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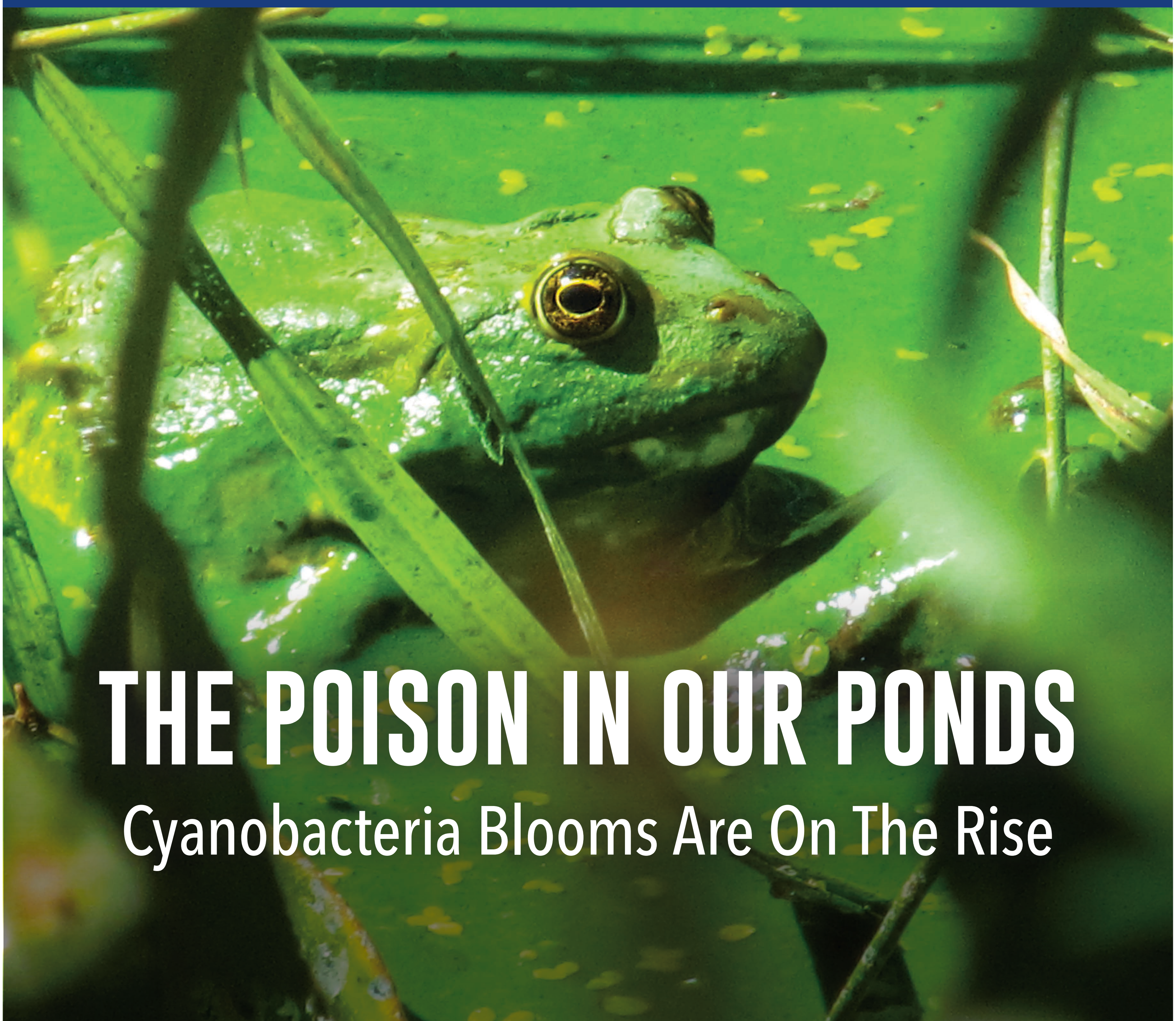
Audubon Society of Rhode Island
REPORT

VOLUME 57 • NO. 3 • FALL 2023 CONNECTING PEOPLE WITH NATURE



THE POISON IN OUR PONDS
Cyanobacteria Blooms Are On The Rise

From the Desk of the Executive Director

Positive Change is in the Air...and in the Forests

Dear Members,

It s been seven months since I took on the role of Audubon Executive Director and I am pleased to share that great strides have been made in areas that you and I are most concerned about. With input, enthusiasm, and teamwork from staff, we ve made great progress this year.

My immediate focus centered on the fourteen Audubon wildlife refuges that are open to the public for hiking and nature observation. Our newly formed teams of refuge managers and land stewards began rebuilding bridges, clearing trails, regrading parking areas, fixing fences, and sprucing up our kiosks. We are now hosting **Crew Days**, a new program that encourages volunteers to join our conservation staff and help maintain Audubon s 30 miles of hiking trails and thousands of acres of protected land. Want to help? Visit our website and click on Volunteer to find out when and where the next Crew Day will be held.

As the General Assembly session came to an end, nature again found allies to keep our state green and healthy. After five years of effort from our advocacy team, the state finally enacted **Solar Siting legislation** that, for the first time, aligns forest preservation and the state s Act On Climate goals. This bill shifts state-level incentives outside of core forests and pushes solar development towards preferred sites, such as rooftops, parking lots, and closed landfills. We could not have achieved this milestone without your help.

As we regroup this fall to set our policy agenda for 2024, we do so without Senior Director of Government Affairs, Priscilla De La Cruz. Priscilla has recently taken on the role of Director of Sustainability with the City of Providence. We are fortunate that she will continue to be a valuable partner to Audubon as we expand our presence in Providence and other urban centers. Priscilla made a significant impact on the lives of all Rhode Islanders in just a few short years with Audubon, and we wish her the very best in her new position.

More changes are coming as we continue to advance the goals of our 2020 Strategic Plan. As always, our work is impossible to do without your support. Thank you.

Common Yellowthroat at Audubon Maxwell Mays Wildlife Refuge.

Good birding,

Jeffrey C. Hall
Executive Director

Support Audubon Now and Help Generations to Come

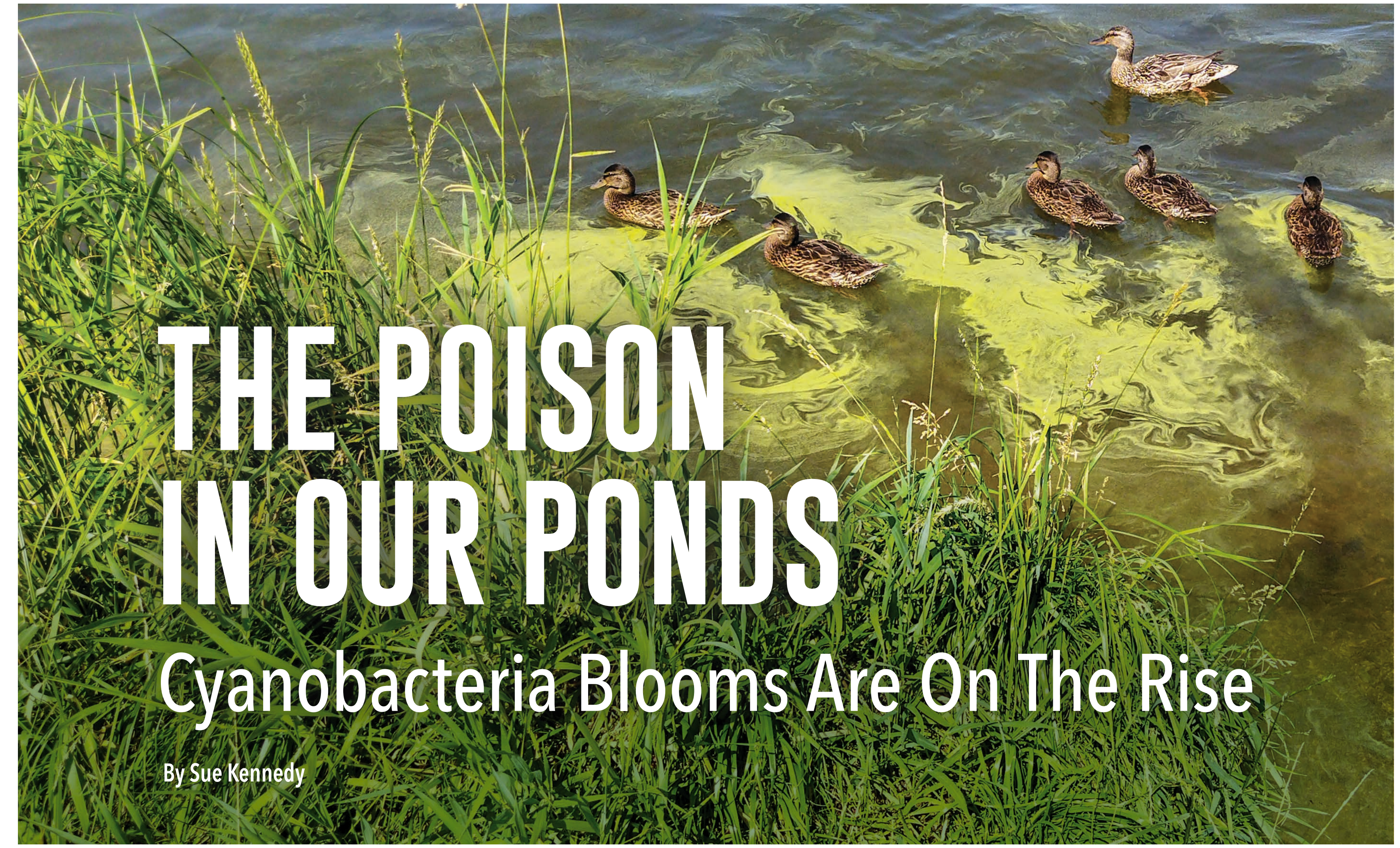
As high heat waves and powerful storm events hit Rhode Island this summer, the realities of climate change were felt by all of us. Audubon will continue to advocate for faster, more equitable solutions for climate resilience, and our protected properties will make a significant impact on mitigating some of the most detrimental effects from climate. We will continue to bring communities together to address issues such as clean water, renewable energy, inclusive and accessible access to nature, and biodiversity.

August is National Make-A-Will Month, providing an opportunity for you to consider supporting Audubon in a meaningful way while protecting what matters most to you. A planned gift - a bequest in your will - will ensure that Audubon receives the future support it needs to rally communities around these critical issues and be responsive to our state s needs.

We invite you to join the hundreds of Audubon friends who have created a lasting legacy through a well-designed estate plan. You can protect your loved ones, pass on generational wealth, make financial decisions on your terms, and support causes you care about   such as Audubon s vital work in preserving our forests, marshes, meadows, and wetlands.

Consider visiting https://bit.ly/PlannedGiftWebinar to watch a video produced by Golden Philanthropy Advisors on the importance of a well-crafted estate plan. Your planned gift will ensure our work will benefit generations to come.

Thank you for your ongoing commitment to the Audubon Society of Rhode Island. Please contact our Advancement Office at 401-949-5454 ext. 3019 or email Robin at rxiong@asri.org for more information.



THE POISON IN OUR PONDS

Cyanobacteria Blooms Are On The Rise

By Sue Kennedy

It s a muggy June morning, and Ryan Kopp, director of the Stormwater Innovation Center (SIC), leans slightly over a railing, peering at the amber colored surface of Roosevelt Lake at Roger Williams Park in Providence. There s a faint skim of lighter colored material beneath his gaze, and he gives it a nod. See that? It could be the start of a cyanobacteria bloom, he says. Those blooms develop to look like someone poured bright green paint in the water.

Kopp steps back from the railing that skirts the park s Seal House and points to colorful boards attached to the metal. Signage has been created for the public that describes and illustrates SIC efforts to bring sound science and policy to bear on stormwater issues in Rhode Island. He taps a diagram on a board. If there s one central takeaway, it s that algae overgrowth ó whether it s cyanobacteria or not ó reflects ecological imbalance that is largely human-driven.

If I had to pick a word to describe the problem, it would be nutrients, and they re mostly from us, says Kopp, whose background in environmental science informs his focus on water quality issues. I can show you great projects here in the park that are helping, but it s equally important that we, as community members, recognize what can be done on our own to reduce these nutrients.

The sun climbs higher; a pair of Canada Geese paddle the lake while two joggers, faces red and perspiring in the heat, pass Kopp. He motions north toward Willow Lake, saying stops will be made at a couple project sites. Likely, he says, there won t be any cyanobacteria or blue-green algae ó the terms are interchangeable for practical use ó to view. It s kind of early for here, but if this year s anything like last year, we ll be seeing blooms sooner than later.

With the blooms comes a ramp-up in public education; Kopp knows from previous years that he ll be pointing out advisory signs to those park visitors fishing along the shore ó sometimes they leave, sometimes they don t ó and advising parents to curtail their children from feeding bread or snacks to the waterfowl ó it s not healthy for ducks and geese, and increases bird waste ó and pointing out algae blooms of all kinds to visitors when he sees it.

> *"We're talking about a lifeform that's been around for three billion years, something that's a normal part of the ecosystem. The problem is that our human activities have created the conditions for cyanobacteria to be, more and more often, out-of-whack with the ecosystem."*
>
> – Dr. Jameson Chace

He projected the blooms correctly, as by mid-July, Rhode Island had already posted seven cyanobacteria advisories for local lakes and ponds, and only one, for Tiogue Lake in Coventry, had been lifted. And while it s too soon to know whether this year s advisory tally will surpass the 2022 total of 23, Kopp s tour makes a clear point: If development and climate change exacerbate blue-green algae, then people have the opportunity to respond. We re doing that here, by implementing green infrastructure, but the impact would be much greater with an overall community effort to reduce the amount of nutrients in stormwater, says Kopp.

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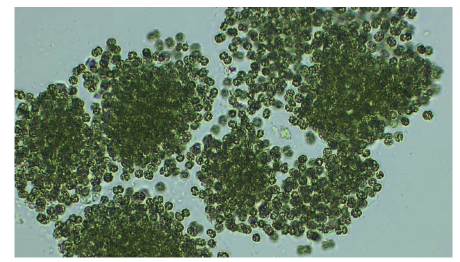

Above: Brown University student and summer intern Yuna Sato tests water quality in Roger Williams Park. Right, top to bottom: A previous cyanobacteria bloom in Roger Williams Park. Stormwater Director Ryan Kopp uses a water level logger along with a rain gauge to verify how much stormwater is entering a green infrastructure installment. Cyanobacteria as seen through a microscope.

A HUMAN-DRIVEN IMBALANCE

Kopp isn t alone in viewing cyanobacteria ó cyano, Greek for dark blue   as a problem of imbalance. We re talking about a lifeform that s been around for three billion years, something that s a normal part of the ecosystem, says Jameson Chace, a wildlife biologist and professor at Salve Regina University and board member of the Audubon Society of Rhode Island. The problem is that our human activities have created the conditions for cyanobacteria to be, more and more often, out-of-whack with the ecosystem.

The imbalance occurs when blue-green algae (academic debate continues about whether it s more an algae or a bacteria) is fed too much nutrient ó chiefly phosphorous but also nitrogen ó and grows too much, too fast. Once it reaches excessive amounts, the toxins it sometimes creates can become overwhelming and sicken pond or lake life. Further problems happen as the algae cycles, dying off in rafts and robbing the water of oxygen, a situation that can choke the fish upon which many birds and other animals subsist.

And, like Kopp, Chace is firm in his observation that a great part of the cyanobacteria problem is directly tied to humans, especially in terms of the prevalence of lawn fertilizers. Feeding lawns can fuel algae, as rain washes phosphorous- and nitrogen-heavy excess fertilizer onto roadways. From there, the nutrients gravitate downhill and, if not intercepted by soil or green infrastructure, they flow directly into water, both fresh and salt resources. Fertilizer is a huge problem, says Chace. Ecosystem balance is complicated, but it s entirely clear that our nutrient inputs are largely driving this. He goes on to explain that the situation is worsened by nutrient from animal waste, both domestic and wild, and runoff is further polluted by oil, gas and other chemicals that collect on roadways before rain sluices them into water bodies.

Couple these obstacles with the increasingly prevalent issue of warming waters, a key impact of intensifying climate change, and opportunity for blue-green algae blooms ripens measurably. We re seeing longer and warmer summer and fall seasons, says Chace. It s definitely having an impact.

GREEN INFRASTRUCTURE: ONE PART OF THE NUTRIENT SOLUTION

Back at the park, about halfway between the Seal House and Willow Lake (heavily engineered via park construction, the lakes are portions of a single waterbody), Kopp has come to a stop. Sweeping an arm, he calls attention to the slight depression in the grassy ground and to the swathe of cobble-like rocks stretched beside it. Unassuming though it may appear, this vegetated and stony area is actually an innovative stormwater drainage tool ó a green infrastructure solution.

 It s a very simple, very smart solution, says Kopp, pointing out how the rocky arc has been constructed to shunt water away from a park road and toward the grassy dip, where several bushes serve as sponges for excess water. First the runoff is diverted from the roads, so it is kept out of the water bodies, then it is being cleaned as it soaks down through the soil.

> *"It's important that communities learn how their decisions and actions contribute to the causes of these algae and bacteria blooms. If we can collectively work to decrease our nutrient loads even a bit, then these structures [green infrastructure installations] are going to be able to work more effectively."*
>
> – Ryan Kopp

Other pluses include a more attractive landscaped footprint and the ability to precision-tailor drainage designs to the needs of specific sites as they change over time. With over 30 examples of such structures at the park as well as in locations statewide, much has been learned about green infrastructure science, policy, and practice.

The Stormwater Innovation Center is a result of a state directive years back that required the City of Providence to address stormwater issues. We are gaining new information all the time about how green infrastructure is helping address water quality issues that really have so much to do with these algae blooms and other problems, says Kopp. These systems can and do work, and part of our job at the Center is to understand and measure this so we can improve them further.

The SIC is enlisting volunteers this year to use a new website called RainSnap and upload photos and videos of stormwater and green infrastructure during rain events around the Providence metro area. The purpose is to help communities assess the functionality of these systems, which are designed to reduce flooding and filter polluted stormwater. These assessments can be used to improve the design and maintenance of green infrastructure, ultimately leading to better water quality and more climate-resilient communities. And community involvement is key.

While green infrastructure represents a world of advancement over the aged and pitted concrete pipes that once streamed runoff directly into park waters, obstacles remain. The more straightforward of these obstacles, Kopp indicates, reflects the administrative and logistical arena, the ongoing planning efforts to ensure green infrastructure is built, maintained, evaluated, and enhanced for the longer haul.

 It s a larger, more complicated obstacle that heightens the urgency of the SIC work. The drainage structures are helping, but it s going to take a community effort ó government, environmental advocates and organizations, and local community members ó to really make a difference with imbalances like the kind causing these cyanobacteria blooms, he says.

A THREAT TO WILDLIFE: PEOPLE AND PETS AND STATE EFFORTS TO RESPOND

While on a virtual call, expressions on Chace s face alternate between appreciation, concern and frustration. Appreciation accompanies his accounts of wildlife ó gulls, ducks, and osprey, for instance ó that he has studied and admired over years of field work, and the opportunities he has had to value the richness and complexity of Rhode Island and regional ecosystems.

Concern and frustration, on the other hand, mirror his grappling with the negative impacts of environmental degradation which seem to be worsening. There are several significant problems with what we re seeing in these ecosystems, says Chace. In terms of the cyanobacteria issue itself, it can cause illness in animals, in birds, especially if toxin is ingested, so that s clearly a problem. But the much larger problem is what this means for our ecosystems as a whole. Let s say small fish ingest this, and they then are a food source for other animals, such as birds, he says. The impact is biomagnified as the toxin moves up the food chain.

With Almy Pond in Newport being a regular focus of his ecological research, Chace sees evidence of the stress that is being placed on the water and its inhabitants. He sees geese gulping globs of gunk ó algae of some sort ó and snapping turtles with similar muck on their feet and shells or carapaces. Whether it s cyanobacteria or not, it s an unhealthy situation, for animals and people alike. That s why when I am out there, I m wearing raingear, he says. When I ve got students out there, I m always making sure we re keeping our hands covered and away from our eyes and faces.

The Rhode Island Department of Environmental Management (RIDEM) has taken on the state s work of understanding and addressing

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CYANOBACTERIA: AN ECOSYSTEM IMBALANCE

When blue-green algae are fed too much nutrient ó chiefly phosphorous but also nitrogen ó it can start to multiply very quickly. Often these nutrients come from fertilizers, but runoff may be further polluted by animal waste, oil, gas, and other chemicals that collect on roadways before rain sluices them into water bodies.

Once it reaches excessive amounts, the toxins it creates can become overwhelming and sicken pond or lake ecosystems. Further problems happen as the algae cycles, dying off in rafts and robbing the water of oxygen, a situation that can choke the fish upon which many birds and other animals need to survive.

YOU CAN HELP REDUCE CYANOBACTERIA BLOOMS

Eliminate or reduce fertilizers in your yard and garden. Nutrients can run off into nearby bodies of water and aid the growth of cyanobacteria.

Consider planting a rain garden or use permeable pavers instead of pavement for your driveway or patio.

Don t wash your car in the driveway. Soaps contain nutrients and runoff into waterbodies.

Reduce the amount of lawn on your property and turn your yard into healthy pollinator and wildlife habitat by landscaping with native plants.

Maintain septic systems to keep wastewater from seeping into waterways.

Properly dispose of pet waste.

Please do not feed ducks in the parks. It is not healthy for them and increases bacteria and feces in the water.

CAUTION! STAY AWAY FROM A CYANOBACTERIA BLOOM

- **Do not wade, swim, or touch water that smells bad, looks discolored, or has the appearance of green paint.**
- **Do not fish or boat in these waters.**
- **Keep pets at a distance. Do not let dogs swim in the area or drink the water. Also keep pets away from dead fish or animals on the shore.**

STATE of the BIRDS

By Dr. Charles Clarkson, Director of Avian Research

Unlocking the Mysteries of Migration

In the spring of 2023, The Audubon Society of Rhode Island joined over 1,800 conservation collaborators with the establishment of its first MOTUS tower. The tower, which consists of a large antenna and receiving station, is permanently affixed to the roof at the Nature Center and Aquarium in Bristol. While relatively inconspicuous (think of old-fashioned antennas mounted to every home for television reception), the tower itself will collect data on animals that have been fitted with coded VHF tags (called Nanotags) as they pass overhead during periods of movement. Detections can be made from as far away as 10 km (6 miles) in an unobstructed direction. While the data collected by the MOTUS tower will be displayed at a new exhibit within the Nature Center for all visitors to enjoy (coming fall of 2024), the tower s purpose is much more far-reaching.

Across the planet, over 40,000 individual animals across over 300 species (birds, bats and insects) have been fitted with tiny Nanotags. The movements of these animals will be used to inform close to 650 projects aimed at better understanding the dynamics of migration. In a world with accelerated habitat loss, climate change and a very real need for targeted conservation, these data are more useful than ever before.

> *"The information gathered through the use of these simple receiving antenna stations and VHF tags has…greatly increased our understanding of how animals move across the landscape, how this movement changes in the face of climate change and human development, and where resources can and should be directed to have the greatest impact from a conservation perspective."*
>
> – Dr. Charles Clarkson

In 2019, a paper published in the esteemed journal *Science* documented the staggering loss of three billion birds from the North American landscape since 1970. The research brought to light just how dire the situation is for many of our beleaguered bird populations. Of those species in decline, migrants were the hardest hit, with the biggest decline documented in species that migrate in the eastern United States. The fact that birds and other organisms that move great distances across the globe are the most threatened should come as little surprise. These organisms require multiple intact, functional and healthy habitats stratified across a large geographic area in order to meet their physiological demands. Migratory stopover habitat is essential to fueling both short- and long-distance movements. These areas provide rest and fuel for weary individuals and, if these habitats are degraded (through habitat loss, the presence of new predators such as cats, etc.), the likelihood of migratory animals getting their requisite rest and food declines rapidly.

The MOTUS network (MOTUS is a wildlife tracking system and is not an acronym; the word means movement in Latin) spans the globe, with over 30 countries participating in data collection. The information gathered through the use of these simple receiving antenna stations and VHF tags has made its way into hundreds of publications and greatly increased our understanding of how animals move across the landscape, how this movement changes in the face of climate change and human development, and where resources can and should be directed to have the greatest impact from a conservation perspective.

To date, the MOTUS tower installed at the Nature Center has made seven detections, including a little brown bat, which is a threatened species. Examples of bird detections include a Gray Catbird detected on June 14...just 3 days after being picked up by a MOTUS tower at Coney Island in New York. A Piping Plover, after being tagged on the Delmarva Peninsula in Virginia on June 2, was detected by our tower on June 21. The tower also detected a Prairie Warbler, one of Audubon s nine Responsibility Bird species. It was detected by a tower in British Columbia on June 9 before being picked up by our tower on July 23.

As birds begin moving south during fall migration, the MOTUS tower in Bristol is likely to capture many more detections. Each will offer a glimpse into the movement patterns of birds, bats and insects (dragonflies and Monarch Butterflies have been fitted with Nanotags). The information gained through the use of this tower and the 1,727 others dotting the planet, will continue providing insight into the mysterious world of migration and empower us to act for the benefit of these rapidly diminishing wildlife populations.

The MOTUS Tower station was made possible through a generous gift from Mary Ann Cofrin.

The MOTUS tower that has recently been installed at the Nature Center and Aquarium.

BIRDS
Why They Matter So Much

Lecture and Book Signing by Dr. Charles Clarkson, Director of Avian Research.

Raptor Weekend Saturday, September 9, 2023; 1:00 pm

Book signing immediately following the Lecture: *Second Atlas of Breeding Birds in Rhode Island,* published by RI DEM. Clarkson held the position of Atlas Coordinator from 2015 – 2021.

Lecture is free with admission to Raptor Weekend. Books may be purchased at the event.

Audubon Brings Bird Banding Experience to Students in Kenya

Audubon believes that EVERY child should have the opportunity to explore nature and develop connections with the natural world, including those a world-away from the Ocean State.

Photos by Richard Staples

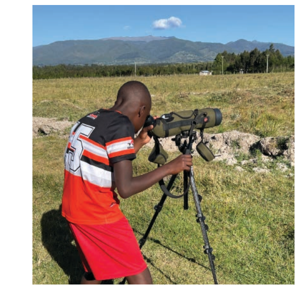
Audubon s outreach recently extended across the globe as the organization connected with students at the Beverly School in North Kinangop, Kenya, one of four STEM-based* schools in that country. From the Audubon Nature Center and Aquarium in Bristol, RI, Audubon Educator Ianna Leshin Szewczok presented a virtual bird banding program to the students on June 10, 2023. Bird banding is an important practice utilized by biologists world-wide for monitoring avian behavior, migration, and more, said Leshin Szewczok. As both a biologist and educator, this was an amazing opportunity to reach students I never imagined I would have the opportunity to work with. The students were enthusiastic, patient, and focused during the virtual presentation. They asked insightful questions and were incredibly respectful. It was a pleasure being able to work with them.

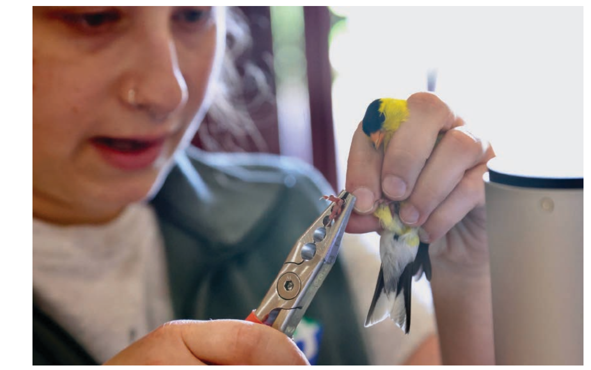
Audubon connected to the Beverly School through Massachusetts resident Kathy Mills, an enthusiastic birder and volunteer in Audubon s bird banding programs. She is currently a Beverly School Board Member who recently taught a program at the school and hoped to bring the science of bird banding to the students in a virtual presentation. When I introduced birding to the students, it was so well received that the school s new principal, Sande Olocho, a birder himself, decided to start a birding club at the school, explained Mills. Presenting a live banding demonstration for these young student birders provided a learning opportunity that they otherwise would not have had. In addition to Leshin Szewczok and Mills, Audubon Council of Advisors Member Steven Reinert, Beverly School Founder Abdi Lidonde and Beverly School Board Member Sue Swanberg were present at the program and enthusiastically engaged with students through the big screen in the auditorium at the Center.

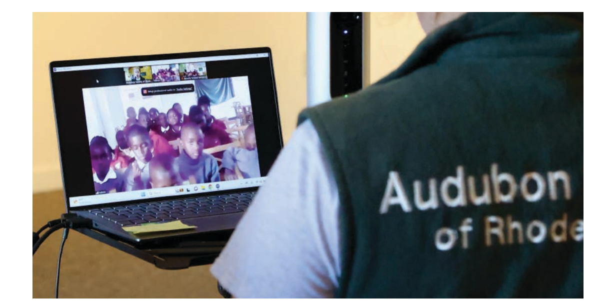
Bird banding is a popular Audubon program where songbirds are captured, banded, measured, and released by experts. For this program, birds were gently removed from tall mist nets set in the shrubby habitats on the grounds of the Audubon Nature Center and Aquarium in Bristol. The techniques of identifying, measuring, weighing, and banding the birds were demonstrated for the Kenyan students before they were released. The migratory habits and life history of each captured species were also discussed.

Audubon thanks Kathy Mills for connecting our education team with the Beverly School and bringing us together for a unique learning opportunity.

** STEM Education is an approach to learning that uses Science, Technology, Engineering, and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking*







Top: Beverly School Founder Abdi Lidonnde and Audubon Educator Ianna Leshin Szewczok band a bird in front of a camera. Second row from left: A student during a birding program in Kenya. Audubon Volunteer Kathy Mills holds up a field guide for the students. Leshin Szewczok banding an American Goldfinch and greeting the Kenyan students virtually.

Fire Ecology

SCIENCE & NATURE

By Dr. Scott Ruhren, Senior Director of Conservation

A hard, gray cone from a pitch pine tree has been in my office for over 30 years. I collected it on a field trip through the New Jersey pinelands, a vast plant community shaped by fire. Most pinecones involuntarily open and drop their seeds as they dry out. This cone has remained glued shut for decades.

Ecologically, fire is a natural and regenerative disturbance in many natural areas including those found in Rhode Island. Most grassland and forest fires ignite by lightning or other natural causes, though some are a result of arson and human accidents.

A powerful evolutionary and ecological force, fire alters but does not destroy habitats. There are, however, balances and tradeoffs. Fire helps cycle nutrients, breaks down excess debris, and raises soil pH, which favors beneficial bacteria, suppresses diseases, and helps to control invasive plants. If fires are too frequent or too intense however, nutrients can be lost to erosion. Some species may die, and invading species may colonize openings. This is why conservationists track the aftermath of fires.

Historically, grasslands were burned annually in an effort to shape and maintain them. Though burning consumes a lot of nitrogen (a key nutrient), burned grasslands are productive because of reduced plant competition, suppression of woody and invasive species, and the release of nutrients back into the soil.

Forest fires are even more variable. Pine forest may naturally burn as frequently as 1 to 10 years. Through time, species in fire-prone forests have adapted to this disturbance. Many hardwood species such as oaks, hickories, ash, and some maples are susceptible to fire, and it affects their presence and numbers. Hardwoods increase while pines decrease when fire frequency is low.

Survival mechanisms of animals include fleeing if possible, and hiding underground. Plants may survive safely as seeds in the soil and some are even resistant to fire. Some plant seeds do not germinate until after a fire has moved through.

Pitch pine is a classic example of a fire-adapted species. This native tree thrives after fire and in habitats that burn frequently special adaptations have evolved. Its thick bark and well-protected buds allow this species to come back quickly. Cones of pitch pine in frequently burned forests often exhibit serotiny ó this is when cones stay closed with natural resin until the glue melts, like the pine cone in my office. Seeds then flutter down to fertile bare ground left by the fire.

As science reveals more about fire, many agencies, including the US Forest Service, have changed their approaches and view of this disturbance over the past 50 years. Suppression of all fires may not be good policy, as habitats change and may lead to hotter fires. In recent years, Smokey Bear s slogan changed from prevent forest fires to prevent wildfires or uncontrolled, severe fires.

Humans have been using fire as a land management tool for about half a million years. Indigenous people worldwide have used fire to clear land for crops and hunting. Land managers use fire to maintain rare native species. However, even carefully controlled burns are a challenge. Weather must be perfect and public safety becomes more pressing as more humans live near managed landscapes.

Abundant wood and weather conditions combined with an igniter have led to recent fires in southern Rhode Island, and Canada has been severely impacted this summer. However, one must remember that fire is a vital part of many ecosystems and climate change will likely exacerbate the effects of forest fires in some regions. Careful monitoring and vigilance of natural habitats, as well as educating and communicating with the public, will be vital to reduce unwanted fires.

Wildfire in Our Backyard

In April, 238 acres of forest burned in Exeter, including the Queens River Preserve. Rhode Island has experienced some of the hottest and driest summers on record due to climate change, and March through May is the riskiest time for wildfires in the state because of the warm and dry conditions.

Four months later, many burned and barren areas are now green again with sprouting pitch pine, oak sprouts, huckleberry and blueberry, fire weed and more. Audubon protects some of the land that was affected through conservation easements and will monitor the forest recovery for tree regeneration as well as invasive species over the next few years. The trails on the Queens River Preserve, managed by The Nature Conservancy, have been reopened to the public.

(Left) A burned and blackened pitch pine shows new growth in July. (Right) New growth appears on the forest floor three months after the fire.

PARTY FOR THE PEREGRINES

Over 135 guests celebrated the raptors of Rhode Island at the Party for the Peregrines on May 13, 2023 at Caratunk Wildlife Refuge in Seekonk, MA. The weather was perfect for the first in-person Peregrine celebration since 2019! Over $50,000 was raised to support Audubon s raptor care and education programs.

Thanks to all who attended and our Peregrine sponsors: NEC SOLAR, PARTRIDGE SNOW & HAHN LLP

Amy Buskey and Richard Buskey

Board Member Kathy Melbourne with Lisa Close

Lisa Futato and Amy Goldfarb

Board Member Shawen Williams and Andrew MacKeith

Adondiram and Kara Sides

Lauren Capizzo, Council of Advisors Member Christian Capizzo, Dino and Danielle Kasvikis

Board Member Carol Trocki with Chris Powell and Council of Advisors Member Candy Powell

Guests enjoyed the work of Vania Noverça Viveiros as she painted images of birds at the party.

Audubon Educator Mark Saunders presents a Barred Owl at the event.

Meimei Tsang and Robert Hutzley

Audubon Executive Director Jeff Hall, Stan Peli, and Board Member Tina Duhaime

Board Member Don Heitzmann

Providence Juvenile Peregrine Falcon Spotted on Great Gull Island

In July, Joan Walsh, of Mass Audubon, and colleagues from UCONN and URI, watched as a young Peregrine Falcon hunted the colony of Common and Roseate Terns on Great Gull Island in Long Island Sound. This small island, only 17 acres, provides critical breeding habitat for more than 25,000 thousand terns. The team was able to read the identifying digits on the banded Peregrine (89-BU), which could be traced back to the Audubon nesting box in Providence. This raptor had been banded in May atop the Superman building.

Audubon thanks Walsh for reporting the banding number that provided the Audubon Society of Rhode Island with an update on the young bird. It is always good to hear that of one of the recently fledged juvenile Peregrines continues to thrive.

Banded in Providence this spring, this male eyas was recently spotted on Great Gull Island.

AUDUBON NATURE TOURS & PROGRAMS

September – November 2023 For more information and to register, visit the events calendar at **asri.org/calendar**

BIRDING WITH AUDUBON

Advance registration is required for all programs.

WEDNESDAY MORNING BIRD WALKS
Locations across Rhode Island. Details will be sent to registered participants in advance. *Every Wednesday through June 2024; 9:00–11:00 am.*

SWALLOWS SPECTACULAR ON THE CONNECTICUT RIVER
Departs from Powder Mill Ledges Wildlife Refuge, 12 Sanderson Road, Smithfield, RI; *September 16, 2023; 4:00–9:30 pm.*

RAPTOR PHOTO SHOOT
Powder Mill Ledges Wildlife Refuge, 12 Sanderson Road, Smithfield, RI; *September 23, 2023; 10:00 am–12:00 pm.*

BLOCK ISLAND BIRDING WEEKEND
Block Island, RI; *September 29 – October 1, 2023.*

URBAN BIRDWATCHING
India Point Park, Providence RI; *September 30, 2023; 8:00–10:00 am.*

BIRDING HAMMONASSET AND THE CONNECTICUT SHORE
Departs from Fisherville Brook Wildlife Refuge, 99 Pardon Joslin Road, Exeter, RI; *October 10, 2023; 7:00 am–5:00 pm.*

OWL PROWL AT CARATUNK
Two Dates Offered. Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA; *October 26, December 7, 2023; 6:30–8:30 pm.*

OWL PROWL AT POWDER MILL LEDGES
Powder Mill Ledges Wildlife Refuge, 12 Sanderson Road, Smithfield, RI; *October 27, 2023; 7:00–9:00 pm.*

SPARROWS & SWEETS
Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA; *November 4, 2023; 8:00–10:00 am.*

OWLS AND ALES AT FISHERVILLE
Fisherville Brook Wildlife Refuge, 99 Pardon Joslin Road, Exeter, RI; *November 17, 2023; 6:30–8:30 pm.* Ages: 21+.

OWL PROWL AT FORT REFUGE
Fort Nature Refuge, (Rt. 5), 1443 Providence Pike, North Smithfield, RI; *November 30, 2023; 7:00–9:00 pm.*

OWLING AT FISHERVILLE BROOK
Fisherville Brook Wildlife Refuge, 99 Pardon Joslin Road, Exeter, RI; *December 8, 2023; 7:00–9:00 pm.*

OWL PROWL AT PARKER WOODLAND
Parker Woodland Wildlife Refuge, Maple Valley Road, Coventry, RI; *December 8, 2023; 7:00–9:00 pm.*

AUDUBON NATURE CENTER AND AQUARIUM

1401 Hope Street (Route 114), Bristol, RI

PROGRAMS, LECTURES & WORKSHOPS FOR ADULTS

BACKYARD BIRDS AND BLOOMS ARTWORK BY VANIA NOVERCA
September 5 – October 31, 2023; 9:00 am–5:00 pm.

RAPTOR WEEKEND
September 9 & 10, 2023; 10:00 am–4:00 pm.

FAIRY HOUSES FOR ADULTS
September 17, 2023; 10:30 am–12:00 pm.

SEA GLASS JEWELRY WORKSHOP
Two Dates Offered.
September 23 & November 11, 2023; 1:00–2:30 pm.

NATIVE SEED STARTING WORKSHOP
October 14, 2023; 1:00–2:30 pm.

NEEDLE FELTED PUMPKINS
October 15, 2023; 10:30 am–12:00 pm.

WILDLIFE CARVING AND ART EXPOSITION
November 4 - 5, 2023; 10:00 am–4:00 pm.

REWILDING: A CALL TO NATURE ART & PHOTOGRAPHY BY JENNIFER MOORE
November 6 – December 31, 9:00 am–5:00 pm.

FAMILY PROGRAMS AND CLASSES FOR CHILDREN

CITIZENS FREE FAMILY FUN DAY
Thanks to Citizens Bank, the Audubon Nature Center and Aquarium is open free to the public the first Saturday of every month. Join us for nature stories, animal discoveries, hikes and more. No need to register! *September 2, October 7, November 11, 2023; 10:00 am–3:00 pm.*

LABOR DAY NATURE ACTIVITIES
September 4, 2023; 10:00 am–3:00 pm.

LI'L PEEPS
September 21, 28, October 5, 12, 19, 26, 2023; 10:00–11:00 am.

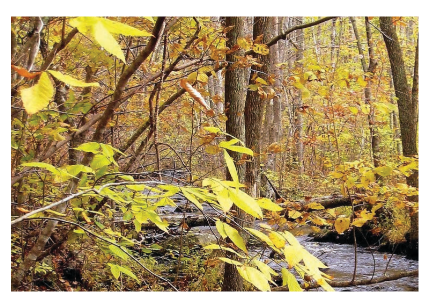
WHALES ON THE LAWN
Three life-sized inflatable whales will be on display. Get up close with the giants of the sea! *September 23, 2023; 10:00 am–2:00 pm. (Rain date September 24)*

INDIGENOUS PEOPLE'S DAY NATURE ACTIVITIES
October 9, 2023; 10:00 am–3:00 pm.

HAPPY OWL-WEEN CELEBRATION!
Come for a day of tricks and treats along the trail. October 21, 2023; 10:00 am–2:00 pm.

DAY AFTER THANKSGIVING NATURE ACTIVITIES
November 24, 2023; 10:00 am–3:00 pm.


Peter Green




Cate Brown

Happy OWL-Ween Celebration!

Audubon Nature Center and Aquarium, Bristol, RI.
October 21, 2023; 10:00 am–2:00 pm.

Come for a day of tricks and treats along the trail.

Owl interviews, outdoor explorations, games, crafts and more!

MEET A LIVE OWL

CARATUNK WILDLIFE REFUGE

301 Brown Avenue, Seekonk, MA

EARLY AUTUMN EVENING WALK
September 28, 2023; 6:00–8:00 pm.

OWL PROWL AT CARATUNK
Two Dates Offered.
October 26, December 7, 2023; 6:30–8:30 pm.

A SCARY GOOD TIME: EERIE FOLKLORE, BEER AND WINE!
October 27, 2023; 8:00–10:00 pm.

SPARROWS & SWEETS
November 4, 2023; 8:00–10:00 am.

STORY TIME AT CARATUNK: 'TIME TO SLEEP' BY DENISE FLEMING
November 18, 2023; 10:00–11:00 am.

FISHERVILLE BROOK WILDLIFE REFUGE

99 Pardon Joslin Road, Exeter, RI

FISHERVILLE BROOK GRAVESTONE CONSERVATION PROJECT – LECTURE AND WALK WITH BETTY AND CAROL MENCUCCI
November 4, 2023; 1:00–3:00 pm.

OWLS AND ALES AT FISHERVILLE
November 17, 2023; 6:30–8:30 pm. Ages: 21+.

OWLING AT FISHERVILLE BROOK
December 8, 2023; 7:00–9:00 pm.

WINTER WILDLIFE WREATHMAKING
December 14, 2023; 6:30–8:30 pm.

AUDUBON NATURE TOURS & PROGRAMS

September – November 2023 For more information and to register, visit the events calendar at **asri.org/calendar**

POWDER MILL LEDGES WILDLIFE REFUGE

12 Sanderson Road, Smithfield, RI

RAPTOR PHOTO SHOOT
September 23, 2023; 10:00 am–12:00 pm.

OWL PROWL AT POWDER MILL LEDGES
October 27, 2023; 7:00–9:00 pm.

FRANKENSTEIN'S PETS - TAXIDERMY IN SCIENTIFIC ILLUSTRATION WORKSHOP
October 28, 2023; 1:00–4:00 pm.

NESTS, DENS, AND BURROWS
November 4, 2023; 1:00–3:00 pm.

TURKEY TEA PARTY FOR KIDS
November 11, 2023; 2:00–3:30 pm.

WINTER WILDLIFE WREATHMAKING
December 16, 2023; 10:00 am–12:00 pm.

PRUDENCE ISLAND

Narragansett Bay National Estuarine Research Reserve, Prudence Island, RI

MUSHROOMS FOR BEGINNERS
October 12, 2023; 1:30–6:30 pm.

FALL HIKING ON PRUDENCE ISLAND
October 27, 2023; 9:45 am–4:45 pm.

EXPLORE PRUDENCE ISLAND
November 29, 2023; 9:45 am–4:45 pm.


Ed Hughes

PARKER WOODLAND WILDLIFE REFUGE

Maple Valley Road, Coventry, RI

AUTUMN WALK AT PARKER WOODLAND
September 30, 2023; 10:00 am–12:00 pm.

OWL PROWL AT PARKER WOODLAND
December 8, 2023; 7:00–9:00 pm.


Peter Green

AUTUMN WITH AUDUBON

Learn how wildlife adapts to the change of seasons.

Which species are heading south? How do others survive the cold? Come rustle through the leaves, look and listen for local wildlife, and learn about the preparations underway for winter!

EARLY AUTUMN EVENING WALK
Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA
September 28, 2023; 6:00–8:00 pm

AUTUMN WALK AT PARKER WOODLAND
Parker Woodland Wildlife Refuge, Maple Valley Road, Coventry, RI
September 30, 2023; 10:00 am–12:00 pm.

OWL PROWL AT CARATUNK
Two Dates Offered. Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA
October 26, December 7, 2023; 6:30–8:30 pm.

OWL PROWL AT POWDER MILL LEDGES
Powder Mill Ledges Wildlife Refuge, 12 Sanderson Road, Smithfield, RI
October 27, 2023; 7:00–9:00 pm.

SPARROWS & SWEETS
Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA. *November 4, 2023; 8:00–10:00 am.*

OWLS AND ALES AT FISHERVILLE
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October 27, 2023; 8:00–10:00 pm; Ages: 21+.

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OWL PROWL AT PARKER WOODLAND
Parker Woodland Wildlife Refuge, Maple Valley Road, Coventry, RI
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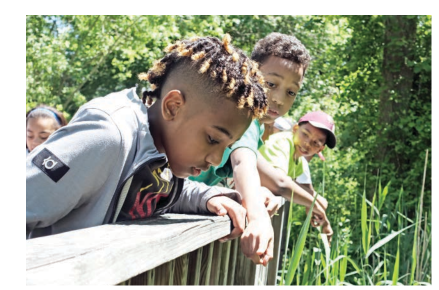
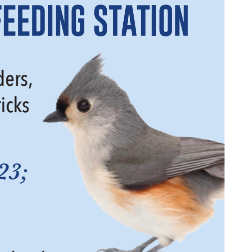


VIRTUAL WORKSHOP
BIRD FEEDING 101: STARTING A FEEDING STATION

Discuss types of feeders, seed, and tips and tricks for attracting birds.

October 12, 2023; 6:30-8:00 pm



Register at asri.org/calendar

WHALES ON THE LAWN

Audubon Nature Center and Aquarium, 1401 Hope Street, Bristol, RI

September 23, 2023; 10:00 am – 2:00 pm

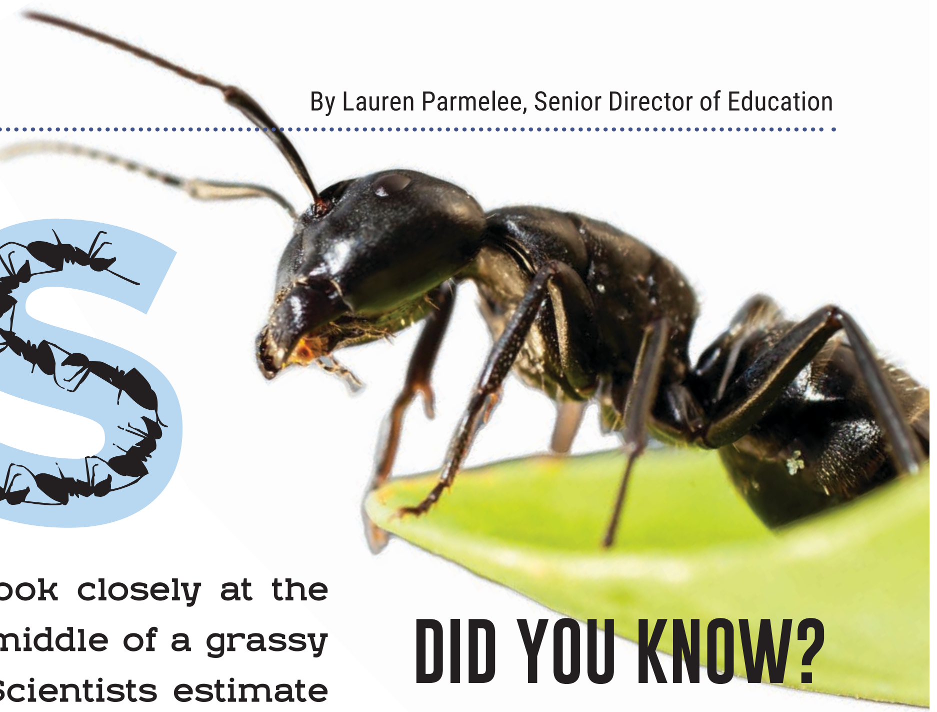
Get up close with the giants of the sea! Bring the kids for a whale scavenger hunt, crafts and other family activities.

Three life-sized inflatable whales will be on display, ranging from 43 to 65 feet in length!

Register at asri.org/calendar

By Lauren Parmelee, Senior Director of Education

ANTS

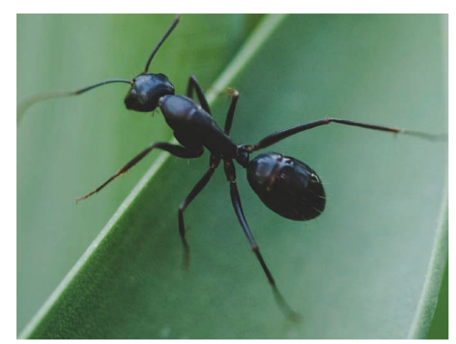


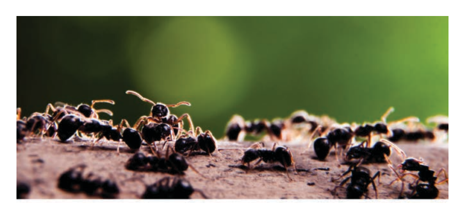
Tiny but powerful, ants are simply amazing! Look closely at the cracks in a sidewalk, under a log, or out in the middle of a grassy field to find these busy, industrious creatures. Scientists estimate that for every person on the planet, there are 2.5 million ants. That's a lot of ants!

- There are 12,000 species of ants in the world. There are approximately 153 ant species in New England, but no one is sure exactly how many live in Rhode Island.
- Ants are very social insects that live together in colonies called formicaries.
- In each formicary, there are one or more egg-laying queens and many female "worker" ants that keep the colony thriving. They take care of the queens, build and maintain the nest, care for the eggs and larvae, forage for food and protect the colony.
- Queen ants are among the longest living insects. They have been known to live for 30 years.
- Ants can't talk - they use smell to communicate! Using chemicals called pheromones, ants create different scents that are passed from one to the other by touching their antennae. They are also very sensitive to vibrations they feel through their feet.
- Queens and male ants have wings. The queen will fly to find a male from another nest. Once they mate, the male dies and the queen starts a new colony and loses her wings.
- Ants are very strong. It has been said that they can lift 50 times their own body weight, but a recent study has shown that some ants may be able to lift 5,000 times their own body weight!
- While we don't like ants in our kitchens, many are helpful to humans. Ants can hunt insect pests on food crops, pollinate plants, distribute seeds, and because they build complex tunnel systems, they can help to aerate the soil.
- Some ants "farm" aphids by providing them with food and then collecting the sweet honeydew aphids produce. Many other species farm fungi for food.

DID YOU KNOW?

There are 12,000 species of ants in the world.





Northern Flickers are woodpeckers that prefer to eat on the ground because their favorite food is ants!

Learning and Play Outdoors

Audubon Creates New Outdoor Classroom at the Nature Center and Aquarium

A large portion of a black locust tree was removed due to decay by Audubon conservation staff in February at the Claire D. McIntosh Wildlife Refuge in Bristol. Portions of the tree were cut to size and repurposed: these logs were set aside to become seats in a planned outdoor classroom near the Nature Center.

In May and June, Nature Center Facility Manager Christian DeCataldo cleared and cleaned up the area with assistance from local volunteer David Johnson and a group of volunteers from AAA Northeast. The seats were installed and this outdoor learning space kept campers cool and protected from the sun this summer. The children enjoyed many activities and outdoor explorations: shelters were constructed with sticks and moss, insects were discovered under logs, homes for wildlife were built, and nature stories were shared under the lush tree canopy. The area will also be used year-round for students visiting on fieldtrips and outdoor family programs.

In partnership with the U.S. Fish and Wildlife Service, resources for outdoor learning spaces can be found on our website. Are you a teacher or do you know a local educator? Information on how to design and build an outdoor classroom space and the Audubon Schoolyard Habitat Resource Guide (full of complementary curriculum created by Audubon educators) are available at https://asri.org/learn/schools/schoolyard-habitats.html

Audubon summer campers enjoy the new cool and shaded outdoor classroom for activities, games, and nature stories.

LET'S GO *Birding* — By Laura Carberry, Director of Properties

Grab Your Field Guide…Sparrows are Coming!

October is coming and so are the sparrows! Yes, we have some resident sparrows throughout the year in Rhode Island, but autumn is the time we see an influx of those hard-to-discern little brown birds. People often overlook this low bush, grass dweller. Some say they all look alike. However, with a little time and patience, you may just fall in love with these feathered friends.


Song Sparrow

White-Throated Sparrow

Sparrows are typically small and brown with conical shaped bills that are great for eating seeds. They are most often found on the ground or low in the bushes. They form small flocks during the winter and several species of sparrows often intermingle. Did you know that Juncos and Towhees are also part of the sparrow family?

When people look to identify these birds, I often suggest starting with a backyard feeder. Sparrows love millet seed and Song Sparrows, Dark-eyed Juncos, White-Throated Sparrows, and sometimes Fox Sparrows can be found searching for dropped seeds on the ground.

If you want to identify a species of sparrow, start by looking at their chest. Is it streaked or non-streaked? Most field guides divide small, brown sparrows into these two categories. After the chest, look at the tail. Is it long or short? Is the tip forked or flat? Is the tail outlined in white when the bird flies? Then, move on to other identifying marks. Does the sparrow have an eye ring? What color is its bill? All these clues can help you to correctly identify sparrows. It can be a little difficult to start, as you often need to study these birds for a while.

Once you have mastered the back yard feeder, take a walk on an Audubon wildlife refuge. Sparrows love old grassy fields and fall gardens as well as low brushy areas. Be patient. Sparrows often quickly fly out of view and deep into the grasses. If you watch the area quietly, they will often pop up after a minute or two. Walk slowly if you find a path in a meadow. Sparrows often fly into the shorter grass looking for seeds. Watch from a distance with binoculars and pick out their different features. Go through the same checklist as above. In autumn, you may find American Tree Sparrows, Field Sparrows, White-Crowned Sparrows and others. The more you observe and practice, the better you will become at identifying these tricky birds.

A couple of great places to look for sparrows around the state are Avondale Preserve in Westerly, Ninigret Park in Charlestown, Snake Den State Park in Johnston, and Godena Farm in Jamestown. Join me for Audubon Wednesday Morning Bird Walks throughout the fall to learn more about our local sparrows. Visit asri.org/calendar to register.

Sparrows & Sweets

Caratunk Wildlife Refuge, Seekonk MA

November 4, 2023; 8:00 – 10:00 am

Start with pastries and coffee in the barn and discuss these birds and how to identify them. Then enjoy a hike along the trails to put your new skills into practice!

For details and to register, visit asri.org/calendar.

Volunteer Crew Days

Help care for the Audubon trails and greenspaces you enjoy! Join Audubon volunteers and remove invasive plants, prune trail and roadside trees, clean litter, weed gardens, and more. Corporate and Community Service groups are welcome.

For a schedule of crew days and to register, visit asri.org/CrewDays

Audubon Society of Rhode Island Named Endowment Funds

The Audubon Endowment is a permanently restricted fund that, by law, exists in perpetuity.

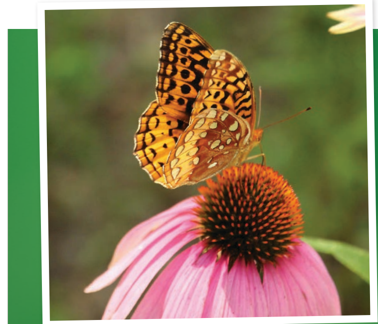
Because the Audubon Endowment is invested, it allows for long-term stability, fiscal responsibility, and financial viability that keeps Audubon a vibrant and growing organization. It also enhances our credibility, relieves pressure on fund raising, allows program expansion, and provides independence.

Donations of $10,000 or more to the Audubon Endowment can be recognized by a named designation, either for an individual, family, or a cause you believe in.

Audubon Society of Rhode Island Named Endowments

Aust-Capron Memorial Fund
Barter-Moore Fund
Edith Becker Fund
Mary Catherine Rogers Beckett Fund
John Brezinski Memorial Fund
Bristol Education Center Fund
Caratunk Fund
Mary B. Cottrell Fund
Severyn Dana Fund
Davis Memorial Wildlife Fund
Norman A. Deslauriers Fund
Dickens Farm Fund
Patricia Meagher Dwyer Conservation Fund
John Raleigh Eldred Fund
Bayard Ewing Fund
Fisherville Brook Fund
Fort Nature Refuge Fund
Grout Memorial Fund
Alice O. Harris Fund
Jonathan H. Harwood Fund
Hicks-Borden Fund
Priscilla J. Hollis Fund
Mary C. Kellermann Endowment Fund
Walter Hammond Kimball Fund
Margaret Robinson Knight Fund
Kimball Memorial Garden Stewardship Fund
Kay Kinsey Fund
Kraus Wildlife Fund
Henry J. Larkin Wildlife Preserve Fund
Lorraine Leaney Fund
Little Rest Bird Club Fund
Lonesome Swamp Fund
Edward B. and Phoebe W. McAlpine Memorial Preserve Fund
Constance McCarthy Fund
McKenzie Wildlife Fund
George B. Parker Fund
Powder Mill Ledges Fund
Prudence Island Fund
Susan M. Romano Memorial Fund
Elton Sanford Fund
Alicia Perry Seavey Family Fund
South County Fund
Everett F. Southwick Fund
Touisset Marsh Fund
Viall Memorial Library Fund
Mrs. and Mr. Dudley A. Williams Memorial Fund

For more information contact Jeff Hall at jhall@asri.org or (401)-949-5454 ext. 3017.



THE AUDUBON 2024 CALENDAR NEEDS PHOTOS OF BIRDS AND WILDLIFE

Audubon is including images of wildlife, as well as birds, in the 2024 calendar competition. Remember that photos must be taken in Rhode Island, and we are looking for images that reflect all seasons.

DEADLINE SEPTEMBER 15, 2023

Visit **asri.org/audubon-calendar.html** for details and to submit photos.

AUDUBON SOCIETY OF RHODE ISLAND

BACKYARD BIRDS COLORING BOOK

Featuring 36 beautifully illustrated bird species with fun facts by West Warwick, Rhode Island artist and cartoonist Jerry Shippee.

A Wonderful Gift Idea for All Ages!
Only $9.99. Size 8.5" x 11" with 36 pages to color.

ORDER ONLINE: ASRI.ORG/NATURESHOP

LET'S GET SOCIAL!

facebook.com/audubonRI
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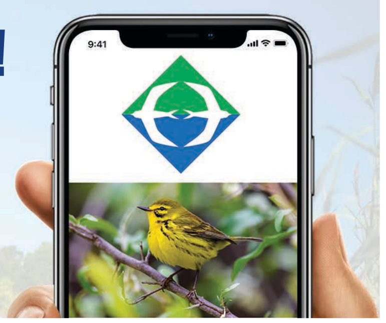
instagram.com/RIaudubon



SAVE THE DATE!

Sunday, October 22, 2023

AUDUBON ANNUAL MEETING

Watch for Details.

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+

If you wish to join the 1897 Society and help promote the values and mission of Audubon, please visit asri.org/leadership or contact Jeff Hall at 401-949-5454 ext. 3017.

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.

Audubon URI Energy Fellows

Since February, Tina Munter and Serena Russell have played critical roles as Energy Fellows in Audubon s advocacy work. The URI Energy Fellows Program was established in 2008 to engage and train students that are passionate about a career in sustainable energy.

TINA MUNTER

A senior at URI majoring in Environmental and Natural Resource Economics, Tina Munter has been working on environmental policy related to the implementation of the Act on Climate legislation. She has attended various events hosted by Audubon and coalition groups throughout the state. I m excited to learn more about climate policy and its impact on consumers, said Munter. I also look forward to getting on the trails and learning more about Rhode Island wildlife. Hope to see you out there!

SERENA RUSSELL

Serena Russell is a senior at URI studying Environmental and Natural Resource Economics, with plans to pursue a master s in environmental management. I am passionate about renewable energy and policy, said Russell. I am excited to be joining Audubon as a Clean Energy and Forest Conservation Policy Researcher. Her primary focus will be on current issues related to solar siting and forest protection in the state, and potential policy solutions. I admire Audubon s work as a non-profit and look forward to expanding my knowledge about state policy and gaining experience in advocacy.

Meet New Marine Life at Audubon!

VISIT WITH SHARKS AND LITTLE SKATES

Get up-close with a chain dogfish (a type of local shark) and a little skate at the Audubon Nature Center and Aquarium in Bristol. Observe these fascinating fish up-close and learn all about their traits, habitats, diets and more.

2023 Rhode Island Youth Conservation League

The 2023 Youth Conservation League restored and created trails, removed invasive species, restored boardwalks, improved habitat, completed light carpentry and more. Six environmentally-minded high school and college students along with a leader and assistant teamed this summer to gain valuable experience while helping conservation groups. The work can be labor intensive and challenging, but the experience is rewarding and has inspired many environmental careers.

Audubon provides guidance, tools and coordination for the league and partners with the RI Conservation Stewardship Collaborative for funding.

Partners in the 2023 Youth Conservation League:

- Barrington Land Conservation Trust
- Burrillville Land Trust
- Sakonnet Preservation Association
- The Nature Conservancy
- RI Dept. of Environmental Management

Youth Conservation League crew members, left to right: Vito Pompili, Julia Johnson McGuigan, Emma Phillips, Torie Reels, Sofie Vangel, Ella Fury, Kate Wieler, Ethan Paiva.

Leaving Audubon in your estate is for the birds.

Learn Simple Steps to Begin Planning Your Legacy.

Call 401-949-5454 (ext. 3017) or download information at

asri.org/legacy

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 through stewardship and education.

Bank of America
Caldwell Realty Rhode Island
Citizens Bank
Cox Communications
DBVW Architects
National Education Association RI
NEC Solar
Partridge Snow & Hahn LLP
Rhode Island AFL-CIO
R.I. Beekeepers Association
United Natural Foods, Inc.
Utilidata
Van Liew Trust Company

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: Michele and Jerry Danish
From: Thomas and Ann Boyd

In Honor of: Erwin Deines
From: Helen Deines

In Honor of: Ann-Christine Duhaime
From: Mary Pelletier

In Honor of: Jeff Hall
From: Mary Alice Smith

In Honor of: Brian Hogue
From: Christopher Murray

In Honor of: Martin Metzger
From: Brian Metzger

In Honor of: Henry Meyer
From: Leah and Joe Loberti

In Honor of: Emeric Rodriquez-Dunn
From: Mike and Emily Engstach
Frank Cerilli

In Honor of: Earl Simson
From: Maureen Reddy

In Honor of: Emily Westcott
From: Kelsey Davis

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: Grandma Canario
From: Eric Whipple

In Memory of: Michael Damiani Sr.
From: Jennifer Damiani

In Memory of: Marion Fisher
From: Evelyn Riley

In Memory of: Ellen McGill
From: Robert G. Campbell
Donald Dicristofaro
Janet Plant
David Shiner
Nancy Weston-Hill
Margaret White

In Memory of: Patricia Parkhurst
From: Carolyn Parkhurst

In Memory of: Richard Ward
From: Patricia Murdoch

In Memory of: Hugh Willoughby
From: Joan and George Gardiner
Lisa L. Gould
David and Mary Gumbley

eWing Newsletter

Keep in Touch with Audubon!

Sign up to receive eWing, Audubon's email newsletter at asri.org/subscribe.

Watch How Our Garden Grows

By Katie Schortmann, Audubon Garden Coordinator / Environmental Educator

Elevating Community Spaces

This spring Audubon received a beautiful new raised bed for the Palmieri Pollinator Garden thanks to the talented middle school students of DownCity Design (DCD).

DCD is a community organization that has served over 2,200 students since it was founded in 2009. Their team of educators empower students to create solutions to community challenges using the principles of design.

Students spent the spring semester honing their design skills to tackle issues of accessibility and critter control in the raised bed. After weeks of brainstorming and more than 15 hours of measuring and building, an elevated planter was installed at Audubon by the students and DCD staff.

Their final design provides a garden bed that is more physically accessible for visitors, staff, and volunteers. The height of the bed allows visitors to pull up a chair and enjoy sensory plants such as sage, lavender, and oregano. Edible flowers and butterfly host plants like cilantro, parsley and dill are also mixed with pollinator-friendly edible plants. They all grow together in the raised bed.

This project highlights the importance of collaboration in efforts to make our community spaces both user-friendly and healthy for pollinators. Come by and take inspiration from this new container-style garden bed by visiting the Palmieri Pollinator Garden at the Nature Center and Aquarium. Many thanks to DownCity Design and their creative students!

Students and staff at DownCity Design of Providence designed, constructed and installed a new raised garden bed that is more accessible for visitors in the Audubon Palmieri Pollinator Garden in Bristol.

Gardening for Wildlife Throughout the Seasons

Designing a garden for all seasons adds beauty to your property and gives your wild neighbors the habitat they need to survive. Autumn is a great time to add plants that provide food and shelter for wildlife throughout the colder months. To get the most bang for your buck, consider planting shrubs and trees that support pollinators with their flowers, as well as provide food and shelter for other wildlife.

Spicebush (*Lindera benzoin*) is a native shrub that is flush with small yellow flowers in early spring. Beautiful, lemon-scented green leaves emerge in summer that create habitat for stick insects and katydids. The ripening red spicebush berries in fall are nearly 50% fat, making them a valuable food for songbirds that need to bulk up before migration. Spicebush makes a wonderful replacement for the non-native forsythia and can be pruned into a tree or a shaped shrub.

Red twigged dogwoods and winterberry shrubs also offer brilliant pops of red color in the dreary days of January. Holly bushes and other evergreens add structure to the garden space and provide animals with shelter from storms and hungry predators.

Clockwise from top left: Holly berries, red-twigged dogwood, and spicebush provide color in your garden as well as seasonal benefits for wildlife.

Native Seed Starting Workshop

Audubon Nature Center and Aquarium, Bristol, RI

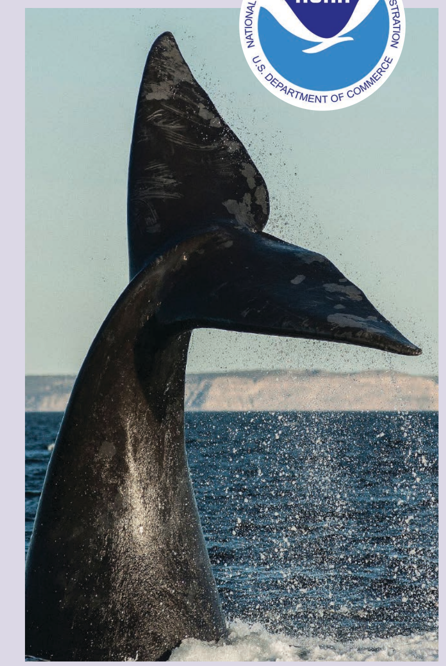
October 14, 2023; 1:00 – 2:30 pm

Learn more about gardening with native plants and join Audubon for a Native Seed Starting Workshop. Discover the garden practices of seed saving and winter sowing.

For details and to register, visit asri.org/calendar.

See a Spout? Watch Out!

Audubon Partners with NOAA and Others for Whale Conservation



Audubon is now a partnering organization in the See a Spout? Watch Out! and WhaleSENSE programs. This collaborative effort between NOAA, Stellwagen Bank National Marine Sanctuary, Whale and Dolphin Conservation, the Audubon Society of Rhode Island and the New Bedford Whaling Museum helps boaters, sailors and whale watch companies understand how to safely navigate waters where whales may be present.

The program offers guidance on how to spot different whale species, interpret whale behavior, and maneuver safely if whales are seen. It also educates on whale conservation efforts and how to report any sightings of whales in distress to authorized responders. The partners have developed an accompanying self-guided course for boaters who want to dive deeper and learn more. For more information, visit seeaspout.org

AAA Volunteers Get Their Hands Dirty and Projects Done!

Audubon Nature Center and Aquarium, Bristol

From May to June, the Audubon Nature Center and Aquarium in Bristol hosted five groups of volunteers from AAA Northeast in Providence. And boy, did they get to work! One team cleaned up and prepared Audubon s new outdoor classroom for incoming summer campers. Another headed into the field and helped to remove invasive mugwort in the meadow. Some volunteers mulched and raked garden areas, while others helped to trim back trees and clean up around our long stone walls. These volunteers joined Audubon staff with enthusiasm and willingness to tackle any task. Audubon sends a big thank you to AAA Northeast for supporting our environmental education and conservation efforts this spring.

A volunteer team from AAA Northeast spent time in May weeding, raking, and cleaning up some of the stone walls at the Nature Center and Aquarium in Bristol.

Preserving History at Fisherville Brook

Several years ago, Audubon Properties Director Laura Carberry noticed a headstone on the ground in the small cemetery at Fisherville Brook Wildlife Refuge. It was broken into three pieces and in need of repair. The small cemetery contains historic headstones dating back to the 1800s, and many of them stand crooked from hundreds of years of frost heaves and weather damage.

Looking to preserve local history, Audubon decided to refurbish the plot. Working with Carberry, Audubon Council of Advisors Member Evert Stuart contacted Betty and Carlo Mencucci, who are well known in Rhode Island for preserving historic headstones. A generous donor in the area funded the project, and in June the front row of headstones was restored.

Learn More!

Lecture: Preserving Historic Cemeteries

November 4, 2023; 1:00 pm

Fisherville Brook Wildlife Refuge, Exeter, RI

Audubon hosts Betty and Carlo Mencucci for a lecture on their preservation work and the significance of caring for historic cemeteries on land trust and public properties. Enjoy a lecture in the barn, followed by a walk to see the restoration that they completed in the Fisherville cemetery. Visit the events calendar at asri.org/calendar to register.

Headstone restoration at Fisherville Brook Wildlife Refuge.

THE POISON IN OUR PONDS

Continued from page 5

how ecosystems and wildlife are being impacted by cyanobacteria and other kinds of water quality issues. Information posted on the RIDEM web site indicates that excessive toxins from blue-green algae can sicken or kill animals either through consumption or absorption through the skin. Fish can grow ill from swimming in toxin-laden water or can suffocate if algae decays and removes too much dissolved oxygen from the surrounds.

Applying science, collecting data, and communicating with the public are three options the state uses to address the issue as effectively and comprehensively as possible. We monitor water quality, we work with the Department of Health to test for toxin, and we work with the public so we can both provide information as well as gather it, says Jane Sawyers, a RIDEM environmental scientist who works on water quality issues, including cyanobacteria. It is definitely a two-way street, in that sense.

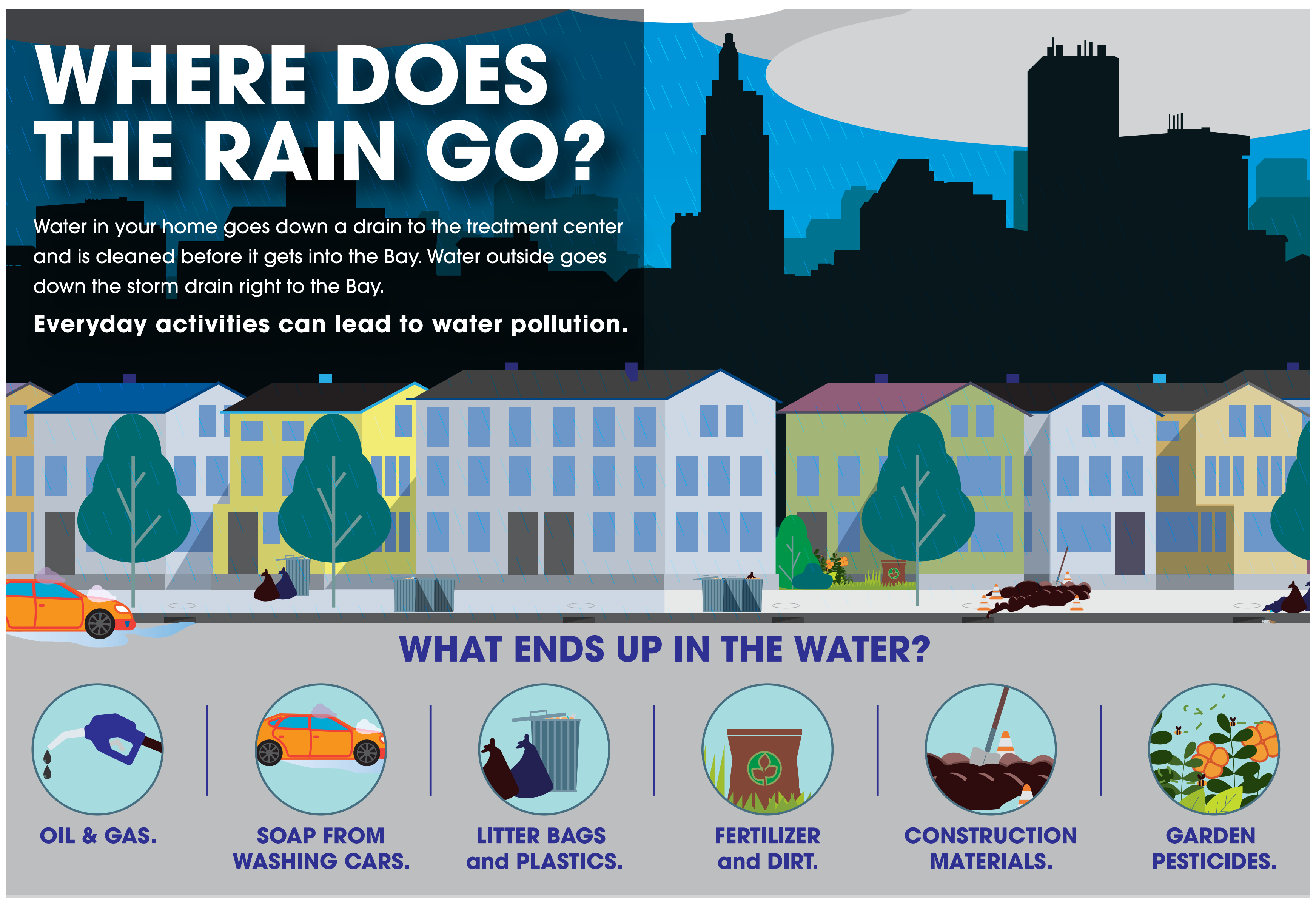
The work is substantial, with summer and early fall representing high season in terms of algae bloom assessment. The science team that Sawyers serves on includes a field crew whose members regularly surveil 17 local water bodies to collect samples. The team also responds to community inquiries ó laboratory testing is necessary for identifying cyanobacteria toxin ó and coordinates with the Rhode Island Department of Health (RIDOH) to provide a notification and signage program, with both health and recreational advisories, to the public.

The history of the effort highlights the gradual yet steady uptick of

Green infrastructure installments, like the one shown above in Roger Willams Park, reduce stormwater contaminants from entering ponds and degrading water quality.

cyanobacteria blooms in the state, which is in keeping with the regional picture. As early as 2009, RIDEM began considering data concerning possible sightings of cyanobacteria, which often takes on a bright green spilled paint appearance as it overgrows. By 2011, advisories were being posted, and more than 170 such notices for state water bodies have been made to date. Today, a joint RIDEM/RIDOH team partners on the research and outreach components, both of which are necessary to respond to the issue.

Sawyers says the joint effort has been successful in the immediate goals of gathering the data necessary to inform health and safety goals, and for helping ensure people have the needed information and know where to turn for resources. But, echoing Kopp and Chace, she s not surprised to see that science is pointing to an increasingly complicated situation.



If people play a role in creating the environmental imbalance that causes blue-green algae blooms, they also, due in part to the state s efforts as well as increased media attention, are more aware of the problem and are making use of opportunities to assist. Jillian Chopy, a RIDOH program manager with an environmental science background, collaborates with Sawyers and the RIDEM team on cyanobacteria management; she describes an environmental challenge that now poses potential hazards to humans and what they value in a shared ecosystem. While we ve been working on this for quite a while, it really seems to have picked up as an issue for people once there was evidence of dogs ó pets ó getting sick, says Chopy. That seems to have been a critical point.

Dogs that wade or swim in lakes or ponds have an increased risk of getting sick from blue-green algae as they could swallow toxin in water, eat animals or material containing it, or ingest toxin from licking their coats and skin. No fatalities have been documented in Rhode Island thus far for either humans or pets, but it will be important, Chopy says, for the public to stay aware of possible threats, especially during summer and fall.

We receive many more phone calls now from people concerned about the health risks associated with these algae blooms, she says. Public awareness is increasing, and more people definitely want to know now what to do to keep themselves and their pets safe.

EDUCATION IS A DOOR TO PARTICIPATION

That public awareness is something Kopp is cultivating into community action ó educating people about the basic science of water quality issues, and training volunteers how to gather water samples so they can be analyzed. While the collection of cyanobacteria samples generally remains, for now, the work of more seasoned teams, the work of the SIC is laying an important foundation. Community monitoring is a way for people to participate in critical public issues, while providing new data for informing solutions and decisions.

There are several ways for people to get involved in community-based efforts to address blue-green algae, other kinds of blooms and water quality issues, and ecosystem balance in general. Residents can undertake steps to reduce their household and yard nutrient loads ó again, cutting fertilizer and picking up pet waste ó join community monitoring programs, and participate in local and state dialogues concerning water quality, stormwater management, and climate change issues (See resources list at end of article.).

And while blue-green algae has emerged as a spotlight issue, Kopp is quick with the overall reminder that the overgrowth of any algae signals imbalance ó something that s never good for an ecosystem. He s at the end of the tour, having explained the workings of a third example of green infrastructure ó a vegetated drainage ditch that helps keep water from flowing across a road and into Willow Lake.

It s important that communities learn how their decisions and actions contribute to the causes of these algae and bacteria blooms, says Kopp. If we can collectively work to decrease our nutrient loads even a bit, then these structures are going to be able to work more effectively.

For now, as he starts to make his way back to the Seal House, Kopp says that he ll continue what he sees as a triple-approach process to improve the health of the park s ecosystem ó collecting the science, applying green infrastructure, and, above all, engaging the public. All three aspects are equally important, equally needed to deal with algae blooms and ultimately improve the environment overall, he says. We are all in this together, and we can do more collectively to address it.

LEARN MORE:

Examine a RIDEM trove of blue-green algae data and reports: https://dem.ri.gov/bluegreen.

Think you see a bloom? Send RIDEM an email with pictures and location descriptions: DEM.OWRCyano@dem.ri.gov.

Visit RIDOH for human and pet health risks of cyanobacteria: https://health.ri.gov/healthrisks/harmfulalgaeblooms/.

See other tips from the U.S. Environmental Protection Agency for reducing your household nutrient load: https://www.epa.gov/nutrientpollution/sources-and-solutions-and-around-home.

Find out more about green infrastructure stormwater solutions and consider becoming a SIC water quality community monitor: https://www.stormwaterinnovation.org/.

Stop by the Stormwater Innovation Center in Roger Williams Park and take a self-guided tour of the green infrastructure installments. Brochures are available outside of the Seal House.

Sue Kennedy is a communications specialist for the URI Coastal Resources Center, serves on the Warwick Wildlife & Conservation Commission, and enjoys freelancing; reach her at skennedy1168@gmail.com.

VOLUNTEERS ARE THE BACKBONE OF AUDUBON

Individuals of all ages, backgrounds, and experiences share their time and talent to support Audubon. From interns and educators to gardeners, trail monitors, office help and more, we depend on volunteers. Upcoming issues of the Report will continue to highlight a number of Audubon volunteers and the many talents they share with us.

AINSLEY GIBBONS

Stormwater Innovation Center Volunteer

Lincoln School student Ainsley Gibbons completed her senior community action project this spring with the Stormwater Innovation Center (SIC). She used her talent in visual arts to decorate rain barrels using images inspired by native plants and butterflies. Researching rain barrels allowed me to learn about other ways we can care for our environment, she said. This project gave me more knowledge about the native species that live in our community.

Ainsley also encountered native wildlife at the Audubon Nature Center and Aquarium in Bristol ó she noted that she would hear Wild Turkeys gobbling in the mornings. It felt like they were welcoming me to Audubon every day! We are grateful to Ainsley for her contributions to the SIC and congratulate her as she moves on to Pratt Institute this fall.

By Rebecca Reeves
Stormwater Education and Outreach Coordinator, Stormwater Innovation Center

VOLUNTEERS FROM BANK OF AMERICA / MERRILL LYNCH

Touissett Wildlife Refuge

A group of volunteers from Bank of America/Merrill Lynch were busy in May at the Audubon Touisset Wildlife Refuge in Warren. This enthusiastic crew cleared trails and built small boardwalks in through the wetland areas. As the Touisset Wildlife Refuge is located along a beautiful salt marsh, the trails can often get wet and muddy from the tidal flow. The work of these volunteers will help preserve the saltmarsh and keep the trails dry and easier to navagate for visitors. Audubon thanks these Bank of America/Merrill Lynch volunteers for their hard work in supporting healthy natural habitats and keeping the Touisset trails enjoyable for all.

By Lincoln Dark
Audubon Wildlife Refuge Manager

CINDY DIBBLE

Avian Research Initiative Volunteer

An Audubon member for over 10 years, Cindy Dibble began volunteering after retirement from a 37-year career as a teacher. She has participated in Osprey monitoring, Raptor Weekend and recently data collection for the Avian Research Initiative.

Cindy grew up in Narragansett where she spent her childhood outdoors, and observing birds was a favorite pastime. As an adult, she has been troubled by the persistent decline in the bird populations throughout New England and across the globe. By participating in data collection for the Avian Research Initiative, Cindy says that she feels empowered to do what she can to help our beleaguered birds. The Avian Research Initiative has given me great hope, Cindy explained. I am happy to contribute in any way possible. Without the tireless work of volunteers, Audubon would not be an effective conservation organization. Thank you, Cindy!

By Dr. Charles Clarkson
Director of Avian Research

DOTTIE DYLAG

Palmieri Pollinator Garden Volunteer
Audubon Nature Center and Aquarium

Dottie Dylag, native plant grower extraordinaire, has been bringing joy and humor to the pollinator garden team at the Audubon Nature Center and Aquarium for two seasons. Her wealth of knowledge has been invaluable as Audubon works to expand its native seed starting efforts. Dottie is a member of the Rhode Island Wild Plant Society and a URI Master Gardener intern. She is always working to educate others about the importance and beauty of native plants. Dottie has also worked with other community members to install a native garden at her local post office. We thank Dottie for her many contributions and truly appreciate that she finds the time to volunteer at Audubon. Thank you!

By Katie Schortmann
Audubon Garden Coordinator / Environmental Educator

Caratunk Barn

The big white barn at Caratunk provides the perfect rural setting for weddings, showers, family reunions or meetings. Birthday parties for children are also offered.

For availability and reservations regarding weddings and birthdays, visit asri.org and click on 'services.' For all other rental queries, contact Lincoln Dark at ldark@asri.org.

Audubon Enters the Space Age

Editorial by Dr. Charles Clarkson, Director of Avian Research

Upon hearing the acronym NASA, images of space stations, rockets, satellites, and incredibly powerful telescopes often come to mind. Generally speaking, most people would not associate the National Aeronautics and Space Administration with bird conservation. But, when you think about the stunning images of our planet that come from satellites orbiting overhead, the potential for earthbound-based datasets to be supplemented by information being collected by the world s premier space agency is greater than you may think. Consider the Sentinel-2, twin satellites orbiting the earth that collect high-resolution image data that has contributed to land management, forestry and humanitarian relief projects. The utility of aerospace data for on-the-ground work cannot be overstated, and the Audubon Society of Rhode Island is about to benefit from these amazing data sources in a big way.

After discussions with the NASA Applied Sciences DEVELOP National Program, Audubon has been selected as a recipient of targeted landcover analysis in the quest to conserve our Responsibility Birds*. The DEVELOP program identifies relevant applications of NASA s earth observation dataset and generates information and reporting useful in the conservation of natural resources or in addressing issues pertaining to public policy. This partnership aims to address the environmental issues we face in Rhode Island using an interdisciplinary capacity-building approach to research.

During a 10-week term (in spring 2024), I will work closely with NASA scientists to generate datasets utilizing NASA s incredibly powerful tools that will allow us to highlight areas of conservation importance within Rhode Island for our Responsibility Birds. As a statewide analysis, this dataset will also allow Audubon to prioritize land parcels for future acquisition based on habitat suitability. In short, this partnership will position the Audubon Society of Rhode Island to be an even more efficient and powerful conservation organization than it already is. And, in keeping with our mission, the biggest beneficiaries of this work will be birds and their habitats.

The NASA DEVELOP program has been in place since 1998 and has engaged over 100 partner organizations each year. Past projects include creating habitat suitability maps to prioritize conservation actions for the Yellow-billed Cuckoo and habitat trend forecasting under various stressor scenarios in the western United States.

These projects rely heavily on spectral indices that measure vegetation, soil moisture and landcover types and will be informed by the work completed as part of the Avian Research Initiative s baseline data analysis. Geospatial and statistical analysis will uncover areas within Rhode Island that provide the required habitats for each of our nine Responsibility Birds and the myriad other species that occupy these same habitat types. And, because effective conservation should focus on adaptive management, the end products supplied to Audubon from NASA will allow us to monitor changes in habitats through time using these powerful earth observation datasets. Moving forward, as the Rhode Island landscape changes, we will be ready to act swiftly. Being nimble is paramount to conservation success, and this partnership will launch Audubon (pun intended) into a new phase of our science and advocacy work: conservation through the use of cutting-edge technology.

A major goal of Audubon s Avian Research Initiative is to lead efforts for bird-focused habitat protection and land management through acquisitions and restoration projects. The work with the NASA DEVELOP program will aim to do just that.

* Audubon has identified nine common bird species that are still relatively abundant but have declined in numbers. These species are being called Responsibility Birds because it is crucial that we begin to address their decline now and work to manage and acquire habitat for their survival.

Learn More About the Audubon Avian Research Initiative.

Download Audubon's State of Our Birds Reports, Part I and II, and support the Avian Research Initiative at asri.org/AvianResearchInitiative

AUDUBON SOCIETY OF RHODE ISLAND
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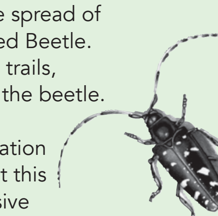
Please pass this copy on to a friend or recycle. Thank you.

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.

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."

Because of you, the Osprey License Plate has provided hundreds of children with the opportunity to learn about nature. Thank you.

Order at www.asri.org

Audubon Society of Rhode Island
12 Sanderson Rd, Smithfield, RI 02917

PROWL FOR OWLS

Take an evening hike with an Audubon naturalist and search of owls in their natural habitat. These programs fill quickly! **Register today at asri.org/calendar.**

OWL PROWL AT CARATUNK
Two Dates Offered.
Caratunk Wildlife Refuge
301 Brown Avenue, Seekonk, MA
October 26, December 7, 2023; 6:30-8:30 pm.

OWL PROWL AT POWDER MILL LEDGES
Powder Mill Ledges Wildlife Refuge
12 Sanderson Road, Smithfield, RI
October 27, 2023; 7:00-9:00 pm.

OWLS AND ALES AT FISHERVILLE
Fisherville Brook Wildlife Refuge
99 Pardon Joslin Road, Exeter, RI
November 17, 2023; 6:30-8:30 pm.
Ages: 21 and up.

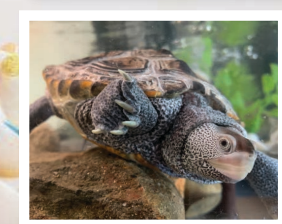
OWL PROWL AT FORT REFUGE
Fort Wildlife Refuge
(Rt. 5) 1443 Providence Pike
North Smithfield, RI
November 30, 2023; 7:00-9:00 pm.

OWLING AT FISHERVILLE BROOK
Fisherville Brook Wildlife Refuge
99 Pardon Joslin Road, Exeter, RI
December 8, 2023; 7:00-9:00 pm.

OWL PROWL AT PARKER WOODLAND
Parker Woodland Wildlife Refuge
Maple Valley Road, Coventry, RI
December 8, 2023; 7:00-9:00 pm.

REGISTER TODAY

AUDUBON BIRTHDAY PARTIES



Have a WILD time!

Choose an Audubon location, a party theme, and have a wild time celebrating your child's special day!

Visit AudubonBirthdayParties.com

SAVE THE DATE!
WILDLIFE CARVING AND ART EXPOSITION

Audubon Nature Center and Aquarium, Bristol, RI

NOVEMBER 4 & 5, 2023

10:00 am – 4:00 pm

New! Nature photographers, illustrators, painters and other nature-inspired artists will join this annual exposition of wildlife carving.