

# NARROW RIVER NOTES

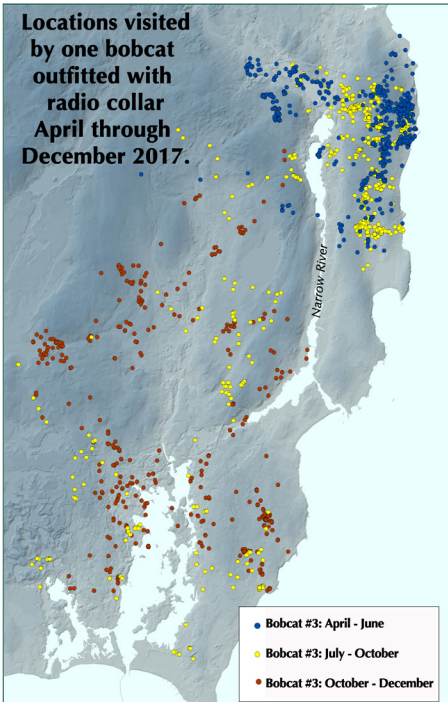
Narrow River Preservation Association: Preserving the Narrow River Watershed Since 1970 / April 2019

## Bobcats in the Narrow River Watershed

Recently, a number of local bobcat sightings have raised awareness of and interest in these fascinating animals.

Bobcats have always been present in Rhode Island, with populations fluctuating due to habitat changes and prey availability, according to the RI Department of Environmental Management. An increase in reports suggests the population is on the rise, and ongoing research is considering why this may be happening. Bobcats (scientific name

*Continued on page 4*



URI and RIDEM have an on-going bobcat research project to learn where they are found, how many reside in the state, what habitats they use and how widely they travel. Biologists have trapped and outfitted several bobcats in South County with GPS collars that record their location every 2 hours. This figure shows the travels of a young male "cat" between April and December of 2017. This animal spent a large portion of the year within the Narrow River watershed.

*Data courtesy of URI Research Associate Amy Mayer.*

## NRPA and Narrow River Land Trust Install Osprey Nest Platform

On Saturday, March 16, Narrow River Preservation Association (NRPA) and Narrow River Land Trust (NRLT) completed the installation of a platform designed for an osprey nest.

Located at Narrow River Land Trust's Garrison House Acres property in South Kingstown, the platform is visible from the trail at Garrison House Acres, from Middlebridge Bridge, from Narrow River Kayaks (across the river) and from boats, kayaks and paddleboards on the Narrow River.

The platform and posts were built by Ken McShane, NRPA board member and treasurer. Ken and other vo-

*Continued on page 7*



Volunteers place a few sticks on top of the new osprey platform as the finishing touch to encourage a mating pair of osprey to adopt the nest.

## Monitoring Oysters on the Narrow River

*by William Helt, Coastal Restoration Scientist, The Nature Conservancy – RI Chapter*

What comes to mind when you think of an oyster? Are you picturing a delicious treat served raw on the half shell? Perhaps grilled or fried and served on a sandwich? Though historically we have viewed oysters as a food source, ecologists like me also know them as "ecosystem engineers" for the many additional services they provide. These craggy, immobile creatures create a reef habitat all on their own. They filter excess nutrients from the water, their shells provide habitat for colonizing organisms at

*Continued on page 6*



Young oysters (spat) on a quahog shell from a spat collector.

*Photo provided by Will Helt.*

## NRPA Seeking Photos and Artwork Featuring Narrow River

Do you have photos or artwork of Narrow River?

As NRPA prepares to celebrate our 50th Anniversary in 2020, we welcome photographs, artwork, historical maps and even stories about the river and surrounding area that we can share with the public.

Please email your pieces to [nrpa@narrowriver.org](mailto:nrpa@narrowriver.org) or post to the NRPA facebook page.



*Watercolor of Sprague Bridge by Richard Grant, NRPA President.*

# President's Cove

Dear friends,

Each year there are two things that I have to take care of before NRPA gets too far into the year.

The first is that I make the effort to assign a project or two to each board member of the NRPA.

And at the same time, of course, new members have to be found to take over the vacant spots on the board of directors if there are any. Both of those items have been taken care of.

If you review NRPA's newsletters from time to time, you will be able to mark in your calendar all the interesting events that have been planned.

From the recent news in the newspapers, it might be time to list all the achievements in the Water, Land and Education areas but I suggest you just dial into narrowriver.org and review the past newsletters. In that way you will have a good idea of how we are approaching the continued trend of cleaner water in the Narrow River.

Thank you for your support.

Best,

*Richard Grant*

Richard Barker Grant  
President, NRPA



Richard Grant, NRPA President, at the 2018 Pettaquamscutt Paddle.  
*Photo by Veronica Berounsky*

## 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

PO Box 8, Saunderstown, RI 02874  
nrpa@narrowriver.org  
www.narrowriver.org

Narrow River Notes  
Published three times per year  
by NRPA  
Editor: Alison Kates

### Board of Directors

Richard Grant, President  
Veronica Berounsky, Vice President  
Ken McShane, Treasurer  
Craig Wood, Secretary  
Erin Chille  
Jason Considine  
Barry Devine  
Sarah Gaines  
Chris Hubbard  
Jim Kaczynski  
Catalina Martinez  
Paula Santos  
Sally Sutherland  
Nate Vinhateiro  
James Dean Vogel

Staff  
Alison Kates, Program Coordinator  
Submissions and correspondence to  
nrpa@narrowriver.org

## Are you a member of NRPA?

### If not, please join now!

Membership has never been easier! You can join by mail or online at narrowriver.org/membership.

Please support our work to protect and preserve the Narrow River as well as our many educational and artistic programs. Your membership matters!



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.



NRPA is participating in the 2019 Rhode Island State Employees Charitable Appeal (SECA).  
Our fund number is 6239.

## Rhode Island Rivers Council



## NRPA Lesa Meng College Scholarship Applications Due April 29

This spring, NRPA will award up to four \$1,000 college scholarships to students graduating from high schools in the watershed: Narragansett High School, North Kingstown High School, The Prout School and South Kingstown High School.

Since 1995, NRPA has granted over \$56,000 to local high school seniors.

In 2007, the scholarship was re-named 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. Since her death, Lesa's husband, Rick Moffitt, and friends have provided additional funding for the scholarship, enabling NRPA to increase the scholarship awards to \$1,000 beginning in 2008.

Applications are judged on the student's environmentally oriented activities in and out of high school, an original essay on mitigating an environmental problem or issue relevant to Narrow River, a science teacher's recommendation and academic achievement in math and science courses.

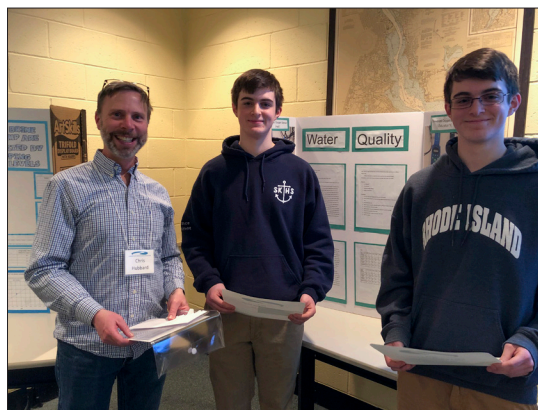
Completed applications are available at the Guidance Department of each school and must be submitted to the student's guidance counselor (not to NRPA) by Monday, April 29, 2019.

## 2019 NRPA Science Fair Award Winners

Students from North Kingstown and South Kingstown High Schools were honored by the Narrow River Preservation Association (NRPA) on Tuesday evening, March 5 for their winning science fair projects. Students presented their winning projects to the NRPA Board of Directors.



Renee Fontaine, left, receives the 2019 Narrow River Preservation Association Science Fair Award for North Kingstown High School from NRPA Board Member Chris Hubbard.



Chris Hubbard, NRPA Board Member, left, presents the 2019 Narrow River Preservation Association Science Fair Award for South Kingstown High School to Connor Daly-LaBelle (center) and Christopher Daly-LaBelle.

*Photos by Alison Kates*

Renee Fontaine of North Kingstown High School presented her project "pH Effects on Hatching Rates of Brine Shrimp" in which she found that in more acidic water, fewer brine shrimp hatch.

South Kingstown High School Juniors Christopher Daly-LaBelle and Connor Daly-LaBelle tested water in the Saugatucket River for dissolved oxygen, pH levels and temperature for their project "Water Quality".

The NRPA Science Fair Awards recognize local students for their rigorous use of the scientific method and the relevance of their project to current environmental concerns.

NRPA also awarded the following Honorable Mentions:

South Kingstown High School:

~ Matt Burns and James Reid – Indian Lake Dissolved Oxygen

North Kingstown High School:

~ Alana Rutherford – Measurement of Salinity in Narragansett Bay

~ Andrew Oldmeadow – Effect of Ocean Acidification on Local Shells

## Narrow River Cleanup Scheduled for Sunday, April 28

NRPA will be hosting a Narrow River cleanup on Sunday, April 28 from noon to 2pm. Volunteers will clean up areas of the Narrow River including the Sprague Bridge area, Garrison House Acres, LaFarge Park and the mouth of the river.

You can join a team led by NRPA or organize a cleanup in your own part of Narrow River!

More information and signup at [narrowriver.org/cleanup](http://narrowriver.org/cleanup)

In case of bad weather, we'll reschedule to Sunday, May 5th from noon – 2pm.

NRPA will supply everything you need for the cleanup including trash bags, recycling bags, containers for sharp items and gloves. Please wear closed toed shoes and bring your own water bottle.



## Bobcats, continued from page 1



This bobcat was caught on camera by Paul Topham in Foster, RI.

*Lynx rufus*) are highly adaptable, and in recent years their populations appear to be increasing regionally and nationally (Roberts & Crimmins, 2010), despite continuous land development and the threat of habitat loss. This could be due to increasing prey populations, such as cottontail rabbits (*Sylvilagus* spp.), gray squirrels (*Scirus carolinensis*), other small mammals, or even the white-tailed deer (*Odocoileus virginianus*). It could also be due to individual bobcats branching out from their usual habitat into more developed areas in search of new territories. Although their reclusive



A motion activated trail cam near Moonstone Beach Road in South Kingstown captured several images of this bobcat in December 2015.

nature can make them a rare sighting, they can sometimes be observed traveling through backyards or walking across roads.

Bobcats rarely present themselves as a danger to humans or to pets. They will occasionally take domestic chickens, ducks, or rabbits, and will sometimes visit birdfeeders in search of squirrels or birds, but in general, their presence in a neighborhood rarely causes a nuisance. More often than not, they are simply an important and non-intrusive part of the ecosystem.

### Description:

Bobcat populations vary slightly from region to region, in home range size, habitat, appearance, and prey selection. Those found in New England average between 13 and 30 lbs. and measure between 32 and 34 inches long, with a height of around 22 inches. The males are typically larger than the females, often exceeding 30 pounds. The tail is “bobbed” and only about four inches long on average, although it can be longer. Individuals found in the Northeast tend to have less spotting on their coat than bobcats found in other parts of North America, causing them to sometimes be mistaken for mountain lions. Bobcat fur is reddish to tawny brown with black spots and stripes along their body, and large white spots which adorn the back of their tufted ears: a key identifying characteristic.

### Life and History:

Bobcats are the most numerous and widely distributed wild felines in North America. They can be found from the boreal regions of Canada, in almost every state in the U.S., and as far south as Mexico. Over time, this species has adapted to live in a variety of habitats including swamps, grassland, shrubland, forest, mountains, and agricultural land.

### Behavior:

Bobcats are solitary animals, only



NRPA will feature a bobcat in the logo of the 32nd Annual Narrow River Road Race.

comingling during the mating season or while females are rearing young. Rather than being nocturnal, bobcats are crepuscular, which means they are most active during dawn and dusk. They can travel between one and twelve miles in a night. Bobcats have excellent hearing and vision, and have large feet that are well adapted to climbing and moving through snow. During the breeding season and while rearing young, females may establish dens in caves or rocky areas, but may also den in brush piles, thickets, hollow logs, or exposed roots. Bobcats are territorial animals, with their territory size depending on season, sex, and prey distribution and abundance.

### Food Habits:

In New England, the bobcat's diet consists mostly of cottontail rabbits and snowshoe hares, but they will also eat other small mammals, such as mice, voles, woodchucks, and chipmunks, as well as birds. They are capable of killing white-tailed deer, usually attacking it while it is bedded down. They are ambush predators, meaning they stalk their prey before pouncing. Bobcats can tolerate long periods without food, and then eat heavily when it becomes available again.

### Reproduction:

The mating season begins in February or March, and birthing will begin in

May or June, when a female will have a litter of two to five kittens and rear them by herself. Juveniles will often stay with the mother through their first winter, sometimes until the next breeding season. Juvenile males tend to leave the maternal home range earlier than their female siblings and may wander widely in search of habitat unoccupied by mature males. Female kittens may breed after one year, while males typically begin breeding after two years.

Diseases:

Rabies can infect bobcats, just like all other mammalian species, but bobcats are not a common host for this disease and to date there have been no confirmed cases in Rhode Island.

Threats:

The biggest threat facing bobcats in Rhode Island are roads; bobcats have large home ranges and are forced to cross roads in search of food. They are also facing habitat loss and degradation as urban areas continue to spread into undeveloped landscapes.

Avoiding Problems:

Free-ranging poultry and domestic rabbits are at risk to prey by bobcats and other predators such as fox, coyote, and raccoons if they are not properly secured. To avoid predation, properly constructed enclosures and keeping animals indoors after dark is necessary. Bobcats are good climbers; fences should be high enough to discourage them from climbing over. Top cover for enclosures can also protect against climbing, as well as aerial predators.

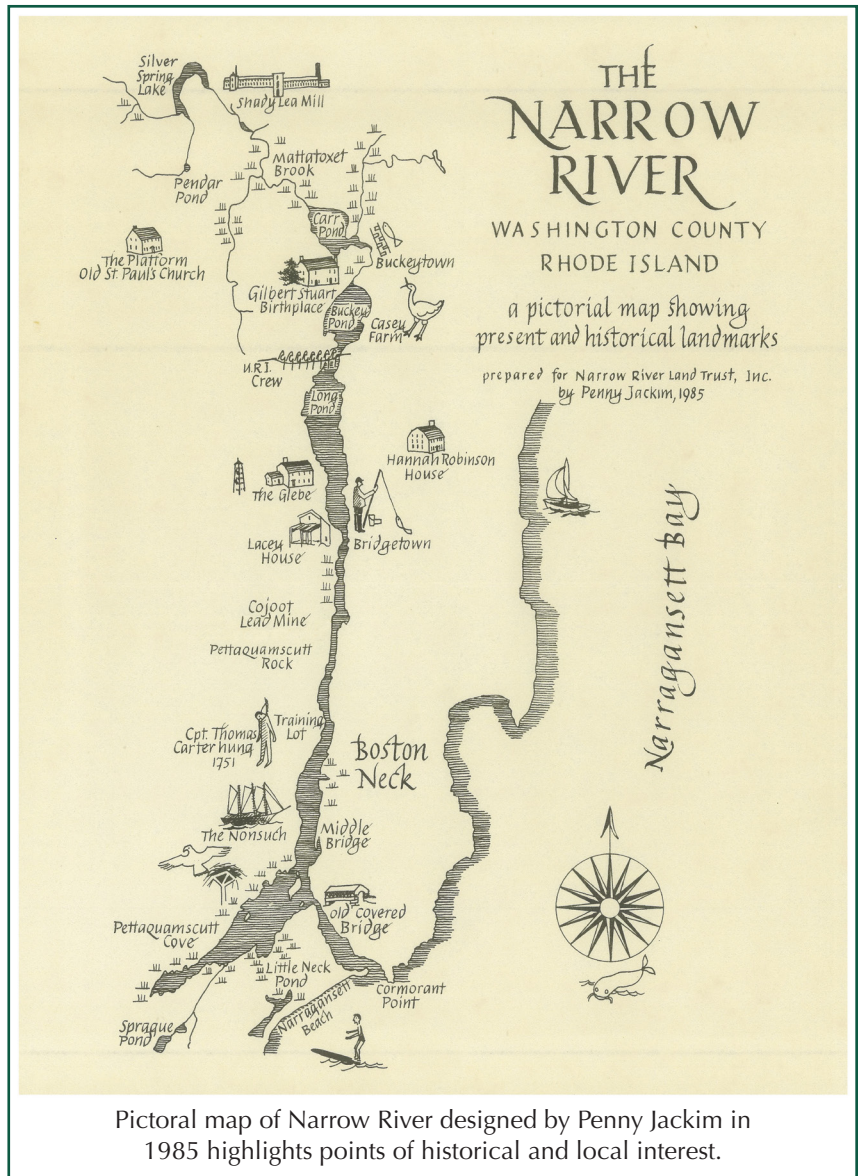
Regulatory Status:

Bobcats are classified under general law as a protected furbearer in Rhode Island. There is no open hunting or trapping season for bobcats. It is illegal to possess the carcass of a bobcat and road-kills should be reported to the Division of Fish and Wildlife. The carcass provides valuable biological information, such as population age structure, dietary habits and reproductive potential.

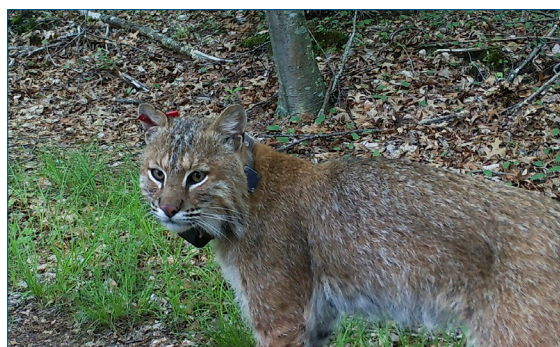
Sighting reports and complaints regarding bobcats can be reported to the Great Swamp Field Office at (401) 789-0281 or by emailing DEM.DFW@dem.ri.gov.

Many thanks to the RI Department of Environmental Management, Department of Fish and Wildlife for permission to reprint the above article about bobcats.

The full article can be seen at [narrowriver.org/bobcat](http://narrowriver.org/bobcat).



Pictorial map of Narrow River designed by Penny Jackim in 1985 highlights points of historical and local interest.



Radio collars, such as the one worn by the bobcat in this photo, enable researchers to track the whereabouts and habits of local bobcats. The movements of one such bobcat are noted on the map on page 1.

**Narrow River No Wake Zone Map**

The Narrow River No Wake Zone Map, as published in the Narragansett Harbor Management Plan is available at [narrowriver.org/no-wake-zone-map](http://narrowriver.org/no-wake-zone-map).

Please respect the zones so everyone can boat, swim and paddle safely!

## Oysters in Narrow River, cont. from page 1

the base of the food chain, and the nooks and crannies in their reefs make ideal hiding places for crabs and juvenile fish.

Unfortunately, in Rhode Island, these engineers cover less than 10% of their historical extent, primarily due to overharvest. Growing recognition of the services oysters provide to the ecosystem, however, has prompted managers to restore and recreate these oyster reefs, not for food but for habitat.

How do you build an oyster reef? It starts with adding a hard surface on which young oysters can settle. Oysters begin their lives as larvae that swim in the water until they are ready to find a surface to which they can attach themselves. They must choose wisely, since that location becomes their permanent residence. Typically, they prefer landing on other oysters. Given their preference, the hard surface we usually add is oyster shell. If we believe the oyster population in a specific water body needs a jump start, we will seed the shell with "spat," or baby oysters, produced from a local hatchery.

Where do you get oyster shells? The Nature Conservancy runs a Shell Recycling Program that picks up oyster shells from restaurants and festivals,

diverting these shells from landfills. After the shells are cured for at least a year on land, they are ready to be placed back in the water to create new habitat.

The past two summers, The Nature Conservancy's scientists have studied the oyster population in Narrow River, specifically to determine how readily new oysters recruit into the system. To evaluate this question, we put a series of spat collectors in the river from the Upper Pond near TNC's King Preserve to the Pollack Ave boat ramp. The results were impressive, as we recorded oyster recruitment at a rate about 200 times higher than some other water bodies in Rhode Island. Combining our data with surveys of existing oysters shows that oysters really want to thrive in this waterbody, but a history of sedimentation has reduced the amount of hard surfaces available to them. In some cases, oysters are so eager to settle that they recruit onto submerged tree branches and even aluminum cans!

The Nature Conservancy is very interested in restoring oyster habitat in Narrow River for all the services it provides and hopes to work with with the Narrow River Preservation Association to identify ideal locations. Oysters will help improve water qual-



TNC summer high school interns opening a spat collector for sampling.  
*Photo by Will Helt.*

ity and provide habitat for juvenile fish. We believe that all we have to do to increase the oyster population in Narrow River is provide more suitable surfaces for the oysters to settle without the need for spat seeding. If you build it, they will come!

**The Nature Conservancy**   
Rhode Island

### Volunteers Needed!

NRPA needs volunteers for our upcoming events! We especially need:

- photographers for our road race
- teams of 2-3 to staff water tables at our road race
- kayak spotters for our swim
- helpers at our swim
- helpers at our kayak fishing challenge
- kayak raffle sales people

Check out [narrowriver.org/volunteer](http://narrowriver.org/volunteer) for more info and to sign up!



Restored oyster reef in Great Salt Pond, Block Island. *Photo by Will Helt.*

## Osprey Platform, cont. from page 1

lunteers installed the post first, then a week later assembled the post extension and platform that Ken built.

Based on a design used successfully in Connecticut, the platform is perfectly constructed and positioned to attract a mating pair of osprey. As osprey return to our area from their annual migration as far south as the Amazon rain forest in Brazil, we hope that a pair will adopt the platform and build a nest on it.

NRLT and NRPA welcome the public's observations and photographs of osprey activity at the platform. Sometime in the next few weeks, the osprey will return to our area. Please email your observations and/or photos to [nrpa@narrowriver.org](mailto:nrpa@narrowriver.org).

The next phase of the project is the installation of a 24 hour live webcam on the nest planned for March 2020. A video of the osprey nest with the Narrow River in the background will be streamed live on NRLT and NRPA websites. We are currently seeking funding for the project.

Osprey return to the same nest each year (and generally mate for life) to lay 2 to 4 eggs and raise their young. The web cam will offer the opportunity to observe osprey behavior up close and will be free to the public. The web cam is deliberately designed

in a way that will not disrupt the birds. Installation is scheduled for March 2020 before the birds return from their migration so as not to disrupt the birds with the setup process.

The nest platform and web cam are a continuation of Narrow River Preservation Association's osprey education program. Each year in March, NRPA offers an osprey education program to local fourth graders. The one-hour presentation introduces students to osprey life history and uses the bird as a case study to teach principles of ecology such as adaptations to the environment. This year, presentations are scheduled at Monsignor Clarke School, Narragansett Elementary School, Peace Dale Elementary School and Wakefield Elementary School.

In 2017, NRPA acquired an osprey mount (a taxidermied osprey), giving people an opportunity to see an osprey up close. The mount, affectionately named 'Pette' (short for Pettaquamscutt, the Indigenous name of Narrow River) can be seen at NRPA events.

The materials for the platform were funded by NRPA.

Learn more about osprey and access a printable activity sheet at <http://narrowriver.org/osprey>.



The above osprey nest platform was built by Ken McShane. Volunteers attached the platform to the post Ken made and then raised it. The platform is now ready for osprey. Share your observations and photos by emailing [nrpa@narrowriver.org](mailto:nrpa@narrowriver.org).



Photos this page: clockwise from top right, Alison Kates, Alison Kates, Alison Kates, Karen Festa and Carolyn Wood



Craig Wood, NRPA and NRLT board member, teaches fourth graders at Monsignor Clarke School (left) and Narragansett Elementary School about osprey in March 2019.



**GO GREEN!!!**  
To receive *Narrow River Notes* digi- tally and in full color, please email us at [nrpa@narrowriver.org](mailto:nrpa@narrowriver.org). You'll save us precious resources and reduce waste!

**Narrow River Preservation Association 2019 Events**  
More information about all of our upcoming events at [narrowriver.org](http://narrowriver.org)

<b>May 18</b>	<b>32nd Annual Narrow River Road Race</b> 10K run, 5K walk and 5K walk along Narrow River in Narragansett and South Kingstown. New this year: winners receive prizes, team registration and optional performance tek T shirts! Proceeds benefit NRPA. 8:30 check in, 10am races start. North Pavilion, Narragansett Town Beach
<b>June 15</b>	<b>What Lives in the River</b> All ages, hands-on exploration of fish, shellfish, crabs and other critters living in Narrow River. Dress to get wet and have fun! FREE. Please preregister. Morning (9-11am) or afternoon (11:30-1:30pm). Middlebridge Marina, 95 Middlebridge Road, Narragansett
<b>June 22</b>	<b>14th Annual Narrow River Turnaround Swim</b> One mile swim in Narrow River. Swim half a mile, turn around bouy and return. Wetsuit and non-wetsuit divisions. Proceeds benefit NRPA. 7:45 check in, 9am swim start. URI Boathouse, 166 Walmsley Lane, North Kingstown
<b>July 19</b>	<b>12th Annual Pettaquamscutt Paddle</b> 9am-noon discounted kayak, canoe and stand up paddleboard rentals. 5pm guided sunset paddle along Narrow River to the mouth of the river. Rain date July 20. Proceeds benefit NRPA. Narrow River Kayaks, 94 Middlebridge Road, Narragansett
<b>August 3</b>	<b>Art on the River</b> Artists of all ages and skill levels create art along Narrow River. Paint, sketch, draw, photograph, make seaweed art or fish prints! Learn from local artists and 'Plein Air' painters. 9-11am, FREE. Please preregister. Middlebridge Marina, 95 Middlebridge Road, Narragansett
<b>Sept 14</b>	<b>What Lives in the River and Salt Marsh Walk</b> All ages, hands-on exploration of fish, shellfish, crabs and other critters living in Narrow River. Dress to get wet and have fun! 9-11am, FREE. Salt Marsh Walk with Narrow River Land Trust, 10am-noon, FREE. Middlebridge Marina, 95 Middlebridge Road, Narragansett
<b>Sept 28</b>	<b>Kayak Fishing Challenge on Narrow River</b> 'Catch, Photo, and Release' four target species: shad, stripers, fluke and bluefish. Fishing from sunrise to 1pm, barbecue, prizes and awards at 2. \$50 per entry, 18 and up, mandatory safety meeting September 27. Metatuxet Yacht Club, South River Road, Narragansett