

ISSUE 17 | FALL 2022

WILD RHODE ISLAND EXPLORER



**MEET THE
GOLDEN NORTHERN
BUMBLEBEE!**



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!

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

Follow us on
YouTube and Instagram!



Rhode Island Department of Environmental Management



The Wild Rhode Island Explorer | Fall 2022

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HABITAT CHAT

Wildflower Power

When you walk through your neighborhood, you might see flowers that your neighbors have planted. Cheerful yellow daffodils sway in the early spring breeze. Bright pink petunias add a pop of color by a mailbox. In the fall, deep orange and red mums sit next to a pumpkin on the front steps. These flowers were probably bought at a greenhouse.

You might spot other flowers growing in places where no one planted them, like on the edge of a road, in a grassy area that hasn't been mowed in a while, or by a pond in the park. These flowers didn't come from a store. They are wild!



JOE-PYE WEED

Many of the wildflowers you can find in Rhode Island are native plants. This means that these types of plants have been growing right here in our little corner of the world for thousands of years. Plants have adaptations, just like animals. Native plants are able to grow in Rhode Island because their adaptations help them to grow in our soil, survive the winter, and spread their seeds so that more native plants can grow. Some seeds float on the wind, others get eaten by birds, and some zoom through the air when the plant's seed pods explode!

Our wild critters recognize native plants as the healthiest food they can find. Some caterpillars only eat one type of native plant to become a butterfly or moth. These are special plants called host plants. Without host plants, these important insects would be in a lot of trouble. And they wouldn't be the only ones going hungry! Caterpillars are one of the best foods for baby birds. Butterflies and moths help pollinate plants, which then make seeds and fruits. Seeds, fruits, and leaves are all eaten by different critters. It's important to have native plants in our ecosystem to make sure everybody is healthy and fed, from the tiniest caterpillar to the biggest deer!



BUTTERFLY MILKWEED



EASTERN RED COLUMBINE

How can you help? Let native plants grow wild, and don't spray any chemicals in your garden! You can also choose natives instead of other garden plants if your family goes to a greenhouse to buy flowers each year. Not only will you be helping wildlife, but your garden will look beautiful! If you don't know which plants are native, or where to find them, the URI Master Gardeners can help you out! Visit www.uri.edu/rinativeplants/ for lots of great info. We all can make a big difference for wildlife if we make our yards and gardens a welcome habitat. That's the power of wildflowers!

MADDIE'S OUTDOOR ADVENTURES

EATING WITH THE ECOSYSTEM



This season in "Maddie's Outdoor Adventures," we will be taking a journey with Cooper Senecal. An 8th grader from Meadowbrook Waldorf School, Cooper made some delicious turkey meatballs with the turkey he harvested this year. He wanted to share his speech on why harvesting his own food is important to him and his love for nature and the outdoors. Thanks for sharing, Cooper! Keep up the good work!

Hi, my name is Cooper Senecal! My project this past school year was called "Eating with the Ecosystem." This was a project about getting closer to food, my environment and ultimately my home. I got to spend many hours in nature with my mentor, Jim Tappero, exploring the woods, streams and ponds where I would be harvesting food. People think it's more humane to shop at the grocery store but I found that by really connecting with the animals, their habitats and patterns, I became part of nature. That deep connection and the compassion that happens from hours of observation, to me, is more humane than buying food in a store.

My journey let me delve into the seasons. My fall was spent observing turkeys, deer, ducks, squirrels and doves. I spent over 150 hours in the forest, actively hunting (which is mostly just sitting in a tree watching and listening to the animals around me). Last autumn I harvested 1 turkey, 2 coot ducks, 1 squirrel and 6 doves. I spent lots of time researching recipes and testing them out. Some of my favorite recipes were by Hank Shaw. He is an award-winning chef who works with wild game. I loved the slow braised turkey leg carnitas and the maple glaze turkey meatballs. I also went to an incredible dinner put on by local fisherman where we got to sample 7 species of local fish including monkfish, scup, sea robin and butterfish.

This winter we were fortunate to have some really cold weather that made for good ice conditions. I live near Worden's Pond so I could pack a sled full of gear and hike a mile through the woods to the pond. I then chopped through the ice with an ax and set up my grandfather's old tip ups. I was so excited when after a few hours on my first day out, I caught a beautiful pickerel. Over the winter I was able to catch over 20 pickerel. I also spent 156 hours bow hunting deer. I wasn't able to harvest any deer yet, but I had many close encounters with beautiful animals! It would have been difficult for me to survive the winter just living on pickerel, so if I really just wanted to live off the land, I would have had to harvest other animals in the winter as well.

Spring is the season of trout, turkey and clamming and I was so grateful that my grandfather taught me how to fly fish. There is quite an art to it. I have caught 3 trout on my fly rod. Clamming in the salt pond was also really fun. I wore neoprene waders and raked the pond bottom. We raked dozens of clams and had a feast with them on the grill. I hope to continue to bring dinner home for my family.

Many of you, including me, are concerned about the wellbeing of animals. Some of you choose a vegetarian diet because of that. I have chosen to eat close to home, where I can see turkeys foraging for nutrient dense acorns, deer browsing on medicinal local plants, fish jumping out of the water to catch protein rich insects. That is nature at its best. Wildlife being wild. And I feel like I'm part of that. Our Rhode Island ecosystem is rich with wild foods. I hope you will try the maple glazed wild turkey meatballs I have harvested and made myself. I would like to thank my mentor Jim Tappero who helped me with so many things. Thank you!



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. In this issue, we'd like to highlight some photos from our research partner Laken Ganoë.

Laken is a URI student studying Rhode Island's fisher population for her PhD project. She uses a trail camera to figure out where fishers are in the state. She also puts tracking collars on them to see what habitats they are using and how much they travel around. If you'd like to learn more about Laken's project and fishers, check out our Winter 2022 issue at www.dem.ri.gov/wildlifeoutreach.

Laken's cameras capture some pretty awesome photos of fishers and other critters too!



A coyote stops to strike a pose for the camera. Look at those beautiful eyes! Eastern coyotes can have lots of different fur and eye colors. We'll be sure to share more photos of unique coyotes caught on Laken's camera!



Nice to see you again! One of the fishers Laken trapped and collared wanders back by the camera. This gives Laken more info about the home range of this particular fisher.



Raccoon 1: "Yikes, that's a weird looking raccoon, Bobby!"

Raccoon 2: "I don't think that's a raccoon, Frankie!"

Virginia Opossum: "Hey guys! Uh, what is it? Do I have something stuck in my teeth?"



Is that a cow wandering through the woods?! Nope, it's just a piebald deer! Sometimes deer are born with this hair pattern because of a little mix-up in their genes called a mutation. This causes them to have patches of brown and white hair on their body.

"SMELLS FISHY" NEWS

LOBSTER FUN FACTS

Lobsters can be found in the coastal waters of Rhode Island. It's always good to know a little about our aquatic neighbors!

SPECIES

- There are 30 species of lobsters found throughout the world.
- There's only one species of lobster in RI, the American lobster.

SEASONAL INFORMATION

- During the springtime, lobsters move close to shore where the water is warmest.
- In the fall, lobsters will migrate offshore to avoid the coldest winds and spend the winter in warmer water.
- No matter the season, most lobsters can be found near rocks.

TRAVEL AND SPEED

- Lobsters can travel up to four miles in a day!
- If threatened, lobsters will flap their tails which propels them backwards at speeds of up to 16 feet per second. Now that is fast!

WHAT DO THEY EAT?

- Lobsters' diets consist of mussels, crabs, and starfish.
- What other types of aquatic creatures prey on lobsters? Hungry skates, sharks, and groundfish will eat lobsters whole!

ANATOMY

- Lobsters can regrow all of their appendages, such as claws and legs.
- During a lobster's life they shed their exoskeleton (hard outer layer) while growing in a process called molting.
- In the first 5 years of life, they might molt 25 times. As they age, this process slows to molting every 3 to 5 years.



Photos: Derek Keats,
Doug Kerr

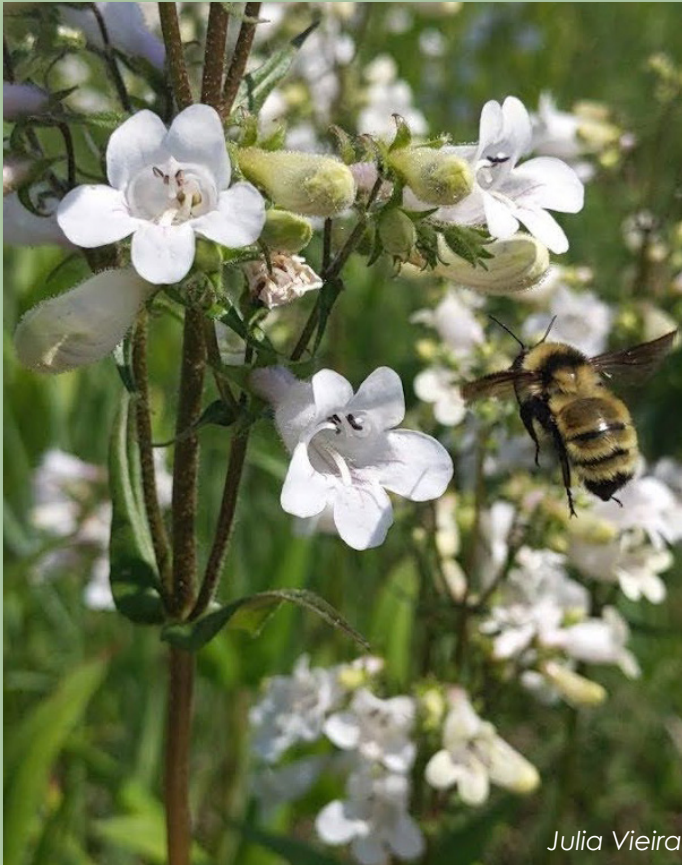


About the Author

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

GOLDEN NORTHERN BUMBLEBEE



HABITAT

Golden northern bumblebees love open meadows with a variety of flowers and bunching grasses. Native plants like goldenrods, asters, Joe-Pye weed, jewelweed, milkweed, and blueberries are all awesome plants for these fuzzy friends. Bumblebees nest in places like abandoned rodent burrows, tree hollows, bunching grasses, and brush piles. Out of all of these nest types, golden northern bumblebees like nesting in tall, native grasses the best!

DID YOU KNOW?

Bumblebee wings beat 200 times per second. To keep up the energy to flap those tiny wings so fast, bumblebees need to eat every 40 minutes!

BREEDING

In the spring and summer, bumblebee queens emerge from hibernation to find a place to nest, lay their eggs and raise their babies (larvae). These larvae will grow up to be female worker bees, who will spend the summer collecting pollen from flowers to feed new larvae! In the late summer, the queen will start laying eggs that will grow up to be gynes (new queens) and drones (male bees). The gynes will then leave their nest to mate with drones from different nests before finding a comfy spot to hibernate for the winter, like a small hole in the ground or a pile of leaves.

FOOD

All bumblebees run on sugar! They drink the nectar from flowers to power those little wings, and will feed their babies pollen from the flowers. Pollen is full of protein, perfect for growing baby bees! Golden northern bumblebees have a very long tongue, which makes them great at slurping up every last drop of nectar! They will also collect food to save for later so that their colonies can grow.

Turn the page to learn how we're working with Rhode Islanders to learn more about our state's bumblebees.

OUT IN THE FIELD

WHAT'S THE BUZZ ON BUMBLEBEES?



Hi everyone! Today I'm frolicking through a field of autumn wildflowers with Katie Burns, our Pollinator Atlas Entomologist. We're searching for bumblebees! Why are we looking for these fuzzy, buzzy insects? And what does a Pollinator Atlas Entomologist do? Tag along and find out!

Mary: Hi Katie! First of all, can you explain to our readers what an entomologist is?

Katie: Hi Mary! An entomologist is a person who studies insects, which are small animals with six legs. Some examples of insects are bees, butterflies, beetles, and flies!

Mary: That's super cool! I bet a lot of folks didn't know that there's a special type of scientist just for insects! Can you describe to our readers where we are right now?

Katie: We are at Sapowet Marsh Wildlife Management Area! This is one of my favorite places to look for bees and butterflies. In addition to insects, this marsh is also home to lots of different plants, birds, mollusks, and crustaceans. It's also a popular spot for fishing and kayaking!

Mary: It's so beautiful! There are so many different plants here. Which ones are the bumblebees' favorites?

Katie: In the autumn, bumblebees love to visit wild asters, goldenrods, and milkweeds. When they visit a flower, they drink the flower's sugary nectar and then gather the flower's pollen to bring home to feed their babies. Bumblebees prefer flowers that are wild and native – like the ones you find in forests and meadows! And it's important that they have access to wildflowers from early spring to late autumn so that they can feed themselves and their babies all season long.

Mary: How many different species of bumblebees can be found here in Rhode Island?

Katie: There are 11 species of bumblebee that used to live in Rhode

Island, but in the last few years only 6 species can be found here. The other 5 species didn't have enough food to eat or enough places to make their nests in Rhode Island, so they couldn't survive here. But hopefully if we keep planting wildflowers and creating bumblebee habitat, these other bumblebee species will come back!

Mary: Wow, I didn't realize we had that many here! Can you explain to our readers how you get close enough to the bumblebees to study them? Won't they sting you?

Katie: Luckily, bumblebees are way more interested in visiting flowers than stinging you! As long as you don't try to grab them in your hand or get too close to their nests, they won't try to sting you. But there are some features of a bumblebee that we need to look at SUPER closely, like the hairs on its legs and face, so that we can figure out what species of bee it is and whether it's a male or a female. To do this, we catch the bumblebee in a net and transfer it to a clear jar so that we can look at it up close. Then, once we've collected the information we need, we let the bee go!

Mary: So, what is a Pollinator Atlas? It sounds really fancy and scientific!

Katie: The Pollinator Atlas is an effort to learn more about our state's insect pollinators, which are important insects that carry pollen from flower to flower to help plants produce seeds and fruits. Some of these pollinators include bees, flies, wasps, butterflies, and moths! We are trying to figure out which species of insect pollinators live in Rhode Island, what flowers are their favorites, and how to help protect them. Since there are many different kinds of insect pollinators,



we are studying them one group at a time – starting with bumblebees! This project is called the Rhode Island Bumblebee Survey.

Mary: That's a lot of work for just one person to do! Will anyone be helping you collect all that info?

Katie: Luckily, I have lots of help! An awesome group of volunteers is helping me with the Rhode Island Bumblebee Survey. These volunteers are community scientists, which means they are members of the public who have been trained by scientists to collect information for a science project. For the Bumblebee Survey, our community scientists are exploring Rhode Island's forests, meadows, gardens, and city parks every month next spring and summer to learn more about our state's bumblebees!

Mary: Why are bumblebees so important in our ecosystem? How can everyone help them out?

Katie: Bumblebees are super important pollinators of both wildflowers and food plants. By helping wild plants produce seeds and fruits, they provide food for many other animals. By pollinating food plants, like apples, blueberries, and tomatoes, they help feed people! Unfortunately, many of our bumblebee species are disappearing due to a loss of food and nesting habitat, caused by the destruction of natural areas.



Luckily, there are lots of things we can do to help bumblebees! We can let wildflowers grow on our lawn and plant native plants to provide bees with food. We can also let long grasses grow and leave brush piles in our gardens for bumblebee nests. To help hibernating bumblebee queens, we can leave the leaves on the ground in the fall, which will protect them while they sleep through the winter.

Mary: What is your favorite thing about your job?

Katie: I have the best job in the world! I love insects and I get to hang out with them every day. I also get to share my love of insects with other people and show people that insects are beautiful, important, and fascinating – not scary and gross!

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

Katie: My favorite Rhode Island critter is the Golden Northern Bumblebee! These bumblebees are really beautiful and covered with golden fur. They also have long tongues, which means that they prefer to drink nectar from long-tubed flowers, like honeysuckle and beardtongue. The Golden Northern Bumblebee is a rare bumblebee, which means that there aren't many of them in Rhode Island and they can be hard to find.

About Katie

Katie is originally from Maine, where she spent her childhood exploring outside and observing the fascinating critters she encountered. She has always had a great love for insects and for nature in general, which led her to pursue a career in entomology. She has traveled all over the United States to work with insects, including California, Florida, and Vermont. Most recently, she spent four years in Ireland studying Irish insect pollinators!



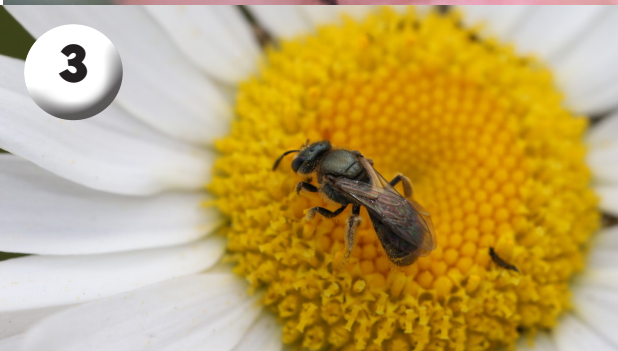
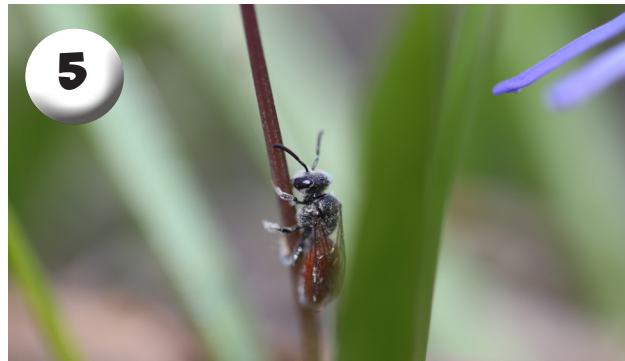
WILD QUEST

A BEE OR NOT A BEE?

Did you know that bees come in all shapes, sizes, and colors? That's right, not all bees are fuzzy with black and yellow stripes like bumblebees.

There are even some types of flies that pretend to be bees! They buzz around flowers and help pollinate them, all while disguised as bees. If you look closely, though, you can spot some differences.

Can you tell which of these insects are bees and which are not? Check the back cover for the answers!



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. 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!

Cut



Fold in half



BUFFLEHEAD (SGCN)



8

I am a cute little duck that can be spotted in fresh or salt water. You might spot me with a group of friends in saltmarshes or along the coast in the winter. I like to dive under the water to find my favorite snacks: bugs, crustaceans, and mollusks.

WHICH ACTIONS WILL HELP ME?

Keeping our coastal waters healthy will make sure that I have lots of food to eat. I also need places to rest during migration. Preserving saltmarshes, salt ponds, and other wetlands is very important!

Fyn Kynd

GOLDEN NORTHERN BUMBLEBEE



5

I am an important pollinator that loves to sip on flower nectar. I have a super long tongue which helps me feed from tube-shaped flowers. You can recognize me by my lovely golden fuzz!

WHICH ACTIONS WILL HELP ME?

Let the wildflowers grow! You can plant native plants like goldenrod, Joe-Pye weed, and jewelweed in your garden for me to snack on. Also, don't spray chemicals like pesticides in your garden. These will make me sick and can harm me!

Rachael Bonoan

WOOD FROG (SGCN)



4

I am one of the earliest frogs to come out in the spring. On warm days in March, you can hear me making my unique clucking sound in the forest. I lay my eggs in vernal pools in the spring, and hop around the forest for the rest of the year in search of food and places to hide.

WHICH ACTIONS WILL HELP ME?

Protecting vernal pools and the habitats surrounding them is the most important thing for me! Also, please don't use chemicals on your lawn and in your garden. The rain washes these chemicals into vernal pools and wetlands. They can harm me because I can absorb them through my skin.

Chris RaitheL

BOBCAT (SGCN)



6

I am a secretive feline with pretty stripes and spots. I love to eat mice, squirrels, and rabbits. I'm great at controlling pests! I'm pretty shy and like to stay hidden from sight. I'm usually out at night, or at dusk and dawn.

WHICH ACTIONS WILL HELP ME?

Keeping land as wild habitat is very important for me. That way, I have lots of space to roam and can stay hidden from people.

URL WIGEL

WILD QUEST ANSWER KEY

BEES!

1. Brown belted bumblebee
3. Sweat bee
5. Blood bee
7. Ligated furrow bee
8. Mason bee

NOT BEES!

2. Robber fly
4. Slender clearwing moth
6. Common drone fly

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!

REMEMBER, IT'S HUNTING SEASON, AND THAT MEANS SAFETY ORANGE!

If you are visiting a wildlife management area, you'll need to wear a fluorescent orange safety hat OR vest September through February, and April through May.

In December, you need to wear a hat AND a vest during shotgun deer season.



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