CONNECTING



Save the Date!
Audubon Annual Meeting
October 22, 2017
Keynote Speaker: Curt Spalding
See page 16

See page 16 VOLUME 51, NO. 3 AUGUST 2017 MORE THAN MEETS THE EYE Audubon Refuges are Nature's Defense Against Climate Change Climate Change Adaptation Starts with Education

PEOPLE

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#### From the Desk of the Executive Director

# tive

## Changing Climate Necessitates a New Perspective

This issue of the Audubon Report moves beyond describing the impacts that climate change will have on Rhode Island's wildlife and natural habitats. In this, the third issue in a four-part series on climate change, we turn our attention to how we might start looking at things with a new perspective – both as an organization and as individuals.

For example, the vast forests that Audubon has protected and stewarded for most of the past century as habitat for birds and wildlife should also be valued for other environmental services that this land provides. Audubon properties serve as a refuge from the heat, groundwater recharge areas, a source of clean air and help to remove carbon from the environment.

The freshwater wetlands and saltmarshes that we protect as habitat for birds and coastal fisheries are also places that will provide a buffer and help to protect us from flooding during extreme storm events.

Also, on a personal level we need to take on a new perspective and consider climate change when making lifestyle choices including what kind of vehicle we choose to drive, the source of our energy, and what organizations we support.

Thank you for your continued support of Audubon.

Farm J. T. Tall

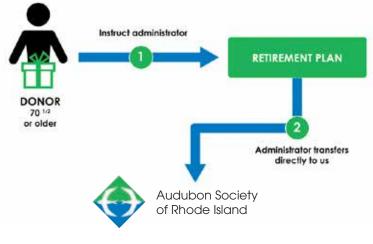
Lawrence J. F. Taft, Executive Director

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In late 2015, Retirement Account (IRA) Charitable Rollover legislation was signed which allows individuals age 70½ or older to transfer up to \$100,000 of tax-free gifts on an annual basis from their IRA directly to their favorite charity. IRA charitable rollovers represent a significant opportunity for you to support Audubon's critical mission of protecting birds and wildlife.

The IRA Charitable Rollover permits those taxpayers age 70½ or older to make donations directly to charitable organizations, like Audubon, from their IRAs without counting them as part of their income, and consequently without paying taxes on the contribution. The annual cap on a donor's total combined charitable IRA rollover contributions is \$100,000. Couples can contribute individually from their IRAs, resulting in potential annual gifts of up to \$200,000 for Audubon.

Audubon encourages you to consult your retirement plan administrator, tax or finan-



cial advisor to determine whether this option would be advantageous for your financial and tax circumstances. For sample language to notify your IRA administrator and Audubon, please use these links:

Transfer Instructions for an IRA Charitable Rollover: http://preview.tinyurl.com/y7ugc25n

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For more information and questions please contact Jeffrey Hall, Senior Director of Advancement at 401-949-5454 ext. 3017 or jhall@asri.org.



# **Facing Forward**

# Climate Change Adaptation Starts with Education

By Todd McLeish

Part Three of the Audubon Report 2017 Series on Climate Change



A t Audubon's final Wednesday morning bird walk of the season in June, nearly two dozen Rhode Islanders – most of whom are regulars at the weekly walks – gathered at the South County Bike Path. They were searching for warblers, vireos, flycatchers and whatever other birds were willing to make their presence known at the peak of the breeding season. Led by Audubon naturalist and Fisherville Brook Wildlife

naturalist and Fisherville Brook Wildlife Refuge manager Laura Carberry, the group spotted more than two dozen species, including Eastern Kingbird, Great Crested Flycatcher, Veery and even a Barred Owl.

In her introductory remarks before the walk began, Carberry reminded the participants about several topics they had discussed in previous weeks, all related to climate change and the strategies each of them could employ to help reduce their carbon footprint. She recommended that the group consider enrolling in a program that provides renewable energy to their homes, reducing their fossil fuel use by carpooling or bicycling, and installing rain gardens in their yards to absorb stormwater run-off. And she thanked them for joining with her in building a pollinator garden at Fisherville Brook to boost the local population of bees, butterflies and other pollinators.

If offering climate change mitigation tips during a bird walk sounds out of place, it shouldn't.

"Everyone who cares about the environment needs to be talking about climate as often as they can," said Barbara Sullivan-Watts, a bird walk regular. "And I think a bird walk is as good a place as any. Birds are declining because of climate change, so why wouldn't Audubon talk about it during a bird walk?"

The feedback has been similarly positive from others in the group as well. Several said that Audubon is a credible source of useful information about climate change, and Carberry is someone they trust to offer factual messages that they are happy to act on.

Please turn to page 4

#### Facing Forward Continued from page 3

"Those that attend bird walks are already environmentally aware, so they're on this wavelength anyway," Carberry said. "I've been pleased with how receptive they've been."

Carberry's climate change messaging is part of a strategic initiative Audubon launched last year with partner organizations Massachusetts and Connecticut Audubons to incorporate climaterelated information in existing programs.

"We've learned that people just don't sign up for climate change workshops or lectures," said Lauren Parmelee, Audubon senior director of education. "In order to provide that information to the public, we have to successfully weave it into our other programs led by people like Laura, who our members already know and trust."

Several Audubon environmental educators attended a workshop last year sponsored by the U.S. Environmental Protection Agency to improve their own climate literacy and learn how to communicate about it without overwhelming program participants or making the issue seem depressing. The ultimate aim is to inspire the public and empower them to take positive action in their communities.

In addition to the Wednesday morning bird walks, the initiative has been incorporated into numerous Audubon programs, including the annual maple sugaring event in March. In addition to climate messaging in each element of the program, a gift of a sugar maple seedling was offered to all participants as a way of encouraging action in their own yards. Climate-related lessons were also part of Parmelee's Beginning Birding class and Audubon board member Dr. Charles Clarkson's Birding: The Next Step class, and Audubon Refuge Manager Kim Calcagno's Greening Your Home program.

"You really have to think about the messaging," Parmelee said. "You can't just tell people the facts and expect them to take action. You have to tap into their values."

Some of the things that people value most are their families, homes and communities. Many Rhode Islanders have already felt the effects of climate change in their towns, basements and backyards as a result of storms - exacerbated by the world's changing climate. In 2010, extended rains caused massive flooding along the Pawtuxet River. The river rose more than 15 feet above flood level and inundated three wastewater treatment plants - West Warwick, Cranston and Warwick. Untreated sewage mixed with floodwaters flowed into homes and businesses. Two years later, in 2012, Super Storm Sandy rushed on shore, devastating more homes and businesses along Rhode Island's southern coast. Misquamicut Beach was one area that was devastated.

Westerly has the most homes vulnerable to increased sea level rise, while Newport has the highest number of commercial structures at risk.

State and local agencies are starting to take steps toward making the region more resilient to the coming changes, and residents need to stay abreast of the projects that are in the works.

The Division of Statewide Planning, for instance, recently completed a study of the socioeconomics of sea level rise to identify who is likely to be affected the most.

Parag Agrawal, the division's associate director,

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Rhode Island's many shore communities are under direct threat from sea level rise due to climate change.

#### I can do it!

#### **Rain Barrels and Rain Gardens**

Conserve water and reduce the amount that flows from your property. Capture rain in barrels from your roof for lawn and garden watering or design a rain garden for your yard. web.uri.edu/riss/take-action/simple-steps-at-home/rain-gardens



#### I can do it!

#### Carpool, Walk or Bike

Reduce your carbon footprint by driving less, carpooling or biking whenever possible. www.dot.ri.gov/community/bikeri



#### I can do it!

#### **Purchase Green Energy**

Support clean energy and purchase your electricity from local renewable sources. www.ripower.org/audubon



## I can do it!

#### Speak Up!

Talk to your neighbors about climate change, the impacts on your community, and what actions you are taking.

Together we can make a difference.

health.ri.gov/healthrisks/climatechange



#### I can do it!

#### **Landscape with Native Species**

Help birds, pollinators and other wildlife by using native plants in your gardens and landscaping. Read about a new pollinator garden at Fisherville Brook on page 11. web.uri.edu/rinativeplants



### I can do it!

#### **Stay Informed**

Stay current with Audubon Advocacy emails. Sign up for Audubon programs – connect with others and learn more about how you can support the environment. <a href="mailto:rww.asri.org/lead">rwww.asri.org/lead</a>



# More Than Meets the Eye...

Audubon Refuges are Nature's Defense Against Climate Change

By Todd McLeish

The late winter and early spring of 2010 was not a time for enjoying the outdoors in the Ocean State. In what may have been the most significant flooding Rhode Island has experienced in its recorded history, more than 20 inches of rain fell during a 38-day period, culminating in a storm that dropped eight inches on the state from March 29 to April 1. The effects were devastating, especially along the Pawtuxet River in Warwick and West Warwick, which rose to more than 15 feet above flood level. Dams and bridges were washed out, homes were destroyed, and businesses and infrastructure were severely damaged.

"The malls in Warwick were flooded because all the water in the Pawtuxet River is forced through a narrow channel between the malls where there are no wetlands, and it flowed over the banks and covered the parking lots," recalled Scott Ruhren, Audubon's senior director of conservation. "It was a mess."

Audubon's wildlife refuges weren't spared. The trails at the Fisherville Brook Wildlife Refuge in Exeter were completely impassable – water was waist deep in places – as the brook overflowed its banks. The house at the Marion Eppley Wildlife Refuge in West Kingston became an island for several days as the surrounding flood plain swelled. And the 11-acre Carr Pond at the Maxwell Mays Wildlife Refuge in Coventry multiplied in size.

But none of the refuges were irreparably harmed. In fact, they played a crucial role in helping to mitigate even greater damage that could have occurred in nearby areas. It's a role they will likely play more and more often as the changing climate delivers increasingly severe storms, rising sea levels and damaging storm surge.

"Conservation lands are resilient," Ruhren said. "Whether they're in a river floodplain or a coastal area, natural lands do what they're supposed to do when the water rises – they absorb the water and release it slowly."

According to Ruhren, the most valuable elements of any conserved property during flooding are wetlands, which he describes as "nature's kidneys. In addition to absorbing and holding large quantities of water," he said, "they also filter out many contaminants from the water."

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#### More Than Meets The Eye...

Continued from page 5

The difference is clearly visible. Water that surges downstream after a storm often looks like chocolate milk, he said. This is especially true where upstream areas are heavily developed with pavement and other structures that contribute to erosion and roadway run-off.

But when that water has a chance to filter through wetlands and other natural areas, it's much cleaner when it reaches the bay.

"Sure, the trails might get flooded, but that's just a short-term inconvenience," Ruhren said. "But the water recedes as it filters down into the ground or continues downstream, and the forests are no worse off because of it. You might have a flooded forest for a short time, but they rebound quickly, and the plants and animals are adapted to it."

The danger comes when wetlands are filled, when impermeable surfaces like pavement prevent water from seeping into the soil, and when increasing development is permitted along waterways.

"Think of it as if we're filling a bathtub," said Audubon's Executive Director Lawrence Taft. "The more you fill in places with pavement and development, the less water an area can hold. By having open spaces and backing off development around wetlands, rivers and marshes – when waters start to creep up, there is a place for it to be stored."

Taft and Ruhren agree that floodplains should be protected from extensive development so they can serve to mitigate damage when the waters inevitably rise again. Many local communities are finally getting the message.

The Rhode Island Coastal Resources Management Council's interactive mapping system, Storm Tools, is helping public officials visualize flood-prone areas and places that will likely be under water due to sea level rise in the coming decades. Coupled with a growing awareness of the important role conservation lands play in flood mitigation, some communities are now recognizing that the protection of open space should be a key component of their comprehensive planning.

Taft is working with the State to develop new rules that factor in climate mitigation values when communities seek grants for open space and recreation lands in the future.

"We really need to start prioritizing those areas that can be safely flooded in our open space decision making," he said. "Properties should be ranked higher if they're near a river or in a flood



Like many areas across Rhode Island, Audubon's Fisherville Brook Wildlife Refuge in Exeter experienced severe flooding during the spring of 2010. However, the resiliency of the property helped to mitigate even greater damage that could have occurred nearby. Flooded pond crossing shown above.

zone because of the climate mitigation services they provide."

But flood mitigation isn't the only environmental benefit that conservation lands provide in this era of climate change. Established ecosystems like forests and salt marshes sequester carbon from the atmosphere while producing oxygen, and they provide critical habitat for birds and other wildlife whose habitat is rapidly changing.

"The more conservation land you have, the more places there will be for wildlife to shift their ranges to when it's necessary," said Ruhren. "And bigger is better, especially when the protected lands are connected."

He also emphasized the important role that forests play in keeping streams and rivers cool.

"A lot of aquatic species are vulnerable to overheating, like native brook trout and freshwater mussels," Ruhren said. "A good way to kill brook trout is to cut down the trees along the stream. We don't think of heat as a pollutant or a stressor, but it is."

"We often talk about how our forests are the lungs of Rhode Island because they clean the air, produce oxygen, absorb carbon and keep us cool," added Taft. "Putting aside land for conservation helps with resiliency and adaptation and mitigation of some of the effects of climate change. Will the forests still change? Yes. Will the species change? Yes. But at least those open areas will be there to function for air quality, flood protection, habitat and cooling."

Todd McLeish is a life-long birder, freelance science writer and author of several books about wildlife, including Narwhals: Arctic Whales in a Melting World.



# Join the Audubon Team... VOLUNTEER!

#### RAPTOR WEEKEND September 9 & 10, 2017

Volunteers needed to help with all facets of our largest annual event at the Environmental Education Center in Bristol. Take your pick of stations: raffle, face stencils, activity tables, parking cars, selling snacks and many more!

#### BIRD CARVING EXPOSITION November 4 & 5, 2017

Volunteer at this artisan event. Carvers from across New England exhibit and sell their work at the Environmental Education Center in Bristol.

For more information contact Jon Scoones at jscoones@asri.org or call (401) 245-7500 Ext. 3044







#### LET'S GO BIRDING By Laura Carberry

## **New Birding Trails Book is Great for Beginners** and Experts Alike

W7hen I am traveling to other states, I **V** often check to see if there are local birding trail books or other small guides that highlight the best places to go birding. These are little pocket books that list access points, property ownership, what species might be spotted and the best time of year to visit. They are invaluable tools for traveling birders.

an avid birder this guide is still very useful - remember, there are over 60 spots listed in the book. Get out and see if you can visit them all in one year!

Perhaps this could become a challenge for our Wednesday Morning Bird Walks. So many of us are creatures of habit, returning to the same locations over and over again. This book can provide inspira-



Audubon Naturalist Laura Carberry (second from right) sets up a scope with members of the Wednesday Morning Bird Walk group.

That is why I am so happy that the Audubon Society of Rhode Island just published one for the Ocean State. If you haven't seen it vet, the Rhode Island Birding Trails book is available at the Audubon Nature Shops and online. It was a combined venture started ten years ago by wellknown naturalist Ken Weber and Audubon Senior Director Jeff Hall. Unfortunately, Ken left us too soon when he passed away in 2007, but Jeff pulled in local birders and Audubon staff to help, compiled the location details, and completed the project this year. The book is dedicated to the late Ken Weber.

Over 60 places to bird in Rhode Island are provided. If you are new to birding, this is a must have. The guide is divided into three sections of Rhode Island. It will lead you to great places to visit and advise on the best way to access the properties. In the back of the book it even has a checklist of birds that are commonly seen in Rhode Island. It also provides websites that you can visit for more information about birding in the state. Even if you are

tion and is a great tool for suggesting new places or reminding you to get out to those spots that perhaps you haven't been to in

If you love birding - check out this great new resource from Audubon!



Pick up a copy today! Available at the Audubon Nature Shops or order online at www.asri.org.

### **THANK YOU!**

#### Donors Send 150 Children to Summer Camp Through Scholarship Program

Because of the generous donors listed here, 150 children were able to explore forest, field and shore habitats, make nature discoveries, hike, visit with live animals and more at Audubon summer camps.

- John Brezinski
- The Lorber Foundation
- The Champlin Foundations Maria A. Masse
- Kathy Crossley-Aiello

- The Providence Journal Summertime Fund
- Mary E. Harrington



It's what summer camp should be!



# LET'S GET SOCIAL!



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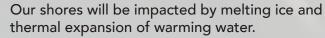
The most followed Audubon Facebook page in New England!

# CLIMATE CHANGE IN THE OCEAN STATE What Causes Climate Change?

Human activity such as transportation, energy production and manufacturing, burn fossil fuels that release carbon and other gases into the atmosphere. These gases form a heat-trapping blanket that warms our air and oceans.

What Are The Results?

#### **Rising Sea Levels**





- Rhode Island has seen a 9-inch increase in sea level since 1930.
- Loss of salt marshes, habitat and shoreline erosion will result.

#### **Unstable Climate Patterns**

In Rhode Island, heavy storms with flooding are on the rise.



- Annual precipitation has increased 6% to 11% since 1970.
- Intense rainfall events have increased 71% since 1958.
- Between the years 2020 and 2099, expect 18% to 20% more precipitation and twice as many extreme weather events with severe flooding will occur.

#### Air & Water Temperatures Rise

Humans, birds, animals, fish and plants will all struggle with ecosystem change.



- The average annual air temperature in Rhode Island has risen 3.0°F over the past century.
- In Narragansett Bay, the average water temperature has risen 2.5°F over the past 50 years.
- Between the years 2020 and 2099 expect to see warmer winters with 22 to 45 fewer days below freezing and hotter summers with 13 to 44 more days above 90°F.

### What Can You Do?

- Reduce energy use. Drive less (walk, bike and use public transportation) and create an energy-efficient home.
- Purchase green power to heat and cool your home and insulate it well.
- Support land conservation. Forests remove CO<sub>2</sub> from the atmosphere, provide shade to keep the landscape cooler, and are critical habitat for birds and wildlife.
- Landscape and garden with native plants that provide food, cover and nesting materials for birds and wildlife.
- Stay informed. Support legislation and community efforts that reduce carbon emissions. Sign up for advocacy emails by contacting Meg Kerr (mkerr@asri.org)



### Facing Forward Continued from page 4

said that while most of the climate-related planning under way focuses on infrastructure, "no one is thinking about who the people are that are going to be most impacted," he said. "We've come up with fact sheets for each of our towns identifying the demographics of the people who will be impacted."

The report found that Westerly has the most homes vulnerable to increased sea level rise, while Newport has the highest number of commercial structures at risk.

In addition, a report of the most vulnerable infrastructure in Rhode Island found 175 miles of roadway and 81 bridges will be at risk from sea level rise and storm surge by the end of the century. Among the most vulnerable roads are Hope Street in Bristol, Memorial Boulevard in Newport, Wampanoag Trail in Barrington and Canonicus Avenue in Jamestown. The bridges most vulnerable to sea level rise include the Barrington and Warren bridges on Route 114, the Apponaug Bridge on Route 1 in Warwick and Easton's Beach Bridge on Route 138 in Newport.

As demonstrated by the floods of 2010, some of the infrastructure most susceptible to flooding and sea level rise are Rhode Island's wastewater treatment facilities, which have been intentionally constructed in low-lying areas near waterways. Wastewater plants take advantage of gravity to deliver waste to be processed, cleaned and discharged into a river or the Bay.

"Wastewater facilities and infrastructure are ground zero of climate change in Rhode Island," said R.I. Department of Environmental Management engineer Bill Patenaude, who analyzed the risk of each of the state's 19 wastewater treatment plants. "We knew that going in. The question is how much flooding are we looking at and how soon. And what do we need to do now and in the future?"

Patenaude said the facilities are designed to handle the flooding from 100-year storms, but now the state is experiencing flooding where it has never seen it before. So he came up with 270 recommendations of measures that could improve the resiliency of the plants.

"What we learned from Warwick and West Warwick during the floods in 2010 is that it becomes too expensive to keep the water out, so you let it in and make sure you can rebuild quickly," Patenaude said. "Just protect the electrical equipment and make sure the tanks are sound and the buildings are sound."

Most of the officials responsible for the state's wastewater facilities are heeding his advice and making plans to increase their flood protection capabilities to match the projected increases in precipitation and sea level rise.

"As communities come to us with new designs for upgrading the facilities, we're engaging them in the process," he said. "We talk to them about what the conditions are going to be like in 50 years and what they can do to make their facilities more resilient. We learned a lot from the 2010 floods. In a way, it was a good thing, because it helped us prepare for when it happens again."

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# Wednesday Bird Walk Group

# Volunteers Dig In and Plant Garden to Help Birds and Pollinators

Every Wednesday from September through June, Audubon Naturalist Laura Carberry leads a dedicated group to various birding destinations across the state. This weekly morning walk is free and open to all. Not only does the group search for birds, but they also talk about the health of various habitats, pick up trash along the trails and discuss ways to reduce their carbon footprint.

A goal for 2017 was to do something local to help birds and wildlife that are facing the challenges of climate change. So many of us feel overwhelmed by the enormity of a changing climate – but this group of volunteers decided to dig in and take action.

On Wednesday, May 10, 2017 a beautiful new pollinator garden was created at the Audubon Fisherville Brook Wildlife Refuge. Native plants were used that will annually attract and provide food for birds and pollinators. The volunteers then enjoyed a potluck lunch to relax and appreciate the new garden.

Audubon would like to recognize and thank these volunteers for getting their hands dirty and helping local wildlife.



Front row left to right: Jeff Hall, Joyce Paterson, Ying Cho, Claire McCorry, Debra Hughes, Ginny Gonville. Standing: Jerry Gonville, Steve Ruscito (in red shirt), Bill Ostiguy. Back row: Barbara Watts, Holly You, Don Heitzmann\*, Kyin Cho, Stephanie Serino, George Welly, Catherine Boisseau, Terry Meyer\*, Mary Beth Burnham. Special thanks to these volunteers who are not pictured: Hank Reiley donated mulch, Lauren Ostiguy helped with weeding, Doug Barret helped with the garden, and Ev Stuart\* created a sign for the garden. \*Audubon Board Member



Some of the native plants used: purple coneflower, New York aster, milkweed, butterfly weed, bee balm, phlox, sedum, cardinal flower, liatris, solomon seal, trilium, coreopsis, wild ginger, bleeding hearts, goldenrod.

# **Audubon Staff Stands Up for Science!**

Approximately 1,000 scientists and science enthusiasts (including Audubon staff members and supporters) braved the cold rain on Earth Day, April 22, 2017 and gathered at the Rhode Island State House to stand up for science. Their mission was to advocate for publicly-

funded scientific research and evidence-based policies that are unrestrained by partisan politics. Climate change, the critical ecological issue of our time, uniquely affects Rhode Island, and we support taking immediate action to reduce its impacts.

Nearly 500 satellite marches were held across the globe, including in every major US city and 37 other countries. Despite the weather, the crowd was cheerful and enthusiastic. They were serious about their message: denying science endangers us all.







# TAKE TIME FOR TURTLES

Many Audubon wildlife refuges include wetland habitats such as ponds, creeks, swamps and marshes. Sneak quietly up to the edge of the water and watch for turtles enjoying the sun.

#### Check out this website to learn more!

http://www.dem.ri.gov/programs/ bnatres/fishwild/pdf/turtles.pdf

On the forest floor, the well-camouflaged Eastern Box Turtle may be found in leaf litter or a rotten log when it is hot. If you get too close, he will pull himself in and close up his shell like a box!

Northern Diamond-backed Terrapins live in brackish water of coastal wetlands and eat sea creatures like periwinkles and crabs. Here in Rhode Island, dedicated people are working to protect the habitats and nesting sites of this endangered reptile.

Don't mess with that HUGE turtle in the lake! Eastern Snapping Turtles resemble dinosaurs with dark, craggy shells and can weigh up to 35 pounds. Snappers (like most other turtles) are omnivores, meaning they eat both plants and animals such as insects, fish and worms.

aquatic turtle species, female Spotted Turtles lay their eggs on land. If you help a turtle cross the road, please don't take her home! You can help by pointing her back in the same direction that she was headed.

You may be lucky and spy a "polka-dotted" turtle in shallow swamps and marshes. Like all

#### SPECIES FOUND IN RHODE ISLAND

Eastern Box Turtle, Eastern Painted Turtle, Spotted Turtle, Stinkpot or Musk Turtle, Eastern Snapping Turtle, Northern Diamond backed Terrapin, Wood Turtle.

Eastern Painted Turtles bask on rocks and logs in muddy wetlands. Look for their shiny black shells and red and yellow markings. If they hear you...plop, plop, plop...into the water they will go!

#### Facing Forward Continued from page 10

The climate change challenges facing urban communities are somewhat different from their rural and suburban counterparts, due largely to the dense development and abundant pavement that rapidly carries polluted stormwater through neighborhoods and into local waterways. Audubon is a leading member of the Rhode Island Green Infrastructure Coalition, a collaborative group of non-profit organizations, businesses, and government staff working to promote sustainable funding for stormwater management. The Coalition promotes softening of urban landscapes by removing pavement and installing green infrastructure like rain gardens, trees and swales to manage stormwater runoff.

The Woonasquatucket River Watershed Council is another member of the coalition that is taking a proactive role in educating local residents about climate change and helping them build resiliency in their communities. "It's only getting rainier around here," said Alicia Lehrer, executive

Climate change may be the most important issue of the century, and educating our neighbors about how they will be affected and how they can help their communities adapt is vital.

director of the council. "The issues with sea level rise and flooding are very much in the forefront in our watershed."

In the Riverside Park section of Olneyville, the council has created a half-mile walking tour with signage describing each project. And they are working to integrate green infrastructure into the expansion of the Woonasquatucket Greenway Bike Path. Climate change may be the most important issue of the century, and educating our neighbors about how they will be affected and how they can help their communities adapt is vital.

Another key message that Audubon seeks to instill in its members is how important it is to stay informed about the steps being taken at the state and local level to address the implications of climate change.

"Once people become aware of the predictions for sea level rise and increased storms and flooding, it's important that they stay abreast of what their decision makers and local leaders are doing and encourage them to pay attention to those issues," said Meg Kerr, Audubon's senior director of policy. "At the State House, it's not on many people's radar. They're not having many policy conversations about climate change-related issues. And most state agencies are still doing business the way they've always done it. Bolder action is needed at all levels of government."

Kerr encourages all Rhode Island residents to regularly ask questions of government leaders.

"Write the governor to ask what she's doing about climate change. Ask your legislators what the State is doing to be more resilient, or about carbon reduction policies," she said. "The more people who ask those questions, the more likely our elected officials will start paying attention."

The same is true at the local level. While every municipality is now required to include hazard mitigation assessments in their comprehensive planning documents, many local officials are unprepared to consider the long-term implications of climate change. So it's up to local residents to make sure it is on their agenda.



The Warwick Mall was inundated with flood waters in the spring of 2010 as the Pawtuxet River rose more than 15 feet above flood level.

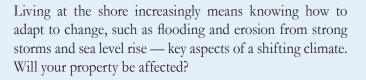
"Talk to local decision makers in your town with open-ended questions," Kerr said. "Are they even thinking about climate change? It's not at the top of the mind to most people. Ask them what they're considering, what they're doing, how will the roads handle flooding in the future. Are they thinking about how to keep vulnerable people safe in severe storms? Are they confident that their community water supply will be safe in the future? These are big issues that must be addressed at the local level."

"Climate change has a multiplying effect on all other environmental problems we have," said Audubon's Lauren Parmelee. "As we work to tackle habitat loss, endangered species, invasive species and water quality - climate change is exacerbating those and other environmental issues. If we don't take direct action to alleviate climate change, our other environmental efforts are futile over the long term. It's like we'd be using a toothpick to chip away at a concrete wall."

Todd McLeish is a life-long birder, freelance science writer and author of several books about wildlife, including Narwhals: Arctic Whales in a Melting World.

# How will Climate Change Affect YOUR property?

# Look Up Your Home on STORMTOOLS Interactive Maps



Visit: www.beachsamp.org/stormtools/stormtools-interactive-maps

- Find out if your property is vulnerable to storm surge.
- How deep will the water be on your property during a 100-year (1% chance) coastal storm?
- Check out how projected sea level rise will affect your property.

# Students Support Audubon Through Endangered Species Project

On May 4, 2017, Riverside Middle School in East Providence hosted a Spring Arts Event. Facilitated by art educator Ms. Katie Truskoski, the event included a student visual art exhibition with music performances and an act from the school's spring musical.

Ms. Truskoski also facilitated a student-led raffle and bake sale hosted by eighth graders as a community extension of their endangered species sculpture project. Students were asked to focus on a chosen endangered species, research the animal, evaluate survival concerns, and make connections to their eighth grade life science curriculum. They then sculpted a model of the animal's head using recycled materials. Students chose to donate all proceeds from the raffle and bake sale to the Audubon Society of Rhode Island to help endangered species in the Ocean State.

Audubon would like to thank Ms. Kate Truskoski and the eighth grade students at Riverside Middle School. Your hard work and generous donation are very much appreciated.



Riverside Middle School students present their endangered species projects.

# **Empty Nesters**

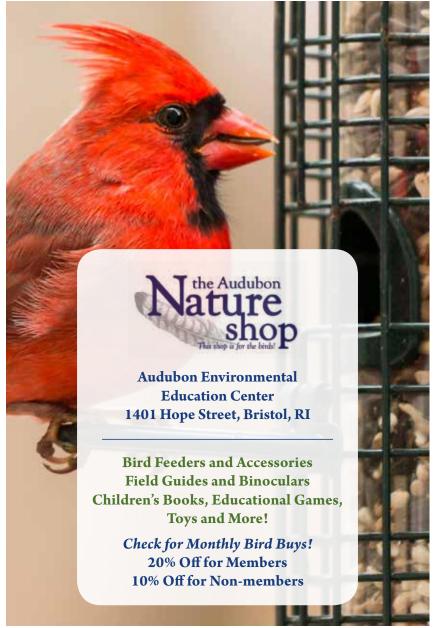
#### Audubon Supporters Keep the Camera On!

Four young Peregrine Falcons were banded on May 30, 2017 atop the Superman building in Providence by Joe Zybrowski. Three female and one male received bands and have now fledged the nest. It is always fascinating to watch as the young falcons loose their white downy feathers, test their wings, and learn to fly.



Donors like you make it possible. Please consider supporting this webcam program by making a donation at www.asri.org. See you next year!





# Thank You!

#### PARTNERS IN CONSERVATION

The companies listed below have demonstrated their significant commitment to the quality of life in Rhode Island and to conserving natural habitats throughout the state through stewardship and education.

- Blount Fine Foods
- Case Construction Company
- Citizens Bank
- Dassault Systemes SIMULIA Corp.
- · Lyons & Zaremba, Inc.
- New England GreenStart
- Pepsico Foundation
- Perfect Supplements
- R1 Rhode Island LLC
- Rhode Island PBS
- United Natural Foods
- X Wheaton

# **Rhode Island Birding Trails**

Over 60 Places to Watch Birds in the Ocean State

Published by the Audubon Society of Rhode Island

Three separate trails: Northern Rhode Island, Southern Rhode Island and

East Bay and the Islands • All locations easily accessible

Find out where the birders ... bird!

#### **Order Now \$14.95**

Order your copy at www.ribirdingtrails.com or purchase at the Audubon Nature Shops in Bristol and Smithfield

#### **GIFTS IN HONOR**

The people listed below have been honored by family and friends who found a gift to the Audubon Society of Rhode Island to be the most meaningful way to celebrate someone important in their lives.

#### In Honor of Joseph Adamonis

From: Lynn Burns

#### **MEMORIALS**

Memorials serve and support the conservation and protection of Rhode Island's environment. During the past quarter, the families and friends of people listed below have chosen to remember their loved ones through a gift to the Audubon Society of Rhode Island.

#### In Memory of Kyle Andrews

From: Timothy Andrew Arthur and Marilyn Fletcher Kevin Kelley Robin Sousa Whalen

#### In Memory of Manuel F. Barbosa

From: Frederick Burgess

#### In Memory of Michael Hadala

From: BayCoast Bank Richard and Mary Lou Dubois Melissa Hadala-Michel Carole Ploski Utility Workers Union of America Local 464

#### In Memory of Michael Maguire

From: Henry Woodbridge

#### In Memory of Steven Rob Maguire

From: Heather and Matt Biben Marcia Maguire Stephen and Ann Quarry

#### In Memory of Maxwell Mays

From: William and Claire Chatto

## In Memory of Marion F. (Pickles) O'Connor

From: Mary Billington Lawrence and Nancy Depetrillo

# In Memory of Terrance M. O'Connor

From: Marc and Keri Calhoun

#### In Memory of Elizabeth Parsons

From: Grace and Brian Keeler

# In Memory of Robert William Rebello

From: James and Jeanne Donnelly Taylor S. M. Frye
Mary-Beth Garofalo
Keith and Kathleen Kussler
Ann Mooney
Stephan and Mary Ravo
Arlene Sullivan
Work Opportunities Unlimited, Inc

# In Memory of Stephen A. Robitaille

From: Robert and Stacey Katon Scott and Rose Labonte

#### In Memory of Jon J. Rotatori, Sr.

From: Theresa Smith Dorry Donna Hagan Brian Hunter Robyn LoCascio Tom and Denise Stevens

# AUDUBON SOCIETY OF RHODE ISLAND 1897 SOCIETY

Named for the year of the Audubon's founding, the 1897 Society honors those whose leadership gifts enable the Audubon Society of Rhode Island to advance its mission of protecting birds, other wildlife and their habitats through conservation, education and advocacy. Our donors can take satisfaction that their contributions have an immediate and lasting impact on the people, wildlife and natural beauty of Rhode Island.

The 1897 Society celebrates donors who give annually at the \$1,000 to \$10,000+ level as special contributors to our ongoing mission and shall be recognized at the following levels:

Leader — \$1,000 to \$2,499 Advocate — \$2,500 to \$4,999

Conservator - \$5,000 to \$7,499

Benefactor — \$7,500 to \$9,999 Visionary — \$10,000+

BIRDING TRAILS

If you wish to join the 1897 Society and help promote the values and mission of Audubon, please contact Jeff Hall at 401-949-5454 ext. 5017.

In recognition of their philanthropic charity, members of the 1897 Society enjoy a variety of exclusive benefits, including invitations to member-only events and special communications.



In the spirit of the famous competition, Audubon is hosting BIG YEAR IN A LITTLE STATE

For details and registration visit www.bigyearri.org

# Volunteers from Dassault Systemes SIMULIA Corp. Build New Boardwalk at Powder Mill Ledges

Ten volunteers from Johnston-based Dassault Systemes SIMULIA Corp. rolled up their sleeves and got a little muddy this past June as they constructed a new boardwalk on the trails at Powder Mill Ledges Wildlife Refuge in Smithfield. They teamed with Audubon conservation staff and transported heavy loads of lumber and concrete footers, prepared the area for construction, and built the new boardwalk.

In addition to the hands-on volunteer efforts, the corporation also purchased the materials necessary to construct the boardwalk along with a new table saw for this project and Audubon's future needs.

This is the second large volunteer project that Dassault Systemes SIMULIA Corp. has completed at Powder Mill Ledges. Audubon thanks the volunteers and management for their time and support. We look forward to a continued partnership.









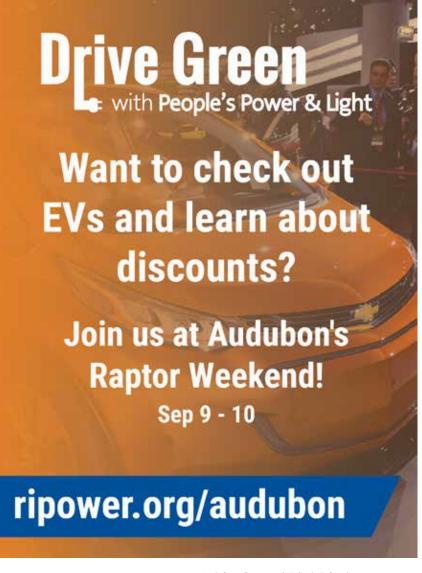


# SAVE THE DATE! ANNUAL MEETING AUDUBON SOCIETY OF RHODE ISLAND

October 22, 2017; 1:00 - 4:00 pm Audubon Environmental Education Center, Bristol, RI

#### Keynote Speaker: Curt Spalding

Regional Administrator of EPA under President Obama and former Save The Bay Executive Director. Currently Professor of the Practice of Environment and Society at Brown University. Curt will share his perspective on environmental challenges facing Rhode Island.



# Audubon's Summer Dream Team for Environmental Conservation

## The 2017 Youth Conservation League

From Barrington to Block Island and plenty of places in between, they removed invasive species, blazed trails, restored boardwalks and more. A team of six environmentally-minded high school students formed the 2017 Youth Conservation League - gaining valuable experience in the field and helping numerous conservation groups with their service.

Audubon Society of Rhode Island conservation staff provided guidance, transportation, tools, and work schedules for these students. Audubon partners with the RI Conservation Stewardship Colaborative to fund the program and provide a wide range of work experiences in various natural habitats.

#### We Need Your Support to Expand!

Promoting stewardship of our natural resources with future generations is vital. Please consider making a donation to the Youth Conservation League so that more high school students may be engaged in this worthwhile program. Donate online at www.asri.org.



Managed by the Audubon Society of Rhode Island, the following organizations were partners in the 2017 Youth Conservation League:

- Barrington Land Conservancy
- RI Dept of Environmental Management
- Hopkinton Land Trust
- Narrow River Land Trust
- RI Natural History Survey
- · South Kingstown Land Trust
- The Nature Conservancy
- Weekapaug Foundation





# Audubon Educators Named Project WILD Facilitators of the Year



From left: Audubon Educators Lisa Maloney and Tracey Hall receive the Project WILD Facilitators of the Year Award from Kim Sullivan of RI DEM.

Audubon Educators Tracey Hall and Lisa Maloney were named the 2016 Project WILD Facilitators of the Year due to their commitment to environmental education and facilitating Project WILD teacher trainings. Kim Sullivan from the RI Department of Environmental Management presented the award

Project WILD is an international program for educators of students in kindergarten through high school. It emphasizes wildlife in environmental education because of their intrinsic, ecological value as well as their role in teaching how ecosystems function. In the face of competing needs and pressures affecting the quality and sustainability of life on earth, Project WILD addresses the need for human beings to develop as responsible citizens of our planet.

AUDUBON SOCIETY OF RHODE ISLAND

JOIN OUR LEAGUE OF SUPERHEROES

Audubon is in need of superheroes – people who go above and beyond. Our current endowment provides only one-third of the necessary funds to keep our organization impactful and dynamic. The Invincible Audubon Campaign will provide needed funding to permanently advocate for nature, to educate children on the importance of our environment, and to protect and defend our nearly 9,500 acres of wildlife habitat. In short... to make Audubon INVINCIBLE.

The Invincible Audubon campaign is different than our annual fundraising. Invincible Audubon is meant to provide permanent funding. Funding that we can rely and plan on for decades to come.



### The following individuals are generous contributors to the Invincible Audubon Campaign:

### LEADERSHIP COUNCIL

Cynthia Warren and Martin Bauermeister • Peter and Kay Lisle • Samuel and Elizabeth Hallowell • Christopher and Candace Powell • Martin and Charlotte Sornborger • Everett and Kristine Stuart • Owen Heleen

### WALL OF SUPERHEROES

Carolyn Aust • Mary Rogers Beckert • Jane K. Blount • John Brezinski • Nicholas and Julia Califano, MD · Nathan and Mary Chace · Dr. Louis Corvese, MD · Severyn Dana • Ewing Family • Samuel and Elizabeth Hallowell • A. Max Kohlenberg, Esq. and Rebecca Minard · Lorraine M. Leaney · Peter and Kay Lisle · Terry Meyer · Susan Romano · Sharpe Family Foundation · Everett and Kristine Stuart · Charlotte and Martin Sornborger • Michael Viveiros and Suzanne Dunkl • Cynthia Warren and Martin Bauermeister

CLIMATE CHANGE THREATENS BIRDS, WILDLIFE AND OUR COMMUNITIES. GIVE AUDUBON THE STRENGTH TO RESPOND.

AUDUBON IS ASKING YOU TO TAKE THE LEAP AND BECOME A SUPERHERO!

For more info please visit www.invincibleaudubon.org or call 401-949-5454 ext 3017.

### LEGION OF SUPERHEROES

John and Karen Bracken Douglas and Wendy Brennan Robert and Linda Brennan Loren Byrne and Kim Seymour Kim Calcagno and Christopher Martin Christian and Lauren Capizzo Drew Carey Pauletter Caron-Andreas Mark and Elizabeth Carrison Steven Church Charles and Eilish Clarkson Judy Colaluca Raymond and Debra Coleman Stephen and Teresa Conlon Terry Conlon Jennifer Critche Jennie Crooks Raymond H. Dearden Frank P. DiGregorio Anne DiMonti

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# Moving Forward With Goals, Not Guilt

Editorial by Meg Kerr, Senior Director of Policy

My older sister fully embraces sustainability. She lives on a farm where she grows almost all her own food. She heats her small home with wood that she harvests from her forested property. She wears second hand clothing, drives a hybrid car, does not own a clothes dryer, and feeds her food compost to her pigs and chickens. She adopted her children so she did not contribute to overpopulation.

We have lived in our home in North Kingstown for 26 years and we have twice taken advantage of the home energy audit provided through National Grid. This free service is supported by a surcharge on electric and gas bills. Our audits identified a list of actions to save electricity like replacing light bulbs with LED, adding insulation, tightening windows and doors. Our energy use decreased once these projects were completed.



I know that I cannot live as sustainably as she does. And I am OK with that. Environmentalists often put too much pressure on themselves and others to live a green lifestyle and then feel guilty when they don't meet their own expectations. We feel remorse when we forget our reusable mug and buy coffee in a disposable cup, or when we drive alone to work and don't car pool. But instead of guilt, we need to feel positive about the sustainable strategies that we implement and that work for us. It is not a one-size-fits-all proposition.

Over the years, my family has adopted many energy saving strategies. In the summer, I hang my laundry outdoors to dry. I relish the clean warmth as I fold them into the laundry basket and the outdoor freshness on clean sheets. In the winter I hang clothes in my basement where the ceiling is crisscrossed by lines and pins. I rarely use a dryer.

#### **Spot the Beetle, Stop the Beetle**

Help prevent the spread of Asian Longhorned Beetle.
When hiking the trails, look for signs of the beetle.

For more information on how to detect this destructive invasive insect, visit www.asri.org and click on "conservation."

My family is also a member of Peoples Power & Light (PP&L). We are happy to pay a little bit more to green our electricity and support renewable energy development in Rhode Island. We also purchase our heating oil through PP&L.

My husband and I recently decided to add solar panels to our home. Like many homeowners who explore solar, we were told that we first needed to replace our roof. Once that was accomplished, solar panels were installed and connected to National Grid. We selected the net metering program where the solar installation is sized to meet our home's demand.

PP&L is strongly encouraging their members to buy electric vehicles and we were convinced at their annual meeting to buy an electric car for my 26-mile commute. We purchased a Chevy Bolt and had a fast charging station installed in our garage. We love the car, but our solar array is now undersized for our usage. According to current state laws, we can upgrade in two years.

Our shift to solar and the purchase of an electric vehicle required a substantial investment. I understand that not everyone is able make these changes, but this issue of the Report includes many low cost tips for greening your personal style. I hope readers can make some changes and celebrate all their actions, big and small, that make a difference to the health of our environment.

# REPORT

Volume 51, Number 3, August 2017

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Cover Photo of Great Horned Owl Ed Hughes

Please pass this copy on to a friend or recycle. Thank you.

The Report is the Audubon Society's member newsletter and updates members on the current issues and actions of the Society, its staff and volunteers. We encourage your participation and you may send items that will be considered for publication to: Hope Foley, Managing Editor, Audubon Society of Rhode Island, 12 Sanderson Road, Smithfield, RI 02917 or by email to hfoley@asri.org.

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Thank you.



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