ISSUE II SPRING 2021 WILD RHODE ISLAND

MEET THE ALEVIER

Also, learn about fish ladders, spring turkey hunting, being responsible while out fishing, and how you can become a volunteer citizen scientist!







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!

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

Follow us on YouTube and Instagram!

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@RI.fishandwildlife

Rhode Island Department of Environmental Management

🕨 YouTube

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HABITATT GHATT

Fish Can Climb Ladders?

Spring is a special time of year for river herring (a group name we use for two species, the alewife and blueback herring). It is the time where adult herring migrate from ocean water and head upriver to spawn in the freshwater. Herring are known as an anadromous fish. **Anadromous** fish are born in the freshwater, travel to the ocean to grow and become adults, and then return to the freshwater to **spawn**, or reproduce. Many fish species are anadromous including American shad and Atlantic salmon.

But what happens when a dam is built and the fish cannot reach the stream where they hatched and need to return as adults? In the 1700's, when there was no electricity, colonists built small dams in order to harness water energy to power their small grist mills and eventually larger dams to

power machinery for the textile mills like Slater Mill in Pawtucket. While the dams helped create jobs for people, fish were no longer able to reach their birth streams and many species failed to live in Rhode Island waters, such as the Atlantic salmon.

The good news is that some very smart people realized that you can have both dams and a fish passage where fish could access those streams that they need to survive. Fisheries scientists and engineers worked together to create **"fish ladders"** where fish would be able to climb up the



At the bottom of the dam, you can see the opening to the fish ladder. Fish will swim up the ladder so they can get to the top of the dam and continue on their way. The ladder is covered by a metal grate to protect the fish.

dam through a series of wooden boards, similar to steps on a ladder. The fish ladders created a small flow that invited the adult fish to go over each step, rest in a resting pool, and continue to the top of the dam. Depending on how large the dam was, the ladder could be either short or long. As time has gone on, the fish ladders have improved the fish passage experience and engineers have become more creative developing different types of **fishways**. Some of these fishways mimic nature. They use natural rocks instead of concrete and boards.

So, as you pass over a stream or river in Rhode Island, take a look. Is there an old dam there? Maybe you can see one of the many fish ladders that have been built across Rhode Island to help anadromous fish reach the top of the dam!

Tis the Turkey Season

Springtime is the most popular time for turkey hunters. Why? Spring hunting lines up with the wild turkey mating season, where male turkeys, called toms, can be lured in with calls that mimic the sound of a hen (female turkey). Before you hunt wild turkey, you first need to know how to find them! Here are some fun ways to scout for turkey, as well as essential tips and safety skills! **Before venturing out into the woods, scouting or hunting, ALWAYS be sure to ask an adult and never go alone.**

1. Scout for turkeys in their favorite

habitats: In Rhodé Island, turkeys live mostly in mature oak-hickory forests. They can also be found on farms and in suburban/ urban communities. Remember, you can't scout or hunt on someone else's property without permission, and you can't hunt in neighborhoods and cities for safety reasons!

2. Be a turkey detective: Look for turkey scratches where they seek food. During spring, they like fresh green sprouts, buds, and insects! The damper the leaves, the newer the scratches. Molted (shed) feathers are a good clue too.

3. Check for tracks: Look for large tracks in sandy or muddy creek beds, roadbeds, or logging roads. Female (hen) turkey tracks average 4 ½" and males (gobblers) can be up to 6"! Turkeys have three toes in the front, and a shorter toe in the back that sometimes doesn't show up in the footprint they left behind.

4. Know the difference between toms and hens: Hens usually do NOT have a beard (sometimes can have a small beard). They do not have spurs on their legs and have lighter edged body feathers. Toms have a beard and spurs. Their body feathers are darker and have a polished, colorful edge. Their heads are also very colorful!

5. Learn to talk turkey: To hunt turkey in Rhode Island, you are required to have a turkey calling device. There are many different types. Practice these calls in your spare time to increase your skill level out in the field. 6. Blend into the forest: Wild turkeys have incredible eyesight! You will want to wear a good camo pattern to blend in with your surroundings while turkey hunting.

7. Be respectful: NEVER crowd another hunter while out in the woods. Always be respectful of others and give each other space.

8. Don't dress like a turkey: Never wear the colors red, white, and blue while out in the woods during turkey season. These colors can be mistaken for a male turkey's head. Not safe!

9. Stay in one place and be patient: Never stalk or sneak up on a turkey. Only call them to you!

10. Follow all rules and be safe: ALWAYS make sure to have the proper hunting licenses and tags and check with an adult before going out anywhere in the woods!

Pro-tip: Check out the <u>"Let's Talk Turkey"</u> <u>video</u> on the Rhode Island Department of Environmental Management's YouTube page to learn about the different types of turkey calling devices and what they sound like!

Have a question about how to become a turkey hunter? Email Madison.proulx@dem. ri.gov or call our Hunter Safety Education Office at 401-539-0019.



About the Author

Hi everyone! My name is Maddie; I am the secretary 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!

CAPTION THIS PIC! Send your captions to mary.gannon@dem.ri.gov

We were hoping to learn more about Rhode Island's mammals with our trail camera study. It seems like this robin thought it was a project on birds!

Shi



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.

"SMELLS FISHY" NEWS

Responsible Fishing

FOLLOW LAWS AND REGULATIONS!

It is important to know the laws and **regulations** before you go out fishing. They help protect fish species to prevent them from being overfished and making sure they can grow up to be healthy enough to reproduce. That means more fish for the future! The regulations will also tell you what kind of aquatic species you can fish for and what you can't.

Did you know that you cannot take plants or fish from one pond and put them into another? It's illegal because it may spread bacteria and disease. It could also cause the spread of **invasive species**.





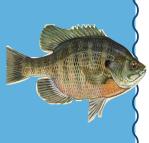
TAKE OUT WHAT YOU BRING IN!

Everyone should do their part to keep our natural areas clean. Birds and other wildlife can get tangled in used fishing lines that people don't bother to throw away. Other trash can make normally beautiful areas look ugly! Litter can also endanger wildlife. Used gum wrappers, plastics, and other types of litter can be a choking hazard to all sorts of animals. A great saying to remember is "Always leave the area cleaner than you found it!"

BE THOUGHTFUL TO OTHERS!

If you are at a pond where others are fishing, be sure to provide them with enough space. You don't want to stand right next to someone and not give them any room to cast their line.

Avoid fishing in the same spot that someone already has. If you see someone has their line in the water at a certain location make sure you cast your line in another area, this way everyone is sharing the body of water and you don't have to worry about your line getting tangled with someone else's. Only fish on private property if you have the landowner's permission.



TAKE CARE OF THE FISH!

When fish are out of the water they cannot breathe, so it is important to put them back quickly. If you need help and are waiting, keep the fish in the water until help arrives. When placing fish back, gently toss them or place them in the water. They are not frisbees or baseballs!

Before touching a fish, wet your hands. Fish have a slime layer that protects them from bacterial and fungal **infections**. If your hands are dry you have a greater chance of removing it. Wet hands will simply glide over the slime layer. Handle the fish only as firmly as is needed to avoid dropping it. Do not squeeze the fish hard. That will only harm it. Being responsible when having fun outside, whether you're fishing, kayaking or doing any outdoor activity, will make sure that you have done your part to keep nature clean, healthy, and enjoyable for years to come. Thank you!

About the Author

My name is Dana, and I am the Technical Assistant at the Division of Fish and Wildlife Outdoor Education Office. I love fishing, mainly fly fishing, and fly tying. A big part of my job is helping people learn to fish. My favorite part is when someone catches a fish, especially if it's their first!

OUR WILD NEIGHBORS ALEWIFE

Habitat ∉ Breeding: Alewives are anadromous fish. This means they spend most of their lives in the ocean, and migrate up freshwater streams and rivers to spawn, or lay their eggs. The water has to be at least 51 degrees. Once the eggs hatch, the baby fish make their way back to the ocean. They stay out in the ocean for 3-5 years before returning to their home rivers to spawn. The migration from the ocean to the rivers happens in the spring. Blueback herring also look almost the same as alewives, but begin their migration upstream a little later when the water warms up some more.

Did you know?

<mark>Scientific name:</mark> Alosa pseudoharengus

> Alewives used to "run" up the streams of North America in the millions, which made the water look silver! Because of **overfishing** and the building of **dams** that blocked their migration paths in rivers and streams, alewife numbers dropped. Because of conservation work here in RI and in other coastal states, we're starting to see alewife return. Turn the page to learn how you can help these fishy friends by volunteering with the RI Division of Fish and Wildlife!

> Food: Alewives eat tiny fish, shrimps, and copepods, which are tiny creatures that float around in the water. Alewives are an important food source for birds, seals, otters, and other fish that people like to eat, like cod, haddock, and tuna!

OUT IN THE FIELD Count Me In!

Hi Everyone! My name is Gabby De Meillon and I am the Technical Outreach Assistant for the RI-DEM Division of Fish and Wildlife. I help get the word out about the amazing projects underway by our biologists and assist Jennifer Brooks, our Volunteer Coordinator, in getting the public involved in conservation in the state! Let's check in with Jennifer to see what she has been up to this spring!

Gabby: Hi Jennifer! Can you tell our readers what you do as a Volunteer Coordinator?

Jennifer: Here at the RI Division of Fish and Wildlife, we have so many different projects going on with all kinds of animals such as, deer, turtles, herring, ducks, and bats, just to name few! Because our biologists have the great responsibility of managing and protecting many of Rhode Island's wild creatures, they often need extra help. I help match volunteers to those projects and these volunteers help us in many different ways! Some volunteers help us by counting the number of animals they see during a survey, others listen for bird calls or put identification bands on geese. We also have volunteers help us remove invasive plants from an area so that new plants that provide more wildlife food and shelter can take their place. Every spring we have volunteers helping with one of our longest running volunteer efforts: herring counts!

Gabby: Wow! It sounds like volunteers are really important! Can you tell me a little more about herring counts? Is counting herring hard?

Jennifer: Not at all! Herring volunteers are taught by our staff during one quick training. After that, volunteers can visit one of our several herring count locations any time during

the survey period and count all the fish that they see go upstream for ten minutes. Volunteers also record the water temperature with a thermometer that we provide and let us know if the water at the site looks high or low. Anyone can volunteer to be a herring counter! There are a couple of sites with age restrictions, due to the setup of the counting area, but we do have sites that allow people of all ages to count. We just ask that anyone who is doing a count spends the full ten minutes looking directly at the water for arriving fish. Volunteers need to be patient and focused, so they don't miss any fish swimming by!

Gabby: What a great way to spend ten minutes! I love watching fish swim by, but why is it so important to monitor herring specifically?

Jewifer: Herring are very important to the marine ecosystem. They provide food for marine mammals, seabirds, and other large fish. Many years ago, herring were very plentiful in Rhode Island's rivers. They provided a very important food source for the indigenous peoples of the area. Unfortunately, over the years, herring numbers in Rhode Island significantly dropped due to the damming of rivers and over-fishing. To help Rhode Island herring make a comeback, RI



A volunteer counts fish for 10 minutes



DEM and other partner organizations are teaming up to remove old dams, improve fish ladders, and make sure fishing regulations are followed. Herring volunteers play an important role in providing us with herring counts which help us to see if these efforts are working.

Gabby: Herring counts seem like a really fun way to contribute to science! What other volunteer opportunities are available and how can our readers sign up?

Jewifer: We have a number of opportunities that vary a little bit from year to year, but some of the annual opportunities that we offer are the herring survey, bat roost surveys, goose banding, turkey gobbling surveys, deer check assistants, and we also have a number of surveys that you can help us with by reporting wildlife sightings via a phone app or website! To learn more about these opportunities and be added to the RI DEM Volunteer Program email list, contact me at Jennifer.brooks@dem. ri.gov. Gabby: Woah, those all sound amazing! Your job sounds awesome, what is your favorite part?

Jewifer: My favorite part of my job is being able to connect people with really cool ways that they can help fish and wildlife. Most of my favorite memories of my job are just being with volunteers for their first time conducting a survey or banding a bird and experiencing that excitement and wonder they feel when they learn, see, or do something new when connecting with nature. Those moments never lose their magic!

Gabby: And lastly, what is your favorite wild Rhode Island critter?

Jennifer: It's hard to pick just one, but I would say my favorite is the little brown bat!

About Jennifer

Jennifer Brooks is the Volunteer Program Coordinator for the Division of Fish & Wildlife. As a child, Jennifer loved exploring outside observing wildlife, admiring tiny wildflowers, and monitoring local tadpoles as they developed into tiny frogs and toads. She still enjoys doing all those things, as well as kayaking, fishing, and creating art. As the Volunteer Program Coordinator, Jennifer gets to share her passion for nature and conservation with all our volunteers who share the same values.





Native Vs. Non-native

Native species: Animals that have adapted to live in a specific place where they belong

Non-native species: Animals that are introduced to a place where they did not originally belong

Most animals live in a specific area, called their **range**. Animals can usually only **survive** in a range that has perfect combination of the **resources** that they need. If an animal is put in a place where it does not belong, it could struggle to survive by itself in a strange **environment** or could upset the **balance** of the **ecosystem**. That is why it is **illegal** to **release** pets into the wild in Rhode Island. (It is also illegal to take an animal from the wild and keep it as a pet, that is considered **poaching**!)

Around the 1930's, people started adopting red-eared sliders (a **non-native** species of turtle) as pets, but when they no longer wanted to take care of them, they let them go in ponds and streams near their houses. Because these pet owners were not responsible, we now have a population of non-native turtles that bully and **compete** with our **na-tive** painted turtles. Red-eared sliders hog the basking logs and can infect our native turtles with new **diseases**. It is important to **protect** our native species of wildlife by being **responsible** pet owners. This will make sure our wildlife has a safe and healthy habitat to live in.

Unscramble the words below... for a hint, look at the **blue** words above!

- 1. GNARE
- 2. USEVVRI
- **3. TOMEPEC**
- 4. VNETIA
- **5. NMERNVEITNO**
- 6. TECSOMEYS
- 7. CABLAEN
- 8. ALELLIG

- 9. BOEERPSSNLI 10. HAPOGINC
- 11. NVTNAOIEN
- **12. UCROERSES**
- 13. RAEELSE
- **14.ABHATTI**
- 15. ECPTROT
- **16. ASIESDES**





CRITTER CARDS

Rhode Island is home to many different wild animals. Some are very common and easy to spot. Others are rare and hard to find. Their populations might even be threatened or endangered for many different reasons. At the Division of Fish and Wildlife, we've created a list of Species of Greatest Conservation Need. 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 really cool critters.

Threatened and endangered species don't just live in faraway places, like the rainforest. There are lots of species right here in our own little state that need our help. In fact, there are over 400 species on our list! Learn more about them by cutting out and collecting these Critter Cards!

Fold in half Cut I lay my eggs in vernal pools in the early spring. You can spot me on warm, rainy nights in March and early April. For the rest SPOTTED SALAMANDER of the year, I hide under logs and in burrows in the forest. A lot of my habitat is fragmented, which means it's cut up into smaller chunks by roads and buildings. I sometimes have to cross roads to get to my vernal pool. I have tiny legs, so crossing the street is slow going and dangerous because I am hard for drivers to see. WHICH ACTIONS WILL HELP ME? Tell people to be careful when driving in wooded areas in the spring. Helping to keep habitat safe and not disturbing vernal pools will give me the space I need to survive. spend most of my life in the ocean, and migrate up freshwa-ALEWIFE ter streams and rivers to spawn (lay eggs). Overfishing shrunk my populations, and the building of dams in rivers and streams blocked my migration paths. Water pollution also messed up my habitat. WHICH ACTIONS WILL HELP ME? Cleaning up the water, removing dams, and building fish ladders where dams can't be removed will help. Volunteering to be a RI river herring counter in the spring will help biologists keep an eye on my populations! **JSFWS** I am a tiny, secretive mammal that scurries around bogs, red maple swamps, and stream edges. I am a ferocious preda-**AMERICAN WATER SHREW** tor...of insects! Water pollution, habitat destruction, and pumping water out of streams has led to the loss of insects in my habitat, which means it's harder for me to find food. WHICH ACTIONS WILL HELP ME? Protecting wetland habitats and making sure that environmental laws are followed will help me in the long run. Studying which habitats are the most important for my population in RI is DGIE also important! I nest in the Arctic and spend my winter on the coasts of North and South America. In the spring and fall, I use Rhode **RUDDY TURNSTONE** Island's coasts to rest and eat during my long migration journey. Lots of people live along the coast and spend time at the beach. All the noise and activity make my resting spots not so welcoming. Also, climate change and sea level rise will change my habitat, or make it disappear. WHICH ACTIONS WILL HELP ME? Protecting coastal habitats and studying where in RI are my favorite places to rest and eat. Also, if you're at the beach, don't

chase birds, keep your dogs on a leash, and give me space!

Reptiles and amphibians are on the move! Get outside this spring and be a citizen scientist with RI Division of Fish and Wildlife!

Ask an adult to download our free HerpObserver app to send in your observations of frogs, toads, salamanders, snakes, and turtles.

Visit dem.ri.gov/reportwildlife for more info!



WILD QUEST ANSWERS

- 1. range
- 2. survive
- 3. compete
- 4. native
- 5. environment
- 6. ecosystem
- 7. balance
- 8. illegal

- 9. responsible
- 10. poaching
- 11. non-native
- 12. resources
- 13. release
- 14. habitat
- 15. protect
- 16. diseases



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TO: