

Narragansett Acquires New Patrol Boat for Narrow River

Please join NRPA in welcoming PB2, the Narragansett Harbormaster's new patrol boat dedicated to Narrow River.

PB2 (Patrol Boat 2), an 18.5 foot Maritime skiff was purchased and customized by Narragansett Harbormaster Kevin Connors specifically for Narrow River. Mettatuxet Yacht Club has generously donated the use of one of their slips as the seasonal home to PB2 at no charge to taxpayers.

The boat will be used for public safety and to step up enforcement of existing boating laws. In addition to increasing police presence on the water, patrols will be increased at the beach area just north of the Dunes Club at the mouth

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Narragansett Harbormaster Kevin Connors aboard PB2, the new boat dedicated to patrolling Narrow River.

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Canine Detection of Human Sources of Bacteria in Narrow River

by Veronica Berounsky and Jonah Namzoff

A few areas of Narrow River suffer from excess bacteria, a common problem for watersheds near towns and cities. In late June, NRPA hosted two canines (dogs) with a new approach to this problem known as canine detection, in which humans combine their efforts with the keen senses of their best friends to identify preventable sources of contamination.

The canine detection project has come to Narrow River thanks to a \$10,000 grant from The Nature Conservancy and US Fish and Wildlife Service, and it is being carried



Specially trained dogs Kai, left, and Remi visited Narrow River in June to seek sources of human contamination.

out by NRPA in conjunction with personnel at the RI Department of Environmental Management (RIDEM) and with the cooperation of the towns of Narragansett and South Kingstown. Results of the project will be available in late August.

What is canine detection? These dogs detect smells of human origin and ignore other smells such as animal waste. The trained canines can sniff the ground or stormwater structures and signify whether there are elements of human contamination such as leaking sewer or septic systems. Once identified, leaks may be fixed.

NRPA contracted with Environmental Canine Services LLC of Otisfield, ME for this service. Founded in 2009, their dogs and handlers have carried out over 70 on-site projects in 14 states and samples have been sent to them for analysis (sniffing) from 11 different states. Although there are a few other ways to identify human sources of bacteria, this method provides instant results (no waiting for lab analyses to be completed) and does not need reference material that is required for DNA studies.

The Narrow River project has two phases. The first was called Ship and Sniff; in late May, scientists from NRPA and RIDEM collected samples from areas of concern and mailed them to Environmental Canine Services LLC laboratory. Once received, the dogs checked each sample and indicated if the source of the bacteria was human.

Phase 2 was Onsite Canine Detection; in late June, the dogs and their handlers from Environmental Canine Services LLC came to the Narrow River watershed. Based on the results from the samples sent in Phase 1 of the project, they went to the areas of concern and worked on tracing the smell of human contamination to its source.

A demonstration of the detection process held on June 27th was performed by two dogs, Kai and Remi, and their handlers. Both handlers have full-time jobs and remain on call to take their dogs out in the field.

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NRPA's 48th Annual Meeting, Tuesday, October 2 Including a Presentation: Canine Detection of Human Pollution in the Narrow River Coastal Institute Auditorium, URI Bay Campus 7:00pm reception, 7:30-9:00pm presentation and meeting Free and open to the public. More information at narrowriver.org

President's Cove

Dear friends,

Each year at this time I have a seine net full of news to relate as we are involved in finishing up the activities of the 2017-2018 year and beginning the 2018-2019 year.

With so much happening, the question is where do I begin?

First of all, thank you for your time and donations. Without monetary contributions and the volunteer work by many families, NRPA would not have the capability of gathering River Watch data at 14 water testing sites in the river from May through October every year. This water testing provides the information necessary to keep Narrow River clean and healthy.

Without your support, NRPA would not have been able to expand our educational services to local communities. This includes What Lives in the River (June and September), Art on the River (August), our 4th grade Osprey Education Program (April) and the Lesa Meng College Scholarships.

Every year something new is happening on Narrow River. This coming year we will be reporting on the Canine Detection Program, hosting a river clean up and introducing a new event: Kayak Fishing Challenge on Narrow River.

With your contribution of your personal time and membership donation, NRPA's work to improve the quality of water and life in the watershed will continue.

I thank you in advance for your personal care of the watershed and your contribution to the NRPA's continued practice of improving the watershed in its 48th year.

In appreciation,

Adam Evant

Richard Grant NRPA President

Save The Dates

September 15: What Lives in the River and Salt Marsh Walk **September 30:** Narrow River Cleanup

October 2: NRPA 48th Annual Meeting

October 20: Kayak Fishing Challenge on Narrow River

Details and registration available at narrowriver.org.



NRPA is part of the United Way Workplace Campaign. Our donor option number is 6239 If you plan to give to United Way, please consider designating a portion of your gift to NRPA.



the 2018 Rhode Island State Employees Charitable Appeal (SECA). Our fund number is 6239. MISSION STATEMENT

The Narrow River Preservation Association (NRPA) works to preserve, protect, and restore the natural environment and the quality of life of all communities within the Narrow (Pettaquamscutt) River Estuary and Watershed.

NARROW RIVER PRESERVATION ASSOCIATION

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A Sad Farewell to Three Long Time Narrow River Supporters

We are saddened to report the recent passing of three long time supporters of Narrow River and NRPA.

Rose Epstein, who served on the NRPA Board of Directors for many years, passed away in May at the age of 92.

"Rose Epstein was an accomplished woman. Of all the people who have been on the board of directors of NRPA, Rose always expressed her opinion on every subject. And outside the circle of NRPA, Rose also rose with the same enthusiasm to meet challenges of city government. We miss Rose's strength." said Richard Grant, President of NRPA.

Al Hawkes, retired long-time Director of the Audubon Society in Rhode Island passed away in March. In 1992, NRPA presented Al with the NRPA Environmental Award in recognition of his committment to the environment.

Also in March, **John Peterson** passed away suddenly at age 54. For the past five years, John and his son Eric have been volunteer monitors at Narrow River site NR 6, off Mettatuxet Beach.

"We were so lucky to have John as part of the River Watch program and he will be sorely missed." said Annette DeSilva, NRPA River Watch Coordinator.

John's wife Linda has taken his place partnering with son Eric monitoring the river off of Mettatuxet Beach.

We will miss these three caring people.



2018 River Watch is under way! In cooperation with URI Watershed Watch, NRPA volunteers measure, sample and test 14 sites in the Narrow River. Here, Margaret Bradley and Elizabeth Donovan check the temperature at Middlebridge, test site NR-8.

2018 Lesa Meng College Scholarships

Since 1993 NRPA has awarded scholarships to seniors graduating from high schools in the Narrow River Watershed as part of its Youth Environmental Education Program. Congratulations to our 2018 NRPA Lesa Meng Scholarship winners: Christina Curci, John McCormack, Jaqueline Lindstrom and Hossam Zaki.

Christina Curci, a graduate of The Prout School will be attending Clarkson University, in the fall. Christina ("CiCi") plans to study environmental engineering with a focus on renewable energy. She has lived on the river her whole life and has participated in The Save the Bay coastal clean-ups. A member of the school Recycling Club, she worked on providing new water bottle filling stations at her school, to prevent the use of plastic bottles. Cici is also a gifted vocalist who was an integral part of the school choir as well as the captain of the school's dance team.





John McCormack, a North Kingstown High School graduate will be attending Villanova University. He plans to major in biology and environmental science. John ('Jack') was a member of the National Honor Society and the Explorers Club. Jack was on the NKHS Varsity Hockey Team since his freshman year and was the Assistant Captain his senior year. He also played Varsity Lacrosse. Jack was a committed participate in VAASA (Varsity Athletes Against Substance Abuse) where he educated middle school students and peers on the dangers of substance abuse.

Jaqueline Lindstrom, a graduate of South Kingstown High School will be attending the Pacific Lutheran University in Tacoma, WA in the fall. She plans to major in either chemistry or physics. Jaqueline ("Jackie") is a Girl Scout Gold Award recipient, where she organized the restoration of the Davisville Middle School courtyard. Jackie also organized yearly beach clean-ups at the East Matunuck Beach. She was president of the National Honor Society, as well as a varsity team volleyball player and gymnastics team member.





Hossam Zaki, also a graduate of South Kingstown High School, plans to attend Brown University in Providence. He was accepted into the 8-year medical program (where he also hopes to earn a PhD.) and expects his undergraduate major to be in computation biology. Since the 9th grade, Hossam has been a part of the URI Watershed Watch as a Narrow River monitor. He is an avid fisherman, and as a Boy Scout, he has participated in many river clean ups. In addition, Hossam is a talented musician and has participated in a variety of school activities.

In 2007, the scholarship was renamed the NRPA Lesa Meng College Scholarship in honor of a former NRPA Board member who passed away in 2006. Lesa Meng served on the Board for six years and was chair of the Narrow River Road Race committee during that time. Her husband, Rick Moffitt, and friends provide additional funding for the scholarship, enabling NRPA to increase the scholarship awards to \$1,000 beginning in 2008.

The scholarship applications are judged on the student's environmentally oriented activities in and out of high school, the quality of an original essay on the river, science teacher's recommendation and academic achievement in math and science courses.

Front

2018 Narrow River Road Race and Swim

The 31st Annual Narrow River Road Race and 13th Annual Narrow River Turnaround Swim, which raise awareness of the Narrow River and its watershed and funds for NRPA's educational and environmental initives, were both great successes again this year.

On Saturday, May 12, 234 runners and walkers enjoyed one of the most beautiful courses in New England as they participated in the 31st running of the Narrow River Road Race. Although the weather was cool and humid, rain held off until after the road race.

Rob Allen of Middletown, RI and Port Hueneme, CA won the 10K run in 41 minutes and 18 seconds. Second place 10K run finisher Nick Peters is from South Kingstown. Julie DiNardo of Wakefield, RI, finished third, placing first among the women, at 42:07.

The 5K Run was won by Paul Martin of Somerset, MA in a time of 18:53. Tiverton's Sarah Berube placed first in the Women's Division in 22:47.

Joe Light of Westerly and Donna Cavaco of West Kingston took first place in the 5K Walk.

On Saturday, June 23, 120 people swam the one mile loop at the 13th Annual Narrow River Turnaround Swim. Despite an air temperature in the 60s, the water was 74°F.

The overall winner, Rob Allen, finished in 21 minutes and 8 seconds. Allen also won the 2018 Narrow River Road Race 10K Run a month earlier.

"It was a fun race. I was able to position myself well behind Stuart (the wetsuit winner) on the way out then made a move for the lead 1/2 way back. Really pleased as I won the Narrow River 10K Road Race last month and this race completed the set!" said Allen.

For the fifth consecutive year, Stuart Cromarty of Foster, RI won the Men's Wetsuit Division. "It was a wonderful experience to win five years in a row!", said Cromarty. "Each year we see more and more improvements in the quality of the Narrow River water and also in the quality and preparation of the actual race ... each year it gets better and better and the race sells out quickly. The swimmers thank the Narrow River Preservation Association for this wonderful cause and swim."

Jillian Beveridge of Pawtucket, RI finished first in the Women's Wetsuit Division with a time of 23 minutes even. When asked how it felt to win her division, Beveridge comented "I felt encouraged - I've been working on my wetsuit swimming for the past few years ... and I think that my result at Narrow River reflects this effort. Outcomes aside, it's always fun just to be able to spend the morning in a beautiful outdoor setting with a bunch of SwimRI teammates."

Four seconds after Beveridge finished, Merin Troutman of Mystic, CT took first place in the Women's Non-Wetsuit Division. Said Troutman: "The Narrow River Turnaround Swim is one of my favorite local open water events! I am proud to support the NRPA and commend the organization for keeping this beautiful waterway safe for swimming. It was a great race with lots of local talent and as always, it was well organized. Looking forward to competing again next year!"

Photographs and full results for both events are available at narrowriver.org.



Lynn and former NRPA Board Member Stephen Hale celebrate finishing the Narrow River 5K Road Race. Photo by Veronica Berounsky



Swimmers in the Narrow River after completing the Narrow River Turnaround Swim on June 23. Photo by Frank McQuiggan

Dogs, continued from front page

Like most of the dogs selected for the canine detection program, Kai and Remi were found in a shelter. Selected for their agreeable demeanor and acute sense of smell, they were adopted and started the one year training program while still young enough to train.

For the demonstration, their handlers planted samples of sewage for the dogs to recognize in some nearby foliage, and Kai and Remi took turns locating the contamination and signaling their finds to their handlers. As promised, they found the waste in a matter of seconds, and one could easily picture them sniffing out even trace amounts of sewage. Handlers work with their dogs to develop signals that work on an individual basis. When Remi detected the sewage, she sat and barked once as many do, but Kai leapt up excitedly and barked once. Each was rewarded with a treat and a quick game of fetch upon accomplishing their goals.

The trainers stayed after the demonstration to answer questions about the program with press and community members, and their dogs enjoyed some affection from the residents of the watershed who will benefit from their work.

"NRPA welcomes every opportunity to improve water quality in Narrow River to ensure the health of the public and the river," said Veronica Berounsky, NRPA Vice President and Chair of the RI Rivers Council. "This strategy has the potential to be an effective and costsaving approach and we are pleased to collaborate with The Nature Conservancy, RI DEM, US Fish and Wildlife Service and the towns of South Kingstown and Narragansett. A previous canine detection demonstration was done in Bristol, RI, but this is the first full project of its kind in Rhode Island and we hope it will inform other such projects to protect Rhode Island waterways."

Bacteria may originate from human and nonhuman sources. Narrow River has been closed to shellfishing since 1994 due to unacceptably high bacteria levels in the water column. In 2001, the Office of Water Resources of RIDEM published the "Fecal Coliform TMDL

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Karen Reynolds, President and dog handler of Environmental Canine Services, gives a treat to Remi after she correctly indicated human waste during a demonstration.

for the Pettaquamscutt (Narrow) River Watershed, Rhode Island". This report included ongoing and proposed mitigation methods for bacterial contamination, such as retrofitting storm drains, building sand filters and detention ponds for stormwater, and adding in bioswales. The Towns of Narragansett and South Kingstown have been diligent in using those methods in an attempt to reduce bacteria levels in Narrow River. RIDEM has done both dry weather and wet weather bacterial sampling and also monitors for illicit connections to stormwater pipes.

NRPA has worked with the towns and RIDEM to educate watershed residents about the mitigation methods and about ways the people can directly help, such as not feeding waterfowl, removing pet waste, and maintaining a vegetated buffer along the River.

Since 1992, NRPA has been testing the water in Narrow River through our River Watch Program, a part of the URI Watershed Watch program. As reported in NRPA's compilation of 25 years of River Watch data, improvements can be seen thanks to the above mentioned efforts, but there are still high bacterial levels found south of Lacy Bridge and in most of the incoming streams. Further studies, conducted with funds from both the US Fish and Wildlife and the RI Rivers Council, have investigated these high bacteria levels, their potential sources, and if there are indicators of human contamination. The next step was to determine if the bacteria are coming from human sources or nonhuman (birds, dogs, wildlife, etc.). If there are human sources, there may be ways to control and stop the contamination.

"Good science, smart dogs," Berounsky commented in light of the demonstration. "How do you top that?"

Osprey (Pandion haliaetus)



The featured bird for this year's Narrow River Road Race, the osprey, is one of the most widespread birds of

prey, inhabiting every continent except Antarctica. They are dark brown on the back and wings with contrasting white underparts. The whitish head includes a dark stripe through each eye and a black, distinctly hooked beak.

The female is typically larger than the male and often displays a necklace of darker feathers across the breast. Juvenile osprey are similar to the adults, but have white edging on their back and wing feathers creating a speckled appearance which wears off by their second year. As juvenile osprey mature, their eye color changes from orangered to yellow. Adult osprey have a wing span of about 6 feet. Osprey life span is typically about 10 years. The oldest known wild osprey lived to age 25.

The osprey is unique among North American raptors for its nearly exclusive diet of live fish and ability to dive into water to catch them by using its long, hooked talons. The osprey exhibits several additional adaptations for catching fish, including dense, oily plumage designed to shed water, oversized feet with barbed pads on the soles, a reversible outer toe that helps with carrying fish through the air, nostrils that close, and eyes that see under water.



NRPA Board Member Craig Wood teaches students at Monsignor Clarke School about osprey.

Osprey overwinter from Florida to Central and South America with many New England birds known to winter within the Amazon Rain Forest. In Rhode Island, osprey typically arrive from wintering grounds in late March to early April.

Osprey often build nests on manmade structures, including nest platforms designed especially for them. They require nest sites in open surroundings for easy approach, a sturdy base to support the weight of the large nests, and safety from ground predators, such as raccoons.

NRPA Board Member Craig Wood leads an educational program for local fourth graders each spring just before the birds return from their annual migration.

NRPA's osprey 'ambassador' is Pette (short for Pettaquamscutt). Pette is a stuffed one year old female. You can see Pette at an upcoming NRPA event.

Visit narrowriver.org/osprey for more information including fun activity sheets.

When Nina Hamlin, age 9, of Narragansett came to enter the Narrow River Road Race, she recognized Pette from when NRPA presented about osprey to the fourth graders at Narragansett Elementary School in April. Here are Nina and Pette!



Narragansett Patrol Boat, continued from front page



Narragansett Harbormaster Kevin Connors patrolling Narrow River on PB2.

of the river.

One Narragansett Police officer has been assigned to the boat throughout the season and other officers will be trained to use the boat as well. Partially funded with a grant from US Fish and Wildlife Service, the Harbormaster's office is working to staff PB2 most weekends.

This new boat replaces a 35 year old boat that was not well suited to public safety. After purchasing the new hull, Narragansett Harbormaster Kevin Connors and Darren McConnell, Head of Fleet Maintenance in Narragansett, installed all of the accessories, including the navigational equipment, motor, communication equipment, lights and sirens, handrails, new safety equipment and a 90HP Yamaha motor. PB2 is capable of exiting the mouth of the river in case of an emergency.

The custom electronics exactly match the accessories in PB1, Narragansett's patrol boat housed at Point Judith. This enables officers to train on either boat to easily transition from one to the other. Connors notes that property owners with riverfront property and docks can post signs reading "No Wake" and/or "Slow Down."

Current laws stipulate no wake under bridges, around mooring fields, near swimming areas and near docks.

People who spot boats making a wake or otherwise breaking laws are encouraged to call the Harbormaster at (401) 640-1038.

If a boater is doing something particularly egregious, the Harbormaster encourages people to photograph the boat (including identification numbers) and email the photo and a description of the offense to the Harbormaster at harbormaster@narragansettri.gov. If the registration numbers are readable, the Harbormaster can follow up with the boat owner.

South Kingstown Harbormaster Michael Stach and his team patrol Narrow River routinely multiple days a week throughout the summer season on their 17 foot patrol boat along with patrolling the other town waterways.

The South Kingstown Harbormaster's office can be reached at 783-3321 ext.104 or harbormaster@skpd.org

More information and links to boat safety resources at narrowriver.org.



Narragansett's PB2 at Mettatuxet Yacht Club.

Narrow River Land Trust Cleanups

NRLT is seeking volunteers to help clear invasive species and maintain trails. All are welcome to join a cleanup from 9am to noon on a Sunday morning. For more info, email office@narrowriverlandtrust.org.

8/5: Walmsley Woods Preserve, 212 River Road, North Kingstown

9/9: Winter Preserve, trailhead between #784 and #806 Middlebridge Road, SK

10/7: Gardiner Preserve, 469 Gilbert Stuart Road, North Kingstown

Kayak Fishing Challenge on Narrow River

NRPA is planning the first ever Kayak Fishing Challenge on Narrow River to increase awareness of conservation efforts, pollution, and boater safety. We aim to encourage appropriate and fun enjoyment of Narrow River.

Challenge: Catch as many of the four target species of fish as possible: summer flounder (fluke), bluefish, shad and striped bass.

Type: CPR: Catch, Photo and Release

Winner: The person who catches the most target species of fish, with combined length of longest of each species as the tiebreaker

Date: Saturday, October 20, with mandatory Captain's Meeting from 6-7pm on Friday, October 19th.

Time: Fishing from sunrise until 1pm Saturday. Barbecue and awards ceremony at 4pm on Saturday.

Participants: Maximum of 50 anglers age 18 and over. \$50 registration fee. For \$75, participants get registration and one year membership in NRPA.

Kayaks: Participants provide their own kayaks or rent from Narrow River Kayaks. No motors of any kind allowed. Other requirements for kayaks can be found at narrowriver.org/kayakfishing.

Launch sites: Participants may launch kayaks at public launch sites (map provided) or at Narrow River Kayaks.

Rules: All Coast Guiard and RI Boating laws must be followed. Each angler must have valid RI saltwater fishing license. Other safety requirements are detailed on website.

Location: Pre-event meeting and post-event celebration will be held at Mettatuxet Yacht Club. Fishing is in Narrow River only, no fishing is allowed past the mouth of the river.

Rain Date: No rain date. In the event of unsafe weather conditions, the event will be cancelled.

More information at narrowriver.org/ kayakfishing.

Learning and Fun at What Lives in the River



On June 16th, more than 150 explorers of all ages came to Middlebridge to learn about everything that lives in Narrow River. More than 20 volunteers, including 5 junior volunteers, made the day a great success.

Some stayed for our picnic lunch along the river bank, generously supported by the New England Grassroots Environment Fund and The Jonnycake Center of Peace Dale.

Visit narrowriver.org/whatlivesinriver for lots more photographs!



UPCOMING

WHAT LIVES IN

THE RIVER

Join us for What

Lives in the River

on Saturday, Sep-

tember 15th from

Narrow River Land

Trust will host a

saltmarsh walk from 10am - noon the same day. Fun for all ages, free and open to the public.

At Middlebridge, 95 Middlebridge Road, Narragansett, across the street from Narrow River

More information

and preregistration

at narrowriver.org.

Kayaks.

9am - 11am.







Clinging Jellyfish

At our What Lives in the River Event in June, we were surprised to find a creature that our experts had never seen

They turned out to be clinging jellyfish.

Dr. Annette Frese Govindarajan of the Woods Hole Oceanographic Institute (WHOI) is an expert on clinging jellyfish. She visited Narrow River in late June and confirmed that we had indeed found clinging jellies.

Clinging jellyfish are about the size of a dime and have an orange/brown cross on their transparent bodies with visible tentacles.

Unfortunately, sometimes these jellies sting, although often they do not. From WHOI: "Reactions to stings can range from no discomfort to severe pain, redness at the sting site, and respiratory and/or neurological symptoms. Symptoms can last three to five days. While the sting symptoms can be severe, WHOI researchers are not aware of any documented fatalities."

These creatures are called clinging jellyfish because they cling to eelgrass. They are not known to live in open water or high-energy environments such as beaches near ocean waves. Researchers say they generally only see clinging jellyfish in calm, quiet areas where eelgrass or other seaweeds grow. The Middlebridge area of Narrow River has a large population of eelgrass.

Visit narrowriver.org/clingingjellyfish for links to the WHOI's Fact Sheet on clinging jellies, a video of the Narrow River sighting and other resources.



A clinging jellyfish found at Middlebridge on June 16th. Sometimes these dime-sized jellies sting, so please do not touch them.

A clinging jellyfi

Many thanks to NRPA's 2018 Sponsors

The Narrow River Road Race, Narrow River Turnaround Swim, the Pettaquamscutt Paddle, and all of NRPA's educational and environmental programs are made possible through the generous support of these businesses and individuals.



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