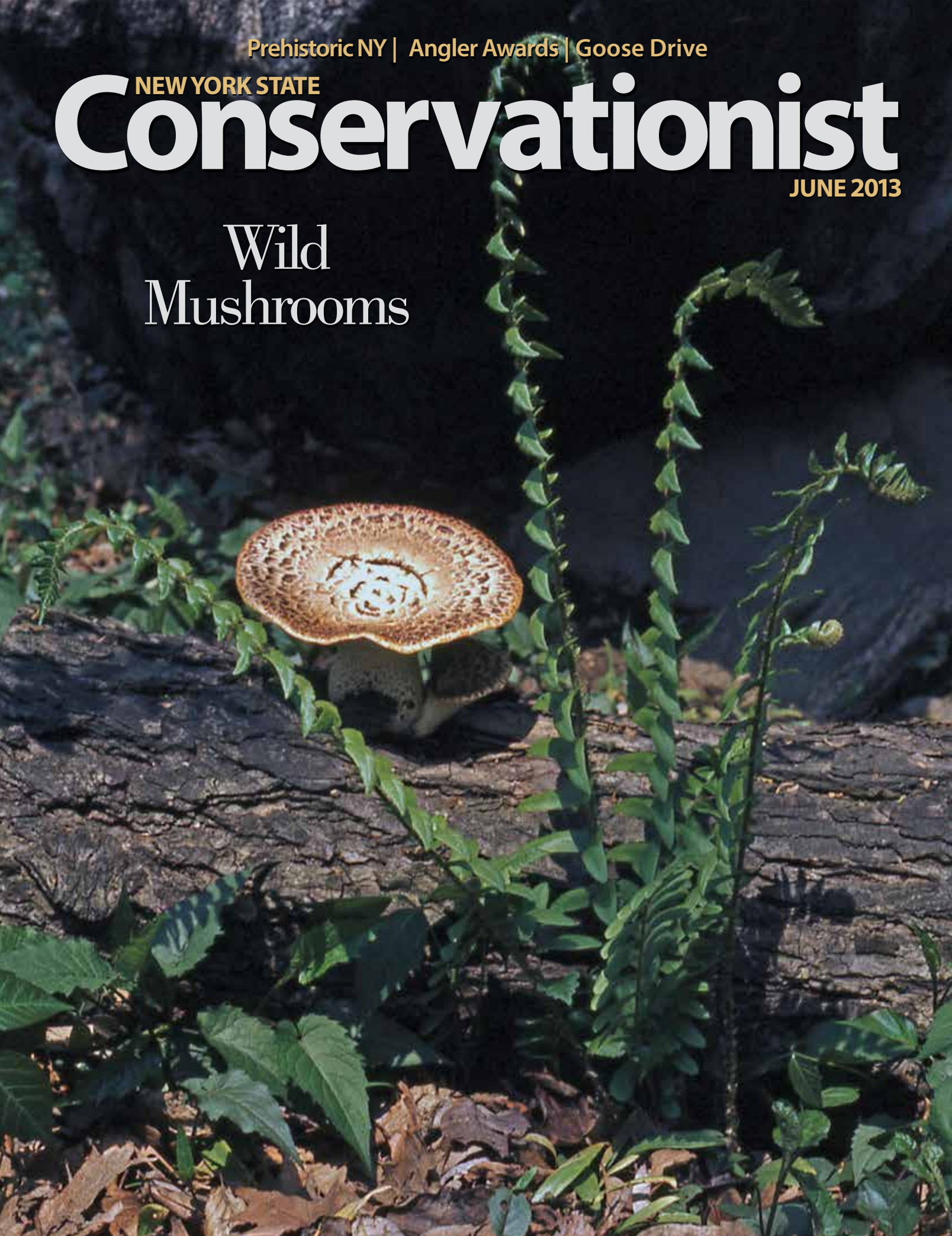
Prehistoric NY | Angler Awards | Goose Drive

NEW YORK STATE

Conservationist

JUNE 2013

Wild Mushrooms



Dear Reader,

Welcome to summer in New York! As the days grow longer and the evenings warmer, we can make our plans for picnics, hikes, fishing and vacations. New York's abundant open space and diverse wildlife makes the great outdoors accessible and enjoyable for everyone. And outdoor recreation means more than getting the most of New York's fantastic natural resources; it means a major boost for businesses in New York State.

According to the Outdoor Industry Association, outdoor recreation generates more than $30 billion in consumer spending in New York, supports more than 300,000 jobs, pays $12.5 billion in wages and salaries, and generates $2.8 billion in state and local tax revenue. Governor Andrew Cuomo recently announced New York's largest tourism campaign in decades, committing nearly $60 million to grow the industry, create jobs, and attract even more visitors to the Empire State.

The Governor's announcement came at the conclusion of the New York State Tourism Summit, where hundreds of tourism experts gathered in Albany to discuss ideas and new ways to bring tourists to every corner of the state. Tourism, the fifth largest employment sector in New York, includes recreation and hospitality businesses in destinations across New York. In 2012, tourism supported 714,000 jobs and generated more than $29 billion in wages. One out of every 12 jobs in New York is tourism-related.

In the Governor's own words: "New York State has some of the most beautiful tourist attractions in the world. From the peaks of the Adirondacks to the beaches of Long Island, no matter what you're looking for you can find it here. I want the world to know about these assets, too, and am committed to making the state a 'must see' global destination and creating new jobs and investments in New York."

Did you know that more than 202 million international and domestic travelers visited the Empire State last year? Their vacations drove $57 billion in direct tourism spending, and generated $7 billion in state and local taxes. We often claim New York has world-class outdoor recreation resources; these global tourists prove it!

Governor Cuomo's "New York Open for Hunting and Fishing" initiative is expanding opportunities for hunters, anglers and youth. The Governor is a champion of open space conservation and is committed to providing access to the outdoors for people of all abilities. Just this past April he announced purchases of terrific parcels like OK Slip Falls and the Essex Chain of Lakes in the Adirondacks, and Cat and Thomas Mountains near Lake George, to name just a few.

The Governor is also a big fan of New York's watchable wildlife program, a great way to inspire a love for the outdoors in the next generation. In April, DEC announced the publication of a new *New York Wildlife Viewing Guide* that features more than 100 locations across the state to visit to view, photograph and experience wildlife in its natural habitat. For more information, visit DEC's website at **www.dec.ny.gov**.

The new, New York is open for all the outdoor recreation pursuits you can imagine—and it's open for business.

Regards,
Commissioner Joe Martens

NEW YORK STATE **Conservationist**

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Andrew M. Cuomo, Governor of New York State

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Jenna Kerwin, *Staff Writer*
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James Lang

June 2013 Volume 67, Number 6

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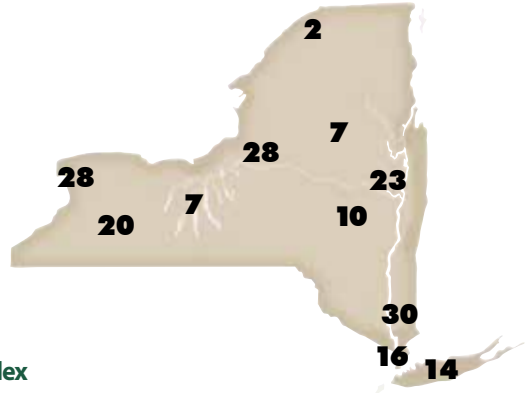

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Front cover: Polypore mushroom with unfurling Christmas fern by Frank Knight | **Back cover:** Painted turtle by Wayne Jones

A young volunteer carries a goose to DEC biologists for tagging.

Goose Drive!

Rounding up passels of ornery Canada geese with canoes and kayaks, volunteers take to the water each summer at Wilson Hill Wildlife Management Area for a rollicking day of bird banding and camaraderie.

by John Razzano
photos by Jim Clayton

Photographer Jim Clayton and I arrive at Wilson Hill Wildlife Management Area on the St. Lawrence River in northern New York on a sunny, mild, late-June evening. The sweet smell of barbecuing chicken greets us as we get out of the car. Several people are enjoying a picnic dinner and friendly conversation. It's the day before the "goose drive" and everyone is anticipating herding little "gooseys" tomorrow morning.

The Wilson Hill Goose Drive has been bringing geese and people together in the name of waterfowl conservation since 1974. Each year, the drive takes place in late June, when Canada geese molt, shedding their flight feathers and growing new ones. At this time, the birds can't fly, so biologists take advantage of this fact to round up, examine and band the geese in large numbers.

Moms, dads, grandmas, grandpas and kids from toddlers to teens (139 strong) have come to volunteer. A campfire is crackling and a few tents are pitched on the lawn nearby. Goose drive veterans are catching up with each other, while first-timers like me listen intently to tales of roundups gone by.

After eating our fill, we confirm last-minute details with Principal Wildlife Technician Blanche Town. Blanche coordinates the drive from the Department of Environmental Conservation's (DEC's) Potsdam office with assistance from staff in nearby Watertown. Loose ends tied up, we say goodbye and leave for Massena, where we'll spend the night. As we drive off, a strong westerly breeze pushes ominous clouds toward us and the horizon glows fiery orange.

After a night of booming thunderstorms, the day of the drive dawns much cooler. Yesterday's blue sky hides behind a ceiling of gray. "At least it's not raining …yet," I think to myself as we set out. Arriving back at Wilson Hill, we join several other sleepy volunteers who stumble over to grab coffee and doughnuts put out by Irene Mazzocchi, wildlife biologist and living proof that perpetual motion is more than just a theory.

Biologist Andy MacDuff calls everyone together before launching our small flotilla. He reviews basic water safety and reminds us to listen to instructions from the drive bosses when we're out on the water so the flocks of swimming geese stay ahead of the drive line. After his pep talk, he "dismisses the troops" and everyone climbs into vehicles for a short ride to unload the boats.

We line up a colorful collection of canoes and kayaks at the water's edge along half of the causeway. The plan is to start on the west side of a stubby peninsula, pivoting in a wide arc from

We line up a colorful collection of canoes and kayaks at the water's edge along half of the causeway.

northwest to northeast. Flocks of flightless geese, either already in the water or driven there by volunteers on the far side of the pool, will be encircled by the lead boats and driven down where the rest of the fleet waits to make the final push to the east side of the peninsula. There, DEC staff have set up a combination of netting and snow fencing to funnel the birds into a holding pen.

Everyone boards the boats, shoving off and floating a short distance from shore until the start signal is given. My kayak is midway in the line, with about a dozen boats to either side. A loud blast from an air-horn signals the start. Paddling along, I see a gull, two swallows and a tern, but no geese.

As we reach a small island about a quarter-mile from shore, the paddlers to my left continue to the other end of the pool, while those of us on the right wait for their return. While we wait, I get to know my fellow volunteers.

In one canoe, four young women from the State University of New York's College of Environmental Science and Forestry tell me how they're giving up some of their summer break to help out. The college is well represented with several canoes and student volunteers getting a taste of what they might be doing someday as wildlife biologists. Another canoe holds a granddad and two grandkids. Grandpa wants to have a little adventure, while showing his two charges the beauty and wonder of nature and the importance of conserving it. A double kayak holds two women who have been coming to the drive for a few years just because it's such a fulfilling way to enjoy the outdoors. In another canoe, a mom wants her two youngsters to experience wildlife in a meaningful way.

Off in the distance, the returning boats appear. But where are the geese? As the paddlers close in, three bobbing gaggles of beige, black and white come into view. Snow-white cheeks on jet-black heads reveal the distinctive markings of Canada geese. But something seems wrong. No honking! The sonorous chorus that typically announces the approach of these birds before they're even visible is eerily absent. Only an occasional high-pitched peep sounds from the flocks as they try to out-maneuver the drivers. I later asked waterfowl biologists why the geese were so silent, but no one seemed to know. Perhaps the geese didn't feel threatened while out on the water, or perhaps they didn't want to draw attention to themselves when in molt. (It's anyone's guess.)

The secret of goose herding is manipulating flock behavior, where safety in numbers is the paramount principle of survival. Unfortunately, the birds don't always cooperate. Suddenly, one group of geese breaks away from the boats and heads for shore, reaching land and disappearing into a thicket before people can cut them off. Only two groups are left to herd into the corral.

Volunteers use their boats to herd the geese toward shore where biologists use a combination of netting and snow fencing to funnel the birds into a holding pen.

In the nearly 40 years they've been doing this, DEC staff have banded more than 30,000 Canada geese.

Three rogue geese also slipped through our dragnet. The first discovered that a single bird could easily escape through the openings between the boats and simply swam to freedom. Two others escaped because their flight feathers regrew faster than their flock-mates, so when they flapped their wings as they approached the corral, their rejuvenated feathers carried them away.

The remaining geese are driven to shore and quickly waddle out of the water, where wildlife technicians herd them into a large pen, using long-handled nets as gooseherds' crooks. With the "herd" safely gathered, everyone beaches their boats, and takes a well-deserved lunch break before banding commences.

Grilled hot dogs and hamburgers and cold drinks are cheerfully served to drive volunteers courtesy of the Massena Rod and Gun Club. After everyone has eaten, goose banding begins.

The leg bands are durable but light-weight aluminum rings about one-half inch in diameter and designed not to injure the birds over the many years they are worn. Each band is inscribed with an ID number and a request for hunters to report banded birds they harvest to the U.S. Fish and Wildlife Service, which regulates migratory bird banding. Each band has a slit for the opening and is carefully crimped with pliers around the leg of a goose.

A line forms in front of the goose pen and two wildlife technicians stand inside, ready to start handing one bird at a time to the excited volunteers. I get in line and eagerly wait my turn for a goose. The birds are gathered at the back of the pen. One technician herds a few up to the gate, careful to keep as many as he can from running back to the safety of the flock. His partner reaches down with one hand and picks up a goose by its shoulders, quickly telling the waiting volunteer how to hold and carry a goose and whether or not it has a band. If it already has a band, the volunteer brings the bird to a table where another technician records its band number. If it does not have a band, the volunteer brings the bird to a table where technicians will place a band on one of its legs and examine the bird, recording its age and sex.

A mixture of excitement, anxiety and pure joy are visible on the faces of the children as they ferry their geese to the tables. The littlest volunteers can't always hold on to these big birds, making for a comical scene of wildlife technicians chasing and scooping up the strays with their long-handled nets.

Technicians herd a small group of geese into the pen's gate (top photo) where they can be picked up and handed to a volunteer who carries the bird to a biologist for processing (bottom photo).

Finally, it's my turn. My goose tries to escape my grip, honking and struggling mightily to no avail. It's a rare treat to hold a wild bird and I relish the experience. A close look at this big beauty reveals why it can't fly. Instead of long flight feathers, the back of its wings are covered with pale-blue, stubby "pin" or "blood feathers." Inside these fragile structures, coursing blood feeds developing new flight feathers.

My goose doesn't have a band, so I bring it to the banding table, where a technician crimps a band securely around its leg. In order to identify the birds' gender, the technician then takes the bird, flips it over and holds it upside down on his lap with its head facing toward him between his legs. It's an uncomfortable position for the goose, which expresses its displeasure by pecking the technician's legs.

Gender identification is difficult because both male and female Canada geese have identical outward markings. Because my goose was noticeably larger than many of the others, the technician guessed and then confirmed that it was an adult male. Size can be deceiving, however, since Canada geese vary in size depending on their subspecies.

Technicians estimate the age of each goose requiring a band, recording whether it is a "hatching-year" (HY) or "after-hatching-year" (AHY) bird. An HY goose was hatched this spring, and is less than a year old, as determined by telltale features like less-pronounced cheek patches. An AHY goose is simply more than a year old. The life span of a Canada goose can run anywhere from a few to more than 20 years.

With my goose's vital statistics logged and its leg sporting a shiny new band, I carry him down to the water's edge to set him free. The instant I relax my grip, he quickly swims away, relieved to be done with his ordeal.

A biologist places a federal leg band on a goose so it can be identified in the future.

I only handle one other goose, but this one is wearing a rare $100 reward band. The hunter that bags this bird will receive $100 for reporting it. Reward bands range from $25 to $100 and are used to provide an added incentive for hunters to report banded birds. Biologists glean invaluable information about the migratory patterns and health of goose populations by matching the band numbers of recaptured geese to banding records.

In the nearly 40 years they've been doing this, DEC staff have banded more than 30,000 Canada geese. Days like today are important for DEC staff to hone their field skills. Furthermore, analysis of band returns will help biologists develop an estimate of goose populations. One of the biologists explains how important this is when making management decisions about hunting season dates and bag limits.

By late afternoon, all 277 geese had been examined and released. Of that number, 138 received new bands and 139 already had bands. The rain that had been threatening since first light finally came. A steady drizzle started falling just as we finished loading up boats and tables and climbed into our vehicles to leave. It has been a good drive and an experience I'll long remember.

The author holds a goose while a biologist attaches a leg band.

If you're looking for a unique and meaningful way to experience the outdoors in a fun, friendly, community atmosphere, try the Wilson Hill Goose Drive in late June. DEC's website **www.dec.ny.gov** has all the details.

John Razzano is a contributing editor to *Conservationist*.

Bluegill—10″
Caught by: K. Schmid on June 15, 2012
Caught at: Rollins Pond, Franklin Co.
Lure/Bait used: Nightcrawler
Catch-and-Release Category

Nice Catch!

—New York's Angler Achievement Awards Program

By Joelle Ernst

New York offers some of the best freshwater fishing in the nation. Whether it's rod-bending salmon in the Great Lakes, or feisty panfish from a local pond, anglers can take their pick of fish species to pursue and what outdoor setting to enjoy it in. But of the hundreds of thousands of anglers who take to the water each year, only a select few are lucky enough to catch a trophy-sized fish.

To recognize the accomplishments of those anglers, DEC runs the Angler Achievement Awards Program. The program has three categories: state record—which recognizes those anglers who break current New York State records; annual award—for anglers who catch the three heaviest fish of the year for each eligible species; and catch-and-release—to commend the actions of anglers who return their qualifying catch to the water. Currently there are 45 eligible freshwater fish species for both the annual and state record categories, and 21 major freshwater sportfish species for the catch-and-release category.

For a fish to qualify as a state record, it must exceed the current state record for that species by at least an ounce. If you think you might have a new state record, photograph it, have it weighed on a certified scale, and take it to a DEC fisheries biologist so it can be examined and officially identified.

Here are a few of the proud anglers who entered their catches into DEC's Angler Achievement Awards program in recent years.

Joelle Ernst is a fisheries biologist in DEC's Albany office.

Brook Trout
5 lbs. 14 oz., 21″
Caught by: William Altman
on May 5, 2012
Caught at: West Canada Wilderness
Area, Hamilton Co.
Lure used: Lake Clear Wabbler
State Record Fish

Black Crappie
3 lbs. 8 oz.
Caught by: Jack Toone on March 23, 2011
Caught at: New Croton Reservoir,
Westchester Co.
2nd Place—Annual Award Category

Yellow Perch
2 lbs. 8 oz.
Caught by: Olivia Thorton on May 13, 2012
Caught at: Seneca Lake, Seneca Co.
Lure/Bait used: Reef Runner Cicada
1st Place—Annual Award Category

Lake Trout
31.25″
Caught by: John Greaves IV
on March 10, 2013
Caught at: Lake George, Warren Co.
Lure/Bait used: Live Minnow
Catch-and-Release Category

Largemouth Bass
21″
Caught by: Ryan Peck
on September 16, 2012
Caught at: Hudson River, Saratoga Co.
Lure/Bait used: Stik-O™
Catch-and-Release Category

For more information about the Angler Achievement Awards Program, including a full list of the current state records, visit **www.dec.ny.gov/outdoor/7727.html**.

PREHISTORIC NEW YORK
—fossil collecting in the Empire State

By Alan Zdinak

All photographs by author, unless otherwise noted

When I was a boy I would visit the American Museum of Natural History in Manhattan and marvel at the dinosaur skeletons. I couldn't get enough of the *T.rex, Triceratops* and their brethren. I dreamed of digging up fossils myself, but imagined them as rare buried treasure found only in far-flung places like Montana and Mongolia. It was nearly half a lifetime later that I learned central New York is a fossil wonderland that anyone can explore.

There are no *Brontosaurus* bones coming out of the Finger Lakes. In fact, aside from a few small footprints unearthed in Nyack there are no dinosaur fossils at all. The Mesozoic Era—the Age of Reptiles (approximately 248 to 65 million years ago)—is pretty much absent from New York's geologic record.

What New York does have are plenty of fossils from the Early Paleozoic era (from the Cambrian through the Devonian periods, 550 to 350 million years ago)—way before the dinosaurs. During that time a succession of shallow seas covered the state. These seas contained vast coral reefs and submarine thickets of sea lilies that armored squid and giant sea scorpions called home. Over time, sea bottom and deltaic sediments turned into the shale, sandstone and limestone that underlie the state from the Catskills to the Great Lakes. And those rocks are bursting with the fossilized remains of that long-ago marine fauna.

Above: North Brookfield trilobite site.
Inset: Cephalon (head) of a *Dipleura* trilobite found there.

Fossil-laden cliffs on the Lake Erie shore south of Buffalo.

Nicole Draina

This is not news. Paleontologists have been studying these strata for more than 175 years. Utica native Charles Doolittle Walcott started his career collecting local trilobites before moving on to head the U.S. Geological Survey and the Smithsonian. Mark Twain collected brachiopods on his Elmira farm. The region is so fecund with fossils that a nineteenth-century survey of New York fossils by James Hall, the first State Paleontologist, ran 13 volumes.

The Early Paleozoic was the heyday of invertebrates, creatures without backbones. Certainly in New York the most abundant fossils are brachiopods. At first glance these fossils look like the clam and mussel shells you find washed up at the beach today. But our modern seashells are mollusks, whereas brachiopods are a different sort of animal altogether and are more closely related to Bryozoa. Back in the Paleozoic they dominated the seascape, coming in a dizzying array of forms, from winglike spirifers (called butterfly stones) to scallop-shaped orthids. Their thick shells were ideal for fossilization and as such they're found studding slabs of rock or weathered out where you more readily spy them.

Reef building corals are also common fossils, both the honeycombed, colonial varieties and the funnel-shaped cones of extinct horn corals. Fossils of another group of colonial creatures, bryozoans, look like delicate lacework etched on rock, and the whorled shells of snails, or gastropods, are also frequent finds.

I've been collecting fossils for many years. One site I enjoy visiting is at a popular roadcut outside Schoharie. Here, a half hour southwest of Albany, as a back road crests a crumbling, limestone hillside, there's a shoulder wide enough to pull a car over safely. The rubble-strewn slope represents the middle of an eroding formation where you can pluck Devonian brachiopods and sponges right out of the gravel, making it a good site for kids and beginners.

To get at fossils still embedded in the15-foot cliff beyond, hammer and chisel are required. This is standard procedure for most fossil collecting in New York. Geologic, mason's or crack hammers are the core of any collector's kit. These are supplemented by a variety of cold chisels, pry bars, shovels and lidded plastic containers for holding specimens. Water, sunscreen, insect repellant and first aid gear come in handy too. It's worth splitting some rocks at Schoharie because cephalopods and trilobites have come out of that site, and the cliff is capped by layers of crinoid (includes sea lilies and feathered stars) hash.

Today's cephalopods include the familiar octopus and squid. But the ancient ancestors of calamari were the apex predators of their food chain. We think of cephalopods as soft bodied animals, but many Paleozoic varieties had external shells like today's nautilus and these are the fossils they've left

Fossil hunters examine a roadcut outside Pompey Center.

behind. While some can be as big as tractor tires, typical specimens tend to be much smaller.

A favorite of New York's fossils are trilobites. Trilobites were arthropods, relatives of today's spiders and crabs. They flourished throughout the 300 million years of the Paleozoic, evolving into thousands of species. Then they vanished. Their ovoid exoskeletons are often capped by eyes like headlamps, among the first complex peepers in nature. Many trilobites could roll up like pill bugs, and perished in that pose. Trilobites shed their exoskeletons as they grew, so their most common remains are molted head shields, fanlike tails, or rib-like thoracic segments. Complete, fully articulated specimens are rare, but frequent enough to make hunting them a rewarding challenge for the determined collector.

Sea lily (crinoids) fossils are another New York prize. With their long stalks and feathery crowns, sea lilies resemble flowers, but they are actually animals akin to sea urchins and starfish. Like brachiopods, crinoids still exist in diminished numbers today, but were widespread in the Paleozoic. Complete fossils, with both stem and tentacled crown, are prized by collectors, but uncommon because crinoids tend to fall apart, or, disarticulate, after death. What are plentiful are the disk-like plates that stacked up to form their stems. Crinoid columnals can be so numerous that whole rock formations are composed of these tough little plates.

The big kahuna of New York fossils is the eurypterid, or giant sea scorpion. Some species grew to nine feet long, the largest arthropods ever. Several of these monsters were no doubt fearsome, with huge, grasping claws or dagger-tipped tails. Others may have been benign as their relative the horseshoe crab. Eurypterids flourished in the Silurian Period (443-416 million years ago), but are not common finds. Nonetheless, some of the finest specimens hail from New York, earning their status as our state fossil.

New York's richest fossil strata are the Devonian deposits of the Allegheny Plateau. This vast region stretches from the Hudson River west to Lake Erie, and from Lake Ontario south to the Pennsylvania border. But all that fossiliferous bedrock is buried under dense forests and topsoil. It's only exposed in quarries, creek beds, or where canal, road and rail construction have cut through it. A little research online will divulge well-known, accessible sites.

Just off the interstate in Tully, there's a bald hillside that can be scavanged for spirifers, rippled *Grammysia* bivalves and the odd trilobite. Fossil collecting tends to be dirty work in often remote places. This site is uniquely located behind a motel with its hot showers and other comforts.

In rolling farmland outside Pompey there's a long roadcut riddled with the ribbed cones of cephalopods at one end and black, button-like gastropods at the other. In North Brookfield a mudstone bluff stands half hacked to rubble by generations of fossil hunters prospecting for palm-sized *Dipleura* trilobites. Over in Earlville, pickups and 4x4s have worn a dirt road down to bedrock paved with cephalopods and pelecypods, making it a tantalizing, but hazardous, place to collect.

One thing to consider in fossil hunting, though, is that while fossils may seem to exist in unlimited supply, this is not true. Fossils are a non-renewable resource that provide scientific evidence of past life forms and environmental conditions. When possible, you may consider

Photo courtesy Lang's Fossils

Large and small eurypterids with discoverer, Allan Lang.

collecting only fossils that are already dislodged from their rock matrix, or even simply photographing or admiring them in place. You should also obtain permission from property owners before entering or collecting on private property. Additionally, be aware that collecting fossils on New York State-owned or federal lands requires a permit.

A good approach to fossil collecting is to join a fossil club like the New York Paleontological Society. Their field trips introduce members to public sites and gain them access to private ones, including "pay-to-dig" sites. If you are determined to find a eurypterid, make an appointment with Lang's Fossils in Ilion for access to their famed quarry. On the outskirts of Buffalo, the Hamburg Natural History Society manages the renowned Penn Dixie site. Over the years this quarry has produced beautiful trilobite specimens. Visitors can either become members of the society or pay a day-use fee for the privilege of collecting there. While brachiopods are abundant—some naturally cast in iron pyrite (fool's gold)—the trilobites usually require some luck or elbow grease to uncover.

Other fossils have been found in New York as well. For instance, the first mastodon found in the U.S. was unearthed in the Hudson River Valley and the state has since proved one of the richest sources of Ice Age elephants in the world. Dam construction near Gilboa uncovered petrified tree stumps from the Devonian, the oldest fossil forest on record. And crabs and oysters embedded in Pleistocene clays wash up in the Rockaways regularly.

In the end, the Empire State is distinguished by its rich Paleozoic heritage. It may not exactly be buried treasure, but it's a hidden resource that can be enjoyed by just about anyone with the desire to seek it out.

Mucrospirifer brachiopod, *in situ* in a stream in Windom.

Cephalopod *in situ* at Pompey Center.

Alan Zdinak is a filmmaker, author and webmaster of **www.fossiling.com**. He is a member of the New York Paleontological Society, volunteers in the fossil prep lab at the American Museum of Natural History, and hunts fossils throughout the Mid-Atlantic states and beyond.

Author's note: The places listed here are just a sampling of some of the scores of known sites across central and western New York. Virtually any roadcut or exposed rockface in this region is worth a look.

Editor's note: While there are many locations across New York where people can legally collect fossils, please be aware that it is illegal to dig for or remove fossils from any state or federal lands.

Long Island National Wildlife Refuge Complex

Several refuges protect critical wildlife habitats on Long Island—6,500 acres

A premier watchable wildlife site

Jim Clayton

Five of nine wonderful places that make up this complex of refuges are open to the public: Amagansett, Elizabeth A. Morton, Oyster Bay, Target Rock and Wertheim. All contain a variety of habitats, and are prime stopovers for migrating raptors, shorebirds and songbirds.

Amagansett and Elizabeth A. Morton National Wildlife Refuges (NWR) are located on Long Island's south fork. Amagansett is 36 acres of beach, swales, fens, cranberry bogs and oak scrub. Most of Morton's 187-acre site is a peninsula jutting into Noyack and Little Peconic bays. Habitats include beach, pond, bog, tidal flat, salt and freshwater marsh, shrub, grassland and maritime forest.

Oyster Bay NWR is located on the north shore of eastern Nassau County and is only accessible by boat. This 3,209-acre

piping plover

Jeff Nadler

black ducks

Gerry Lemmo

great blue heron

Bill Banaszewski

area includes bay, salt marsh and freshwater wetlands, and is especially important for wintering waterfowl and a variety of waterbirds. Target Rock NWR is 80 acres on the Lloyd Neck Peninsula of Long Island's north shore. Mature oak-hickory forest and rocky beach are found here. Oak-pine woodlands, grasslands and fresh, brackish and saltwater wetlands characterize 2,550-acre Wertheim NWR on Long Island's south shore.

Wildlife to Watch

At Amagansett, visitors can see merlins, Cooper's hawks, kestrels, sharp-shinned hawks, and peregrine falcons during spring and fall migrations. In late spring and summer, the beach hosts threatened piping plovers, willet and sandpipers, as well as roseate, common and least terns. Eastern hognose snakes, a species of special concern, also occur here. Long-tailed ducks, white-winged scoters, common loons, horned grebes, Ipswich sparrows, rough-legged hawks, and short-eared owls overwinter.

At Elizabeth A. Morton, white-tailed deer, eastern chipmunk, painted turtles, green frogs, songbirds and ospreys are seen in warmer months, while long-tailed ducks, common goldeneyes, white-winged scoters, and black ducks are common in winter. The ocean surrounding the refuge is critical habitat for Kemp's ridley sea turtles and, occasionally, loggerhead turtles. The beach attracts endangered piping plovers, as well as roseate and least terns.

At Oyster Bay, abundant fish and shellfish support a complex food web linking waterfowl, fish-eating birds, and marine mammals. Harbor seals, sea turtles and diamondback terrapins are commonly seen. Wintering waterfowl include black ducks, greater scaup, bufflehead, canvasback and long-tailed ducks. Osprey, egrets, herons, terns and cormorants are also found here.

Target Rock hosts a variety of warblers, shorebirds and waterfowl during spring and fall migrations. The refuge provides nesting habitat for bank swallows and shorebirds like the piping plover. During colder months, diving ducks are common offshore, while harbor seals occasionally rest on the beach and nearby rocks.

Wertheim was established to protect the Carmans River Estuary for migratory birds. Ospreys, hawks, owls, pine warblers, wood and black ducks, mergansers, bufflehead, great egrets, green and great blue herons, and kingfishers are a few of the approximately 300 species of birds spotted here. Visitors also encounter white-tailed deer, muskrats, fox, weasels, frogs, painted turtles and butterflies.

Site Features

Site Notes: Headquarters/visitors center located at Wertheim. From April through August, some beaches are closed to protect breeding birds. Shore fishing is allowed at Target Rock, and at Wertheim by boat only. Hunting is allowed at Wertheim in season; special rules apply. Entrance fees apply at some locations.

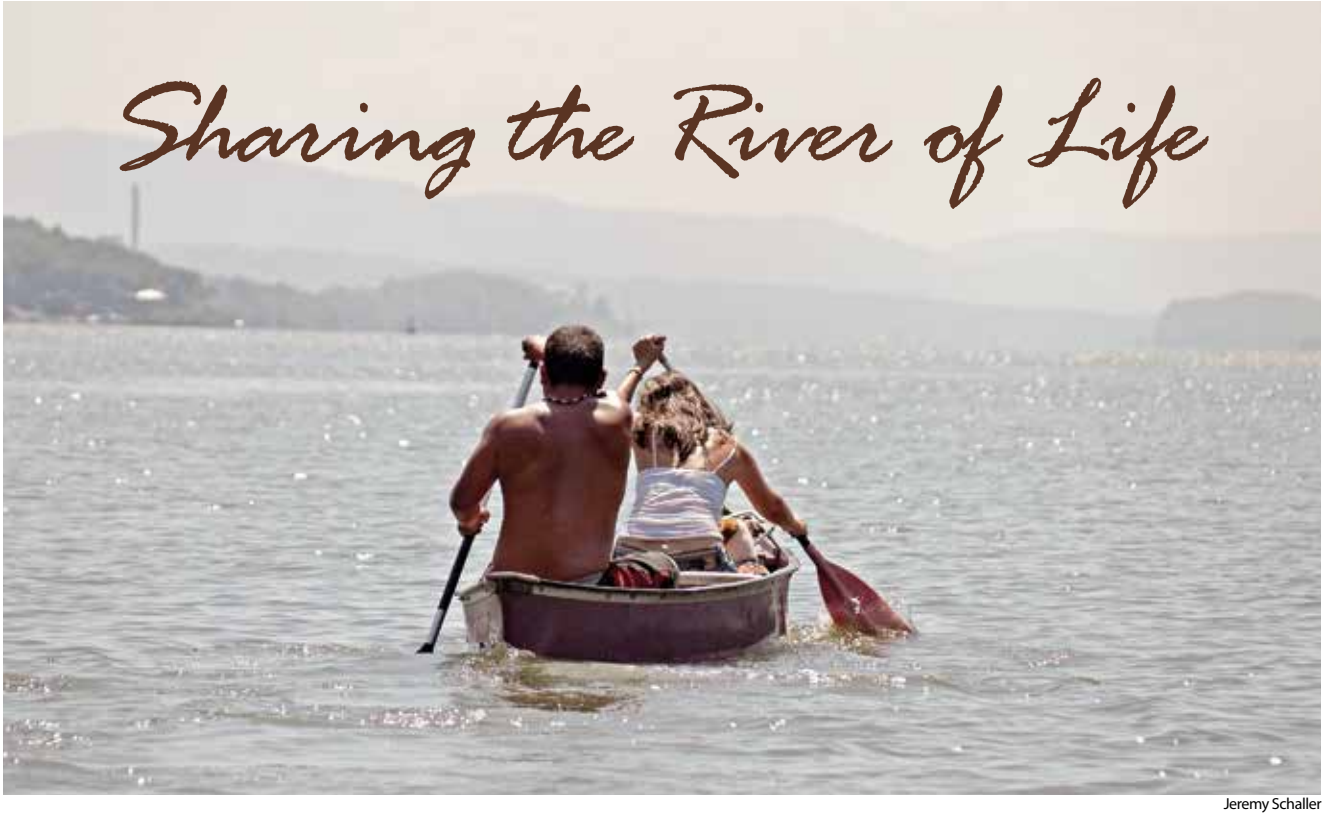
Trails: Amagansett: Walk along the beach (dunes closed year-round). Elizabeth A. Morton: A nature trail passes through upland areas and onto the beach where you can follow the peninsula for almost two miles. Oyster Bay: Use a canoe or kayak at this refuge of mostly ponds and marshes. Target Rock: A nature trail winds through hardwood forest, past seasonal ponds and along the shore of Huntington Bay to an overlook. Wertheim: There are trails through the refuge's different habitats, and visitors can use a boat on the Carmans River and estuary.

Accessibility: Portions of trails at Wertheim and Morton are accessible to people with disabilities.

Directions: For directions and other information pertaining to the complex, call 631-286-0485, or visit **www.fws.gov/northeast/longislandrefuges**.

PLAY HERE EXPLORE NY STAY HERE

Sharing the River of Life

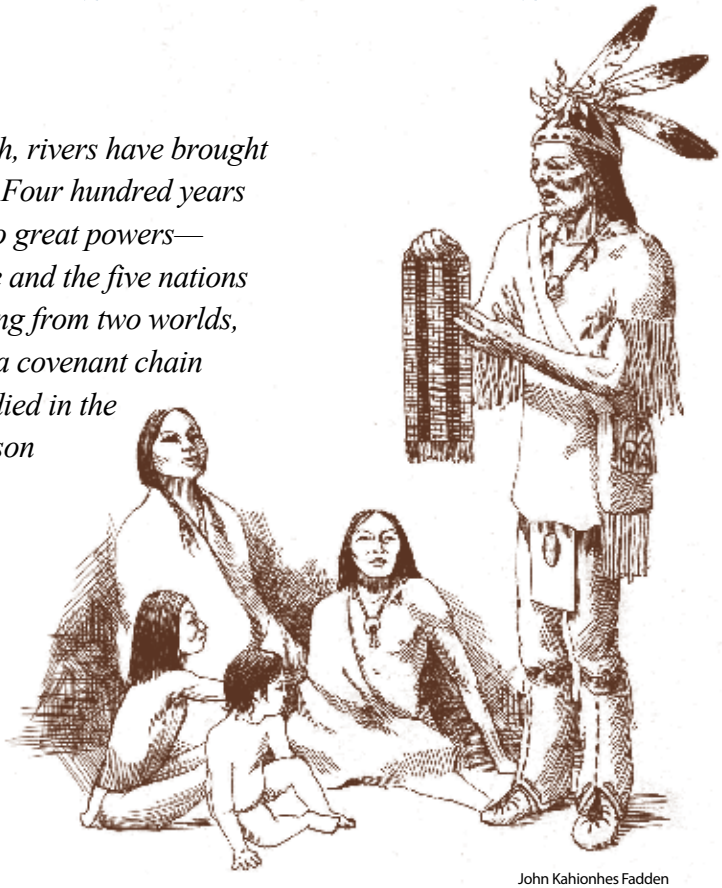


Jeremy Schaller

—Traveling side by side on the Hudson River toward a sustainable future of peace and friendship

By Aya Yamamoto

For as long as rain has fallen to the Earth, rivers have brought together the two worlds of land and water. Four hundred years ago the Hudson River brought together two great powers—the trading enterprises of the Dutch empire and the five nations of the Haudenosaunee Confederacy. Coming from two worlds, brought together by this river, they forged a covenant chain of peace, friendship, and perpetuity, embodied in the Two Row Wampum. This summer the Hudson River will bring our peoples together once more. Where the land and water meet, where two worlds join forces, witness history come to life and take part in creating a just and sustainable future.



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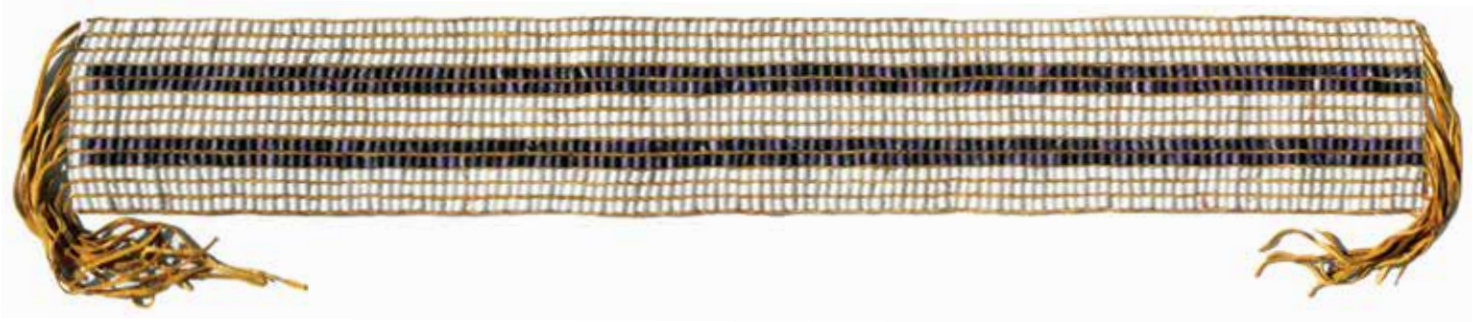


Rivers have always captivated the imagination. Cultures around the world view rivers as symbols of time, spiritual enlightenment, change, power, peace, and life itself. Their banks are the gateway between two worlds: land and water. They abound in highly diverse habitats, so life congregates near rivers. Rivers have also been extremely important for transport. In North America, they served as vital travel corridors long before the arrival of Europeans.

In the early seventeenth century, the rivers of what is now called New York State brought Dutch traders and settlers into the homeland of the people whose teachings would serve as a template for American democracy. They were the Haudenosaunee, or Iroquois, who to this day refer to waterways as the blood vessels of Mother Earth.

The Haudenosaunee Confederacy is one of the oldest living democracies on the planet. It consisted originally of five nations: the Mohawk on the east; the Oneida; the Onondaga in the geographic center; the Cayuga; and the Seneca on the west. The Tuscarora joined the Confederacy in 1722. The story of the Confederacy's formation, in which five warring nations were brought together under the Great Law of Peace, and the actual governmental operation of the Confederacy had a great influence on America's founders (see House Concurrent Resolution 331 at **www.senate.gov/reference/resources/pdf/hconres331.pdf**).

Between 1609 and 1664, Dutch trading posts and settlements clustered along the Hudson River, the northernmost being Fort Orange (Albany) and the southernmost being New Amsterdam (New York City). Just as rivers bring together the two worlds of land and water, the Hudson River brought together the worlds of two peoples—each with different languages, customs, laws and worldviews. The Dutch and Haudenosaunee met at this juncture and forged a binding chain of peace, friendship and perpetuity for the sake of both nations' future generations. For the Haudenosaunee this linkage was symbolically captured in the Two Row Wampum, or Guswenta, which became the foundation for all the subsequent treaties it made with Netherlands, England, France and the United States.

Stephen Lang

Wampum beads are made from quahog clam shells.

Eric Weiss

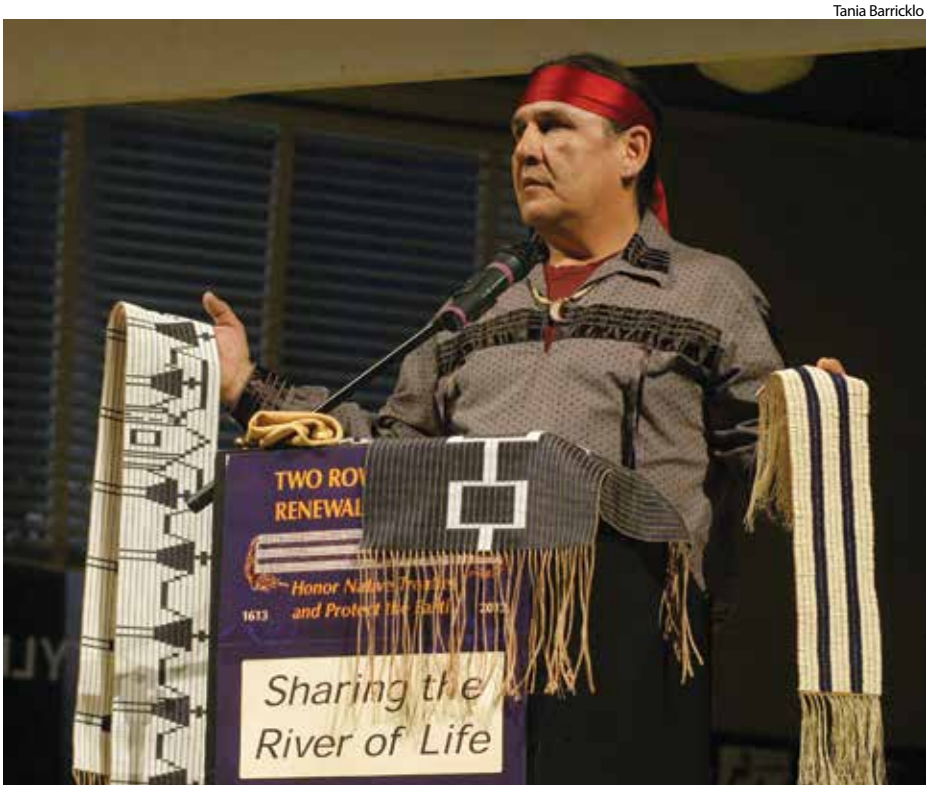
Onondaga Faithkeeper Oren Lyons

The Two Row Wampum symbolizes how the two nations should relate to each other. The two purple rows that give the belt its name represent the Haudenosaunee in their canoes and the Dutch in their ships, traveling side by side down the River of Life, respecting each other's laws, cultures, and worldviews, and working together to protect their shared environment. The three white bands represent peace, friendship and perpetuity, which are three principles routinely referred to in subsequent treaties made by the Haudenosaunee.

The Two Row Wampum Renewal Campaign is a grassroots educational campaign encouraging United States citizens to honor native treaties and protect the Earth. The campaign seeks to unite neighbors on themes of justice and environmental healing for the good of all future generations, using the Two Row Wampum as a model. The campaign, being conducted throughout New York State during 2013, began as a collaborative effort between the Onondaga Nation and the Neighbors of the Onondaga Nation (NOON), a project of the Syracuse Peace Council.

Through community and university events, social media, online resources, and outreach to schools, the campaign seeks to educate the general public about treaties and indigenous perspectives on environmental issues. It also aims to highlight our shared environment, including the Hudson River itself, as the common ground that we must work together to protect. The campaign is based on the understanding that we have an obligation to fulfill the responsibilities outlined in treaties—responsibilities to each other and to the land that have been ignored for far too long.

Tania Barricklo



Onondaga Chief Jake Edwards

This summer, the campaign's focal point will bring the Two Row Wampum to life on the Hudson River. From July 28-August 9 two rows of canoes and kayaks—with native people in one row and allies in the other—will paddle side by side from Albany to New York City. The event will kick off with a cultural festival in Troy on Saturday, July 27. The flotilla will then set out the following morning, with participants scheduled to paddle between 9 and 15 miles each day and camp along the route.

Just as the Hudson River brought our peoples together 400 years ago, so will the river unite us again this summer. Educational and cultural events (some large, some small) are planned at many stops along the river. The gatherings will feature cultural sharing and talks by Haudenosaunee leaders and allies. The flotilla is scheduled to stop at Schodack, Coxsackie, Kingston, Poughkeepsie, Beacon and Croton Point, before ending in New York City on August 9th at the International Day of the World's Indigenous Peoples celebration (**www.un.org/en/events/indigenousday**).

For more information about the Two Row Campaign, including the latest information about the flotilla, visit **http://honorthetworow.org**.

Aya Yamamoto is an organizer, educator, and paddler for the Two Row Wampum Renewal Campaign, and a graduate of the SUNY-College of Environmental Science and Forestry.

Tania Barricklo

Onondaga Clan Mother Freida Jacques

On Patrol

Carl Heilman II

Real stories from Conservation Officers and Forest Rangers in the field

Contributed by ECO Lt. Tom Caifa and Forest Ranger Capt. Stephen Scherry

Greedy Crabbers—Suffolk County

Lt. Frank Carbone and ECOs Alena Lawston, Jeremy Eastwood and Brian Farrish conducted patrols focusing on horseshoe crab harvesting in Riverhead and Southampton. At Westhampton Beach, ECO Eastwood and Lt. Carbone—who had concealed themselves behind some reeds—watched as a van and a pickup pulled into the parking lot. After the drivers got out, they began collecting horseshoe crabs near the bridge. Eastwood and Carbone overheard the men repeatedly warn each other to, "Keep a lookout for the DEC." Eventually, the men put their harvest into the van, and the driver stated he would be stopping at a local convenience store. ECO Lawston followed the men to the store, pulled up behind the van and questioned the driver. As the store's curious customers looked on, the ECOs began counting the crabs in the van. The total was 230—more than twice the legal limit of 100—and the men were ticketed.

ECOs Rescue Boaters—Erie County

ECOs Michael Phelps, Carlton Gill and Scott Marshall were patrolling the Buffalo River when a passing boater flagged them down. He believed another boat in the vicinity was having trouble, and the ECOs quickly found a disabled vessel taking on water. Within minutes, the boat had a foot of water in it, and the situation continued to deteriorate. Chilly water pooled around the passengers' legs, one of whom was pregnant and had an injured back. Phelps, Gill and Marshall removed most of the passengers, but the pregnant woman was unable to jump aboard the patrol boat. ECO Gill struggled to keep the sterns of both vessels together in the choppy water, and ECOs Phelps and Marshall boarded the sinking boat to quickly help the woman onto their vessel. The ECOs then towed the disabled boat to a nearby dock and requested medical attention for the woman, keeping her comfortable until EMS arrived.

"Buck" Bests Burglar—Sullivan County

ECO Scott Steingart, accompanied by K9 "Buck," was checking anglers at a public fishing access site along the Neversink River when he noticed a man wearing a backpack sneak around a gravel bank and disappear from sight. The man was heading toward summer homes that had recently been burglarized. ECO Steingart called the Fallsburg PD for assistance, and then he and Buck followed the man's tracks. Buck pursued the man through some brush in the direction of the houses, but suddenly the dog took a sharp right turn. Within seconds, Buck discovered the nervous man hiding in shrubbery. The man tried to convince Steingart that he was hiking, but a search of his backpack revealed wire cutters, a pillow case and binoculars. The suspect was taken into custody, and the investigation continues.

Dangerous Leap—Greene County

Recently, Ranger Chris DiCintio overheard a Greene County 911 dispatch of an injured swimmer in the area along Kaaterskill Creek known as "Fawn's Leap." According to eyewitness accounts, the subject had been drinking and, after making a 50-foot jump into the swimming hole, slipped and fell while attempting to climb back up the narrow ledges. He hit several rocks on the way down and fell onto more rocks in a shallow end of the swimming area. A companion was able to retrieve and bring him to shore, and a passing motorist called for assistance. Rescue Squad and Greene County paramedic personnel treated the man for injuries to the head, back, abdomen and legs. Ranger DiCintio helped prepare him for transport to a landing zone established by the Kiskatom Fire Department at the former Friar Tuck Inn parking lot. The subject was then flown by a medevac helicopter to the Albany Medical Center for treatment.

ASK THE ECO

Q: I have a raccoon living in my attic. Will DEC remove it for me? Can I do it myself?

A: DEC does not remove nuisance wild animals from homes, but the department's Division of Fish, Wildlife and Marine Resources will refer you to a nuisance-wildlife trapper who can help. These licensed professionals, who charge for their services, also can be found online or in your phone book. Rules exist regarding the trapping or killing of nuisance wildlife. Call your DEC regional office for more information, or visit DEC's website at **www.dec.ny.gov/animals/7005.html** if you want to remove the raccoon yourself.

Bill Banaszewski

professionally trapped raccoon

Please Disturb

—When it comes to certain wildlife, sometimes a little disturbance can be a good thing

Jim Clayton

Jeff Nadler

mourning warbler

By Eli J. Knapp

My ornithology class was quickly taking on the feel of a forced march. Energy levels were flagging, black flies were buzzing, and the swamp's morning bird symphony had reached an intermission. But being an overly optimistic ornithology professor, I desperately wanted my students to see a northern goshawk, the fierce and elusive bird of our northern forests.

I turned to my sun-baked audience, hoping to rouse them for one last pursuit. "We'll leave the swamp and head into this grove of evergreens!" I yelled, hoping my voice would carry to those in the back. "But first we need to switch disciplines, from ornithology into conservation biology. Who can tell me why we need large expanses of intact forest?" I asked.

Fortunately, at least one student was still lucid. "Because that's the only place that some species will use!" a flannel-shirted guy named Joe hollered from the back.

"Exactly," I said, flashing Joe an appreciative smile. "The goshawk is a case in point."

The canopy closed overhead as we marched into the evergreens. Last year, I had staked out a place that goshawks had nested in. But now, as we marched, I noticed sunlight coming from my desired destination. What had happened to my forest? (Like many who frequent public lands, I felt informal ownership of this parcel.)

Moments later, to my dismay, the mystery solved itself. The previous year's goshawk grounds had been transformed into a patch clear-cut with the ground littered with fallen tree tops and bramble. The forest surrounding the clear-cut was still intact, though, as if aliens had flown over and simply removed a perfectly rectangular patch for further study.

The students read my expression like a book. "I guess we won't be finding any goshawks, will we?" a girl asked.

"Not today," I responded, feebly trying to mask my despair. I paused a moment to collect myself. But I couldn't. My emotions bubbled up and I stood on my soapbox made possible by a nearby stump. I knew better than to intentionally interject my own biases into my class. But I was too wounded to refrain. "This," I exclaimed, "is what happens when you clear-cut before consulting with ornithologists, ecologists, and conservation biologists! Yeah, it'll grow back. But goshawks don't tolerate ripped up forests. They need their home intact. Maybe they've found suitable nesting nearby. But I doubt it. Look at this everybody and remember it…"

Jim Clayton

A planned timber harvest may appear unsightly at first (photo preceding page), but the area greens up quickly with lush vegetation (above).

Young Forests: *Helping Our Wildlife*

Jeff Nadler

According to the Northeast Association of Fish & Wildlife Agencies, for many people a healthy forest is an older, park-like setting of tall trees widely set apart. However a healthy forest ecosystem should also contain patches of young forest. Young forests provide essential homes for lots of wildlife. Some birds, like the brown thrasher and mourning and prairie warblers, can only thrive in open sunny areas within young forests full of shrubs and saplings. Young forests are also important nurseries for grouse, deer, moose and black bear.

Forest disturbance—whether from natural causes, like a severe storm or wildfire, or from manmade causes, such as a planned timber harvest—is vital for creating young forests. The disturbed area seems unsightly at first, but this is temporary. For numerous wildlife species, a burned area or cleared patch of forest is a welcome sight.

Young forests are great places to watch wildlife. The year after a disturbance, grasses, wildflowers, shrubs and tree saplings will take over the site, and within a few years, the site is lush with new growth and teeming with wildlife.

To learn more about the importance of young forests, check out **www.youngforest.org**.

I paused, hoping to impregnate the moment with meaning and inspire the next generation of environmentalists. Stunned by my outburst, nobody said a word. But the silence was suddenly broken by an unmistakable warble. At first it was faint. I cupped my ears. Like an approaching ambulance, the beautiful string of notes steadily increased.

"What is *that*?" Joe asked, scanning the vegetation with his binoculars.

"It's a warbler," I responded, trying to hide my uncertainty.

I needed time to flip through my dusty mental audio database and retrieve this species that I hadn't heard, or seen, in years. But Joe was persistent. For him and my other students, professors that readily profess philosophy from freshly hacked tree stumps had better be able to profess the name of a dainty little bird warbling nearby.

My dimly flickering light bulb finally blazed. "It's a mourning warbler!" I exclaimed.

I crashed through a tangle, absorbed a dozen blackberry thorns, and finally laid eyes on my quarry. Sure enough, a male mourning warbler was singing his springtime heart out from the top of a small sapling. "Do you all see it?!" I whisper-shouted back to my confused class.

A few heads nodded; others madly scanned the foliage. But before everyone saw it, the warbler dissolved back into the brush. Excited, I fought my way back to the class and dredged up my dormant mourning warbler facts.

"Now that is a fantastic bird!" I started. "It's never abundant because of its very specific habitat requirements. For the mourning warbler to flourish, it needs a disturbed area with thick underbrush. It needs a disturbance that's surrounded by mature forest. Essentially the mourning warbler needs storms or fire or loggers to disturb the forest to give it the right habitat to nest." In my excitement, I missed the obvious irony I'd dimwittedly created. But my students didn't.

"You mean it needs a clear-cut?" a girl named Brianna asked innocently, scribbling in her field notebook.

"Um…well…in a way, yes," I responded.

"So a clear-cut is *good*?" she pressed, her pen poised like a hummingbird inspecting a flower.

Several students were now taking notes. I paused again, knowing my words were being recorded as sacrosanct. I needed to choose them carefully.

I hesitated. "It's ultimately a question about values. Or trade-offs. Should we destroy habitat for the goshawk to create it for the warbler? Or exclude the warbler for the goshawk? What do you all think?" I asked. Although new at teaching, I'd quickly learned the quasi-duplicitous art of asking a question to mask my own momentary ignorance. "We'll discuss that more this afternoon," I said. "In the meantime, we best get going."

Since my students knew the route, I intentionally took the rear to avoid conversation. I needed to think. I had stumbled into an inadvertent double-standard. Here I was the professor, yet I was the one learning the lesson.

I hold an advanced degree in ecology. Yet my discipline, like so many others, frequently breeches the walls of philosophy. I often revel in it, in fact, promoting any cross- and multidisciplinary endeavors that come my way. But it's risky, too. Expertise can only go so far. So when I do storm another colleague's castle, how far can—or should—I go? So much, I'm learning, rides on this question; the invaluable academic lives of my students, and the actual lives of goshawks and warblers, among myriad other creatures.

By the time we piled in the vans, I still had no answers to the goshawk-versus-warbler question. Nor about logging. The answers are undeniably complex. But I had arrived at a simpler truth, previously obscured by the tangle of questions: When I'm teaching—or preaching—about the philosophy of nature, humility must be lesson number one. As the mourning warbler reminded me with its clarion call, answers to nature's riddles are rarely clear-cut.

Eli J. Knapp is a professor of biology at Houghton College.

HUNTING MUSHROOMS

By Stephen J. Rock; photos courtesy of author

I come by my love of mushrooms honestly. Some of my earliest childhood recollections involve weekend afternoons in late summer and fall when the entire house would fill with a particularly noxious odor—one that can be created only by what I now consider to be a cardinal sin of mycophagy (eating mushrooms): the boiling of mushrooms.

For many people, like the author (top of page) and his father (pictured here with *Xanthoconium separans*), mushroom hunting is a tradition handed down through the generations.

I was raised in Cohoes, NY by a first-generation Carpatho-Rusyn Lemko who hunts primarily two to three species of "bolete" mushrooms for his culinary purposes. My father's method of preparing the species of mushrooms that he collects was handed down to him by his parents, both of whom emigrated from villages in what is now southeastern Poland. My Lemko ancestors would go into the woods at particular times of the year seeking these delicacies to prepare (as my father does) and also to dry them for use during the winter holidays.

Likewise, when I was a kid, Dad would go out for a morning walk and often return with a grocery bag full of these odd-looking and earthy-smelling mushrooms. I never forgot the look of them. Dad would use the mushrooms to make zypraska (a gravy made from rendered-down pork fat, onions, peppers, garlic, flour, spices

The author's wife with hen-of-the-woods.

Boletus edulis

and, of course, mushrooms), following the family recipe of boiling his mushrooms before preparing the gravy. It smelled horrible, but I later learned that it tasted wonderful. After finally getting over the mushrooms' scent and tasting the delicious gravy (usually served over egg noodles), I immediately re-assessed my displeasure at the exotic aromas, and my interest in mushrooms in general.

I'll never forget how my pursuit of the fungal wonders of the New York forests got jump-started by that memory. My wife Margaret and I had just come out of a favorite woods in Pawling, NY when I spotted a mushroom that looked like the ones my father picks. The following weekend I attended a lecture that was given by a member of the Westchester County, NY–based Connecticut-Westchester Mycological Association (COMA). My first mycology mentor, Marge Morris, told the assembled group about many species of mushrooms that we could find in our area. After the lecture, I returned to my car and found a mushroom similar to the one I'd seen the previous weekend. I brought it back to show Marge, who immediately held it up in the air like a priest with a chalice and declared "King bolete! King bolete!" I'd apparently found a keeper! It was a specimen in the *Boletus edulis* complex, one of the most highly prized wild mushrooms in the world. That was it: I was hooked!

Photograph them to your heart's content, but never eat a wild mushroom that has not been identified as an edible species by an expert mycologist.

Fortunately for me, Marge lived nearby and was happy to share both her hunting spots and years of mycological expertise. Marge and I spent many weekends hunting on our own and with other COMA members. I was indeed fortunate to be in the company of so many skilled and knowledgeable amateur mycologists who mentored me and became good friends. Most of them had studied at the New York Botanical Garden under the author of the Audubon guide to mushrooms, Gary Lincoff. Their combined expertise was both inspiring and intimidating, but their ability to gradually (and patiently) bring a person from novice to skilled amateur overrode my trepidation. I enjoyed each walk more than the previous, and I was soon leading walks, editing the club newsletter, and producing a club promo video for YouTube.

Within a few short years, I felt totally capable of foraging on my own, finding various species of delicious edible mushrooms as each fruited through the seasons. I quickly realized that although my interest and fascination with all species of mushrooms was high, I was for all intents and purposes, a "pothunter," a person whose primary interest is in collecting, and cooking with, wild edible mushrooms. However, one of the great things about learning about mushrooms from experts is that they do not focus only on the specific species that they want to eat. I learned not only to seek certain mushrooms at specific times of the year, but also to be open to discover all that nature provides as I hunt my highly prized edibles. On most walks something unexpected or not previously encountered surprises me, all because I'm looking for particular mushrooms.

Finding mushrooms and collecting mushrooms are two different things, however, so amateurs must ensure that there are no restrictions on the harvesting of fungi before taking any out of the woods. Many local and state parks put restrictions on what can be removed and these rules must be followed. Even when restrictions are in place, though, I have

found that I have been allowed to take a sample or two, as well as an infinite number of photographs for study. Finding those places where edibles can be collected is similar to finding that great secret fishing spot, and it can take many years of hiking and hunting to do so. (There are even stories of people leaving the location of their morel spots and hen-of-the-woods trees in their wills!)

As was the case with me, foraging for wild mushrooms is a tradition that is typically started by an immigrant ancestor and then handed down through the generations. Those of us, like myself, who are fortunate enough to have parents who are still able to pursue this delightful and rewarding hobby revel in each opportunity to engage in it with them. In August of 2011 my father told me that he had an incredible crop of "prawdiwek" (the "true mushroom") growing in a lot that he owns. He was bringing them home by the shopping bag full and giving them away to family and friends because he just could not cook any more!

Fortunately I had a high school reunion two weeks later that brought me back to Cohoes, and I set out with my father to see what remained. I was stunned to see the most beautiful fruitings of lilac bolete that I'd ever encountered. Although there were dozens of gorgeous, healthy specimens growing under the oak trees, my father assured me that it was nothing compared to what had been there earlier. The reunion was an event that I'd looked forward to for many months, but that time spent with my father was the highlight of my year.

Boletus frostii

No matter where you go in New York, if there are trees, there will be mushrooms.

When you learn to identify the different types of edible mushrooms, there's no telling the amount of delectables you could be carrying home from the woods.

Leccinum versipelle

Boletus edulis

Amanita jacksonii

Boletus bicolor

Amanita jacksonii

Hunting in various parts of the state has been an eye-opener for me, too. I'll never forget the first time I encountered a giant king bolete on the northern edge of the Pharaoh Wilderness in the Adirondacks. It stopped me in my tracks, took my breath away, and brought me to my knees in amazement and adoration. In my neck of the woods I might find them anywhere from 3- to 10-inches tall; this one was at least 16 inches in height with a cap that was a foot or more in diameter! Other encounters with Adirondack mushrooms taught me that, despite thinking that they were new to me, they were (for the most part) simply larger specimens of mushrooms that I'd studied 150 miles south of there. The substrata in those ancient forests make for some amazingly large and healthy mushroom specimens.

With the unusual weather patterns that we have been experiencing, I have not seen a "typical" year in the 15+ years that I've been hunting mushrooms. Each year, though, seems to be "the year of" one kind of mushroom or another. A few years ago, for instance, members of my club were harvesting amazing amounts of morels. Then there was the incredible summer of the chanterelle when the temperatures and rainfall had them fruiting in great abundance. In 2011 it seemed you could not take 20 steps in an oak forest without encountering another hen-of-the-woods at the base of an oak tree—sometimes five or six of them! And that was on top of the delectable boletes that I'd picked with my father.

No matter where you go in New York, if there are trees, there will be mushrooms. As I heard on one of my first COMA forays: "You see what you look for." So keep an eye out for those beautiful and fascinating fruiting bodies that we call mushrooms—they're not hard to find. After all, Mother Nature has assigned a wider color palette to the kingdom of fungi than she has to flowering plants. Photograph them to your heart's content, but never eat a wild mushroom that has not been identified as an edible species by an expert mycologist. Soon, you too can be finding and cooking with wild mushrooms!

Stephen J. Rock is a publishing technician for Boehringer-Ingelheim Pharmaceuticals, Inc. He and his wife enjoy foraging for and photographing mushrooms.

Author's note—The following two sources were used:
Shernoff, L. *Mushroom: The Journal of Wild Mushrooms*. **www.mushroomthejournal.com**
Kuo, M. *North American trees* **www.mushroomexpert.com/trees**.

Boletus edulis

Come join the hunt!

If you'd like to explore the world of mushrooms and mushroom hunting, there are many clubs and organizations throughout New York that offer classes, talks, hikes and much more! Here are some of the many mushroom clubs you can explore:

Central New York Mycological Society, Baldwinsville: **www.cnyms.org**
Connecticut-Westchester Mycological Association (COMA), White Plains: **www.comafungi.org**
Long Island Mycological Club, Ridge: **www.limyco.org**
Mid Hudson Mycological Association, Albany: **www.midhudsonmyco.org**
Mid York Mycological Society, Rome: **http://mymsnet.org**
New York Mycological Society, New York City: **www.newyorkmyc.org**
Rochester Area Mycological Association, Rochester: **http://rochestermushroomclub.org**
Susquehanna Valley Mycological Society, Endicott: **www.svmsonline.org**

BRIEFLY

Compiled by Jenna Kerwin and David Nelson

Jennifer Hayes

Don't Hook Sturgeon

DEC advises anglers to be aware of lake sturgeon in the Great Lakes, the St. Lawrence River, Finger Lakes and Oneida Lake. Last season, DEC received many reports of anglers catching sturgeon. Commercial fishing, dam building and habitat loss have decreased sturgeon populations. Lake sturgeon are listed as a threatened species in New York so there is no open season for the fish and possession is prohibited. If you hook one, you should follow certain practices to ensure the fish is returned to the water unharmed. For example: avoid bringing the fish into the boat, remove the hook with pliers, and always support the fish horizontally. For more information about sturgeon, visit **www.dec.ny.gov/animals/26035.html**; and for details about sturgeon restoration, visit **www.dec.ny.gov/animals/26045.html**.

Return of the Cicada

This summer, Brood II of the 17-year cicada will emerge in parts of southeastern New York. The emergence of this brood of periodic or "magicicada" has been documented in the east every 17 years since the early 1700s. Magicicada differ from other cicadas in that they have black bodies, red eyes and orange wing veins. When cicada nymphs emerge from the ground,

John H. Ghent, USDA Forest Service

males begin calling for mates. These loud choruses are what many people think of when they think of cicadas. Cicadas are not dangerous to humans and are generally not considered pests. To see if Brood II will be in your area, visit **www.magicicada.org** and click on the many interactive maps.

New Email Service

DEC recently began using GovDelivery (a streamlined subscription service) to manage its email listserves. GovDelivery is an easy way for the public to receive updates from DEC, and

BRIEFLY

subscribers can choose to receive email updates on any number of more than 100 topics. GovDelivery does not share any personal information with third-party sites. To sign up, manage your account, and to learn more, visit **www.dec.ny.gov**.

New Trail

DEC recently opened a 12.8-mile, multi-use trail connecting the communities of Raquette Lake and Inlet, through the Moose River Plains Wild Forest. The trail provides a variety of recreational opportunities throughout the year, such as mountain biking, hiking and snowmobiling. The project was a cooperative effort between DEC, local townships, the State Snowmobile Association, and the Student Conservation Association. To see a map of the trail, visit **www.dec.ny.gov/outdoor/89235.html**.

Correction to Barberville Falls

In our February 2013 article "Waterfalls of New York," we reported that people could visit Barberville Falls in Poestenkill, Rensselaer County. We've since learned that The Nature Conservancy has had to close Barberville Falls to the public during the summer because of continual misuse of both the Nature Preserve as well as the neighbor's property. For more information, please visit The Nature Conservancy's website at **www.nature.org** and search "Barberville Falls."

Edward Smathers

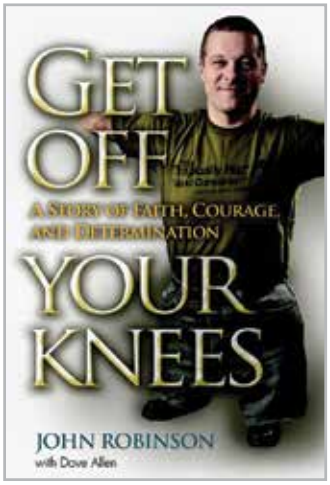
snapping turtle

Susan Shafer

Watch out for Turtles

DEC reminds motorists to be cautious of turtles crossing roads. Roadkill can be a significant problem for some reptile and amphibian populations; turtles are particularly at risk between the last week of May and the first week of July, when female turtles migrate to available nesting areas. DEC reminds people to be careful when moving turtles off the road. Try to move the turtle in the same direction it was headed, and be careful of the turtle. Some species, for instance (such as snapping turtles and spiny softshells), may strike at the rescuer, and the bite can be painful. Also, never attempt to pick up a large snapper by its tail. This puts all its weight on its backbone, which can cause dislocation of the vertebrae (or a broken back) from which the turtle may not recover. Remember: be cautious of traffic and don't put yourself in danger.

Journey along the Canal



On June 23rd, congenital amputee John Robinson will begin a 16-day trek handcycling along the Erie Canalway Trail, from Buffalo to Albany. John aims to increase awareness about people with disabilities, and raise funds for Adaptive Sports and Accessibility for New Yorkers with Disabilities. The journey will be filmed as a follow-up to the PBS documentary, "Get Off Your Knees: The John Robinson Story." John will invite people with disabilities from communities along the way to share their stories of inspiration, and all are welcome to join for portions of the journey and attend scheduled gatherings. Visit **http://info.ourability.com/travel** for more information about the trip and how you can be involved.

LETTERS Compiled by Eileen Stegemann and Jenna Kerwin

Osprey Action

I thought you would enjoy this osprey picture I recently took.

Clifford Dayton
Long Island

Great capture! It shows how osprey carry fish fore and aft, rather than sideways. Look for osprey along coastlines, and on major lakes, rivers and wetlands upstate.

—*Conservationist* staff

Permanently Tracked?

I read with interest the "Tracking the Short-eared Owl" article in the February 2013 issue. The range of the satellite-tracked and mapped owl is impressive considering the short time-span required for it to cover this range. The picture of the satellite transmitter attached to an owl noted the batteries provide power for about 12 to 18 months. When the batteries are depleted, does the transmitter fall off on its own and free the bird?

Jerry Kron
Conklin, Broome County

Great question. First, let me clarify the difference between two types of transmitters. VHF (radio) transmitters last for 12 to 18 months, and under the best conditions have a straight-line range of 1-3 miles. These transmitters are tracked manually to get localized data. PTT (satellite) transmitters theoretically last about three years. PTT transmitters communicate with satellites and provide data of the bird's migration and breeding grounds. The weight and placement of the transmitters in no way inhibit the bird, and they are sewn on with cotton thread, which in time will rot and fall off.

—Glenn Hewitt, DEC Wildlife Technician

Magazines Overseas

My brother recently received some magazines I sent him, and I wanted to pass along his thank-you note and photo he sent me: "Just wanted to thank you for the *Conservationist* magazines! It's really great being able to see and read about the beautiful nature back home, especially while I'm surrounded by desert! I really have enjoyed reading these. Thanks again! – Jeffrey Walters"

Jacquie Walters

We're happy your brother is enjoying his magazines, and we would like to thank him for his service!

—*Conservationist* staff

Unearthing Family History

DEC librarian Emily Wager recently helped a reader gather information about her grandfather, William C. Adams, a game protector with the Department in the '30s and '40s. We thought we'd share some of their comments:

"Attached is some information that Law Enforcement staff found on your grandfather. In the 1932 Annual Report, the governor rewarded him and other Game Protectors for unusual services. I hope this gives you more insight into your grandfather and his time spent at the Conservation Department."—Emily Wager

"You have given us a huge gift by your diligent searching. I am thrilled to have this information about my grandfather. His letters are so warm and interesting but the ones I have, ended in l943. Among other things, I note he was a fine, clear thinker and writer. In his letters, he spoke less about himself and more about his family so it is truly lovely to have this other side of his life detailed. He was an avid hunter and if I recall correctly, one day in the '40s, he went hunting with a nephew(?) of Winston Churchill and Errol Flynn. He described Errol as a nice guy but a very indifferent shot!"—Susan Adams Farrand

LETTERS

Historic Flour Mill

I discovered this old mill on a nature trail near Gasport (Slayton Settlement Road). I have been by it a million times but have never really noticed it before!

Kim Abrams
Genesee County

What nice photos! Many flour, grist and saw mills were in operation in this "mill district" area of Niagara County from the early 1800s to mid 1900s.

—*Conservationist* staff

Colorful Cecropia

My fiancée Ilona and I were cycling when she spotted this large and colorful insect. I don't know if it is a moth or butterfly and I certainly don't have any idea of its identification beyond that. We were wondering if you could help us with an ID.

Pete Jensen
Putnam County

You've come across a cecropia moth—and a great specimen, too! Cecropias are New York's largest moth, and belong to the group of moths known as giant silk moths. Like all giant silk moths, cecropia adults have no functioning mouthparts, so they don't eat. Instead, they survive on fatty reserves they accumulate during the caterpillar stage.

—*Conservationist* staff

Please Carry It Out!

We've received a couple of letters from readers who have come across some wildlife ensnared by plastic. DEC wants to remind everyone to carry out any trash, and also remind anglers to pick up any old or discarded fishing line. To make it more convenient for anglers, receptacles for old fishing line have been installed at several fishing access sites around the state.

Ask the Biologist:

Swimming Squirrels

Q: We've had several people write in about seeing swimming squirrels in summer. Janet Quinn of Jefferson County sent us this photo of a swimming red squirrel that she encountered while canoeing Slang Pond (Franklin County). She commented on how it looked calm, not at all in a panic, and seemed like it knew where it was going as it headed directly for a specific log, then landed and scampered off into the woods. Janet wondered if this was a common behavior, and asked if squirrels are known to cross small bodies of water while carrying out their usual activities?

Another reader, Jim Wojdan of Cattaraugus County, also saw a swimming red squirrel while he was kayaking on Lake Abanakee (Hamilton County). He described how when the squirrel reached shore it seemingly collapsed on the closest log and rested for quite some time before taking off.

A: Most people will be surprised to find out that it's really not that unusual to see a swimming squirrel. DEC biologists say this is particularly true at certain times of the year, such as the fall, when squirrels are looking for new territories; so a few will swim. Also, there are some squirrels that are driven into the water by a predator. But we would bet that sometimes, they just want to get to the other side!

—*Conservationist* staff

Write to us

Conservationist Letters
NYSDEC, 625 Broadway
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or e-mail us at: magazine@gw.dec.state.ny.us

Back Trails

Perspectives on People and Nature

John Bulmer

Headwaters

by Paul F. Noel

I follow the old trail more by instinct than familiarity, guided by memories of the heart rather than landmarks that have long grown up, rotted, or blown over.

It is a warm, calm day in early June with a white sky overhead offering promise of neither sun nor rain. Young leaves on spindly white birches barely move, acting unsure and tentative after their recent emergence. Birdsong fills the heavily scented air and the growing green of witch hobble frames the road. It is a good day to be out if one has fishing on the mind.

My year-old German short-haired pointer runs along my side with seemingly purposeless abandon. He lives strictly for the moment, unaware of the concept of time, and I wonder what that might feel like.

My reason for this trip: brook trout; my destination: a northern Adirondack stream. Not any brook trout, but wild fish whose ancestors were caught by my father, my brothers and me. And not just any stream, but one that has come to symbolize my growing years. That wild watershed provided a shy, thin boy an education to the natural world and a place to find peace and competence during a time when such things were not easily found.

The stream's headwaters are small, surrounded by grassy banks choked with speckled alders. Downstream, the brook meanders, widening and deepening, allowing trout to hold in pools and fly fishermen to cast. My brothers and I would set the hook to an ancient pulse until called off by my father, telling us it was time to quit. I still hear that voice in other forms when I listen silently and honestly.

The upper reaches drain though expansive, fragrant conifer stands where years ago we hunted hare, trapped bobcats and fisher, and tracked mystical whitetail bucks into impenetrable havens. The surrounding land rises higher into classic maple, beech, birch and ash hardwoods where spooked deer could occasionally be seen.

I make my way downstream from the slower currents of the headwaters. Here the brook accelerates over copper-colored rocks; gurgling and popping, ever-changing, ever the same. The riffles, glides and pockets hold hungry brook trout whose lives revolve around grabbing something to eat while avoiding being eaten. It's a common theme in this natural world and I sometimes envy the simplicity. But as a hunter or angler, I become part of that theme and reduce my world to the bones and roots of human evolution. These experiences are needed to sustain me through the rest of my work days spent in an unnatural world.

The sun is passing behind the balsams, that in-between time when all creatures nocturnal and diurnal stir. Peepers start calling from a still backwater in concert with a hermit thrush and the yipping of coyote pups. The brook is playing her music. It yields different songs to different souls.

A hatch of moth-like caddis starts and the water slowly percolates with the sips, plops and splashes of feeding trout. I stand in the current and feel it wash over and through me. I start casting, the arc and swish of my rod and line in perfect harmony with the stage around me.

The leader lands gently in the shimmering, silver water. A brook trout grabs my fly with a familiar primitive aggressiveness. I instinctively set the hook and feel the head shake to and fro, a million years of selective survival transmitted through line and rod.

The red spots with blue halos, the white-edged fins, the yellow and green vermiculations along the back, make this creature a symbol of all things wild and beautiful. I gently back out the hook and the freed trout slowly fins suspended in the current, suspending me along with it. Then in a subdued flash it disappears into a deeper unknown. My gaze shifts downstream, watching the water tumble away... away from the headwaters.

Carl Heilman II

A lifelong sportsman, **Paul F. Noel** was raised in the Chateaugay Lake area of northern NY. He now lives in Vermont and is a graduate of the fisheries and wildlife program at SUNY Cobleskill.

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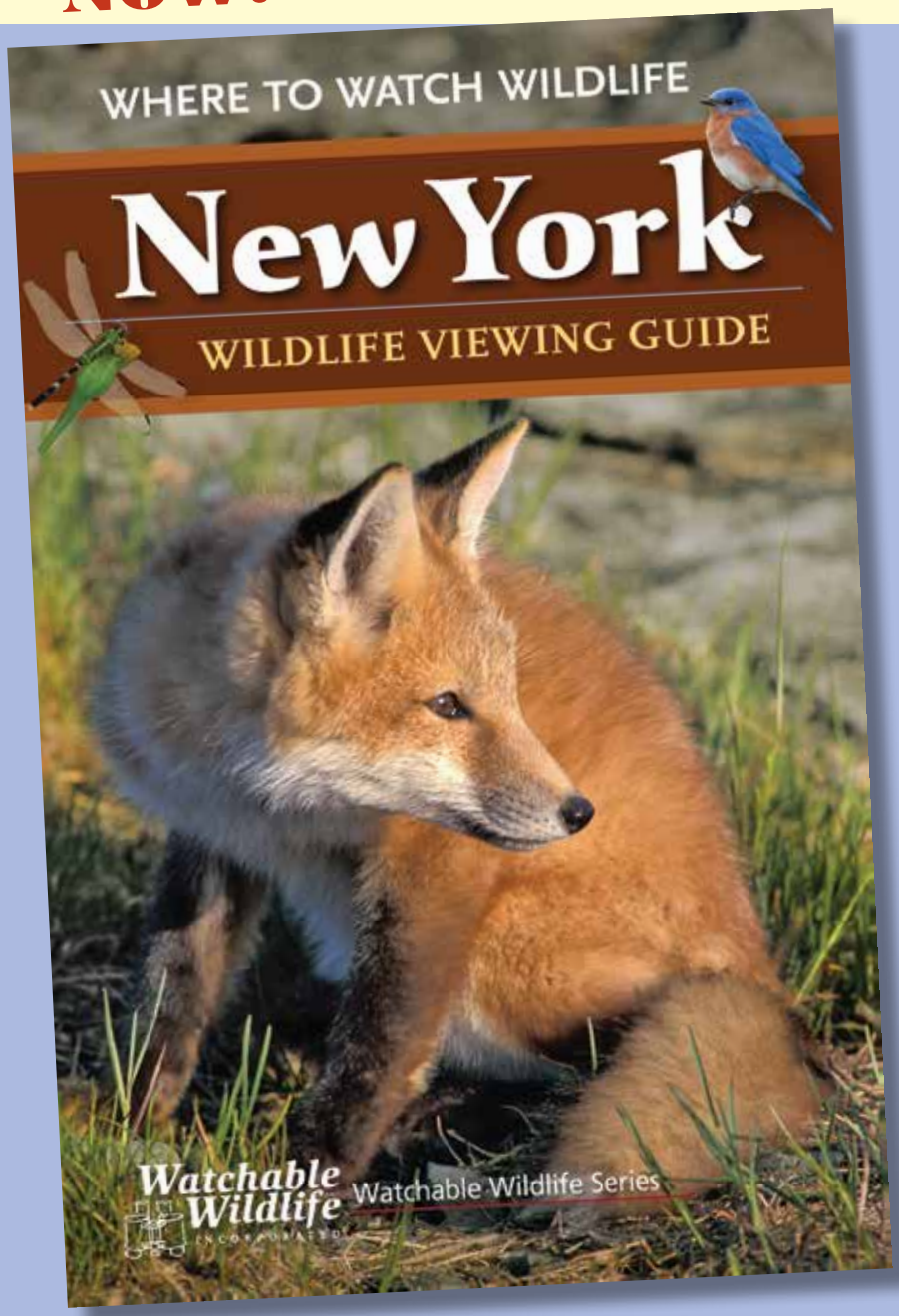

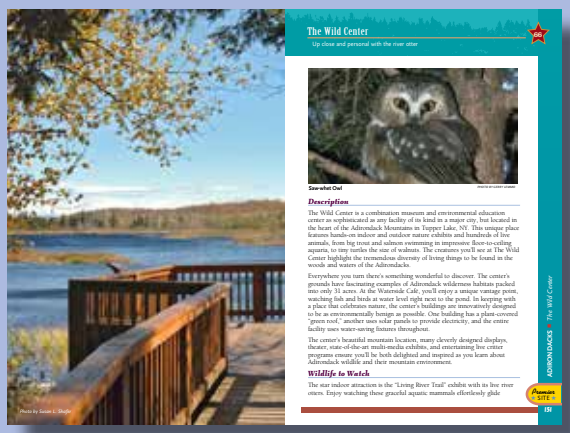

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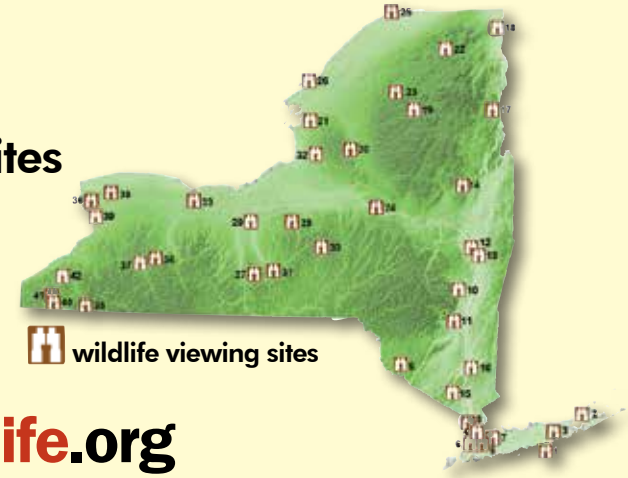

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See pg. 14

Wayne Jones

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