MEET THE
EASTERN
COYOTE!
DID YOU KNOW?

We do a lot of work to protect, conserve, and learn about Rhode Island’s wild creatures and the places they call home. None of this work would be possible without the help of people who hunt and fish in our state. Hunters and anglers buy a license each year. This license means that they promise to follow all the rules of hunting and fishing in Rhode Island. These rules exist to protect our important natural resources and make sure that people can enjoy hunting and fishing in our state forever. Also, the money from these licenses goes towards important conservation work in Rhode Island.

There’s another really cool way that hunters, anglers, and also target shooters (people who may not hunt, but practice their aim with firearms or archery at a range) help with conservation all across the United States. The businesses that make firearms, ammunition, archery equipment, and fishing equipment pay a tax on these items. This raises millions of dollars, which is split up and given to each state by the United States Fish and Wildlife Service.

What do we do with all this money? We use it to help our state’s fish and wildlife! This money helps to buy more land for our management areas, which means more habitats will be protected in our state forever. We also use the money to do important research to learn more about our fish and wildlife, and what we can do better to help them.

Much of our work wouldn’t be possible without the help of our hunters, anglers, and target shooters. By participating in these types of outdoor activities in a responsible and safe way, you can help support fish and wildlife conservation in Rhode Island too!

CONTACT US

RI DFW FIELD HEADQUARTERS
277 GREAT NECK ROAD, WEST KINGSTON, RI 02892
401-789-0281 | DEM.DFW@DEM.RI.GOV

RI DFW EDUCATION CENTER
18 CAMP E-HUN-TEE, EXETER, RI 02822
401-539-0019

DIVISION OF LAW ENFORCEMENT
24HR VIOLATION LINE: (401) 222-3070

Want to learn even more about RI’s fish and wildlife?

Follow us on
YouTube and Instagram!

@RI.fishandwildlife

Rhode Island Department of Environmental Management

IN THIS ISSUE

Habitat Chat
Don’t Feed the Wildlife! .................. 3
Maddie’s Outdoor Adventures
Fall Hiking ................................ 4
Critter Cam ................................ 5
Smells Fishy News
Meet the Macroinvertebrates .... 6
Our Wild Neighbors
Eastern Coyote ......................... 7
Out in the Field
Keeping Up With Coyotes .......... 8
Wild Quest ................................. 10
Critter Cards ............................. 11

This program receives federal funds from the U.S. Fish and Wildlife Service. Regulations of the U.S. Department of the Interior strictly prohibit unlawful discrimination in departmental federally assisted programs on the basis of race, color, national origin or ancestry, gender, sexual orientation, age, or disability. Any person who believes he or she has been discriminated against in this program, activity, or facility operated by this recipient of federal assistance should write to: The Office for Equal Opportunity, U. S. Department of the Interior, Office of the Secretary, Washington, D. C. 20240

The Wild Rhode Island Explorer  |  Fall 2021
Writer/Editor: Mary Gannon
Cover photo: Ed St. Germain
Inside cover photo: Mike Stultz
Contributors: Madison Proulx, Gabrielle DeMeillon, Kim Sullivan, Numi Mitchell

The Wild Rhode Island Explorer
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
277 GREAT NECK ROAD, WEST KINGSTON, RI
401-789-0281 | DEM.DFW@DEM.RI.GOV
24HR VIOLATION LINE: (401) 222-3070

This program receives federal funds from the U.S. Fish and Wildlife Service. Regulations of the U.S. Department of the Interior strictly prohibit unlawful discrimination in departmental federally assisted programs on the basis of race, color, national origin or ancestry, gender, sexual orientation, age, or disability. Any person who believes he or she has been discriminated against in this program, activity, or facility operated by this recipient of federal assistance should write to: The Office for Equal Opportunity, U. S. Department of the Interior, Office of the Secretary, Washington, D. C. 20240

The Wild Rhode Island Explorer  |  Fall 2021
Writer/Editor: Mary Gannon
Cover photo: Ed St. Germain
Inside cover photo: Mike Stultz
Contributors: Madison Proulx, Gabrielle DeMeillon, Kim Sullivan, Numi Mitchell

The Wild Rhode Island Explorer
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
277 GREAT NECK ROAD, WEST KINGSTON, RI
401-789-0281 | DEM.DFW@DEM.RI.GOV
24HR VIOLATION LINE: (401) 222-3070

This program receives federal funds from the U.S. Fish and Wildlife Service. Regulations of the U.S. Department of the Interior strictly prohibit unlawful discrimination in departmental federally assisted programs on the basis of race, color, national origin or ancestry, gender, sexual orientation, age, or disability. Any person who believes he or she has been discriminated against in this program, activity, or facility operated by this recipient of federal assistance should write to: The Office for Equal Opportunity, U. S. Department of the Interior, Office of the Secretary, Washington, D. C. 20240
Don’t Feed the Wildlife!

While sitting at the park on a sunny summer’s day, you and your friends share some snacks. Everyone’s laughing and having fun when suddenly, a little squirrel hops across the grass and sits at the edge of your picnic blanket. He stares at you with his beady eyes and sniffs at the snacks. You hold out a cracker with some peanut butter on it. The squirrel takes it with his little paws and starts crunching away. You and your friends laugh. He’s so cute!

Feeding a squirrel in the park might seem harmless, but feeding wildlife of any kind can cause lots of problems for both people and animals. The squirrel in our imaginary story wasn’t afraid of people, he just walked right up and waited for a snack. That’s a clue that he has been fed by people before. Now, whenever he sees people, he thinks, “Free food!” Any wild animal can be trained to think that way. When it’s a squirrel, it’s cute. But would you feel the same way if a coyote walked up to you, waiting for you to toss him a snack?

Encouraging wild animals to get close to people can be dangerous for both people and animals. When wild animals get too comfortable around people, it puts humans at risk because wild animals can carry diseases that can make us sick. Getting close to and even touching a wild animal is not a good idea. It’s best to enjoy watching animals from a safe distance. On the flip side, when animals get too used to being fed by humans, they lose their natural fear of people. This could lead to animals crossing roads more often, which puts them at risk of being hit by a car. Eating food that they normally wouldn’t eat in the wild is unhealthy for animals and can make them sick. For example, birds can get very sick and even die from eating bread, which can get stuck in their stomachs. It also makes them rely on humans for food, instead of finding their own food in the wild.

It is against the law in Rhode Island to feed wild animals on purpose. You might not be feeding animals on purpose, but did you know that you might be feeding them by accident? Trash cans, compost piles, and pet food left outside are all examples of things wild animals are happy to munch on. Make sure your trash and compost are safely kept in a bin with a lid. Try not to feed pets outside, but if you do, make sure to take in the food bowls at night when most critters are active.

Let’s work together to keep our wildlife WILD!

What’s up with this goose’s wing? This is a condition called “angel wing.” It’s caused by the bird only eating bread when very young. Bread doesn’t give birds any nutrients, so their bodies do not grow properly. Sadly, this bird won’t be able to fly.

Photo: Audrey, CC BY 2.0
MADDIE'S OUTDOOR ADVENTURES

Fall Hiking

The cool crisp air is here! Let’s go hiking! Here are some tips for a safe and fun hike:

**STAY TOGETHER:** Be sure to always head out with a responsible adult and a group of people. Never hike alone, always stay in sight of the group and wait if you walk too far ahead.

**SHARE YOUR PLANS:** Make sure to tell someone that is not part of your hiking group where you will be going before you go and when you plan to be back, in case you get lost.

**BRING FUEL:** Always bring extra food and water, more than you think you’ll need. Encourage everyone to stay hydrated. Make water break stops frequently on your hike and refuel with some trail mix or a granola bar! It is a good idea to carry a safety whistle along with your snack pack.

**PREP FOR FIRST AID:** Make sure to bring a first aid kit with your group! If someone gets injured on your hike you will be prepared!

**CHECK THE WEATHER:** Make sure you are prepared if the weather changes! It is a great idea to bring rain gear and extra clothes to make sure you are covered for all weather scenarios. Dress in layers. It is always better to bring too many layers than not enough. You can ALWAYS take layers off if you get too hot, but make sure you will be warm first and foremost. Handwarmers are a good idea as well if the weather is a bit chilly.

**BE THE ORANGE POLICE:** Make sure everyone is wearing daylight fluorescent orange in your group! Vests, baseball hats, and beanies are all good options. All users of state wildlife management areas and undeveloped state parks are required to wear at least 200 square inches of solid fluorescent orange during the hunting season. It MUST be solid, fluorescent (safety) orange, worn above the waist. This is to make you visible to others using the management area and to keep everyone safe.

For more detailed information visit: [http://www.eregulations.com](http://www.eregulations.com)

About the Author

Hi everyone! My name is Maddie; I am the administrative assistant at the Outdoor Education office. I have the best job ever because I encourage people to go explore the great outdoors! I love to practice archery, learn about wild game animals (turkeys are my favorite), go fishing, and cook up seafood with my family! I did not grow up in a hunting family, so I relied on RIDEM Hunter Education programs to learn and to connect me with awesome mentors who helped me get to where I am today. I am still learning and growing, and now I am here to help you do the same!
CRITTER CAM

About our trail camera study:

A trail camera is a small, waterproof camera that can be strapped to a tree. It takes photos when it senses something moving in front of the lens. We’ve teamed up with wildlife biologists from the University of Rhode Island to learn more about our state’s mammals with trail cameras. A whopping 248,743 photos were taken during our bobcat project! We are currently working on new projects studying beavers, muskrats, otters, and fisher.

“This stick tastes good!” These gray foxes were caught on camera while sniffing out what’s called a scent lure. This is a super stinky liquid that wildlife biologists use to catch the attention of any critters in the area. When the animals walk up to the smelly spot to investigate, the camera snaps their photo!

Under the cover of darkness, one of Rhode Island’s most secretive creatures is caught on camera…the Northern flying squirrel! Flying squirrels don’t really “fly.” They actually use flaps of furry skin connecting their front and hind legs to gracefully glide from tree to tree.

UPCOMING EVENTS

Did you know that we have lots of events and classes where you can learn outdoor skills like archery, fishing, and first aid?

Follow us on Facebook or Instagram to check out more upcoming events!

Visit dem.ri.gov/fishwildlife for more info and to sign up!
Did you know that several flying insects that seem to suddenly appear in the spring and summer started their lives in the water?

Just like butterflies, several insects such as dragonflies and mayflies go through complete and incomplete metamorphosis. The eggs are laid in the water, hatch, and then enter either a pupae or larval stage all while in the water. When they are ready to become an adult, they emerge from the water, shed (or molt) their exoskeleton (the hard, outer layer of an insect) and dry out their wings. Once their wings are dry, they can take flight!

Biologists are extremely interested in these insects during their watery larval stages because they not only provide food for frogs, salamanders and fish but they can also predict the quality of the water! A mayfly larva can only survive in the water if there is a lot of oxygen and very little pollution. A mosquito larva, on the other hand, can survive in water with very low oxygen and a lot of pollution. Biologists refer to organisms that can predict water quality as benthic macroinvertebrates, which just means critters without a backbone that crawl on the streambed floor and can be seen with your eyes. To help figure out stream quality, biologists sort them into three main groups:

**GROUP 1**
No pollution  
Lots of oxygen

**GROUP 2**
A little pollution  
Lower oxygen levels

**GROUP 3**
Pollution tolerant  
Low oxygen levels

---

**About the Author**
Kim works as the Aquatic Resource Education Coordinator for RI Fish and Wildlife. Kim loves teaching Rhode Islanders about our state’s aquatic creatures, water quality, and how to fish. One of her favorite programs is the Come Clam with Me workshop!

*Photos: Creative Commons -- Bob Henriks, golocalprov, Charles J. Sharp, Judy Gallagher, Brad Carlson, John Douglas, Dave Huth, Katja Schulz, David Hoffman, Donald Hines*
HABITAT: Coyotes are happy to live in lots of different habitats. In Rhode Island, you can find them in forests, fields, suburban neighborhoods, and even in the city! In other parts of the US, coyotes also live in prairie and desert habitats.

BREEDING: In Rhode Island, coyote mating season runs from December through March. Pups are born in the spring. Between 4-7 pups are born in each litter. Females nurse the pups during the first 2 weeks, until their eyes open. Both parents care for the pups and take turns leaving the den to fetch them food. Pups venture from the den around 3 weeks and gradually explore greater distances, eventually joining their parents to find food. Coyotes are fully grown at 9 months old and will either remain with the pack or find their own territory.

FOOD: Coyotes are not picky eaters! They are omnivores. Their natural diet includes rabbits, squirrels, small rodents, fruits, and berries. They will also eat things like food scraps in the garbage, pet food, compost or carrion (dead stuff). They can hunt deer, but usually only prey on fawns. It’s much easier for a coyote to pick food from a trash can than it is for them to hunt, even though it may not be the healthiest for them. The more food resources that coyotes can easily pick up from neighborhoods and trash cans, the larger the packs may be. Lots of easy-to-gobble-up food means more pups in each litter!

DID YOU KNOW?
Coyotes originally were only found in the Great Plains region of the US. As settlers moved westward across America, they brought farm animals with them, and dumped their trash along the wagon trails. Coyotes took advantage of these food resources, and began to spread out across the country. Here in New England, the settlers killed all of the gray wolves that once lived in our forests. This left open a spot in our local ecosystem for a top predator, which the coyote has now filled.

Want to learn more about coyotes? Visit www.coyotesmarts.org or check out RIDEM’s “Understanding the Eastern Coyote” guide at www.dem.ri.gov/wildlife.
Mary: Hi Numi! There are lots of interesting animals in Rhode Island. Why did you decide to track and study coyotes in particular?

Numi: Coyotes expanded their distribution into Rhode Island in the 1960s but didn’t reach the islands I live on (Aquidneck Island and Conanicut Island, also known as Middletown and Jamestown) until the mid-90s. My friends and neighbors were aghast as they started to become very common very quickly. The Conservation Agency wanted to help, and I had an idea that I thought might work. We knew that coyote abundance was controlled by how much food they are getting. More food equals more pups being born. We decided to use GPS collars and tracking to figure out what food sources might be making them so abundant.

Mary: Coyotes are very smart, so it must be tricky to catch them to get a tracking collar on them. How do you catch the coyotes you are studying?

Numi: You have to think like a coyote! They are very wary because they have been hunted by people for hundreds of years. You have to make the trap look very inviting. We find that really stinky smells and bird feathers are irresistible to coyotes. They have to investigate and forget about being suspicious about the traps.

Mary: Once each coyote has a collar, how long do you track them for? Do you have to catch them again to take the collar off?

Numi: About one year. At the end of the year, the collars drop off automatically. They have timers inside.

Mary: What kind of information do the tracking collars collect?

Numi: Most importantly, the collars show us where the coyotes go to feed. They show when they do, how fast, and how many times they visit. In this way, we can find out what food sources are important to them. In the wild, they eat meadow voles, fruit, and deer. In urban and suburban areas, pet food left outdoors, garbage scraps, and sometimes small pets become a part of their diet.

Mary: When you are looking at the map with all of a coyote’s

Hi everyone! My name is Mary Gannon. I am the Wildlife Outreach Coordinator for RI Division of Fish and Wildlife. One of my favorite parts of my job is sharing information with people about all of the cool wildlife projects we are working on! We partner up with a bunch of other groups to study our state’s wildlife. Today, I’m chatting with Dr. Numi Mitchell from The Conservation Agency. Numi leads the Narragansett Bay Coyote Study. Let’s learn more about the work she is doing on coyotes!
out in the field GPS points, what catches your attention? What are you hoping to discover about a coyote’s movements around Rhode Island?

**Numi:** We’re looking for feeding hotspots. These are areas where the coyotes’ lines of travel meet up. This lets us know what food resources are important to coyotes in the state.

**Mary:** Where are you currently tracking coyotes in the state?

**Numi:** We are doing trapping and GPS tracking in Providence, East Providence, West Greenwich, Jamestown, and Newport.

**Mary:** What is your favorite thing about your job?

**Numi:** I love discovering new things about animals, not just coyotes. One day I watched an opossum pick up straw and sticks, carefully push them under her stomach with her paws, and grab them with her curled up tail. I guessed she was going to use the bundle she collected to make a nest for babies. I didn’t know they carried stuff that way!

**Mary:** And lastly, what is your favorite wild Rhode Island critter? Other than the coyote, of course!

**Numi:** I happen to be very partial to gray tree frogs!

**About Numi**

Numi (pictured here with coyote project assistant, Kyle Hess) is a biologist specializing in the study of resource and habitat use by wildlife. She usually troubleshoots endangered species problems. The coyote project is her first project in which management issues concern a species that is too successful, which is an interesting challenge. If you’d like to contact Numi about coyotes in your area, you can email her at numi@theconservationagency.org or call 401-300-HOWL (4695).
Wild mammals are mostly shy and secretive. Unless you’re lucky, you probably won’t see too many mammals when you’re walking through the woods. But, you can look for a certain clue that a mammal has been in the area: Scat!

Scat is another word for...poop! Believe it or not, you can identify an animal by its poop. Shape, size, and any leftover food are all good clues. If you are out in the woods and find some scat, look at it and make some observations, but please don’t touch it. Wild animals can carry diseases, and touching their poop could make you sick.

Put on your wildlife detective hat and see if you match the animal with its scat! Answers are on the back cover.

Photos: URI WGEL, USFWS, Dawn Martin, Alex Feuti, Liam Corcoran, Charles Brown, Fritz Flohr Reynolds
Rhode Island is home to many different wild animals. Some are very common and easy to spot. Others are rare and hard to find. Some are doing great and have healthy populations, while other species are threatened or endangered. At the Division of Fish and Wildlife, we’ve created a list of Species of Greatest Conservation Need (Marked as SGCN on the cards). We focus a lot of our work on helping these species. We do this by studying their populations, protecting special habitats, and spreading the word about these cool critters.

Cut out and collect these Critter Cards to learn about Rhode Island’s wildlife species!

**Eastern Coyote (SGCN)**

I play an important role in the ecosystem as a predator and scavenger. I’m very smart, but sometimes I am a bit lazy. Hunting for rabbits, squirrels, and deer is a lot of work. If I come across a free buffet of leftovers, trash, or pet food, I’m super happy! I also don’t understand the difference between a pet cat and a woodchuck when it comes to hunting for my dinner.

**Which actions will help me?**

As much as I love picking through garbage cans for leftover pizza, it’s really not the best for me. Take a look outside at home, and see if there’s anything there that might catch my attention. Make sure to take it away or put it somewhere I can’t get to it. Don’t let your pets outside alone, especially at night. Also, if you see me and I look curious, make lots of loud noise to scare me away. I need to remember that I shouldn’t get close to humans!

**Eastern Box Turtle (SGCN)**

I’m different from other turtles because I’m not really a swimmer. I spend most of my time in forests, fields, and shrublands. My beautiful, patterned shell can close like a box, which protects me from predators. Some box turtles have been known to reach 100 years old!

**Which actions will help me?**

Protecting habitat is the most important thing for me. When habitat is broken into small chunks, it means I must cross dangerous roads to get from place to place. If you see me crossing the road, please carry me to safety in the direction I was heading. Also, never take me home as a pet! This is very bad for turtle populations.

**Least Bittern (SGCN)**

Carrion (dead stuff) is my favorite food! It might sound gross to you, but the ecosystem needs important decomposers like me to recycle nutrients and keep things clean. I once lived in 35 states, but now you can only find me in Oklahoma, Arkansas, Nebraska and Rhode Island. The RI population is actually the largest in the country and can only be found on Block Island. I’m also our state insect!

**Which actions will help me?**

It’s important to protect the habitat in the places where I can still be found. There’s been a lot of work done to help me on Block Island with help from a bunch of folks from The Nature Conservancy, Roger Williams Park Zoo, US Fish and Wildlife Service, and the RI Division of Fish and Wildlife.
TO: Wild Quest Answers
1. River otter
2. Bobcat
3. Coyote
4. White-tailed deer
5. Black bear