Smokey Bear | Brook Trout Return | Wildland Firefighting

NEW YORK STATE ONSELVZICONSC AUGUST 2014

Picture Perfect: New York's Wild Side

Central NY Historic Sites



Dear Reader,

The dog days of a New York summer are upon us. I am reminded of summers of my youth: balmy nights, the sounds of katydids, the visual spectacle of heat lightning, and the pleasure of root beer floats on the back porch.

Soon kids will be back in school, and if they are anything like me, they'll start their academic year looking longingly out the window before hitting the books. In just a few weeks, my own son, Liam, will enter college, and I can't help thinking of all the outdoor adventures we've shared. We've fished, hiked and kayaked, and I know that his appreciation of our natural world has been shaped by those experiences.

I was inspired this month by the essay Homemade Playground you'll find at the back of this issue. In it, young author Kathleen Lamanna points out that you don't need a lot of gear to enjoy the outdoors. Rather, all you need is a piece of ground, maybe a small woodlot, a little brook, perhaps an old bike (the kind handed down from one kid to another), and some creativity. Kathleen's essay reminded me of a time less structured, and less connected than many experience today. In my day, we were out the back door and playing with other kids whenever we could; basketball, touch football or simply making the rounds in our neighborhood. The rules were simple: be home by dark. When the streetlights came on, we knew it was time to call it a day, albeit grudgingly.

Kids benefit a great deal by such unstructured outdoor play. It's educational, healthy, and builds social skills. When left to their own devices, kids invent games and tools, and experiment with things.

My own experiences remind me that one needn't take the kids or grandkids to hike the tallest mountain peak hundreds of miles away, or kayak the wildest river. A simple fishing trip on a local pond will suffice. Likewise, a casual stroll through a nearby park or state forest affords plenty of opportunity to slow down, appreciate nature, and spend time with the ones you love.

So go enjoy the rest of summer. Listen for a katydid's song. Share your appreciation for the outdoors with someone in your family, scout group or neighborhood. And although times have changed, outdoor recreation close to home, is one of life's simple pleasures.

Regards,

Commissioner Joe Martens

Conservationist

Volume 69, Number 1 | August 2014 Andrew M. Cuomo, Governor of New York State

DEPARTMENT OF ENVIRONMENTAL CONSERVATION Joe Martens, *Commissioner* Dianne L. Patterson, *Director of Communications* Harold Evans, *Director of Office of Communication Services*

THE CONSERVATIONIST STAFF David H. Nelson, Editor Eileen C. Stegemann, Assistant Editor Megan Ciotti, Business Manager Jenna Kerwin, Staff Writer Jennifer Peyser, Art Director/Designer Jeremy J. Taylor, Conservationist for Kids Nicole Draina, Summer Intern

OFFICE OF COMMUNICATION SERVICES Ellen Bidell, Contributing Editor Elaine Bloom, Contributing Editor Jim Clayton, Staff Photographer Bernadette LaManna, Contributing Editor John Razzano, Contributing Editor

EDITORIAL OFFICES

The Conservationist (ISSN0010-650X), © 2014 by NYSDEC, is an official publication of the New York State Department of Environmental Conservation published bimonthly at 625 Broadway, 4th Floor, Albany, NY 12233-4502. Telephone: (518) 402-8047

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

TO SUBSCRIBE:

\$18 per year, \$24 for two years, \$30 for three years. Outside the U.S., add \$27 per year with a check drawn on a U.S. bank. All orders must be prepaid.

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

Send check or money order payable to:

Conservationist NYSDEC 625 Broadway Albany, NY 12233-4502

or call: **1-800-678-6399** Visit the Department's website at: **www.dec.ny.gov**

The New York State Department of Environmental Conservation does not discriminate on the basis of race, national origin, disability, age, or gender.

POSTMASTER: Send address changes to:

Conservationist NYSDEC 625 Broadway Albany, NY 12233-4502

~Printed on recycled paper. Please recycle this issue.

f



Photo courtesy of NY Empire State Development

Contents

- 2 New York's Wildlife Through the eyes of photographer Melissa Groo
- 7 Rambling Success: 15th Annual Hudson River Valley Ramble By Mark Castiglione
- 8 Homeward Bound A Central New York Historical Adventure By Jenna Kerwin
- 12 Coming Full Circle Brook trout return to Brooktrout Lake By Leila Mitchell
- **17 Botanical Treasure Hunt** Searching for the small whorled pogonia By Mike Adamovic
- 20 70 Years of Vigilance The True Story of Smokey Bear By David Russell
- 22 Thacher State Park: 100 Years of Outdoor Recreation By Wendy Gibson
- 24 Wildland Firefighting By Don Nelson



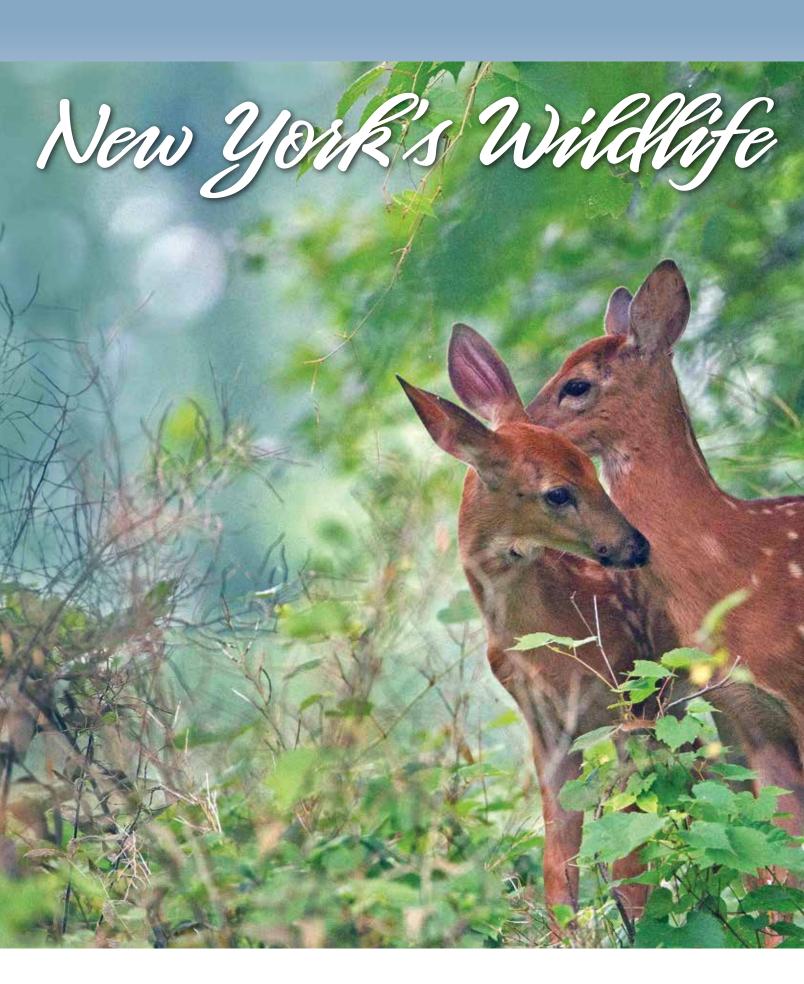
August 2014 Volume 69, Number 1



See pg. 5

Departments 16 On Patrol | 28 Briefly | 30 Letters | 32 Back Trails

Front cover: Field of Goldenrod by Melissa Groo | Back cover: Vintage Smokey Bear posters



Through the eyes of photographer Melissa Groo



White-crowned sparrows in fall, at Golden Hill State Park, in Barker

Award-winning photographer Melissa Groo has been photographing wildlife for more than 20 years. Through her photography, she seeks to capture the essence of a creature, and hopes that her images tell stories and educate people about the natural world.

A native New Yorker, Melissa worked for years in the Bioacoustics Research Program at Cornell's Lab of Ornithology, focusing on elephant communication. She was a research assistant for scientist Katy Payne on The Elephant Listening Project, and spent several field seasons in the deep rainforest of central Africa studying forest elephants in the wild. She credits this experience with teaching her to listen deeply and watch closely-useful skills for photographing wildlife. While Melissa continues to pursue her interest in elephant conservation, working parttime for Kenya-based Save the Elephants, these days you'll usually find her out exploring woods, swamps, shorelines and open fields, trying to blend in and capture local wildlife with her camera.

Two fawns nuzzle each other in Ithaca



Black skimmers perform aerial acrobatics at Nickerson Beach on Long Island



A red fox kit plays with a leaf in Lansing



A belted kingfisher with its catch in Stewart Park, Ithaca



Melissa takes all her photographs in natural light in the wild, without the use of bait to attract animals. She feels strongly about the use of ethical practices in the photography of wildlife, and tries her best to disrupt her subjects as

little as possible.

A mink in Roy Park Preserve, Ithaca



A ring-billed gull coming in for a landing at Allegany State Park

Melissa has received several national and international awards in photography, and her photographs of the great sandhill crane migration along the Platte River were recently featured in the March 2014 issue of *Smithsonian Magazine*. She is a guest contributor on Nature Travel Network and The Miracle of Nature, and her prints are in personal collections all over the country.

To view more of Melissa's spectacular photography, visit her website at **http://melissagroo.com**.





RAMBLING SUCCESS: 15th Annual Hudson River Valley Ramble



By Mark Castiglione; photos by Robert Goldwitz

The Hudson River Valley Ramble celebrates the history, culture and natural resources of the Hudson River Valley National Heritage Area, with emphasis on our amazing landscapes, educational and entertaining community events, and recreational byways. An impressive tourism event, the Ramble also seeks to provide a deeper understanding of the Valley's resources, and in doing so, helps to connect people with and cultivate stewardship of these resources.

What began as a modest event held one weekend in September has grown steadily in popularity over the years and now draws visitors from the entire country. The 15th Annual Hudson River Valley Ramble will take place over four weekends in September and will feature an extraordinary assortment of programs, from guided nature walks and challenging hikes, bike rides, and paddles, to living history events, family-fun festivals, and arts and culture experiences. The Ramble is presented by the Hudson River Valley Greenway and National Heritage Area in partnership with nearly 200 organizations that host Ramble events. The event is also sponsored by the NYS DEC Hudson River Estuary Program.

For more information, visit: www.hudsonrivervalleyramble.com.

Mark Castiglione is Acting Executive Director of Hudson River Valley Greenway.







HOMEWARD BOUND — a Central New York Historical adventure

By Jenna Kerwin

When people ask me where in New York I'm from, I want to tell them, "Oh, you know, that 'Leave it to Beaver' town smackdab in the middle of farm country. The one next to the casino where Tom Jones sometimes croons in the Showroom (my grandmother goes to his shows like it's her duty); a handful of miles from the college everybody bleeds orange for come basketball season; kinda, sorta, not really by the amusement park (with that stellar restaurant Eddie's) that my sister, our cousins, and I went to every summer (which is a whole lot bigger in my memories); nestled riiiight by the brewery that makes its own beer, and puts on fantastic shows in the summer (or so my mom tells me); a hop, skip and a jump from the speedway my dad goes to every once in a while because he loves F1 racing and (between you and me) probably wishes Michael Schumacher still raced; and that's a bit 'round the corner, so to speak, from the town with some of its sidewalk painted yellow because the guy who wrote the Wizard of Oz was totally from there. (True story.)... You know, that town."

But that would just be silly.

Instead, I say "By Rome." When the person's meek, "Oh" isn't enough to convince me they know I mean Rome, New York and not, somehow, Italy, I follow up with, "It's about fortyish miles east of Syracuse...Do you know Fort Stanwix?" The light bulb usually goes off in their head and a brief sparkle flashes in their eyes, and I know I've got them. Here is when my eyes sparkle because that is the best way to introduce someone to my region: its history. And where better to start than Fort Stanwix?

You may sense something a bit strange about Fort Stanwix on your first visit. The fort is right in the middle of Rome, after all. There are some fast food joints and various businesses in the



photo courtesy of National Park Service

Historical New York!

Plan a trip into New York's past by visiting the official Path Through History website. The Path Through History project is designed to help draw attention to New York's rich cultural and historical heritage so that residents and tourists may appreciate and experience everything our state has to offer. Visitors to the website can explore by themes, regions, events or itineraries. Check out http://paththroughhistory.ny.gov today to start your historical adventure!



photo courtesy of CNY hiking



area; a pharmacy, hospital and hardware store, but a fort? You bet! And it might also surprise you to learn the fort you step up to from North James Street or Black River Boulevard is not the original fort, but one built on the original site in the 1970s by the National Park Service. Years of excavation took place before the current fort was built. Inside, you can check out the artifacts archeologists unearthed, which include: iron hardware like nails and bolts; pieces from military arms; cannon balls; items from clothing, including buttons and belt buckles; spades and shovels; horseshoes; dishes and other accoutrements; and a lot more!

As you walk the grounds of Fort Stanwix, you will soon forget the hustle and bustle of modern-day Rome outside the fort's walls. Historic military camps and eighteenth-century cannons make it appear as though you have stepped back in time to the original fort. Built by the British in 1758, Fort Stanwix was used to protect the Oneida Carry from the French during the French and Indian War. The Oneida Carry referred to a footpath between the Mohawk River and Wood Creek, a small creek that runs from Rome to Oneida Lake. Native Americans had used the Oneida Carry for many years; colonists later used it for trading.

By the 1770s, the fort's importance had diminished and it was abandoned in poor condition. This, however, was when the Americans realized the importance of the Oneida Carry area, and so occupied and repaired Fort Stanwix in 1775, renaming it Fort Schuyler. Then, two years later, American forces withstood a 21-day siege by British and allied troops, a victory that helped earn the fort its nickname, "the fort that never surrendered."

Unfortunately, though, time took its toll. By the later part of the eighteenth century, flood and fire had destroyed most of the fort, and so it was again abandoned. By the 1800s, Fort Stanwix had been replaced by the bustling metropolis of nineteenth-century, industrial Rome.

By the twentieth century there was renewed interest in the fort. In 1935, President Franklin Roosevelt signed a bill which established the fort as a national monument, and in 1973, the National Park Service began construction of the Fort Stanwix National Monument we have today.

A 15 minute drive southeast of Fort Stanwix is Oriskany Battlefield. Made a National Historic Landmark in 1963,

Herkimer Home, Little Falls



Oriskany Battlefield has a somber, ghostlike quality about it. It's hard to imagine that the large, well-manicured patch of verdant field surrounded by forest and bordered by wood fence was the scene of one of the bloodiest battles of the American Revolution. On August 6, 1777, however, Brigadier General Nicholas Herkimer led American forces and Oneida Indian allies in a brutal fight against British and Loyalist troops.

A tall monument, built and dedicated in 1884, commemorates this battle fought more than 230 years ago. Visitors can walk the site and read interpretive signs about the battle set up around the field. During special events, a replica historic encampment is set up for visitors to see.

American forces experienced heavy casualties during the Battle of Oriskany, but they forced the British and their allies into a retreat. Unfortunately, General Herkimer was wounded during the battle, badly injuring his leg. He died ten days later at his home in Little Falls.

The brigadier general's home known today as Herkimer Home State Historic Site—is open to the public, Friday through Sunday. Herkimer built the mansion in 1776 on more than 100 rolling acres of Central New York land, and today guests can still enjoy the great view. The grounds and gardens are open for exploration, as is the Georgian-style mansion (including the original root cellar!). The Herkimer family cemetery and Herkimer's Monument are close by, and guided tours and events happen throughout the year.

Following the Battle of Oriskany and the siege of Fort Stanwix in 1777, the British abandoned another important fort about 70 miles northwest: Fort Ontario. Located in Oswego, this fort was built by the British in 1755 and underwent several renovations throughout the late eighteenth and early nineteenth centuries. Today it is a star-shaped brick structure sitting on lush green grass, a mere stone's throw from Lake Ontario. The fort's buildings, which resemble large colonial houses, loom before you; grass-covered, sloping walls stand between you and sweeping views of the lake. You can explore inside the buildings, which include the guardhouses and officers' barracks, as well as the underground artillery, and the cemetery down the road. This cemetery holds the graves of the officers, soldiers, and their families who served at the fort.

Much like Fort Stanwix, when Fort Ontario was abandoned in the late 1800s, its story didn't end. In fact, from 1944-1946, Fort Ontario was used as an

Inside Herkimer Home (top and bottom)







W. Knight

emergency refugee camp for victims of the Nazi Holocaust—the only one of its kind in the nation. The fort was made a state historic site in 1949, and even housed World War II veterans and their families following the war. Today you can visit Fort Ontario from May through October.

Situated near the smaller (and perhaps unknown to outsiders) Cazenovia Lake is the colonial-style mansion, Lorenzo. The mansion was built in 1807-08 by land agent John Lincklaen and sits on expansive, quiet grounds. Over the years the mansion has exchanged ownership within the family but was finally given to the State in the 1960s. Today, guests can explore the mansion and grounds, including the extensive gardens—a sure favorite.

Hyde Hall State Historic Site in Cooperstown is another favorite historic building among out-of-towners. Visitors



Hyde Hall Historic Site, Cooperstown

Lorenzo State Historic Site, Cazenovia



photo courtesy of NYS Parks, Recreation and Historic Preservation

to the site can explore the vast grounds and neoclassical-style mansion, built by George Clarke (1768-1835), heir to lands owned by his great grandfather, George Clarke, a former lieutenant governor of New York. When George Clarke (the younger) arrived from England to ensure his family's agricultural wealth, he commissioned renowned architect Philip Hooker to build Hyde Hall: a grand house to remind Clarke of his days growing up in England. Today guests can explore the nearly 50 rooms of Hyde Hall, picnic on the lawn, participate in guided tours, and much more. Hyde Hall even hosts weddings and other special events!

These are just some of the places that make up the history of Central New York (or what I consider CNY). Around every corner is a story: the fog rolling across a former battlefield catches images of soldiers; the brick walls of a fort hold the scars of cannon and gun fire; the halls of an eighteenth-century home echo the voices of its former occupants. Just as I can tell you stories of childhood summers at Sylvan Beach Amusement Park, my grandmother's "girls' nights out" at Turning Stone Casino Resort, or even walking the yellow-brick sidewalk to get ice cream in Chittenango, the towns and cities in my region can fill pages with their history.

So turn on your GPS, plug in one of these places, and begin your historical adventure to one of my favorite places: home.

Originally from "that town" in Oneida County, Jenna Kerwin lives in Albany and is the staff writer for Conservationist.



Fort Stanwix National Monument is located at 100 North James Street, Rome, NY 13440. It is open daily 9 a.m. to 5 p.m., year-round, except for January 1st, Thanksgiving Day, and December 25th. Visit the website at **www.nps.gov/fost/index.htm** or call (315) 338-7730 for more information.

Oriskany Battlefield State Historic Site is located along State Route 69, Oriskany, NY 13424. It is open April 1-October 31, 7 days a week, from 10 a.m. to 4 p.m. Call (315) 768-7224 or (315) 338-7730 for more information.

Herkimer Home is located at 200 State Route 169, Little Falls, NY 13365. Visit http://bit.ly/1psPwZm or call (315) 823-0398 for more information.

Fort Ontario State Historic Site is located at One East Fourth Street, Oswego, NY 13126. Hours of operation vary; check the website at **www.fortontario.com**, or call (315) 343-4711 for more information.

Lorenzo State Historic Site is located at 17 Rippleton Road, Cazenovia, NY 13035. Visit **www.lorenzony.org** or call (315) 655-3200 for more information.

Hyde Hall State Historic Site is located at 267 Glimmerglass State Park Rd., Cooperstown, NY 13326. Visit http://hydehall.org or call (607) 547-5098 for more information.



COMING FULL CIRCLE —After recovering from acid rain, Brooktrout Lake once again has brook trout

By Leila Mitchell; photos by Dave Winkler unless otherwise noted

As a child growing up in the 1970s, I went with my family on vacations near Indian Lake in the Adirondacks. I considered this area the most beautiful and wonderful place in the world. My dad would take my mom, sister and me fishing all afternoon, and in the evening tell us stories of great fishing trips of the past.

As time went on, we caught fewer and smaller fish. Dad said he heard in the news that acid rain was killing some of the lakes and ponds. I didn't know what that meant, and I am not sure he did either. How could rain be bad?

Years later I started working for the Department of Environmental Conservation. By then, acid rain and its impacts were better understood, and New York State and the federal government began to pass laws to reverse the damage.

Acid rain is a broad term referring to rain, snow, sleet, hail, fog, and deposits of particles and gases from the atmosphere. It is formed when sulfur dioxide (SO₂), nitrogen oxides (NOx meaning NO₂, NO₃, or NO₄), and ammonia (NH3) combine with moisture in the atmosphere to produce sulfuric and nitric acid. In the United States, about two-thirds of all SO₂ and one-quarter of all NOx come from electric power generation from burning fossil fuels, like coal. Prevailing winds can send these pollutants far away from the industries that created them. In New York, the Adirondack region has suffered the most from acid rain due to high annual precipitation along with shallow soils and bedrock of the type that doesn't buffer acid runoff very well.

Fish cannot survive in an acidic lake, river or stream because the acidic water disrupts their reproductive cycle. Also, the acid in the water causes aluminum to leach from the soil into the water, clogging the fish's gills and altering their blood chemistry. As the water becomes more acidic, one species after another disappears.

But this story is about recovery! In 1984, New York State passed the first law in the nation to control acid rain, the State Acid Deposition Control Act. Then in 1990, Congress amended the federal Clean Air Act to require nationwide controls on SO_2 and NOx. As a result of these laws, national SO_2 and NOx emissions have declined and some waterbodies are showing signs of improvement. One recovering Adirondack lake is Brooktrout Lake located in Hamilton County and within the West Canada Lakes Wilderness Area. In 1950, biologist Martin Pfeiffer conducted a fisheries survey on Brooktrout lake and wrote a four-page report extolling the virtues of the well-named lake. Sixty brook trout were caught—all of wild origin—ranging from 6.7 to 14.7 inches in length. He reported that the brook trout population was self-sustaining. Unfortunately, subsequent fish surveys over the years captured fewer and fewer fish until, in1984, no fish were found.

In 1992, the Adirondack Lakes Survey Corporation (ALSC) began a long-term monitoring program to assess trends in water chemistry in 52 lakes and ponds throughout the Adirondack Park. Two years later, Rensselaer Polytechnic Institute (RPI) began an independent assessment program to monitor chemical changes, and study acidification effects on fish and other aquatic biota on 30 of the 52 waters; these were concentrated in the southwest quadrant of the Adirondack Park. Brooktrout Lake was included as a study site in both of these programs.

Data collected at Brooktrout Lake by ALSC and RPI indicated that significant improvements had taken place in the lake's chemistry and biology over time. By 2005, the lake had recovered enough to consider restocking it with trout, and that fall DEC stocked fingerling Horn Lake Heritage Strain brook trout. This strain was chosen because it is native to Horn Lake, which is located about eight miles from Brooktrout Lake and in the same watershed. Monitoring the lake for changes in water quality and biota, DEC again stocked fingerlings in 2006, 2007 and 2008.

In 2010, Brooktrout Lake became a success story when the first wild trout offspring were netted in the lake. Two years later, a DEC hatchery technician observed and photographed a trout fry



Fishing for brook trout is a popular sport among anglers.



Researchers head to the Brooktrout Lake outlet to check on a beaver dam.



A researcher measures an adult brook trout before tagging and releasing it.



fingerling brook trout

(young fish) swimming in the near-shore area. This provided additional confirmation of an established, self-sustaining brook trout population. In June the same year, a field crew conducting a survey at Brooktrout Lake also observed and photographed several brook trout fry. It was official: Brooktrout Lake was the first verified example of recovery in a region heavily affected by acid rain.

The results from Brooktrout Lake are encouraging for other impacted Adirondack waters. In fact, there are several nearby lakes that are also becoming less acidic, and DEC recently began stocking trout in Deep Lake and Indian Lake. Honnedaga Lake in Herkimer County is also a success story.

As a person who likes to fish in the Adirondacks, I am very glad to hear about these recovering lakes. However, we still have a long way to go. Even with the reductions achieved under the Clean Air Act, computer models project that the problem of acidic deposition in the Adirondacks will continue for some time. Furthermore, once affected, some lakes can take up to a century to regain their ability to neutralize acid.

Brooktrout Lake's recovery provides an optimistic outlook for the recovery of more favorite fishing spots. This success story is motivation to continue the fight to save and protect the Adirondacks.

Leila Mitchell works in DEC's Division of Water office in Albany.

In 2010, Brooktrout Lake became a success story when the first wild trout offspring were netted in the lake.



A helicopter helps researchers bring in equipment for three days of study at the lake.



DEC's reintroduction of Horn Lake brook trout into Brooktrout Lake has been very successful.

Opposite page: Recording lake profile data on Brooktrout Lake

You Can Help Fight Acid Rain

There are ways we can all help reduce SO_2 and NOx. Since many of the pollutants are emitted from power plants, conserving energy is essential. Automobiles are also a source of these pollutants, so we can reduce emissions if we take public transportation or carpool. As a concerned citizen, notify your representatives in Congress to encourage them to support legislation that limits SO_2 and NOx emissions.

Real stories from Conservation Officers

and Forest Rangers in the field

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





Jaws of Life Saves Bear— St. Lawrence County

ECO Scott Atwood received a call from a concerned homeowner regarding a bear that had an old metal milk can stuck on its head. The homeowner said the can covered the bear's entire head, although the bear could see out the open bottom. Officer Atwood and DEC Wildlife staff set up a bear trap, and captured the bear after two days. They tranquilized it and the local fire department successfully used their "Jaws of Life" to remove the can. The bear was tagged, transported to a nearby state forest, and released back into the wild.

Rabid Bobcat— Tioga County

ECO Stan Winnick received a call from the Tioga County Sheriff's Department regarding a possible rabid bobcat in the Town of Nichols. A man had been working outside when a bobcat jumped on him and inflicted several deep wounds to his forearms. After fending off the bobcat, the man was taken to a local hospital. Approximately 30 minutes later, the bobcat attacked a dachshund just up the road from the first attack. The dog owner rescued his pet by shooting and killing the bobcat. Cornell University Lab confirmed it was positive for rabies. Unfortunately, the dachshund hadn't been vaccinated for rabies and had to be euthanized. The man who was initially attacked was treated for exposure to rabies and released from the hospital.

Smokey Situation— Queens County

ECO Alan Brassard was on patrol when he spotted a large black cloud of smoke in the distance. ECO Brassard found it was coming from a heavy-duty diesel vehicle of an age bordering on antiquity. The officer



stopped the vehicle, and conducted a safety check and smoke meter test. The old truck failed the smoke meter test and the driver was issued a summons for exhaust over the opacity limit.

Ask the Ranger

Q: My son was showing me pictures he took on his last climb. One was a hand-lettered sign at the base of the mountain that said "denettling ended." What is this sign?

A: Your son came across an old sign that was used to identify a problem area of nettles along the trail. Often called stinging nettles, these plants have numerous hollow stinging hairs on the leaves and stems which can cause a stinging sensation (hence the plant's name) in someone who comes into contact with them.



By Mike Adamovic

Mike Adamovic; inset by Jim Fowler

Nestled on an unassuming mountain slope, deep in the understory of the 2,700-acre Schunnemunk State Park in Orange County, lies one of the rarest plants in eastern North America: the small whorled pogonia (Isotria medeoloides). Only a single population consisting of six individuals of this federally threatened and state-endangered orchid is known to reside in New York. Until recently, no one even knew about these plants.

This species was thought to be extirpated from the state long ago, when the last two specimens disappeared from Onondaga County in 1976 as a result of habitat alteration. In 2010, 34 years after the two orchids were last spotted, a state botanist, looking for various rare plants, stumbled across the Schunnemunk population as she bushwhacked her way through a portion of regenerating forest in a remote section of the park. Today, the site is closely monitored to ensure that wildlife and the occasional hiker don't disturb these sensitive plants. Currently, the population appears to be stable, experiencing minor variations from year to year. Though survey work of historically recorded sites and areas of prime habitat have not turned up any new individuals, botanists believe it is highly probable that these plants exist elsewhere in the state, waiting to be found. The search for this elusive orchid can best be summed up as a "botanical treasure hunt." And, like a quest for precious metals or gems, one must be wary not to be deceived along the way by fool's gold. Large whorled pogonia (*Isotria verticillata*)—a separate, but closely related species that in many ways mimics the small whorled variety—can be found in modest numbers throughout the state. Indian cucumber-root (*Medeola*) *virginiana*) also superficially resembles these orchids and is often misidentified as such.

Small whorled pogonia generally can be found rising from the leaf litter to a maximum height of around 10 inches, with five to six leaves that are "whorled" or encircle the top of the stem, just below the flower. Leaves are light green and glaucous, meaning they have a waxy and grayish tinge to them, similar to a grape. The stem is short, robust and solid green.

Large whorled pogonia also possesses the same number of leaves, in an identical pattern. However, these are slightly darker and are not glaucous. This species has a slightly longer stem, and the bottom portion has a purple coloration. This is the easiest characteristic to differentiate the two species: a light green stem for small whorled; purplegreen for large whorled.

Both orchids can be found in bloom at similar times, starting in May and lasting until mid-June. Flowers endure little more than a week. Each plant has a single, yellow-green flower, but on extremely rare occasions may be found with two. Not surprisingly, the flowers of small whorled pogonia are tinier and have shorter sepals (small petal or leaf-like structures found directly beneath the petals) that are entirely green and less than an inch in length.

In order to locate both species, it is necessary to visit the proper habitat. As with most organisms, orchids are not randomly distributed, but are generally found in clumps in a highly specific environment with little conditional variation. These orchids prefer to sprout in moist, but well-drained deciduous forest that contains acidic soil. They especially favor gently sloping hills or mountains that have secondary forest growth, having been logged or disturbed in the past, and are in the process of regenerating. The largest populations of small whorled pogonia normally contain no more than 20 orchids.

Often, small and large whorled pogonias can be found growing side by side, and in areas in which Indian cucumber-





Indian cucumber-root



small whorled



large whorled



Jim Fowler

Identifying small and large whorled pogonias can be difficult, especially since they are similar to Indian cucumber-root. A helpful way to tell the difference is that both orchids have fleshy, smooth stems while Indian cucumber-root has a wiry stem, often with white hairs.

root also makes an appearance. The Schunnemunk site, for example, has all three crammed together. This can make identification of small whorled pogonia very difficult and is probably the reason more populations have not been discovered. This plant is undoubtedly rare, but the fact that it doesn't stand out from understory vegetation when not in bloom makes overlooking it incredibly easy, even for botanists. Plants can also go up to eight years between blooms, making identification of new populations legendarily tricky.

It is not well understood why small whorled pogonia is so much rarer than its relative, but orchids in general are uncommon primarily for two reasons. First, most orchids reproduce slowly, as evidenced by these plants remaining dormant or not flowering for long spans of time. Second, while they do produce voluminous quantities of seeds, very few ever sprout. Unlike most plants, the seeds of orchids do not contain a food supply to help with germination. Instead, orchids form a mutualistic relationship with mycorrhizal fungi that help germinate the seeds and supply them with the necessary nutrients for growth. Unless the proper fungi are present in the soil, seeds will not begin to grow.

Seeing these plants in their proper habitats is the best way to gain some experience for future searches of small whorled pogonia. It's difficult (and tedious) to wander the woods in search of an orchid. It's necessary to be aware of other common plants that can lead you to these rarities. Orchids are often present in conjunction with several other plant species that can be used as indicators for the possible presence of pogonias. A partial list includes: American beech, hemlock, red maple, red oak, witch-hazel, wintergreen, partridgeberry and various ferns.

If during a walk or hike you happen to come across a specimen of small whorled pogonia, please contact the NY Natural Heritage Program. This state-run organization maps the distribution of rare plants in New York and is instrumental in making sure these gems remain protected. It's important to note that orchids do not transplant well and will probably die if removed from their native habitat. Mycorrhizal fungi that help the plants germinate stay with the orchids for the entirety of their lifespan, forming a mutualistic association. Uprooting a plant damages this bond, and as most soils do not contain the proper fungi to reestablish it, these sensitive plants will not survive the move. Like most things, small (and large) whorled pogonias are best viewed in the wild.

These orchids are a hidden gem in New York's forests and—just like buried treasure—are a rare and exciting find. Though, unlike a pirate's stash, these plants are a delicate bounty not to be disturbed. So, keep your eyes peeled and your camera handy; during your next outing, you may come across a hidden community of small whorled pogonias.

Mike Adamovic has a Bachelor's degree in Environmental Studies and enjoys searching for and photographing rare plants in the Northeast.

Preserving New York's Natural Communities



The NY Natural Heritage Program is a partnership between DEC and SUNY Environmental Science and Forestry, set in place to help conserve rare animals, rare plants, and natural ecosystems, or "natural communities." NY Natural Heritage maintains the state's most comprehensive database on the status and location of these unique species and natural communities. With the help of volunteers, staff has compiled data on more than 12,800 locations throughout New York where 802 rare plant and 466 rare animal species are found. This data is essential to their preservation, and for guiding land-use and land-management decisions where these species and communities exist. Visit **www.dec.ny.gov/ animals/29338.html** for more information about the program, including how to contribute data.





70 YEARS OF VIGILANCE — The True Story of Smokey Bear

On August 9, 2014, Smokey Bear will celebrate a birthday—his 70th to be exact. Smokey is the emblematic image that fronts the longest-running public service announcement in U.S. history. A 2012 poll showed 96 percent of Americans recognized Smokey. One might ask how he has maintained such an iconic image for so many years. The answer may be simpler than you think.

Smokey's message of wildfire prevention is just as valid today as it was in 1944. Wildfires in this nation have always been, and will continue to be, a human-caused problem. Simply put, 9 of 10 wildfires nationally are caused by human activities, and in our state, that number rises to 96 percent. So if not lightning strikes, what are the major causes of wildfires? The answer is just what you'd expect: unattended campfires, the burning of debris or brush, improperly extinguished smoking materials, dumped coals or ashes from fireplaces/grills, equipment that creates sparks, and arson.

In 1950, Smokey Bear became more than a simple print icon when a black bear cub was rescued after a wildfire had burnt through the Lincoln National Forest in New Mexico. The cub had climbed a tree to escape the fire, and although his life was spared, he was badly burned. With proper medical attention, the little cub survived his ordeal. Because carelessness had caused the wildfire, the bear cub was

Today, Smokey interacts with audiences, promotes wildfire prevention, and delivers fire safety tips through social media

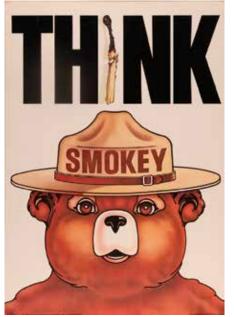
Years ago, many people wrongly believed (and some still do to this day) that lightning is the leading cause of wildfires. This incorrect belief led to the development of Smokey's original catch phrase: "Care will prevent 9 out of 10 forest fires," which lasted until 1947. Since then the message has been changed to what most people will recognize today, "Only You Can Prevent Forest Fires." In the 2000s, the term "Forest Fire" was replaced with "Wildfires," to represent the increased focus on all types of wildland fires, not just forests. given the moniker, "Smokey," in honor of the icon created just six years before.

The actual bear became the living symbol of wildfire prevention. Smokey was moved to the National Zoo in Washington, D.C. where he lived the rest of his days as a reminder that wildfires have the potential to destroy much more than just trees and brush.

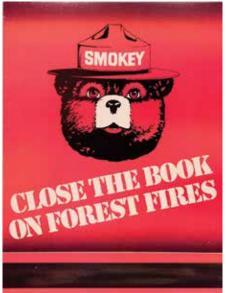
A recent phenomenon has strengthened the need for Smokey's time-tested cautionary message, that being the trend of people moving from urban areas into areas historically prone to large-scale wildfires. **By David Russell**







1974



1984





We should all be concerned about the future because we will have to spend the rest of our lives there. The move is often prompted by a desire to get closer to nature to enjoy the beauty provided by forests and other wildlands. This area where wildfire-prone natural vegetation combines with human development is called the Wildland-Urban Interface (WUI). Fires in the WUI can affect much more than just trees and vegetation; large fires can disrupt recreation and tourism, threaten drinking water sources with excess run-off, damage or destroy houses, and put firefighters' and residents' lives at risk.

Importantly, Smokey's message is not "no fire." Instead, he promotes caution. Used responsibly, prescribed fire can promote healthy forests and provide value for many Americans who enjoy recreating and working outdoors. Prescribed burns can also reduce the intensity of future fires by preventing fuel from building up on the forest floor.



DEC photo

Many generations of Americans have grown up with the Smokey Bear icon. Landowners, forest rangers and conservationists of all ilk should rest assured that for years to come, Smokey will be teaching new generations about the threat of wildfire and the importance of exercising caution. Remember Smokey's rules for wildfire prevention:

- Only you can prevent wildfires
- Always be careful with fire
- Never play with matches or lighters
- Always be in attendance of your campfire
- Make sure your campfire is completely out before leaving it

Today, Smokey interacts with audiences, promotes wildfire prevention, and delivers fire safety tips through social media, including Facebook, YouTube, Instagram and Twitter. Smokey's website, **www.smokeybear.com**, includes resources for audiences of all ages and provides wildfire prevention tips and games, as well as a look at Smokey's history. Readers young and old should check these resources for more information, or just for a pleasant trip down memory lane.

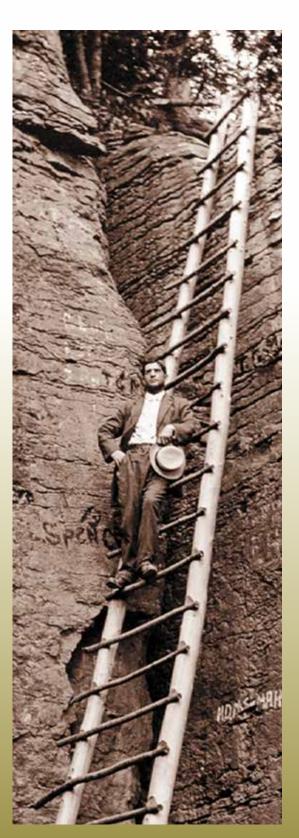
Enjoy your outdoor activities this summer. Use fire responsibly, and please remember to exercise caution. Smokey Bear appreciates it.

Forest Ranger David Russell is the New York State Wildfire Prevention and Education Specialist.

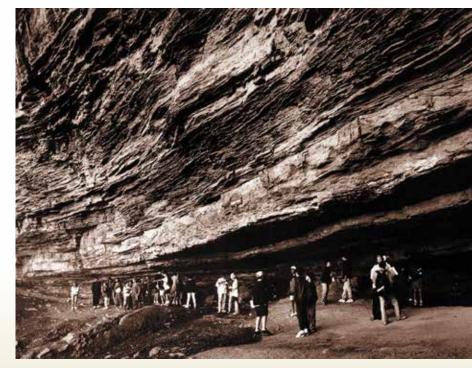
For more about Smokey Bear, see the October 2009 and August 2004 *Conservationists*.

Thacher State Park: 100 Years of Outdoor Recreation





By Wendy Gibson

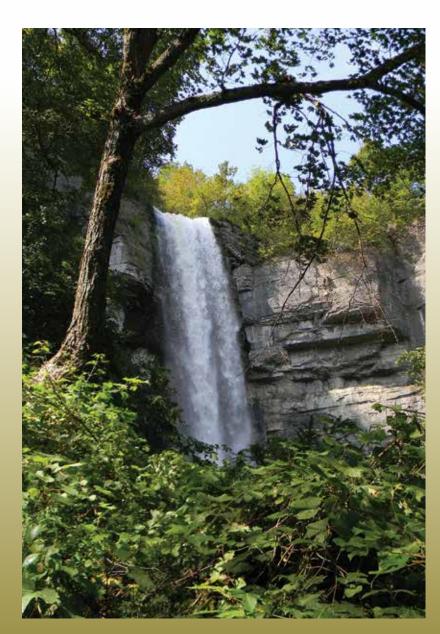


Praised as a paradise for geologists and acclaimed for its stunning views, John Boyd Thacher State Park has introduced countless families to the outdoors for the past 100 years. Located atop the magnificent Helderberg Escarpment, the park's roots trace back to the early 1900s when John Boyd Thacher and his wife Emma began acquiring land there to protect it from development. By 1909, when Thacher died, the couple owned numerous ridge-top parcels, setting the stage for the family's land donation of 350 acres, and the park's subsequent establishment in 1914.





John Bulmer



One hundred years later, Thacher Park has grown to 2,400 acres including Thompson's Lake State Campground and the Emma Treadwell Thacher Nature Center. Along with the panoramic views of the three-mile-long, 1,200-foot-high limestone escarpment, other highlights of the park include trails such as the popular Indian Ladder Trail with its 100-foot waterfall, picnic pavilions, athletic fields, a swimming beach, and a variety of exhibits and educational programs about the area's unique natural history. Thacher offers four seasons of adventure with lake swimming and boating, hiking, mountain biking, cross-country skiing and snowmobiling.

To mark Thacher Park's centennial and honor the legacy started by its namesake family, a free celebration will be held at the park Saturday, September 13, 2014 from 10am-7pm.

Wendy Gibson heads the marketing and promotions unit in the NYS Office of Parks, Recreation & Historic Preservation office in Albany.



By Don Nelson; photos provided by author

The call came in on a Friday evening in August. Long Island DEC Forest Ranger Kevin Slade was on the other end. Kevin was no stranger to me; we worked together on the Crazy Mountain Complex fire in Alaska in '09. He told me we were going to Idaho and that he would be my squad boss. Idaho was the hottest spot in the country for fire activity that week. He said we were to meet at the cache in Saratoga on Sunday morning at 10:00 a.m.

So it was set. I was on the Initial Attack Type 2 NYS Fire Crew #1, Squad #1, heading west to do our part in the suppression of wildland fires in 2013. On Sunday morning I said my "see ya laters" (at my house, we don't say 'good-bye' because it seems too final) and was on the road. I arrived at the cache about 9:30 a.m., ready to gear up. The cache of gear and personal protective equipment was located at DEC's Saratoga Tree Nursery, and my excitement began when I pulled in the driveway.

Familiar faces greeted me; some from the California crew of '08, others from Alaska in '09, and still others from work. When I checked in, DEC's Lisa Smith told me of a change in plans: we were headed to Montana instead of Idaho. The new plan included busing to Manchester, New Hampshire, where we were to meet up with a crew from Cape Cod. From New Hampshire, we would fly to Harrisburg, Pennsylvania to pick up two other crews, then to Duluth, Minnesota for one more. This would be a plane of 100 firefighters.



A typical firecrew consists of firefighters, squad bosses, and crew bosses. For this assignment, each of our three squads had one sawyer (runs the chain saws to cut trees), four firefighters, and a squad boss.

By 10:30 a.m. I had my gear, fire shelter and personal protective equipment. I weighed in. We are allowed only 65 pounds, including clothes, sleeping bags, tents, personal care items, fireline pack and fire shelter. My gear weighed 64 pounds. I was relieved because I didn't have any fat to trim (at least not from my gear). As the rest of the crew weighed in, we received our briefing from our crew

I've learned that situational awareness is the key to living another day.

boss, William Meehan, and crew boss trainee, William Giraud; both DEC forest rangers. Forest Ranger Division Director Joseph Zeglen and Colonel Andrew T. Jacob also addressed the crew, and then we boarded the bus for New Hampshire.

After we spent the night in the National Guard facility, we boarded the plane Monday morning. We were greeted in Missoula, Montana by a tall column of smoke on the horizon. Everyone was hurried onto retired school buses; it was the last time we would see the other crews until our return on September 2nd.

We headed to the Montana Department of Natural Resources and Conservation (DNRC) headquarters in Missoula, and learned that the Lolo Creek fire had "blown up" from three acres one day to approximately 3,000 acres the next. The fire had joined the West Fork fire; together they formed the Lolo Creek Complex. Originally under control of the DNRC, the wildfire's rapid growth made it fall under the control of the federal government. All firefighting resources were pulled from the fire on August 19th because of uncontrollable spreading and dangers to personnel. Everyone involved reassessed the situation.

Once an attack plan was configured, the Incident Command (IC) at DNRC got busy allocating our crew the necessary resources to commence work. Squad by squad, we gathered our wildland firefighting tools: shovels that have a sharpened edge; combis, which are similar to army shovels except they have long handles; pulaskis, which have an axe on one side and a trenching-type spade on the other; axes; and chain saws. Each squad was then assigned vehicles. We became a true Initial Attack Wildland Fire Crew: ready, willing, and able to address the needs of the DNRC. On Day Two, we staged at the DNRC's headquarters before being deployed to the Lolo Creek Complex to assist the Idaho Hotshots (an elite, highly trained group of firefighters) with a burnout operation. The game plan was to hold a fireline on the burnout to make sure fire did not retreat across the established line. We deployed our squads on a logging road, which was used to create the fire break, and kept watch on the green side of the fire. (In fire terms, "black" areas are already burned; "green" areas are unburned.)

The terrain in Western Montana is very steep, rocky and well-forested. There are plenty of forest fire "fuels" (living and dead wood), and the potential exists for ignition from the smallest of sources. The black area was uphill from us and smoldering debris would routinely roll down. We would try to stop it, but small embers would inevitably get by and start small spot fires. Because midday humidity dropped to only 10 to 12%, the forest litter was dry so that as soon as an ember touched it, it ignited. Our job was to contain those individual spots, and to stop them from taking off and burning areas



Intense heat and dry conditions can cause trees to explode into flame and "torch" like this one on the Lolo Creek complex.

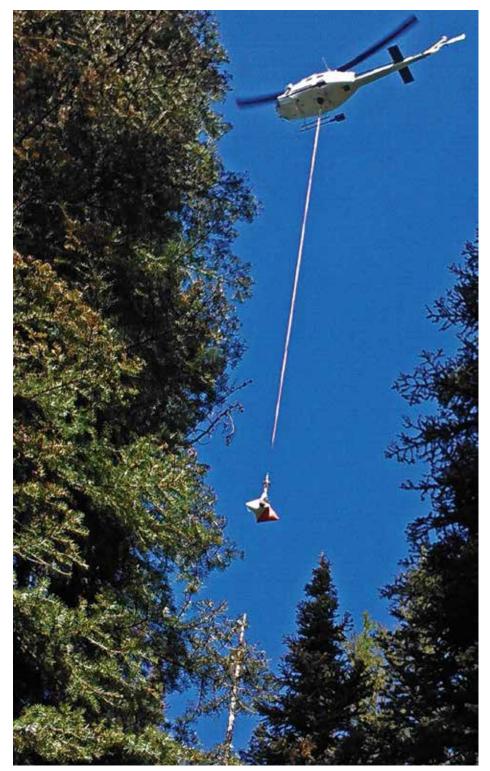
behind the line, and more importantly, behind us. We ended that day with 100% success; we held the line.

The next day, we assisted the Hotshots again and dug a fireline up the side of a mountain to join a dozer line later that day. The terrain was extremely steep, and with fire burning to our left, we completed the task with a great sense of accomplishment. Helicopters dropped water on the fires to our left and eased our command's concern for our safety. We then moved into the lower land to establish protection around several residences in the fire's path. We dug firelines around them and positioned sprinklers. It worked. Although the fire approached these structures, not a single structure was lost.

By night, the fire had grown; it was an amazing sight. Fire really does appear to be alive—at times moving through the forest like an animal stalking prey, and at other times like the furious attack when prey is brought down. Fire commands respect and understanding.

A few days later, we were back working containment with fire on all sides. It was a grueling, hot day with low humidity, and we worked feverishly, digging a half-milelong fire line. The whole crew was there; we worked like a well-oiled machine. (At times, western crews doubt the abilities of crews from NYS. We soon put that to rest. Through example, we demonstrated our knowledge and ability. They knew we were the real deal.)

The next day, we returned to the DNRC, who needed us to chase fires ignited by lightning strikes. This time we were deployed as individual squads. My squad traveled deep into state lands for a fire spotted by a reconnaissance flight. The helicopter pilot directed us to the best access point via vehicle, then we hiked an additional hour and a half to the fire. It was rugged terrain and one wrong step could spell disaster. Fortunately we made it in unscathed.



A helicopter carries a portable, collapsible tank of water (called a blivet) to drop on the fire.

Dehydration is a constant battle for wildland firefighters. A few folks had felt its effects in the previous days, but were able to recuperate fully. This day would prove difficult for me.

The Bateman Creek fire was at the bottom of an extremely steep ravine. Our

sawyer cut away trees that were hazards or in the way. We worked quickly to start our containment. By nightfall, we had made a containment line about two-thirds of the way around the fire. Our incident commander believed we could leave the fire for the night, so we headed back to our vehicle.



A crew of wildland firefighters dig a fire line in an attempt to contain the fire.

At about 9:30 p.m., we began our ascent. By the time we got to the top, I was feeling the physical exertion. Trying to stay hydrated, I had regularly consumed water, but apparently not enough. My leg muscles began to feel unsteady and about 30 minutes into the hike I had a significant cramp in my left leg. I rested for a short time. We resumed our travels but it was difficult because of the terrain and darkness. Our IC was accustomed to the terrain; he traveled it with ease. (I thought he had to be part mountain goat.) Some of my squad was able to keep up with him, but I was bringing up the rear. My leg cramped again, so I drank some water and Gatorade. It wasn't enough; 30 minutes later my other leg began to cramp.

My squad members were great and recognized my condition. They all tried to assist me. I drank more water and snacked on some banana chips. The thought of sleeping there crossed my mind, but I knew if I kept going, I could do it, so we pushed on.

Relief washed over me when we reached our parked vehicle, and the realization that I had been the weakest link hit me. I knew my dehydration was temporary, but the fact remained: I had presented a potential risk to my squad. I made certain that it wouldn't happen again, and it didn't. Dehydration can be avoided. I made sure to keep my end of the bargain.

We slept at the logging road that night, and in the morning were treated to a unique sight: a herd of about 25 elk came within 100 yards of our campsite. One 5 x 5 bull (here we would call him a 10-point) was obviously the leader; it was an incredible sight.

We headed back into the fire, taking a more terrain-friendly way. Armed with several quarts of water and with rested legs, I was a new man!

We reached the site, and cleared a spot for a helicopter to drop supplies. NYS squad #2 joined us and we made quick work of getting the fire under control. By late afternoon, we headed out.

When fighting fires, you are at the mercy of many variables, and this time it was the weather. A significant thunderstorm rapidly approached. We hustled up and crested the steep wall just as the storm hit. Driving rain and lightning were hitting, so we swiftly moved off the ridge to wait out the storm. It had rained enough to get us wet, but with such low humidities, our clothes and gear were dry in a few minutes. That was amazing to me; I wasn't used to the arid climate. At home, I am certain it would have taken three times as long to dry out.

We were sent out to another lightning fire farther back in the wilderness. We worked late into the night before retreating to sleep under the stars. This time we were at 6,300 feet of elevation, in grizzly and cougar country, with a million stars overhead. I saw four shooting stars. The most memorable of them was right above me with a tail that stretched across the entire sky. I was in awe.

As I look back on my experiences during those weeks and think of the inherent risks associated with firefighting, I realize how easy it would be to become complacent. I've learned that situational awareness is the key to living another day. Accidents happen, and conditions can change quickly. For this reason, I am grateful that I am under the watchful eye of the NYS Forest Rangers. The rangers are extremely well-qualified in fighting fires and incident command.

I am glad I got to be on the fire crew in Montana. Montana is quite beautiful, but in all reality, I think New York State is one of our nation's greatest treasures.

I can honestly say I love New York.



Don Nelson is a pesticide control specialist in DEC's Cortland office.

BRIEFLY Compiled by Jenna Kerwin and David Nelson



New Record Striped Bass

On May 14, Eric Lester of Campbell Hall (Orange Co.) caught a 60-pound, 53.4"-long female striped bass from the Hudson River in Newburgh, setting a new state record for the largest inland striped bass. Lester submitted details of his record-breaking catch to DEC's Angler Achievement Awards (www.dec.ny.gov/outdoor/7727.html), which recognizes anglers for exceptional catches. Lester's catch is also the first newly listed record on the NY Fish and Wildlife App, a free mobile app that provides up-to-date information on fishing, hunting, wildlife watching and more outdoor opportunities in New York. The app is available for free download in the iPhone and Android markets.

Anglers Wanted!

DEC is looking for anglers to help with its Finger Lakes volunteer angler diary program for the four eastern Finger Lakes (Cayuga, Owasco, Skaneateles and Otisco). Anglers are asked to record trip and catch information in specific diaries that DEC provides. Volunteers provide valuable information on growth rates, stocked fish recruitment and angler success rates, which help in management efforts. Visit **www.dec.ny.gov**/ **outdoor/27875.html** for more information about the program, including how to sign up.

Zero Emission Vehicles

Recently, New York and seven other states agreed on the Multi-State Zero-Emission Vehicles (ZEV) Action Plan, to dramatically increase the number of clean vehicles on U.S. roads by 2025. The action plan establishes a variety of goals for clean vehicles, including: providing consumer incentives for ZEV purchases; building a ZEV market by planning and investing in critical infrastructure like fueling stations; and tracking progress toward the main goal of having 3.3 million ZEVs on the road by 2025. The plan falls in line with Governor Cuomo's 2013 Charge NY initiative, a program designed to create up to 3,000 public and workplace charging stations and 40,000 plug-in vehicles on the road over the next five years. Currently, more than 8,000 electric vehicles and 900 charging stations exist in the state. Visit http://bit.ly/SYUzSO to learn more.

Boaters—Help Stop Invasives

DEC recently adopted new regulations requiring all boaters to remove any visible plant and animal materials from boats, trailers and other equipment, and to drain boats before departing the launch, as well as prior to launching from DEC lands. The regulations will help combat the spread of aquatic invasive species. Boaters should dispose of any materials in Nuisance Invasive Species Disposal Stations located at many DEC boat launches, or in the trash or an upland location away from the launch. Additionally, boaters intending to boat on Lake George are reminded of the Lake George Park Commission's new regulations which require all boats to be inspected for aquatic invasive species prior to use. Information can be found at **www.lgboatinspections. com**. Visit **www.dec.ny.gov/regulations/95111.html** to learn more about the new regulations.





photo courtesy of US F&WL Service

BRIEFLY



New Opportunities on Refuges

The U.S. Fish and Wildlife Service recently expanded hunting and fishing opportunities throughout the National Wildlife Refuge System. Currently, hunting is permitted on more than 335 refuges; fishing on more than 271. The USFWS maintains hunting and fishing programs on refuges to ensure sustainable wildlife populations, as well as to offer outdoor recreation. The USFWS opened several refuges to big game hunting for the first time, including the Shawangunk Grasslands National Wildlife Refuge. Additionally, sport fishing has been expanded on many refuges. Visit **www. fws.gov/refuges/hunting** and **www.fws.gov/fishing** to see lists of hunting and fishing opportunities on refuges.



Darren McGee

B.A.S.S. Returns to New York

The Bassmaster Elite Series Tournament—the world's premiere bass fishing tour—returns to New York this fall. With New York's wide variety of coldwater, warmwater and saltwater fish species, the Bassmaster Series will highlight and promote the state's many fishing and vacation opportunities. The event will also include the Governor's Challenge fishing competition, featuring the Governor, elected officials from New York and some of the biggest names in professional fishing. There will also be fishing demonstrations and a banquet. Visit http://bit.ly/TOa1BM for more information.

New Lands

New York recently acquired 590 acres of land on Balsam Mountain in the Catskill Park from The Nature Conservancy. Most of the new lands, which feature old growth forests, will be added to DEC's Big Indian Wilderness. This new acquisition will help preserve critical habitats for species, and expand outdoor recreation opportunities. In addition, because of its location, Balsam Mountain helps to ensure clean drinking water for people living in New York City. Visit http://bit.ly/llcP1u2 for more information.

In Remembrance

Last spring, two DEC Law Enforcement K-9s and one family dog died from smoke inhalation due to a house fire. The dogs' handler, ECO Brett Armstrong, and his family returned from an outing to discover their home full of smoke and flames. Fire-



fighters found the dogs inside. Three-year-old "Hawk" was in the process of completing his training, and ten-year-old "Nitro" was a well-known German shepherd often used for his wildlife detection and tracking abilities, and used in public appearances. The family dog was a chocolate Labrador retriever, "Shadow." This summer, ECO Armstrong began training with a young German shepherd, "Phoenix." DEC's K-9s work with ECOs to aid in wildlife and firearm detection, tracking and the protection of their handlers. Visit **www.dec.ny.gov/regulations/2427.html** for more information about DEC's Division of Law Enforcement's K-9 Units.



Nitro

LETTERS By Eileen Stegemann and Jenna Kerwin



Photogenic Owlets

This photo was taken by our 15-year-old son, Jared, in our backyard. We have been observing what appears to be a family of six owls (four juveniles and two adults) for about a week.

Patti, Larry and Jared Doyle Clyde, Wayne County Fun picture! Can our readers spot the fourth owlet?



Sunflower landscape by Shelly Lannon of Clifton Springs, Ontario County

Moose in the Mist

I photographed this Adirondack moose at Helldiver Pond. Rhys Templar, Madison County

What a great shot! You were lucky to photograph what very few New Yorkers get to see—a moose in the wild. One of the largest land mammals in North America, adult bull moose (like the one pictured here) average six feet tall at the shoulder and can weigh as much as 1,400 pounds. Thanks for sharing your picture with us.



New York State Conservationist, August 2014

LETTERS



Fuzzy Caterpillar

I found this strange-looking bristly caterpillar. I never saw anything like this before. Can you identify it?

Linda Anderson

Barryville, Sullivan County

You've captured images of a milkweed tussock moth (milkweed tiger moth) caterpillar (Euchaetes egle). These caterpillars dine exclusively on milkweed. The caterpillars and adult moths can be found throughout the eastern United States, west to Minnesota and Texas.



Lizard in the Highlands

I spotted this northern fence lizard in the Hudson Highlands. What can you tell me about fence lizards?

Mike Adamovic Dover Plains, Dutchess County

Northern fence lizards are native to New York, but occur only in a few isolated colonies in the southeastern part of the state. They prefer dry, rocky hillsides within oak or oak-pine forests and you can often spot them basking on rocks and logs, or around and on the base of trees or brush piles. For more information on New York's lizards, check out a copy of the August 2006 Conservationist online or at a local library.



Ask the Biologist

Alice M. Steele

Q: I used to see monarchs all the time, and now it seems as though there are very few. What happened to them?

A: During the past few years, scientists and butterfly enthusiasts alike have noticed a dramatic decline in monarch populations. The causes of decline are widely disputed; however, today there are certainly far fewer milkweed plants in the northern U.S. and Canada than years ago. Milkweed is vital to the butterfly's survival because the caterpillars feed exclusively on this plant.

The complex life cycle of the monarch occurs in four main stages: the egg, the caterpillar, the pupa (chrysalis), and the winged adult. There are multiple cycles of monarchs during their northern migration, as they move slowly, following the spring growth of the milkweed plants. The north-flying adults generally live for a only few weeks, but the south flying adults can live for as long as nine months as they trek to Mexico to overwinter.

Here in New York, peak fall migration occurs between late August and mid-September. You can help these butterflies by reporting sightings, and by protecting and conserving milkweed habitat. Visit **www.monarchwatch.org** to see specific migration times and to find out how to: create your own "Monarch Waystation" (habitat); rear and tag monarchs; and much more. And, be sure to visit Monarch Watch on Facebook for more updates and information.

-Conservationist staff, with Research Scientist Jerry Carlson

Contact us!

E-mail us at: magazine@gw.dec.state.ny.us Write to us at: Conservationist Letters NYSDEC, 625 Broadway Albany, NY 12233-4502 facebook.com/NYSDECtheconservationist

Back Trails

Perspectives on People and Nature

John Bulm

Homemade Playground by Kathleen M. Lamanna

People don't understand the meaning of "coming from a small town" until they've been to Highmarket, New York. To be fair, I guess it isn't really a town any more. But it used to be—there was a cheese factory there, once upon a time. Now, Highmarket is the home of deep swimming holes, massive trout, beaver dams, and a few, brave human souls.

My family has lived in Highmarket for longer than my sister and I have been around. We grew up with flower gardens lining our driveway and fresh cut grass invading our noses. We put kiddie pools full of cool, well water on our kitchen floor to avoid the mosquito-filled, stickyhot summer days. At night, we sat on the swinging bed that our mother made on our porch, and watched fireworks that our father set off in the yard.

My sister and I would go down to the stream, build a dam, wade in, and then flip rocks to catch crayfish. Once we got a plastic bucket-full, we would pad back down the dirt road to our house and play with them before transporting them down to our pond. We would cross the river to get to our island where we would build forts and clamber onto sloped trees to watch the water waver and gleam in the cool, stagnant air. When we grew up a little, we would take the same kiddie pool that once sat in our kitchen and put it in our pond, fabricating a leaky, wobbly, twoperson skiff.

Some days we would adventure through the woods, across the narrow dirt road, until we reached our secret swimming hole. We would bushwhack through the woods till we got to the clearing of the creek, emerging with battle wounds of deep, thin, scratches from the pricker bushes. The cool water soothed our bare feet as we relaxed in the sun. One time, we found a concrete anchor at the water's edge and dragged it all the way back to the house. It still sits on our front steps.

We grew up learning how to properly pick blackberries and blueberries and raspberries: gentle, don't tug; let it fall into your hand; whatever you do, don't pick the green ones. We grew up helping with hay season—although I'm pretty sure we only helped so we could jump out of the hay mow into the pile of loose hay on the ground after the day was done. We made lemonade from scratch, making sure to never forget the orange slices.

In autumn, we would rake leaves in a pile under the old maple tree, then climb as high as we could to make the biggest "splash" in the pile. We would spread the pile out and try to make snow angels in the burnt orange and ruby red leaves that were as intricate and detailed as the flakes that would be falling in a few months.

In winter, we could walk right up on the roof because the snow banks were so high. Taking our purple plastic sleds with us, we would slide down, from roof to ground, to see who could get the farthest down the icy driveway. When we were cold, we'd scurry in to get hot chocolate and watch Dad plow the driveway through our curtain-less picture windows.

My sister and I used to pick wild flowers, play with barn cats, and panic at the first sign of play-reducing rain. We went on hourly adventures in our ferncovered, mossy woods of a backyard. We climbed on rock piles, ran screaming from snakes, and rode our bikes up and down the unpopulated dirt road, always being cautious of the bears that could appear at any moment.

My sister and I were raised on that back road, fern-clad, hill. We learned how to fend for ourselves, and how to make a game out of everything. From the woods we made our own playground; we had fun, adventured, fell down, got back up, and, ultimately, grew up.

Kathleen M. Lamanna is a senior majoring in English/ Creative Writing at Wells College in Aurora, NY.

Bill Banaszewski



New York State Conservationist, August 2014

INVEST IN OUR FUTURE





im Clavto



When you purchase a \$5 Habitat & Access Stamp you help open and improve land for outdoor recreation. It's a perfect way to conserve New York's wildlife heritage. All funds are deposited in the **Conservation Fund's Habitat Account.**

For more information, talk to your license issuing agent, or visit www.dec.ny.gov

1948



1964



See pg. 20



Subscribe today! Call 1-800-678-6399

Visit online: www.TheConservationist.org

