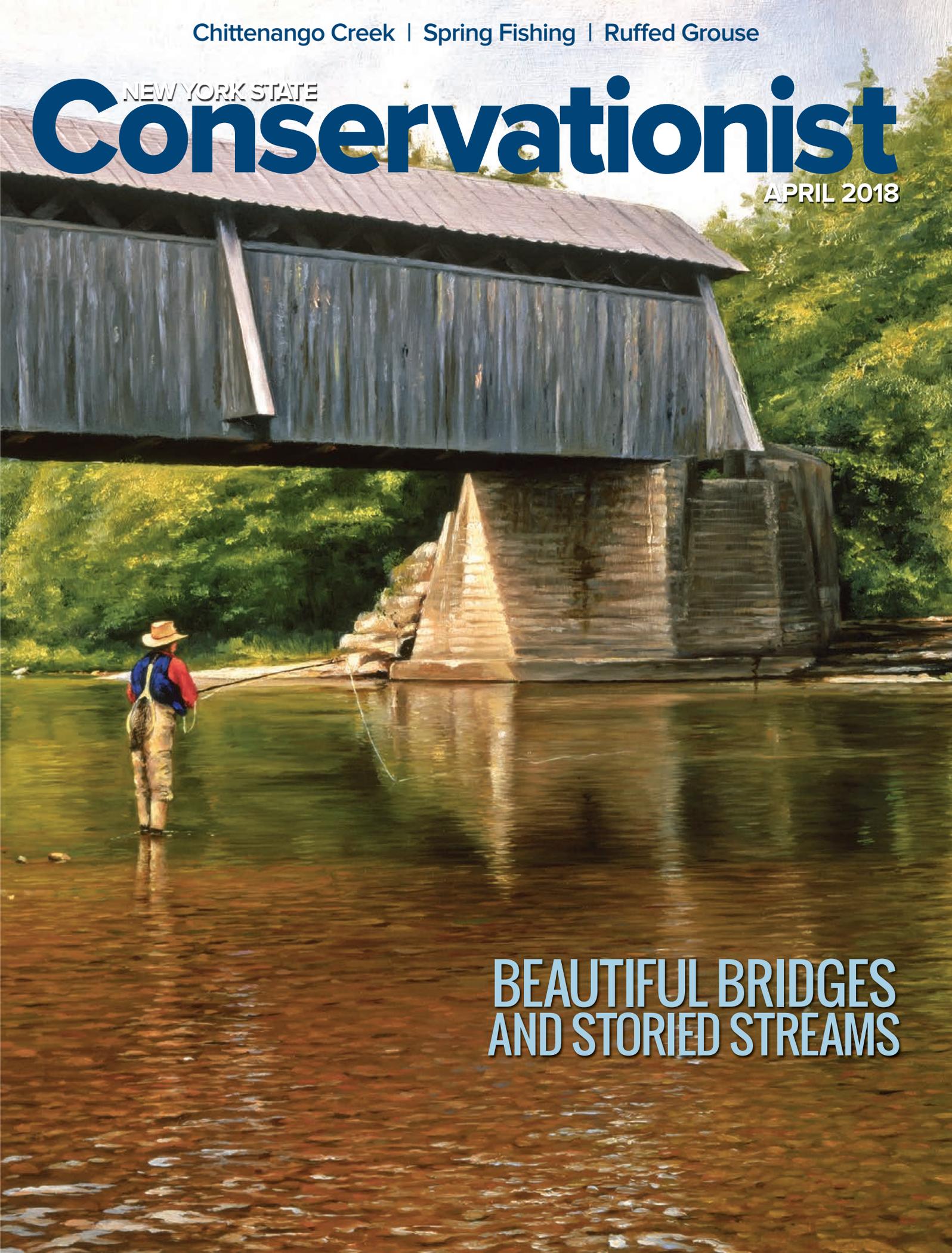


Chittenango Creek | Spring Fishing | Ruffed Grouse

NEW YORK STATE  
**Conservationist**

APRIL 2018



**BEAUTIFUL BRIDGES  
AND STORIED STREAMS**



Dear Reader,

Each spring, as temperatures begin to rise, many people get excited about heading outdoors for one primary purpose: fishing. Even if you have been fishing for decades, the anticipation of the opening of trout season on April 1st has probably been growing since you put the fishing rod away last year, and you'll head out the door with the excitement of a child going fishing for the first time.

DEC encourages this enthusiasm, and we are constantly looking for ways to improve the fishing experience for all New Yorkers—young and old, beginners to experts and everyone in between.

In this issue, you can read about spring panfishing (pg. 2), and learn about the Adirondack Fish Hatchery (pg. 26), which dates to the late 1880s. Another article details DEC's habitat enhancement projects to improve fishing in Chittenango Creek and protect properties along its banks (pg.6). And I think you'll enjoy reading our Back Trails article about a boy learning to fish and carrying on the family tradition in Roscoe, N.Y., commonly known as Trout Town, U.S.A.

Roscoe is also the backdrop for an article on the historic Beaverkill Covered Bridge (pg. 10) and how DEC worked with a coalition of state and local groups to restore this Catskills' landmark, preserving a regional and state treasure that remains a great site to visit. You'll want to see the pictures and summaries of some other historic covered bridges located across New York, too.

Restoration is also the theme of an article on how DEC has teamed up with the New York Power Authority (NYPA) to restore fish and wildlife habitats on the Niagara and St. Lawrence Rivers under NYPA's relicensing agreement to operate two clean energy hydropower plants (pg. 23). This story is also a good example of the type of restoration and improvement projects we are advancing across the state through the Resilient NY initiative launched by the Governor this year. Resilient NY is seeking to improve community and ecosystem resiliency to sea level rise, flooding and storms through protecting important freshwater and coastal habitats.

With the beginning of spring, many people—even those who don't fish—are anxious to get outdoors and enjoy New York's natural resources. Check out the article about opportunities at the Utica Marsh Wildlife Management Area (pg. 18), or learn about ruffed grouse, a bird that spends most of its time on the ground, not in the air (pg. 20).

This month, we celebrate Earth Week (April 16-22), a great time to reconnect with nature and renew our commitment to protecting our air, land and water (pg. 5). I encourage you to join the celebration by exploring the outdoors with friends and family—opportunities abound across the state and many can be found close to home. Check out DEC's webpage at [dec.ny.gov](http://dec.ny.gov) to find a list of Earth Week activities that showcase earth's magic.

I hope you take advantage of some of New York's unique sites and attractions, and create or even rekindle memories of fishing and other outdoor experiences with family and friends.

All the best,  
Basil Seggos, Commissioner

# NEW YORK STATE Conservationist

Volume 72, Number 5 | April 2018

Andrew M. Cuomo, Governor of New York State

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EDITORIAL OFFICES  
The *Conservationist* (ISSN0010-650X), © 2018 by NYSDEC, is an official publication of the New York State Department of Environmental Conservation published bimonthly at 625 Broadway, 4th Floor, Albany, NY 12233-4502. Telephone: (518) 402-8047

Manuscripts, photographs and artwork will be accepted if accompanied by SASE. Please write to the above address with an author's query or to request a Contributor's Guide. The publisher assumes no responsibility for loss or damage of unsolicited materials.

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Please allow 6 to 8 weeks for new subscriptions or changes of address. Periodical postage paid at Albany, NY, and additional mailing offices.

Send check or money order payable to:

*Conservationist*  
NYSDEC  
625 Broadway  
Albany, NY 12233-4502

or call: **1-800-678-6399**  
Visit the Department's website at:  
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POSTMASTER: Send address changes to:

*Conservationist*  
NYSDEC  
625 Broadway  
Albany, NY 12233-4502  
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Environmental  
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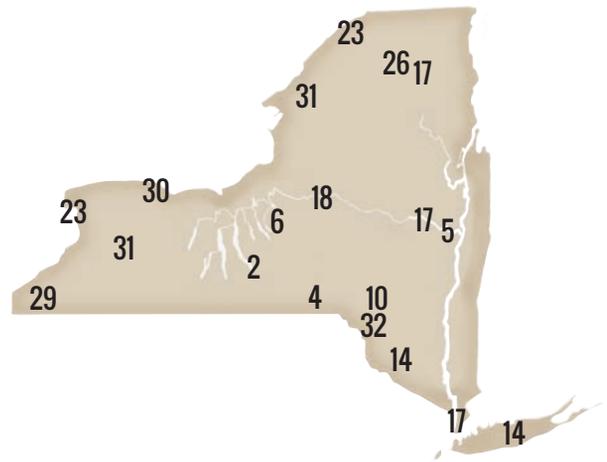


Susan L. Shafer

April 2018 Volume 72, Number 5

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# SPRING panfishing

By John Rowen  
DEC photos unless otherwise noted

*Panfish angling in the spring is one of the great fishing experiences of the year. From Lake Montauk at the easternmost end of New York, to Lake Erie on the Pennsylvania line, and from wilderness ponds to stormwater retention ponds, these fish are plentiful in both still and flowing waters. So, no matter where you live in New York, there is a panfish adventure near you.*

Bill Banaszewski



A young angler proudly displays his catch—a colorful pumpkinseed.

Panfish are basically any fish that can be cooked in a pan, such as sunfish, rock bass, crappie and yellow perch. They are the perfect quarry for anglers of any age or skill level, and can be caught on tackle that's as simple or complex as an angler wishes.

My father took me on my first fishing trip to Sycamore Lake in southern Indiana. Looking down into the lake's clear, shallow water, I was amazed when a school of fish appeared seconds after the bobber and worm hit the water. I held my breath, waiting to see whether the fish would take the bait. It was thrilling.

Decades later, I still love watching panfish hit my bait or lure. But I've also learned to fly fish and relish the anticipation of seeing a fish come from beneath the surface to strike a foam popper, wet fly or streamer I've cast out. It's great when they do take the bait, because panfish hit emphatically and put up a lively fight. Plus, panfish are tasty—especially in the spring.

In New York, anglers can pursue various panfish species, including bluegill, pumpkinseed, redbreast sunfish, rock bass, crappie and yellow perch. All are found in shallow water, and with the exception of rock bass and crappie, are highly colorful. They are generally small- to medium-sized, occasionally reaching two pounds or more in weight.

Prolific breeders, panfish can become stunted (i.e., they don't grow as large) if they become too abundant in a given waterbody. Stunting also occurs if waters are overfished, if there are few predatory fish or if excessive weed growth gives smaller fish cover from predators.

Fisheries managers used to think that catching more panfish in a fishery with stunted fish improved the fishery. New research, however, reveals that catching high numbers of larger panfish

reduces overall fish size. Removing larger fish leaves fewer predators to eat smaller fish. Some fish are small for genetic reasons alone; if no larger fish are reproducing, genetics favor smaller fish.

Most anglers who keep panfish to eat prefer larger fish because they are easier to fillet. But if you want to help improve a fishery, keep some smaller fish to cook. A. J. McClane's *Encyclopedia of Fish Cookery* is a great resource for preparing and cooking small sunfish whole without encountering too many bones.

As is the case with all fishing, understanding a fish's behavior enables anglers to catch more fish. For instance, since panfish like shoreline cover or underwater structures, anglers should concentrate their efforts in these spots. Panfish also tend to travel in schools, so if you catch a fish, stay in the same area; more may be nearby.

You will do better if you approach the water quietly, or if in a boat, travel quietly, without banging the anchor and oars or dropping your tacklebox. However, as a friend of mine asserts, a vow of silence is not a mandate. "Sunfish," he quips, "are the only fish that will stick around with all the noise a grandpa and two kids can make on a dock."

Fishing can also lead to friendships. Avid angler Carl Kochersberger was fly fishing with friends near Cornell, using nymphs he tied himself, when a mother and her two young sons approached to watch. Carl recalls, "We lent the boys our fly rods, and the boys, who had never held a fishing pole before, each caught a small, but feisty pumpkinseed every time a nymph touched the water. No casting was needed; just dipping the fly in the water triggered the fish fighting over the nymphs. It was the perfect way to introduce these boys to fishing." Carl met the same family on another excursion and saw them enjoying their new found skills.



Whether you catch a small bluegill (left), or a larger crappie (center and right), panfish angling is fun for everyone.



Bluegill (top) and pumpkinseed (bottom) both make a tasty meal.

Local fishing knowledge and a willingness to be flexible increases an angler's chance of success. The late Willard Osterhout often invited me and friends to the lake by his house. Although some came to the lake with a fixed plan, such as fly fishing all day, Willard's advice, gained by fishing the lake daily, was always better than any pre-conceived notions we arrived with.

When my friend Lotfi's brother, Adel, visited from France, we took him fishing on a bright afternoon. We were not sure how we would do, but Willard told us about a new lure, a combination plastic tube and jig, and gave us a few to try. Soon after, we found a school of crappie and for the next 15 minutes, we caught a fish on every cast. We caught enough to feed two families.

When planning a panfishing trip, bring different types of lures, some bait and several rods. Many angling writers recommend light spinning or spin-cast tackle, with line that is four- to six-pound test. For lures, I've found that flies, poppers, spinners and jigs work well and are relatively inexpensive. You can assemble a good variety of lures and tackle for a reasonable price. If one lure doesn't work, try different retrieve speeds, and if that doesn't work, try another lure or switch to bait.

My buddy Allen loves panfishing with a bobber. "When the fish are biting," he says, "you first see the bobber quiver. Then it slowly starts to move. After that, it may sink gradually, like a submarine periscope, as the fish is hooked, or it may be abruptly yanked underwater if the fish is big." He also advised, "the small size of garden worms makes them better bait for panfish than nightcrawlers. But if only nightcrawlers are available, it's better to put pieces of them on the hook; otherwise the fish will likely pick the hook clean."

If fish are not taking a worm fished with a bobber, consider removing the bobber. I caught a 12-inch crappie fishing this way; the fish were deep in the lake and letting the worm sink helped find them. Fishing small cork or plastic-bodied surface poppers—which have smaller hooks—with a fly rod is another effective and fun method to use when pursuing panfish in shallow water. Just like seeing a fish strike a worm in shallow water, or watching the bobber move as a fish strikes, seeing a fish pull down the popper is exciting.

Mary Ellen Papin, who fishes in Western New York, observes that, "Panfish stories may not be the first thing that come to mind, and they are not the equivalent of a nice trout story. But of all my fishing memories, the stories about fishing for panfish with kids or family are among the ones I value most."

With panfish, it is less a question of *if* you will catch them, but more a question of *how* and *when*. I like to flatten the barbs on my hooks. Since panfish generally strike hard they'll be firmly hooked. With a barbless hook, you can remove a fish faster and return it to the water or put it in the cooler.

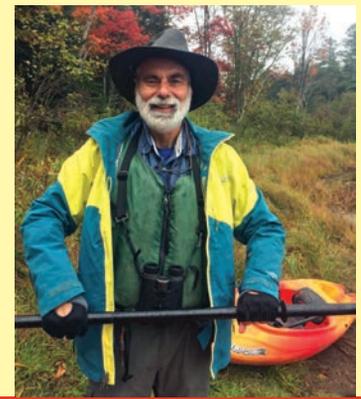
If you handle a fish that you plan to release, wet your hands first. With damp hands, you are less likely to rub off the slime coating that helps a fish stay healthy. Also be mindful of spines in the fins or, in the case of yellow perch, on the gill cover edge behind the head. Brushing back the fins from front to back as you grasp the fish will make it less likely that a spine punctures the skin.

One of the nicest fishing trips I ever took was in an old rowboat with my wife Dorothy and daughter Lily. We were pursuing panfish, and, as I recall, we might have caught some. But what I remember most was the rhythm of rowing, the conversation and jokes, and the sun sparkling on the water. Something memorable happens when panfishing, whether it's the fish, the company or the setting!

Recently retired from the New York State Department of Transportation, **John Rowen** is a frequent *Conservationist* contributor.

For more information on getting started fishing, check out *I Fish NY Beginner's Guide to Freshwater Fishing*, available on DEC's website at [www.dec.ny.gov/docs/fish\\_marine\\_pdf/gsfishing.pdf](http://www.dec.ny.gov/docs/fish_marine_pdf/gsfishing.pdf)

See also: *Crappie Fishing* in the April 2014 *Conservationist* and *Tales of a Crappie Fisherman* in the June 2002 issue.



## STAFF PROFILE

### Ray Perry— SHARING HIS PASSION FOR THE OUTDOORS

Growing up in a small Massachusetts city, Ray Perry and his friends didn't have easy access to natural areas, but they still spent as much time outdoors as possible. And when he met his future wife, Lysle, who shared his outdoor passion, they decided to pursue careers in outdoor recreation and environmental education.

Ray gained experience through a series of internships and volunteer positions—including one at DEC's Five Rivers Environmental Education Center. Afterwards he was hired to start an environmental education program at Saratoga Spa State Park, then did a stint at Five Rivers where he was the Project WILD coordinator, and went on to coordinate the NYS Parks' Bird Conservation Areas program.

Like the call of the wild, Ray later returned to Five Rivers, and became director in 2013. He oversees management of the facility and its programs, yet credits his staff for their efforts to make Five Rivers such a popular destination for young and old. With their help, Ray tackles new areas of natural history each year, learning as much as he can, and then shares that knowledge—and his passion—with visitors. For Ray, a good day includes leading a nature walk or engaging in informal interactions at the visitor center. But guiding an outdoor program is his first choice: "if a few good birds are seen, that would be ideal."

After 34 years as an environmental educator, Ray plans to retire soon. He and Lysle will remain active, enjoying birding, paddling, running, biking, hiking and geocaching. He will miss the work and the people. Ray is happy that many environmental programs he initiated have endured. The young boy who had to seek out natural areas and create outdoor adventures never lost his passion for nature. And that passion and love of the outdoors has been passed on to new generations.

By Ann Harrison

Remember how excited you were the first time you turned over a rock and saw all the critters scatter, or when you saw a flash of red and recognized a cardinal? Well, Earth Week is the perfect time to share your love of nature with a family member or friend. There's nothing like getting outside to discover the magic of New York's natural wonders!

Earth Week is celebrated in the week leading up to Earth Day on April 22. It is an opportunity for formal and informal educators, families and communities to appreciate, understand and respect how healthy ecosystems increase our quality of life.

The first Earth Day on April 22, 1970 has grown into the largest environmental education event in the world. It built upon the Arbor Day tradition, which began in 1872, of engaging students, organizations, communities and individuals in planting trees as earth's trustees.

At a time when environmental issues like climate change are increasingly in the news, it is important that New York's youth enter adulthood with the tools to understand and address these problems head-on. Earth Week provides schools and communities the opportunity to highlight and promote hands-on lessons and experiences that will lead to a better understanding of environmental issues and stewardship of our natural resources.

Being outside does more than help young people understand habitats and ecosystems: it's also good for them. Research has repeatedly shown that spending time in nature helps students focus, reduces symptoms of ADHD, fights obesity, and reduces bullying. And if these reasons aren't enough, it's also lots of fun!

DEC environmental education centers ([www.dec.ny.gov/education/74.html](http://www.dec.ny.gov/education/74.html)) and State Parks' nature centers (<https://parks.ny.gov/>) offer a host of activities, ideas and events throughout the state to celebrate Earth Week.

Wherever you live, there's so much to enjoy outdoors. Visit Kids GO (Get Outside) at [www.dec.ny.gov/education/69.html](http://www.dec.ny.gov/education/69.html) for a series of fun activities to appreciate the environment. Or just take a family walk around your neighborhood to see, smell and experience the natural world—you may just want to make Earth Day, every day!

**Ann Harrison** is chief of DEC's Bureau of Environmental Education.



# CHITTENANGO CREEK PROJECT—

## A bonus for anglers, trout and local landowners

By Briana Foisia and Catherine Flood; DEC photos unless otherwise noted

John Patane walks along the bank of Chittenango Creek on a brisk day. Climbing over rocks, weeds and hills, he points out the water elevation at this point in the creek, less than a mile downstream from the 167-foot drop of Chittenango Falls in the northwestern corner of Madison County.

One month after renovations to the creek were completed, the deep water is noticeable. It flows over and around boulders, increasing the water's oxygen content and providing better habitat for the trout that live here. A smile spreads across John's face as he talks about the trout that will now be able to hide from predators and find resting spots. An avid fly fisherman who grew up in nearby Canastota, he has high hopes for the growing trout population in Chittenango Creek.

Patane also has great satisfaction knowing that homeowners along the creek can now sleep in peace because their properties are no longer at risk from damage caused by erosion. Prior to the renovations, a few landowners were losing driveways—and

money—each time rising water levels swelled the creek beyond its narrow course.

It was a few years back when Patane and the Madison County Chapter 680 of Trout Unlimited pushed to designate this stretch of the creek as a catch-and-release area. For that to happen, however, fishing regulations had to be changed, and those changes had to be adopted and approved by DEC. Once the program was approved, John wanted to see about conducting substantial stream improvement in that area.

“Chittenango Creek is a high-quality trout stream,” Patane says. “It has cool water because many small cold springs feed the main channel, and the stream is very well-shaded in most areas, which also keeps the water cool. The cooler the water, the more oxygen it can hold and the greater potential for trout.” He adds that a large variety of mayflies hatch from the stream, which helps provide the nourishment trout need to grow large.



Restoration projects like this one lead to better habitat and better fishing.

Patane notes that the section chosen for improvements already had permanent fishing rights. Years ago, landowners sold permanent easements to New York State, allowing the public to fish along the stream.

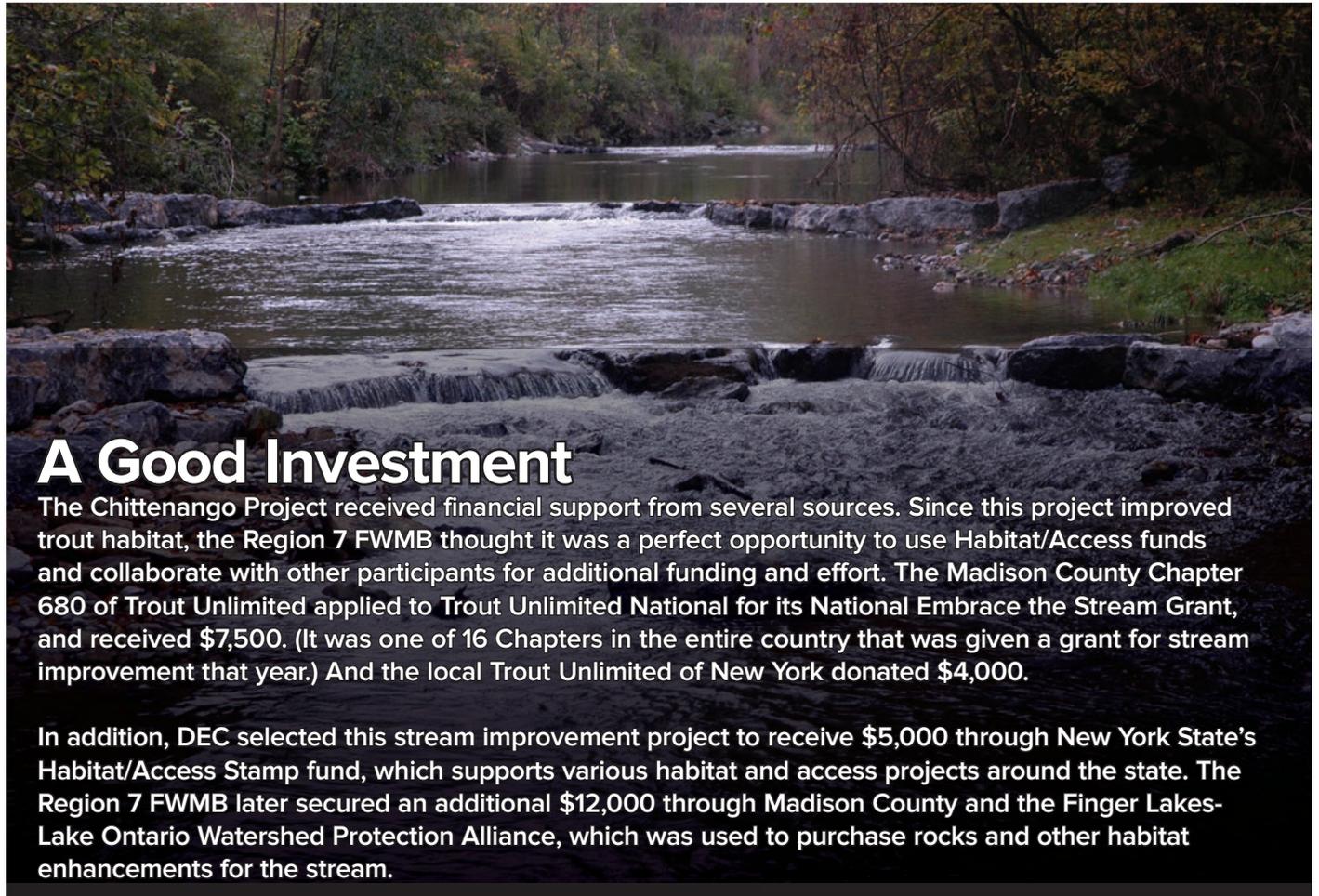
As we walk farther downstream, he points out the areas where boulders were put in to guide the water flow away from the banks. By redirecting the water, he explains, erosion will be less likely to occur and the risk of financial loss will diminish.

**Since trout need cool water and high oxygen levels to survive, all these improvements will lead to better trout habitat.**

To get the ball rolling for stream improvement work, Patane contacted Jim Petreszyn, the Madison County Associate Planner and representative to the DEC's Region 7 Fish and Wildlife Management Board (FWMB); Carl Schwartz, the project designer and U.S. Fish and Wildlife Service's northeast regional conservationist for the Cortland office; and Dave Lemon, DEC's Region 7 fisheries manager. Fortunately, the fishery experts agreed with him.

Carl Schwartz said, "It's important to get a more stabilized river system because when a stream is unstable, the sediment deposits into the middle of the channel. And with nowhere else to go, the water spreads to the sides and cuts into the banks."

Schwartz notes that at some point in the distant past, Chittenango Creek became "channelized"; its path became closer to a straight line. When that occurs, a stream's water flow becomes faster and erosion increases, reducing the ability of these sections to support trout.



## **A Good Investment**

The Chittenango Project received financial support from several sources. Since this project improved trout habitat, the Region 7 FWMB thought it was a perfect opportunity to use Habitat/Access funds and collaborate with other participants for additional funding and effort. The Madison County Chapter 680 of Trout Unlimited applied to Trout Unlimited National for its National Embrace the Stream Grant, and received \$7,500. (It was one of 16 Chapters in the entire country that was given a grant for stream improvement that year.) And the local Trout Unlimited of New York donated \$4,000.

In addition, DEC selected this stream improvement project to receive \$5,000 through New York State's Habitat/Access Stamp fund, which supports various habitat and access projects around the state. The Region 7 FWMB later secured an additional \$12,000 through Madison County and the Finger Lakes-Lake Ontario Watershed Protection Alliance, which was used to purchase rocks and other habitat enhancements for the stream.



Stream improvement involved placing boulders (above) and root wads (left) to combat stream bank erosion (bottom) and improve trout habitat. NYSDOT partnered with DEC and provided many of the trees used in the project.

“Channelization basically shortens the stream and changes its characteristics,” Dave Lemon adds. Channelization cuts off the “meanders,” or bends and curves in a river system, changing habitat from a series of riffles and pools to a much harsher habitat with shallow, faster currents. “In this section of Chittenango Creek, the stream is trying to return to the meandering pattern it needs,” Lemon says. “We were trying to enhance its efforts to rebuild a more natural channel.”

Stream improvements included placing rip-rap (large boulders that help increase oxygen levels) and root wads (trunks of dead trees with the roots still attached) in the creek. In the case of the wads, the soil is removed to expose the roots, which deflect water flow and protect the bank. The wads are usually placed projecting into the current, which slows the water. The trunk itself is placed within the creek’s bank and then covered with soil to help stabilize the bank.

Along with protecting landowners’ properties, improvements to the creek’s banks reduced the risk of damage to NYS Route 13. Previous storms had created heavy flows that ate away at the banks, which were unstable due to a lack of vegetation and large rocks to protect the soil.

Patane explains that in addition to improving fish habitat, reducing soil erosion and keeping the stream off the highway were important goals. One section of the creek had shifted course and created a new channel that reduced water flow and raised water temperature in the original channel, a deadly combination for trout. Pointing to the restored channel, Patane notes that they blocked off the new channel and shifted the water back into its original route.



DEC photo

Schwartz added that they also used rock veins, cross-veins, tow wood, and rock clusters to enhance the habitat in Chittenango Creek. He described how cross-veins look like horseshoes facing upstream, which create riffles and pools in the system. Larger fish stay within the pools, or the areas of the stream where the water is moving slowly, while smaller fish are more likely to be found in the riffles, or the portions of the stream where the water flows faster over the rock veins. These riffles help to create calmer water downstream. In the Chittenango Creek project, rocks were used to redirect flow of the channel to the center of the stream instead of the banks. These rocks provide a place where the trout can spend less energy while they wait for food to come downstream.

The rock vein and cross-vein structures are layered to create much deeper pools behind them, which is better for fish. Fish can move out and feed, then come back to rest in calmer water. Resting areas also provide places for trout to hide from their natural predators, including blue herons, raccoons, mink and even otter.

In one section of the stream, three different veins are placed one right after the other, making it look like a flight of stairs. Patane noted that "...coming from the falls there's kind of a steep gradient from here throughout the Village of Chittenango, located less than five miles below the falls, and it's constantly dropping. The more flow you can get, the more bubbling effect you get, and the more oxygen you add to the water."

Since trout need cool water and high oxygen levels to survive, all these improvements will lead to better trout habitat. As winter passes, the water elevation will continue to rise. By spring, the creek should show a great turnabout due to the improvements.

Avid anglers will notice the difference right away, with an increased trout population in areas that couldn't support as many adult trout before. Patane feels anglers will be "wowed" by the improvements, and he hopes that in the future, more improvements will follow.

The proof, he says, will come in the spring. In the meantime, he will keep visiting the area, keeping tabs on the project, and on the fishing.

At the time of writing, **Briana Foisia** and **Catherine Flood** were seniors in the Journalism & Communication for Online Media B.S. Degree Program at Morrisville State College.

**Editor's Update:** *It's been a few years since this project's completion and in that time severe flooding affected the area. However, the streambank remains protected and nearly all of the other structures look and function much as they did immediately after installation. As for the fishing—anglers are successfully catching trout!*

## STAFF PROFILE



### Dave Lemon—A Focus on Fishing

As DEC's Region 7 Fisheries Manager, Dave Lemon oversees efforts to manage and create access to the ponds, lakes, rivers, and streams in Central New York (CNY), including fish and habitats in the Salmon, Susquehanna and Seneca Rivers and four of the eastern Finger Lakes. It's a long way from his start as a seasonal tech in DEC's Region 3 office in 1990, but a logical path from his position as an aquatic biologist when he moved to Region 7.

Like most managers, he still enjoys spending time in the field when he can, noting that "hands-on fishery sampling is still the best part" of his job. But he also relishes the opportunity to help educate people, whether answering their questions or pointing them in the right direction. Based on the diversity of fishing options in CNY, that direction ranges from small, coldwater trout streams to the salmon and trout opportunities of Lake Ontario.

The Norristown, PA native still loves to fish, and enjoys the variety of opportunities in CNY, such as casting for trout in Chittenango Creek ("it's dear to my heart," he says), as well as bass and walleye in the Susquehanna. A couple of years ago, he caught two wild stream brown trout, each over 26 inches, on consecutive casts—like all dedicated anglers, he refuses to divulge the exact location. But that doesn't mean he isn't working to create great fishing opportunities on Chittenango Creek and other waters in the region.

Dave has a wife and two children, and enjoys living in the heart of New York. He and his fishery staff are committed to building on the strong fishing tradition in the state, with a focus on the Central New York region. The regional office has an expression they use when they talk about the area—"Almost heaven, Region 7." And while some may be a bit skeptical, Dave is a staunch advocate, and his work backs it up, as he leads efforts to create great fishing experiences for young and old, beginners and experts. After all, in the words of a true fisherman, "a reel expert can tackle anything."

# THE BEAVERKILL COVERED BRIDGE

*—Restoring History and Preserving  
the Character of the Catskills*

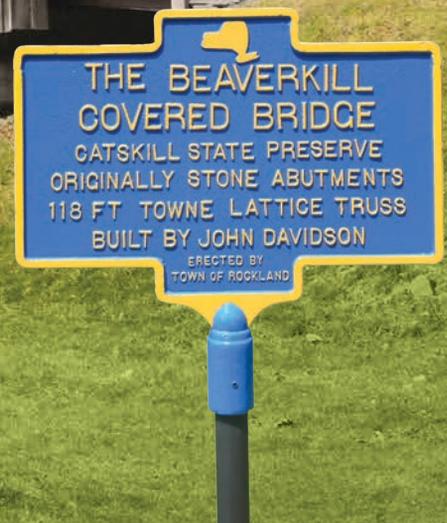
By Peter Constantakes  
Photos courtesy NYS Covered Bridge Society & DEC

If you've ever come upon a covered bridge, purposely or by accident, you likely were drawn to its unique structure, so different from today's modern bridges. Seeing these bridges transports you back in time. In your mind, you can picture travelers from an earlier era (maybe you see them in a black-and-white photo), with horse-drawn carriages or sleds, crossing the bridge with passengers, crops or some other freight in tow.

At one time, New York had more than 300 covered bridges, stretching from Long Island to the western part of the state. Today, the number of historic covered bridges in the state has declined to about 30. Many of them are historic community attractions rather than active, working bridges; some have been restored and refurbished, and continue to play an integral role in the community.

Like many aspects of our history, covered bridges fell victim to the inevitability of progress and the changes it brings. Advanced engineering techniques and new materials revolutionized bridges; steel bridges were more sturdy and durable, able to carry heavier loads (e.g., people, vehicles, freight) and withstand cold and wet weather for longer periods of time. These bridges did not need covers to prevent rain and snow from damaging their structural integrity, i.e., the wooden trusses that provide support by distributing the weight of loads along the bridge's span.

Fortunately, many covered bridges have endured. In some cases, local communities, organizations and the state have worked together to repair and restore these historic bridges, preserving both their legacy and beauty, and in some cases, their functionality.





The Beaverkill Covered Bridge (the Dutch word, “kill,” means creek or stream), in the town of Roscoe, Sullivan County is one such bridge. Built in 1865 by John Davidson, the 98-foot span was one of the first bridges to span the Beaverkill. It provided access to a remote area of the Catskills that was home to a small community of residents, a few nearby tanneries and businesses, and generations of anglers who cast their lines near the confluence of the Beaverkill River and Willowemoc Creek, an area that earned the title, “Trout Town USA.” (See pg. 32)

Like many bridges from that time, it was built as a single span structure comprised of wood, with four trusses and lattices on each side. But it also featured a new design concept: the “Town lattice truss,” which provided structural support by using an uninterrupted series of crisscrossed diagonals connected by pins to the top and bottom chords, forming overlapping triangles. The individual triangles fastened to others at their points of intersection, equally distributing the load across all the triangles to provide structural strength and stability.



This new technique allowed engineers to build bridges without vertical timbers, and incorporate readily available, local materials, including lighter weight-bearing planks that were less expensive. With this new type of truss, bridges could be built on piers spanning long distances, and ultimately were easier to construct.

The Beaverkill Covered Bridge helped shape the community and local culture for more than a century. The bridge, along with its namesake creek and adjacent lands, including DEC's Beaverkill Campground, has been a popular Catskill tourist attraction for generations.

In 2007, the bridge was added to the State and National Registers of Historic Places. However, just six years later, it was clear the bridge was in desperate need of repair and upgrades.

A coalition of state and local partners took up the challenge of restoring the bridge, rather than replacing this historic structure. The groups included DEC, NYS DOT, the NYS Office of Parks, Recreation and Historic Preservation, the Open Space Institute, John and Patricia Adams and the Friends of Beaverkill Community, the Catskill Mountainkeeper, Sullivan County and the town of Rockland. Together, they developed a restoration plan to preserve the structure, history and character of the bridge, and its important role as an historic Catskill landmark.

A three-year, \$2.5 million project was initiated that included replacing timber decking, roofing and siding, as well as some floor beams, roof rafters, a bridge pier and other support features.

The side abutments were also rebuilt and resurfaced to replicate the original stone approach ramps, and a walkway under the bridge was widened.

"This project provided a unique opportunity to protect an important part of the Catskills' history, and enhance a site that has long been a popular destination for fishing, camping and day trips," John Adams said. "The restoration of the Beaverkill Covered Bridge is a testament to how key stakeholder groups and the local community, in particular partners like Sullivan County Paving, can work together to honor, celebrate and build upon New York's outdoor legacy, and create vital links between our past and our future."

This past fall, NYS Office of Parks, Recreation and Historic Preservation honored the bridge rehabilitation project with a 2017 New York State Historic Preservation Award, noting the effort "has made an important contribution to preserving this rare surviving local landmark for the greater public good."

For those who have not seen this historic bridge, and others who enjoy a beautiful setting for fishing, camping, or spending a day with family and friends, this is a great site to visit. You can step back in time to when the bridge was new and the area offered a mix of breathtaking scenic views, nature trails and outdoor serenity, and some of the best fly fishing found anywhere in the world. And the best news is that the restored Beaverkill Covered Bridge preserves this experience; it is truly a bridge connecting the past and the future.

**Peter Constantakes** is an associate public information specialist in DEC's Albany office.



# Discovering New York's Covered Bridges

Modern bridge design, like many engineering improvements, provides many benefits, including being more practical in terms of durability and cost. But the design and history of covered bridges still excites many people. Covered bridges stimulate a part of our minds that longs for the beauty and simplicity of a simpler, more pastoral time, which is increasingly hard to find.

Fortunately, covered bridges, like the following examples, can still be found across New York.

Many of them have been restored to structural stability, but retain the unique characteristics that make them memorable.



- *The Hyde Hall Bridge* at Glimmerglass State Park in Cooperstown, for example, is not only the oldest, still standing covered bridge in New York, but the oldest in the country. Visitors stroll across the covered bridge and take pictures of the historic Hyde Hall to capture a bit of nostalgia. The 53-ft. bridge is a single-lane, timber-framed, gable-roof structure originally built in 1825, and restored in 1967. The bridge originally carried the main estate road across Shadow Brook to Hyde Hall, and now serves as a pedestrian crossing in the state park. It features a timber Burr segmental arch truss, and is a notable example of engineering design used during the Federal period.



- *The Newfield Bridge* in the town of Newfield, Tompkins County, was built in 1853 at a cost of \$800. The 115-ft. by 16-ft., single span structure features a Town lattice truss design, with laminated arches that were added in 1972. The bridge crosses the West Branch of the Cayuga Inlet, replacing a previous log bridge at the site. For years, the Newfield Bridge was a vital resource for the local economy, with two grist mills below it, and a sawmill, a tannery and a woolen mill above. The Newfield Bridge is the oldest covered bridge in New York still open to daily traffic. It was added to the National Register of Historic Places in 2000.



- *The Downsville Bridge* in the town of Colchester, Delaware County, was constructed in 1854 at a cost of \$1,700. The 174-foot, single-span bridge crosses the East Branch of the Delaware River and is the oldest of the county's six covered bridges. Built at a high elevation, which has helped limit damage from floods, the bridge features a Long truss design and auxiliary queen post for support. In 1998, the bridge was rehabilitated at a cost of \$975,000, which included replacement of its two lower chords and the addition of a single, 174-ft. laminated beam—the largest laminated beam ever constructed. The Downsville Bridge was added to the National Register of Historic Places in April 1999.



- *The Buskirk Bridge* is unique in that it is the only covered bridge in New York that connects two counties, Rensselaer and Washington. The 158-foot, single-span bridge crosses the Hoosic River where its waters widen into a floodplain, and over the years, the bridge has been damaged by floods and ice. After being damaged by floods in 1976, the bridge was raised two feet. It is one of only three covered bridges in New York built with the Howe truss design. A complete bridge rehabilitation was completed in 2004-05. The bridge, along with three other covered bridges in Washington County, was added to the National Register of Historic Places in 1978.

For additional information on covered bridges in New York, including pictures, visit the New York State Covered Bridge Society website at: [www.nycoveredbridges.org](http://www.nycoveredbridges.org).



# BE PET SMART

—Don't release unwanted pets into the wild

By Catherine McGlynn

Many people love having an aquarium (or two) in their homes. It's fascinating to watch the wide variety of striking-looking exotic fish and other critters, such as discus and arowana fish from the Amazon River Basin, datnoid (tiger fish) from Indonesia and Thailand, green spotted puffer fish from Southeast Asia, freshwater stingrays from South America, and axolotl salamanders from Mexico. Aquarium owners take great pride in caring for their pets, but if they decide they can no longer care for them and release them into local waterbodies, those actions can lead to serious problems.

In 2008, northern snakeheads (*Channa argus*) were discovered in Ridgebury Lake in the town of Wawayanda, Orange County. Aggressive predatory fish native to Asia, northern snakeheads have the potential to reduce or eliminate certain native fish populations, and can harm aquatic ecosystems and fishing. The snakeheads found in Ridgebury Lake were likely released from someone's aquarium after the fish had grown too large (they can reach three feet long). DEC successfully eradicated the fish, but it required removing and storing the native fish outside of the lake, treating the lake with rotenone (a pesticide that kills fish), and then restocking it with the native fish. The project cost hundreds of thousands of dollars.



northern snakehead

In 2016, an alligator gar (*Atractosteus spatula*) was found in Iroquois Lake in Schenectady. At almost three feet long, this fish had probably grown too large for its aquarium, so its owner released it into the lake. Native to the southern United States, where they inhabit lakes, rivers, reservoirs, bayous and brackish waters, alligator gar can reach more than eight feet in length. Gar were heavily harvested in their native range, and now many Midwestern and Southern states have initiated efforts to restore those populations. Interstate transport and sale of alligator gar is illegal under several state and federal regulations. When people violate these regulations, it can have significant consequences, and could even eradicate native species. Fortunately, an angler was able to catch this fish and remove it from Iroquois Lake before it affected the lake's fish community.



The green tree python

In 2017, the Lake Management Program at the State University of New York at Oneonta assigned a student to develop a lake management plan for Lake Ronkonkoma in Suffolk County. Lake Ronkonkoma is one of the only inland lakes on Long Island with a public launch for fishing. Oriental weatherfish now inhabit this lake as a result of aquarium releases. Unfortunately, when the fish were released, the plants in the aquaria were also dumped into the water. Where once more than ten species of native plants lived, now two aquatic invasive plants that are prohibited in New York—*Hydrilla verticillata* and Eurasian water milfoil (*Myriophyllum spicatum*)—dominate the lake. Both plant species are often misidentified and sold by pet stores and online companies, often under the name “anacharis.” *Hydrilla verticillata* was also dumped from an aquarium into Tinker Park Nature Center pond in Henrietta (Monroe County), and DEC is currently working to control this population and protect the waterbodies connected to the pond. Control efforts, if possible, have not yet occurred in Lake Ronkonkoma.

Aquarium owners aren’t the only ones who have released unwanted pets into the wild. Large snakes and pet alligators have been discovered in several places in New York. Last year, for instance, DEC staff captured two alligators one week apart on the Tioughnioga River in Broome County. Both alligators had been



spotted by kayakers who were out for leisurely paddles. One alligator measured 39 inches, the other 45 inches. DEC believes they were once kept as pets and let go when they became too large to handle. In New York, it is illegal to keep an alligator as a pet, but that doesn’t stop people from obtaining them elsewhere.

Such releases may be due to owner ignorance, but they are misguided and can harm the state’s native species and ecosystems, as well as the pets themselves. For example, alligators cannot survive our cold northern winters, nor can many pet snakes. With the responsibility of pet ownership comes the responsibility of proper handling, including disposing of animals or plants that are not native to New York.



Lieutenant Kenric Warner with the pet alligator found in Broome County.

If you own an exotic pet or have an aquarium that you can no longer care for, don't release the animals into the wild. Instead, donate unwanted plants and animals to a school, nature center, aquarium or zoo, or return them to where you bought them. You can also contact a veterinarian or pet store for help if you can't find your pet a new home.

Nature's inhabitants are often exciting to watch, in the wild or in your home. So enjoy your aquarium and legal exotic pets, but don't forget that we have a responsibility to properly care for, and dispose of them. You'll protect the environment and your pets. Plus, it's the right thing to do, and easy to do as well.

**Catherine McGlynn** works in DEC's Office of Invasive Species Management in Albany.

(Note: A regulation, Part 575, adopted in July 2014 prohibits or regulates the possession, transport, importation, sale, purchase and introduction of select invasive species in New York State. The adjacent list is based on assessments of current available information.)

For a full list of Part 575 species, see [www.dec.ny.gov/docs/lands\\_forests\\_pdf/islist.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/islist.pdf)

Common name	Scientific Name
<b>PROHIBITED PLANTS</b>	
Fanwort	<i>Cabomba caroliniana</i>
Brazilian waterweed	<i>Egeria densa</i>
Hydrilla/water thyme	<i>Hydrilla verticillata</i>
Parrot feather	<i>Myriophyllum aquaticum</i>
Eurasian water milfoil	<i>Myriophyllum spicatum</i>
Curly leaf pond weed	<i>Potamogeton crispus</i>
<b>PROHIBITED ANIMALS</b>	
Northern snakehead	<i>Channa argus</i>
Bullseye snakehead	<i>Channa marulius</i>
Giant snakehead	<i>Channa micropeltes</i>
Walking catfish	<i>Clarias batrachus</i>
Oriental weatherfish	<i>Misgurnus anguillicaudatus</i>
<b>REGULATED ANIMALS</b>	
Goldfish	<i>Carassius auratus</i>
Common lionfish	<i>Pterois miles</i>
Red lionfish	<i>Pterois volitans</i>

# On Patrol

Carl Heilman II

*Real stories from Conservation Officers and Forest Rangers in the field*



Jason DeAngelis

## Three Men in a “Pickerel”— Schenectady County

On March 11<sup>th</sup>, ECO Jason DeAngelis nabbed three men in the process of taking well over their limit of five pickerel each on Mariaville Lake. When the officer approached, the men began to dart about and fling fish through the holes in the ice. The officer counted 69 pickerel over the limit, with 31 of them being under the minimum length of 15 inches. All three men were ticketed with multiple violations and those fish that were still alive were returned to the lake.

## Trail Injury Assist— Essex County

DEC Ray Brook Dispatch received a call from a United States Army medic regarding a 58-year-old male with an unstable lower leg injury on the Cascade/Porter trail. The subject had fallen, and when his leg hit a tree, he heard something snap. The medic

on the trail that day splinted the man's lower leg and advised Forest Rangers that he and the injured subject would begin making their way to the trailhead. Regional Forest Ranger Capt. John Streiff and Forest Ranger Peter Evans responded from the Saddleback/Basin incident command post and found the subject 0.4 miles from the trailhead. Rangers re-evaluated and re-splinted the injury and assisted the subject to the trailhead. The injured hiker stated he would seek further medical care on his own.

## Assist in K-9 Search in CT— Putnam County

Late on December 21<sup>st</sup>, DEC Forest Rangers received a request from the New York State Police for assistance searching for a missing Connecticut State Police K-9. The bloodhound got loose when its handler fell while conducting a search in a mountainous area in Wooster Mountain State Park in the Town of Danbury, CT. Forest Rangers Philip

**Contributed by ECO Lt. Liza Bobseine and Forest Ranger Capt. Stephen Scherry**

Parlier and Lincoln Hanno were assigned to respond early the following morning, and they assisted with the search. The uninjured dog was found the morning of December 22<sup>nd</sup> with his 15-foot lead entangled in a fence. It was an emotional reunion between the CT K-9 and handler.

## Leaking Parts at Junk Yard—Westchester County

On January 31<sup>st</sup>, ECOs Dustin Dainack, Craig Tompkins, Chad Eyler, Kevin Wamsley and Aaron Bonilla, along with Lt. Meg Filmer and members of the Mount Vernon Police and Fire Departments, conducted a saturation detail focusing on auto repair shops and dismantlers. At one of the sites the team found mountains of engines and transmissions leaking oil, huge piles of lead acid batteries and waste tires, burn barrels of trash next to oil, and gas tanks and cars stacked haphazardly upon one another. The ECOs issued citations for all these violations. ECO Dainack will follow up with DEC program staff to ensure the property is cleaned up and brought into compliance with state environmental regulations.

## Ask the ECO:

**Q:** When I'm doing my spring cleaning, how can I get rid of unwanted garbage?

**A:** If the material is “solid waste” (normal household material, not pesticides or harmful chemicals), your local county transfer station is a good bet. Remember, all solid waste must be securely covered during transport! One ECO watched several pieces of wood come flying off the back of a truck before he was able to stop the vehicle.

# UTICA MARSH WILDLIFE MANAGEMENT AREA

*An Urban Gem!*

By Steven R. Heerkens

If you've ever motored along State Routes 8 and 12 near the City of Utica, you may have noticed this familiar scene: a large wetland pool full of migrating Canada geese. This view is part of Utica Marsh Wildlife Management Area (WMA), a small, productive wetland habitat immediately adjacent to a city of 60,000 people!

An assortment of waterfowl species, including mallards, wood ducks, widgeon, green-winged teal and northern shoveler use the property, and countless other bird species also call Utica Marsh home. Although it is a great place to watch birds, Utica Marsh also provides opportunities for people to engage in other outdoor activities literally minutes from downtown.

Utica Marsh WMA was developed through the combined efforts of DEC staff and interested members of the public. One group of motivated individuals, the Utica Marsh Council, was created as a non-profit organization whose intent was, in part, to "enhance... marsh resources and expand... access and community use of the marsh..." The council also felt that the marsh should be available as an educational resource for students and the public to learn about wetlands and ecosystems.

The property lies between the Mohawk River and the historic Barge Canal. The WMA was born from the remnants of light industrial development and a former city dump site, and for decades co-existed adjacent to several auto dismantling facilities. In 1980, DEC finalized a management plan highlighting the natural resources on the property and described how to encourage public use and greater visitor access.

Utica Marsh's location and varied habitat attracts many species of birds, and also hosts mammal species commonly found in the floodplain. River otter, raccoon, beaver and mink all inhabit these wetlands, while white-tailed deer, coyote and wild turkey roam neighboring upland cover. The city of Utica's only breeding pair of peregrine falcons use the marsh and surrounding river corridor to hunt and regularly catch prey such as woodcock, yellowlegs, various woodpeckers, cuckoos and small waterfowl. Least bitterns, gallinules, Virginia rails and common egrets inhabit the shallow water at the edges of the marsh.

Numerous invasive plant species also inhabit Utica Marsh and have made wetland management challenging. As is true in many disturbed areas throughout New York, knotweed, *Phragmites*,



DEC photo

Observation tower



Megan Cardon

Wood duck



River otter



Peregrine falcon

**LOCATED AT THE BORDER OF THE CITY OF UTICA AND THE TOWN OF MARCY IN ONEIDA COUNTY; SIZE: 213 ACRES**



## Site Features



**NOTES:** Open year-round. Fishing, trapping, hiking, birdwatching, nature study and wildlife photography are all popular activities. The New York State Canalway Trail (<http://canals.ny.gov/trails/about.html>) passes adjacent to the WMA and connects Utica with Buffalo to the west, and Albany to the east. A kiosk for the area is located off N. Genesee Street in North Utica and provides additional information about the area and WMA regulations. Visitors should note that trails are not maintained in the winter, but are open to snowshoeing and cross-country skiing.



**DIRECTIONS:** Accessible from two directions. From the west: Mohawk Street Canal trail parking area, Town of Marcy. From the east: N. Genesee Street in North Utica.



**CONTACT:** For information on Utica Marsh WMA, visit or call 315-866-6330 ext. 116 (DEC Region 6 Wildlife Office).

and purple loosestrife live on the property. Recently, European water chestnut has invaded the WMA as well. Loosestrife has been managed successfully with *Galerucella* beetles, but water chestnut requires both manual management (hand pulling) and the use of certified herbicides to kill the plants. In August 2017, DEC's Region 6 wildlife staff implemented the first treatment of water chestnut with herbicide, but it will require several years of effort to control this aggressive plant.

The WMA is not open to hunting, but trapping is allowed. Access has changed since the WMA was created more than 35 years ago, and the public can no longer drive directly to the site. However, the New York State Barge Canal and Canalway Trail run along the property, so visitors may access the WMA by walking, biking or by boat (see sidebar). Visitors will find a well-developed trail system that takes them close to wetland areas where they may birdwatch, and to a new observation tower that provides unobstructed views of the large wetland pools.

Wildlife Biologist **Steven R. Heerkens** works in DEC's Herkimer office.



*Galerucella* beetle



European water chestnut



Purple loosestrife



# RUFFED GROUSE

By Bean Friend

Photos by author unless otherwise noted



Robert Cook



Male ruffed grouse “drum” from a horizontal perch to advertise their presence to females and to announce their territory to other males.

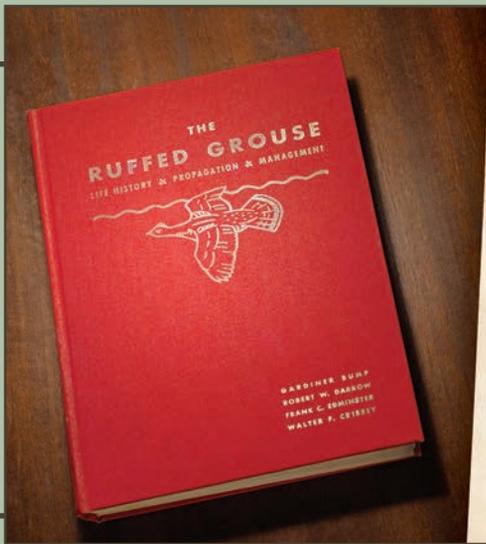
As my brother and I drove up his driveway, he warned me that a new, feathered friend had moved in. Not knowing exactly what he meant, or why a bird merited a warning, I was soon to find out. As the long driveway passed under the young stand of birch, aspen, and eastern hemlock trees, I spotted a chicken-like bird emerge from the brush, charge full speed ahead like a locomotive set for a course, and chase our car all the way to my brother’s house.

It was early spring, and the male ruffed grouse (*Bonasa umbellus*) was protecting his newly proclaimed territory: about 10 acres of young deciduous forest in front of my brother’s house in Western New York. Although strange, his behavior was not all that uncommon; male ruffed grouse can get particularly territorial in spring, as they defend their turf in hopes of attracting females.

Grouse belong to the family Phasianidae, along with pheasants, quail, and partridges. The Latin name for the ruffed grouse genus, *Bonasa*, may relate the grouse’s drumming sounding like the thundering hooves of a buffalo. *Umbellus* describes the bird’s umbrella of ruffed neck feathers, seen during mating rituals and in defense of territory.

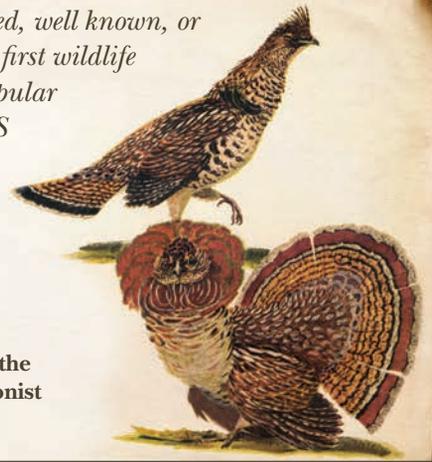
Ruffed grouse are the most widespread of all grouse in the Phasianidae family. Biologists recognize many subspecies, which are based primarily on location. Two color phases occur: gray and red. Generally, the gray phase is found in northern ranges, while the red phase occurs in warmer, southern climes.

The ruffed grouse’s range is remarkable. It can be found in parts of all Canadian provinces, and in 38 states, from Alaska to Maine, down to northern Georgia. Many characteristics allow for this wide range; principal among them is the grouse’s ability



*Few wildlife species are as well studied, well known, or as revered, as the ruffed grouse. The first wildlife monograph was compiled on this popular gamebird by researchers from the NYS Conservation Department and Cornell, and resulted in the 1948 publication, The Ruffed Grouse Life History, Propagation and Management.*

**For further reading, see: the pullout in the center of the October 2005 Conservationist**



to withstand cold weather. Their feet have comb-like growths or pectinations along each toe that act as snowshoes, which allow ruffed grouse to walk atop deep snow. As winter approaches, feathers on their legs grow thicker, giving the grouse better insulation. Also, additional feathers expand downwards towards their beak, helping to insulate otherwise exposed nasal passages. They are also known to burrow into the snow on cold nights to stay warm.

While ruffed grouse can be found in many different types of deciduous or mixed deciduous/coniferous forest, the range is closely related to aspen forests in North America. This is because aspen looms large in grouse diets: buds and catkins of aspen and other poplars, and birch are important food sources in winter. Early successional forests such as young aspen-birch-fir stands provide good woody cover, helping to protect ruffed grouse from predators such as goshawks and great horned owls, as well as the occasional fox or coyote. Disease and wet weather (especially for the young) are other common causes of death

Ruffed grouse are somewhat monomorphic: the male and female generally look the same. They can even be difficult to tell apart in the hand. Males generally have an unbroken dark tail band, while a female's is less continuous in the center. Males also tend to have longer tail feathers than females, and there can be differences in feather patterns on the rump.

Breeding behavior can also be used to distinguish males from females. Male ruffed grouse signal the onset of spring by exhibiting two remarkable reproductive behavior displays: *drumming* and *strutting*.

The drumming display is one of the most exciting spectacles and sounds of early spring. A male ruffed grouse will choose a specific log, or a raised mound, which often overlooks his

territory. The male begins his display by slowly thrusting his wings in an upward and forward fashion, quickly speeding up the tempo to a rapid wing flap. During this drumming display, the grouse braces his tail against the log and firmly clutches the perch beneath him, for the powerful forward and backward motion of his wings creates such momentum that he needs to maintain a solid grasp. The result of the drumming is a dull, thumping sound that resembles a distant motor starting up, and it can be heard a mile away.

While drumming may be heard throughout the year, it is most frequent from March to May. Like most reproductive display behaviors, drumming is performed to attract a female and to announce his territory to warn away other males. It can be considered a way of advertising a male's location in the dense forest, and it will notify all available female grouse in the area that he is available to mate!

While the *Bonasa umbellus* is usually a shy, well-concealed bird of the forest floor, if challenged, especially in the spring, a male grouse can be quite aggressive. When challenged, an adult male ruffed grouse will "strut" to drive out unwanted visitors and defend his territory. The strutting male holds his tail erect and outspread as he swaggers back and forth towards the intruder. If the intruder does not retreat, the male grouse may ruff out his neck feathers and begin hissing. Then, he lowers his head towards the intruder and proceeds to run directly towards the unwanted visitor, trying to chase it far away from his territory.

The subject of this strutting behavior is often another male grouse; however, strutting can be directed at any object the male perceives as a challenge on his territory. The proximity of my brother's house to our ruffed grouse's drumming log put us in conflict whenever we left or entered the house! As we left the

front door, sometimes it would take less than a minute for the grouse to notice us, as he would charge out from the forest edge and begin strutting at us. If we didn't immediately retreat, the grouse would begin hissing and intimidating us with short bursts of threatening energy. Occasionally, after the grouse had corralled us into the house, he would land on the large windowsill outside my brother's kitchen window and peck at the window, while strutting back and forth. Eventually, this bizarre and aggressive behavior dwindled, as spring came to a close. Males usually become less aggressive and territorial after the breeding season ends. While the male grouse drum and strut away the spring, females begin moving away from their established winter home ranges towards the male drumming sites.

Ruffed grouse are promiscuous, as one male grouse may mate with multiple females in one season. The male plays no part in nest building, incubation or rearing the young. In fact, after copulation, the pair may spend up to a few hours together, dust-bathing and eating. Then they go their separate ways. The male retreats back to his territory, while the female searches for an appropriate location to establish her nest.

Ruffed grouse prefer middle-aged hardwood stands with a few conifers for a nesting location. This habitat exhibits appropriate visibility, protection, and shady conditions with patches of sunlight. The nest is located on the ground, usually at the base of a tree or stump, but can also be found under a bush or in a small thicket.

A grouse hen also exhibits remarkable behavioral displays, especially during incubation or when young chicks are present. If she feels threatened, the hen may exhibit a disablement display to divert the attention of the predator or unwanted guest. Much



Attractive birds, grouse are prized by the hunter and birdwatcher alike.

## Species Spotlight:

### RUFFED GROUSE

#### COOL FACTS:

- Are widespread and are related to pheasants, quail, and partridges
- Are one of the most highly sought game birds in the Northeast
- Do not migrate; spend their entire lives within a few acres
- Spend most of their time on the ground
- Seldom fly more than a couple hundred yards, but can make sharp turns in the air
- Males make drumming sounds with their wings to attract females

Jean Gawalt



Grouse have fleshy projections on their feet which allow them to walk on soft snow.

like a killdeer, the female grouse will feign a broken wing, as she hobbles away from the nest. Once well away from the nest, she will fly away, usually disappearing behind a stand of trees, only to return to the nest moments later.

An average brood contains 10 or 11 eggs. Once they've hatched, chicks forage the forest floor for insects, which are their main food source for their first two weeks. During cold weather or rain, the hen will brood the chicks to keep them warm. Chicks can fly very short distances after just 10-12 days.

We never crossed paths with the male ruffed grouse on my brother's property again. Perhaps he met an unkind fate. We can only hope that his "drumming and strutting" worked as nature intended, and that he left many offspring to carry on his legacy in the woods of Western New York.

**Bean Friend** is a musician, photographer, and videographer in Buffalo, N.Y. In his free time, he enjoys photographing birds and spending time with his family.



# CLEAN POWER AND HEALTHY HABITATS

—Working Together to Improve our Environment

By Tim DePriest and Michael Morgan

A habitat manager will probably never be confused with a magician. They can't pull a rabbit (or a Blanding's turtle, for that matter) out of a hat, or make an object disappear. Yet, they do have a vision for improving our environment, and often achieve amazing results; in fact, in one recent example, they actually made an island reappear.

Since 2007, DEC has teamed up with the New York Power Authority (NYPA) on habitat improvement projects in and around the Niagara and St. Lawrence Rivers. This unique partnership was created as part of NYPA's 50-year federal relicensing agreements to operate two hydroelectric plants: the Robert Moses–Niagara Project and the St. Lawrence–FDR Power Project.

While these largescale, clean energy projects provide many environmental benefits, including reducing harmful emissions and reliance on fossil fuels, their operations also affect habitat for fish, birds and wildlife, and, in turn, the ecology of the rivers.

NYPA recognizes the importance and benefits of sustainable fish and wildlife habitats in both regions, and during the plant relicensing process spearheaded an ambitious effort to restore and expand habitat value and functions throughout the river systems. A total of 18 Habitat Improvement Projects, totaling more than \$46 million, were initiated in the Niagara and St. Lawrence regions, providing a powerful jump-start to restore riverine habitats. In addition to mitigating ecological impacts associated with the power plants, NYPA has also teamed with DEC to advance projects that go beyond mitigation and will improve the

environment as a whole. It's a win-win situation: a healthy fish and wildlife habitat combined with emissions-free hydropower that combats climate change and supports the regional economy.

The Niagara and St. Lawrence Rivers are unique, but also interconnected. Water from most of the Great Lakes flows over Niagara Falls and through the Niagara into Lake Ontario, and then is carried along by the St. Lawrence, eventually draining into the ocean. Despite this connection, designing habitat for each river is uniquely challenging, even though the goal is the same: protecting fish, wildlife and habitats from ancillary impacts created by the hydropower energy generation.

In the Niagara Region, DEC staff work with partners like U.S. Fish and Wildlife Service, the Tuscarora and Tonawanda Seneca nations, Buffalo Niagara Waterkeeper, the Western NY Land Conservancy, Buffalo Audubon, and others, to develop and manage habitat improvement projects. Known as the Ecological Standing Committee, the group develops restoration projects that will have positive benefits on the Niagara habitat. Many of these projects are "passive," meaning that once they are complete, they will only require coordination and monitoring, though some will include "adaptive" management, such as controlling invasive plant species, to achieve maximum long-term benefits. In contrast, many of the St. Lawrence River projects require active management to operate features such as fish passages, pump stations, or vegetation control.

The habitat improvement projects on both rivers (a few of which are detailed below) range in scale and complexity, from erecting bird nesting platforms to reconstructing islands, which create and protect a wetland and aquatic habitat complex (like magic!).

## ON THE NIAGARA RIVER, HABITAT RESTORATION PROJECTS INVOLVE FOUR ISLANDS:

**Motor Island:** This small island originally was developed as a site for a private motorboat club with marina facilities and a vertical bulkhead replacing nearly all the natural shoreline around the island. The site was later abandoned by boaters, and the trees on the island became an oasis for colonial nesting water birds, including great blue herons, black-crowned night herons, and one of only two great egret colonies in New York. By removing the vertical bulkhead and re-grading the shoreline to a natural slope, fledging birds and some semi-aquatic species now have access to the shallow water and wetland habitat for food and shelter.

**A Newly Constructed Island:** A shallow, barren section of riverbed between Motor Island and Strawberry Island had been a sand-and-gravel mine that provided building material for Buffalo a century ago. The lack of plant growth on the island—which was submerged for 30 years—was caused by the constant battering of the shallow water area by storms, boat wakes, and ice floes. To counteract these impacts, a U-shaped berm of heavy rock was built to surround more than two acres of riverbed, creating “quiet water” areas where plants can take root. The improved environment will promote spawning and nursery habitat for sportfish, as well as food and cover for wildlife.



Strawberry Island

**Strawberry Island:** Also the site of a former mining operation, the island’s shape had been altered, creating a protected lagoon that provided good wetland and aquatic habitat. More recently, the island was eroding rapidly, and critical habitat was being lost. The erosion was addressed, but wetland and aquatic plants have been slow to recover. An ongoing project is replacing some of the sand and gravel, and will reduce wave energy in the lagoon. Roughly five acres of habitat have been improved and planted with native wetland plants, including a new “island” at the mouth of the lagoon to protect the habitat from severe storms.

**Beaver Island:** In the 1960s, a coastal marsh in Beaver Island State Park was filled in with dredge spoil from the construction of a nearby marina, transforming a valuable habitat into a sterile lawn with little habitat value. The recent restoration project removed approximately 20,000 dump truck loads of fill and uncovered eight acres of original wetland soils that had been buried for almost 50 years. Amazingly, the seeds of the original wetland plants sprouted, generating a dramatic recovery of the marsh within just a few growing seasons.

## ST. LAWRENCE RIVER PROJECTS INCLUDE:

**Nichols Pool:** The 185-acre wetland—created by the construction of four dikes to isolate a bay of the river—allows the fluctuating water levels to be stabilized. The project, which includes two water control structures that also serve as fish passages, already is improving submerged aquatic habitat and promoting spawning by native fish, particularly northern pike. Prior to the project, the activities of thousands of spawning carp—a non-native invasive fish—also posed a significant threat to the habitat. The fish passages allow DEC staff to attract native fish, and can be closed once carp start to arrive.



Dike construction at Nichol's Pool

**Wilson Hill Wildlife Management Area (WMA):** The construction of a series of water control structures, improved dikes and a large pump station provide DEC with valuable tools to manage water levels in approximately 2,400 acres of wetlands. Although habitat quality for waterfowl and geese in the Wilson Hill WMA was always good, this project created several hundred acres of emergent marsh habitat to support additional wildlife and waterfowl.

**Lake Sturgeon Restoration:** As part of a larger, multi-agency effort to restore the threatened lake sturgeon population in New York, artificial spawning beds have been installed in the St. Lawrence River, and active monitoring is conducted to assess populations and check for the presence of algae, sediment and other factors that can harm or interfere with sturgeon spawning. To date, the spawning bed effort has proven to be a successful component of the collaborative lake sturgeon restoration effort, and additional spawning beds are being considered. The St. Lawrence River sturgeon population is also providing eggs for USFWS and DEC hatcheries to raise sturgeon fingerlings, which are then stocked in 10 watersheds throughout New York to restore sturgeon populations in those regions.

### IF YOU BUILD IT—OR IN SOME CASES, REMOVE IT—THEY SOMETIMES COME (BACK!):

**Osprey Nesting Platforms:** Once in significant decline, New York's osprey population has rebounded, with dozens of pairs returning to the Niagara and St. Lawrence Rivers, where osprey can find plenty of fish, their primary food. Biologists have overseen placement of osprey nesting platforms, which give these birds sites to nest and breed, and contribute to population recovery. Five nesting platforms were installed at various Niagara River locations, leading to 3 new nests that have produced 14 osprey chicks; 8 platforms in the St. Lawrence region have fledged 90 chicks since 2005.

**Tern Nesting:** For a few decades, a breeding colony of common terns, a threatened species in New York, has been nesting on breakwater structures in Buffalo Harbor with limited success. NYPA and DEC spread pea gravel and built retaining walls and shelters to improve nesting habitat along 10,000 square feet on three breakwalls to protect the eggs and newly hatched chicks. These improvements created the largest tern colony in the entire Great Lakes, with more than 2,000 nesting pairs. This effort is also bolstered by a NYPA-DEC tern project in the St. Lawrence, which seems to have created a link to the Niagara region, with terns moving between the two colonies.

**Fish Structures:** Biologists placed large rock and log structures at four Niagara locations to slow the strong river current and provide fish shelter. These areas are popular with anglers because of the high concentrations of sport fish, especially smallmouth bass.

Michael Morgan



Blanding's turtle

**Blanding's Turtles:** DEC continues to create and restore breeding habitat for Blanding's turtles, including controlling vegetation on sandy soils that are preferred turtle nesting habitat. Twenty nests have been documented in the habitat improvement area, with an additional 50 nests in an adjacent cornfield recently acquired by DEC that will be restored as habitat.

As these projects and others are implemented and evolve, the Niagara and St. Lawrence Rivers have been given a much-needed ecological boost that will last for decades to come. However, just as a gardener must tend the garden to keep it productive, these habitat areas will need active management and monitoring to produce the maximum benefits possible for fish and wildlife.

NYPA is committed to the long-term stewardship of habitat projects like these for the next 35 years, and has made significant funding available to add even more valuable habitat and contribute to the recovery of these vital rivers. DEC will continue to be their active partner, performing critical management activities and manual operations that are crucial to improving these habitats for the long-term.

Those who appreciate the ecology of the Niagara and St. Lawrence Rivers will be comforted to know that on any given day, you might be able to glimpse a bald eagle, enjoy a world class fishery, or experience the wild beauty of a flock of tundra swans in mid-winter. And at the same time, you'll be confident knowing you'll have access to clean, natural energy, now and for decades to come.

**Tim DePriest** is the Niagara River habitat ecologist in DEC's Buffalo office, where he works with NYPA on habitat improvement and Niagara Greenway projects. **Michael Morgan** is a biologist and the project manager for DEC's St. Lawrence Habitat Management Project near Massena, NY.

# ADIRONDACK HATCHERY

By Matt Jackson; DEC photos

In 1884, R. U. Sherman, one of New York State's three fishery commissioners, was tasked with picking a site for a new fish hatchery in the Adirondacks. The hatchery would require a consistent flow of cool, clean water, and should be near local waters that could supply fish, as well as be located with easy access to a railroad and telegraph and telephone lines. The outlet of Little Clear Pond in Saranac Lake met all those requirements, and in 1885 the land was secured and construction of the Adirondack Hatchery began.

Through the years, significant improvements and changes to the hatchery were made, including the addition of ponds and buildings in the 1930s by the Civilian Conservation Corps. However, based on the need to upgrade the hatchery's operations, most of the buildings and ponds were rebuilt in the 1980s to modern specifications.

In its early years, the hatchery raised multiple species of trout and salmon, but currently it raises landlocked Atlantic salmon (it is the only New York hatchery that does so) and the endangered round whitefish. The salmon are stocked across

the state, from the Adirondacks to the Catskills, Finger Lakes and Lake Ontario; the whitefish are stocked in appropriate Adirondack waters they historically inhabited.

Staff at the hatchery collect and incubate about 1.2 million salmon eggs from both captive and wild broodstock (mature fish used for breeding) each fall. Approximately a third of the fry are kept in the incubators in cold water for the hatchery's non-feeding fry program, and the rest are transferred to raceways after hatching. The non-feeding fry are stocked in the springtime into tributaries of Lake Champlain and Schroon Lake. The remaining fry are kept until the following year and stocked as yearlings averaging 7" long.

Round whitefish eggs are collected from broodstock in Little Green Pond, and incubated at the hatchery in jars. Fry remain at the hatchery until they reach fingerling size (1" to 3" inches), and are stocked in either the spring or fall. Each year the facility produces roughly 256,000 yearling salmon, 330,000 non-feeding salmon fry and 10,000 round whitefish.

## Species Spotlight:

### LANDLOCKED ATLANTIC SALMON (*SALMO SALAR*)

- New York's only native salmon, Atlantic salmon spend their entire lives in freshwaters of the state and are usually called landlocked salmon.
- Atlantic salmon are silvery with a few dark (often x-shaped) spots on their sides. They are generally found in open waters of cold, deep lakes, and migrate into tributaries, streams and rivers to spawn in the fall (Oct - Nov). Adult fish dig nests (redds) in gravel areas and cover their eggs.
- Atlantics grow to be 12-30" long. Mature fish feed heavily on other fish, with rainbow smelt being their preferred food. Other prey fish include alewife, cisco, and yellow perch. Young Atlantics eat aquatic insects.
- Atlantics were all but extinct from the state by 1900 due to settlement and development. Today they occur in approximately 30 waters, including some of the state's biggest waters (Lakes Ontario, Champlain, Cayuga, and Seneca), as well as a few small- or medium-sized waters in the Adirondacks.
- Highly regarded sportfish, Atlantic salmon are known for their spectacular fighting ability, including making several jumps completely out of the water.



**LOCATED AT 103 FISH HATCHERY RD.,  
OFF NYS RT. 30, ONE MILE SOUTH OF  
LAKE CLEAR IN FRANKLIN COUNTY**



## If You Go

The Adirondack Fish Hatchery is a 33,700-square-foot facility in Saranac Lake that raises all the landlocked Atlantic salmon for stocking in the state. There is a Visitor Center which features displays and a video of how staff take eggs and raise fish. Visitors also have access to part of the Production Pond Building, where they can observe and feed large broodstock salmon.



**LOCATION:** 103 Fish Hatchery Rd,  
Saranac Lake; just off Route 30 between  
Lake Clear and Saranac Inn.



**VISITOR HOURS:** April 1<sup>st</sup> to October 31<sup>st</sup>,  
seven days a week 9:00 AM to 3:30 PM.  
Closed November 1<sup>st</sup> to March 31<sup>st</sup>. There  
is no admission fee. Please call for group  
tour appointments.



**SPECIES RAISED:** landlocked Atlantic salmon  
(*Salmo salar*); round whitefish (*Prosopium  
cylindraceum*)



**PHONE:** 518-891-3358

For further reading: See *Introducing  
the Frost Fish* in the February 2009  
*Conservationist*.

The hatchery water supply comes from Little Clear Pond and four wells situated on the property. The warmer well water is used during winter months to speed up egg and fish development, allowing the hatchery to stock larger fish in a shorter amount of time.

In May, the water from Little Clear warms to the same temperature as the well water, and staff can switch to water intakes from Little Clear Pond to conserve electricity. There are two intakes: one in shallow water, the other in deep water. As the pond temperature rises throughout the summer, the shallow water intake becomes too warm, which could affect fish health. Staff closely monitor water temperature and open the deep-water intake to bring cool water from 64 feet below the surface of Little Clear to the fish. However, because there isn't sufficient oxygen in the deep water to support fish culture, oxygen is injected into the main water lines to keep the levels high enough to promote and sustain good fish health.

Although the Adirondack Hatchery dates back more than a century, it continues to play an integral role in maintaining large, healthy fish populations and providing exciting angling opportunities.

**Matt Jackson** is the manager at DEC's Adirondack Hatchery.



Outdoor raceways; circa 1920



Taking eggs



Tending nets



Adirondack Fish Hatchery, 1906

DEC photo



## Become an Outdoors Woman

Women who want to learn outdoor skills for fishing, hunting, archery, map & compass, and more will have the opportunity at the upcoming Becoming an Outdoors-Woman (BOW) workshop, September 7-9, 2018, at Greek Peak Mountain Resort near Cortland. This three-day, hands-on workshop is designed for women who have limited outdoor experience. The event includes two-night/double-occupancy lodging, meals and instruction. Most equipment needed to participate will be available at the site. The BOW events have become popular, and registration is done through a lottery. If you are interested in participating, sign up for the BOW email notification listserv at [www.dec.ny.gov](http://www.dec.ny.gov) to be alerted when registration will open. For additional information, visit [www.dec.ny.gov/education/68.html](http://www.dec.ny.gov/education/68.html).

Scott Smith



## Avoiding Bear and Coyote Encounters

Bears and coyotes would not seem to have much in common, but one thing they do share is a need for food, even if that food source is in a person's yard, car or garbage can. DEC urges people to take precautions to prevent encounters with black bears and conflicts with coyotes as these animals seek food when temperatures warm up in spring. DEC discourages people from feeding coyotes. It's also against the law AND dangerous to intentionally

feed bears or allow incidental, indirect feeding through garbage or bird feeders. It can be detrimental to these animals as well. Simple steps like cleaning barbecue grills (including grease traps) before nightfall, storing garbage in a secure building and/or a certified bear-resistant container, and only placing cans at the curb just before trash pickup—not the night before—are smart ways to avoid unanticipated and unwelcome animal encounters. You should also take down bird feeders after April 1<sup>st</sup> (birds won't need this food source in spring/summer) and feed pets inside. While it is exciting to watch coyotes and bears, always remember to appreciate them from a distance. It's difficult to predict or change a wild animal's behavior, so always take precautions to co-exist safely with wildlife.

## Two Birds in One Trip

As spring turkey hunters head into the field this May, they can help DEC track another game bird, the ruffed grouse. Since hunters rely on all their senses, they are well-equipped to identify the unique sound of ruffed grouse drumming—a deep, thumping noise made as the male bird rapidly rotates its wings back and forth as part of its mating ritual. Ruffed grouse are not easy to spot, and are generally quiet, so their drumming is one of the best ways to identify their presence in the forest. By recording the number of ruffed grouse drumming, spring turkey hunters provide DEC with critical information on the abundance and distribution of these birds. To participate in this important survey, simply download a survey form at [www.dec.ny.gov/animals/48169.html](http://www.dec.ny.gov/animals/48169.html), record your observations, and submit the form online or through the mail. Last year, 179 hunters participated in the survey, reporting 700 ruffed grouse heard during 1,100 hunting trips and 4,200 hours in the field.

DEC photo





The students interact with DEC forestry staff and local Audubon members, staff from the Roger Tory Peterson Institute (RTPI), local anglers, biology teachers and university students. As they explore Clear Creek's riparian habitat, the students conduct water and soil analyses, collect and identify riparian insects, and plant trees. Along with this field work, they also receive instruction on fly fishing and spin-cast fishing for brown trout that live in creek waters, and learn about the role fish play as both predator and prey in the riparian system. For many students, it's their first introduction to a local creek and its environs. The experience makes them better stewards of the natural world now and in the future.

## Camping Ambassadors

If you will be camping at a DEC facility in the Catskills or Adirondacks this summer, you may be welcomed by a Campground Ambassador who can help you plan activities throughout your stay. DEC's new Campground Ambassador program is part of the state's Adventure NY initiative to help people connect with the outdoors. The volunteer ambassadors will focus on customer service, providing visiting campers with information and assistance on many outdoor adventure options in or near campgrounds, including hiking and fishing opportunities. Campground Ambassadors will be serving Catskills campers at Kenneth L. Wilson and North-South Lake campgrounds. In the Adirondacks, they will be stationed at Cranberry Lake, Fish Creek Pond/Rollins Pond, Lewey Lake, Moffitt Beach, Nicks Lake, and Rogers Rock campgrounds. To view full details about the Campground Ambassador program, visit: [www.dec.ny.gov/outdoor/112550.html](http://www.dec.ny.gov/outdoor/112550.html) or call 518-457-2500 x1. For more information on DEC-operated campgrounds, visit [www.dec.ny.gov](http://www.dec.ny.gov) and go to the Camping link under the Recreation section, or call DEC's Bureau of Recreation at 518-457-2500.

## iMapInvasives Training

If you have a smartphone, you can help stop the spread of invasive species and preserve biodiversity across the state. DEC encourages people to use iMapInvasives, an online, early detection mapping system that allows citizen scientists, educators and natural resource professionals to report invasive species locations and control efforts. This information will ensure New York has an accurate, up-to-date map of invasive species sites, which will assist with early detection, invasive species inventories, and management efforts. The Natural Heritage Program is offering free training sessions this spring for both beginners and advanced level participants. Visit [www.nyimainvasives.org](http://www.nyimainvasives.org) for schedule details and registration, or contact [imapinvasives@dec.ny.gov](mailto:imapinvasives@dec.ny.gov) if you have general questions. Become part of a growing network of people helping to track invasive species and protect our environment.



## A Learning Experience at Clear Creek

Each May, 15-20 students from Jamestown High School participate in the Clear Creek workshop, where they are introduced to the natural world and careers in conservation.





### Easter Sunday Trout

I was fishing on the Ashokan Reservoir with my son last Easter and caught this 26.5 inch, 5.5 pound brown trout.  
Mike Wilson

*Nice catch Mike, your son looks so excited! Ashokan, meaning "Place of Fish," is aptly named given the recreational fishing opportunities for both coldwater and warmwater fish that the reservoir provides. Ashokan Reservoir is stocked with over 16,000 brown trout every spring.*

### Out-of-Towner

A wayward visitor, possibly from the Atlantic coast, this brown pelican showed up at the Buffalo River and caused quite a stir among area birders last May.

April Landschoot  
Buffalo, Erie County



*Brown pelicans are found along the southern coasts of the Atlantic, Gulf or Pacific. Occasionally, birds are blown off course by a storm, and find themselves in the most unlikely places.*

### Say What?

I had the pleasure of photographing 5 different northern saw-whet owls at Owl Woods, Braddock Bay. These little owls are migrating through and like the conifer trees in these woods to stop and rest.

Christy Hibsich



*Great photo Christy! Northern saw-whet owls are the smallest of New York's owls, about the size of a robin and weigh up to 1/4 pound.*

### Snakes on a Trail

We were hiking the Portage Trail at Letchworth State Park and came across two very large black snakes at two different points. We estimated the longest to be around 4 1/2 feet long and it was completely indifferent to our presence. Park staff thought that they were rat snakes, but weren't completely sure.

Lynn and Jeff Jones  
Syracuse, Onondaga County



The black rat snake is the largest species of snake in New York—they can reach lengths of six feet! It isn't usually found in the Western part of the state, but is common in the lower Hudson Valley.



## Porcu-Party

I wondered how a porcupine could be doing so much damage to my camp in the woods, so I set up a trail cam. Not one, but three porcupines are devouring our camp, destroying our trees and eating the rubber tires on my forest carts. Is there anything I can at least put on the wood walls of the camp to discourage them from eating me out of house?

Bob Boschock  
Philadelphia, NY

*That looks like quite a prickly situation, but there are some measures you can take to keep your property looking sharp. Porcupines love salt, so if you think there may be buildup on your tires, consider hosing them off regularly. Wood stains and preservatives often have salt in them, so well-placed aluminum siding could be a good option with the added benefit of making climbing more difficult. Trees can be enclosed with wire fencing or wrapped with aluminum flashing. Keep in mind that porcupine damage tends to spike in the winter/early spring months when nutrient sources are low, so pay attention to the timing of these porcu-parties and you may not have to employ these techniques year-round.*

—Deanna Kreinheder, DEC Fish and Wildlife Technician



## Ask the Biologist

**Q:** Can you identify this for me? Is it a coyote, wolf or coywolf?  
Owen Cramsie  
Garnerville, Rockland County

**A:** That is a large Eastern coyote; there is no species of “coywolf.” The genetic mix in Eastern coyotes was noted in “Rise of the Eastern Coyote” in the June 2014 issue of the *Conservationist*. “Not long after coyotes appeared in New York, researchers noticed that these arrivals differed slightly from western coyotes in size and appearance. Using genetic analyses, researchers found that eastern coyotes are roughly 64% western coyote, 26% wolf ancestry and 10% domestic dog.” Interactions between dogs and coyotes can happen any time of year, but are more likely in the months of March and April when coyotes are setting up denning areas. For information on avoiding conflicts with coyotes, see page 28, or visit [www.dec.ny.gov/animals/6971.html](http://www.dec.ny.gov/animals/6971.html).

—Mike Schiavone, DEC Wildlife Biologist

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# Back Trails

Perspectives on People and Nature

John Bulmer

## Trout Town U.S.A.

By Les Eggleton

Roscoe, NY, also known as Trout Town USA, is a small town with a big reputation. While it has been deemed the Best Outdoor Sports Town in New York, and winner of the Ultimate Fishing town in the USA, in fact, it's not even a town at all (it's a hamlet)! Located in the town of Rockland in northwestern Sullivan County, Roscoe is a place right out of a Norman Rockwell painting. And it's my hometown. I couldn't have asked for a better place to grow up, although I didn't know it at the time.

Home to both Willowemoc Creek and the Beaverkill, Roscoe is considered by many to be the birthplace of modern fly fishing. It's also home to some of the best-known names in fly fishing: the Dettles, Darbees, and Wulffs honed their fly fishing and fly-tying skills here, then shared their knowledge with anyone willing to learn—a tradition that continues to this day.

My brothers and I grew up on these famed trout streams, living literally across the street from the Willowemoc, and down the road from the Beaverkill. Our parents instilled in us a love of all things outdoors; growing up in the 1960s, we lived without computers or handheld games, and had fewer than 10 channels on our black-and-white television. One show we did watch regularly, however, was *The American Sportsman* with Curt Gowdy. Intrigued by Mr. Gowdy's fishing adventures, we were naturally drawn to the streams that lay before us.

Our father has been a fly fisherman as long as we can remember. He must have the patience of a saint to have



The author and his brothers during the 1960s

taught all his sons to fly fish at once. Only five years separate us, and we all yearned to learn to do whatever the others were doing, at the same time. We had to graduate from worms to lures before eventually moving up to flies. Somehow we all learned to fly fish without killing our father, or each other (or him us).

Fly fishing is more than just fishing; it's part art and part passion. It requires practice, technique, and dedication. It's not as simple as fishing with a can of worms, a hook, and a bobber. We learned to fly fish with big, clumsy fiberglass rods no one would dare use today. Now we use lightweight graphite rods and wear waders instead of just wading into the river in shorts and bare feet. While perfecting our fly fishing skills on the Willowemoc and the Beaverkill, my brothers and I all got flies stuck in our hats or heads. With some lessons from Dad and the help of a few cooperative trout, we've all become rather proficient: one of my brothers even has a fly fishing guide service of his own.

In my opinion, fishing with dry flies is the pinnacle of fishing; the presentation of a dry fly in the right location on a river's surface in such a manner that entices a



large brown, rainbow or brook trout to rise to the surface and take your offering is the ultimate goal. Thankfully, it's a goal we've accomplished many a time.

We've taught our children and grandchildren to appreciate and enjoy the outdoors. Fly fishing is at the top of our list, and now it's even more rewarding to watch the next generation of fly fishermen find success than it is to catch fish ourselves.

We do still feel that same excitement each spring when April 1<sup>st</sup> rolls around and we can get back in the streams. Knowing that we have four generations of anglers in our family helping to keep this sport alive is an accomplishment in which we all take pride.

Fly fishing isn't for everyone, but neither is golf or hockey or soccer. I can tell you this: if you give fly fishing a try, you will experience the true art of fishing.

And you might even get, well, "hooked."

DEC Real Estate Specialist **Les Eggleton** retired in the spring of 2017 just in time for opening day.

# arbor day



Arbor Day (April 27, 2018) is the official day we recognize the importance of trees in our lives. Not only do trees produce oxygen, clean our air and water, and provide wildlife habitat, but spending time amidst trees and in nature in general also makes us healthier and happier. In fact, some doctors are advising patients to go outside for a wide variety of conditions such as ADHD, high blood pressure, asthma, obesity, anxiety, diabetes, and depression. A hundred years ago, people left polluted, industrialized cities for the Adirondacks and Catskills to recover

from physical and mental ailments. Now science is proving that time spent around trees and in nature is good for us.

If you need a pick-me-up, visit a local park or forest. It's free, easy and just what the doctor ordered.

Visit DEC's website at  
[www.dec.ny.gov/lands/5274.html](http://www.dec.ny.gov/lands/5274.html)  
for more information on Arbor Day.  
For a list of state lands to visit, check out  
[www.dec.ny.gov/outdoor/96031.html](http://www.dec.ny.gov/outdoor/96031.html)



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See page 20

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