Pond Hopping | Lake Sturgeon | Lean-tos

NEW YORK STATE

Conservationist

AUGUST 2017

Beauty of the Thousand Islands

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Conservationist

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Andrew M. Cuomo, Governor of New York State

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Dear Reader,

One of the things I like most about the *Conservationist* is that it conveys information on a variety of environmental programs and activities that reflect DEC's core mission. Our efforts are designed to protect and improve our environment, and provide opportunities for people to enjoy New York's extensive natural resources.

Some may look at DEC as an agency that promotes outdoor recreation activities like hunting, fishing, paddling and camping, while others may focus on our agency's role in protecting our air, land and water. As DEC Commissioner, I believe all our activities reflect and advance the same goal—ensuring a clean, healthy and accessible environment. DEC recognizes that we have important environmental responsibilities and we are continuously working to protect and improve our environment.

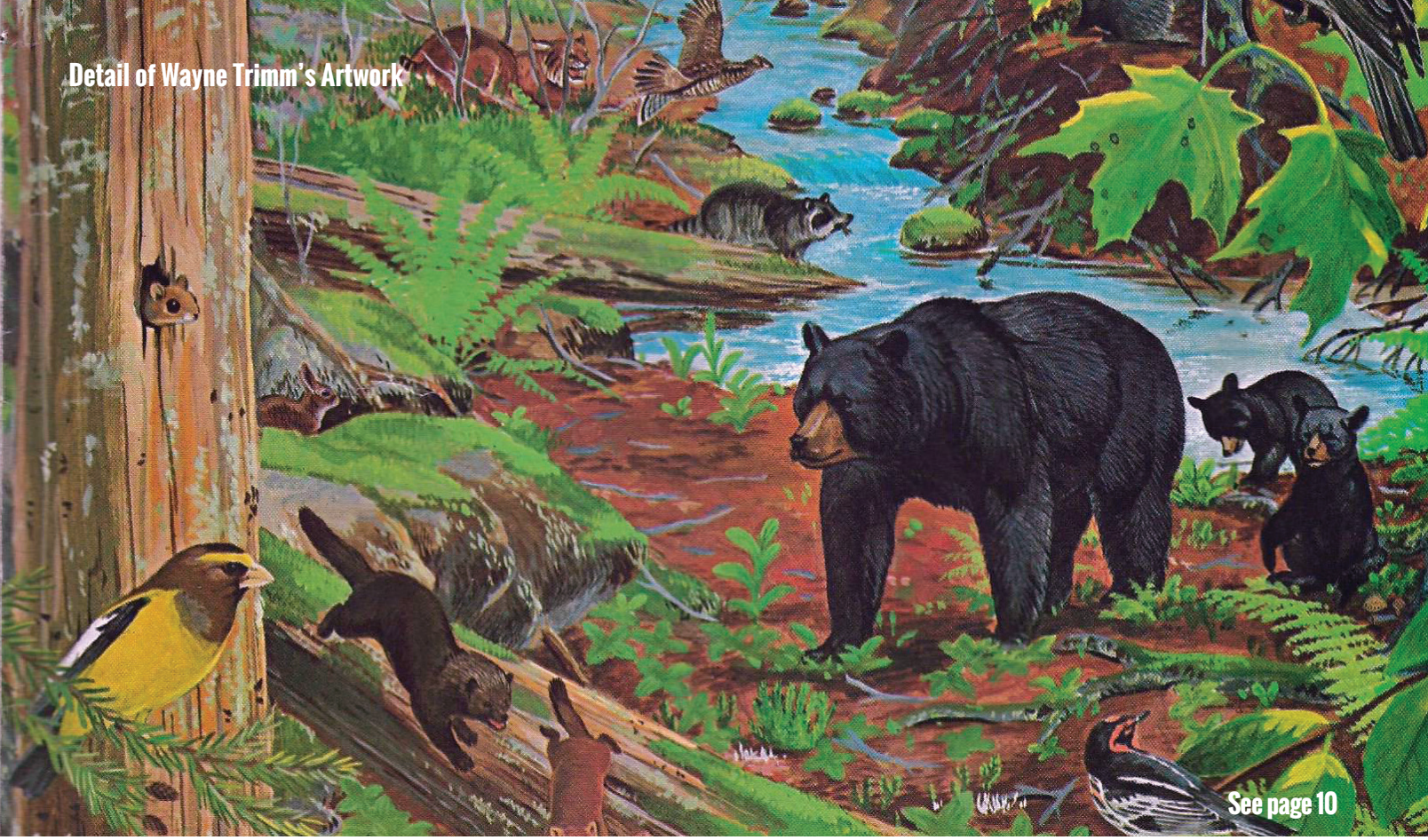
This issue features articles on how the agency has made our air cleaner (pg.26), and a new program—the Governor's Adventure NY initiative—that will make significant investments to rehabilitate campgrounds, upgrade recreation facilities and improve access to the outdoors, which also will boost local economies (pg. 15). You can also read about a successful effort DEC launched to protect and restore lake sturgeon, a large, prehistoric fish that has roamed New York waters for more than 1,400 years (pg. 22).

As you read the *Conservationist*, I encourage you to take some time to reflect on what the environment means to you. Whether you are paddling on a mountain pond (pg. 6), visiting the beautiful Thousand Islands region (pg. 2), or simply taking in a breath of fresh air, rest assured DEC is doing all we can to protect our natural resources and make it easy for people to enjoy all nature has to offer.

On a final note, I want to pay homage to a great naturalist and environmental educator, Wayne Trimm, who recently passed away at the age of 94. Many of you may recognize the name, as Wayne was the Art Director of this magazine for nearly 20 years. In his memory, we have included a sample of his artwork (pg.10), which clearly reflects his love of nature. Wayne's wildlife mural has been a popular feature at the Five Rivers Environmental Education Center in Delmar for many years, and remains on prominent display at the new Center I had the pleasure of opening this June. Come visit us at Five Rivers: peruse the exhibits, walk the trails, and enjoy Wayne's beautiful artwork that is a lasting tribute to his skill and the beauty and diversity of nature.

All the best,
Basil Seggos, Commissioner

NEW YORK STATE | Department of Environmental Conservation



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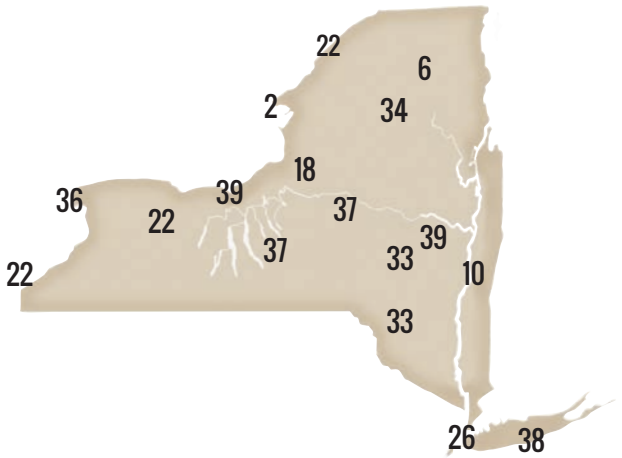

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The Garden of the Great
A Photo Essay of the Thousand Islands

Text and photos by Christopher Murray

Spirit:

Only islands that are above water 365 days a year and have a living tree are considered part of the official Thousand Islands count.

Crooked Creek

Straddling the U.S-Canadian border, the Thousand Islands region features a vast archipelago of emerald green islands strewn between the banks of the mighty St. Lawrence River. The river is a shipping conduit from the Great Lakes to the Atlantic Ocean and back, and many of its islands are popular vacation destinations and home to small towns with long, storied histories.

The Thousand Islands—which actually total more than 1,800 islands—stretch 50 miles downstream from the eastern end of Lake Ontario in Kingston, Ontario, Canada. Some islands are more than 20 miles long and hundreds of square miles, while others are about the size of a small car.

The Haudenosaunee (Iroquois) referred to this area as Manitouana, the "Garden of the Great Spirit," and many people believe the beauty of the islands and river is unrivaled. The area has also been called "The Freshwater Boating Capital of the World," and for those who like to fish, the opportunities are endless, and often challenging, where anglers pursue such species as northern pike and walleye, bullhead and yellow perch, panfish and the legendary "elusive" muskellunge. In 1957, an angler caught a 64.5 inch, 69 pound, 15 ounce musky, which has been a state record for six decades.

The Thousand Islands played a key role in our state's and nation's history, and visitors can tour key historical sites and museums, including: the beautiful Boldt and Singer castles, the antique boat museum in Clayton, and the Sackets Harbor Battlefield, which served as the command center for American naval and military operations on Lake Ontario during the War of 1812.

If you enjoy the outdoors, consider taking a day or weekend trip, or camping at one of the dozen State Parks in the region, where you can explore the heritage, culture and picturesque lands and waters of the Thousand Islands.

Christopher Murray is a fine-art nature photographer working primarily in the landscape of the woods, lakes, mountains, and streams of New York State. You can see more of his work at **www.chrismurrayphotography.com**.

Grindstone Island

Kring Point

Waterson Point State Park

Wellesley Island

Wellesley Island

POND HOPPING

• EXPLORING A SERIES OF LAKES •

By Eileen Stegemann;
Photos provided by author, unless otherwise noted

It's a gorgeous day. The sky is blue with puffy clouds, there's a light breeze, and the temperature promises to be in the low 70s. Perfect for pond hopping.

My husband and I love taking out our canoes and fishing poles and paddling on a series of ponds. There's something therapeutic about heading out for the day to explore several local waterways and possibly sample their fisheries. If you're lucky, you may spot some loons or even spy an eagle along the way.

I should explain that I'm by no means a die-hard paddler, and often avoid long portages (carries). But that's the beauty of the Adirondacks; there are so many locations where you don't have to portage far between waters. However, if you *are* a die-hard paddler, there are plenty of longer options available as well. So if you want the challenge of portaging up to a mile, go for it (but you won't see me there).

I was first introduced to pond hopping about ten years ago. While my family had portaged around obstacles like rapids or a dam before, the concept of purposefully hitting three or four ponds in a single day was foreign to me. And frankly, I couldn't understand the appeal. Why not settle in and spend the day fishing and canoeing on one water rather than getting in and out of the boat several times and lugging everything overland to another spot? But after experiencing the thrill of exploring a number of different waters and habitats, all interconnected or geographically close, I was hooked.

Today's venture is a favorite of mine: four ponds in a row, and only two portages. If the water level is low, however, there could possibly be one additional shallow spot where we would have to get out and walk the boats through. It'll take most of the day if we go at a leisurely pace (my preferred method), but it could easily be done in a half-day.

After filling a pack with assorted gear (raincoat, hat, bandana, sunglasses, sunscreen, insect repellant, pocket knife, first aid kit, water and food), we put our two single-person canoes on the car. Folks who know me, know I like to overpack, especially "emergency survival tools and gear." I know I'll likely never use more than half of what I bring, but I'd rather have it and not need it, than need it and not have it, especially when going into the backwoods. And, despite my husband making fun of me for packing so much, on more than one occasion he has benefitted from my bounty. Of course, the downside to bringing so much is you have to carry it on the portages. But I make sure it all fits in a backpack, which makes for easier hauling.

My cell phone, binoculars, and a map of the area also accompany me on our forays. I keep these items in a waterproof bag and secure it to the thwart next to me so it's close at hand. Even though we've done this same paddle more than a dozen times, we still bring a map, just in case we decide to check out a previously unexplored path or channel.

Today's lightweight canoes make portaging easier.

Fishing gear, paddles and PFDs round out our gear and we're ready for the day. Fortunately, the put-in point is only a short drive from our house, and it only takes a few minutes for us to reach the first pond. While my husband unloads the boats, I sign in at the register, making sure to indicate our planned route and noting it's a day trip. It's always a good idea to sign in: DEC uses this information to evaluate how much use an area is getting, and rangers rely on this information to focus a search should anything unexpected happen that prevents someone from returning at a scheduled time.

Our planned route takes us across the length of the first pond. It's a nice open expanse that lets you stretch your legs (or should I say arms) as you get into a rhythm. On windy days there may be some substantial waves that can prove challenging to paddle, but fortunately there's only a light breeze today, so paddling is fairly easy. I love days like this—great weather, fresh air, gorgeous scenery, and at this time of year, very few bugs. It's a paddler's and photographer's dream.

It's not long before we spot our first loon. Its boldly patterned black-and-white body stands out against the steel grey-blue water. This one has an older chick with it and we stop paddling to enjoy the show as they repeatedly dive below the surface, only to reappear in another location a short distance away. Occasionally, we can hear the soft hoot of the pair calling to each other. It's a spectacle I never grow tired of and find it hard to tear myself away.

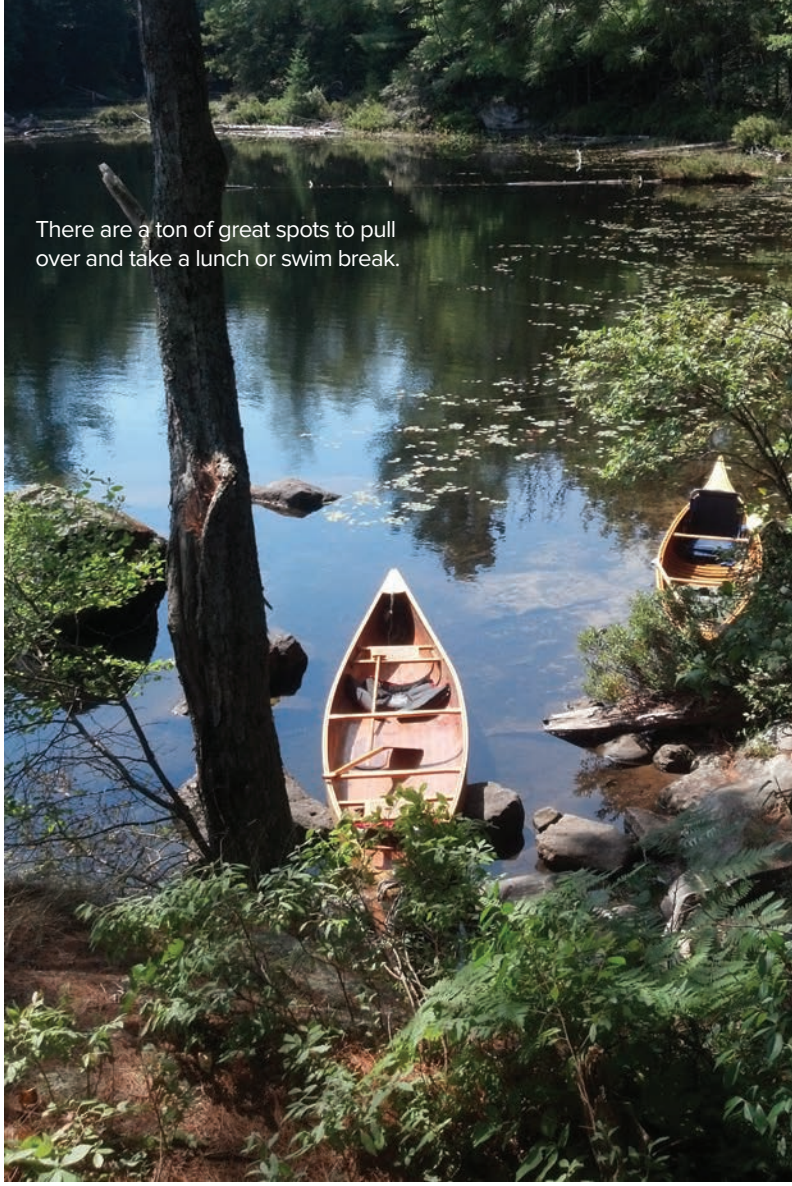
There are only a few other paddlers out and it feels like we have the whole place to ourselves. After cruising along the wooded shoreline speckled with rocky outcroppings, we arrive at the first portage. Though somewhat steep, it's very short: a quick, up-and-over a berm. Fortunately for me, we recently invested in lightweight boats—each weighing less than 30 pounds—making portaging much easier. Occasionally we'll bring the two-person strip canoe my husband made years ago. The boat is beautiful, but heavy and cumbersome on portages. However, it's sometimes nice to be in one boat—especially when I can fish while my husband paddles.

This next stretch is one of my favorites—it's narrow and peaceful, and we almost always see a loon family in here. There's also some decent fishing for bass, so we decide to throw our lines in and try our luck. Twenty minutes later and only one nibble between us, we decide to hang it up and just enjoy the scenery.

As hoped, a loon family—one adult and two older chicks—swims by. They come remarkably close and we snap a few pics before heading toward the end of the pond. On our way, we spy a kingfisher flying from tree to tree, and see a turtle slip off a log and into the water.

Like many days in the Adirondacks, what started out as a cool day has now warmed up, and I slip off my outer-layer. Dressing in layers is important in the mountains, enabling you to quickly adjust to the changing temperatures here.

The sun feels great and I'm looking forward to stopping in a little bit for a picnic lunch. But first we have to go through the narrow channel that separates this pond from the next. Since it's later in the summer, the water is low, so we have to get out of our boats and walk them through the short rocky channel. Several smaller bass, along with a large one, quickly swim by my feet, and I wonder where he was a few minutes ago when I was fishing.



There are a ton of great spots to pull over and take a lunch or swim break.

Loon

The entrance to this next pond is very shallow and weedy, but then it opens to a pretty little pond with several campsites on it. One of the sites is being used, but our favorite one at the far end is open and we make a beeline for it. The site is perched on top of a rocky outcropping with a beautiful view of the lake. If available, we often stop here to picnic and maybe take a quick swim.

The next portage is a short paddle from our stop. As we approach the carry, we stop to wait for a group who is just putting in after portaging from the other side. They are on a weeklong camping trip and their canoes are loaded down. I confess that my first thought was I'm glad it's not me portaging all those supplies.

While we wait, I spot a squirrel swimming across the pond and point it out to my husband. It's the second time we've seen a squirrel do this on this same pond and we wonder if it's the same swimming squirrel.

Once the other group is on their way, we land our canoes and get out. Despite the trail being flat, it's a longer portage and I have to take a quick break at the halfway point. My husband is carrying most of our gear and I send him on ahead of me. When I arrive at the next pond, he's chatting with another couple who are having lunch. They are on their way out, but tell us to be on the lookout for a bald eagle that's been hanging around.

This last pond in today's trip is long, with numerous coves and bays. A mountain provides the backdrop to the large pines lining the shoreline, and there are snags and scattered boulders protruding from the water in some of the shallower areas. It is a popular spot with anglers and paddlers, but despite this, we only encounter three other canoes in the next hour. While we explore several channels and coves, we are treated to the iconic wail of loons from various parts of the pond. It's an eerie, yet comforting sound that lets you know you're in the Adirondacks.

All too soon it's time to head back. Retracing our route, I keep a keen eye out for that eagle and swear I spot it, but it's too far away to be sure.

My arms are tired by the time we reach our starting (and ending) point, but it's a good feeling. It's been a great day and I feel incredibly lucky to live in an area with an abundance of scenic waterways to explore.

Before we leave, we sign out on the register. In the ten minutes it takes us to get home, we have already planned our next excursion.

Author's Note:

Pond hopping is a fun way to explore several ponds in one trip, and the Adirondacks has an abundance of small ponds and larger waters that are all geographically close to one another. For more information about the great paddling available, check out DEC's website at **www.dec.ny.gov/outdoor/100898.html.**

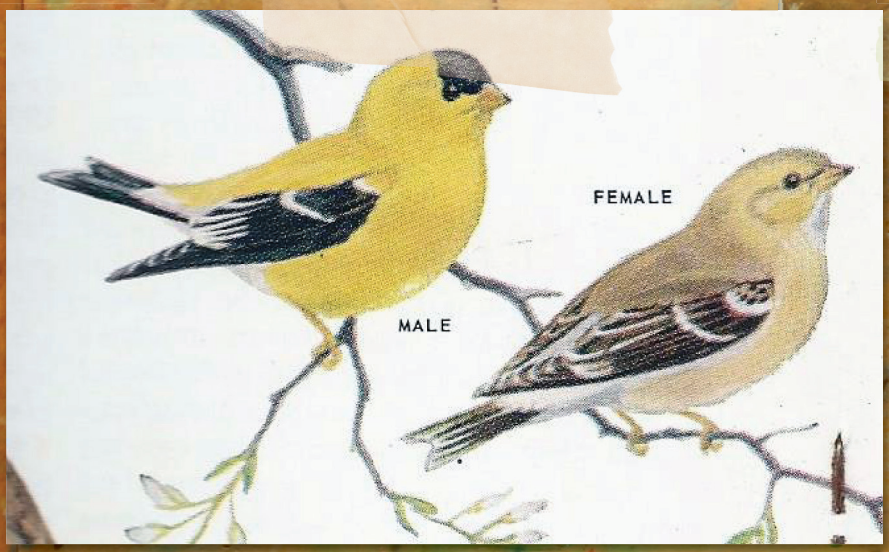
Photo Credit: Carl Heilman II

Conservationist Assistant Editor **Eileen Stegemann** is a long-time DEC employee who loves paddling and fishing, especially in the Adirondacks.

The Lasting Images of

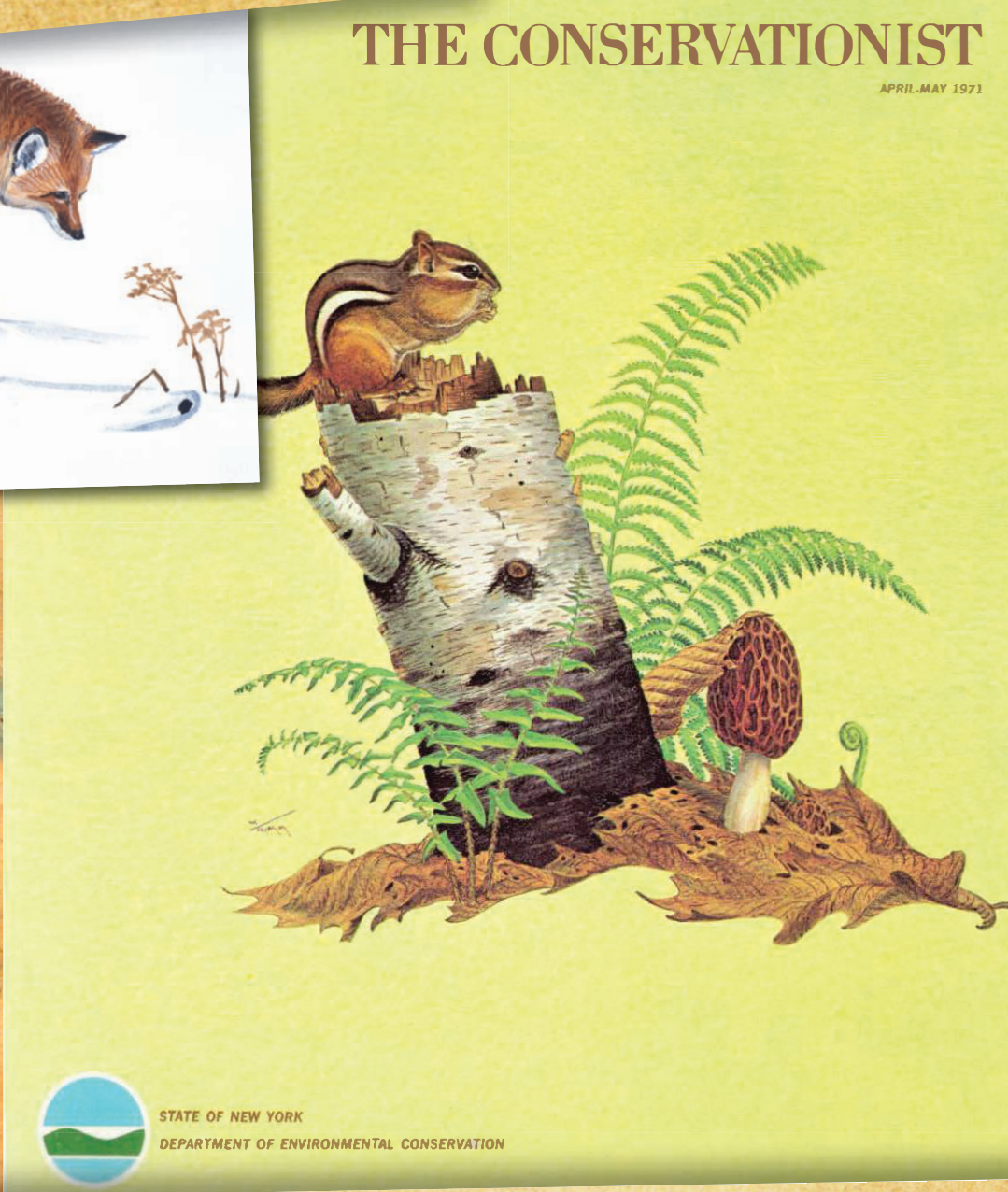
Since its inception, the *Conservationist* has featured an array of pictures and art that helps people appreciate nature and invites readers to explore the great outdoors.

For nearly 50 years, Wayne Trimm provided many of those images — created by his own hand. These drawings, paintings and centerspreads created an intimacy for readers, and became one of the most recognizable and popular features of the magazine. For decades, Wayne's work graced many a front, inside, or back cover, and his sketchbook line drawings were a magazine staple for years. As a trained biologist, Wayne prided himself on producing scientifically accurate representations of the state's flora and fauna.



Wayne Trimm

Text by *Conservationist* staff



Many a budding young naturalist clipped, taped and tacked these beautiful works to their walls and desks, or brought them to school, to gaze upon them time and time again. Frogs and toads of New York. Snakes of New York. Prehistoric mammals of New York. Boreal birds of the Adirondacks. Grosbeaks and finches of New York. Somehow, displaying these pieces evoked wonder, and brought nature study into the home.

Wayne Trimm passed away in June at age 94. But like any great artist, his work lives on. Anyone who has visited DEC's Five Rivers Environmental Education Center near Albany, has likely spent time looking closely at the details of his Beaver Pond wildlife mural—even if they've seen it many times before.

There is no single word or phrase that can fully encapsulate Wayne or the mark he has left behind. Educator, biologist, lecturer, teacher, painter, photographer, writer, wildlife rehabilitator, avid outdoorsman and artist, all in one.

In 1972, Wayne offered his support to the newly formed NYS Big Buck Club, agreeing to paint portraits of the largest buck taken in New York each year by gun and bow. Those portraits were featured in the *Conservationist* every year through 2010; Wayne is credited with helping to build the club's early success, as the portraits are seen and enjoyed by a wide audience.

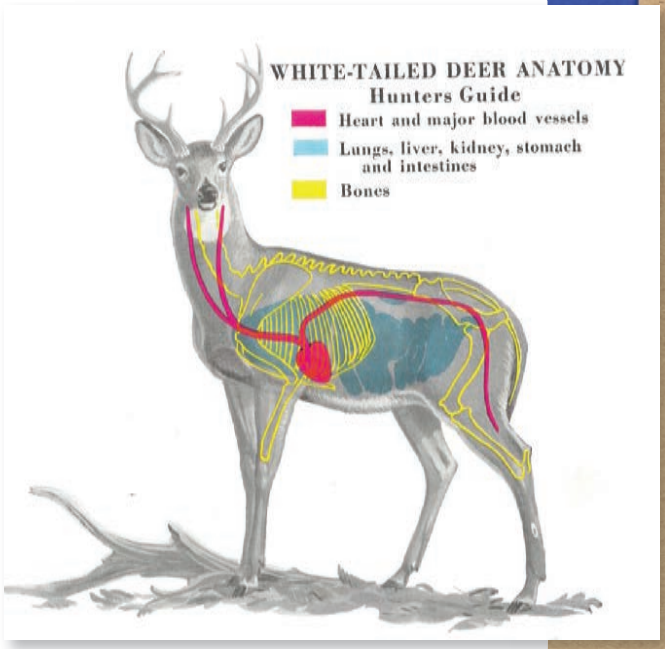
Those who knew Wayne best have personal memories of a great man and his work; we feature one such personal reflection herein. Fortunately, one and all can enjoy the images he left behind, the beautiful art that reflects who he was, what he believed in, and what he loved.

Sometimes pictures are art. Sometimes art paints a picture. Wayne Trimm used both to illustrate stories and invite people to truly see the beauty of the world around us.

On these pages are just a few of the paintings and drawings Wayne created for the magazine. We are grateful for his inspiration and dedication, which continue to endure at DEC and in the *Conservationist*.

Recollections of Wayne Trimm

By Wayne Jones



One of my most treasured possessions is a Wayne Trimm print that he signed with the words "To my very special friend Wayne Jones." I am proud to be among the people he called friend.

Most people know Wayne Trimm as the staff artist and art director for the *Conservationist*. That's how I knew him when I was growing up. While Wayne's artwork certainly defined his career, Wayne was a wildlife biologist—he actually considered himself a scientist who made wildlife illustrations. To me, he was an educator and mentor.

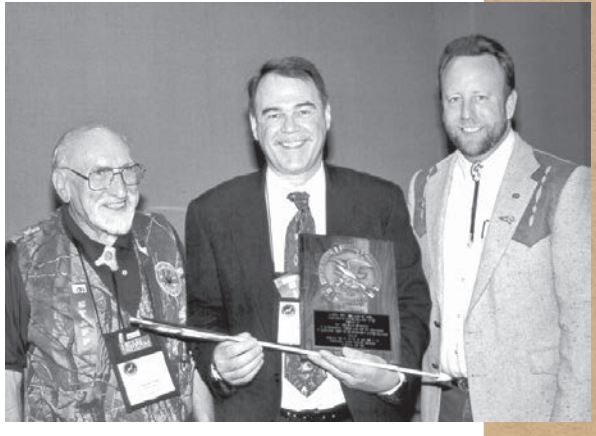
While studying at the New York State College of Forestry at Syracuse University (now the SUNY College of Environmental Science and Forestry) in the 1970s, I met Tracy Trimm as a fellow member of the College's Archery Club. I was delighted to learn that Wayne was his father, and that he was a very accomplished bowhunter. I was also passionate about bowhunting, and meeting Wayne Trimm helped shape my own career.

Wayne threw himself into his interests with exceptional enthusiasm. Achieving success bowhunting for deer in New York, he set his sights on other game, traveling to Alaska to pursue caribou and Alaskan brown bears. He gave talks to students at the College of Forestry, showing us photos of his hunts and his magnificent paintings of wildlife.

Wayne attended graduate school at the College of Forestry in the 1950s. During that time, he met Bill Wadsworth at Syracuse University. The two shared a passion for bowhunting, and great things developed from their friendship. Together, they helped found the Central New York Bowmen, promoted a law requiring new bowhunters to take a hunter education course, and eventually turned bowhunter education into a national effort.

Wayne's artwork graced the pages of the first bowhunter education manuals, as well as on the flip charts and other teaching aids. He helped hunters understand deer anatomy by producing drawings and sculptures that illustrated the internal organs of deer. He did this by dissecting animals he had harvested, laying the animals down and making sketches as he removed layers of hide, muscle and bone, adjusting the image to account for the effects of gravity.

After Wayne retired, he continued to volunteer in bowhunter education and teach schoolchildren about wildlife conservation and appreciation. Wayne appreciated nature, and worked tirelessly to help others appreciate it as well.



Wayne Trimm (left) was instrumental to DEC's Wayne Jones' (center) decision to pursue a career in hunter education. Here, Wayne Jones receives the NBEF Hunter Education Administrator of the Year award in 1999.

Wayne Jones was DEC's Sportsman Education Program Administrator from 1992 to 2008. During his tenure, Jones' work on the international level developing online educational tools set national standards for course content.

Connecting People & Nature

By Laura DiBetta

Maybe you like to spend your free time paddling on a tranquil pond. Or you have neighbors who get out of bed when it's still dark to cast a line at dawn. You might even know people who head into the forest to hunt that elusive buck, or like to camp in the woods, far away from the daily grind.





There are many ways to enjoy New York's outdoors, and millions of New Yorkers and visitors from other states and countries take advantage of these opportunities. The State has more than 800,000 hunters and 1.8 million anglers, and each year more than a million people stay at New York campgrounds, and 2.7 million hike trails. And that's but a sample of the outdoor recreation opportunities available to residents and visitors.

While nature has blessed New York with beautiful lands and waters, the State recognizes the need to provide people with easy access to outdoor recreation and the types of experiences that will encourage them to get outdoors and keep them coming back.

Earlier this year, Governor Cuomo announced a new initiative—Adventure NY—that will make significant investments to enhance outdoor recreation across the state, starting with $50 million this year.

Over the next three years, the program will fund projects to upgrade state campgrounds and recreational facilities, rebuild boat launches and construct new duck blinds, expand and enhance hundreds of miles of hiking trails, and add and improve programs and exhibits at environmental education centers and children's camps.

There are a variety of outdoor experiences available in New York, including many that can be enjoyed by first-time adventurers and those who don't have a great deal of outdoor experience and can use a little help to access nature.

...significant investments to enhance outdoor recreation across the state, starting with $50 million this year.

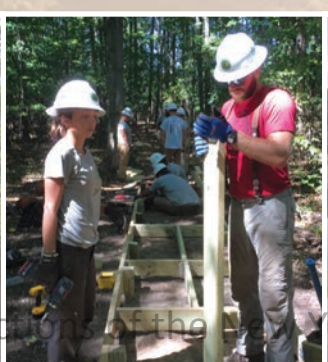
DEC and NYS Parks offer a range of outdoor sites and services for people of all ages and abilities, and constantly seek new and better ways to make nature more accessible. For example, DEC recently improved access, public safety and viewing sites at Kaaterskill Falls, the crown jewel of the Catskill Park, with the highest cascading falls (260 ft.) in New York. DEC crews also completed trail upgrades in other areas of the Catskills and Adirondacks, including bridge replacements, trail rehabilitation, new trail loops, and connector trails. These trails truly offer a great vantage point to view foliage, scenic vistas and wildlife.

New York has nearly five million acres of public lands that allow people to explore and enjoy the outdoors. Adventure NY will fund a variety of projects that provide greater access to these lands, and create enticing outdoor experiences for children and adults, and in some cases, provide amenities that will help the less experienced outdoor enthusiasts stay within their comfort zones. But don't worry, those who seek a more primitive or challenging outdoor experience will still have many opportunities.

New York is open to all, including people with disabilities who could encounter barriers in accessing state lands and facilities. Universal access is now incorporated in state programs and policies, and we are committed to accommodating the needs of all visitors. For example, DEC recently added an accessible fishing and wildlife viewing platform and trail at Spicer Creek Wildlife Management Area on the eastern shore of Grand Island to ensure every visitor can enjoy the trails, views, and fishing at this Western New York site.

The range of outdoor activities available in New York caters to personal tastes and diverse skills. So whether you like to ski on loose powder, groomed trails or summer waves on a mountain lake, camp under starlit skies, or pursue the legendary buck or trophy fish that got away last year, New York's outdoors is a great place to be any time of the year. And we are working to make these adventures even better.









Adventure NY also will help introduce kids to nature at an early age, building on their innate curiosity about wildlife and the outdoors to develop hands-on, lifelong nature lovers. Environmental education centers and children's camps help kids learn about nature and develop outdoor recreation skills, and DEC programs like I BIRD NY, I FISH NY, and Connect Kids provide an avenue for them to get outdoors. As a bonus, children who learn about our environment will likely become active, lifelong environmental stewards who protect our lands, water and air.

Another new program initiated this summer, the free, First-Time Camper program, encouraged families to try camping at select DEC and NYS Parks campgrounds. Participating families—including many from urban communities—were provided with essential gear, including a tent, sleeping bags, a lantern, and even firewood. Camp staff and members of the Governor's Excelsior Conservation Corps provided basic instruction prior to the family's first day of camping, and were on-hand to offer advice and support to these first-time campers throughout their stay. It's a novel way to introduce families to the outdoors, and a great way to build the next generation of New York outdoor enthusiasts.

It's also important to recognize the positive impact outdoor recreation has on New York's economy. Outdoor recreation in the state creates 313,000 jobs and generates $41.8 billion in consumer spending. New York's licensed hunters and anglers combined contribute $3.6 billion to the State's economy. And I'm pretty sure they have a good time doing it.

New investments are protecting longstanding outdoor traditions like fishing, while also helping to develop a new generation of sportsmen and sportswomen. To many anglers, Lake Ontario and its tributaries, and the Salmon River, are well-known as a world-class fisheries, with trophy-sized Pacific salmon, steelhead, brown trout and Atlantic salmon. While these fish may have been created by nature, the Salmon River Fish Hatchery in Oswego County provides vital assistance to keep the waters well-stocked.

Recognizing the value of the hatchery for outdoor recreation, DEC is investing $1.7 million to improve the fishery. Projects include: replacing the fish ladder, designing and installing predator-exclusion structures for the outdoor raceways and ponds, and redesigning the hatchery water supply structure to achieve more efficient fish production. Upgrades to the visitor center will improve the experience for the hatchery's 50,000 annual visitors. These investments assist and complement nature's work, and will greatly benefit all who use this renowned fishery.

Governor Cuomo believes it's important to connect people to nature AND keep them connected. Some people have already developed this nature link. Others might need a little enticement, but once they take the first step they'll be hooked. And why not? World-class fisheries, navigable lakes and rivers, rich forested lands, and a wide array of game species await just a short distance away. And Adventure NY will strengthen and expand our state's proud outdoor heritage.

Nature gave us the natural resources; it's up to us to both enjoy and protect them. With a full range of four-season outdoor recreation available in every region of New York, there's every reason to join the 75 million visitors who recreate in New York's outdoors each year and enjoy your own, special Adventure NY.

Laura DiBetta is the special assistant to the Commissioner for outdoor recreation in DEC's Albany office.

ADVENTURE NEW YORK

will support initiatives to address

four strategic priorities

1. **Expand** access to healthy, active outdoor recreation
2. **Connect** people with nature and the outdoors
3. **Protect** New York's natural resources
4. **Boost** local economies



Clues in the Forest

—Archaeology at Florence Hill State Forest

By Kristy E. Primeau, Sarah A. Hoskinson, Charles E. Vandrei

Photos provided by authors, unless otherwise noted

Camden High School students visited Florence Hill State Forest to help uncover the history of the nearly forgotten Florence Settlement.

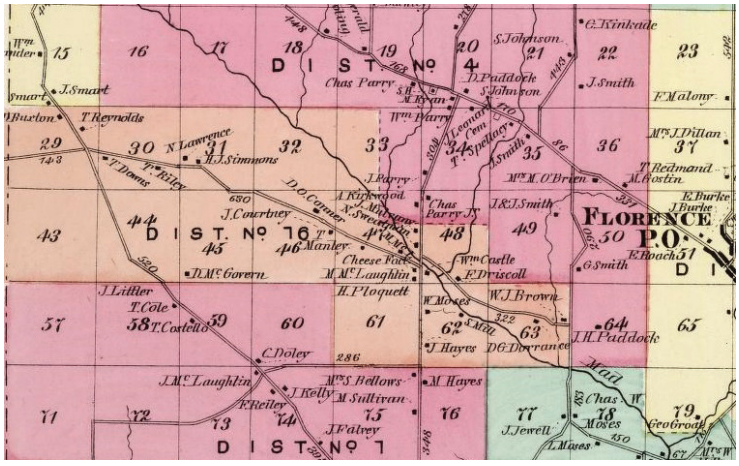
New York State forests were not always forested; the trees came later. Through the nineteenth century many sites of present-day state forests were cleared agricultural lands inhabited by homesteaders and used for farming. As the forests matured, they have protected a wealth of artifacts and features from nineteenth-century farmsteads, which provides us with important links to our past, enabling archaeologists, historians and even young students to discover how New Yorkers used to live.

Nestled in northwestern Oneida County, Florence Hill State Forest looks very different than it did 150 years ago. A woods road that runs through dense forest was once the main street of the Florence Settlement, a free African-American community from 1843-1860.

The area that would become the Florence Settlement was originally part of 17,000 acres of land deeded to early Yankee, Irish and Black settlers by wealthy landowner and noted abolitionist Gerrit Smith. African-American families established farmsteads as part of the Florence Farming and Lumbering Association, which had been formed to create a free community with an independent economy based on farming, timber, and the production of goods from nearby mills and factories.


Gerrit Smith

In 1846, a 36-acre parcel of land (Lot 16) was deeded to Stephen Myers for his private use; however Myers, an Albany newspaper publisher and leader of the local Underground Railroad movement, had other plans for the parcel.



District 16 on this 1874 map of the Town of Florence was the site of the Florence Settlement.

A former slave who gained his freedom at the age of 18, he and his wife, Harriet, became leading abolitionists, education advocates, and activists for the rights of African-Americans. He envisioned the Florence Settlement as "a village where Black families could become self-sufficient and escape the limitations and prejudice of city life."

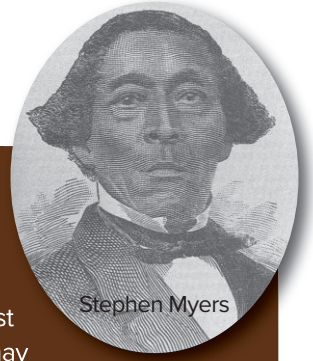
Settlers could purchase quarter-acre lots for $3, and additional farmland as their funds allowed. Those without farm acreage worked as laborers within the community. Land ownership was important to African-Americans in New York during this time because free Black men who owned property were able to vote. According to census data, 51 African-Americans lived in Florence in 1850, with birthplaces ranging from the West Indies to Nova Scotia, Maryland, and several New England states.

The Florence Settlement was ultimately abandoned, in part due to the fear generated by passage of the Fugitive Slave Act in September of 1850. Under the Act, officers who captured runaway slaves could earn promotions or other compensation, while those who failed to arrest and return alleged runaway slaves to their former masters could face fines. In addition, citizens aiding escaped slaves by providing shelter, food, or other assistance could be fined or imprisoned. Free African-Americans also had reason to fear the law because anyone suspected or accused of being an escaped slave had no right to a trial. As such, many settlers fled the area, but some Black homesteaders remained here throughout the 1850s.

The "archaeologists for a day" enter the forest to search for clues about the former free African-American community in Oneida County.

In recent years, archaeologists, and some local high school classes have visited the state forest to study the remains of the Florence Settlement. At a 2013 Madison-Oneida BOCES teacher workshop, AP history teacher Jessica Harney and Library Media Specialist Jennine Bloomquist (both from Camden High School) began researching local historical documents to piece together the history of the forgotten settlement. They focused on local land deeds related to a plot of land Gerrit Smith sold to Stephen Myers. As the story of the site unfolded, they got closer to uncovering the location of the historic area.

Prior to this, a group of individuals associated with the Underground Railroad History Project had been exploring the story of Florence. Paul and Mary Liz Stewart and Mary Ellen Urtz visited the state forest in 2010 to make initial observations, and returned in 2014 with professional archaeologist Matt Kirk, DEC staff, and others, to conduct an extensive archaeological investigation of the site. Using deeds, census records, historic maps, and newspaper clippings from the 1840s-1870s, a cluster of African-American homesteads was identified.



Stephen Myers

For more information on the life and times of Stephen and Harriet Myers or the Underground Railroad History Project, visit: **http://undergroundrailroadhistory.org/**

To learn more about abolition history and how abolitionists are being honored today, visit **www.nationalabolitionhalloffameandmuseum.org/**.

For information on historic sites in New York State or report the location of a site, visit the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) Cultural Resource Information System website at: **https://cris.parks.ny.gov/**.

You can help DEC protect sites like the Florence Settlement so we can learn more about our shared past. When you are outdoors, keep your eyes peeled for clues to our past and try to imagine the people who may have once lived there. Be careful not to disturb any artifacts you come across—once an artifact is moved, it is no longer a clue, having lost its context in relation to other features that help us understand the story of our forests.

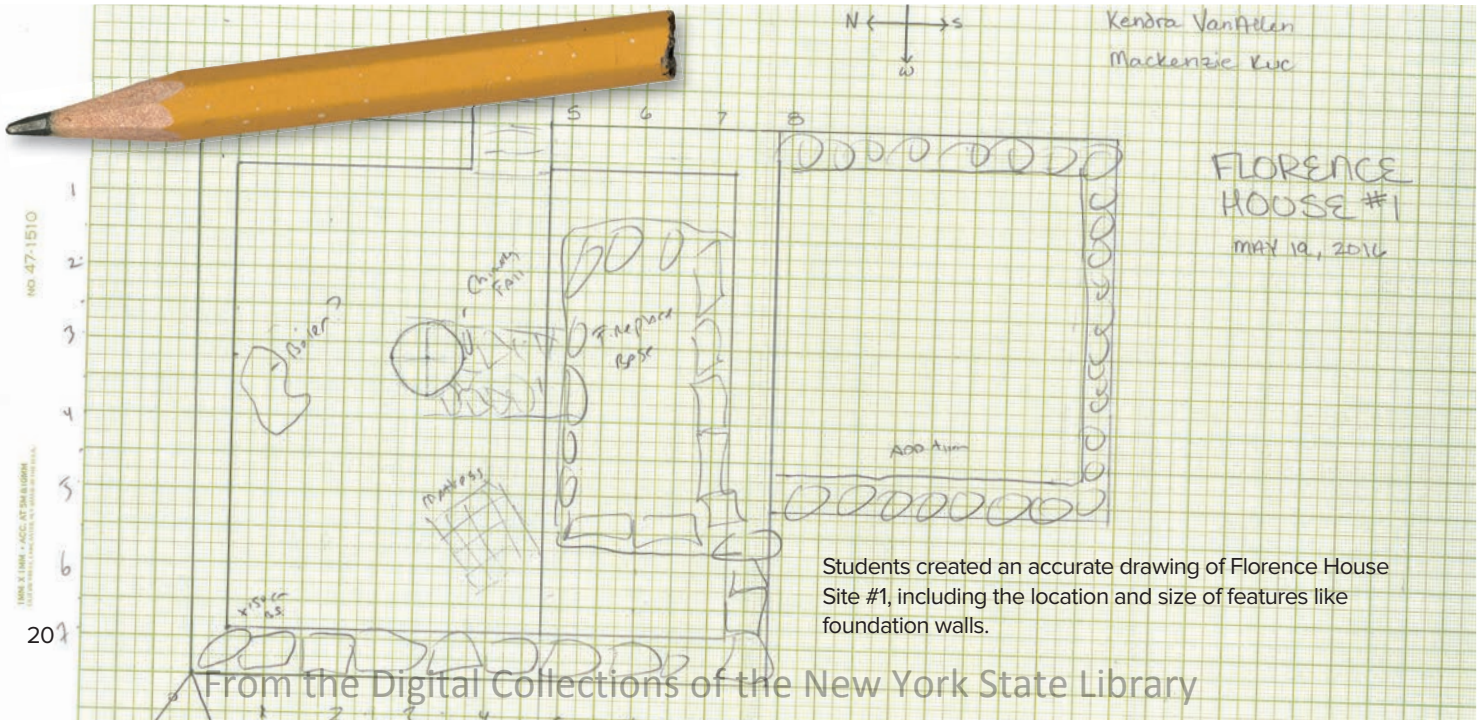
Once the group pinpointed the possible location of the Florence Settlement on a state-owned reforestation area, they coordinated an exploratory site visit in October 2014 that included DEC Historic Preservation Officer Charles Vandrei, Mark LoRusso from the NY State Museum, and the Camden High teachers. After compiling enough documentation to prove the existence and location of the forgotten settlement, Harney was awarded a grant through the William G. Pomeroy Foundation in the spring of 2016 to recognize the significance of the site by marking its location with a NYS Historic Roadside Marker.

This official state recognition prompted Kirk and Harney to continue their research. They designed a project for students to participate in hands-on research to show them what historians and archaeologists do in their career field. Students were first taught archaeological field methods and techniques for applying archaeological data in historical thinking and deductive reasoning. Then in May 2016, after the school obtained permission from DEC and the NYS Museum to work on state lands, 18 Camden High history students became field archaeologists for a day, visiting the site along with representatives from DEC and the Underground Railroad Project.

The day began with an archaeological "walkover survey." Students fanned out to form a long horizontal line, with individual students standing about six feet apart; then, along with field crew, they walked through the forest in unison, marking features they encountered with bright orange flagging tape. Once the walkover survey was complete, four teams of students further exposed and then recorded the features, such as foundations, fire pits, wells, and other immovable traces left behind by human activity.

One team cut back brush and raked leaves that had grown over the wells and foundations at the farmstead. Clearing the

Measuring the length of the foundation wall provides accurate information for future research.



Students created an accurate drawing of Florence House Site #1, including the location and size of features like foundation walls.

overgrown vegetation from the sites allowed other teams to see the features and gather accurate information about them. A second team used GPS to record feature locations, taking one GPS point at each corner of the foundations to create a site map depicting all the features. A third team photographed the features and any exposed artifact concentrations.

During this process, students learned how archaeologists place a north arrow, scale bar and chalkboard to identify features within each photo, which helps them understand the relationship between features within the landscape. The last student team was responsible for creating plan view drawings of the foundations. The dimensions of the stone foundations were recorded with measuring tapes and sketched onto graph paper to create a scaled drawing that included the feature name, site name, a north arrow, and scale bar. The students were also able to locate several historical artifacts, including glass bottles and farm implements.

DEC forest managers will use the students' data to aid them in making land management planning decisions and developing a preservation plan for Florence Hill State Forest. In addition, the NYS Museum and the Underground Railroad History Project can use the information to help educate the public about the site's role in the 1850s freedom seeker and abolitionist movements in New York.

Following their day in the field, the Camden High students synthesized the data they collected with primary sources, like historical newspaper articles and maps, to tell 5th grade students the story of the Florence Settlement at the Annual Peterboro Civil War Living History Day. Although the presentation was the culminating experience for many students, research about the former Florence Settlement homesteaders will continue, and new classes of AP U.S. History students will have the opportunity to be part of a similar hands-on learning experience.

This fall, Harney's students will participate in the dedication ceremony of the NYS Historic Roadside Marker. The site is slated to be included on a Walking/Driving Freedom Trail being developed by the Oneida County Freedom Commission.

The effort to uncover the Florence Settlement illustrates that history has no boundaries, and is accessible to all. And our state forests may have some tales to tell.

Kristy E. Primeau works in DEC's environmental permits office in Schenectady. She is a professional archaeologist.
Sarah A. Hoskinson was a seasonal natural resource planner in DEC's Albany office.
Charles E. Vandrei is an historic preservation officer in DEC's Albany office.

Chuck Vandrei: DEC Researcher With An Historical View

Few people know that part of DEC's duties include assessing objects of historic significance in the environment. As such, DEC has an historic preservation program, and for Charles (Chuck) Vandrei, his interest in history (particularly Native American history) led him to become an archaeologist, and a valuable resource for DEC.

Chuck began his DEC career 33 years ago, working on a federally-funded program that built wastewater treatment systems across the state. His job was to identify archaeological and historic resources as part of the environmental review process, and document resources that should be protected.

In his current role, he reviews records and inventories resources ranging from Native American villages and eighteenth century battlefields to fire towers, Civilian Conservation Corps projects, and historic buildings like the Caledonia Fish Hatchery (the oldest hatchery in the western hemisphere). His field research is critical to illuminating our past by preserving resources on public lands.

Chuck's work helps unveil New York's hidden or forgotten history, and he was excited the settlement associated with the Florence Farming and Lumbering Association was located on state lands. He also helped restore Great Camp Santanoni in the Adirondacks and create historic areas in the Forest Preserve that showcase the region's history. Recently, he worked on a project that identified a French and Indian War fort that researchers had been hunting for decades.

Chuck cares deeply about preserving physical evidence that will allow future generations to explore and understand our history. Outside of his job, he enjoys cycling, traveling to new places and meeting new people, and cooking. And, true to his love of history, you might see Chuck dressed up in period clothing as a member of the British 55th Regiment during a French and Indian War reenactment.

One of his favorite outdoor activities is hiking along a ridge on the east side of Lake George that offers a great view of the majestic lake and mountains to the north and east. When he's there, he reflects on his role in developing Submerged Heritage Preserves in Lake George and in Lake Champlain, where SCUBA divers can explore historic shipwrecks—another opportunity to learn about an important part of our past.

Living Leviathans

By Lisa Holst

NEW YORK'S LAKE STURGEON

Jennifer Hayes

Unusual. Strange. Unique. Prehistoric. No matter what adjective pops into your head when you first see a sturgeon, the encounter will likely be memorable.

Sturgeon are found in the fossil record as far back as 150 million years. They have changed little in that time, retaining the bony external plates more common to reptiles than fish. Their scythe-shaped tail allows them to move close to the bottom without stirring up the mud in what can only be described as "cruising." Worldwide there are 27 species of sturgeon, most of which are listed as threatened or endangered. One species, the lake sturgeon, lives and breeds in the Great Lakes, their tributaries, and the outflow through the mighty St. Lawrence River.

Death and endurance are nothing new to this leviathan. It has patrolled New York's waters since the end of the last ice age, about 1,400 years ago, when melting glaciers created the Great Lakes. Sturgeon survived the mass extinction event that wiped out the dinosaurs, but their survival would be further tested by their interactions with humans.

Native Americans depended on sturgeon as an early spring source of meat. They also used sturgeon skins to make jars for storing oil, and the swim bladders provided the base for glue and paint. Some Native American women used the swim bladder to create isinglass, a type of gelatin that became a prominent trade item with European fur traders on the Canadian side of the Great Lakes. Incidentally, isinglass (from legally harvested sources) is still in use today for clarification of beer and wine, and as a binder in restoration of very old paintings.

The burgeoning industrial age produced sewage and factory waste that choked our water, impacting sturgeon and other fish. In addition, construction of mill dams blocked sturgeon from their spawning streams. Lake sturgeon were labeled trash fish and a nuisance by fishermen whose nets got torn by captured sturgeon. The oily carcasses of sturgeon were stacked like cordwood on beaches and burned, or used to stoke boilers that powered the steamships plying the big lakes.

In 1865, German immigrants Siemen and John Schacht came to the U.S. seeking a new source of caviar. Russian caviar had become a European culinary favorite in the 1800s, and Russian and European stocks of sturgeon were fished out. Lake sturgeon roe was discovered to be a suitable substitute for beluga caviar, and suddenly Lake Erie was the hub of a thriving commercial sturgeon fishery.

In a report to the U.S. Congress titled "Review of the Fisheries of the Great Lakes in 1885" by Merwin-Marie Snell

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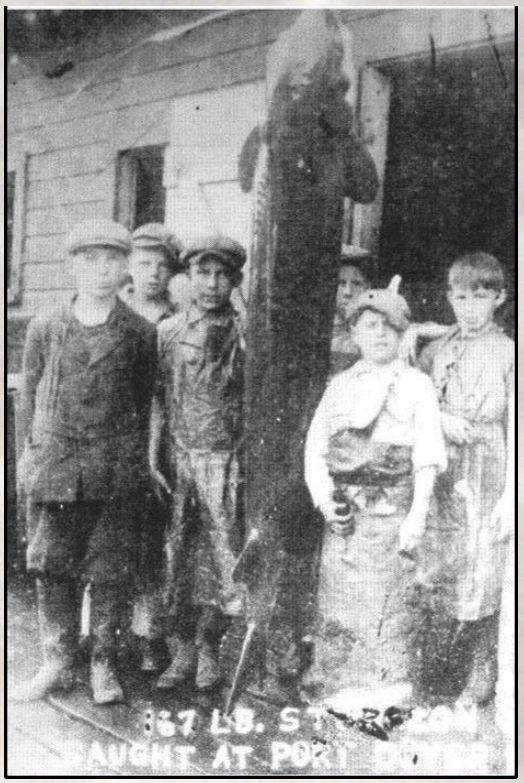

and Joseph William Collins, the authors noted "The most extensive fishery for sturgeon is at Buffalo. Considerable quantities occur throughout the lake [Erie], except in Chautauqua County, New York, west of Irving, and in Maumee Bay and River, where the catch is small." Sturgeon were taken primarily by gill net and set line, with a staggering 3.66 million pounds taken in Buffalo and Erie County that year. (It should be noted that Atlantic sturgeon on the East Coast, including the Hudson River, suffered a similar fate.)

That same year, an estimated 10,000 pounds of caviar were manufactured in Buffalo. This raised concerns about the sustainability of sturgeon. Reports stretching back to the late 1800s warned of and decried the demise of the largest freshwater fish in New York. Snell and Collins commented that "Many fishermen and observers are inclined to the opinion that this fishery should be discontinued, taking the ground that sooner or later it must result in the serious decimation of the sturgeon, if not in their complete or practical extermination."

The lake sturgeon fishery in the U.S. reached a peak in 1885, with 8.6 million pounds harvested nationally. Of that total, 5.2 million pounds (more than 60 percent) came from Lake Erie alone. At a rough calculation of 100 pounds for an adult fish, that's at least 52,000 lake sturgeon removed from the population in one year. By 1911, the annual Report of the Commissioner of Fisheries stated, "The steady and constant decline of the sturgeon fisheries of the coastal and inland waters of the United States indicates the eventual extinction of the species unless the supply is replenished…"

A source of caviar, lake sturgeon became highly sought after in the U.S. beginning in the mid 1860s. Sturgeon were heavily harvested. In 1885, 8.6 million pounds were harvested nationally. More than 60% of that total came from Lake Erie.

It is thought that 80 percent of the lake sturgeon population was removed from Lake Erie by the late 1900s—a seemingly cruel fate for a gentle fish that has no teeth and primarily preys on aquatic insects, crayfish, snails and leeches. In fact, commercial harvest continued at a very low level in New York until the fishery was finally closed in 1976. It wasn't until 1983 that lake sturgeon were listed as a New York State Threatened Species.

During 2001, 27 dead sturgeon were reported from the beaches around Lake Erie, apparent victims of an outbreak of botulism. In that same year, the U.S. Fish and Wildlife Service

DEC STOCKS THOUSANDS OF FOUR-MONTH-OLD STURGEON REARED FROM EGGS TAKEN AT MASSENA.

tried sampling for lake sturgeon in Lake Erie with no success. But during the ensuing decade, DEC began receiving phone calls reporting encounters with live sturgeon. Boaters reported seeing lake sturgeon breach, leaping clear out of the water near Buffalo Harbor. Anglers targeting walleye along the jetties lining the entrance to the harbor were hooking lake sturgeon regularly enough to ask what DEC planned to do about it.

In June 2011, two veteran biologists with DEC's Bureau of Fisheries—Mike Clancy and Don Einhouse—set off one warm and sunny afternoon with a boat loaded with gill nets to see if the angler stories checked out. They launched the boat and set two large-mesh gill nets near the breakwater in Buffalo Harbor. Two hours later, Don steered the boat to the first, shallower net. Mike grabbed the float line of the net and began pulling it in. Don asked how the net felt. Right away Mike exclaimed, "Geez, I think we got one!" Don recalls, "I really thought he was just pulling my leg, Mike is a chronic joker." As they pulled in the net by hand, they discovered a five-foot, healthy sturgeon wrapped up in the monofilament mesh. A few minutes later, they pulled in another one just about as large.

Don is the unit leader for DEC's Lake Erie Research Station at Dunkirk and has been gill netting on Lake Erie every fall since 1981. The Unit has also conducted a standard trawl sampling program since 1992. In all that time, Don had only heard of (but never actually seen) four sturgeon encountered, and yet he and Mike caught two in just two hours. It seemed remarkable, but maybe it wasn't as surprising as one might think. After all, adult lake sturgeon are generally loners, only grouping up during spring spawning migrations. So it stands to reason that fall sampling might not be the best time to see sturgeon.

Lake sturgeon are potadromous, meaning they live in large freshwater lakes (like Erie), but seek out streams each spring to spawn. They prefer areas of high water flow with rocky bottoms. Males gather first at river and stream mouths in May or June and wait for females. Researchers have learned that in order to catch sturgeon in any significant numbers, they must wait for when the fish gather to spawn.

It takes lake sturgeon a long time to reach spawning age. The average female reaches maturity at 20+ years, but they may live to a hundred years or more. Males mature earlier, between eight and twelve years of age, and generally don't live as long. Neither sex spawns every year. Males spawn every two to seven years and females spawn every four to nine years. All of these breeding characteristics are fairly unusual in the fish world, and make sturgeon particularly vulnerable to overfishing. Population models for lake sturgeon show that the survival of breeding adults may be more important to the population's health than survival of juveniles.

DEC photo

In 2011, after anglers started reporting hooking lake sturgeon in Buffalo Harbor, DEC fisheries biologists Mike Clancy (left) and Don Einhouse (right) set some nets and hauled in this five-foot sturgeon.

DEC photo

DEC began netting for lake sturgeon in Buffalo Harbor in 2011. Between 2011 and 2016, DEC staff captured 149 sturgeon.

Following Don and Mike's success that sunny June day, DEC began netting for lake sturgeon in Buffalo Harbor each spring. In May 2012, staff set both gill nets and long lines of hooks called set lines over the course of five days and hauled in 13 sturgeon. They ranged in size from four- to five-feet long and weighed up to 70.5 pounds. Most of the fish were juveniles or younger, based on cross sections of their first pectoral fin ray—the thin sections of these hard parts of the fin structure, which have distinct growth rings that can be counted like rings in a tree.

From 2011 through spring 2016, DEC staff handled 149 sturgeon via gill netting in Buffalo Harbor. Although it's difficult to tell the sex of lake sturgeon without cutting them open, 95 of those 149 were definitely males as they released sperm when handled. Only five could be confirmed as females. One specimen was a 6-foot, 5-inch, 129-pound female captured in 2014. The fin ray DEC collected from her put her age at 84 years old.

It's hard to imagine what female #2336 (as she became known) must have seen in her lifetime. She was hatched in 1930, long before the sturgeon fishery in Lake Erie ended. She saw the water quality in Lake Erie improve after the passage of the Clean Water Act in 1973. She remained through the extinction of blue pike, and the invasion of sea lamprey, zebra mussels and round goby, and she survived the outbreaks of Type E botulism that killed many other large sturgeon in the early 2000s. Now she is doing her part to bring her species back in an environment that would be unrecognizable to her ancestors that swam with the dinosaurs.

Fortunately, enough lake sturgeon have survived since the fishery ended to contribute to the recovery of the species across all its former range in New York. In some places—like Buffalo Harbor, the Lower Niagara River, and sections of the St. Lawrence River—the recovery is happening without human intervention. In other parts of the state, DEC stocks thousands of four-month-old sturgeon reared from eggs taken from the St. Lawrence River at Massena. These stocked fish have survived in sufficient numbers that we are now detecting their own babies in a few places.

With any luck, #2336 could live another 40 to 60 years and see the delisting of her species, and a much brighter future for all New York's sturgeon populations.

Lisa Holst is the leader of DEC's Rare and Endangered Fish Unit in Albany.

Doug Carlson

A HELPING HAND FOR STURGEON

Lake sturgeon were listed as threatened in New York State in 1983. At that time, these large, bottom-feeding fish were seldom seen by researchers or anglers. In 1992, DEC's Bureau of Fisheries started a recovery program for lake sturgeon, including a stocking program whereby DEC staff capture spawning sturgeon from the St. Lawrence River near Massena and take the fertilized eggs to hatcheries.

After some fits and starts in the early years, DEC and our partners at U.S. Fish and Wildlife Service have successfully raised and stocked more than 100,000 young sturgeon. The fish were deposited in 12 locations in their historic range and along the northern border. Among the most successful and popularly recognized programs are Oneida Lake, the Oswegatchie River, and the lower Genesee River. These stockings have resulted in good survival of young sturgeon, and in a few cases have produced juvenile sturgeon spawned from these releases.

In addition to these stocking locations, remnant populations in eastern Lake Erie, the lower Niagara River, Black River, Grasse River, and lower St. Lawrence River have been recovering on their own. Cleaner waters after the 1970s have been important in this, and spawning beds have been constructed in some areas, like the middle St. Lawrence River. The most profound numbers are seen in the two largest rivers, the Niagara and St. Lawrence.

DEC is in the process of revising the recovery plan for lake sturgeon and expects to put it out for public comment later in 2017. Depending on the outcome of further recovery and sampling over the next few years, removal of lake sturgeon from the list of threatened species may be in sight.

THE air THAT WE BREATHE

Tracing Air Quality Through Generations

By John Sheppard; Photos provided by author and DEC, unless otherwise noted

When I was a young boy, my grandmother and step-grandfather, Henri, lived just off the west side of Central Park in Manhattan. When I visited them, I liked looking out the window on the upper floor while my Gram pointed out some of the buildings and neighborhoods. The Lincoln Center complex was visible to the right and Tavern on the Green was less than a block away, nestled in the trees of the park to the left.

On a warm New York day, I would write my name in the fine black and grey film on the open windowsill. Some days the grit was grainier than others, and sometimes it was like black sand. A day after I traced my name "John" on the sill, I could trace it again in the same spot, a new film making it seem like I hadn't traced it just the day before.

Improvements in air quality are clearly evident in these NYC street scenes from 1989 and 2017.

That was in the early 1960s. Henri was in his eighties, and his movements around the two-floor apartment were slow. He needed a cane or a helpful arm to steady himself as he wheezed his way through the living room and up the creaky, winding staircase to his art studio. Later, when his health was failing, he and my grandmother packed up their belongings and moved to a small community near my family's home west of Albany.

Within a month after relocating upstate, Henri was able to walk down the hundred-foot driveway unassisted to the mailbox at the side of the road. He began to paint again, marveling at the blue skies and sunshine that greeted him most mornings. It was a new life for him and my grandmother, one filled with healthy activities and pleasant days sitting under the trees in the backyard.

When I recall this story now, I feel fortunate that my Gram and Henri were able to move to a cleaner environment and thrive in their senior years. But many people living in New York City during that time—and in subsequent years—endured very unhealthy air.

This was not just a New York City story. Poor air quality could be found in many villages, towns and cities across the state; even in the sparsely-populated high country, air pollution was wreaking havoc on ecosystems, threatening land and waters, and aquatic life, in the Adirondacks and Catskills.

COMMUNITY AIR MONITORING

DEC offers a number of air quality programs to protect public health and our environment, including community air screening. Through the Community Air Screening Program, which was launched in 2012, DEC works with community groups and local volunteers to conduct air quality surveillance that can identify and address neighborhood air quality concerns. Participants from local communities actually use equipment to conduct air sampling for toxic pollutants. Community air screening is conducted in summer/fall.

DEC trains community residents to use portable devices to monitor neighborhood air quality.

In western New York, steel, automotive and chemical industries established operations on lakes Erie and Ontario in the late nineteenth century. Over the years, emissions from these plants shrouded the region with thick smoke, particulates and highly toxic substances. Smog and haze blanketed populated areas day after day, and the quality of air breathed by people living and working in, or visiting, the area was poor.

America gradually awakened to these environmental problems. On July 1, 1970, DEC was born, the same day the federal Clean Air Act was signed into law, underscoring the importance of air quality as a critical environmental issue. Exactly one year later, New York enacted regulations to control industrial sources of air pollution. And the following year, the state established standards for eight significant pollutants, along with regulations for automobile emissions. This aggressive rulemaking schedule launched New York on an ongoing 47-year mission to clean and protect the air we breathe every day.

Initially, state air regulations focused on industrial emissions. DEC worked to clean up smokestack emissions from factories, apartment house incinerators, and power generators. Progress didn't happen immediately; it would be a long, difficult road to clean our air.

As work continued through the 1970s and 1980s, New York was a national leader in promoting clean air, with smokestack sampling and regulations to control emissions and improve air quality. Concurrent with the state's regulatory efforts, scientific firms and universities were developing new technologies to remove pollutants from emissions sources, and refine processes to eliminate the generation of such pollutants in the first place.

For example, to comply with new air pollution standards, the Dunlop tire factory in Tonawanda (now Sumitomo Rubber) revised its manufacturing process, which reduced volatile organic compounds (VOCs) emissions by 1,200 tons/yr. That's equivalent to the weight of 450 pickup trucks. VOCs contribute to ozone creation in cities on hot days, which causes breathing difficulties for older residents, young children, and people with respiratory problems like asthma.

By choosing zero-emission transportation like bicycles, people are helping reduce carbon emissions from motor vehicles.

Many people are acquainted with the term "acid rain," a chemical compound formed when fossil fuel emissions of nitrogen oxides and sulfur dioxide combine to form nitrous and sulfuric acid, which falls back to earth in rain or snow. Acid rain caused significant ecological damage to Adirondack mountain lakes, ponds and streams, and everything surrounding them.

Today, more than three decades after Governor Mario Cuomo signed the Acid Deposition Control Act into law, significant progress has been made to reduce acid rain emissions and prevent damage to our natural resources. Still, many waterbodies and forested lands in New York have not fully returned to their natural, pristine states, and the Adirondacks, Catskills and many other susceptible areas in New York are still at risk.

Because air pollution does not recognize state borders, pollutants released from coal-fired plants in Midwest states continue to impact environmental resources in New York and other Northeast states. We have achieved some notable successes, including the recovery of Brooktrout Lake *(see Conservationist magazine, August 2014)*, but it's an ongoing challenge.

The acid in coal emissions isn't the only problem caused by coal combustion. When coal is burned it also releases mercury, which eventually rains down onto lands and water, and accumulates in fish and other aquatic species. This creates potential public health risks, which is why certain waters in New York are subject to fish consumption advisories to protect children and adults, specifically women of child-bearing age (under 50), from ingesting harmful substances.

DEC closely studies acid rain, and maintains records of water sampling and other evidence noting progress or declines in acid impacts. We also continue to explore new ways to reduce the source of damaging emissions from power plants and motor vehicles (an often forgotten source of acid rain causing pollutants).

New York's efforts to clean the air still face tough challenges. Although the air we breathe is significantly better than 40, 30 or even 20 years ago, there are new and emerging health threats from air pollution sources. New York has made significant progress to limit our sources of air pollution, but transport—the pollution that comes into the state from far away—remains a serious problem for acid precipitation-plagued regions and areas with high ozone.

The newest field of study is small particulates—what we call PM2.5 and ultrafine particles. These tiny particles are less than 2.5 microns, and under 0.1 micron in size, respectively; so small they are invisible to human eyes. Yet scientific research has revealed the potential havoc they can cause inside our bodies, with studies showing a negative effect on cardio-pulmonary health. During periods of extended high temperatures, regions in New York may be under an Air Health Quality Advisory, recommending people take precautions when outdoors, or stay inside, due to high levels of ground ozone or particulate matter.

There are plenty of things added to air that make us unhealthy—and almost all are the result of human activity. We continue to mitigate these factors through controls on specific combustion and chemical processes, while also promoting actions and new technologies like battery-powered car engines. These measures reduce the amount of contaminants in our air, helping create a cleaner, healthier environment.

In many ways, the early years of identifying and regulating air pollution sources were actually the easy part. We have addressed some key sources of pollution and made significant progress to clean our air, but as science and medicine continue to reveal previously unknown health impacts of breathing polluted air, we must do even more.

My grandmother and step-grandfather did not live long enough to see and breathe the cleaner air we now have. New Yorkers enjoy the cleanest air in the state's modern history. The work of environmental professionals and policymakers in both the public and private sectors, as well as people's increased interest in healthy living, have made the air we breathe the healthiest in decades. And it will keep getting better.

Photo Credit: Mark Webster

The growth of clean, renewable energy in New York, like wind power, will help ensure our air is cleaner and healthier.

John Sheppard:

Supporting the "TEAM" Improving our Air Quality

John Sheppard grew up in an outdoor sporting family, so he was well acquainted with DEC at a young age. But DEC didn't figure in his career plans, at least not initially. After working for 10 years in small engine and automobile repair shops, John studied business, earning a degree in finance. Instead of pursuing corporate finance or investment banking as he originally envisioned, John realized he had "an activist's soul" and wanted to work for the public.

When he saw an opportunity to fulfill this "dream," he took it; John's coursework allowed him to take a research specialist exam offered by DEC, and led to him being hired by the Division of Air Resources, where he now provides IT support. John considers his co-workers to be his customers, and ensures air engineers and other staff have the tools they need to conduct research, monitor air data, and ultimately improve air quality.

John has achieved his goal of serving the public and, like other New Yorkers, also reaps the benefits of a healthy environment. He loves being outdoors and continues to participate in shooting sports. While his career path was unique, he encourages others to get involved in the environment, either professionally or passionately (or both). "Protecting the environment is as noble as any profession, and you feel pretty good when you meet with success," he says.

John Sheppard is an environmental program specialist in DEC's Division of Air office in Albany.

—Older adults staying connected with the outdoors

By Alex Hyatt

Photos provided by NYS Office for the Aging

The Smiths just returned from a bicycling trip across the state. Now in their 70s, they've been biking for 50 years, and still love exploring the various bike trails that crisscross New York. Further north, a couple in their late 60s is preparing to hike up to a nearby fire tower. It's their fourth hiking adventure this summer and they hope to get in a couple more before winter.

In the Hudson Valley, Mike Cavanaugh, New York State Director for the American Canoe Association, and a retired DEC staffer, gets ready to teach a group of older adults how to kayak. "It's amazing how many people take up kayaking, canoeing, or stand-up paddleboarding after retirement," he says. "In most of the kayaking classes I teach, the students are generally people who are starting the sport later in life, when they have the time and income." In fact, the American Canoe Association reports that 47% of its members are older than 50.

Across New York and the U.S., older adults are physically active, enjoying time outdoors. Whether it's walking, hiking, biking, canoeing, kayaking, horseback riding, or cross-country skiing, New York's older adults are taking advantage of the Empire State's great outdoors.

Alan Mapes

A Growing Demographic

With more than 3.7 million older adults, New York ranks fourth in the nation in the number of individuals aged 60 and over. By 2030, this population will likely grow to more than 5.3 million, equal to 25 percent of the state's population. In addition, over the next decade, 51 of New York's 62 counties will have populations where at least 25 percent of their citizens are aged 60 or over.

Data Dispels Myths

Contrary to common myth, today's older adults are mobile, active and healthy. And they bring enormous social, intellectual and economic capital to their communities. Discussions about demographic changes in America—which have been occurring for decades—often warn of doom and gloom for our aging population. But in reality, older Americans continue to be major contributors to their communities, their families, the local economy, and society as a whole. And they remain vibrant, participating in a wide variety of sports and recreational activities, as well as having active roles in businesses and civic organizations.

New York State: Built to Lead

New York is committed to supporting healthy and active older adults. In his 2017 State of the State Address, Governor Cuomo laid out a comprehensive plan to advance a "Health Across All Policies" approach to incorporate health considerations into policies, programs and initiatives led by non-health agencies. It's a comprehensive, all-inclusive approach to make New York the first age-friendly/livable state in the nation, as defined by the World Health Organization/AARP (see sidebar).

A core premise of a "Health Across all Policies" approach is that the health and well-being of all citizens is essential for overall social and economic development. It recognizes that health is influenced by a wide range of factors such as housing, transportation, education and our environment, and, therefore must include more than just medical and health-based partners.

New York's natural resources offer a range of activities that can support and improve the health of all our citizens, regardless of their age or ability. Connecting with nature though hiking,

8

Eight Domains of Livability

According to AARP, Inc., the availability and quality of certain community features impact the well-being of older adults. The World Health Organization identified the following eight domains of livability that influence the quality of life of older adults. This framework is used by many towns, cities and counties in the AARP Network of Age-Friendly Communities to help an area become more livable for both older residents and people of all ages.

Domain 1:
Outdoor spaces and buildings

Domain 2:
Transportation

Domain 3:
Housing

Domain 4:
Social Participation

Domain 5:
Respect and Social Inclusion

Domain 6:
Work and Civic Engagement

Domain 7:
Communication and Information

Domain 8:
Community and Health Services

Recreation and nature crosses into several of these domains.

paddling, skiing or swimming is beneficial to both the body and mind, and the opportunities are easily accessible.

"The fact is, people are staying healthier and more active for a longer period of time across their lifespans..."

Healthy aging is a concept based in science and psychology. It has a very simple premise: as we grow older, it is important to stay physically and mentally active, and socially engaged. Those who do so remain healthier and more independent for a longer period of time. Staying active can be accomplished by continuing to work or taking a part-time job, participating in a hiking club, volunteering, or any number of other activities that benefit your health and well-being.

New York's growing aging population can access a variety of outdoor opportunities. DEC has expanded access to beginner-level hiking trails, boat launches and camping, and offers discounted sporting licenses to older New Yorkers. State residents aged 62 or over can also participate in New York State Parks' Golden Park Program, which provides free weekday vehicle access to most state parks, boat launches and arboretums (except on holidays), as well as a fee reduction at state historic sites and state-operated golf courses. (Visit: **www.dec.ny.gov/outdoor/83411.html** for more information.)

According to the National Council on Aging (NCOA), a healthy and active aging population significantly contributes to our economy and social fabric, and also helps to reduce chronic diseases or falls that can affect an older adult's quality of life. The NCOA recommends up to 150 minutes of moderately intense physical activity or exercise per week for older adults—and New York is constantly expanding programs to help them meet this goal.

"The fact is, people are staying healthier and more active for a longer period of time across their lifespans, and to be competitive all our systems and institutions should be preparing for that," said

Greg Olsen, acting director of the New York State Office for the Aging. "This is a tremendous upside for New York State looking forward."

Never underestimate older adults. Their minds and bodies are strong. According to AARP, people over age 50 control 70 percent of our country's wealth, and account for 51 percent (more than $7 trillion) of consumer spending. In New York, their contributions extend far beyond economics: nearly 700,000 people aged 60 or over perform 119 million hours of community service annually (for those who like economics, that equates to an economic value of $3.35 billion).

As you can see in the pictures accompanying this article, there are numerous ways to be active and stay healthy. The wonders of nature that intrigued you when you were young, the outdoor resources that beckoned, and activities like canoeing and trail hiking that you once dreamed about don't have age restrictions; they are still available across New York, just waiting for you.

For ideas about how you or an older loved one can stay active, visit **www.aging.ny.gov**.

Former *Conservationist* assistant editor **Alex Hyatt** is now a public information specialist with the New York State Office for the Aging.

On Patrol

Carl Heilman II

Real stories from Conservation Officers and Forest Rangers in the field

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

The K-9 Nose Knows—Schoharie County

At 5:30 a.m. on Friday, July 14, Town of Cobleskill Police contacted DEC ECO Tech. Sgt. Keith Isles to request the assistance of K-9 "Shamey" to locate a prisoner who had escaped during arrest processing. The prisoner was arrested for alleged assault, but escaped into dense fields adjacent to the police station. Officers could not locate him due to darkness, and called in DEC and NY State Police. About four hours into the search, K-9 Shamey picked up a scent and led officers to the escaped prisoner, who was hiding in a nearby field. The subject was taken into custody without incident. Police found that he was also wanted by the Schoharie County Probation Department and the Rotterdam Police Department. He was charged with Resisting Arrest and Petit Larceny, class A misdemeanors, and Escape in the Second Degree, a class E felony, arraigned in Town Court and remanded to the Schoharie County Correctional Facility. The longest serving member of DEC's K-9 unit, 9-year-old Shamey has worked with DEC for eight years and is trained in the detection of wildlife crimes—like tracking deer poachers—but also excels in finding hidden evidence, tracking criminals, and assisting other agencies around the Capital District. He is named after former ECO Lt. Bill Shamey.

Illegal Dumping—Sullivan County

A concerned hunter from of the Town of Thompson contacted ECO Tom Koepf about an enormous pile of garbage on a property he frequently hunted. ECO Koepf installed a trail camera near the dump site, and over a few weeks captured a number of images of vehicles entering and leaving the site. Once the winter snow melted, ECOs Koepf and Travis McNamara sorted through hundreds of bags of garbage, retrieving dozens of incriminating documents, most of which were linked to a renovation job by a New York City contractor. Several town residents aided the ECOs in tracking down the suspect. In late May, ECO Koepf interviewed the suspect who initially denied any involvement, but agreed to meet with ECO Koepf at the dump site. When presented with the evidence of documents found in the pile and trail cam photos of vehicles entering the site, the contractor provided a full confession and stated he had instructed his workers to dump material from his NYC job site on the vacant property. The subject was issued two misdemeanor appearance tickets for unlawful disposal of solid waste in excess of ten cubic yards, and depositing a noisome or unwholesome substance near a public highway. He faces thousands of dollars in penalties and is required to clean up the site.

Lost Hikers—Greene County

A couple out for a day hike from North Lake parking lot to Inspiration Point on the Escarpment Trail left the marked trail at the Catskill Mt. House and followed an unmarked path. They continued until they became disoriented in thick vegetation, and then called North-South Lake Campground for assistance. Ranger Robert Dawson responded, and through a phone interview and GPS coordinates was able to locate the subjects approximately 300 feet south of the escarpment trail. The hikers walked out with Ranger Dawson and returned to their campsite without injury.

RESTORING LEAN-TOS,

VOLUNTEERS WORK TO SAVE THESE HISTORIC STRUCTURES

By Dave Nelson and Peter Constantakes
Photos by Peter Davis

"A storm is threatening my very life today, if I don't get some shelter." —Rolling Stones, Gimme Shelter

Few symbols are as iconic to the Adirondacks as the lean-to. Along with guideboats and Adirondack chairs, the three-sided lean-to occupies an important place in New York's outdoor lore and wilderness experience.

Originally built to shelter hunting and fishing guides and their customers from northern New York weather, lean-tos bridge the gap between wilderness and the comforts of home. Incorporating a raised floor, walls and a roof to protect from the wind and rain, shelves and hooks for personal belongings, and the promise of a flat surface on which to lay down, a lean-to is a welcome sight on any long journey.

Whether you've hiked in the Adirondacks, Catskills, or on the Finger Lakes Trail, you've likely come across a lean-to at one time or another. Although their shed-like roof and three-sided nature may appear odd at first, after just one rain event, you'll likely come to appreciate the design of these basic outdoor shelters.

But exposure to these same elements from which lean-tos protect humans also eventually leads to deterioration. After years of service, New York's lean-tos need repair, and the investment of time, resources, and energy required often exceeds our ability to address the need in a timely manner. Enter the volunteer—an important partner in keeping the wilderness wild. Following are profiles of two groups whose members adopt and repair lean-tos—preserving a part of Adirondack history that remains relevant to this day.

Lean2Rescue

For Paul Delucia, repairing lean-tos was a way to assist DEC in maintaining connections to natural life. He initially worked on a project in the Fish Pond area, using shingles, logs and mortar to fix up a lean-to, and he and his wife later repaired an outhouse and another lean-to. He said taking up these challenging projects made it feel like "we were making a difference," and through word of mouth, the idea spread and the roots of Lean2Rescue took hold in 2004.

More than 225 people have gone into the field as part of Lean-2Rescue's all-volunteer effort, which focuses on projects that benefit people and the environment, usually in remote locations.

Volunteers who maintain, repair or rebuild lean-tos open the wilderness to hikers in the Adirondacks and Catskills.

Delucia recollects that as he organized increasingly difficult projects, he was pleased to see that "volunteers stepped up to lend a hand." He originally thought they'd be able to repair five lean-tos or maybe a few more in his lifetime; three-and-a-half years later, the group had worked on all 37 lean-tos in DEC's Region 6.

Paul can easily recount some of the challenges they have faced, such as the time a helicopter that was supposed to deliver materials couldn't make the trip. Lean2Rescue volunteers and the DEC Cranberry Lake operations crew took up the task, delivering the materials to their final destination via canoe and foot —11 miles away. Another time, the group used canoes and small carts to transport more than 20,000 pounds of lumber via water and off-road trails, including a 50-foot hill.

Looking back over Lean2Rescue's accomplishments, Delucia can recount many successful projects—including some on rugged trails in bad weather, where volunteers' efforts helped "the nearly impossible get done, and usually with lots of laughter."

The group's success relies on a strong relationship with DEC foresters and managers, and with partners like the Adirondack 46ers and ADK Mountain Club, working together to create a safe and enjoyable outdoor experience for Adirondack visitors. Delucia notes that Lean2Rescue can never be "a replacement for DEC operations, but a supplement," to maintain the history and character of Adirondack trails. Mission accomplished (and still going).

Adirondack Mountain Club

The Adirondack Mountain Club (ADK) is dedicated to the conservation, preservation and responsible recreational use of the New York State Forest Preserve and other parks, wild lands and waters. In 1985, ADK member Jon Schneider began coordinating a new effort, Adopt-a-Lean-to, where volunteers would pledge to visit specific lean-tos at least twice a year to check on their conditions, and perform tasks like clearing leaves and dirt from roofs, sweeping out the lean-to, cleaning its water source and maintaining drainage, and determining if significant repairs were needed to the foundation, floor, walls or roof.

At that time, there were 155 lean-tos in the Adirondack Park. The first lean-tos were "adopted" in 1986; that year, ADK had about 14 adopters. John Schneider continued to build the program over the next 25 years, and by the time he passed the reins to a new coordinator in 2010, all 155 lean-tos had adopters. The program keeps growing, and now includes 196 lean-tos and more than 350 adopters, including student campers, families, and friends groups.

Transporting logs and other materials to remote locations is one of the challenges lean-to volunteers must overcome.

As organizations like Lean2Rescue restore, rebuild and add more lean-tos to the Park, ADK's Adopt-a-Lean-to program will continue to expand. The program's current coordinator Hilary Moynihan, who took over the reins from John Schneider, notes there is "a synergy" with DEC, adopters and Lean2Rescue that keeps the program strong and vibrant. The reason is simple, she says, and reflects the same theme as when the lean-to organizations were formed so many years ago: "We all share the same mission as stewards of the Adirondack Park."

If you are interested in learning more about lean-tos and how you can help restore, rebuild and maintain them, you can visit the following sites: **www.adk.org/adk-adopt-lean-to-progra/** and **www.lean2rescue.org**/.

Conservationist Editor **Dave Nelson** and Associate Public Information Specialist **Peter Constantakes** work in DEC's Albany office.

Authors' Note: Backcountry lean-tos also provide shelter to hikers and backpackers in the Catskill Park. The New York-New Jersey Trail Conference partners with DEC to maintain and repair lean-tos as part of its Catskill Trails Program. For more information, visit: **www.nynjtc.org/catskill-leantos**.

New Visitor Center at Five Rivers

As part of New York's Adventure NY initiative to connect people with the outdoors, DEC officially opened a new visitor center at Five Rivers Environmental Education Center in Albany County this June. The center incorporates green building materials and techniques (including solar panels, LED lighting and a green roof), and offers year-round programs and activities, including hands-on exhibits and displays that stimulate the senses, and are accessible to schoolchildren and individuals with special needs. Five Rivers was established in 1972 though the generous support of local citizens who formed the Friends of Five Rivers. More than 70,000 people visit Five Rivers each year to participate in school, youth and public programs, or simply to enjoy its scenic outdoor setting. The new center is open 9 a.m. to 4:30 p.m. Monday through Saturday (closed on Sundays and state holidays).

James Clayton

I Bird NY/Utica Marsh Improvements

In his 2017 State of the State Address, Governor Cuomo launched I BIRD NY, a program that encourages people to visit parks, state forests, grasslands, wetlands and other sites across New York that offer great opportunities to view birds in their natural habitats. You can find a list of regional bird walks and birding programs, and see tips on how to become a better bird-watcher by visiting the I Bird NY website at **ibirdny.org**. The site also includes information on special programs like DEC's Bird Challenge for Kids, New York's Bird Conservation Areas (BCAs), and other events, activities, and attractions to help people—young and old—discover the fascinating world of birds.

The I Bird NY initiative was unveiled at the Utica Marsh Wildlife Management Area, a unique, easily accessible urban wetland in Oneida County. This site, which includes a mixture of cattail wetlands, wet meadows, open water pools and flooded willows, is home to a diverse marsh habitat that features a variety of plants and animals, and an abundance of bird species. DEC recently completed rehabilitation and enhancement of 75 percent of the site's one-mile trail, and constructed a secondary overlook/observation area, with new kiosk access and interpretive signage. A new wildlife observation tower will be constructed this year.

Reminder: *Saturday, September 23rd is National Hunting and Fishing Day, and also a designated free fishing day in New York. This is a great time to celebrate New York's proud sporting heritage and enjoy our state's amazing hunting and fishing resources. Check out DEC's Facebook and Twitter feeds the week of September 17-23 for events and opportunities.*

David Denk

Banding Peregrines

High above the Niagara River, DEC Wildlife Technician Jacquie Walters holds a 26-day-old peregrine falcon chick while its mother watches closely. Just after this photo was taken, the chick was identified as a female, given a quick visual health check, and fitted with band 39 BW. Banding this chick was special for Jacquie since she had banded its mother three years ago at the historic Central Terminal Train Depot in Buffalo. Peregrine chicks are banded around three weeks of age since their legs are fully grown, but they are unable to fly away from the nest because their flight feathers are still undeveloped. The nest box was installed by the NYS Thruway Authority, and a pair of falcons has been using it on and off for 12 years. DEC Wildlife Biologist Connie Adams has worked with property owners and cooperators in DEC Region 9 to erect 14 peregrine nest boxes in the last 12 years.

Counting Turkeys

DEC wants your help counting turkeys! Since 1996, DEC has enlisted citizen scientists to help with the Summer Wild Turkey Sighting Survey each August to get estimates on brood size throughout the state. The information collected helps DEC gauge reproductive success and predict fall harvest potential.

Henry Zeman; National Wild Turkey Federation

Volunteers record the sex and age composition of all flocks of wild turkeys they see during normal travel. To participate, print or download a Summer Wild Turkey Sighting Survey form to record your observations, and submit your completed survey forms via mail to: Turkey Survey, NYSDEC, 625 Broadway, Albany, NY 12233-4754, or online (see **www.dec.ny.gov/animals/48732.html**).

Art Woldt (1928-2017)

Art Woldt, author of the Back Trails article "A Farm Forever" in the June 2017 *Conservationist*, passed away in June at the age of 89. Art worked at DEC for 24 years, and served as the director of the agency press office before retiring in 1992. He also was the producer and narrator of the Environmental Conservation

Courtesy Woldt family

Reporter, heard on New York radio stations. An avid fisherman, hunter and outdoor enthusiast, Art was a member of the Outdoor Writers Association of America and the NYS Outdoor Writers Association. His love of the outdoors was clearly reflected in his recent article chronicling his efforts to preserve farmland and open space.

Erratum

In the June review of *The Snake and the Salamander*, we listed the publisher incorrectly. The publisher is Johns Hopkins Press. *Conservationist* regrets the error.

First Fish

I took my two granddaughters fishing. Lilly was catching all day and Chloe couldn't quite get the hang of it. With a little coaching from cousin Lilly, Chloe finally caught her first fish! The picture says it all.

Dave Gardner
Sackets Harbor

I wanted to share this picture of my grandson, Logan, who caught his first fish while fishing with his dad. Logan was so proud. After his mom snapped a quick pic, they returned the sunfish to the water. The whole family had a great day.

Cynthia Dutoit

Thanks for sharing these great moments. Seeing the smiles on these kids' faces is a reminder of how family fishing is a great experience. Read "A Family Fishing Affair" in the June 2017 Conservationist *for more.*

A Good Read

Here is a picture of my two-year-old son after our hike at Connetquot State Park. He's enjoying the complimentary issue of *Conservationist for Kids* from the park. We are big fans of your magazine.

Ed Hickey

We love seeing the next generation of readers enjoying Conservationist.

Just a Quick Drink

This gray treefrog loves our water spigot!

Barb Nuffer
Averill Park

How nice for you. The gray treefrog has large suction cups on the tips of its toes. While young frogs are lime green, the adults can range in color from gray to light green. Interestingly, gray treefrogs may vary their color, depending on the surrounding temperature and relative humidity. Gray treefrogs have hearty trilling calls which can often be heard in late spring and early summer from a shrub or tree near their breeding wetlands.

Making an Appearance

I found a monarch caterpillar earlier this spring and was lucky enough to be able to photograph it as it developed and emerged.

Gert Federici

Wow, what an amazing shot! If that monarch is a female she's now laying eggs, and will live only about two to five weeks. There are actually four generations of monarchs hatched between May and October. It is the last generation that makes the long trip to Mexico. You can read more about monarchs in "Got Milkweed?" in the June 2016 Conservationist.

Stick Around

While playing in the grass with my son, I saw this walking stick. I'm not sure how common they are for the area, but it is the first one I have ever noticed. These bugs have some pretty amazing camouflage.

Amber Hotto
Lyons, NY

The walking stick lives among twigs to provide excellent protection from predators. Read "A Bee or Not a Bee, That is the Question" in the June 2017 Conservationist *to learn about more insects that use mimicry as protection against predation.*

E-mail us at: magazine@dec.ny.gov
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Albany, NY 12233-4502
facebook: NYSDECtheconservationist

Seeing Double

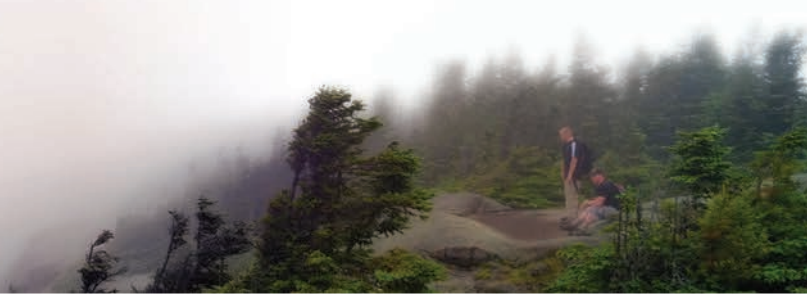
Self-proclaimed die-hard Conservationist *reader John Bailo sent us this picture he took of two deer side-by-side. Thanks John!*

Ask the Biologist

Q: We spotted these two bald eagles in our backyard, apparently with their talons locked together. We weren't sure whether they were mating or fighting, but they were still locked together four hours later and had become more vocal and fluttering about; however, they wouldn't let go. We called the police and animal control and as soon as the three of them walked into the backyard, the eagles broke free and flew away. Was this a mating ritual or were they fighting?—Mike Pastore, Guilderland

A: *This was not a mating ritual. These two adults were fighting over something, perhaps territory, and would not unlock their talons until their focus was diverted by people. Occasionally, one adult eagle will actually kill another during a dispute.*

—Scott Crocoll, DEC Wildlife Biologist



John Bulmer

Pencil Pusher's Day Out

by Nancy Lussier

Last summer, our commissioner challenged me to participate in a hunter education class. I've always been active; years of playing softball, racquetball and squash have taken their toll on my knees. But hunter education? Would I have to navigate rough terrain? I called the man leading the class; he assured me that I'd be fine.

Even though I'm not a gun fancier, I was pleasantly surprised by the entire experience. Safety was the main theme; the class began with an alarming video that showed how dangerous firearms can be when handled irresponsibly.

The instructors were fantastic. They didn't rush us; they let us handle firearms at our own pace. At first, the firearms weren't real. But they looked and felt authentic to me. If you're a complete novice like I am, the instructors demonstrate how to do everything. They patiently waited for me to overcome my fear of handling firearms, something I didn't think I could do.

The workbook we used in class includes worksheets that focus on the crucial points of each of nine chapters. As I completed the worksheets, I learned the key tenets of safety, conservation and respect. The focus on respect surprised me.

Hunters comprise a very small part of the population; those opposed to hunting also make up a small portion. The workbook advises would-be hunters to respect private property and to treat their harvested animals with respect. One of the workshop's goals is to ensure that hunters' actions don't offend others.

Our trainers, including DEC's own hunter education program staff, really knew their stuff. They answered our questions thoroughly and in a straightforward manner. Even when put on the spot, they were patient and good-natured.

Robin Kuiper

The author enjoys a moment of pride—mixed with a little humility—from her shooting exploits at the hunter education class.

When we finally got to handle real guns and crossbows, it was an entirely new experience. First we learned how to safely cross a fence with a gun—something that is often done wrong, and causes accidents.

Another thing we learned was that a person uses his or her dominant eye to shoot. Even though I'm right-handed, I'm left-eye dominant, so I had to shoot left-handed. Talk about confusing!

With a pump-action shotgun, I shot some clay birds. Using a rifle, I managed to hit the paper target five times, although only one bullet scored within the target's rings. The arrow from my crossbow also hit the target, but another arrow intended for a fake deer was off the mark. It flew harmlessly into the woods. All in all, I had a great time and got quite an education.

Bragging rights for the best "shot" of the day belonged to the elk, whose head hung on the wall in the classroom. With absolutely no effort, the elk smacked two DEC executives in the head with its nose, even getting one of them twice.

Even if you never plan to hunt, consider taking the hunter education course. Invite a friend and make a day of it. You'll learn a lot, and enjoy yourselves as well.

Tell 'em "Left-eye Lussier" sent you!

Nancy Lussier is Director of DEC's Office of Management and Budget Services

Note: For a list of hunter education classes near where you live, visit DEC's website: dec.ny.gov/outdoor/92267.html

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NEW YORK STATE OF OPPORTUNITY. | Department of Environmental Conservation

Jennifer Hayes

See page 22