

ISSUE 3 | SPRING 2019

# WILD RHODE ISLAND EXPLORER

**IN THIS EDITION...**

**LEARN ABOUT  
NATURE'S FIRST  
SIGNS OF SPRING**

**CHECK OUT A VERNAL  
POOL**

**MEET THE  
SPOTTED  
SALAMANDER!**





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*The Wild Rhode Island Explorer* | Spring 2019

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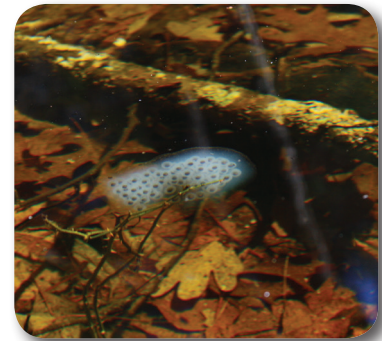
*A green heron strikes a pose over the Genesee Swamp*



## The Secret World of Vernal Pools

Imagine you are walking in the woods right now. It probably doesn't look like springtime. The trees aren't green yet...There aren't any flowers blooming...It's chilly, and you're still wearing a jacket! But an amazing thing is happening, right under your nose. Water from rain and melting snow has slowly trickled across the forest floor...Wait a minute, where did that little pond come from? That little pond is called a vernal pool!

**Vernal pools** are filled with water only about 6 months out of the year. They appear and disappear each year. Although they may just look like a big puddle, there is lots of life hiding beneath the water and in the forest around you! Take a look into the vernal pool. Woah! What's a thing with all of those tiny legs? It's a **fairy shrimp**, slowly swimming across the pool. Do you see something that looks like a bunch of clear grapes? It's an **egg mass**, laid by a female **wood frog**. Check out that blob of white jelly resting on the pool floor. That blob is the egg mass of a **spotted salamander**. These critters are probably hiding under logs or leaves on the forest floor around you. They are waiting for sunset.



Spotted salamander eggs

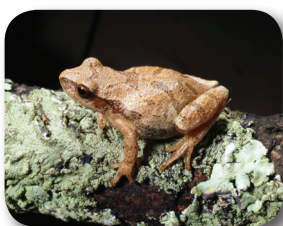
It starts to get darker, and the sun begins to set. Rain sprinkles from the sky. You start to hear something...

*Peep...peep...peeeeeep...PEEEEE!*

It's the sound of the **spring peeper**, the smallest frog in Rhode Island! Even though they are very tiny, spring peepers are very loud. All of a sudden, you see a wood frog hopping by. He makes a clucking noise as he hops into the pool with a plunk. You take out your flashlight, and look into the water. The water is so smooth, it feels like you're looking through a window at the creatures below. A red-spotted **newt** swims by. You also see a tiny creature with gills that stick out like feathers on the side of its head. It's a baby marbled salamander. Eventually, she will lose her gills and be able to walk on land. This change is called **metamorphosis**.

A beetle swims into the light, and then CHOMP! A scary-looking bug chows down on the beetle! It's a baby **dragonfly**. Dragonflies lay their eggs in vernal pools when they start to fill up in the fall. In the spring, those eggs hatch into **nymphs**, and then become adult dragonflies with wings.

Vernal pools are important habitats for many different animals. Some animals can *only* be found in vernal pools. If the pools disappeared, so would the creatures that need them to survive. Keep your eyes and ears open for some of these critters this spring!



Spring peeper



Fairy shrimp



Wood frog



Red-spotted newt

# FISH TALES

By Edward Manning

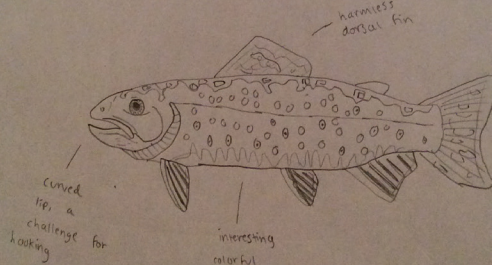
I've always enjoyed freshwater angling in my quiet town of Little Compton. I recall the past few spring seasons in Simmons Mill Pond, a management area with an abundance of fish such as bluegill and large and small-mouth bass. One thing you've got to be careful about is hooking trout and reeling them in.

Speaking from experience, I have never had luck successfully catching a trout. With their unique curved lower and upper lip, it is hard to hook them. This happened some years ago when my dad took me to Wilbur Woods, a popular forest in Little Compton. I hooked a brook trout, but, alas, was never able to reel it in.

The late summer and early spring are top notch times to freshwater fish. The Department of Environmental Management stocks the ponds in Simmons Mill with trout. One of the most common fish on your lure and lurking near the banks is bluegill, a small rounded fish with a distinguishing black "ear."

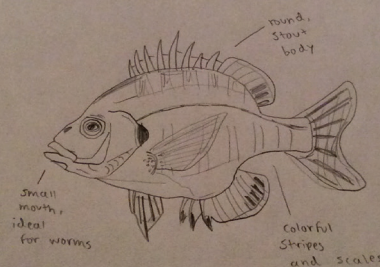
Fishing with my friend a few years ago in Simmons Mill, I had a worthy catch. It was a black crappie, a seemingly rare fish in the area I live. I knew it was worth the picture! This was one of more significant experiences I had freshwater fishing in Little Compton. I hope to continue fishing, as it is a fun and interactive experience anywhere you go. And, if I am ever lucky, I will finally land a trout this spring!

The Brook Trout is an eastern trout with dark, wavy lines/blotches on the upper tail and fins. In Little Compton, this roughly 2 lb. fish can be found mainly in Wilbur Woods in small, shallow ponds. A common species to catch in Spring and Summer as well.



Check out Edward's field notebook sketches of trout and bluegill!

Bluegill is a small, round fish native to Little Compton and other areas in North America. Known for its blue/black ear flap extended onto its gills. Lives in ponds, streams, lakes, and rivers. One of the largest sunfishes, weighing sometimes over 1 lb.



How do you connect with nature? Whether you fish, hunt, bird watch, or just enjoy being outdoors, we would love to hear your story!

# OUR WILD NEIGHBORS!

## Spotted Salamander

**Scientific name:** *Ambystoma maculatum*

**Range:** You can find spotted salamanders in most of the eastern United States and in southeastern Canada.

**Size:** Spotted salamanders can be 4 – 9 inches long. They are one of the largest salamanders found in Rhode Island!

**Habitat:** Spotted salamanders live in the forest. They spend most of the year in underground burrows. Because they spend so much time underground, spotted salamanders are also known as “**mole salamanders**” by biologists. Spotted salamanders use vernal pools for breeding habitat.

**Predators:** Adult spotted salamanders can be eaten by raccoons, turtles, snakes, skunks, and opossums. The eggs and baby salamanders (called **larvae**) can be eaten by snakes, birds, insects, turtles, and even other salamanders. To escape being eaten, adult salamanders produce a nasty-tasting slime from their skin. Yuck!

**Food:** Spotted salamanders eat insects, snails, spiders, slugs, and earthworms.

**Breeding:** Spotted salamanders **migrate** from their burrows to vernal pools during the breeding season. Usually, big rainstorms and warmer nights signal to the salamanders that it's time to move. On a rainy night in March or April, you can sometimes see lots of spotted salamanders crawling on the forest floor on their way to the pools. They often cross roads too, so it's important to be careful when driving on rainy spring nights. Female spotted salamanders can lay up to 200 eggs! The eggs look like a big blob of jelly. They can be either clear or cloudy in color.

## DID YOU KNOW?

**Spotted salamanders are one of 10 amphibians listed as Species of Greatest Conservation Need in our Rhode Island Wildlife Action Plan.** One big way you can help our tiny, slimy friends is by picking up trash and using less chemicals in your house and yard. Pollution is a big problem for amphibians! Another thing you can do to help amphibians is by sharing what you know about them with others. The more people who know about these creatures, the better!



A spotted salamander found during a vernal pool survey

# OUT IN THE FIELD

## Raising Trout in Rhode Island

By Kimberly Sullivan, Aquatic Resource Education Coordinator

Rhode Island opened its first state **hatchery** in 1928, currently known as the Lafayette Trout Hatchery. The purpose of the hatchery was to replenish the fish populations for **anglers** because the factories of the industrial revolution and overfishing diminished our fish populations. Today, the hatcheries raise many different kinds of fish to help **restore** fish populations and provide diverse fishing opportunities for our current anglers. But what is it like to work at the hatchery? Is it just feeding fish? Let's meet KC Fernstrom, the District Resource Manager who manages our hatchery system to learn about raising fish in Rhode Island.



*KC patiently raises fish from eggs to full sized adults*

**Kim:** KC, how many hatcheries are in Rhode Island?

**KC:** There are four hatcheries in Rhode Island: Lafayette Trout Hatchery in North Kingstown, Perryville Trout Hatchery in Wakefield, Carolina Trout Hatchery in Carolina, and Arcadia Warmwater Hatchery in Richmond. Only Lafayette Trout Hatchery is open to the public, Monday-Friday from 9:00 am - 3:00 pm.

**Kim:** What types of fish do you raise and why?

**KC:** We raise four species of trout - rainbow trout, golden rainbow trout (a color variation of a rainbow trout), brown trout and brook trout - and one **hybrid** species, tiger trout. The tiger trout hybrid is a cross between a brook

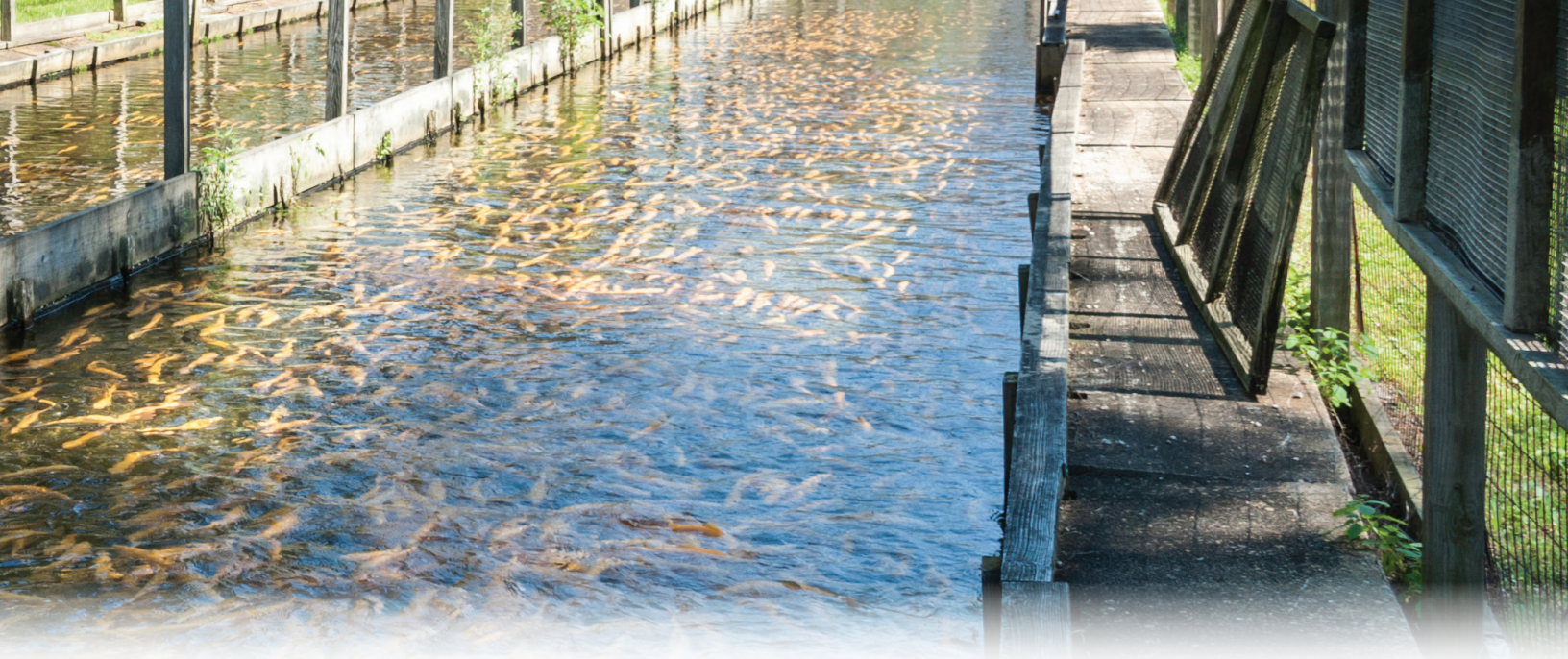
trout and a brown trout. We also raise Atlantic salmon, and Northern pike. We raise the fish for the fishermen and their fishing enjoyment. Without the hatcheries there would be fewer fish to see or catch.

**Kim:** KC, what is a typical working day like at the hatchery?

**KC:** First, you start off by feeding the fish and then clean all the **raceways**, removing debris that may have fallen in and any deceased fish. Activities vary day to day but may include **grading**, or sorting, fish by size, general repair work on nets or screens as needed, observing the fish to check on their health and look for signs of being stressed. We continue feeding three more times throughout the day.



*Come visit the Lafayette Trout Hatchery!*



**Kim:** Other than raising the fish, what are your other duties?

**KC:** I maintain the grounds, mow the grass and weed-whack, create reports to summarize our fish data, monthly sampling of water and fish weight to determine the amount of fish we have on hand. Also, depending on the time of year we **stock** the fish, I transport the fish and **spawn** the fish.

**Kim:** How long do the fish stay in the hatchery? How do you know they are ready to be released?

**KC:** About a year and a half. We release the fish when they weigh about a pound, or measure 14 inches long.

**Kim:** Where do the fish go after the hatchery and how do they get there?

**KC:** The fish go to 108 different locations throughout the state in rivers, lakes, ponds and streams. They are transported by trucks that carry giant fish tanks on the back of them.

**Kim:** What is your favorite part of fishing?

**KC:** Hooking the first fish of the day. It doesn't always happen but that is the best part!

**Kim:** What is your favorite thing about your job at the Division of Fish and Wildlife?

**KC:** I really like that I get to work outdoors every day.

**Kim:** And lastly, what is your favorite Rhode Island wild animal?

**KC:** I guess it is the cottontail rabbit. There is just something fascinating about them!



*KC shows us a trout from the raceway*



*The stocking truck, ready to transport fish to ponds all over Rhode Island*



*Sharing the joy of fishing with family!*

# THE CRITTER CAM

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. Lots of people use trail cameras for many reasons. Wildlife biologists use camera "traps" to collect information about animal populations. Hunters use them to scout for the best place to hunt deer or turkey. Some people set them up just to see what kind of critters are living in their backyards. Even though trail cameras are used for many purposes, one thing is certain — they capture some cool photos!

## CHECK OUT SOME SPRING PHOTOS CAPTURED FROM AROUND RHODE ISLAND!



*Top: A mink investigates a stream...maybe looking for a snack? (Romeo D'Andrea)*

*Bottom: A wild turkey performs his spring strut for a group of hens in the far left corner of the photo (Brian Tarka)*



# THE CRITTER CAM

## LAST ISSUE'S WINNING CAPTION

Hey, Martin...  
Do I have  
something in my  
teeth?  
-Liz A.

### Honorable Mentions

"I told you we should have asked that beaver for directions, Brenda. Now look at us, all lost and stuff!"  
- Colton B.

"Geesh, someone's in a bad mood!" - Layla B.

Photo: Brian Tarka

### CAPTION THIS PIC!

Send in a caption for this photo by  
April 7, 2019.

We'll reveal the winning caption in  
our next issue! Submit your caption  
by sending an email to:  
[mary.grande@dem.ri.gov](mailto:mary.grande@dem.ri.gov)

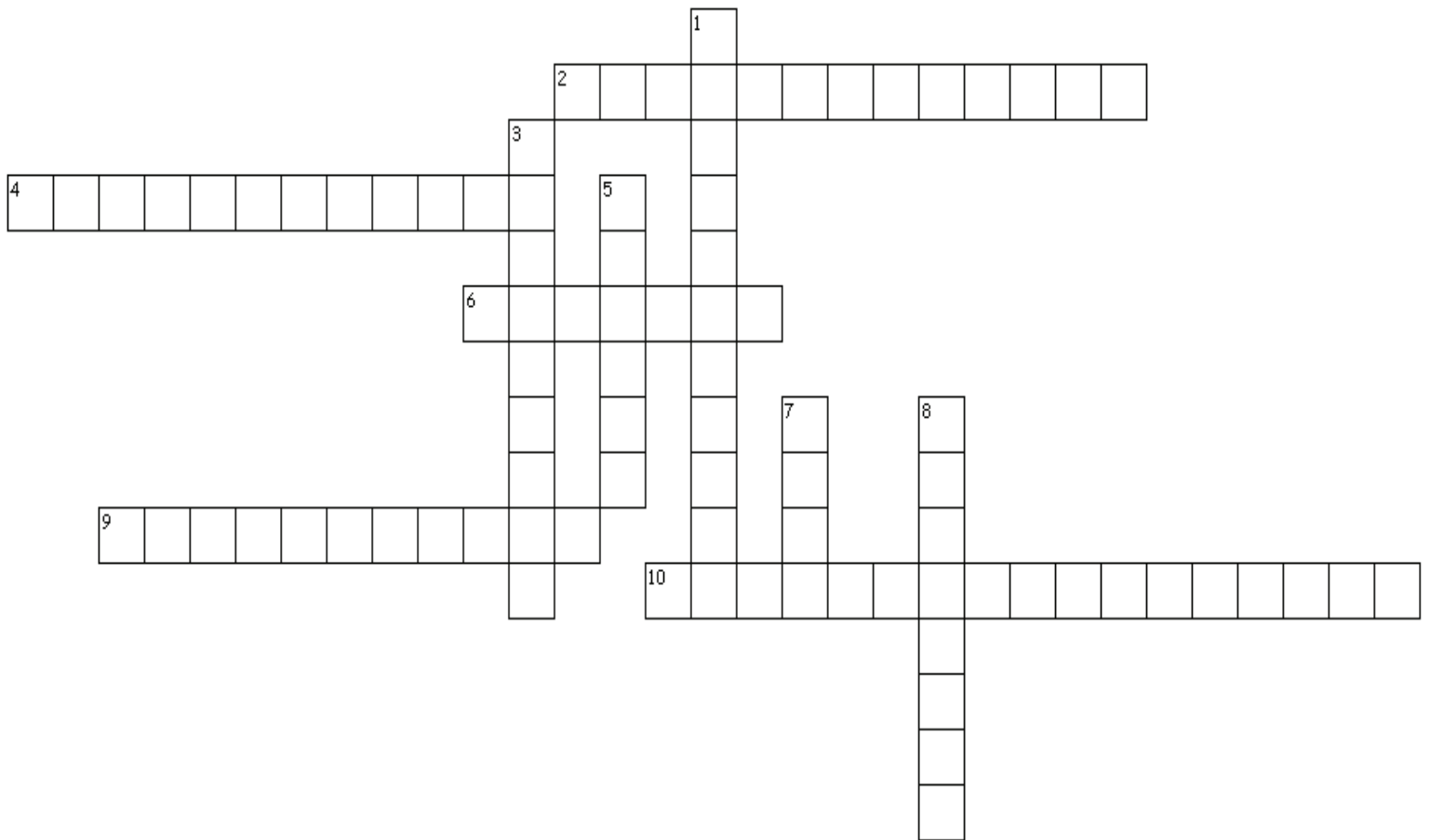


Caught on camera -- a fisher! (Amy Gottfried-Mayer) 9



## VERNAL POOL CROSSWORD

In our Habitat Chat article, you will see some words that have been highlighted in **green**. See if you can use all of the highlighted words to solve this crossword puzzle! (You can find the answers on the back cover of the magazine.)



# CREATIVE CORNER



"The Bird Season" by Charlie R.

Our theme for this issue was "Nature's Signs of Springtime." Thank you for sharing your creative work!



"Signs of spring" by Jack R.



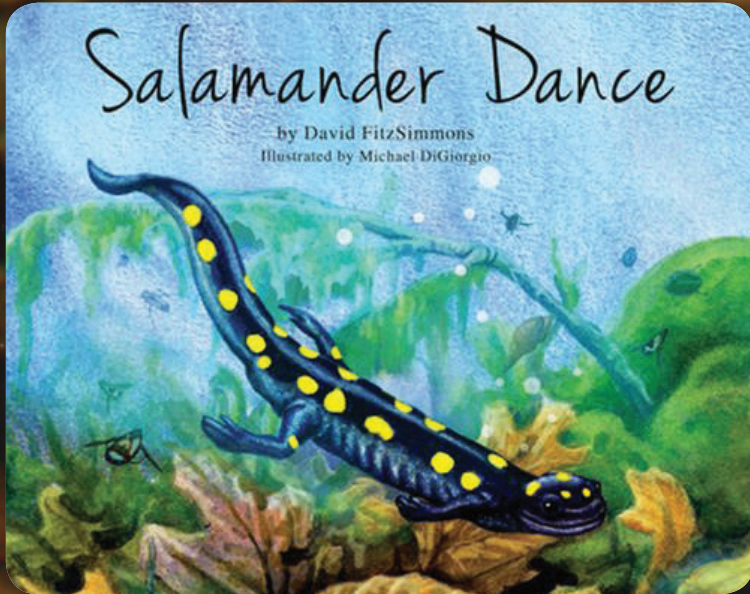
"My chicken laying an egg" by Lily R.

Send us your artwork and writing by April 7, 2019 to be featured in our next issue!

The theme for our summer issue is: Swamp Critters

If you would like to share your creative work, you can send an email to [mary.grande@dem.ri.gov](mailto:mary.grande@dem.ri.gov) or you can mail it to the address below.

# BOOK NOOK



Check out these books to learn more about salamanders!

## Vernal Pool Crossword Answer Key

### ACROSS

2 metamorphosis

4 spring peeper

6 egg mass

9 vernal pool

10 spotted salamander

### DOWN

1 fairy shrimp

3 dragonfly

5 nymphs

7 newt

8 wood frog

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

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