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Cover photo of Congdon Wood by Scott Ruhren.



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

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The Report is the Audubon Society of Rhode Island's newsletter, updating members and supporters on current news, policy issues, research and initiatives being led by the organization, staff, and volunteers.

We encourage your participation. Please send items that will be considered for publication to Managing Editor Hope Foley at hfoley@asri.org.

FROM THE EXECUTIVE DIRECTOR

WE'VE JUST BEGUN

s you read this, spring peepers are set to begin their spring chorus. Like clockwork, these frogs boldly signal the return of spring and remind me that nature is beginning its annual re-awakening. Their calls also reinforce my belief in the work we do at Audubon, and why it is so critical ... protecting places where these creatures live and thrive. I never want to see the day when peepers no longer peep.

In January, I announced a historic donation to Audubon of 300 acres in North Kingstown, now known as the Congdon Wood Wildlife Refuge. This pristine expanse of undeveloped woodlands and wetlands contains the headwaters of the Saugatucket River. It also provides a sanctuary for birds and wildlife, protecting its rich biodiversity. In tandem with this landmark acquisition, another generous donation expanded Audubon's Perched Boulder Woods Wildlife Refuge in Coventry. And we have just begun! In 2024, Audubon is moving forward to protect even more of Rhode Island's natural spaces.

Our Avian Research Initiative has reached unprecedented heights, culminating in the highly anticipated annual avian research symposium. Over 200 scientists, professionals and passionate community members gathered to share current research being done across New England. The enthusiasm and dedication exhibited by the attendees underscored the vital importance of our collective efforts in preserving avian biodiversity.

The stark realities of climate change, and how it continues to wreak havoc on our state, continues to be front and center in our work. The devastating floods that encroached upon our cities and neighborhoods has also impacted our wildlife refuges. Now, more than ever, it is imperative that we redouble our initiatives for climate resiliency and safeguard our natural heritage for future generations.



Given these challenges, I am pleased to introduce Phoenix Wheeler as the newest member of our leadership team. As Director of Advocacy, Phoenix will work to advance our legislative priorities using our science and education initiatives, mobilize you and thousands of our other supporters, and put Rhode Island on a path of leadership in climate resiliency.

None of our accomplishments would be possible without you. We rely on you for support, as generous donors are the lifeblood of our organization. Thank you for helping us create a healthier, greener, Rhode Island for all.

Good birding,



Jeffrey C. Hall, Executive Director

P.S. Audubon has upgraded to a new-and-improved donor database. Please bear with us during the transition and learning curve. Ultimately, this new system will save time and make us far more efficient with your donations. Thank you for your patience.



Your donations at work. Thank you for helping Audubon make nature more accessible to all.

TAX SEASON REMINDER

With tax season looming, now is the perfect opportunity to explore tax reduction strategies that benefit you and provide crucial support to Audubon. Remember, charitable tax strategies can be complex, so I encourage you to seek guidance from a trusted tax advisor to best align with your financial goals and philanthropic aspirations. Options may include donations from your IRA or a donor-advised fund or leaving Audubon in your will or insurance policy. You may even consider a Charitable Gift Annuity that will provide you a lifetime of financial security...and nature with forever security.

Jen Clelend has joined our staff as the new Director of Development and will be happy to discuss how you can make a lasting impact on preserving habitat for birds and wildlife. Contact Jen at jcleland@asri.org.



A LEGACY DONATION

CONGDON WOOD

Audubon Secures its Fourth Largest Wildlife Refuge

By Sue Kennedy

A Walk in the Wood

Something."

now, several days old but still fresh and white, blankets a section of an access trail, its smooth texture a natural medium for capturing a path of pawprints. "Coyote," indicates Scott Ruhren, Audubon Senior Director of Conservation, pointing out deeply indented heel marks and the defined spread of trotting toes. "You can see the signs of larger predators." Jeff Hall, Audubon Executive Director, nods. "And we're not even halfway, maybe barely a quarter into the property yet," he says. "That says something."

So do other things, they add, moving along the trail: the absence of noise, of any kind, from human activity; the complexity of natural habitat on the property – here's a stand of beech trees, with even decaying specimens serving a vital purpose as homes for, say, Barred Owls; and the prominent presence of the Saugatucket River, which winds through the forest.

But one fact, maybe, makes the point most clearly. "Just consider this," says Hall. "We're on the site of what is now Audubon's fourth largest conservation property, and it's these large swaths of donated land that really underpin, and add value to, the Audubon mission of preserving biodiversity in Rhode Island."

After an hour of walking at a fast clip through the property on this chilly January morning, Hall and Ruhren begin making their way out of Audubon's newly acquired Congdon Wood Wildlife Refuge, which encompasses 300 acres in North Kingstown, Rhode Island. And as they do, a look back at the trail reveals that the coyote had continued on, its tracks in clear relief until a rise and bend in the snowy path finally hid them from sight.



Barred Owl (Strix varia)

A Singular Donation Story

While the story of the Congdon Wood donation is, in terms of land conservation transactions, more or less straightforward, it's also stunningly singular. A Kingston couple had contacted Audubon in early 2023. The organization's reputation for conservation work appealed to them – so they inquired if Audubon would possibly be interested in accepting the land - as they were hoping to have it permanently protected.

Hall recalls the cautious optimism with which he greeted the inquiry, an optimism that grew as discussions continued and details were carefully sorted, prior to the resulting official donation in December 2023. "I cannot stress enough how momentous this donation has been, and how important our donors are to us," he says. "The family made an informed decision to donate the land, and we worked very hard to make sure their incredible generosity was met with an acquisition process that was as effective and efficient as possible. We are very grateful for this gift that will so positively impact birds, wildlife, and generations to come."

Three parcels make up the donation and an accessway to the land has been provided so Audubon can properly plan and implement conservation, research, management, and maintenance activities. Bordered to the north by Shermantown Road in North Kingstown and accessible to the south by Route 138 in South Kingstown, the refuge includes a sizable stretch of the Saugatucket River, which moves in a roughly north-to-south direction toward Point Judith Pond and, ultimately, Block Island Sound.

At left: The headwaters of the Saugatucket River are located within the new Congdon Wood Wildlife Refuge in North Kingstown. Photo by Scott Ruhren.

A Critical Refuge for Birds and Wildlife

As they retrace their steps along the path, Hall and Ruhren continue to point out details of the refuge's environment; yes, here's a beech that's all pocked – a clear sign of fungal infection – but it's ideal housing now for larger birds like owls. That tree with the distinctly curled branch twisting above the path? Sassafras, for sure.

And with each identification, they support their overall point: While every bit of conserved land, regardless of size, has the potential to offer habitat benefits to birds and wildlife, it's the unique expanse of a property like Congdon Wood that can provide the increasingly rare complexity of ecosystem resources that so many birds and wildlife depend upon for survival. "I think of it as this incredibly beautiful mosaic," says Hall.

Having spent many hours over the past months taking stock of the property, Ruhren determined that the refuge is "mostly forested with a mix of tree species, including some old American beech, yellow birch and white pine." Furthermore, he says, "Close to fifty percent of the land is wetland, mostly hardwood swamp and streams feeding into the headwaters of the Saugatucket River." He notes that sections of the refuge "were most likely farmland in the past two hundred years." He emphasizes the interaction that farmers and property owners have had over time with the land by pointing that "old stone walls crisscross many areas."

Birds, of course, represent a key aspect of the research work being initiated at the site. "A refuge the size of Congdon Wood is where you'll find birds that need the kind of space and habitat coverage that you just can't often find in more suburban settings," says Ruhren. "This contiguous expanse of forest and wetland habitat provides true protection to wild-life, including birds, and we know already that this is a critical stopover and breeding habitat for migratory species."

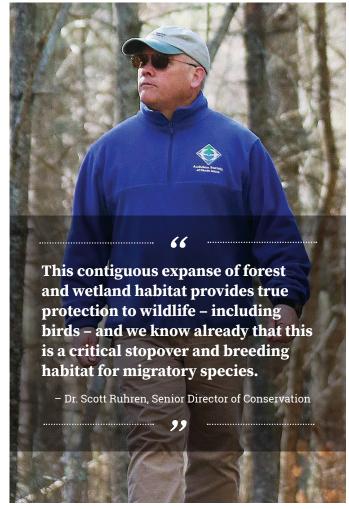
An initial inventory of bird species found at the refuge has begun. Species include several of Audubon's "Responsibility Birds," those species identified through Audubon's Avian Research Initiative as birds they will particularly focus on for conservation: Wood Thrush, Scarlet Tanager, Black-and-white Warbler, and Eastern Towhee.

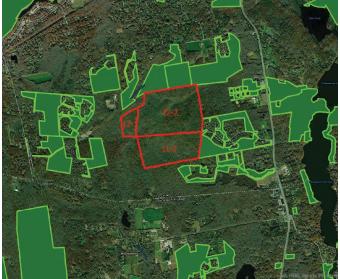
Numerous other species such as Pileated Woodpecker, Veery, Pine Warbler, Red-eyed Vireo, Ovenbird, Coopers Hawk, Barred Owl, Downy Woodpecker, Wild Turkey, American Goldfinch, Tufted Titmouse, Whitebreasted Nuthatch, Brown Creeper and Black-capped Chickadee use the property year-round or for critical migration stop overs.

At the same time, other kinds of wildlife are also showing up in Ruhren's inventorying efforts. He says native brook trout inhabit the waters of the refuge's span of the Saugatucket River, and that amphibians like the vulnerable dusky and two-lined salamanders breed in the ponding wetlands of the refuge. And, he adds, "based on local wildlife observations, the forest should be home to bobcats, fisher and black bear."

Ruhren had also mentioned the likely presence of bobcat earlier in the hike, when he noted the coyote tracks. He had smiled at the thought of eventually identifying the big-pawed cat on the property, and had stretched out an arm, an encompassing motion, to the expanse of refuge woods. "With these bigger animals, we're talking about space and area," he says. "So I'll say it again: three hundred acres of protected forest habitat is a big deal in Rhode Island, particularly in a suburbanized landscape like North Kingstown."

CONGDON WOOD Continued on page 36





Congdon Wood (outlined in red) is particularly valuable due to its proximity to other conservation lands, creating a vital corridor for wildlife. Protected land (shown in green) are municipal, federal, and private properties in South Kingstown and North Kingstown near the Congdon Wood Wildlife Refuge.

At right: Trail at Maxwell Mays Wildlife Refuge in Coventry. Photo by Peter Green.

Is a Land Donation in Your Future?

o you have a story to tell about your land, and is there potential for it to interweave with Audubon's conservation goals? For over 100 years, Audubon has been actively working with landowners to tailor permanent conservation plans for families and protect valuable properties across the state.

If you would like to discuss working with Audubon to protect your property for birds, wildlife, and their habitats, please contact Senior Director of Conservation Scott Ruhren at sruhren@asri.org or 401-949-5454 (x3004).



Powder Mill Ledges Wildlife Refuge Protected since 1980, Donated by Mary L. Walcott



Caratunk Wildlife Refuge Protected since 1971, Donated by Charles Greenhalgh



Emilie Ruecker Wildlife Refuge
Protected since 1965, Donated by Emilie Ruecker



Florence and Richard K. Fort Wildlife Refuge Protected since 1996, Donated by the Fort Family

Maxwell Mays Wildlife Refuge
Protected since 2010, Donated by Maxwell Mays

Generous Donors Expand Audubon's

PERCHED BOULDER WOODS WILDLIFE REFUGE

Coventry, RI



Every Bit of Conservation Land Counts

Conservation land donations at the size and scale of the Congdon Wood Wildlife Refuge are unique, with their rarity illuminating the critical role represented by a statewide quilt of smaller land donations that make up a solid portion of Audubon's conservation portfolio. "When it comes to habitat conservation, every bit counts, and we know and value that," says Jeff Hall, Audubon Executive Director. "Every land donation represents extensive time, effort, and thoughtfulness on the part of the individual who is donating the property, and a significant part of Audubon's work is honoring their gift by making sure the land is leveraged for wildlife and habitat values as extensively as possible."

Audubon protects 103 properties that total over 9,800 acres; more than half represent smaller donations of fewer than 50 acres, and these often bolster the organization's abilities to enhance conservation activity on larger companion conservation refuges.

This was the case with the recent acquisition of a five-acre parcel in Coventry, Rhode Island that has enabled Audubon to enlarge its Perched Boulder Woods Wildlife Refuge to 58 acres.

Collaboration With Donors is Key

Several generations of Beverly Gammell's family had owned the pristine property that contains dense thickets and a mix of oaks and pines, and they knew that Audubon owned neighboring conservation land. Gammell and her brothers, Glenn and Ken Wilcox, made the decision to permanently protect their property, especially with development expanding in the area.

"It just seemed to us like the right thing to do," says Gammell, who recalls that her parents, Ernest and Lorraine Wilcox, always deeply appreciated the outdoors. "Our father always had an affinity for the land, and our mother loved being outside, enjoying her plants and gardening."

Gammell said she and her brothers are very pleased with the chance to provide protected land via partnership with Audubon. "Development is taking place more and more, so conserving the land is good for the environment and the community, and it's what our parents would have wanted," she says.

And with the bulk of Audubon conservation properties being made up by this kind of donation, a great emphasis is placed on opportunities to work with a variety of landowners – from residents and families to businesses and schools, and to government and the advocacy sector – to explore and tailor potential options for gifting lands, regardless of their size. "That's an exciting aspect of this work, being able to collaborate with people on their goals and wishes for land they are hoping to donate to Audubon" says Hall. "Every piece of property has its own story and history to tell through the people donating it, and every acre of land is critical to help Audubon protect the natural biodiversity of the state."



TRANSFORMING THE LANDSCAPE

SUPPORTING NATIVE PLANTS AND POLLINATORS

Saturday, April 20, 2024 • 9:00 am-4:00 pm • Rhode Island College, Donovan Dining Center

Workshops and Lectures with Scientists, Master Gardeners, and Environmental Organizations

Learn how to build a sustainable community and support native pollinators by creating healthy wildlife habitat at home.



Keynote Speaker

DR. DOUG TALLAMY

Renowned Author and Chair of the Department of Entomology and Wildlife Ecology at the University of Delaware



For more information and to purchase tickets, please scan the QR code or visit asri.org/PollinatorSymposium

Symposium Presenters

- Dr. Steven Alm,
 Professor of Entomology, and the URI Bee Lab
- Lee Ann Freitas,
 Director, Roger Williams Park Botanical Center
- Sally Johnson, Ecoastal Design
- Shannon Kingsley, Seed Collector/Botanist, Rhode Island Wild Plant Society
- Donna Merrill,
 Founder and President of Pollinator Pathway
- Jen West, Coastal Training Program Coordinator, Narragansett Bay Research Reserve
- Phoenix Wheeler, Audubon Director of Advocacy

Other Organizations Represented at the Event

- Stormwater Innovation Center
- URI Master Gardener Program
- Rhode Island Wild Plant Society
- Barrington Pollinator Pathway

Sponsor packages available starting at \$500. For details, please contact Director of Development Jen Cleland at jcleland@asri.org.

Calling All

POLLINATOR PROTECTORS

By Katie Schortmann

Pollinator Outreach Coordinator / Environmental Educator

n 2022, Rhode Island legislation was passed to keep dangerous neonicotinoid pesticides (neonics) out of the hands of untrained users. Although this legislation went into effect on January 1, 2024, we still need your help!

You can continue to support pollinators by holding accountable local businesses that sell landscaping products. Neonicotinoids are long lasting and negatively affect the navigation system of bee species, making it harder for them to forage and to find their way home. These chemicals attack the central nervous system of insects, often resulting in paralysis and death.

We need your help to ensure that the regulation of these dangerous chemicals remains a priority. Together, we can make change happen.

Lawn care companies, farmers, and other professionals are still able to purchase neonicotinoids when necessary – but they must be certified users. Speak to your landscapers, HOAs and local nurseries about the dangers of neonics. Let them know you are concerned about plants and lawns grown and treated with these dangerous chemicals and the use of pesticides on or near your favorite outdoor spaces.

Bumblebee on native Anise Hyssop (*Agastache*) in the Palmieri Pollinator Garden. Photo by Casey Chan.









USE YOUR CONSUMER POWER TO SPEAK FOR THE BEES

Rhode Island businesses are no longer permitted to sell pesticides containing neonics to untrained professionals. Politely request that any products containing neonics be removed from shelves in accordance with RI Gen L § 23-25-40. (2022).

If you notice neonicotinoid pesticides still being sold on store shelves in Rhode Island, please email Audubon Director of Advocacy Phoenix Wheeler at pwheeler@asri.org and include the date and location where you saw the pesticides in your email.

For more information:

- Sign up for the Audubon Eagle Eye newsletter and look for Audubon's advocacy toolkits: signup.e2ma.net/signup/1978785/1780455
- Visit the Xerces Society website to learn more about bees and neonicotinoids: xerces.org/publications/scientific-reports/how-neonicotinoids-can-kill-bees



GET INVOLVED WITH LOCAL RESEARCH INITIATIVES

Butterfly Monitoring - Four Training Sessions Offered

Collecting data on declining monarch butterfly populations will help Audubon with conservation efforts. Volunteers are needed for this community science project from May through July. Questions? Contact Nathan Archer at narcher@asri.org for more information.

- Virtual Training Sessions: April 18, 23, 2024; 7:00-9:00 pm.
- In-Person Training Sessions: Audubon Nature Center and Aquarium, Bristol, RI; April 27, May 3, 2024; 10:00 am-12:00 pm.

Volunteers are asked to attend both a virtual and an in-person session. For details and to register, visit asri.org/calendar.

SUPPORT OUR WORK

We rely on your generous donations to expand native habitat, support pollinator health, and create sustainable communities. Visit *asri.org/donate*.

BIRDS ACROSS NEW ENGLAND

Audubon Regional Conservation Symposium

wenty-seven researchers from academic, research and nonprofit organizations throughout the northeast converged on February 4 at Salve Regina University to share the amazing amount of work they do to better understand birds and conserve them. An audience of over 200 eager-to-learn attendees digested talks ranging from planting native vegetation for birds, the interaction of birds and wind power, shorebird surveys across the Western hemisphere, the decline in aerial insectivores, and much more.

The event began with a keynote address by the award-winning author Carl Safina, whose message illuminated the audience of the similarities between birds and mammals in our capacity to feel emotion and act compassionately toward one another.

Peter Paton, URI professor, presented data collected over 40 years at the Kingston Wildlife Research Station, a property owned by Audubon that is the oldest continuous banding station in the country. The results were sobering. Not only have the total numbers of birds banded at the site dropped precipitously through time, but individual species declines were breathtaking. For example, the Common Yellowthroat (an Audubon "Responsibility Bird") has declined by 82% during the study period.

The entire audience gathered at the end of the day in the main lecture hall to hear Dr. Scott Edwards, Curator of Ornithology at Harvard University, discuss his amazing journey across our country, which exposed him to different birds, different landscapes, and different opinions. His presentation was inspirational, entertaining, and the perfect way to end the symposium.

Science is so much more than data and manuscripts. It must also involve connection. I strive to fight for the freedom of nature to

...filling a room with a crowd of scientists and the general public can be electric. The energy created in that space from the positive interactions between those who study the problems and those who want so desperately to help fix them was palpable.

- Dr. Charles Clarkson

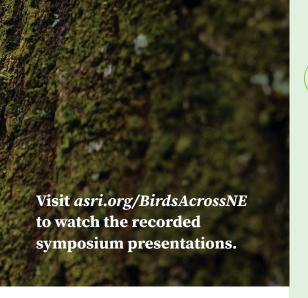
exist. This fight requires data as a tool that must be used in conjunction with compassion and emotion. We need to make the case that birds deserve to remain on this planet. Showing graphs and plots will never be powerful enough to save them in their own right.

I learned an incredible amount at the annual symposium. Far more than the material presented. I learned that filling a room with a crowd of scientists and the general public can be electric. The energy created in that space from the positive interactions between those who study the problems and those who want so desperately to help fix them was palpable.

I saw a lot of hope on Sunday, February 4. And, in the words of Desmond Tutu, "Hope is being able to see that there is light despite all of the darkness."













Top to bottom: Director of Avian Research Dr. Charles Clarkson, Audubon Board Member Dr. Jameson Chace, and Executive Director Jeff Hall. Keynote Speaker Dr. Carl Safina. Over 200 attended the event. Opposite page, left to right: Gathered presenters. Dr. Scott Edwards closed the symposium with his talk.



Motus tracking birds for science

Audubon is part of the Motus Wildlife Tracking System, a network that connects scientists, educators, communities, and organizations across the globe by tracking the movement of birds and wildlife. The data collected from our tower at the Nature Center and Aquarium* is merged with thousands of other Motus systems, and may be used to develop conservation plans for species in decline.

BY THE NUMBERS

LOCAL.

motus towers in Rhode Island

126

bird detections by Audubon's tower

bat detections by Audubon's tower

mile range for animal detection

GLOBAL.

1,788

motus towers across the globe

700+

research projects using motus

340+

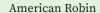
species of birds, bats, and insects tagged

44,000+

birds and animals tagged globally

TOP 3 SPECIES DETECTED BY AUDUBON





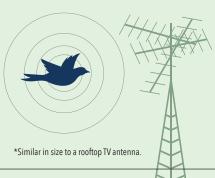


Bank Swallow



Dark-eyed Junco

There are plans to install another Motus tower at Audubon's Marion Eppley Wildlife Refuge in South Kingstown. In addition to collecting data on migrating birds, insects, and bats, this tower will collect movement data on local breeding birds, including Eastern Towhees and Prairie Warblers, two of Audubon's Responsibility Birds.



ARESILIENT WISION

Art Returns to the Maxwell Mays Wildlife Refuge

By Betsy Sherman Walker

welve years after the opening of the Maxwell Mays Wildlife Refuge, Audubon has embarked on what might fit in as the final detail in the story of Mays' legacy—as an artist, a conservationist, a lover of wildlife, and a philanthropist.

Art is coming back to the Maxwell Mays Wildlife Refuge.

Audubon has announced plans to convert Mays' guest cottage at Woodlot Farm (which he playfully named the chicken coop even though he had no chickens) into an art studio and teaching workshop. The program will be run by Coventry artist Aileen Quinn, who has ties to the property and is a member—as was Mays—of the Providence Art Club. With an enthusiastic endorsement from Executive Director Jeff Hall, Quinn, under a rental agreement with Audubon, will begin classes in April. The program will run through October. At the moment all that's been needed is a fresh interior coat of paint. "We're going to spruce it up a bit," said Quinn. According to her, the building is an ideal spot in an ideal location. "There is a nice wide open space with so much natural light."

"This has been a priority of mine for years," Hall says. Mays, who the Providence Journal referred to in 2009 as Rhode Island's "living legend," was Past President of the Providence Art Club, with the main gallery named for him. He left his beloved Woodlot Farm to Audubon in 2010, and Hall added that one of Mays' visions was to make Woodlot Farm available to Art Club members for plein air painting excursions. "Max was such a huge part of the Art Club," he added, "and I want to maintain that connection."

Quinn, a lifelong artist, is a native of Warwick and has been teaching art in the area for more than 25 years. She currently leads a weekly art class for adults with special needs at the Warwick Center for the Arts, as well as monthly watercolor workshops. Her connection to Audubon runs deep; from 2013-2015 she ran the Fresh Palette art studio at the old barn located at the Parker Woodland Wildlife Refuge

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I would like this land to stay open. I would like this land to breathe.

- Maxwell Mays

"

in Coventry. When the house and barn was sold to help finance the endowment of the Parker Woodland property, Quinn recalls, "I figured I'd take my passion and pour it into life in some other way."

Quinn is also currently the housekeeper for Mays' lake-side cottage on the property, which Audubon rents during the summer months. ("I turn the place around between guests," she explains.) On her many housekeeping gigs—and as an overnight guest herself, when she goes to paint—she would walk by the coop, a small clapboard structure with oversized windows, and see a small gem with big potential. "Every time I'd go down there the [chicken coop] would be sitting there—not being used," she said. "I'd say to Audubon Land Steward Joe Metzen, 'What are you going to do with that little building?""

With Metzen as the conduit, Quinn and Hall eventually came together. "The idea for art at the refuge started after Max's death," says Hall, "but we didn't have a plan or a timeline. The conversation resurfaced after [Joe] brought the subject up to me last winter." Metzen, also an artist, presented Quinn's idea and her interest in renting the space for an art studio. According to Hall the fact that, like Mays, Quinn was local, established, and a member of the Providence Art Club was the indisputable link.

"When I heard that," he said, "I thought it might be a perfect fit for the coop."







Allison Barrett, Maxwell Mays' niece and companion during the later years of his life, lives on an adjacent piece of property – a gift from Mays. Her fondest memories are of walking the trails with him, almost daily. In a recent conversation with Hall, Barrett confirmed that the notion of "bringing the art back to the refuge" is something Mays would have endorsed, wholeheartedly. "He could paint for hours and not be interrupted," she noted in a previous conversation. But he was also very social, she added "and also loved to entertain friends at his house on Carr Pond, fill it up with people who appreciated it as much as he did."

Quinn says she never met Maxwell Mays, but that her stepfather would mention growing up in the same Providence neighborhood, and that he was "proud to have owned a print of Max's well-known painting 'Buttonwoods." Her attraction to the coop reveals an artist's practiced eye, and an artist's sixth sense about what it takes to create a good painter's retreat. Besides maintaining the Lake House for other renters, she has also spent numerous weekends there, bringing fellow artists along.

Hall says he would like to see a fundraiser come together later in the fall. No date is set; he wants to see how the summer unfolds first. But it would be wonderful to have the venue for the event—which may include an auction—be the Providence Art Club, in the Maxwell Mays Gallery. "It's something that we want to explore," says Hall. "It could pull together people who knew Max and loved him."

In true Mays fashion, Quinn's vision is his: to share his woodlands, trails, and the wildlife drawn to Carr Pond with as many art and wildlife lovers as possible.

"It would be an honor to be able to teach art and carry on for him,"

Continued on page 33



Clockwise from top left: The field near the Maxwell Mays farmhouse, with his easel and unfinished painting, artist Aileen Quinn, the "Chicken Coop" cottage, a landscape painting by Aileen Quinn of the Mays Wildlife Refuge in autumn.

GET CREATIVE THIS SPRING!

A complete schedule of Maxwell Mays Art Studio classes may be found on page 21.

SUMMER ON CARR POND

Rent the Charming Maxwell Mays Lakefront Cottage

For details and availability, visit asri.org/services.

TIMING IS EVERYTHING, USUALLY

In October, in one evening, warblers headed south strip native viburnums of their nutritious fruits at Audubon's new Congdon Wood Wildlife Refuge in North Kingstown. In March, as the snow melts, the forest floor warms and spring flowers open, insects will move from flower to flower in search of food.

All living creatures have a life history, the stages and steps they go through from birth to death. Phenology is the timing of biological events in these histories and environmental forces drive phenologies. This is where ecology meets weather. Examples of phenologies include appearance of migratory birds, beginning and ending of breeding season, first flowering time, departure of migrating monarchs and more.

Phenologies include the timing of interacting species as well, and coevolution with other organisms drives some phenologies. Some species rise and fall in synchrony with other species.

Across Rhode Island in spring, queen bumblebees and solitary native bees emerge looking for flowers that offer crucial nutrition for survival and reproduction. Flowers that finish earlier may not be pollinated and will not feed their pollinators.

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Ecologists agree that phenological mismatches are occurring more often. How will species respond when the timing is off? Can they adapt?

- Dr. Scott Ruhren

"

Decades of research and natural history observations reveal that climate change influences these cycles. However, the impact and outcome of this is difficult to generalize. Still ecologists agree that phenological mismatches are occurring more often. How will species respond when the timing is off? Can they adapt?

For forest spring flowers that complete their flowering before the tree canopy closes this "spring window" has decreased by almost seven days since the 1850s when Thoreau was exploring New England. Spring is shorter yet the outcomes vary. Once again biological differences occur. For example, trees are more sensitive—or responsive—to warming than herbaceous species. Invasive plant species are making it worse and several (e.g., honeysuckle shrub species) have a competitive advantage by leafing out faster than their native neighbors.

For birds that depend on insects to feed their young in spring and summer and fatten up on fruits as they migrate south in the fall, changes in timing could lead to adverse mismatches in nutrition and food supply.



Many areas of the world including Rhode Island have had less snow. In addition, snow cover is melting sooner and many creatures are emerging earlier.

Are amphibians laying eggs earlier after shorter winters and early springs? Warmer Mays and Aprils mean drier forests. Are vernal pools holding water long enough for adult frogs and salamanders to emerge?

Fresh and marine water bodies are warming sooner. Are spring plankton blooms occurring earlier? Is this influencing fish spawning?

It has been a troubling 20 years in many cases. Thankfully, biodiversity has its own disaster insurance. Duplicate pieces of the puzzle enhance survival of the species that need those pieces. Pollinators that can use many different flower types could fare better than insects with very restricted diets.

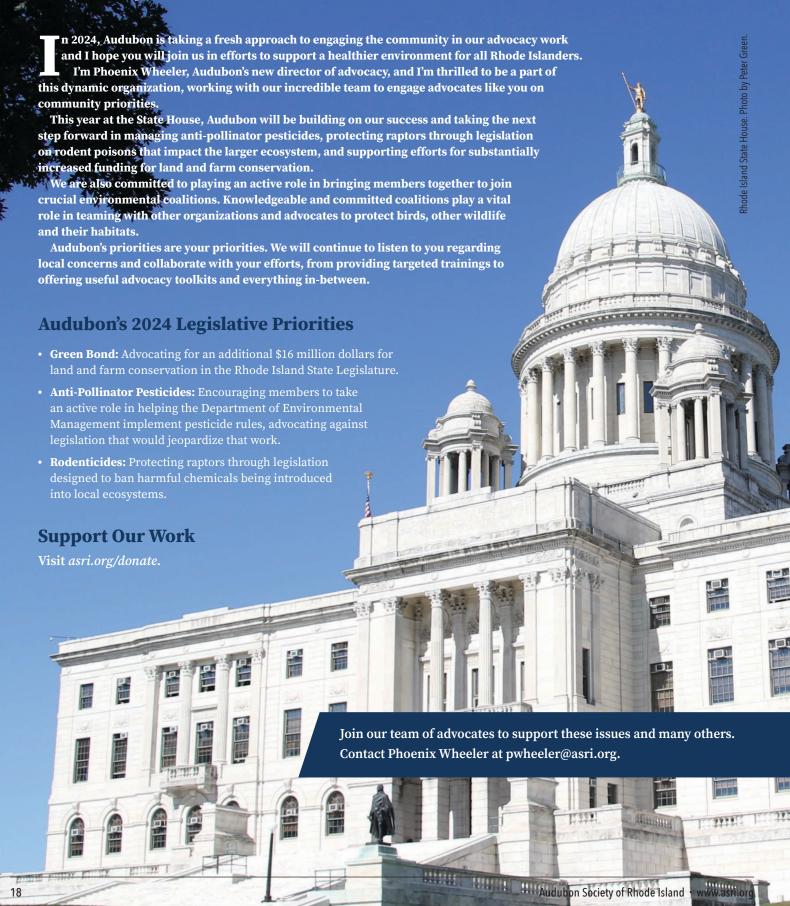
Audubon protects habitat for the species that live on and use our properties and we manage and restore areas to improve conditions and increase "the insurance." For example, we plant native seed mixes of grasses and wildflowers to feed pollinators and their larvae as well as birds during crucial times in their development. Rather than focusing on single species restoration, we strive to support a diverse mix, based on science with a measure of hope that most will survive.

Most likely, there will be a range of winners and losers in our changing climate. Some species are more flexible and able to respond to changes in timing. Others, more rigid in the life history and needs will likely decline. In the worst cases, local extinctions may occur for species that cannot keep up with their changing world. Adaptive management and knowledge of what species require to survive will help maintain Rhode Island's biodiversity.

Clockwise from top left: Eastern Kingbird, Cedar Waxwing, Eastern Bluebird, American Robins feed nestlings.



2024: YEAR OF THE ADVOCATE



AUDUBON WELCOMES NEW DIRECTORS



Jen Cleland

DIRECTOR OF DEVELOPMENT

A udubon welcomes Jen Cleland as Director of Development. Her main responsibilities include securing funding for the organization's priorities and engaging the community in Audubon's work.

Jen comes from a nonprofit background and has held leadership roles in national organizations such as the March of Dimes, National Multiple Sclerosis Society, and NPR affiliates. She has also served in leadership

capacities for Thrive Behavioral Health in Rhode Island, LIFTT in Billings, Montana, and Little People's Learning Center in Yellowstone National Park. During her tenure, these organizations experienced growth in funding and community engagement.

Jen holds degrees from the University of Rhode Island and Cambridge College in Boston. She is originally from Rhode Island and currently resides in North Kingstown.



Phoenix Wheeler

DIRECTOR OF ADVOCACY

hoenix Wheeler (they/them) was welcomed last fall as Audubon's new Director of Advocacy. Their main responsibilities include empowering members across Rhode Island to advocate for state legislation and local priorities that safeguard critical Rhode Island biodiversity and ecosystems.

Phoenix began their career in the LGBTQIA+ policy arena as a community organizer around local ordi-

nances, state legislation and ballot initiatives in Vermont, New Jersey, Maine and Massachusetts. Phoenix was also a consultant on several local, state, and federal electoral campaigns supporting first-time candidates. After settling in Rhode Island, Phoenix became a constituent representative for then-Mayor Jorge Elorza, progressing to become Executive Director of the Providence Human Relations Commission, then transitioned to broadband outreach and policy, continuing into Mayor Brett Smiley's administration until they joined Audubon.

Phoenix holds a master's degree in advertising from Boston University and a bachelor's degree in political communications from Emerson College. They currently live in Providence.



Mark Your Calendar!

Join the State-wide Day of Giving and support the Audubon Avian Research Initiative.

asri.org/401gives

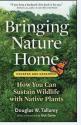


Audubon Nature Center and Aquarium 1401 Hope Street, Bristol, RI asri.org/natureshop

Garden with Native Plants to Support Wildlife

Books by Doug Tallamy are in stock.





Just In Time for Spring

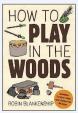
Check out our selection of garden tools and new whimsical watering cans!



Frogs, Worms, Birds, & Bugs

Pick up some exploration tools for kids.





Members Receive 10% Off In Bristol

Just present your membership card at the register!



CHOOSE YOUR OWN ADVENTURE

Audubon Nature Programs and Events • March-May, 2024

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. Each week a new birding destination is chosen. Location will be sent to registered participants. Every Wednesday through June 2024; 9:00-11:00 am.

Woodcocks and Wine

Fisherville Brook Wildlife Refuge, 99 Pardon Joslin Road, Exeter, RI; March 22, 2024; 6:30-8:30 pm.

Timberdoodles and Treats

Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA; March 29, 2024; 6:30-8:30 pm.

Watching Woodcocks: Supper and Saunter

Powder Mill Ledges Wildlife Refuge, 12 Sanderson Road, Smithfield, RI; April 5, 2024; 6:00-9:00 pm.

Bird Walk at Hunt's Mills

Hunt's Mills, 65 Hunt's Mills Road, Rumford, RI; April 27, 2024; 8:30-9:30 am.

May Bird Walk and Breakfast

Start the morning off with an early bird walk and enjoy a scrumptious fireside breakfast at the lakeside cabin. Maxwell Mays Wildlife Refuge, 2082 Victory Highway, Coventry, RI; May 4, 2024; 8:00 am-12:00 pm.

Wings by Sight: Birding for the Hard of **Hearing Community (HH)**

Discover the world of birds through visual cues!

- Powder Mill Ledges Wildlife Refuge, 12 Sanderson Road, Smithfield, RI; May 4, 2024; 9:00-11:00 am.
- Caratunk Wildlife Refuge, 301 Brown Avenue, Seekonk, MA; May 11, 2024; 9:00-11:00 am.

Great Expeditions

Birding van trips in May and June. See page 25.

Audubon Nature Center and Aquarium

1401 Hope Street (Route 114), Bristol, RI

For Adults

Small Wonders: Art Exhibit by Katie Khan

March 3-April 30, 2024; 9:30 am-4:30 pm.

Stamp and Sip

Make your own greeting cards! March 19, 2024; 6:30-8:00 pm.

Sea Glass Jewelry Workshop

Two Dates Offered. March 30, May 11, 2024; 1:00-2:30 pm.

Wildlife Carving and Art Exposition

April 6-7, 2024; 10:00 am-4:00 pm.

Lecture and Book Signing with Author Ann Parson

The Birds of Dog; An Historical Novel Based on Mostly True Events. April 11, 2024; 7:00-8:30 pm.

Ecology - A Celebration of Our Shared Experience: Photography Exhibit by Hecmar Delgado

May 5-June 30, 2024; 9:30 am-4:30 pm.

Bird Banding

May 11, 2024; 9:15-11:15 am.

Audubon Lecture with Pamela Lowell Nature Inspired Art: My Summer with Ospreys

May 11, 2024; 1:00-3:00 pm.

For Children

Camouflage Egg Hunt

March 23, 2024; 9:30-10:30 am.

Signs of Spring Discovery Walk

March 24, 2024; 10:00-11:00 am.

This popular program introduces children ages 18 months to 2 years to the delights of nature. March 28, April 4, 11, 25, May 2, 9, 2024; 10:00-11:00 am.

Free Family Fun Day

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! April 13, May 4, 2024; 10:00 am-3:00 pm.

April School Vacation Week Activities

Celebrate spring with animal interviews, crafts, turtle races, owl pellet dissections and more! April 15-19, 2024; 10:00 am-3:00 pm.

Preschool Adventures

Nature comes alive for children ages 3 to 5 through games, hikes, crafts, songs, and more! April 20, 27, May 4, 11, 2024; 10:00-11:00 am.

Meet and Greet Darwin the Turtle

April 21, 2024; 10:00-11:00 am.

Fairy House in the Garden

May 5, 2024; 1:00-2:00 pm.

Memorial Day Nature Activities

May 27, 2024; 10:00 am-3:00 pm.





Caratunk Wildlife Refuge

301 Brown Avenue, Seekonk, MA

Nature Discovery Series for Young Children

Young children ages 3 to 6 explore the wonder of spring! March 27, April 3, 10, 17, 24, May 1, 8, 15, 2024; 2:00-4:00 pm.

Timberdoodles and Treats

March 29, 2024; 6:30-8:30 pm.

Frogs in the Forest

April 15, 2024; 10:00 am-12:00 pm.

A Froggy Night at Caratunk

April 17, 2024; 7:00-8:30 pm.

Wings by Sight: Birding for the Hard of Hearing Community (HH)

May 11, 2024; 9:00-11:00 am.

Fisherville Brook Wildlife Refuge

99 Pardon Joslin Road, Exeter, RI

Woodcocks and Wine

March 22, 2024; 6:30-8:30 pm.

Teatime and Fairy Houses

April 13, 2024; 10:00-11:30 am.

Fort Wildlife Refuge

1443 Providence Pike, North Smithfield, RI

Emerging Spring Walk

March 30, 2024; 1:00-3:00 pm.

Frogs in the Forest

April 18, 2024; 10:00 am-12:00 pm.

Froggy Night at Fort Wildlife Refuge

April 19, 2024; 7:00-8:30 pm.

Sensory Forest Bathing Walk

May 5, 2024; 9:00–11:00 am.

Maxwell Mays Art Studio

Maxwell Mays Wildlife Refuge, 2082 Victory Highway, Coventry, RI

First Fridays: Watercolor from Nature 101

Two-session Class. May 3, June 7, 2024; 10:00 am-1:00 pm.

The Art of Paper Making for Adults

May 17, 2024; 10:00 am-1:00 pm.

Glass Painting

June 14, 2024; 4:30 -6:00 pm.

Art Classes for Kids! Ages 6+

- Earth Day 2024: Recycled Creations April 16, 2024; 10:00 am-12:30 pm.
- Print Making and Nature Journals April 18, 2024; 10:00 am-12:30 pm.
- The Art of Paper Making for Kids May 18, 2024; 10:00 am-12:30 pm.

Powder Mill Ledges Wildlife Refuge

12 Sanderson Road, Smithfield, RI

Camouflage Egg Hunt

March 23, 2024; 9:30-10:30 am.

Watching Woodcocks: Supper and Saunter *April 5, 2024; 6:00–9:00 pm.*

The Wild Garden:

Storytime and Planting Seeds

April 16, 2024; 10:00-11:00 am.

Wings by Sight: Birding for the Hard of Hearing Community (HH)

May 4, 2024; 9:00-11:00 am.

Audubon Spring Craft Fair

June 1, 2024; 10:00 am-4:00 pm.

Prudence Island

Narragansett Bay National Estuarine Research Reserve, Prudence Island, RI

'Spring' on Over to Prudence Island!

April 24, 2024; 9:45 am-4:45 pm.

Spring Birding on Prudence Island

May 16, 2024; 7:30 am-3:00 pm.

Spring Nature Walks

Locations across Rhode Island

Pools, Swamps, and Cabbage

Maxwell Mays Wildlife Refuge, 2082 Victory Highway, Coventry, RI; March 22, 2024; 9:30 am-12:00 pm.

Ducks With Devin

Trustom Pond NWR, 1040 Matunuck Schoolhouse Road, South Kingstown, RI; *March 23, 2024; 10:00 am-12:00 pm.*

Searching for Spring Pollinators

Parker Woodland Wildlife Refuge, Maple Valley Road, Coventry, RI; April 26, 2024; 9:30 am-12:00 pm.

Native Pollinator Walk

Touisset Marsh Wildlife Refuge, 99 Touisset Road, Warren, RI; May 10, 2024; 10:00 am – 12:00 pm.



Register at asri.org/calendar.



CONNECT. EXPLORE. LEARN.

AUDUBON NATURE CENTER AND AQUARIUM

New! Sensory Friendly Hours

For guests who would benefit from exploring the Nature Center and Aquarium with fewer guests, a quieter environment and lower lighting, Audubon now offers Sensory Friendly Hours. Offered twice a month, visit asri.org/SensoryFriendlyHours for details and to register for a 50-minute time slot.

Automatic Doors Make Nature Accessible

Thanks to the Christopher and Dana Reeve Foundation, new electric doors allow guests living with paralysis and other mobility issues greater independence and easier access. New accessible picnic tables and trail benches are also coming soon!

Let 'em Get a Little Muddy!

Check out all the hands-on nature exploration tools for kids at the Nature Shop!

Invite a Turtle, Owl - or Even a Snake!

What's better than cool critters at a birthday party? Plan a child's celebration at *AudubonBirthdayParties.com*

Art at the Aquarium

Meet New England artists and discover stunning bird carvings, photography and artwork. April 6 & 7, 2024.



Flashes of Red

Head down the trails in March and watch for Red-winged Blackbirds in the marsh... a true harbinger of spring!



Croak!

Our wetlands come alive in spring with a frog chorus. Enjoy their croaks, trills, gunks, quacks and other fabulous calls!

They're Back!

Look for the Osprey nest in the marsh along our boardwalk. These fish-eating raptors return in spring to their nesting sites and lifelong mates. Watch for them by rivers and shorelines.



What's the Buzz?

See how the Palmieri Pollinator Garden grows! Notice we do not 'clean up' the garden until night temps are consistently over 50 degrees. This protects grounddwelling native bees until they are ready to emerge.



The Search is On

How well do brown eggs camouflage? Kids find out at Audubon's popular egg hunt on March 23. Register at asri.org/calendar.



At right: Seasonal blooms welcome visitors – and pollinators – to the gardens and grounds of the Audubon Nature Center and Aquarium in Bristol, RI.

Photo by Paige Therien.





Discovering Where Stormwater Flows... And Where it Doesn't

Grant Funds Support Monitoring of Urban Green Infrastructure

By Rebecca Reeves, Stormwater Education and Outreach Coordinator

In 2022, the Stormwater Innovation Center received a grant from the Narragansett Bay Estuary Program (NBEP) to monitor select green infrastructure sites in the Providence metro area using a variety of low-cost methods. The project was a collaborative effort between the Audubon Society of Rhode Island, The Nature Conservancy of Rhode Island, and the University of New Hampshire Stormwater Center.

At 26 different green infrastructure projects, owned by both public and private entities, water level loggers and/or time-lapse cameras were installed to record data about whether stormwater was properly entering the structures during rain events. Water level data was checked against regional precipitation data to ensure that the incoming water matched the optimum volume expected.

Time-lapse cameras provided a detailed understanding of how water was entering - or not - into the system. Just because a particular green infrastructure project was receiving water did not necessarily mean that the water was coming from its intended source. Similarly, if water was not entering a particular site, the recordings provided a clear picture and demonstrated the potential reasons for this.

Ultimately, of the 26 sites monitored, only 12 were performing at their intended capacity. Ten were operating below capacity, and 4 showed no evidence of receiving any stormwater during significant rain events.

This data has provided meaningful information to the participating owners, designers, contractors, and even other maintenance professionals not directly involved with this monitoring project. Although many of the site owners employ staff to do basic maintenance of the sites - clearing out debris and sediment, mowing and trimming - they often don't have the resources to dispatch staff to these sites when they are most active. Sometimes, sites performing below capacity are being maintained properly, but have a design flaw that doesn't allow stormwater to enter.

All green infrastructure owners were given the results of this monitoring so that they could





Monitoring green infrastructure is critical to ensure that stormwater is diverted properly (green arrow) and untreated runoff does not flow directly into nearby bodies of water.

For tips on how you can help keep our waters clean, visit stormwaterinnovation.org/athome.



seek future grant funding to make any necessary retrofits or restorations. Several sites operating below capacity in Roger Williams Park have already been identified to be retrofitted. The Stormwater Innovation Center and Providence Parks Department have secured grant funding from NBEP as well as Restore America's Estuaries (RAE - a part of EPA's Southern New England Program) to work with engineering and design firms and contractors to make the changes required to see these projects operating at their full capacities.

A full interactive report detailing the processes and results of this NBEP project can be accessed at stormwaterinnovation.org/reports.

In 2023, the Stormwater Innovation Center launched the community monitoring website Rain-Snap. The website is a natural continuation of the original NBEP project - volunteers monitor green infrastructure sites in the Providence metro area and upload photos and videos of them during rain events. The purpose is the same - to relay to green infrastructure owners whether and how well their projects are working. Volunteers are able to receive training online and track upcoming qualifying precipitation events.

It's easy to sign up for RainSnap! Join our team and register at rainsnap.org.

The Wonders of Water

Earth Day Celebration

Roger Williams Park Boathouse Lawn, Providence, RI April 22, 2024 12:00-4:00 pm

Learn more at asri.org/calendar.



Great Expedition Van Trips

Migration at Magee Marsh

May 6-11, 2024

Join a guided van trip to Magee Marsh near Toledo, Ohio – a spot that draws birders from around the world for spring migration. Details available at asri.org/calendar. Deadline for registration is April 1, 2024.

The Great North Woods

June 5-8, 2024

Travel with Audubon to the Connecticut Lakes Region of New Hampshire. In this northern wilderness, it's possible to spot over 100 bird species that nest in the area, including Gray Jay, Bicknell's Thrush and Boreal Chickadee. Details available at asri.org/calendar. Deadline for registration is May 1, 2024.

May Bird Walk and Breakfast

Maxwell Mays Wildlife Refuge, Coventry, RI

May 4, 2024

Search for early spring warblers and more...then enjoy a delicious fireside breakfast!





n warm, rainy nights in early spring, watch for salamanders, frogs and toads crossing the roads. These animals are amphibians. Taken from the Greek language, amphi means "double" and bios means "life" which makes sense since many of these creatures spend part of their life in water and part of their life on land.

Salamanders have smooth skin that can absorb moisture and nutrients from the environment. Lungless salamanders, like the red-backed and northern dusky, breathe through their skin. These adaptations make salamanders and other amphibians very susceptible to pollution.

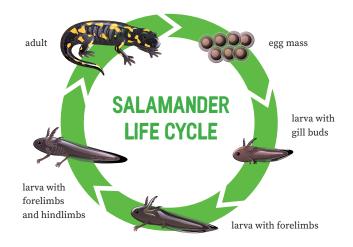
Spotted and marbled salamanders live underground in small mammal burrows. In spring, spotted salamanders emerge and make their way to ponds, swamps and vernal pools to breed. Vernal pools are shallow wetlands that form in depressions from snow melt and spring rains. While they usually dry up in the summer, spotted salamanders and a variety of frogs depend on these pools in spring to lay their eggs. Because there are no fish in these pools, the growing larva are safe from predation.

Other salamanders lay their eggs in streams, swamps or moist soil under logs or leaf litter. Unlike other salamanders in Rhode Island, marbled salamanders wait until autumn to breed.

Adult salamanders have a sticky tongue that helps them capture food like insects and other small invertebrates like worms. However, the marbled salamander larva is a predator and will eat the eggs and larvae of other salamanders.

Audubon scientists study the vernal pools on our wildlife refuges to better protect them. They map where the pools are located and inventory the species that are using them.

Spotted salamander eggs are enclosed in a jelly-like substance and often contain green algae which uses the carbon dioxide exhaled by the embryo to grow and in turn releases oxygen that the embryo can use.



Salamanders go through a life cycle called metamorphosis. The egg hatches into a larva that lives in water and uses gills to breathe. The larva first grows front legs and then back legs, and eventually matures into a salamander that lives on land.

THERE ARE EIGHT SPECIES OF SALAMANDERS IN RHODE ISLAND



Check out "Amphibians of Rhode Island" by Chris Raithel in the Audubon Nature Shop.



spotted



marbled



northern dusky



ky northern two-lined



red-spotted newt



four-toed



northern spring



northern red-backed

CELEBRATIONS & HAPPENINGS

Art at the Aquarium Wildlife Carving and Art Exposition

April 6 & 7, 2024 Audubon Nature Center and Aquaurium

Meet New England artists and discover stunning bird carvings, photography and artwork.







Interested in showcasing your artwork? Contact audubon@asri.org for info.

Save the Date! Audubon's Solstice Soiree

June 20, 2024 Roger Williams Botanical Center, Providence

Join Audubon to celebrate the summer season! Bid for a chance to win unique local nature experiences, dining packages, tours and more!

Watch asri.org for details.



We'll Bring the Party Animals Birthdays at Audubon

Invite an owl, turtle, or snake to a child's birthday celebration at Audubon and have a wild time!

Visit AudubonBirthdayParties.com for details.





New this Summer... Concerts for Conservation

Bring friends and join local musicians for outdoor summer concerts. Proceeds support Audubon conservation initiatives.

Watch asri.org for details.

April Showers Bring... Frogs, Turtles and More! Vacation Week Fun

April 13-21, 2024

Kids head outside to search for frogs in the pond, build fairy houses in the forest, dissect owl pellets, meet cool critters and more.

Visit asri.org/calendar for details.





Get Ready to Run Wild! Virtual 5K Run/Walk

April 21-27, 2024 • Anytime, Anywhere

Interested in doing even more for wildlife? Start an Audubon fundraiser! You'll receive a personalized fundraising webpage to share with friends and family. Collect donations and help keep Audubon's beautiful wildlife refuges free and open to all.

New! 2024 T-shirts and unique hand-crafted awards created by local artisans.

Prizes for the top fundraisers! Watch for more info and registration details on asri.org.



Thanks to generous donors, more than 30 students in Providence received free field guides that they can keep and use in perpetuity.

If you visit Providence these days, don't be surprised to see some 4-foot-tall birding experts out and about in the parks. Last year, through the generous efforts of Audubon, Ocean State Bird Club and Wild Birds Unlimited, gently used bird field guides were collected and donated to the Audubon partners at the Providence Urban Wildlife Conservation Partnership. These field guides were put directly into the hands of Providence youth with the intention of providing resources that might not always be easily accessible. More than 30 young naturalists were given individual guides that they could use during their in-school and afterschool programs and were then able to take them home to keep and use in perpetuity.

Adventures in the Fields at Caratunk

One group of students included the new members of the Paul Cuffee Elementary School's Wild Kids Club. These 4th and 5th grade students spent each Thursday in the fall visiting the city park, Neutaconkanut Hill in Providence, where they tested out their naturalist skills. Throughout this afterschool program hosted by the Providence Urban Wildlife Conservation Partnership, the students took hikes on the many miles of nature trails in the park, learned to use binoculars to watch for birds, explored invertebrates using field nets, and built nature shelters from natural materials found around the park. Each year, they enjoy a culminating visit to the fan favorite, Audubon's Caratunk Wildlife Refuge in Seekonk, MA.

This year, the students were given their field guides to use on the Caratunk field trip and were told they could take them home at the end of the day. They were ECSTATIC! These young naturalists immediately used their books to look up what a Purple Martin was, having been intrigued by the funny-shaped bird houses hanging in the field. While Purple Martins had already left the refuge at the time, the students enjoyed being able to find them in their new guides.





Along the way, we heard a Blue Jay, saw an American Robin, and heard a Red-tailed Hawk. Every time a new bird was sighted or heard, the crowd of students would rush to find the bird in their new field guide and proudly walk among their peers pointing out the different features, reading the descriptions, and comparing notes from the different book brands. I have never seen students so excited to educate others about the species found on the trails! At the end of the trip, they loaded back onto their bus, saying their final goodbyes for the afterschool season.

Their teacher lead, Stacy Gale, texted me and said, "it's a silent bus ride home". I assumed that meant they were all so tired from running around enjoying the day, but after taking a peek at the photos that were attached in the text, I realized it was because they were all engrossed in their field guides.

Connecting Students to Urban Ecology

Another group to receive guides included 5th grade students at George J. West Elementary School in Providence. Their teacher, Jessica Theriault, is both a 5th Grade teacher and Special Educator involved in their Behavior Intervention Program. She took part in an annual summer Teacher Institute, hosted by the Providence Urban Wildlife Conservation Partnership and Roger Williams Park Zoo. This week-long training provides best practices and resources for educators to bring learning outdoors, using city parks as outdoor learning spaces.

Theriault continually looks for new and innovative ways to inspire her students to connect to the urban ecology around them. "The 5th grade students in rooms 307 and 312 are super thankful and very excited to put these books to use!" she told us. "Room 307 is a self-contained behavior classroom at George J. West. We mainstream with Room 312 which is a regular education classroom for up to 4 hours per day. Our students especially love science. We spend time not only learning the grade-level curriculum but also time learning about the environment pertaining to Rhode Island. We have spent time learning about the wildlife right here in Providence and will use these field guides to identify birds that frequent our gardens at George J. West Elementary."

66

Our students especially love science...we have spent time learning about the wildlife right here in Providence and will use these field guides to identify birds that frequent our gardens at George J. West Elementary.

- Jessica Theriault, Grade 5 Teacher and Special Educator



George J. West Elementary is also home to Providence's first certified Schoolyard Habitat, which launched the Schoolyard Habitat initiative between the U.S. Fish and Wildlife Service (USFW) and Audubon back in 2016. In Rhode Island, Audubon and USFW work with schools that have demonstrated readiness to create a schoolyard habitat and integrate the new outdoor teaching space into school curriculum. They have collaborated to bring funding and technical assistance to teachers, parents and after-school providers that promote and support the development of outdoor learning. The Audubon Society of Rhode Island provides free Schoolyard Habitat Resource Guides and Activity Guides on their website: <code>asri.org/learn/schools/schoolyard-habitats.html</code>.

The Providence Urban Wildlife Conservation Partnership is incredibly grateful for the support provided by the Audubon Society of Rhode Island, Ocean State Bird Club, and Wild Birds Unlimited. Initiatives such as this field guide drive truly help to ensure that nature exploration is accessible to all.

Top of page 28: A young naturalist from Providence uses a donated field guide at Caratunk. Left, top to bottom: Students from George J. West Elementary School check out their new field guides in the school library. Paul Cuffee Elementary School students (a Providence public charter school) at Caratunk Wildlife Refuge last fall. Part of the school's Wild Kids Club (hosted by the Providence Urban Wildlife Conservation Partnership) this popular annual field trip encourages the students to put their new naturalist skills to use.

NATURE KITS FOR CITY KIDS

Audubon Partners with Providence Community Libraries

o spark curiosity and deepen connections with nature, Audubon has collaborated with the nine Community Libraries of Providence to share nature exploration kits with their communities. Curated by Audubon Community Education Coordinator Lisa Maloney, these mobile nature kits contain a variety of materials and resources to encourage outdoor exploration and understanding of local urban wildlife. Providence residents can just stop by the Community Libraries of Providence and ask to borrow a nature kit!

Other libraries across the state may also obtain nature kits for their communities. Library staff may contact Jen Cleland at jcleland@asri.org..

Thank you to Providence Libraries Director Cheryl Space and Youth Services Coordinator Judanne Hamizada for supporting this collaboration.



Youth Services Librarian Kaia Heimer-Bumstead at the Washington Park Library in Providence receives the Audubon mobile nature kits to share with local children.

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rom late February through May, you might be lucky enough to observe one of the most spectacular "dances" of all the shore-birds in Rhode Island. But this unique aerial display will not be found along the coast. Rather, you will need to head inland to look for the American Woodcock in secondary growth forests near a field. Also known as a timberdoodle, bog sucker or a mudsnipe, these plump shorebirds live their entire lives in fields and woods, not by the shore at all.

The American Woodcock has evolved to live inland, with its brown, beige and black feathers that help it camouflage with the leaf litter found in dense young forests. Its eyes are set on top of its head so that it can see 360 degrees, great for detecting predators. Because their eyes are so far back on their heads their brain has evolved to be "upside down." It has a long 2.5 inch bill with sensitive nerve endings that helps probe the soil for worms and insects.

Starting in February and March, Woodcock will start migrating from their wintering grounds in the southern parts of the United States and make their way back to their hatching grounds. This is where the magic begins. Males will find a clearing near the forest called a singing ground. Here he will defend it from other males

by chasing and cackling at them. At dusk and dawn the male will begin peenting, a nasally buzzing sound, from his territorial spot. After peenting for a minute or two, the male will fly up 200 to 300 ft into the air. Then he comes spiraling back down to his spot singing a liquid warbling chuck chip chip as he descends. He will resume peenting once on the ground and start the process again. The males often display until it is dark.

The female often nests within 150 yards of the male's displaying area. He plays no role in the nesting or upbringing of the chicks. She makes a small scrape in the ground where she will lay 4 camouflaged eggs. This is one of the many reasons Audubon doesn't allow dogs on wildlife refuges. Raccoons, dogs and skunks often find and destroy Woodcock eggs. After about 20 days, the eggs hatch and the chicks are precocial or well enough developed to leave the nest after just a few hours. The female helps lead them around and defends them, but the chicks can feed themselves after just a few days. The young Woodcocks are fully grown and flighted in just four weeks. On average a woodcock only lives 1.8 years but some have been known to live up to 7 years. Habitat loss, migration and hunting are all obstacles they have to contend with.

In Rhode Island there are many places you can look for Woodcock displaying. Trustom Pond, the Great Swamp, and Audubon's Parker Woodland and Caratunk Wildlife Refuges are just a few spots they can regularly be found. The birds will display in March through May. Its a sight to see!

Join Audubon for one of our American Woodcock programs in March.

See page 20 or visit asri.org/calendar.



TerraCorps member Nathan Archer planting native species at Audubon's Usher Cove Wildlife Refuge in Bristol.

Poppasquash Forest Habitat Restoration

s part of Audubon's effort to restore native pollinator habitat across the state, Audubon Senior Director of Conservation Dr. Scott Ruhren and TerraCorps service members Ethan Paiva and Nathan Archer planted over 100 native plants along the beach-forest edge of Audubon's Usher Cove Wildlife Refuge in Bristol, RI in early December.

The plants selected are native woodland and coastal species that will help restore the forest understory and are especially beneficial to pollinators, birds and other wildlife. They included many native aster species, wild geranium, goldenrod, several woodland ferns, highbush and lowbush blueberries as well as coastal groundsel bushes. All plants were locally sourced and grown.



Join our team of dedicated volunteers for Audubon Crew Days this summer.

Volunteer Crew Days Begin in March! Support Audubon, Protect Natural Habitat and Have Fun!

o you want to help care for the Audubon trails and greenspaces you enjoy? Get outside and give Audubon a hand at a Volunteer Crew Day! Audubon volunteers gather to cut and remove invasive plants, prune trail and roadside trees, clean litter, weed gardens, and so much more. Corporate and Community Service groups are welcome.

Please register in advance so you can be notified of any cancellations. For details, visit asri.org/CrewDays.



Members gain experience and skills working in the field of conservation.

2024 Youth Conservation League Now Accepting Applications

udubon is looking for high school students, new graduates, and early college students interested in environmental careers, forestry, landscaping, or wildlife biology. The Youth Conservation League work as a team on land conservation and wildlife management projects for partners across the state including Audubon and The Nature Conservancy. Work will include controlling invasive plants, improving wildlife habitat, light carpentry such as signs and fences, native seed collection, community outreach, and more. The work will be intense and challenging, but very rewarding.

July – August, 2024 • Mon–Thurs, 8:00 am–4:00 pm.

Visit asri.org/YCL or contact Laura Carberry lcarberry@asri.org for more information.



Bobcat at Eppley

Bobcats are occasionally captured by trail cams at the Marion Eppley Wildlife Refuge in South Kingstown and Exeter. Typically solitary, quiet, and secretive, bobcats are growing more common in South County. As opportunistic feeders, they patiently wait for small mammals such as rabbits, squirrels, mice, and voles to pass within reach.



AUDUBON NATURE CENTER & AQUARIUM

Ideal for weddings, showers, or the site of your next business meeting or off-site retreat. Located in historic Bristol, RI, just 30 minutes from Providence, Newport, and Fall River, the award-winning Audubon Nature Center and Aquarium is one of Rhode Island's most unique meeting venues. With beautiful trails, exhibits and aquarium, large meeting, reception, and outdoor patio space, the Nature Center provides a setting that will captivate guests.

For availability and reservations, visit asri.org and click on services or contact Anne DiMonti at (401) 949-5454 x3116 or adimonti@asri.org.



CARATUNK BARN

The big white barn at Caratunk provides the perfect rural setting for weddings, showers, family reunions, business meetings, or birthday parties for children.

For availability and reservations regarding weddings and birthdays, visit asri.org and click on 'services.' For all other rental queries, contact Michelle Solis at msolis@asri.org.



Volunteers Are the Backbone of Audubon



ndividuals 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.

By Rebecca Reeves, Stormwater Education and Outreach Coordinator



Jadyn Casper
Watershed Watch and RainSnap Volunteer
Stormwater Innovation Center

University of Rhode Island student studying Wildlife and Conservation Biology, Jadyn Casper volunteers for two water quality programs through the Stormwater Innovation Center (SIC): Watershed Watch and RainSnap.

Jadyn's work monitoring and gathering data for chlorophyll and dissolved oxygen levels in bodies of water at Roger Williams Park has provided valuable field experience for her future career path. She has also volunteered with RainSnap, the SIC's community green infrastructure monitoring initiative. During storms, she braves the rain to take photos and videos of green infrastructure to assess how it is performing. Jadyn says that volunteering with RainSnap has made her realize "how much rain can impact our environment and infrastructure." She has also volunteered at Audubon's Raptor Weekend! We are grateful for Jadyn's contributions to improving water quality in her Rhode Island community.



Laura Maxwell

Stormwater Education and RainSnap Volunteer Stormwater Innovation Center

Tith a home on Mashapaug Pond in Providence since 2004, Laura Maxwell has enjoyed observing wildlife and their behaviors on and near the pond. She has spotted, from her kayak and backyard, everything from Hooded Mergansers and Green Herons to a Bald Eagle.

Laura is on the executive board of UPP|Arts, a grassroots organization that has partnered with artists, scientists, environmentalists, Indigenous communities, young people, and the Audubon Society of Rhode Island's Stormwater Innovation Center to educate our community about urban ponds (upparts.org). As a RainSnap volunteer, she has been able to observe green infrastructure in action and learn about new types of stormwater structures that can help to keep urban ponds cleaner and less prone to harmful cyanobacteria blooms. Thank you, Laura, for your support of the Stormwater Innovation Center!





New! Sensory Friendly Hours

Audubon Nature Center and Aquarium, Bristol, RI

A udubon invites people with Autism Spectrum Disorders and other sensory processing sensitivities to discover nature at the Center with fewer guests, a quieter environment, lower lighting, and no screens. Sensory Friendly hours are offered twice a month.

For dates, details, and to register for a 50-min time slot, visit as ri.org/SensoryFriendlyHours.

A RESILIENT VISION continued from page 15

Quinn says. "To be able to bring people to the refuge and see what Max left for us. It's a legacy that should be honored. I'm so glad to be a part of bringing it back."

The chicken coop will be busy. Quinn is planning on classes for all ages, and in a variety of media. Her plans include plein air watercolor sessions beginning in May, workshops on painting seasonal birds on glasses (beginning with the hummingbird); and both youth and adult weekend sessions of papermaking. She will be offering a journaling workshop for young children, and to honor Earth Day, in April she has scheduled a recycled art workshop during spring vacation.

Carr Pond, and the fields and woodlands on the property will be adding artists to Mays' envisioned list of visitors. Mays' resilient vision prevails —and seems to be growing. And from where Maxwell Mays would be standing, framing with his hand one of his many wildlife scenes, paints at his side, Quinn sees it from an artist's perspective. "I really look forward," she says, "to spending more time on the property, on the fields, quietly painting and reflecting."





Above left to right: Mays's Woods Walk painting of his property. The late Maxwell Mays with painted wall mural in his farmhouse.

Betsy Sherman Walker is a Rhode Island native who writes for area non-profits, news and lifestyle publications, and who has recently discovered the joy of birding. Touch base at walkerbets@gmail.com

SUMMER ON CARR POND

Rent the Charming Maxwell Mays Lakefront Cottage

Perfect for a weekend-get-away or a family vacation, this beautiful wood and fieldstone camp is available May through October.

For details and availability, visit asri.org/services.



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 E. 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.







You Can Give a Child ACCESS TO NATURE

Support Audubon Camp Scholarships and Summer Enrichment in Underserved Communities

REACHING CHILDREN IN THEIR COMMUNITIES

Children engaged at community centers, YMCAs, libraries, and child-care programs all benefit when Audubon brings nature programs to their neighborhoods.

But many community centers and city camps do not have the funding for summer enrichment. Your support allows Audubon to bring these programs to more cities and towns across the state.

CAMP SCHOLARSHIPS

Audubon provides over 100 scholarships for families that cannot afford the cost of camp. Your donation allows even more children to explore forests and streams, search for birds and bugs, and make new friends on our wildlife refuges.

Help Expand Summer Enrichment

- \$150/one program
- \$300/two programs



Send a Child to Summer Camp

- \$350/one week
- \$700/two weeks

SUPPORT OUR WORK



Please visit asri.org/sendakidtocamp

You may also mail a check to:

Audubon Summer Outreach / Camp Scholarships 12 Sanderson Road, Smithfield, RI 02917

Please include your name and address and make check payable to Audubon Society of Rhode Island.

A Super **A Super Challenge**



With the redevelopment of the Superman Building in downtown Providence, Audubon will be working with the owner and contractors to minimize disturbance of the Peregrine Falcon nest site. The camera will stay on, but Audubon will begin to search for a new nesting location in downtown Providence. Watch the Peregrine nestlings at asri.org/view.

Support the Peregrine Webcam

Donate today and support the search for a new nesting location.



Visit asri.org/donate.

Audubon 2024 Wish List

Donate Today and Support an Audubon Project!

Audubon's focus areas include accessibility, biodiversity, and climate resiliency. Choose to fund a single project or make a monthly contribution to support Audubon's 2024 wish list.

2024 Wish List Projects Include:

- Binoculars for community programming
- Monarch butterfly raising station
- Electric equipment for conservation work
- Invasive plant species management

Visit *asri.org/wishlist* for the complete wish list and to donate.





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, DBVW Architects, National Education Association RI, NEC Solar, Partridge Snow & Hahn LLP, Peregrine Property Management, Poseidon Expeditions, RI AFL-CIO, RI Beekeepers Association, RI PBS, 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:

April Alix from Glenn Rawson; Ann Brinton from Diane Greenwald; Jane Case from Donna Medeiros; Jesus Christ from Bonnie Fairbanks; Johnson Family from Celeste Leveillee; Carol Gerold from Christopher Lysik; Pamela Goulet from Susan Synan; Colleen Gregory from Barbara Margolis; Lois Hartley from John Hartley; Anonymous from Matthew Hird; Joe Koger from Sally Godfrey; Dan Lass from Heather, Gene, Brendan & Brittany Walker Susan Cherepowich, Jennifer, and the girls; Butch Lombardi from Nancy de Flon; Spencer & Caroline Martin from Julianna Anthony; Henry Meyer from Leah Loberti; Debbie Mongeau from Deborah Smith; Deron Murphy from Xenia Murphy; Dona Rhines Thomas from Thomas Rhines; IMPACT RI from Megan Serafin; Barbara Seith from Barbara Sherman, Claudia Cooper, Deborah Burke, Marjorie Bradley; Mary Stevenson from Deborah Smith; Audubon Trail Repair from Richard & Betsy Staples.

MEMORIALS

Memorials serve and support the conservation and protection of Rhode Island's environment. 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:

D. Patricia Allen from Mary Heffner; Leigh Anne Bell from Julia Parmentier; John Bruscato from Lois Kyle MacPherson; Florence Butler from Ellen Newhouse; Daniel Elkins from Karen Elkins: Eva "Ann" Gardiner from Doris Defeo: William Gardner from Sandra Gardner; Michael Hadala from Wendy Hadala; Joanne Kennedy from Richard Audette; Daniel Lass from Christine Parker and friends from Flux Marine, Dawn Cacchillo and BHS Sunshine; Juliette Mandeville from Paul Mandeville; Ellen McGill from Nancy Weston-Hill; Christopher Moreau from Keith Moreau; Noella Mosunic from Katherine Vaudrain; Raymond Norberg from Sheila Pittman, Kristen Norberg, Kimberly Hermanowski, Joe Woelfel; James Schaefer from Jonathan Schaefer; Mary Tankovich from Christopher Logenbaker; Peter Tasca from Mary Natale; Daniel Antonelli from Dea and Paul Carcieri and Andrew Antonelli; Charles G. Greenhalgh from Jane and Larry Ransom; Raymond Norberg from James and Jeanette Clark.



PPL Foundation Awards \$15,000 to Audubon's Urban Environmental Education Initiative

he PPL Foundation recently awarded \$15,000 in funding to support Audubon's Environmental Education for Urban Schools Initiative. This grant will help Audubon provide hands-on learning experiences in the field and classroom to Rhode Island students in kindergarten through high school, particularly children in urban areas of Providence, Pawtucket, Central Falls and Woonsocket.



Audubon Receives Funding to Support Bird and Animal Ambassadors

In December, Audubon received \$7,500 from the Rhode Island Foundation's Program for Animal Welfare to purchase food and supplies for our many animal ambassadors. Audubon's popular owls, hawks, turtles, and snakes are permanently injured wild creatures that are unable to be released back into the wild. They are now cared for and have a forever home at Audubon. These popular ambassadors help to educate thousands of people in the region each year about wildlife and biodiversity.

Automatic Doors Make Nature More Accessible to All

e would like to thank the Christopher & Dana Reeve Foundation Quality of Life Grants Program for providing fund-



ing to the Audubon Society of Rhode Island for new automatic electric doors at the public entrance to the Audubon Nature Center and Aquarium in Bristol, RI which helps give greater independence to individuals living with paralysis. Automatic doors allow people with mobility issues to access the Center without needing to physically open traditional doors and are designed with a larger width to accommodate wheelchairs.

The grant program also provided funding for a trailside bench and two accessible picnic tables that will be located on the beautiful grounds at the Audubon Nature Center and Aquarium. Visitors may relax with family and friends at the accessible tables and bench, observe birds and wildlife, and enjoy time outdoors. This grant will provide our community with easier access to nature, truly enhancing all our lives.



Wish List Funding

udubon would like to thank an anonymous donor for generously covering the cost of a number of our pending 2024 projects. This family recognized the positive impact that our wish list items would have on wildlife, the community, and our properties. We simply could not do our work without the support of our community. Thank you!

Important Benefits for Humans and the Developed Environment

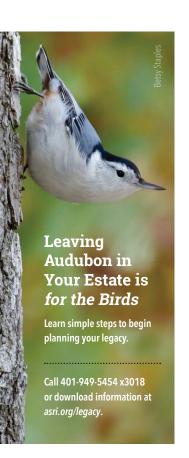
Another point that Hall and Ruhren find worth repeating is the critical roles that land conservation and the natural environment play in terms of enhancing human life - the economic and social assets that are central quality-of-life components. For example, from an economic perspective, land conservation both increases property values in host communities while preventing costs tied to road, water, and other utility and infrastructure projects, that can accompany residential and commercial development.

"Saving our land is more than just a good idea; it's like putting money in the community bank," says Hall. "Sure, it's tricky to put a fixed price tag on all nature does for us but think about it - there is a cost in protecting water quality, public health, and clean air. Nature does this for free. And studies have shown that every dollar invested in saving land is more cost-effective and efficient in shielding us from the effects of a changing climate."

And as evidenced by the recent spate of increasingly common flooding events in Rhode Island, between December 2023 and January 2024, land conservation has an important role to play here, too. According to Ryan Kopp, Director of the Stormwater Innovation Center, flooding, be it from storm events or more gradual sea level rise, is exacerbated by impervious surfaces, like paved roadways and parking lots, because excess water has nowhere to drain. "Anytime you have fewer impervious surfaces, the better your potential is for flood mitigation," says Kopp, adding that the Center implements green infrastructure efforts across the state to mirror this natural activity in developed areas compromised by large amounts of impervious surface. "Any piece of natural environment is going to help in flooding situations like we saw recently in Cranston, Johnston, and Providence, but it's the large tracts, like Congdon Wood and other Audubon properties, that are quite valuable for flood mitigation." Ruhren agrees with this, having noted mid-hike that were Congdon Wood to have been developed, the likelihood is that flood risk tied to the Saugatucket would have increased exponentially, "especially downstream, towards the river's main course."

But no valuation of the worth of land conservation to human ecosystems can be talked about without the simple acknowledgement that, in a very real and direct way, people have, and always will, crave a desire to connect to nature; to be in it, and to benefit from it.

Hall notes that point while hiking toward the exit of Congdon Wood, turning around to take in once more the expanse of snowy woodland. "The thing that I hear all the time, whether it's from our donors, or visitors to our public conservation areas, or our partners, or people out in the community - 'I love being out in nature, I need the birds, I need the wildlife and these natural areas to make me whole," he says. "It's always along those lines, and I feel it too. I think we all do. We all want to feel that vital connection to these wild and conserved places."



Doing the Work and Looking Ahead

With Congdon Wood now officially protected as an Audubon conservation refuge, a new chapter of work ensues for the organization - the significant effort to ramp up avian research and other monitoring efforts while implementing conservation plans to manage and maintain the wildlife refuge.

For Hall, his leadership efforts focus on ensuring that Audubon carries out a comprehensive outreach effort, developing working relationships with the neighboring properties, and collaborating with the owners of abutting or nearby conservation areas to leverage opportunities for all. "While it's not always clear to the public how much effort and resources are needed to successfully manage wildlife refuges, it's a significant investment," Hall explains, "by reaching out to our neighbors and other local groups engaged in land protection, we can hopefully bolster our collective efforts and increase community interest, involvement, and investment in protecting our wild places."

Meanwhile, Ruhren will work from the conservation perspective, initiating research and field work with emerging student scientists headed into the environmental field. "We always engage graduate and undergraduate students in our work as often as we can, because we both benefit," says Ruhren. "We're getting significant assistance with fieldwork, monitoring, and other conservation tasks, and in turn they are receiving the training that they'll need in order to work as scientists in the environmental field."

And as they begin to emerge from the refuge - "Back to civilization," jokes Ruhren - they stop once more to reflect on the generosity of the donors and the work that lies ahead. "What's happened here, with this donation, is truly important, truly unique, and we are just so grateful to our donors for working with us to make this happen," says Hall. "They've done their part, and now Audubon will do ours - creating a strong and effective conservation future for Congdon Wood."

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.

At right: Trails at Fisherville Brook Wildlife Refuge in Exeter. Photo by Richard Staples.

IN THE RIGHT DIRECTION

BILINGUAL TRAIL SIGNS

Coming Soon

This spring, Audubon will install new trail signs at public wildlife refuges that have longer trail systems. Not only do they provide a map with a 'You are Here' mark at specific locations, but trail names and significant habitats will also be identified in English and Spanish.

Audubon is committed to providing safe and welcoming facilities and properties to all Rhode Islanders. Bilingual trail signs are a welcoming way to help visitors feel comfortable on the trails and make nature more accessible to all.

FOOTBRIDGE REPLACEMENT

Eagle Scout Jon Conway from Troop 1 Scituate replaced a footbridge at Powder Mill Ledges Wildlife Refuge in Smithfield last fall with help from others in his troop. The decayed bridge had been built over 30 years ago as a previous Eagle Scout project, so the tradition of service at Audubon continues.

Due to severe flooding, several large footbridges on other Audubon properties also needed replacement or repair this winter. See back cover for details.

ACCESSIBLE BENCHES

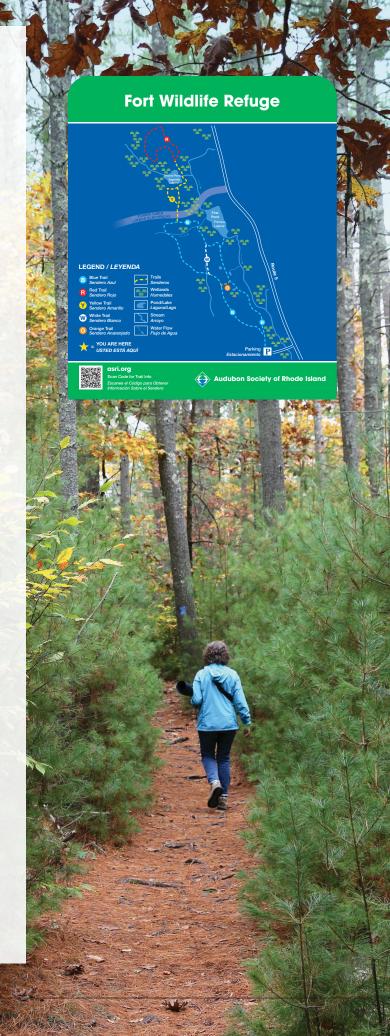
To provide comfortable spots for guests to stop and rest while enjoying nature, Audubon looks to install more accessible benches along the trails at all public wildlife refuges. We thank the following Eagle Scouts for their contributions:

- Eagle Scout Grace Sande: Three benches at Fort Wildlife Refuge, North Smithfield, RI
- Eagle Scout Thomas Lynch: Three benches at Powder Mill Ledges Wildlife Refuge in Smithfield, RI.

If you know of a local scout troop or individual who would be interested in building and installing benches for Audubon wildlife refuges, please contact Laura Carberry at lcarberry@asri.org.









Editorial by Dr. Charles Clarkson, Director of Avian Research

Pretend for a moment that you are a bird. More specifically, pretend that you are a male Yellow Warbler, the most common species of warbler in Rhode Island.

et's assume you have overwintered in the central lowland rainforests of Panama. While you moved about, you have been keeping an eye out for predators of all kinds looking to make you a snack...hawks, falcons, snakes, bats, cats and the like. And... while you've been eating and vigilant, you've also been molting your flight and body feathers, a process that is energetically costly but necessary for the upcoming migration and breeding season.

Finally, when the time has come to migrate north and breed, you fatten up over several weeks, beginning your trip with a non-stop flight over the Gulf of Mexico, a journey of roughly 800 miles with just the fat stores in your body and your muscles powering your wings. Once you reach the shores of the U.S., you drop from the sky and search frantically for enough fuel to replace some of what was used and provide for the next leg of your journey. Again, you go to work searching high and low for insects and spiders...as many as you can find, as quickly as you can find them. You are being compelled to continuously move by two major forces: the first to avoid the suite of predatory animals that have planned for your arrival and the second impulse to get back to Rhode Island as quickly as possible. The earliest birds to arrive in the Ocean State get the best territories, the first mating opportunities, and the ability to nest quickly and re-nest if necessary.

Getting to Rhode Island first means everything.

Over the next few days, you monitor the climate and when conditions are right, under the cloak of darkness you continue your journey. You will repeat this process...migrating all night, stopping during the day to refuel, migrating again, until you reach your breeding site...a shrubby area along the Wood River in western Rhode Island. No time is wasted. You scout the best territory...perhaps it

was the same one you occupied last year. Your time is now spent defending the territory in earnest as new males arrive and attempt to usurp your spot, and you sing from every perch in every corner of your defended area. When females begin arriving, you have to split your attention between attracting the eye of a potential mate and continuing to defend your territory from rival males. Fights and chasing ensues. Some of your neighbors spend so much time fighting that they fail to see the Cooper's Hawk that swoops in or the cat hidden under a bush. Their life ends abruptly. Yours continues...for as long as you remain vigilant.

When at last you have attracted a mate, she gets to work building the nest. You return to the process of defending your territory, taking time away only to forage, preen and copulate. The nesting period increases your workload, as your mate incubates entirely by herself, but you need to find and bring her food...on average 5 times every hour. If you are lucky, your eggs will hatch within 10 days or so, and now you are faced with hungry and naked chicks. Eight days is all you get before they fly from the nest. You and your partner will need to visit the nest thousands of times with beaks crammed full of food for roughly 17 hours each day. If you don't, the chicks won't survive. And all the while, you can't forget to feed yourself, maintain your feathers, your territory and your safety.

Your fledglings enter the most dangerous period of their lives.

You did it. Your chicks have fledged! Well, what's left of them. You lost one chick...eaten in the night, but the rest have survived. Now, your three nestlings are suddenly fledglings and you must accompany them for 20 days as they learn to forage on their own. This is the most dangerous part of their life, with mortality rates skyrocketing. It's not hard to understand why...the fledglings barely know how to fly, they need to learn how to feed themselves, they are not entirely sure what creatures are friend or foe and their reaction time is slow. It is now mid-July. By mid-August you will begin your south-bound migration... time is of the essence.

You lead your fledges through new habitats and expose yourself and your family to all sorts of new threats. You begin to molt, a complete replacement of all your feathers, while your fledges initiate their own molt, replacing many of their feathers as well. This increases your energetic needs. Eat, eat, eat. Eat some more. During this time, you and your fledges will also need to pack on some additional grams of mass for the upcoming migration, so...DON'T. STOP. EATING.

Mid-August arrives quickly. You managed to keep one of your fledges alive. One was taken out by a house cat, the other run over by a car. With just one surviving fledge, you've done nothing to contribute to the growth of your population this year...you will have to try again if you survive. You depart on your southbound migration, leaving your recent fledge and mate behind. They will need to figure things out for themselves.

The non-stop journey across the Gulf of Mexico lies ahead.

You fly south. Stopping only to refuel and rest, keeping yourself alive. Now, the biggest hurdle, the nonstop voyage across the Gulf of Mexico, lies at the very end of your travels. A final slap in the face after working so hard for so long. But, with determination, experience, superior genetics, and an amazing evolutionary history that has shaped you for this very journey, you make it unscathed. As the morning light begins to brighten the horizon, you see Panama ahead...only a few more miles.

You've done it. With any luck, you might live for 6 or 7 years. You will complete this cycle many more times. But for now the insects are ripe for the plucking...just don't forget about all the predators.

OK, you can now stop pretending you are a bird.

Being a bird is not easy. It is not peaceful. It is easy for us to derive peace from looking at birds. They seem graceful and beautiful. But their work is nonstop, and their lives are tough. The very least we can do to ensure their success is to make their jobs as easy as possible...by protecting habitats and resources critical to their needs.

When we help birds survive, we help each other. Learn more about the Audubon Avian Research Initiative. Visit asri.org/AvianResearchInitiative.



SUPPORT OUR WORK

We rely on your generous support to protect and maintain over 9,800 acres of natural habitat for birds, wildlife, and all Rhode Islanders.

Visit asri.org/donate.

