

ISSUE 19 | SPRING 2023

WILD RHODE ISLAND EXPLORER



**MEET THE
AMERICAN EEL!**



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!



@RI.fishandwildlife

Rhode Island Department of
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HABITAT CHAT

What is Poaching?

When a wild animal is illegally killed or taken from its habitat, it's called poaching. There are many laws that protect wildlife across the world, but poachers don't care about following the rules or about our wildlife. Poachers often break the rules to make money, or because they just don't care. They aren't thinking about how their actions are harming wildlife. The first example that many people might think of when they hear the word poacher is elephants being killed for their tusks, called ivory. Another example is the killing of tigers for their skins and bones. A lot of times, poaching seems like it happens far across the globe, but it also happens right here in Rhode Island!



In Rhode Island, our Environmental Police Officers respond to reports of poaching and make sure everyone is obeying the law. Sometimes, they catch people hunting deer outside of the hunting season. The season for deer is in the fall and winter, when deer are no longer raising their fawns and when some may have trouble surviving the long winter months when food is scarce. Sometimes they catch people keeping fish that are smaller than the size that's allowed. If a fisherman is taking hundreds and hundreds of fish out of the ocean, this can be a big deal because the fish won't be able to grow big enough to reproduce and could cause our fish populations to shrink! Another big example of poaching is taking animals out of the wild and keeping them as pets. Turtles are threatened by this type of poaching. Each year, thousands of turtles are taken out of the wild and shipped alive overseas, where they are sold as pets. This is a huge problem for our turtle populations! Turtles take a long time to grow old enough to lay eggs, and many hatchling turtles don't survive to become adults. This type of poaching can wipe out entire populations of turtles, which is very sad!

Sometimes, people accidentally become poachers! A lot of people have accidentally taken home a fish that's too small or brought home a turtle as a pet without knowing it's harmful. Even digging up wild plants from certain places can be against the rules. It's important to remember that these rules are there to keep our wildlife safe and our habitats healthy. That way, everyone can enjoy and appreciate our state's wildlife for many years to come!

You can help stop poaching by making sure you follow the rules, and by making sure wild animals stay in the wild. You can also let the RIDEM Environmental Police know if you suspect that there's some serious poaching happening, like hunting out of season or selling wild turtles. To report poaching or any other environmental lawbreaking, call (401) 222-3070.

MADDIE'S OUTDOOR ADVENTURES

Why Do I Fish?

Fishing is a wonderful outdoor activity I like to participate in with my family and friends. Sitting out enjoying nature waiting for that first bite makes me very content. I also love bringing new people out and teaching them the joy of catching fish. I was curious on why others liked to fish, I reached out to my community to ask and here are some of those responses!

"We fish because we love to get outside and spend time together doing something we really enjoy!" - Colin R.



"We fish for fun and relaxation. Just being on the water, fresh or salt, is an instant mood changer!" -Joanne V.

"To pass on our love of the outdoors to the next generation!" - Shawna S.



What do you like doing outdoors?



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

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 colorful male wood duck hangs out in a wetland. Wood ducks like to nest in tree cavities, instead of on the ground like most ducks. RIDEM Division of Fish and Wildlife also puts up nesting boxes for wood ducks built by volunteers!



"You kids are getting heavy!" A mother opossum carries her babies on her back. They look like they're getting a little too big to ride on mom! How many babies can you count?



Look very carefully and see if you can spot the weasel scampering over the tree branches on the ground! In the summer, weasels (aka ermine) shed their white winter coat and change into a brown coat. The color change helps them camouflage! We have two weasel species in RI, the long-tailed and the short-tailed.



A coyote stops to enjoy the warm sun and smell the breeze!

"SMELLS FISHY" NEWS

RHODE ISLAND FISH HATCHERIES

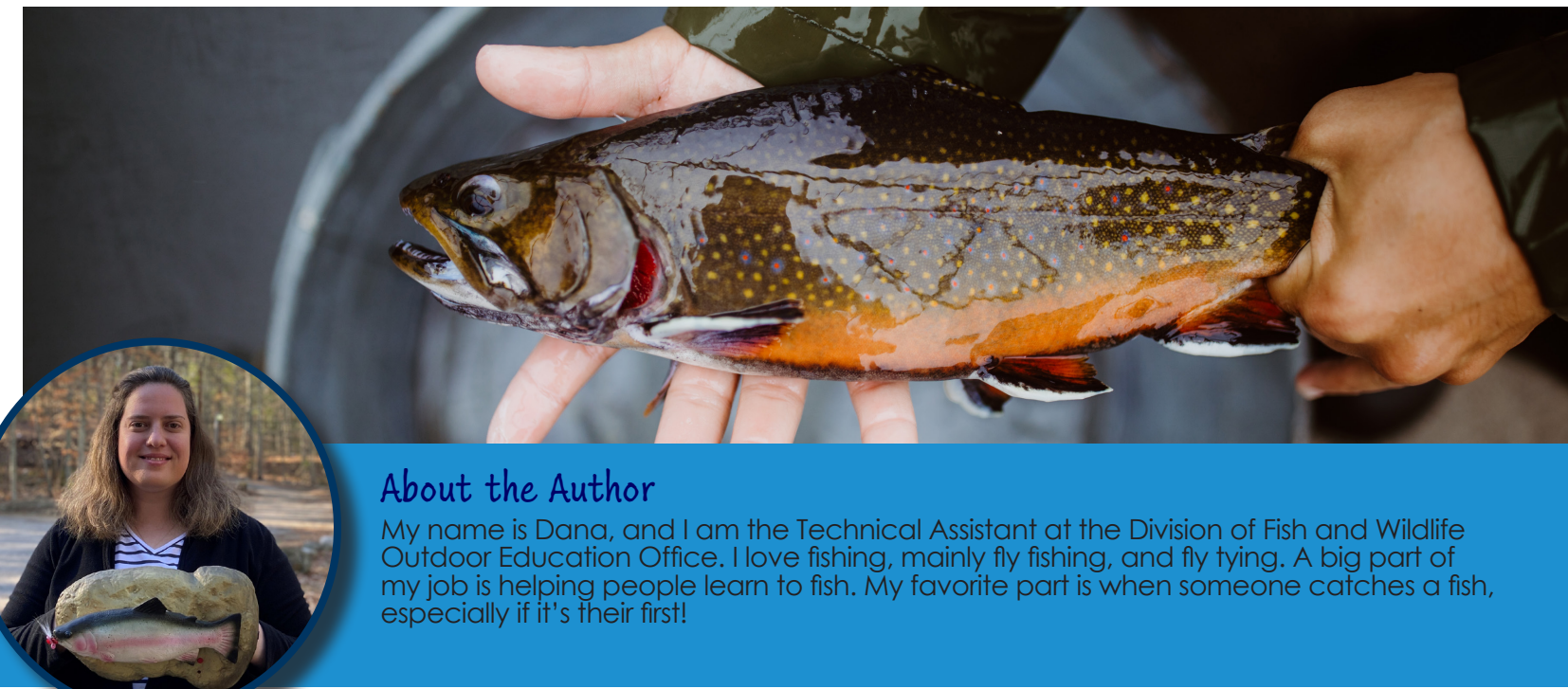


Fish hatcheries are places where fish are raised from eggs. The Rhode Island Division of Fish and Wildlife has four fish hatcheries located around the state focused on raising sportfish for anglers to catch. Some of the species that they raise include brook trout, brown trout, rainbow trout, golden rainbow trout, Atlantic salmon, and landlocked Atlantic "Sebago" salmon. Recently, the hatcheries have even raised Northern pike and the hybrid tiger trout, which is a cross between the brook trout and the brown trout. These are all species that anglers like to fish for throughout the year.

Hatchery staff work year-round taking care of the fish. Their duties include feeding the fish daily, checking to make sure they are healthy, and cleaning the tanks and screens. Come March, when the trout fishing season closes, staff use a huge truck to stock over 100 places across Rhode Island with different types of trout. The goal is to get plenty of trout to the ponds before the trout fishing season opens up again on the second Saturday in April!

The hatcheries are also important to the freshwater biologists as well. For example, hatchery staff raise Atlantic salmon and brook trout for the Salmon in the Classroom and Trout in the Classroom programs. Once the fish eggs are ready to go to the schools, biologists pick them up from the hatchery and deliver them to insulated fish tanks where students can take care of the eggs until they hatch into fry (baby fish) and release them into specific bodies of water. They also help biologists research other types of fish that the public might like to fish for including bass species and Northern pike.

Please be on the lookout for special opportunities to visit Rhode Island's hatcheries. A few times a year the Lafayette Trout Hatchery in North Kingstown hosts an open house for the public to explore the amazing life cycle of the trout!



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

AMERICAN EEL

HABITAT

American eels are catadromous. This means that they live most of their lives in rivers and estuaries (where fresh and saltwater mix together). They like to hide in underwater plants, tree branches, and other sheltered spots close to shore. They migrate out to a part of the Atlantic Ocean called the Sargasso Sea to lay their eggs. The Sargasso Sea is pretty big – 2 million square miles, between Cuba and the Azores off the coast of Portugal. American eels can be found along the Atlantic coast from Venezuela to Iceland, and also along the Gulf of Mexico and the Mississippi River. They can even be found in some lakes like Lake Champlain and Lake Ontario.



BREEDING

In the winter, adult American eels leave their home rivers and estuaries, and migrate to the Sargasso Sea to spawn (lay their eggs). After they spawn, they have reached the end of their life and die. When the baby eels hatch, they ride the ocean currents for a year until they reach the coast. Then, they swim upstream into rivers and estuaries. At this life stage, they are called glass eels because they are clear and transparent like glass. At this point, they are only 2-3 inches long. The glass eels will then grow into adults in their new habitat. American eels can live 7 to 20 years before heading back to the ocean to spawn!

FOOD

American eels hunt under the cover of darkness. They like to eat small insects, other fish, and crustaceans.

DID YOU KNOW?

American eels are an important food source for lots of wild animals, as well as people! Turn the page to read about some of the interesting science fisheries biologists are doing right here in Rhode Island to conserve the American eel!



OUT IN THE FIELD



In this issue, let's head out in the field with our Aquatic Resource Education Coordinator Kim Sullivan to learn more about the work Fisheries Biologist Patrick McGee is doing in RI!

Kim: Hi Patrick! Can you tell our readers a little bit about your job at the Division of Fish and Wildlife?

Patrick: Hi Kim! As a fisheries biologist, I lead surveys for river herring, American shad, and American eel to gather data on populations and movements. These are all diadromous fish species, which means that they travel between saltwater and freshwater as part of their life cycle. Once I collect data, I write reports to sum up my work so myself and other can improve and create new ways of surveying for these species. Survey work includes trapping, seine surveys, electrofishing, point counts, and biological sampling. I'm also a part of a few groups of biologists from other states who all work together to conserve these species.



Kim: You mentioned that you worked with the American eel, why is it important to study them in particular?

Patrick: American eel are an important species in a complex ecological food chain. Due to their long migration to the Sargasso Sea, and complex life cycle, they serve as prey for a wide variety of predators, including other fish and sea creatures, birds, and mammals. Some of these marine predators include fish species that are very important to people either as fish that we eat or like to go out fishing for. It is important to study American eel populations to ensure their survival and well-being within this ecosystem.

Kim: What is an eel ramp?

Patrick: Rhode Island uses eel ramps to study inland-migrating juvenile eels, also called "glass eels." The ramps are angled and have a rough bottom, which helps these tiny eels to climb up and over an obstacle, most often a dam. The Division of Fish and Wildlife can use these ramps as collection sites to count and collect data on these eels.

Kim: Why are American eels so slimy and why do they move around so fast?

EXCITED ABOUT EELS!



Patrick: Eels produce a mucus that coats the body and may help them in a number of ways. It helps control the water balance within their bodies, can protect against parasites and cuts, and can help reduce drag while moving through the water so they can swim faster. They tend to stick close to the bottom, where they can move fairly quickly along the sand, mud, and rocks.



Kim: Can Rhode Islanders go fishing for eel?

Patrick: Yes, you can fish for eel. They taste great and are often eaten as sushi! There are some rules to follow, though! If you would like to keep the eel that you catch, it has to be at least 9 inches long. There are size limits

for many of our fish in Rhode Island. This protects our fish populations by letting them grow into adults and lay eggs. We don't want to take fish out of the environment that are too young, or else it could shrink our fish populations too quickly.

Kim: That's very important! It's also a good reminder for all of our anglers in Rhode Island to take a copy of our state fishing regulations magazine with them when they head out for a fun day of fishing. What are some other ways we can help the American eel here in Rhode Island?

Patrick: Conservation research, improving fish passages to connect streams back together, and taking care of water pollution all play a huge role in helping American eel in Rhode Island.

Kim: What is your favorite part of your job?

Patrick: Being able to do field work outside and on the water is the best part of my job!

Kim: And lastly, what is your favorite wild Rhode Island animal? I think I might know your answer...

Patrick: My favorite wild Rhode Island animal is the American eel!

About Patrick

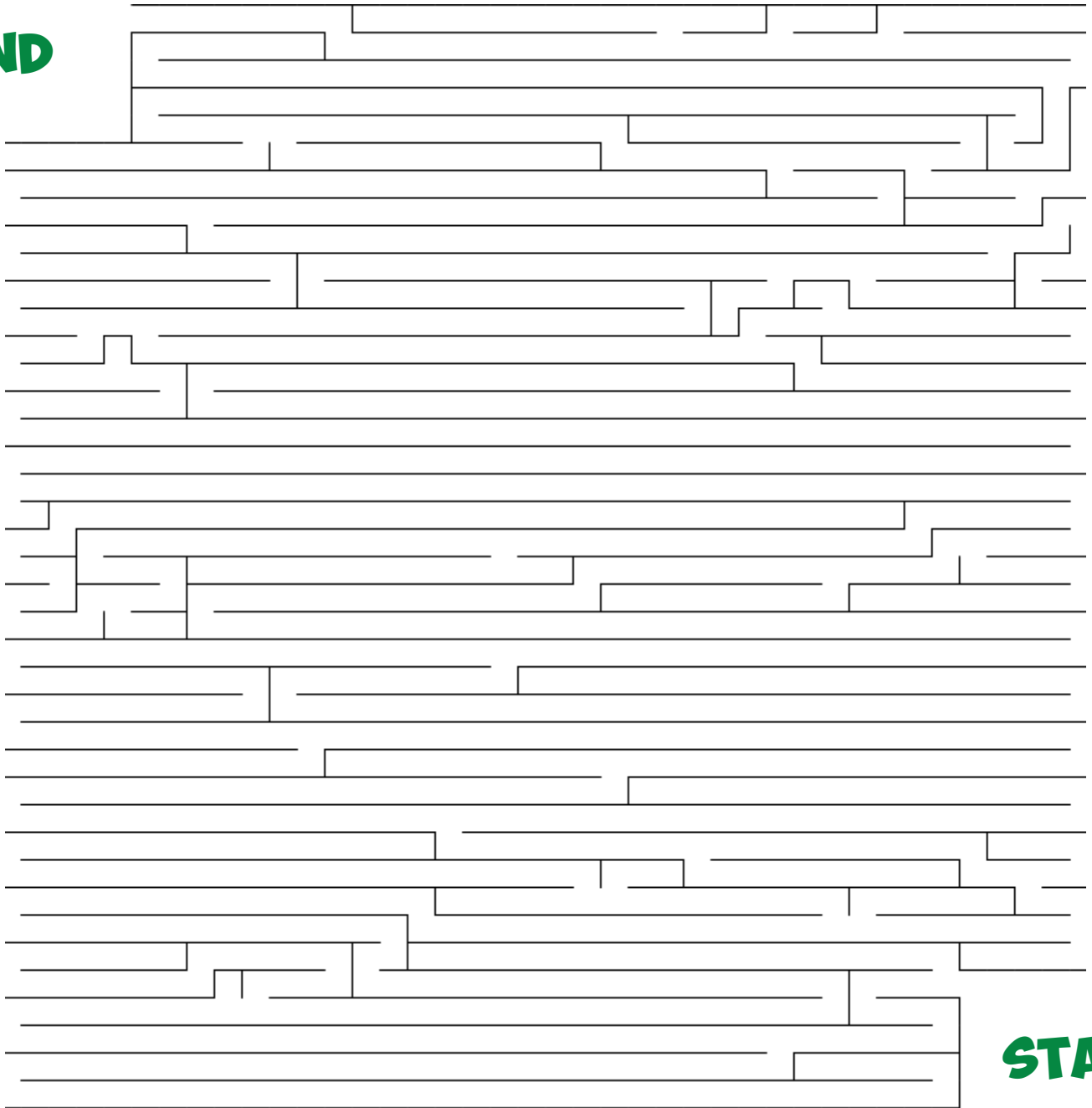
Patrick McGee is a Principal Fisheries Biologist for the Division of Fish & Wildlife. He grew up on a lake, where his love of fishing, boating, and studying the local wildlife began. He continued to pursue his interests, graduating from the University of Rhode Island with a degree in Wildlife & Conservation Biology. He worked with a number of watershed groups while interning with the Division during and after college. He was eventually hired to lead the diadromous fisheries projects within the Division of Freshwater Fisheries. Pat continues to enjoy exploring wildlife and the outdoors, both local and abroad. Here he is with his best canine pal, Roisin the Irish wolfhound!



WILD QUEST

Help the glass eels find their way from the ocean to freshwater!

END



START



Photo: Canopic

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



AMERICAN EEL (SGCN)



3

USFWS

I am a long, slimy fish that migrates from freshwater to the ocean to lay my eggs. As a baby eel, I float on the ocean current to return to the coast, then swim upstream to my home. I'm an important food source for a lot of other animals, and for people too! I can live a long time, 7-20 years!

WHICH ACTIONS WILL HELP ME?

Keeping water clean and healthy is important for me and other aquatic animals too! Helping create passageways at dams can help me complete my migration and reach more water bodies. Also, if you're fishing, please don't take me home unless I'm at least 9 inches long!

RACCOON



8

USFWS

I am one of RI's most common mammals. I am mostly nocturnal. I can live anywhere from the woods to the city! I eat lots of different things and can sometimes get into mischief by eating from trash cans. My little paws are very good at opening stuff!

WHICH ACTIONS WILL HELP ME?

You can help me by making sure your trash cans are secure, and by putting them out in the morning on trash day. Don't feed pets outside if you can help it, because I might think it's a free buffet! It's healthiest for me to find my own food out in the wild.

BARN OWL (SGCN)



11

Paul Topham

I am a beautiful bird that is rare in RI. You can usually only spot me on Block Island and Aquidneck Island. I like grassland habitats the best, and like nesting in old buildings or nest boxes. I am an amazing mouse hunter!

WHICH ACTIONS WILL HELP ME?

Helping to create grassland habitat and places for me to nest will be helpful. Also, if you need to trap a mouse or rat, please don't use poison! If I eat an animal that has eaten poison, I can also get sick and die. This will also help other birds of prey too!

WOOD TURTLE (SGCN)



5

Tyler DeVos

I am a turtle with bright orange scales and a shell that looks like tree rings. I live in slow moving rivers. In the spring, I come out of the water to find a place to lay my eggs. I like to wander around meadows and the forest to find food.

WHICH ACTIONS WILL HELP ME?

Please be careful while driving near wetlands! Sometimes I must cross the road to travel, and it's dangerous when you're a slow turtle like me. If it's safe, help me cross by putting me on the side of the road where I was heading. Protecting my habitat is also super important. Also, please leave me in the wild where I belong!



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