Sensible Senses

What does a tree smell like? How do our taste buds work? We'll answer these questions and more as we touch, taste, smell, feel, and see our way through this program. Join us for an exploration of the senses.



Winter School-Age Series

Children 6-9 years old, parents are not required to stay Thursdays, 4:00 -5:30PM

\$12M/\$17NM per session; \$67M/\$102NM per series There are 2 six-week winter series; register for one or both series, or sessions individually.

Series I

JANUARY 8

Snowflake Faeries Of Winter

Where do faeries go in winter? Make a special home for the snowflake faeries!

JANUARY 15

Freeze!

Water does some fun things in winter! Let's play a few icy games and create a frozen craft.

JANUARY 22

Chinese New Year

Celebrate the Year of the Ox with us! We will discover the lunar roots of this holiday.

JANUARY 29

Feeding Winter Birds

What birds are around now? Learn what and how they eat. We will also make birdfeeders!

FEBRUARY 5

Feeding Winter Birds Too

Come back this week and make some custom bird food recipes.

FEBRUARY12

Smudges Of Color

It may look drab and gray outside, but we will find those little bits of color, and create our own!

Series II

Maple Sugaring

The sap in the Maple trees is flowing once again. Learn how the sweet treat of maple syrup is made. Shiver me maple trees!

MARCH 5

Out And About

Bundle up and take a walk. Explore and play, then come back to the nature center for hot cocoa!

MARCH 12

Shadows and Shapes

Come look at natural objects and landscapes in new ways. Make a puzzle to take home.

MARCH 19

Spring Into Spring!

What are the signs of the season to come? Prepare for spring with some games, a story, and a craft.

MARCH 26

Weave It To Me!

Learn to weave, try weaving with natural materials, and learn about animals that weave!

APRIL 2

Eek, A Rodent!

This amazing group of animals has special traits. Learn about voles, capybaras and explore their world.



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 \bowtie EMAIL: To contact staff by email, use the first letter of the person's first name, followed by the last name: for example, jwaltman@thewatershed.org

For more information on the latest Watershed News, contact: www.thewatershed.org

New Faces at the Watershed



New Watershed Employees Richard Anthes, Joan McGee and Nicholas Ho.

Our Watershed Association family continues to grow!

Ioan McGee is the Watershed Association's new Watershed Policy Specialist. Joan has both law and master's of business administration degrees from Rutgers University and has worked as the township administrator for East Amwell Township for the past 10 years. As Watershed Policy Specialist for the Watershed Association she will be working to assess local land use laws and advocate for measures to protect clean water and the environment throughout our watershed.

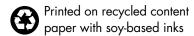
Nicholas Ho, a recent Temple University Environmental Studies graduate, has joined our staff as a GIS Specialist. The Watershed Association's GIS Center is dedicated to assisting government agencies (especially local governments) and nonprofit organizations in their utilization of geographic information systems (GIS) and related technologies. Working with Janel Bisacquino, GIS specialist, he'll be working on some of our largest GIS projects.

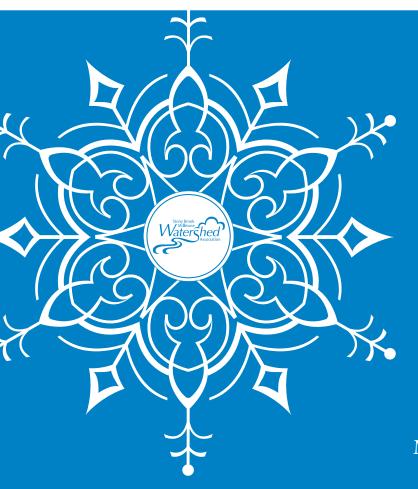
Richard Anthes is the Watershed Association's new 2008– 2009 AmeriCorps Ambassador. The New Jersey Watershed Ambassador Program is a community-oriented AmeriCorps environmental program designed to raise awareness about watershed issues in New Jersey. Through this program, AmeriCorps members are placed in watershed management areas across the state to serve their local communities. Rick will be helping the Watershed Association with a number of efforts, including organization of our Spring 2009 Stream Clean-ups.



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DECEMBER 6

Holiday Open House

Saturday, 12:30 PM-3 PM Families and Adults, FREE

Help us celebrate the upcoming holidays at the Buttinger Nature Center.

Meet the staff and get a close look at our displays and animals.

Music, refreshments, children's crafts and a hike are included in the afternoon's fun.

Receive 20 percent off on your Nature Shop purchases that day.