

WILD THINGS

in the
Narragansett Bay Region



NARRAGANSETT BAY
ESTUARY PROGRAM

FRIDAY, OCTOBER 6, 2023

Roger Williams University CAS 157
1 Old Ferry Rd.
Bristol, RI 02809

WILD THINGS

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About the Event

What **living thing** comes to mind when you think about the greater Narragansett Bay Region? This region spans three of the most densely populated states in the country – Massachusetts, Rhode Island, and Connecticut. Yet, in addition to their human inhabitants, our watersheds and estuaries are home to a stunning array of wildlife. Many of these species are commercially and culturally important; some are regionally or federally threatened; all have ecological and intrinsic value.

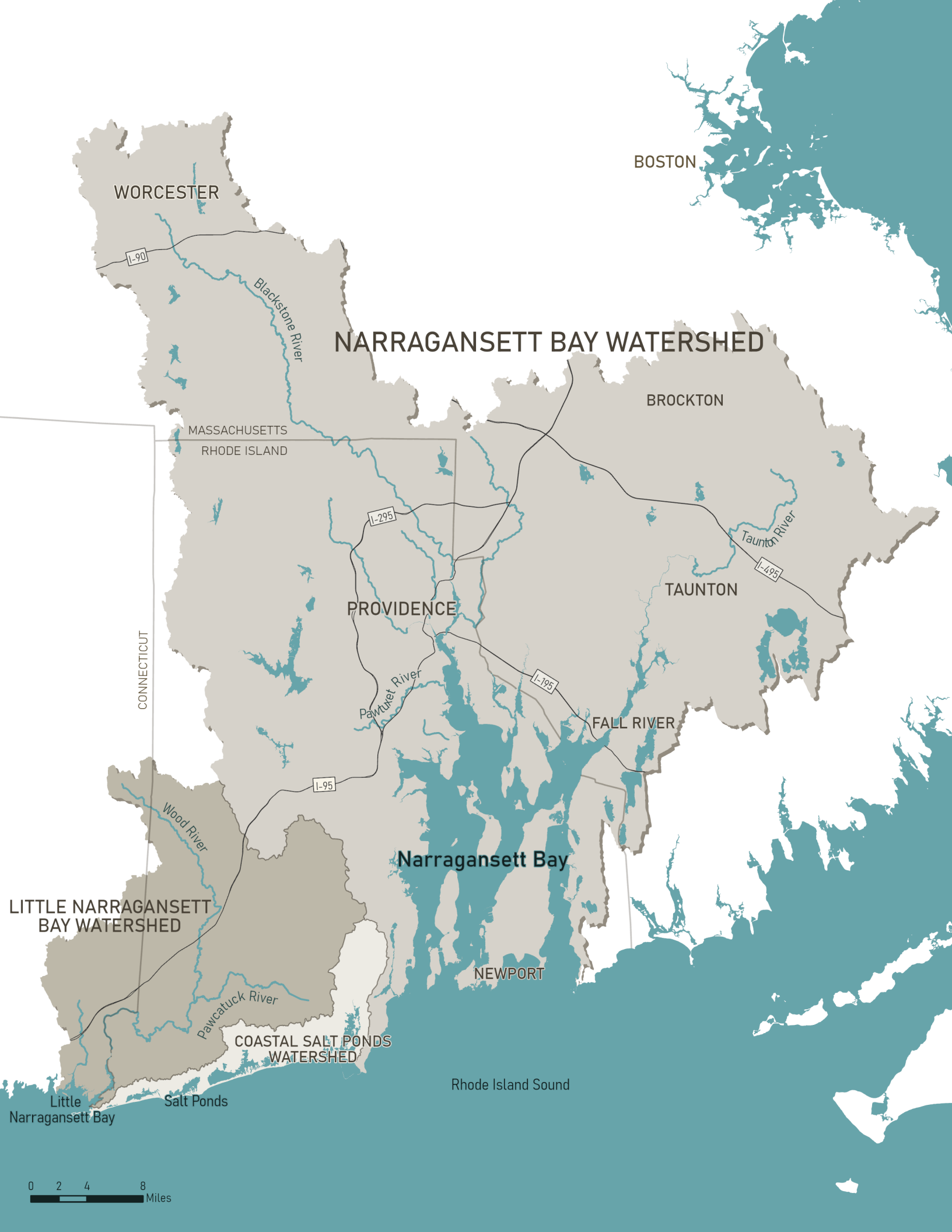
Today, we've invited presenters whose passions reflect much of the breadth of the tree of life in estuaries and their watersheds, from fins to feathers to fungi. They share a common message: wild things matter, and you can help conserve them, no matter your profession, age, or personal background.

We encourage you to reflect on our opening question throughout the day. Whether or not your answer changes, we hope that you walk away with a deeper understanding of the wild things that make the Narragansett Bay Region special.

Event Partners

Roger Williams
University





WORCESTER

BOSTON

NARRAGANSETT BAY WATERSHED

MASSACHUSETTS
RHODE ISLAND

BROCKTON

PROVIDENCE

TAUNTON

CONNECTICUT

Pawtucket River

Taunton River

FALL RIVER

Narragansett Bay

Wood River

LITTLE NARRAGANSETT
BAY WATERSHED

NEWPORT

Pawcatuck River

COASTAL SALT PONDS
WATERSHED

Rhode Island Sound

Little
Narragansett Bay

Salt Ponds

0 2 4 8
Miles

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Schedule

8:00 REGISTRATION AND BREAKFAST

8:30 WELCOME

Margaret Everett, *Provost*, Roger Williams University

Darcy Young, *Interim Executive Director*, Narragansett Bay Estuary Program

8:45 FRAMING THE DAY

David Gregg, *Executive Director*, Rhode Island Natural History Survey
Save the Actors AND the Stage - Importance of Species Conservation

9:15 KEYNOTE

John Waldman, *Research Scientist*,
Queens College, City University of New York
Shifting Baselines for Anadromous Fish and Freshwater-Saltwater Connectivity

9:45 COFFEE BREAK

10:00 WILD THINGS IN SALTWATER

Conor McManus, *Chief*, RIDEM - Marine Fisheries
Fish and Fisheries of Narragansett Bay: Where We've Been and Where We're Headed

Deirdre Robinson, *Co-Director*, Saltmarsh Sparrow Research Initiative
Biophilia and the Saltmarsh Sparrow

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Schedule

10:50 WILD THINGS IN SALTWATER (CONT'D)

Sara Grady, *Senior Coastal Ecologist*, Massachusetts Audubon
The Oldest Blue Bloods - Horseshoe Crab Ecology and Management

Carolyn Mostello, *Coastal Waterbird Biologist*,
Massachusetts Division of Fisheries & Wildlife

Restoration of Tern Nesting Habitat at Bird Island, Massachusetts

Jody King, *Quahogger*

Changes to Narragansett Bay As Told By a Life-Long Quahogger

11:50 LUNCH AND TABLES

12:50 WILD THINGS IN FRESHWATER

John Marsland, *President*, Blackstone River Watershed Council

Nancy Garcia, *Member*, Narragansett Indian Tribe

Stefanie Covino, *Program Manager*, Blackstone Watershed Collaborative

Bringing Herring Back to Kittacuck - Drumming Up Local Support for
Migratory Fish Passage

Brian Bastarache, *Environmental Conservation Department Chairman*,
Bristol County Agricultural School

Head-Starting as a Conservation Tool

Corey Pelletier, *Fisheries Biologist*, RIDEM - Fish & Wildlife

Native Brook Trout in Rhode Island and the Ecosystems They Represent

Marea Gabriel, *Freshwater Manager*, The Nature Conservancy -
Massachusetts

Freshwater Mussels: Hidden Gems of our Rivers and Lakes

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Schedule

2:20 COFFEE BREAK

2:45 WILD THINGS - THE UNSUNG HEROES

Lou Perrotti, *Director of Conservation Programs,*
Roger Williams Park Zoo

The 29-year Effort to Establish the American Burying Beetle
(*Nicrophorus americanus* Olivier) to Nantucket Island, Massachusetts

Kate McPherson, *Narragansett Bay Riverkeeper, Save the Bay*
Lazy Landscaping: How One Homeowner Put Off Yard Work Long
Enough to Support a Robust and Growing Bloodroot Population

David Hibbett, *Andrea B. & Peter D. Klein Distinguished Professor,*
Clark University

Population Genetics and Development of the "Tiger Sawgill", a
Semi-Aquatic Mushroom of Riparian Forests

Numi Mitchell, *Lead Scientist, Narragansett Bay Coyote Study*
What Sherlock, Watson, and Clouseau Taught Us About Coyote
Management

Katie Burns, *Pollinator Atlas Entomologist, RIDEM - Fish & Wildlife*
The Rhode Island Pollinator Atlas: Conserving and Celebrating
Insect Pollinators Through Community Science

4:30 DISCUSSION

4:55 CLOSING

Darcy Young, *Interim Executive Director,*
Narragansett Bay Estuary Program

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Tables: Organizations and Information

BLACKSTONE WATERSHED COLLABORATIVE

Stefanie Covino / Website: BlackstoneCollaborative.org

The Blackstone Collaborative was developed in 2021 to implement the priority goals identified within the [Blackstone Needs Assessment Report](#). We're here to help the watershed improve local health and resilience in the face of development and climate change.

CLIMATE CREATIVES

Susan Israel / Website: ClimateCreatives.com

Our unique engagement programs combine sustainability content with art and design experiences to pull people into your with goals with joy and commitment.

FRIENDS OF THE MOSHASSUCK

Greg Gerritt / Website: TheMoshassuck.org

The Friends of the Moshassuck has been established to help heal the Moshassuck River from the ills visited upon it by Industrialism, help people learn about and experience the joys and wonders of the Moshassuck River, both natural and man made, and explore and explain the relationship between ecology and economy in the modern world, with a special emphasis on the development of urban communities.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Mary Gannon / Website: [RIDEM-Wildlife Outreach Program](#)

The Division of Fish and Wildlife began our Wildlife Outreach Program in 2017. The program provides Rhode Islanders with information and unique opportunities to learn about our state's wildlife resources and conservation efforts.

RHODE ISLAND MYCOLOGICAL SOCIETY

Deana Thomas / Website: RhodeIslandMycologicalSociety.org

The Rhode Island Mycological Society promotes the study and exchange of information about the Kingdom of Fungi. Through a variety of educational opportunities and events we benefit from our members' collective knowledge as we explore and document the fungal diversity of our backyards, parks and forests.

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RHODE ISLAND NATURAL HISTORY SURVEY

David Gregg / Website: RINHS.org

The Rhode Island Natural History Survey connects people knowledgeable about Rhode Island's animals, plants, and natural systems with each other and with those who can use that knowledge for research, education, and conservation.

SAVE THE BAY

Kate McPherson / Website: SaveBay.org

Save The Bay is a member-supported nonprofit organization dedicated to protecting and improving Narragansett Bay and all the waters that flow into it. Our vision, since 1970, is a fully swimmable, fishable, healthy Narragansett Bay, accessible to all.

SNEP NETWORK/NEW ENGLAND EFC

Phaeng Southisombath / Website: NEEFC.org/SNEP-Network/

The Southeast New England Program Network is a collaborative group of 16 partner organizations with expertise in financing and implementing stormwater and watershed management efforts. Our mission is to empower communities to achieve healthy watersheds, sustainable financing and long-term climate resilience through management of stormwater and restoration projects. A project of the New England Environmental Finance Center, we provide free training and technical assistance to strengthen the capacity of municipalities, organizations, and tribes within Rhode Island and Southeastern Massachusetts.

SOWAMS HERITAGE AREA PROJECT

David Weed / Website: sowams.org

The Sowams Heritage Area Project is developing a National Heritage Area (NHA) in Sowams, the ancestral homeland of the Massasoit Ousamequin who welcomed the Pilgrims in 1621. Situated in nine towns and cities on the northeastern side of Narragansett Bay, this nationally significant landscape is laced with a network of estuaries that have sustained those who've lived here for 10,000 years. NHAs are living, working, landscapes, which are designated by Congress to honor the important role of a region in our country's development and to foster grassroots stewardship of our environment, heritage and culture.

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Abstracts and Contact Information



BRIAN BASTARACHE

Bristol County Agricultural School / bbastarache@gmail.com

Head-Starting as a Conservation Tool

Head-starting has been used for decades in attempts to augment declining populations of various species. This lecture will present the important points and lessons learned through raising 2,000+ animals over more than a decade of head-starting rare turtles and other species. The typical criticisms, thoughts about best practices, and considerations before initiating head-starting efforts will be discussed.



KATIE BURNS

RIDEM Fish & Wildlife / katherine.burns.CTR@dem.ri.gov

The Rhode Island Pollinator Atlas: Conserving and Celebrating Insect Pollinators Through Community Science

Insect pollinators play a vital role in supporting healthy food webs, as well as our food security. Unfortunately, insect pollinators are experiencing global declines, which poses a risk to human and environmental health. In 2021, the RI DEM Division of Fish & Wildlife caught the “buzz” on pollinators, launching an exciting new initiative called the Rhode Island Pollinator Atlas. The Atlas is an inventory of Rhode Island’s pollinating insects and will inform future conservation plans to protect insect pollinators. This talk will focus on how to conserve these important critters and how the public can get involved with the Atlas!



MAREA GABRIEL

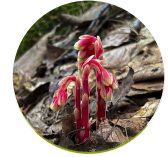
The Nature Conservancy - Massachusetts / mgabrie@tnc.org

Freshwater Mussels: Hidden Gems of Our Rivers and Lakes

Freshwater mussels are one of the most imperiled animal groups in North America, yet 8 species of these vital filter feeders help clean the rivers and lakes that drain to Narragansett Bay. Come learn about the fascinating biology and life cycle of freshwater mussels, their reliance on fish, the myriad threats to these sensitive animals, and vital roles they play helping to maintain healthy freshwater systems that benefit nature and people.

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SARA GRADY

Mass Audubon / sgrady@massaudubon.org

The Oldest Blue Bloods - Horseshoe Crab Ecology and Management

Horseshoe crabs are unique and prehistoric creatures whose populations have declined in many places over the past few decades due to over-harvest for bait and increased pressure for their valuable blood. They play an important role in the ecology of our coasts, and managing their populations is a long-term task. This talk covers their natural history, conservation and management, and what makes them so amazing



DAVID GREGG

Rhode Island Natural History Survey / dgregg@rinhs.org

Save the Actors AND the Stage - Importance of Species Conservation

It has been argued that, given climate change, field inventory and monitoring are essentially irrelevant...out of date before your boots are off. However, use of resource models that are based on long held understandings about how geographical conditions, natural community composition, and species behavior affect biodiversity may be glib and misguide us at a critical moment. It is true that observation-based conservation tools of long standing are now probably too costly and not as useful as we thought they might be, being too imprecise or too slow to implement given conditions. We need an all-of-the-above approach to biodiversity conservation where we draw on existing tools like the natural heritage methodology, wildlife action plan, ecological land units, and stressor management and also develop new approaches. And we need to greatly increase our capacity to gather and manage biodiversity field data. In a time of rapid change and novel ecological conditions, it is critical to avoid normative assumptions and to keep our eyes open and document what's going on all around us.

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Abstracts and Contact Information



DAVID HIBBETT

Clark University / dhibbett@clarku.edu

Population Genetics and Development of the "Tiger Sawgill", a Semi-Aquatic Mushroom of Riparian Forests

The "Tiger Sawgill", *Lentinus tigrinus*, grows on silver maples and other hardwoods in riparian habitats. This unique mushroom produces two radically different forms, one with normal "gills" and the other resembling a "puffball." When water levels are high (e.g., 2023), *L. tigrinus* mushrooms may be submerged, but in dry years (e.g., 2022), the mushrooms may complete their development entirely above water. With support of community partners, we are testing whether stochastic fluctuations in water levels, within and across years, are important for maintaining the polymorphism in *L. tigrinus*.



JODY KING

Professional Quahogger

Changes to Narragansett Bay as Told By a Life-Long Quahogger

Growing up on Narragansett Bay in Warwick, I have watched changes in the Bay and the surrounding estuaries. As a child the Bay was my playground. As an adult the Bay is my life! All of Narragansett Bay has changed with the times and tides. I have had to adapt to the changing Bay. In the early 1990s, I wished the Bay was a lot cleaner. Now I wonder how clean is too clean!

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Abstracts and Contact Information



JOHN MARSLAND

Blackstone River Watershed Council / BRWCFOB@gmail.com

NANCY GARCIA

Narragansett Indian Tribe



STEFANIE COVINO

Blackstone Watershed Collaborative / scovino@clarku.edu



Bringing Herring Back to Kittacuck – Drumming Up Local Support for Migratory Fish Passage

This three-part talk will provide a brief introduction to (the lack of) migratory fish passage on America's Hardest Working River – the Blackstone, or Kittacuck. We'll discuss how diadromous species such as herring have been excluded from the region for over 200 years and how advocates are working to change that, with a primary focus on community engagement and highlighting the perspectives from the traditional stewards of this land – the indigenous communities – through public events, stakeholder meetings, and strong relationships.



CONOR MCMANUS

RIDEM Marine Fisheries/ conor.mcmanus@dem.ri.gov

Fish and Fisheries of Narragansett Bay: Where We've Been and Where We're Headed

Narragansett Bay is home to a diverse marine ecosystem that supports a suite of recreational and commercial fisheries. However, this marine faunal community has undergone several changes over time, which have translated to alterations in harvest opportunities. With scientific monitoring data, I present on how the marine ecosystem of Narragansett has changed over time, from marine fish and invertebrates to anadromous fish, and the current state of fisheries in Narragansett Bay. I then look toward the future by examining species and fisheries that have expanded in recent years. Through this presentation, I am to provide insight into where the ecology and fisheries of Narragansett Bay is headed in a continuously changing environment.

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Abstracts and Contact Information



KATE MCPHERSON

Save The Bay / kmcpherson@savebay.org

Lazy Landscaping: How One Homeowner Put Off Yard Work Long Enough to Support a Robust and Growing Bloodroot Population

When Kate and Keith purchased their home on three acres of woodland in Gloucester in spring 2008, they didn't realize the enormity and diversity of the invasive non-native species they had inherited. Instead of clearing, grubbing and planting grass, Kate took the slow route of selective killing, burning, planting native trees, and annual mowing. Once the tangle of multiflora rose, bush honeysuckle, and burning bush had been removed, a tiny white flower emerged- bloodroot. The invasives work continues but through timing yardwork for times when bloodroot is dormant, the patch has expanded to the point where Kate can share some of her unexpected rare plants with those that appreciate them most.



NUMI MITCHELL

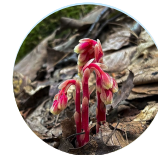
Narragansett Bay Coyote Study / numimitchell@gmail.com

What Sherlock, Watson, and Clouseau Taught Us About Coyote Management

The Narragansett Bay Coyote Study has been tracking GPS collared coyotes since 2005 in order to identify 1) reasons for growing populations in RI and 2) how to reduce coyote numbers and reduce coyote-human conflicts. Since coyote population growth is directly related to available food resources, Dr. Numi Mitchell used fine-scale GPS tracking to determine what resources coyotes are using and study how removing human food subsidies impacts coyote populations.

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Abstracts and Contact Information



CAROLYN MOSTELLO

Mass. Division of Fisheries & Wildlife / carolyn.mostello@mass.gov

Restoration of Tern Nesting Habitat at Bird Island, Massachusetts

Bird Island, in Buzzards Bay, Massachusetts, is a site of continental importance for the endangered Roseate Tern, a small seabird. Nesting habitat at this tiny site was rapidly shrinking due to erosion and sea level rise, threatening the stability of the entire North American population. Over a period of nearly 20 years, MassWildlife and partners designed, funded, and implemented the reconstruction of the island's deteriorating revetment and the restoration of tern nesting habitat, encountering and surmounting many obstacles throughout the process. Tern populations at the site have increased substantially in the years since completion of the project.



COREY PELLETIER

RIDEM Fish & Wildlife / corey.pelletier@dem.ri.gov

Native Brook Trout in Rhode Island and the Ecosystems They Represent

In the face of climate change and added disturbances from human development and population expansion, it is important as ever that we focus on protecting our freshwater resources. The Eastern Brook Trout is the only non-migratory salmonid that is native to Rhode Island. Due to their life history, wild Brook Trout presence is an indicator of clean and healthy rivers and streams. Habitat fragmentation has isolated populations of Brook Trout among many other aquatic organisms and therefore, has reduced access to important habitats. Continuity of river systems and access to a range of habitats is integral for near- and long-term resiliency of species to withstand disturbances. This talk will take you through the connections between Brook Trout and their ecosystem, the challenges we face, and the path forward to support biodiversity in our freshwaters given ever increasing pressures.

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Abstracts and Contact Information



LOU PERROTTI

Roger Williams Park Zoo / lperrotti@rwpzoo.org

The 29-year Effort to Establish the American burying beetle (*Nicrophorus americanus* Olivier) to Nantucket Island, Massachusetts

The American burying beetle (*Nicrophorus americanus* Olivier) is a federally listed species once common throughout the eastern and mid-western United States and now surviving in limited habitats in seven states. From 1994–2023 an initiative to re-establish the beetle on Nantucket Island, Massachusetts has been carried out by a partnership with the USFWS, the RIDEM, and many other public and private conservation agencies. During the 29-year period, nearly 3,500 beetles from the RWPZ breeding program were released on the 31,000-acre island. This talk will outline the beetle's natural history, reasons for its decline and the 29-year reintroduction effort and show how current post-release monitoring has confirmed that substantial numbers of beetles are reproducing and surviving over winter.



DEIDRE ROBINSON

Saltmarsh Sparrow Research Initiative / drobinsong@gmail.com

Biophilia and the Saltmarsh Sparrow

The Biophilia Hypothesis will be explored as a segue into understanding the motivation necessary to study and protect vulnerable species such as the Saltmarsh Sparrow. Rhode Island is home to a robust breeding population of this vulnerable bird –who has successfully nested in salt marshes for millennia– but now faces extinction, due primarily to sea level rise. The eight year history of our work at Jacob's Point will be shared, along with the results of a nest lifting experiment in 2023; we will also explore options for the future of this unique species.

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Abstracts and Contact Information



JOHN WALDMAN

Queens College - CUNY / john.waldman@qc.cuny.edu

Shifting Baselines for Anadromous Fish and Freshwater-Saltwater Connectivity

That one could “walk drishod on the backs” of schools of salmon, shad, and other fishes moving up Atlantic coast rivers was a not uncommon description of their migratory runs during early Colonial times. Accounts tell of awe-inspiring numbers of spawners pushing their way upriver, the waters “running silver,” to complete life cycles that once supported important inland and marine fisheries along the Eastern Seaboard. Despite these primordial abundances, over the centuries these stocks were so stressed that virtually all are now severely depressed, with some biologically or commercially extinct and others simply forgotten. There is a litany of drivers of decline, including overfishing, pollution, predation by non-native species, among others, but with none as generally harmful as the loss of connectivity of rivers because of damming.

Acknowledgements

**Thank
you!**

NBEP would like to thank our partners for their support of this event. **RWU Events Staff** secured space for this meeting and managed all logistics seamlessly. Finally, NBEP would like to thank our speakers for crafting this event. Their enthusiasm and drive make the biodiversity of the region fun to explore.

Photo credits belong to: Alicia Schickle (@Scientifically_Surreal); Ayla Fox for NBEP; Creative Commons