

Rhode Island Department of Environmental Management



**Division of  
Fish and  
Wildlife**

**Annual Report  
2023**

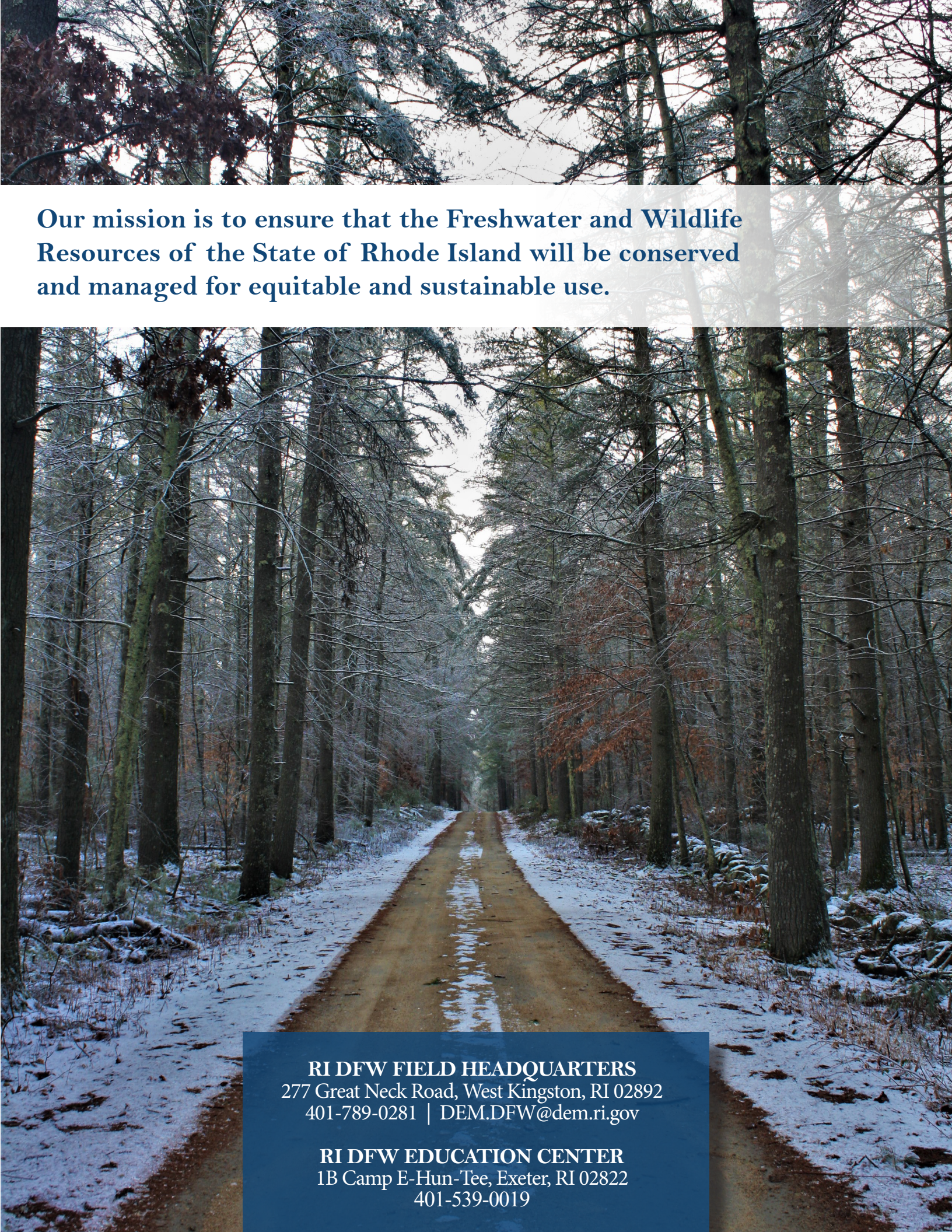


**DEM**  
RHODE ISLAND



*Baltimore oriole, Dean Birch*





**Our mission is to ensure that the Freshwater and Wildlife Resources of the State of Rhode Island will be conserved and managed for equitable and sustainable use.**

**RI DFW FIELD HEADQUARTERS**  
277 Great Neck Road, West Kingston, RI 02892  
401-789-0281 | [DEM.DFW@dem.ri.gov](mailto:DEM.DFW@dem.ri.gov)

**RI DFW EDUCATION CENTER**  
1B Camp E-Hun-Tee, Exeter, RI 02822  
401-539-0019



# A Letter from the Division Chief

Welcome to the RIDEM Division of Fish and Wildlife's annual report for 2023! Over the past year, we have accomplished an enormous amount of work, with only a small sampling highlighted in this report. Numerous fish and wildlife research projects were completed throughout 2023, including the completion of a three-year research study on brook trout movement and habitat selection in streams with high summer water temperatures and physical barriers. We also completed a human dimensions survey entitled "Rhode Island Residents' Attitudes Toward Wildlife, Interactions With the Agency, and Experience With Human-Wildlife Conflicts" partnering with Responsive Management. **The report showed that 75% of RI residents spend some time recreating outdoors and almost, 90% of those surveyed stated they enjoy seeing wildlife, and that fresh air and mental health are primary reasons for being active outdoors.**

The Division continues to work on fish and wildlife habitat improvement projects. Highlights include the preliminary stages of a saltmarsh improvement project at the Galilee Bird Sanctuary in Narragansett. Thus far work involves the completion of an engineering report and work will continue to address marsh degradation through runneling (hand dug trenches) and recalibration of tide gates. Other salt marsh restoration efforts are under way at Sapowet Marsh, and another plan is in the final stages for work at Succotash Marsh. All three of these projects will benefit waterfowl and other coastal bird species. In addition, prescribed burns within management areas continue to be utilized as a tool to improve shrubland habitat. We have continued efforts to improve fish passage throughout the state, steadily chipping away at the large number of obstacles fish face in moving throughout our state's watersheds.

Our outreach and education staff connected with thousands of Rhode Islanders in 2023. Many popular programs were brought back, and new opportunities were developed. One of our most exciting community engagement projects this year was the Rhode Island Bumblebee Survey (RIBS). This project included 46 Division volunteers who surveyed a total of 50 sites across Rhode Island once a month from April – October, collecting data on over 2,000 bumblebees for the state's first comprehensive bumblebee survey! Diamondback terrapin surveys were conducted by 17 Volunteers who contributed 251 hours this year in the quest to locate and monitor diamondback terrapin sites along the coast. These keen-eyed volunteers identified a new state nesting site as well as spotting turtles in a couple of new locations. These new finds are a win for enhancing turtle conservation in our state! The Aquatic Resource Education program partnered with the Rhode Island's USFWS National Refuge System to obtain the state's first "First Catch Center" from the Recreational Boating and Fishing Foundation. The First Catch Center included a wrapped trailer along with both freshwater and saltwater fishing equipment. To date, the equipment was made available at 7 events involving 933 participants.

The Great Swamp Shooting Range was utilized by approximately 2,700 sportshooters and archers this past season! We pulled off another successful Women's Day at the Range event in partnership with The Federated Sportsman, with 43 women in attendance. We are thrilled to have continued our partnerships with the Matt Light Foundation for the spring youth turkey hunt and Ducks Unlimited for our fall youth waterfowl hunt.

As in past years, the Division worked on acquiring new land for hunting, fishing and conservation activities, but also worked hard to maintain, protect, and conserve existing state land. The trout and pheasant stocking programs were successful in 2023 and due to the favorable water level conditions and available fish this fall, DFW hatchery staff conducted a Columbus Day and Veteran's Day stocking along with additional fall stockings.



I hope you find the 2023 annual report informative, and I encourage everyone to participate in Rhode Island's outdoor activities whether it's fishing, hunting, hiking or boating!

Sincerely,

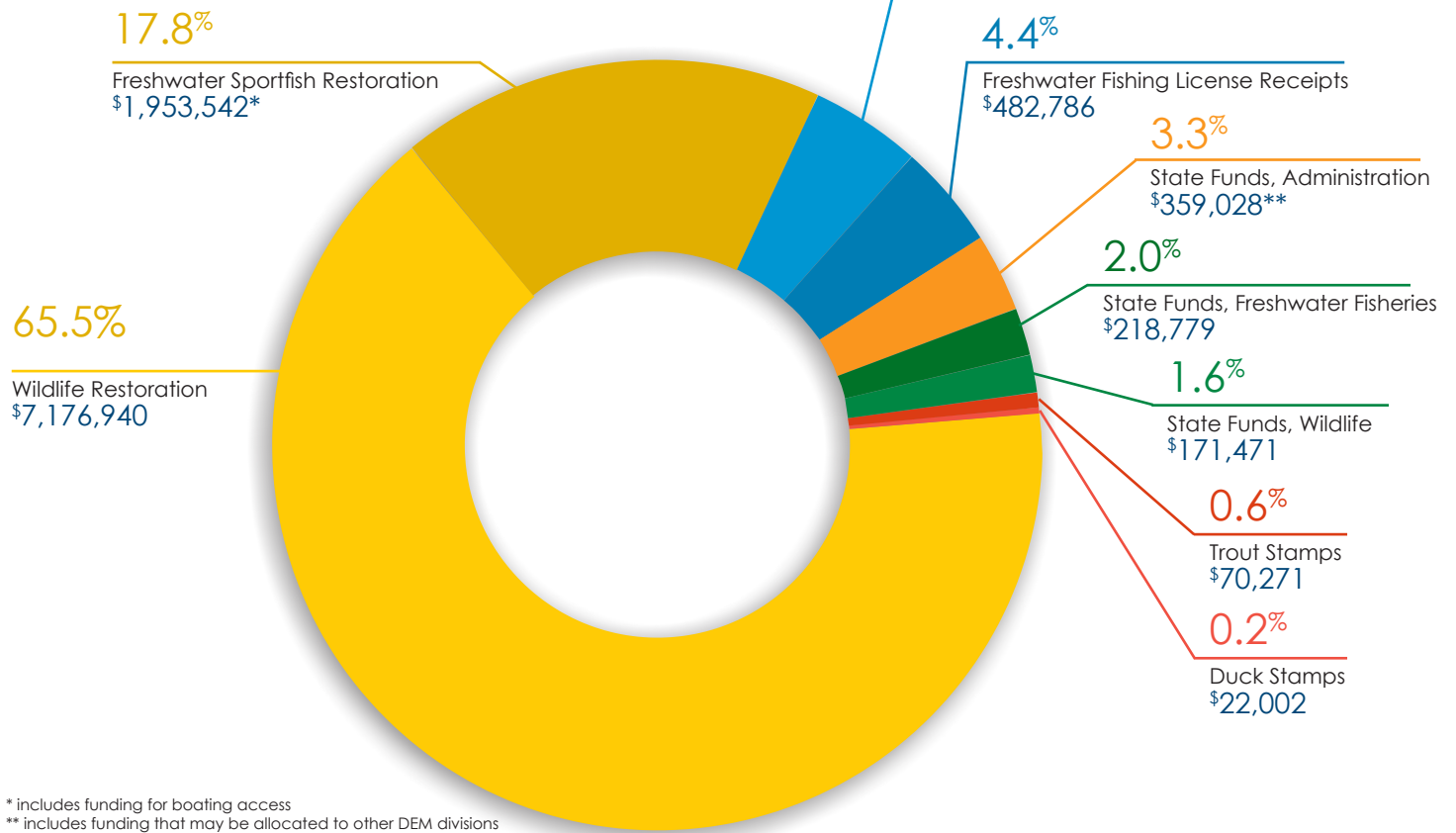
**Phil Edwards**

*Division Chief*

*RIDEM Division of Fish and Wildlife*

# Year in Review

## DEM DIVISION OF FISH & WILDLIFE FUNDING BY SOURCE



## OUTDOOR LICENSE SALES (2022-2023)

### HUNTING LICENSES SOLD

Resident Hunting License .....	2,917
Non Resident Hunting Licenses	1,472
Resident Hunt/Fish Combo .....	2,886



ALL HUNTING LICENSES  
FEBRUARY 1 TO JANUARY 31

7,275



DUCK STAMPS

1,785



RESIDENT FRESHWATER FISHING LICENSES  
MARCH 1 TO FEBRUARY 28

17,379



TROUT STAMPS  
MARCH 1 TO FEBRUARY 28

14,124



# OUTDOOR EDUCATION & VOLUNTEER PROGRAMS

## AQUATIC RESOURCE



CLASSES  
118



HOURS SPENT  
2,150



PARTICIPANTS  
10,300

## HUNTER EDUCATION



CLASSES  
58



HOURS SPENT  
2,029



PARTICIPANTS  
408



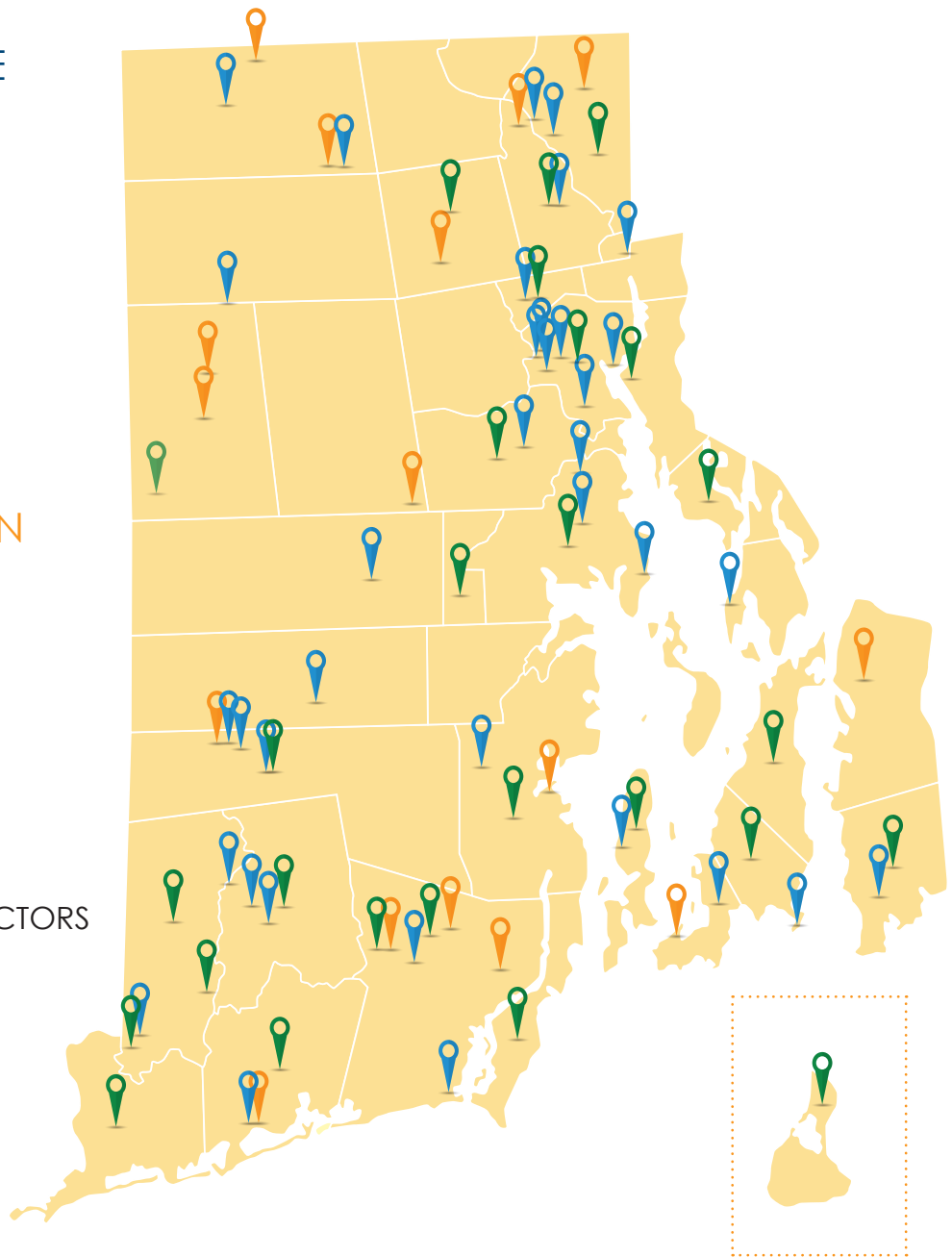
VOLUNTEER INSTRUCTORS  
52



MILES  
8,716



IN-KIND MATCH  
\$134,019



## WILDLIFE OUTREACH



PROGRAMS  
35



STUDENTS  
673



HOURS SPENT  
84



TOWNS  
31



PARTICIPANTS  
1,134

## VOLUNTEER PROGRAM



PROJECTS  
27



MILES  
29,465



HOURS SPENT  
3,806



IN-KIND MATCH  
\$113,512



VOLUNTEERS  
>215





# Our Division consists of...

**17 State Full-time Employees**

**27 Contract Full-time Employees**

**26 Seasonal Employees**

**267 Volunteers**

We are immensely grateful to our partner organizations, volunteers, and Rhode Island's sportsmen and women for your support and assistance. Without you, we would not be able to accomplish our work in stewarding our state's fish and wildlife species, protecting critical habitats, and educating the public. Thank you!







# Aquatic Resource Education Programs Create New Connections

*By Kimberly Sullivan, Aquatic Resource Education Coordinator*

## Fly Fishing with The Vet Center

In 2023 the Division's Aquatic Resource Education (ARE) Program extended its partnership with The Vet Center by offering an "Introduction to Freshwater Fly Fishing" workshop for veterans. On a very rainy Saturday morning in June, 23 veterans learned how to tie flies, cast, and what to bring for a successful fly fishing day on the water. They then had the opportunity to apply those skills alongside one of the ARE ponds located at the Carolina Trout Hatchery. Instructors from Trout Unlimited, United Fly Tyers of Rhode Island, and Rhody Fly Rodders, many of them veterans themselves, were on hand to help participants learn the art of fly fishing. The Introduction to Fly Fishing program was in addition to other events held in conjunction with The Vet Center this year, which included a Come Clam with Me workshop and a surf casting program in partnership with Narragansett Surf Casters. Next year, the ARE Program hopes to include more events like these for the veterans of Rhode Island!



## Rhode Island's First Catch Center

In 2023, the ARE Program partnered with the Rhode Island's USFWS National Refuge System to obtain the state's first "First Catch Center" from the Recreational Boating and Fishing Foundation. Spearheaded by the Refuge System, Rhode Island was the first refuge system in the Northeast to receive the wrapped trailer complete with both freshwater and saltwater fishing equipment. The purpose of the trailer is to easily provide partnered fishing programs to Rhode Islanders across the state with a focus on urban areas. This year alone, the equipment was made available at 7 events involving 933 participants!





# Trout Research Guides Future Restoration

*By Corey Pelletier, Fisheries Biologist*

In 2023, the Division completed a 3 year research study on brook trout movement and habitat selection in streams with high summer water temperatures and physical barriers. This study provided insight on how Brook Trout select habitat and move when water temperatures reach stressful and even critical temperature levels, yet are constrained by barriers. Findings indicated that despite physical barriers eliminating upstream movement potential, brook trout were able to find cool water when ambient stream temperatures were high, but for several individuals, this required significant downstream displacement. Furthermore, in streams which remained cooler, brook trout consistently selected for deeper water and close proximity to physical cover. In streams with high water temperatures, brook trout selected for cooler water temperatures and distance to cover, but selection for depth was diminished. These findings will help to prioritize potential project locations to reduce water temperatures and limit summertime displacement of brook trout and also to help guide successful restoration practices. A publication is currently being prepared to submit to the Transactions of the American Fisheries Society.



The Division has also continued our Trees for Trout program, a collaborative project with the Rhode Island Chapter of Trout Unlimited. Two new conifer revetment structures were constructed in 2023 on the Falls River in Exeter, Rhode Island. These structures will provide short term physical habitat for small fishes and in the long term, collect fine sediments and promote habitat complexity. The Division has also continued working with various partners on grant funded projects for feasibility studies for dam removal and connectivity improvement and project implementation.

## New Software Makes Volunteering a Breeze!

*By Jennifer Brooks, Volunteer Program Coordinator & Division Bat Biologist*

This year the Division launched our new volunteer management software, Better Impact, to our volunteers! The software provides volunteers with a portal where they can register to volunteer, sign program waivers, and record their time and mileage to be submitted for in-kind match. With volunteers donating thousands of hours across nine grants, Better Impact has been a game-changer in reducing the amount of staff time dedicated to entering volunteer time and mileage records, which were traditionally required to be submitted via signed paper forms and manually entered into a database. This software was carefully selected to assure that it is in compliance with USFWS requirements for digital in-kind recording and has saved staff countless hours of data entry and greatly reduced our use of paper. Volunteers also enjoy the ease of using the Better Impact smartphone app! With the app, volunteers can enter their time and mileage after they complete their service or utilize the timeclock option to punch in and out of their shift. Better Impact has been a win for staff, volunteers, and the environment by reducing our carbon footprint!



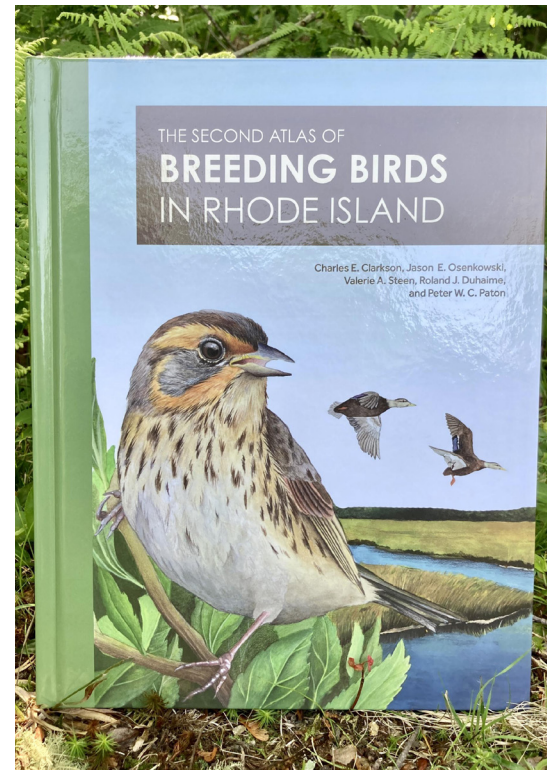
# New Publication Looks to Future of Bird Conservation in RI

By Jay Osenkowski, Deputy Chief, Wildlife Section

The Division is proud of the highly anticipated release of *The Second Atlas of Breeding Birds in Rhode Island!* This effort was a community science project aimed at mapping the distribution and abundance of bird species within the state. The project was conceived and initiated by the Division in collaboration with the University of Rhode Island. An astounding 200+ volunteers assisted with the project that spanned a period of 5 years.

The hardcover book was released in June 2023, over 30 years after the publication of RI's first bird atlas, 1982-1987. The second atlas detected 173 breeding species, including 11 species not previously documented during the 1980s effort, such as common raven, winter wren, common eider, and black vulture, as well as the notable bald eagle and peregrine falcon. Species such as upland sandpiper, least bittern, magnolia warbler, Nashville warbler, and common nighthawks seem to have disappeared during the breeding season in RI.

This publication is a marvelous compilation of bird inventory work and a wealth of modern distributional information for RI. These data will assist in informing and directing actions such as land acquisition and habitat management by state, town, and NGO partners. With the completion of this project, RI is well positioned in addressing the contemporary needs and conservation concerns of all breeding birds in Rhode Island.



Did you know that the Division of Fish and Wildlife has several other publications for sale?

- *Inland Fishes of Rhode Island*
- *Amphibians of Rhode Island*
- *Dragonflies and Damselflies of Rhode Island*



Purchase your copy here!



# Statewide Survey Results Are In!

*By David Kalb, Supervising Wildlife Biologist*

The Division recently completed several Statewide surveys to better inform staff about the values of our constituents. The first, completed two years ago was focused on all those who hunt within Rhode Island and the results were posted online. The second, which we just completed in November, was a survey to all Rhode Island residents regarding their feelings about the Division, their interactions with the Division, and about interactions with wildlife. The survey “Rhode Island Residents’ Attitudes Toward Wildlife, Interactions With the Agency, and Experience With Human-Wildlife Conflicts” was completed by Mark Duda and Responsive Management. The Responsive Management team has over 30 years experience working in 15 countries and all 50 states; they are renowned for their quality surveys in the wildlife profession.

Some of the highlights are that at least two thirds of RI residents spend at least some time (~25 minutes) in natural areas recreating (hiking, running, hunting, swimming etc.) on a regular basis! The median travel time from home to residents chosen outdoor recreation site was only 15 minutes. Most residents (87%) also enjoy seeing wildlife in their backyards. Residents ranked getting fresh air and mental health as some of the top reasons why they elect to recreate outdoors. Most residents (71%) agree that the Division can be trusted to manage the states wildlife resources and their habitats and 75% feel that we are a trusted source for information regarding wildlife topics.

The survey also provided areas for Division staff to work on. Many residents were not fully aware of where the Division’s budget comes from, but more than 40% of residents felt that it was not enough for what we do. Nearly 25% of RI residents would like to learn more about hunting and fishing skills. Finally, while only 21% of residents had experienced conflict with wildlife in the last two years, we would like to see that number decrease as we continue to provide outreach and education opportunities to Rhode Islanders. We anticipate continuing to survey hunters and the RI public into the future to ensure that the Division is meeting the needs of RI.



*View the results of the “Rhode Island Hunters’ Attitudes Toward Hunting and Wildlife Management” survey here.*





# Recent Regulatory Changes Improve Access and Clarity

By David Kalb, *Supervising Wildlife Biologist*

The wildlife section of the Division passed some really exciting and important regulations in 2022-23 regulatory cycle. Our goal is to continue to increase access, increase opportunity, and increased hunter success. These three factors will constantly improve hunter satisfaction with their sport and ensure that there is opportunity for new members to feel welcome during the harvest seasons. Several new parcels of land were added as public access for hunters in RI, 5 of which were in Bristol township specifically for deer hunting. Bristol has had the highest rates of deer vehicle collisions in RI for several years. The hope is that increased harvest over time will bring a balance to the growing deer numbers and decrease vehicle collisions. Additionally, harvest opportunities were improved for small game. Game bird hours were adjusted for pheasants to provide consistency and clarity; now all small game hunting opens at sunrise and goes to sunset.

Finally, one of the best feelings as a hunter is recovering your game. Knowing the harvest will make its way to the kitchen table is a top priority for RI hunters. This year, DFW passed regulations that allow deer hunters to use the aid of a dog to assist in recovering deer that were fatally wounded. As one of the last states to pass these regulations in the country, we were able to glean the best aspects from other regional states; examples for success and specific rules for the use of dogs were all laid out in their regulations. Annually, the Division is looking for ways that we can improve the rules and decrease the complexity of our regulations to increase their comprehension to the average hunter in the state. If you have comments or suggestions, please reach out to [David.Kalb@dem.ri.gov](mailto:David.Kalb@dem.ri.gov).

## Dragonflies and Damselflies Dazzle Event Attendees!

By Mary Gannon, *Wildlife Outreach Coordinator*

This summer, the Wildlife Outreach Program offered a new outdoor learning opportunity as part of our annual guided field program series: The Summer Dragon Hunt! On a hot, muggy July morning, a group of all ages trudged along the trail at the Great Swamp Wildlife Management Area, bug nets in hand, searching for dragonflies and damselflies, collectively known as odonates. Leading the walk was Virginia (Ginger) Brown and Nina Briggs, author and illustrator of *Dragonflies and Damselflies of Rhode Island*. Ginger and Nina enthusiastically shared their knowledge of these incredible insects, expertly swooping their nets through the air and catching individuals for an up-close look. The crowd gasped in awe at vibrant colors and jewel-like iridescence, marveling at the intricate differences between species. The highlight of the walk was when Ginger spied and captured a swamp darner, the largest dragonfly in North America! All left the swamp that day smiling and full of an enhanced appreciation for these insects and their conservation importance. An enormous thank you to Ginger and Nina for sharing their time and expertise for this unique program!

The Summer Dragon Hunt was added to our 2023 lineup based on frequent requests from program attendees when asked in our feedback form what they'd like to learn about next. Do you have an idea for a new outreach program? Email [Mary.Gannon@dem.ri.gov](mailto:Mary.Gannon@dem.ri.gov) to share your ideas! Keep an eye on our website for more upcoming events in 2024!



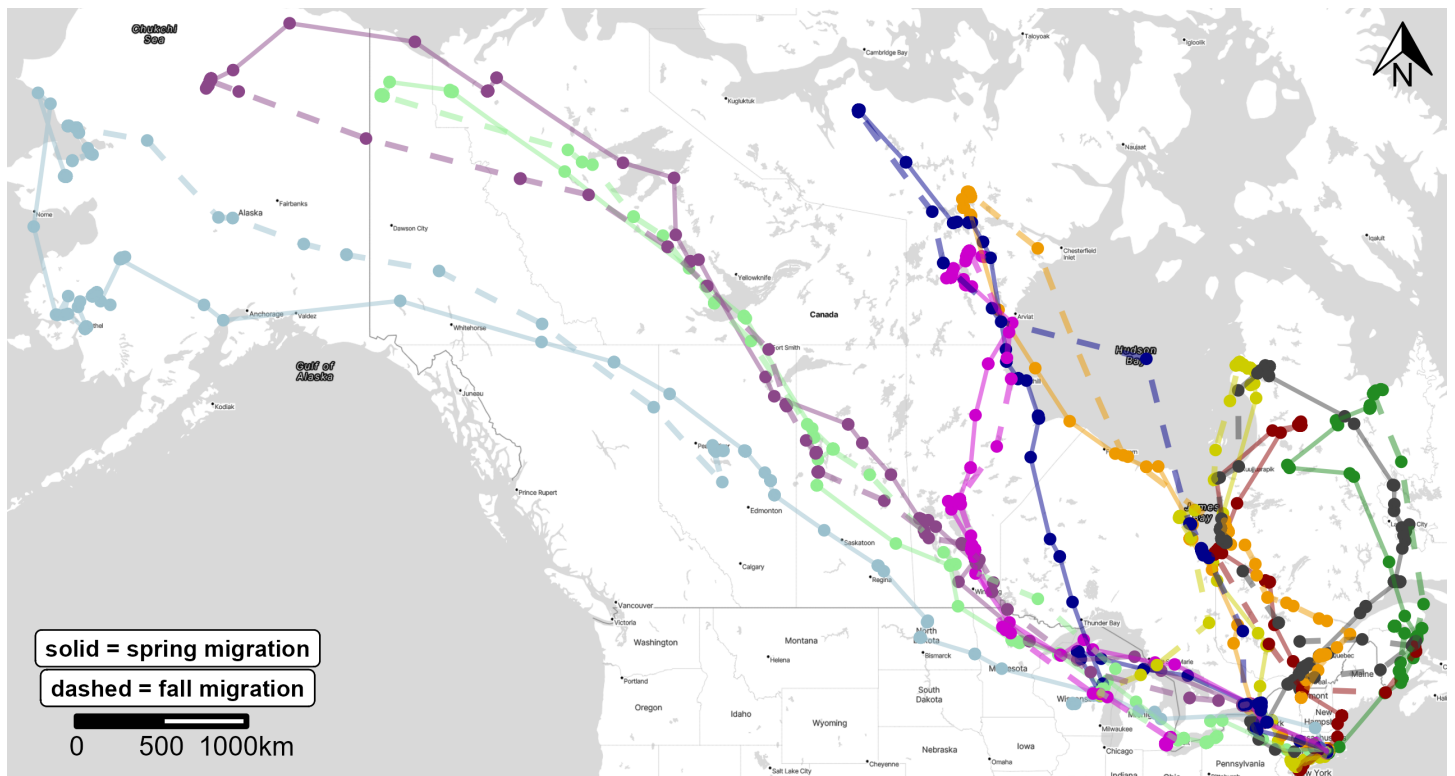
*Bluet damselfly, Joseph Klinger*



# Collaborative Waterfowl Project Sheds Light on Seasonal Movements

By *Tori Mezebish Quinn, PhD Candidate, University of RI*

During February and March 2023 DEM biologists in partnership with researchers at the University of Rhode Island captured greater scaup across Narragansett Bay to deploy implanted GPS transmitters. This work comprises a portion of the graduate research of University of Rhode Island PhD candidate Tori Mezebish Quinn, advised by Drs. Scott McWilliams and Peter Paton. We tracked 20 greater scaup through the duration of the winter and into the beginning of their spring migrations. Birds remained in Rhode Island for 24 days on average following capture and transmitter deployment (range = 3 – 43 days) and moved among multiple areas where scaup are known to congregate, rather than remaining only near capture locations. Average date of spring migration initiation was 22 March 2023 (range = 07 March – 09 April 2023). Because the transmitters rely on the cellular network to transmit data, all 20 went “quiet” for the summer while birds were on remote breeding grounds in the tundra. As of December 2023, ten individuals have made it far enough south on their fall migrations to re-enter cellular networks and begin transmitting data again. Only one bird has returned to Rhode Island, with all other birds that are actively transmitting data staging on and around the Great Lakes. During the breeding season, these birds spread across the entirety of their known breeding range, in northern Alaska, Yukon, Nunavut, and Quebec. These data will help us understand and manage the areas and habitats that are most important to greater scaup during the winter in coastal Rhode Island as well as across the annual cycle when these birds move across the continent.



Photos: *Tori Mezebish Quinn & Peter Paton*



# Rhode Island Fisher Study Updates

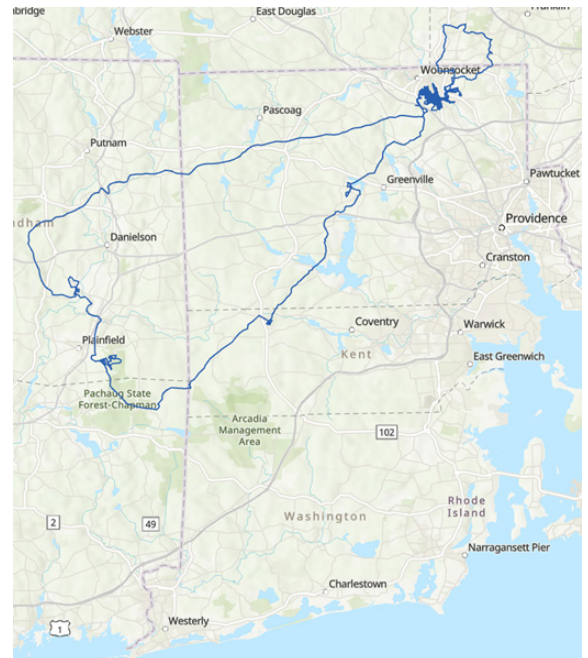
*By Laken Ganoë, PhD Candidate, University of Rhode Island*

The Rhode Island Fisher Study (RIFS) began in 2020 to learn more about our furry and misunderstood neighbor, the fisher, in Rhode Island. The project is a collaborative effort between RIDEM and the University of Rhode Island to understand where fisher are living in the state, what are some barriers to their movement, and to get a general idea of how the population is doing.

For the past 3 years we have been collecting millions of trail camera images and have tracked 56 fishers with GPS collars. We've had some amazing opportunities to get to know these animals and find out their personalities. We even had one young female fisher who was caught in Cumberland Hill travel over 100 miles in search of a new territory, only to return back to where we caught her in time for her to have her kits. She did all this in just 2 weeks!

Sadly, for us biologists who rather enjoy being in the woods over sitting behind our computers, we have finished catching animals and running our trail camera stations. However, we are now in the final phases of the project and are beginning to discover some neat things about our Rhode Island fishers! We found evidence that fishers are becoming less common in the state and that they really prefer those places with lots of cover for them to hide and hunt.

In addition to studying fisher, we are able to also use our trail camera data to study coyotes, bobcats, and foxes – oh my! We are currently looking at how human development (especially roads), changes in the forest as a result of the spongy moth outbreak in 2015-2017, and climate are impacting all these species in Rhode Island. The information we collect will be helpful to the Division in understanding population trends and informing subsequent management decisions of our Rhode Island carnivores.



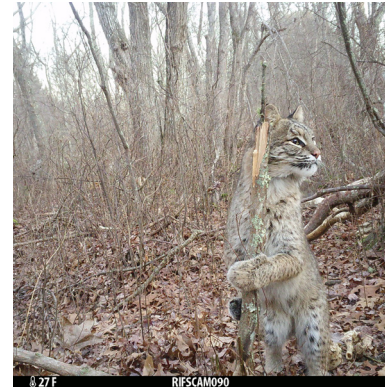
*Left: The 2023 RIFS field crew with our final fisher capture of the project. This was a young male, M23 (Quint) who was caught in North Kingstown in early March. (Left to right: Julie Müller; Laken Ganoë, Amy Mayer)*

*Right: Map of F15's (Peaches) tracks in the spring of 2022, making her 114 mile loop into CT and back.*

*Top: A male fisher waiting at the bottom of a pine tree for his mate, who was being radio-tracked by Laken. The female was at the top of the tree!*



Trail cameras were set up to aid in trapping fisher for this study, but they also captured some fantastic snapshots of other wildlife! This additional information helps our biologists understand the distribution of other mammals across RI.





# “Tiny But Mighty” Land Acquisition

*By John Veale, Habitat Biologist*

**Connectivity:** Twelve letters that can have an outsized impact on how and where management occurs in a state as densely developed as Rhode Island. It was with this theme in mind that the Division purchased a small parcel of property nestled in between Big River Management Area, a parcel owned by the town of West Greenwich, and the Fisherville Brook Wildlife Refuge owned by the Audubon Society of Rhode Island. In doing so, we were able to connect the properties and make a large, contiguous 9,000 acre tract of conservation land running for nearly 8 straight miles, spanning 3 towns with minimal road crossings – all within a short drive of one of the most densely populated areas of the state.

The property itself can be found along Widow Sweets Rd in both West Greenwich and Exeter. It totals 60 acres, abutting West Greenwich town land to the west and Fisherville Brook Wildlife Refuge to the east. Walking through the property paints a familiar picture of Rhode Island’s forests and land use history. Gently rolling topography creates several low dry ridgetops containing beech stands, lichen and exposed ledge, with low deciduous forested wetland areas between them. The wetlands and ephemeral pools held within these low spots are a fantastic breeding site for wood frogs and other amphibians. Mixed coniferous and deciduous forests containing white pine, red and white oak and several species of maple give way to evidence of the human land use history of the parcel. As is so often the case, stone walls cross the property in many areas and rock piles placed with intention are present throughout, giving a glimpse into how those who came before us may have used it. Along with amphibians, white-tailed deer, turkeys, small game animals and a host of songbirds, woodpeckers, and raptors call this parcel home.

When compared to the neighbors it connects, this parcel is small and constitutes a narrow constriction when looking at all of them collectively. It punches far above its weight, however, in its ability to forever connect these great conservation lands and provide passage for wildlife between them. Places like this are few and getting fewer as the wheels of progress churn towards development, construction, and human infrastructure. Conserving this land parcel in perpetuity is an accomplishment that should be recognized, and hopefully repeated whenever possible. Maybe it’s the unofficial “Tiny but Mighty” motto we as Rhode Islanders adopt, but the ability of 60 acres to create 9,000 acres just puts a smile on my face.





# Second Annual URI Mentored Waterfowl Hunt

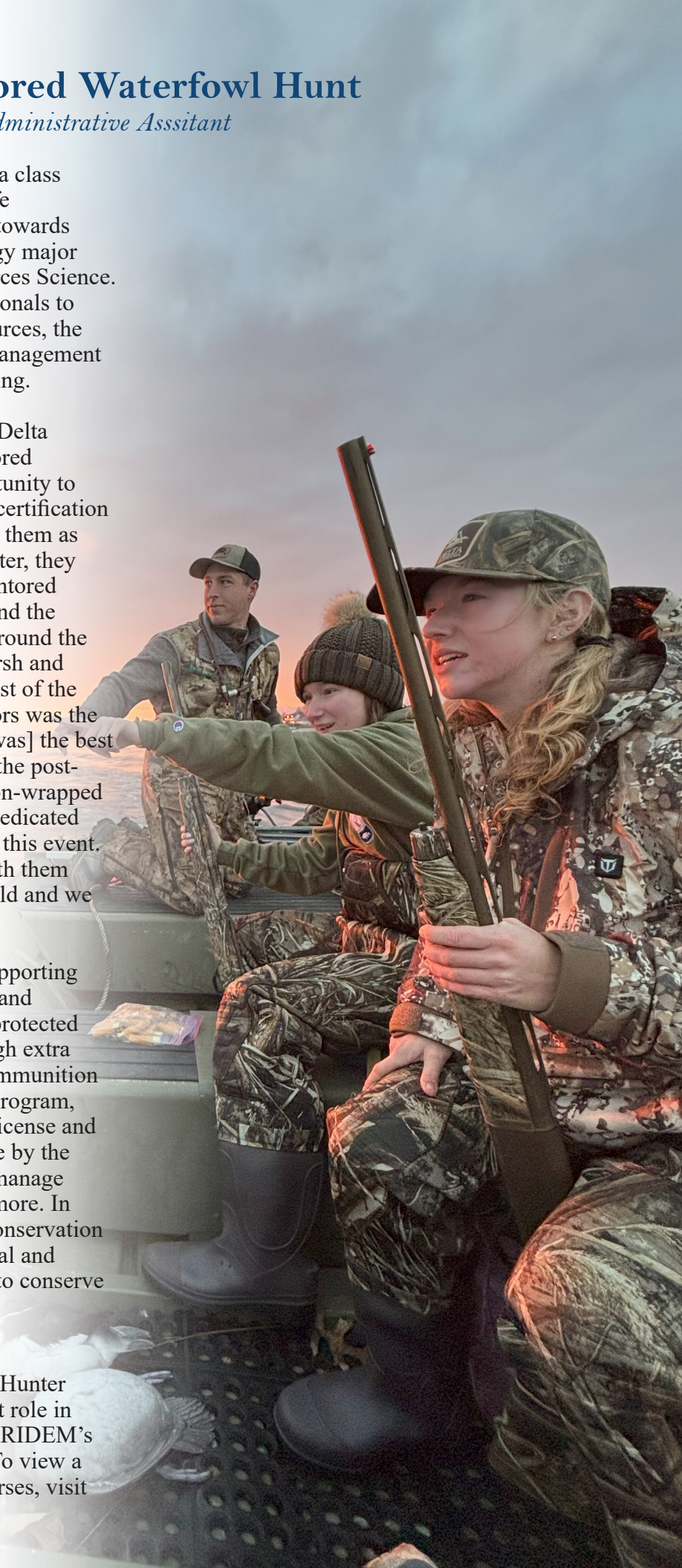
*By Madison Proulx, Outdoor Education Administrative Assitant*

This is the second year the Division has offered a class at the University of Rhode Island (URI), Wildlife Conservation and Hunting. The class is catered towards undergraduate Wildlife and Conservation Biology major students in URI's Department of Natural Resources Science. The class is designed for future wildlife professionals to gain knowledge of Rhode Island's wildlife resources, the North American Conservation model, and the management of natural resources through sustainable harvesting.

In December 2023, the Division partnered with Delta Waterfowl to host the second annual URI Mentored Waterfowl Hunt. Twelve students had the opportunity to complete an extended Hunter Safety Education certification course as part of their fall curriculum, certifying them as safe and ethical hunters. At the end of the semester, they put those learned skills to the test during the mentored waterfowl hunt sponsored by Delta Waterfowl and the Division. The groups hunted various locations around the state, from geese in a cornfield to ducks in a marsh and on Narragansett Bay. It was the first hunt for most of the students, and pairing up with experienced mentors was the key to success! Some students reflected “[This was] the best class I have ever taken!” during the morning of the post-hunt meetup while chowing down on some bacon-wrapped duck bites. The Division thanks everyone who dedicated their time and efforts scouting and preparing for this event. We hope these students carry this experience with them throughout their future careers in the wildlife field and we can't wait until next year!

Hunting has a long tradition in Rhode Island, supporting family customs, connecting people with nature, and attracting tourism to the state. Hunters provide protected funding for wildlife conservation projects through extra taxes placed on their purchase of firearms and ammunition through the Wildlife and Sportfish Restoration Program, and through the purchase of their state hunting license and permits. These funds are distributed to each state by the federal government and used to conserve land, manage habitat, restore wildlife populations, and much more. In this way, hunting plays a huge role in wildlife conservation in Rhode Island. Without the contribution of legal and responsible hunters, RIDEM would not be able to conserve and protect our state's wildlife.

Don't plan to hunt but are interested in wildlife conservation? Everyone is encouraged to take a Hunter Safety Course to learn about hunting's important role in wildlife conservation and providing funding for RIDEM's broader network of wildlife restoration efforts. To view a complete list of hunter education and safety courses, visit [www.dem.ri.gov/huntereducation](http://www.dem.ri.gov/huntereducation).





# In Search of Spadefoots

By Sarah Riley, Chief Implementation Aide

The Eastern spadefoot toad (*Scaphiopus holbrookii*) is an amphibian species considered both a Species of Greatest Conservation Need (SGCN) and the only State Endangered amphibian in Rhode Island. Their specific habitat needs, unique life histories and elusive behaviors require specific monitoring strategies and conservation efforts. Beginning in 2019, the RIDEM Division of Fish & Wildlife began conducting night surveys to identify and collect data from known populations, as well as strategic monitoring efforts across current and historical breeding sites throughout the state. The extent of this program's success is in large part thanks to the collaborative efforts with several conservation and research organizations such as the USFWS, University of Rhode Island, Roger Williams Park Zoo, and many Land Trusts.



Spadefoot toads are so named for the spade-like digit on their hind feet which allows them to burrow backwards into the ground during periods of inactivity, such as during the day, dry weather, or during brumation (hibernation) in the late fall through mid-spring. During the breeding season, these toads come out at night to feed and potentially breed during heavy rainstorms when small, temporary pools of water form, allowing a short window for them to lay their eggs. If conditions are right and the pool doesn't evaporate too quickly, those eggs will hatch and metamorphose into "toadlets" before other species of amphibians can establish and eat all of the eggs, tadpoles or toadlets. Spadefoots are one of the fastest metamorphosing amphibians in North America, and this niche has allowed them to remain in areas that many other predatory species call home. So far, a few established populations have been identified and tracked for the last several years. And as of 2023, a new population of breeding individuals was identified.

Spadefoots, like almost all amphibians face mounting threats to their populations and habitats. Human activity, habitat loss and fragmentation, disease, and climate change pose challenges in an ever-changing landscape. Due to the highly specialized habitat requirements and environmental conditions required for spadefoots, their populations have greatly contracted from what was historically a much wider range across southern New England. It is crucial that the Division continue to monitor these and other amphibian species to evaluate their current populations, and illuminate trends and conservation effort needs in Rhode Island.

During spadefoot toad surveys, environmental data is collected, and if individuals are found the following data is collected: GPS coordinates, sex and age when determinable (if it is a female, whether or not she has eggs), length, weight, and if there are any additional signs of disease or abnormality. If they meet the right criteria, individuals may also be given an individual tag to help identify them if they are found in the future, thus providing crucial information about their whereabouts for months, or even years. This year, several toads both male and female, were recaptured from previous seasons!







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