

ISSUE 7 | SPRING 2020

WILD RHODE ISLAND EXPLORER

In this edition...

- Learn about stream habitats
- Head out in the field with a fish biologist



MEET THE BROOK TROUT!





DEM
RHODE ISLAND



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

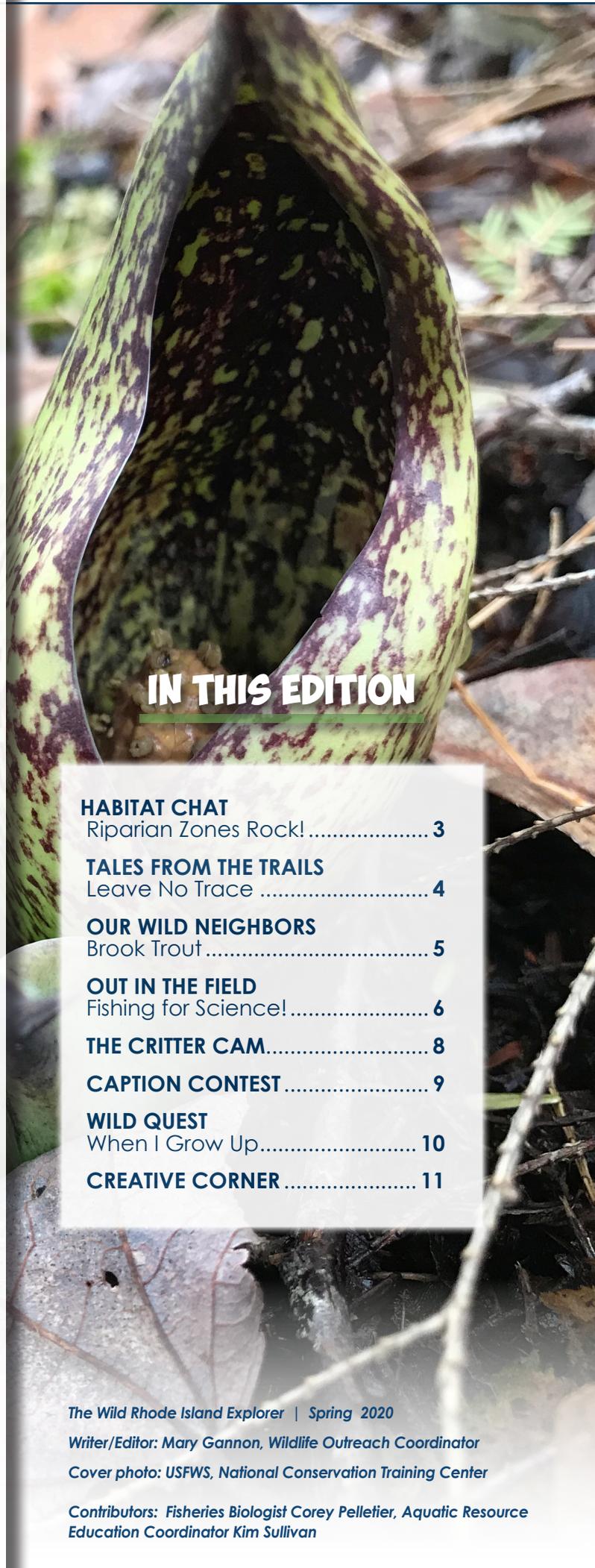
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24HR VIOLATION LINE: (401) 222-3070



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The Wild Rhode Island Explorer | Spring 2020

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Cover photo: USFWS, National Conservation Training Center

Contributors: Fisheries Biologist Corey Pelletier, Aquatic Resource Education Coordinator Kim Sullivan

HABITAT CHAT

Mike Stultz

Riparian Zones Rock!

Our bodies are filled with veins and arteries so that our blood can travel from our hearts to the rest of our bodies. Veins and arteries carry all the things our bodies need to be healthy, like vitamins and oxygen. Streams and rivers do the same thing for the environment! They flow across the land and transport oxygen and other important **nutrients**.

Lots of animals live in streams, like insects, fish, frogs, salamanders, otters, and turtles, to name a few. Many animals may not live directly in the stream, but really like the habitat that can be found along a stream or river. This type of habitat is called a **riparian zone**. In Rhode Island, we've protected many riparian zone habitats in our State Management Areas, like the one in Arcadia Management Area in the picture above.

Protecting riparian zones helps keep our streams and rivers healthy. The plants growing in riparian habitats help to **filter** the water that flows across the land during a rainstorm. This water is called **runoff**. If runoff flows into a stream and is **polluted**, it can be harmful to the animals that live in the stream. Streams transport good things like oxygen, but can also transport bad things like chemicals too.

By keeping our riparian zones safe from pollution or disappearing, we can make a big difference for the critters that live in and around streams. Healthy riparian zones also help people because they help stop and slow down floods!

You can help aquatic creatures by picking up trash, cleaning up after your pets, and keeping chemicals out of the environment as much as possible. Let's work together to make sure our riparian zones rock on forever!

Two-lined salamander
Chris Raithe



TALES FROM THE TRAILS

Leave No Trace By Girl Scout Troop 777

Girl Scout Journeys are roadmaps for Troops that emphasize discovering themselves and their values. Journeys also teach girls how to connect with others, how to care about their impact on the world, and how to take action to improve their communities. Girl Scouts is "girl-led" and the girls in the troops choose what is important to them and how they can make the world a better place.

As part of the Girl Scouts Outdoor Journey, Troop 777 learned about what "Leave No Trace" means. Each troop member demonstrated why it is important to them through watercolor paintings to share with friends and family. As part of our sustainable Take Action Project, we wanted to share what we learned so others could know how to respect nature and be aware of our responsibility to nature.



Top row back left to right: Lilah, Riley, Lucie, Maggie, Jessica; Front row left to right: Lauren, Genevieve, Madeline, Zoey, Angelina; Not pictured - Madison

"Everyone should take care of their campsite and make sure campfires are out by stomping, using sand or water. Be careful with fire because it can hurt the animals that live in the woods and they can lose their homes."

"Don't pick flowers or harm trees. Some plants can be poisonous and if you are allergic to it, it could hurt you."

"Always take your trash with you. If you find trash in the woods, pick it up. Clean up after picnics so the animals don't eat it. Trash on the ground pollutes and is not good for the Earth."

"Respect your pets, keep them close and keep them from getting lost. Stay on the trails to keep you from getting lost. Leave wildlife alone for their safety as well as yours."

DO YOU WANT TO HELP RHODE ISLAND'S WILD ANIMALS?

Check out our Volunteer Program!

There are lots of ways you can get involved and make a difference!

For more info, contact Jennifer.Brooks@dem.ri.gov

OUR WILD NEIGHBORS

BROOK TROUT

Sarah Petrarca

Scientific name: *Salvelinus fontinalis*

Range: Eastern brook trout are native to the east coast from northern Georgia through the Appalachian Mountains and New England up into southern Canada.

Size: In Rhode Island, Eastern brook trout can grow up to 12 inches. Most grow to between 6 and 8 inches.

Habitat: Eastern brook trout need clean and cold water to survive. They also need plenty boulders and logs in the water to hide under.

Food: Brook trout eat mayflies, caddisflies, and stoneflies. They find these **invertebrates** drifting in the current and on the surface of the water. Once brook trout reach a larger size, they even feed on smaller fish.

Breeding: Brook trout **spawn** in the fall and the males display beautiful spawning colors, with bright red bellies. Females use their tail to make a **redd** (fish nest) in the stream bed. They “fan” the stream bottom with their tail to dig up the sand for their redd. The female and male will spawn over the redd, laying fertilized eggs into it. Following their mating ritual, the female will then use her tail to cover over the redd with sand and gravel where the eggs will **incubate** for a few months before hatching.

Predators: Great blue heron, mink and otters all eat brook trout. Brook trout are fast swimmers and are very skittish. They often stay close to cover to avoid predators.

DID YOU KNOW?

Eastern brook trout are a **Species of Greatest Conservation Need** in Rhode Island. This means the brook trout needs our help! Habitat loss, dams, water pollution, climate change, and **invasive species** are all threats to these beautiful fish.

HOW WE'RE HELPING BROOK TROUT IN RHODE ISLAND

The Rhode Island Division of Fish and Wildlife is working to conserve this native fish species. Biologists collect data to monitor populations and environmental signs to figure out how our **populations** are doing. We're working to create better trout habitat in streams. Other projects, like dam removals, are being done to help **water quality** and **connectivity**. This means helping fish swim freely up and down streams without any obstacles.



USFWS National Conservation Training Center

A baby brook trout, also known as a “fry”

OUT IN THE FIELD

Fishing for Science!

By Kim Sullivan, Aquatic Resource Education Coordinator



Sarah Pellicano

Fisheries Biologist Corey Pelletier during a stream survey

Lots of Rhode Islanders love to go fishing. It's so much fun to get outside with friends and family to see what you'll catch in the pond or river! Did you know that there's a lot of work that goes into making sure our wild fish and their habitats are healthy? To learn more about caring for our wild fish, I chatted with Fisheries Biologist Corey Pelletier.

Kim: Would you mind describing what you do for the State of RI?

Corey: Working as a fisheries biologist, my main duties are to collect **data** in order to conserve and protect our freshwater fish populations. This helps to make sure Rhode Islanders have lots of opportunities to get outside and go fishing.

Kim: Why is it important to study RI's brook trout?

Corey: Eastern brook trout populations are shrinking across their **range**. To preserve this native species in Rhode Island from the effects of habitat loss, pollution, and climate change, we must take action to reduce impacts and protect populations.

Kim: How do you study them?

Corey: We do stream **electrofishing** surveys and monitor **water quality**. We look at water temperature and the amount of oxygen in the water.

Kim: What is electrofishing?

Corey: Electrofishing is a survey technique that uses equipment to create an electric field in the water to stun fish. When targeting small streams and rivers, we use what is called a backpack electrofisher. It's carried by one of the biologists, and also has a wand that sends electricity into the water. We protect ourselves from the electrical current in the water by wearing rubber insulated waders (tall boots) and gloves.

Kim: Does it hurt the fish?

Corey: Fish are generally not harmed. The settings are adjusted to just stun the fish. Once the fish are stunned and netted, they are placed into a bucket of water before being measured. The fish can't move from being stunned by the electrical current. This makes it easier for us to catch and measure them. They wake up as soon as they are out of the electric field.

Kim: How will the work you do affect RI fisheries in the future?

Corey: The goal of all of this work is to protect freshwater species for generations to come. This means taking care of balanced ecosystems and healthy populations for **anglers** (people who fish) to enjoy.

Kim: Why did you want to study fish?

Corey: As an outdoorsman and fisherman, I want to make a difference by conserving the natural environment. Our natural and unique ecosystems are often overlooked when it comes to humans' activities, like building new roads and the growth of businesses. It is rewarding to study fish and use that information to protect something you feel passionate about.

Kim: What is your favorite part of your job?

Corey: Being outdoors and in places that not many people get a chance to see is one favorite. Also, working with many groups and communities, educating people on the importance of conserving our freshwaters and species that inhabit those is up there as well.

Kim: What is your favorite wild animal in RI?

Corey: I may be biased, but the Eastern brook trout is the most beautiful wild animal in Rhode Island!



CRITTER CAM



A bobcat, out for a morning stroll

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. Here in Rhode Island, we've set up 100 trail cameras across the state to learn more about our bobcat and black bear populations. We've teamed up with wildlife biologists from the University of Rhode Island to keep track of the hundreds of photos that are taken. The cameras take pictures of all sorts of animals, not just bobcats and bears. This study is helping us learn a lot about our state's mammals!



Spring has sprung! Male deer will begin growing back their antlers.

CAPTION CONTEST

LAST ISSUE'S WINNING CAPTION

Honorable Mentions

I feel like my whole world has been turned upside down.

- Dave

Nuttin' to see here!

- Chloe

I am one with the tree.

- Scott

Morning yoga session...

- Joshua

THE GROUND IS LAVAAAAA! - Ryan



CAPTION THIS PIC!

Send in a caption for this photo by April 30, 2020.

We'll reveal the winning caption in our next issue! Submit your caption by sending an email to:

mary.gannon@dem.ri.gov



Brian Tarka

WILD QUEST

WHEN I GROW UP

The insects that live in and around streams, ponds, and rivers go through **metamorphosis**. This means that their bodies change from baby to adulthood. See if you can match the insect **larvae** (top) with their adult forms (bottom)!

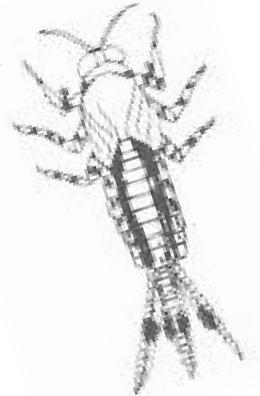
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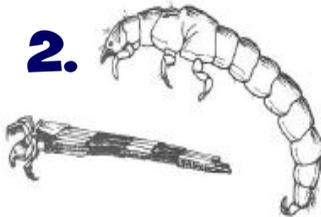
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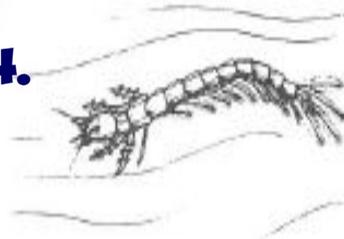
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Whirling beetle

10

Caddisfly

Stonefly

Mayfly

Dragonfly

CREATIVE CORNER: FISHING



Fish by Ramsey

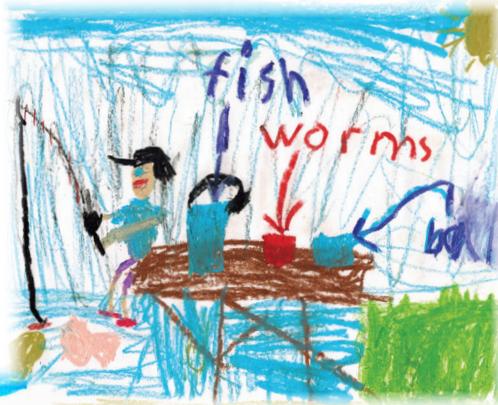
"Rainbow Trout" by Teagan



"Monster Fish" by Ebby



"Fishing" by Nadia



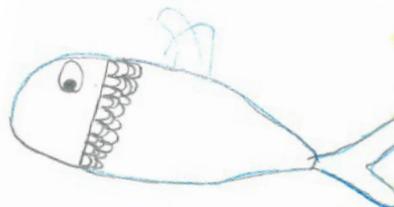
"Fishing" by Sadie



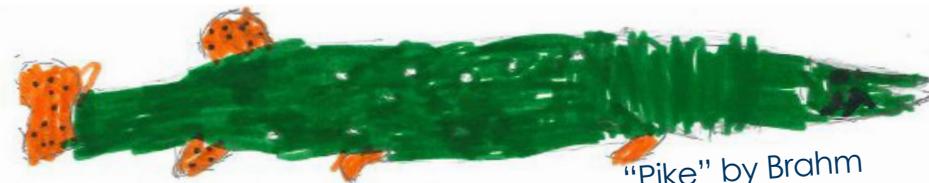
"Fish Print" by Caedmon



"Fishing" by London



"Fish" by Katarina



"Pike" by Brahm

**THANK YOU FOR
SHARING YOUR
ARTWORK!**

Send us your artwork and writing by
April 30, 2020
to be featured in our next issue!

The theme for our summer
issue is: Nighttime wildlife

*If you would like to share your creative work, you can send an email to
mary.gannon@dem.ri.gov or you can mail it to:
RIDEM Division of Fish & Wildlife, ATTN: Mary Gannon, 277 Great Neck Road,
West Kingston, RI 02892*



GO FOR THE GOLD THIS YEAR!

GOLDEN TROUT PIN CONTEST RULES

Catch a Golden Rainbow Trout between April 11– April 29, 2020.

Upload your picture and email it to dem.fishri@dem.ri.gov

Entries MUST include your name, mailing address, and pond where you caught the fish. We'll send you a golden trout pin in the mail!

Photos submitted after April 29, 2020 will not be accepted. Anglers must adhere to all fishing regulations.

Don't have your fishing license? Buy one here: DEM.RI.GOV/HUNTFISH

For more information contact: Madison.Proulx.int@dem.ri.gov (401)539-0019

WILD QUEST ANSWERS

1. Dragonfly
2. Caddisfly
3. Stonefly
4. Whirling Beetle
5. Mayfly

Want to read more? Subscribe to receive *Wild Rhode Island Explorer* online or directly to your mailbox. It's FREE to all!

Contact Mary Gannon
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401-782-3700



Learn more at
dem.ri.gov/wildlifeoutreach

