

DEC Summer Camps | Hudson River Almanac | Clarence Petty

# NEW YORK STATE Conservationist

FEBRUARY 2009

The Only Rock We Eat  
Mining for Salt in New York

Adirondack  
Fish Story  
In Search of the Frostfish

Conservationist for Kids!  
New issue inside



Dear Reader,

Fifteen years ago, the Hudson River Almanac began with a single entry. Today, New Yorkers up and down the Hudson River Valley – ranging from elementary school students to professional biologists – contribute their writings about nature every week in this important nature journal. From the Adirondack High Peaks to New York Harbor, entries in the Almanac include wonderful imagery of the Hudson’s crystal waters and natural surroundings, reports of sightings of a wide array of wildlife, including hawks, eagles, owls, snow geese, and much, much more. If you’d like to recount your own Hudson River experiences in the Almanac, just visit <http://www.dec.ny.gov/lands/25608.html>

In addition to participating in the Hudson River Almanac, various other citizen science projects allow you to play an important role in gathering data on New York State wildlife. For example, DEC’s Bureau of Wildlife routinely uses information collected by observers like you while bird watching, hunting, fishing, hiking, or scouting. You can also explore the Cornell Lab of Ornithology’s and Bird Studies Canada’s project FeederWatch, a citizen participation study where people report on the number and type of birds visiting their feeders during the colder months.

Visit our website at <http://www.dec.ny.gov/animals/1155.html> for information on and how to get involved in a citizen science project. And whether or not you join one of these great (and important!) activities, I encourage you to take time to get outdoors to experience New York State’s spectacular natural wonders.

Sincerely,  
Commissioner Pete Grannis

# NEW YORK STATE Conservationist

Volume 63, Number 4 | February 2009

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Salt pillar by James Clayton

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# River Reflections

## The Hudson River Almanac turns 15

by Steve Stanne

Writers have seldom been at a loss for words to describe the Hudson River. Poems, essays, novels, scientific treatises, and even histories—millions of words have been printed about the Hudson’s splendors. But one of the most engaging and illuminating forms of writing about the river is also one of the briefest and simplest: the journal entry.

For the last fifteen years, The Hudson River Almanac has

served as a journal of the river’s natural history. Its entries—concise observations and reflections from hundreds of river lovers—capture the spirit, magic, and science of the Hudson from the High Peaks of the Adirondacks to the sea. Its present format and distribution take advantage of modern technology; the Almanac is a digital journal distributed weekly via e-mail. However, its entries bring to mind those in the first written record of the Hudson Valley:

*“The eleventh, was faire and very hot weather. At one of the clocke in the after-noone, wee weighed and went into the Riuer, the wind at South South-west; little winde. Our soundings were seuen, sixe, fiue, sixe, seuen, eight, nine, ten, twelue, thirteene, and fourteene fathomes. Then it shoalded againe and came to fiue fathomes. Then wee Anchored, and saw that it was a very good Harbour for all windes, and rode all night.” Robert Juet - September 11, 1609*

Four hundred years ago, Robert Juet's journal entry for September 11, 1609, marked the entrance of the Dutch ship Half Moon into the river later named for his captain, Henry Hudson. (To read Juet's journal, go to the New Netherland Museum website at [www.halfmoon-mus.ny.us/](http://www.halfmoon-mus.ny.us/).) Over the next few weeks, Juet noted the river's physical characteristics: its depths, shoals, winds, tides and currents. His entries describe fish "...they took four or five and twenty Mulletts, Breames, Bases, and Barbils..." and trees "...goodly Oakes, and Wal-nut trees, and Chest-nut trees, Ewe trees, and trees of sweet wood in great abundance..."

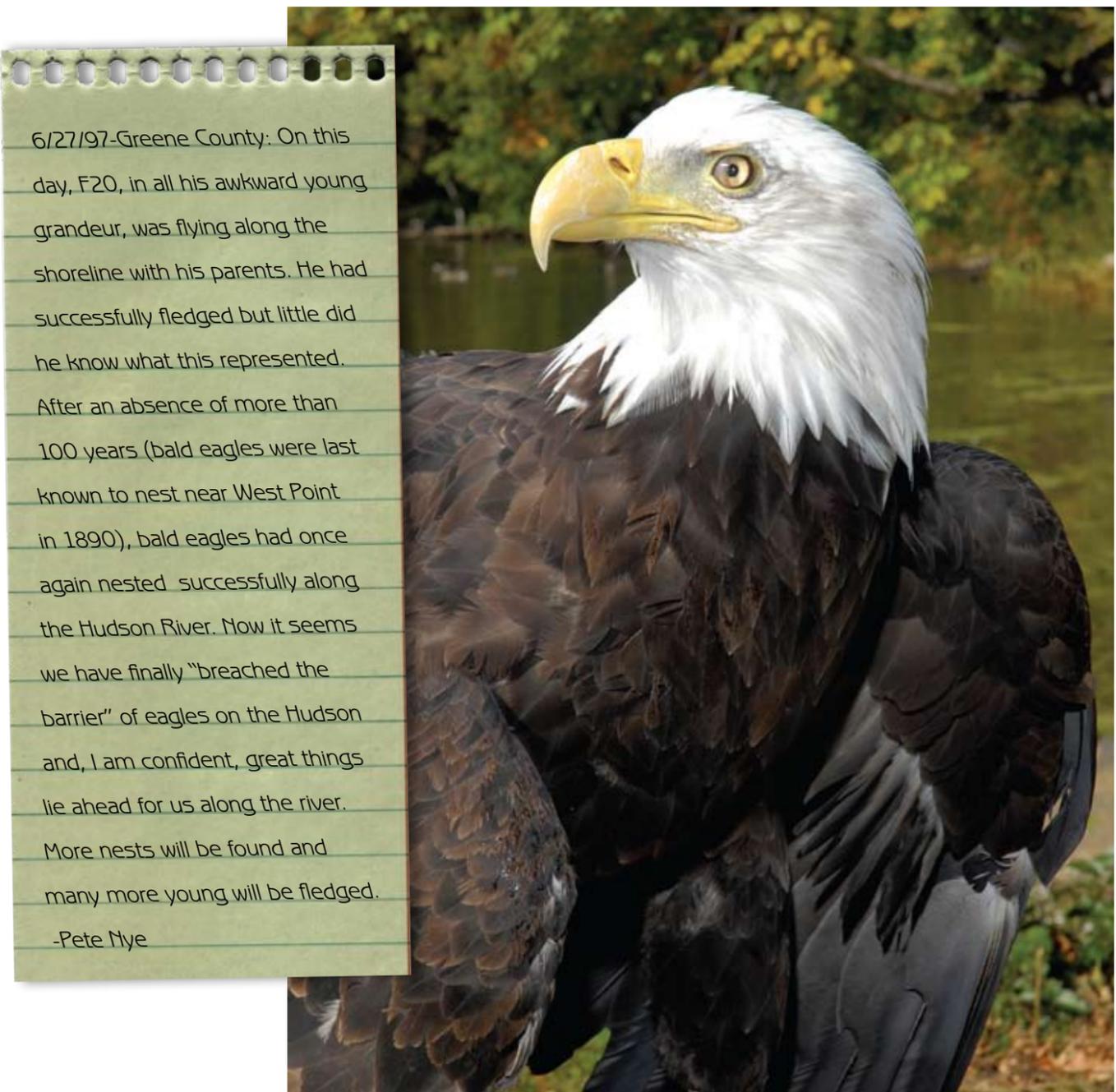
Reporting on an exploration of the Kill Van Kull between modern day Staten Island and Bayonne, Juet wrote: "The lands they told us were as pleasant with Grasse and Flowers, and goodly Trees, as euer they had seene, and very sweet smells came from them."

Hudson's own logs of the Half Moon's voyage were eventually lost, so Juet's writing conveys the earliest European impressions of the Hudson Valley. It speaks of beautiful landscapes and a river richly endowed with natural resources. It allows readers to visualize scenes long since vanished—the Kill Van Kull is now lined with tank farms

and shipyards—but also to see through fresh eyes terrain that is familiar to today's nature journalist.

*3/20—Preston Hollow, Catskill Mountains: Between "peents" of the calling woodcock you can hear the snowmelt drip from the spruce limbs, the water move through the soil where the ground is bare. From limb to soil, through soil to roadside ditch, then down to Potter Hollow Creek, Potter Hollow to Catskill, Catskill to Hudson's tidewaters. So the water flows. -Dennis Mildner*

Fifteen years ago, Dennis Mildner's March 20, 1994 observation was the first entry in a new journal—The Hudson



Susan L. Shafer

6/27/97-Greene County: On this day, F20, in all his awkward young grandeur, was flying along the shoreline with his parents. He had successfully fledged but little did he know what this represented. After an absence of more than 100 years (bald eagles were last known to nest near West Point in 1890), bald eagles had once again nested successfully along the Hudson River. Now it seems we have finally "breached the barrier" of eagles on the Hudson and, I am confident, great things lie ahead for us along the river. More nests will be found and many more young will be fledged. -Pete Nye



James Clayton

9/7/07—Manhattan, Hudson River Mile 115: The Hudson River in Manhattan has few beaches where one can haul a seine net. We had gotten wind of at least one in Fort Washington Park just a short distance south of the little red lighthouse and the great gray bridge, and decided to explore. At low tide on this bright and sunny afternoon we made five hauls with a 30' seine at two sites in the park. The catch was amazing. Along with the ubiquitous Atlantic silversides, striped bass, and blue crabs (dozens and dozens of these, in all sizes), we found 3 inshore lizardfish (the largest about 6" long), 2 striped sea robins, a 5" long northern kingfish, a very small (45 mm) black sea bass, 3 northern pipefish, a winter flounder, several snapper bluefish, a bunch of white perch, and one goby (species uncertain). -Margie Turrin, Steve Stanne

River Almanac—intended to reawaken New Yorkers to the natural character of the Hudson, chronicling sturgeon and shad, loons and larks, sunsets and snowstorms. The project was initiated by Robert Bendick, a former Deputy Commissioner of DEC. He saw the Almanac as a way of documenting natural history changes on the Hudson, but also as a way of creating a cooperative network of perceptive people, each providing a piece of the mosaic that is the Hudson from the Adirondacks to the Atlantic.

Judging from readers' reactions, the Almanac is realizing Bendick's vision. Contributor Dan Wolff harkened back to Juet's journal when he commented that "The Hudson River Almanac has

always seemed to me to be a kind of ship's log: a working diary of events and observations noted down to show those who follow where we've been. Here we can find the latest sighting of a flock of brant, how many eggs a pair of bald eagles have produced, the arrival of the coyote or the sudden absence of bluebirds. From these specifics, the Almanac has, over fifteen years, helped create a larger picture: a picture of how the river's doing—and how we're doing."

For eight years DEC's Hudson River Estuary Program published the Almanac annually as a softcover book, compiling entries starting and ending on the vernal equinox one year to the next. Complete with photographs and illustrations, it was something readers could curl up

## HAPPY 400<sup>th</sup>, HUDSON RIVER!

2009 marks the 400th anniversary of the explorations of Henry Hudson and Samuel de Champlain. They changed America forever and helped shape New York State's future with their discoveries of the Hudson River and Lake Champlain. In honor of the voyages, DEC and the Hudson-Fulton-Champlain Quadricentennial Commission are overseeing



a year-long celebration of New York State's historical, cultural and environmental achievements of the past four centuries. Many exciting activities and events are planned from New York harbor to the Canadian border. Check the official Quadricentennial website [www.exploreny400.com](http://www.exploreny400.com) for detailed information about upcoming events and programs.

with before turning off the bedside light. However, at least six months would elapse from the date of the last entry each year to the publication of the finished volume, making that edition's earliest entries a year-and-a-half old. In 2003 the Estuary Program revamped the Almanac as a weekly e-mail publication. In addition to improving the journal's timeliness, the change made it easier to mine information from issues archived on DEC's website.

From the first Almanac on, compilation of the many contributions to the journal has been in the capable hands of Tom Lake, naturalist for the

Hudson River Estuary Program. Tom has probably logged as much time on the Hudson as any long-lived Atlantic sturgeon of the estuary. He is an angler, archaeologist, birder, commercial shad netter, researcher, and teacher who has repeatedly traveled the length of the Hudson from its headwaters in the Adirondacks past the head of tide at Troy and the harbor at New York City all the way to the Hook—Sandy Hook, New Jersey—beyond which lies the open Atlantic.

Tom is a firm believer in the value of journaling. Asked why, he replied, "Perhaps the best argument is to make

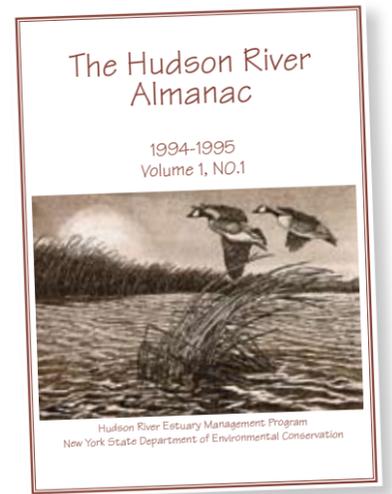
a personal connection to the natural world, that community of life in which we exist, and without which we could not survive. For most, the joy of keeping a daily natural history journal allows them to get to know the other members of the community on a first-name basis—not our human neighbors, but the flora and fauna and natural phenomena that occur all around us."

That said, the Almanac has been the catalyst for the growth of a diverse community of people interested in the Hudson. Almanac reader and contributor Robin Fox sums up the feelings of many: "It amazes me to learn about

orchids at the mouth of the Hudson, and moose 300 miles north...The delight and wonder I find in the world around me is all the richer for the many people sharing and describing their experiences of this splendid region." Naturalist and educator Leslie Day expands on this thought: "I have lived on the river for 33 years, snug in my boat at the 79th Street Boat Basin in Manhattan. I felt isolated in my sightings of amazing wildlife, that is, until I subscribed to the

Almanac several years ago. Since then I have felt part of a passionate community of people from the Harbor to the Adirondacks who love the river and its animals as much as I do."

**Steve Stanne** coordinates the education efforts of DEC's Hudson River Estuary Program through a partnership with the New York State Water Resources Institute at Cornell University.



4/7/2008—Hunter's Brook, HRM 67.5: As the sun set over Wappinger Creek tidewater, five Roy C. Ketcham High School A.P. Biology and Environment students helped us check our eel net in Hunter's Brook. This was the evening after the new moon, and with the strong tides and rise in water temperature (52° F) we had high hopes. We felt more than saw the elusive glass eels in the bag of the net and carefully moved them to our collection bucket to be counted and weighed. We put 9 of them into a small glass jar and then watched as they performed an enthralling ballet, a graceful writhing.  
-Chris Bowser, Samantha Deger, Jennifer Edwards, Amanda Faughnan, Kathryn Goerge, Kayla Rath, Tom Lake



Hudson River Estuary Program naturalist Tom Lake teaches a group of students about the Hudson's diverse aquatic inhabitants.



It is easy to join this community of thousands of river lovers who read the Almanac and the 500 who have contributed entries to date. To subscribe, simply send an e-mail with "HR Almanac" in the subject line to [hrep@gw.dec.state.ny.us](mailto:hrep@gw.dec.state.ny.us). Subscriptions are free, and the distribution list is used only to send out the Almanac—it is not shared, sold, or traded for any other purpose. Visit the DEC website to learn more and to view archived issues.

# How DEC Summer Camp Shaped My Life

By Bret Canary

## How DEC Summer Camp Shaped My Life

In the summer of 1990 my parents drove me into the heart of the Adirondacks for a weeklong stay at Camp Colby, one of four DEC outdoor education camps. I was 13 years old at the time and had butterflies in my stomach knowing that my parents were dropping me off to stay with strangers.

As we pulled in, most kids were huddled around the docks of Lake Colby. I thought, "Oh no, a swim test." It was a typical August day in the Adirondacks, breezy and cool...more like September. I reluctantly changed into my swim trunks and got in line. Sooner than I wanted, it was my turn. I jumped from the dock, it was like slow motion as I floated through the air, looking at the beautiful surroundings while I descended, the sun shimmering over the waves. The shock of the water snapped me back to reality, taking every bit of air out of my lungs. Panicking, I swam through the cold, thick water. After what seemed like forever, I finished the test and passed. I remember getting out with uncontrollable shivering. A counselor came over and asked what my name was, and I replied "B-r-r-r-ret Canary." Immediately another counselor came over and together they sang me "Canary in a Coalmine" by The Police. I knew then I was going to be just fine. But what I didn't know was this memory would be the first of many that would ultimately affect my life decisions and shape my career.

The week at camp went by quickly, filled with adventures—night hikes, animal tracking, climbing the High Peaks, games, and so much more. The counselors were very knowledgeable and always entertaining with their humor and crazy antics. It was impossible not to admire them and want to be a counselor just like them.

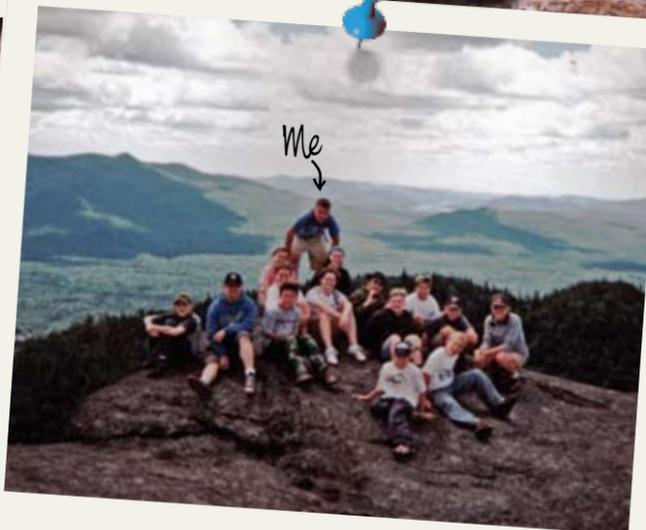
For years, I kept those adventures fresh in my memory with photos, thoughts, and a camp journal I still have today. I never gave up my desire to be a camp counselor and in the summer of 2000, my goal was realized. Not only did I become a counselor, but I returned to Camp Colby and was charged with overseeing the boys' cabin I had stayed in ten years earlier.

The adventures began anew my first year as a counselor, with fresh experiences and memories—climbing Wright Peak in August, teaching field ecology, and Friday night campfires reliving the week's events and preparing for emotional goodbyes. Nothing surpassed seeing in the campers' eyes the same excitement and enthusiasm I had felt as a camper. I just hoped I left as strong an impression on them as previous counselors did on me.

One of the highlights of camp was hunter education training. The campers have the option to earn their hunter safety certificate, studying the safety, ethics, and laws of hunting and firearm handling. New York State Environmental



I took this at "The Boq"



We climbed Ampersand Mountain

**DEC camp is an unforgettable experience.** The adventures kids have and knowledge they gain may even carry them into an exciting and rewarding career in an environmental field. Any youth 12 to 17 years old may attend, and oftentimes an organization will sponsor a child to go. While it may seem early to be thinking about camp, registration begins in February. So, if you know a child interested in attending one of DEC's four camps, and would like to learn more, visit our website at [www.dec.ny.gov/education/29.html](http://www.dec.ny.gov/education/29.html), call (518) 402-8014 or e-mail us at [edcamps@gw.dec.state.ny.us](mailto:edcamps@gw.dec.state.ny.us)



Just as when Bret attended Camp Colby, youth who attend a DEC summer camp today get to enjoy a variety of outdoor activities, including hiking.

Conservation Officers assist with this training. I looked forward to hearing their stories and watching the kids stare in awe at their uniforms and listen with rapt attention. I found myself respecting the officers, wanting to be like them. Their presence, love for the job, and experiences made the career seem like no other and one that I knew I would love to do.

I spent four summers as a DEC camp counselor. In the “off” season, I studied natural resource management at SUNY Plattsburgh. After graduation I watched for the Environmental Conservation Officer exam to be announced, doing odd jobs in the interim as I waited for my dream career to take off. Soon, I took the test and passed. A background investigation, physical fitness test, and interviews ensued. Then I had to wait to be called for the academy. Months passed as I worked at an auto detailing facility, just biding my time. Beginning to despair and about to pursue a different career, I finally got the call—I was going to the academy!

I attended the 15th Basic Academy in Oswego, graduating in June 2004. After almost five years on the job, I still can't believe I'm wearing the uniform. The pride I feel every day I get dressed for duty is a constant reminder of what got me here in the first place. Being an Environmental Conservation Officer is, by far, the best job in the world; I can't see myself doing anything else.

I owe a debt of gratitude to my parents for bringing me to Camp Colby, the Environmental Conservation Officers who kept the spark going, and my wife for encouraging me through the academy.

But most of all, I owe it to the camp counselors, who guided a week that changed my life.

Environmental Conservation Officer **Bret Canary** works in St. Lawrence County.



Photo courtesy of Bret Canary

*New York State Conservationist*, February 2009



Susan L. Shafer

## Happy Campers

Many people recall their days at DEC camp with affection and happy memories. For some, like Bret Canary, their experience set the stage for their future career. Time and again, DEC employees who were past campers identify camp as the place where “it all started.” So we asked them to tell us about their experiences. The following are just a few of the many responses we received.

*“I was a camp counselor for Camp Rushford, Camp Colby and Camp DeBruce. It was the best job of my life. I have a journal from some of the trips I did with the campers that they wrote themselves.”*

Mary Jo Crance, DEC Wildlife Biologist

*“From swimming, to jumping in a bog, to singing silly songs, Camp Colby was the most enjoyable summer camp I ever attended.”*

Gina Fanelli, DEC Marine Biologist

*“I attended Camp Colby in 1977. The forestry and ecology lessons were fascinating. After I graduated with a bachelor of science degree in Chemical Engineering, and saw an announcement for the Junior Engineer exam with positions at DEC, it seemed almost preordained that I should take a job here—the DEC mission having been instilled a decade before at a beautiful and fun camp.”*

Kathy Prather, DEC Environmental Engineer

*“I went to Conservation Camp during the Korean War and it made a positive impression that has influenced my career as a wildlife pathologist.”*

Ward B. Stone, DEC Wildlife Pathologist

*“I attended Camp DeBruce in 1977. I remember not being old enough to take my hunter safety course, but the counselors allowed me to run the skeet thrower for the kids who had just taken their courses. I also remember hiking up a mountain in the dark and camping in the woods with minimal supplies. It was a really neat experience.”*

Robert W. Yager, DEC Mined Land Reclamation Specialist 2

*“I attended Camp DeBruce in the early 1970s. The main educational experience I recall was the hunter safety training class. It was a good opportunity to learn about firearms safety.”*

Scott J. Stoner, Chief, Standards and Analytical Support Section, Water Assessment and Management, DEC



Barbara Nuffer

Barbara Nuffer

# Wintergreen

(*Gaultheria procumbens*)

By Barbara Nuffer

A simple joy on a late winter or early spring walk is finding shiny, living leaves and brightly colored berries along the side of the trail. Wintergreen, a beautiful New York native, is adorned with thick green- to burgundy-colored leaves and brilliant red berries. Crush one of the berries or break a leaf and you will be rewarded with the distinctive wintergreen scent. Although it grows close to the ground at a height of two to six inches, wintergreen is considered a shrub. It is a member of the heath family, which includes rhododendrons, azaleas, heaths and heathers. The common name wintergreen and the species name *procumbens* (meaning prostrate), describe how the plant is found poking its glossy leaves and scarlet berries up through pine needles and snow on the forest floor.

In 1753, the plant's genus was named for Jean-Francois Gaultier, a Canadian physician and botanist who was studying

the plants of Quebec. A common name in Quebec for wintergreen is a "petit thé du bois," which translates to "little tea of the woods." Both the leaves and the berries were used to make tea, as another common name, teaberry, indicates.

A waxy, 1/4" long, pinkish-white flower blooms in the summer and looks like a drooping bell, but it is actually made up of five petals. The flower's shape is similar to that of blueberry, a close relative. Bumblebees pollinate the flowers to produce the small berries, which are filled with orange-yellow seeds.

Wintergreen has been valued as a medicinal plant for centuries. The



Barbara Nuffer

Mohawk tribe brewed the leaves, which contain methyl salicylate (the active painkiller found in aspirin), into a pain-relieving tea. The Iroquois used it for analgesic purposes and to relieve cold symptoms. Native Americans cooked the berries into pies or ate them raw. Oil of wintergreen, derived by steam distillation of the leaves, was used as a flavoring agent in candies, such as "Teaberry" brand chewing gum. Wintergreen flavor was later derived from the more common sweet birch and now it is synthesized artificially.

As you enjoy walking year round in the woods of New York, remember to look down for this attractive plant closely hugging the ground. If you are lucky, you will find the lustrous green or burgundy foliage and the attractive scarlet berries that many bird and animal species enjoy eating.

**Barbara Nuffer** works in DEC's Division of Air Resources in Albany.

*New York State Conservationist, February 2009*



Carl Heilman II

# On Patrol

Real stories from Conservation Officers and Forest Rangers in the field

Contributed by ECO Lt. Tom Caifa and Forest Ranger Lt. John Solan

## Don't Eyeball the ECO—St. Lawrence County

On a routine patrol in December, ECO Bret Canary found himself in suspicious circumstances in the town of Pierrepont. When he drove by a hunting camp, a few men were standing outside and watched ECO Canary very carefully as he passed. Canary felt something wasn't right and decided to turn around. As he did, he noticed fresh drag marks and blood leading out of a nearby trail head. Sure enough, the marks led to the camp Canary just passed. The particular area happens to be closed to hunting and when the ECO pulled into the driveway, he saw the men had moved inside. Canary went to the front door and, looking through the glass, saw two of the hunters feverishly filling out tags. Eventually, the hunters showed the ECO three deer hanging behind the camp. Only one was tagged and its hunter was not there. The hunters admitted that a total of six deer were taken in the area and those missing were in a pick-up truck on its way to Saranac Lake. Canary contacted ECO John Blades, and he quickly intercepted the truck on its way. Turns out, five of the six deer taken by the hunters were illegal. The three deer at the camp were taken in a prohibited area and not tagged properly, and two of the three deer ECO Blades intercepted were illegally tagged. The hunters were charged with hunting violations and the deer were donated to local people in need.

## Monkey Business—Nassau County

Recently, Long Island DEC law enforcement officers got a tip from U.S. Fish and Wildlife Service special agents that a pet store was illegally selling monkeys to the public. ECO Matthew Garrigan met with two agents at the store. They told Garrigan they had gone into the store undercover and saw three monkeys were being offered for sale with a combined price of nearly \$20,000, constituting a potential felony. The sale of monkeys as pets is carefully regulated for good reason; they can be very aggressive and sometimes carry communicable diseases. Garrigan interviewed store employees, gathered evidence, and made arrangements with the Bronx Zoo and a local veterinarian to hold the monkeys while the criminal investigation took place. Environmental Conservation Investigators worked to get the cooperation of the corporation responsible and it ended up paying a \$6,000 administrative penalty for possessing, importing, and offering monkeys for sale without a permit.

*New York State Conservationist, February 2009*

## "Snow" in Brooklyn—Kings County

Recently, ECO Jennifer Okonuk received a complaint regarding a Brooklyn-based cement facility, Northstar Ready Mix Corporation. Apparently, the company's workers overfilled their silo, which caused blow off from the top. The result was a whitish-grey dust cloud that surrounded the facility and spread a snowfall-like coating over a two-block radius. The material even wafted into the local subway stations and was a public nuisance to everyone. ECO Okonuk spoke with the company's manager about the situation and he explained what happened. He was ordered to immediately send employees out to clean up the surrounding area, and ECO Okonuk issued the company two summonses for air contamination violations.

## Ask the Ranger

**Q:** How does my snowmobile registration have to be displayed?

**A:** Resident and non-resident owners of snowmobiles operated in New York should carry a copy of their snowmobile registration and insurance with them at all times when riding. The registration sticker provided by the New York State Department of Motor Vehicles must be displayed on the snowmobile cowling, with the current validation sticker properly affixed. Snowmobiles first registered before 1995 may not have this sticker and must display their registration number on the cowling in three-inch block letters that read left to right, begin with the letters NY, and are both reflective and in a contrasting color to the cowling. Non-resident owners of snowmobiles operated in New York State need only display the New York validation sticker, if the snowmobile is properly registered in another state and that registration is displayed appropriately.



Photos courtesy of the Petty family

# Adirondack Inspiration :

# Clarence Petty

by Ellen Bidell

Nearly 100 years ago, a seven-year-old boy named Clarence was helping his father guide a wealthy family in the Adirondacks when another young boy gave him a model canoe. Little did Clarence know that the little boy who gave him the canoe would grow up to be governor of the state and that the modest gift would bring them together at the forefront of the fight to save the Adirondacks.

Adirondack icon Clarence Petty, now almost 104 years old, grew up hiking, hunting, fishing, canoeing and snowshoeing the woods that currently make up the Adirondack Park. He has climbed all 46 high peaks, and some say he knows every square inch of the park. Described by the New York Times as one of the most important and inspirational

figures in the history of the Adirondack Park, Clarence Petty has devoted his life to protecting the land he loves so well.

Born in 1905, the son of a cook and an Adirondack guide, Clarence was the middle child of three boys. His father

**Not only has Clarence Petty been inspired by the Adirondacks, he shaped the Adirondack Park we know today.**

earned only \$2 a day, so the family lived in a primitive shanty near the east shore of Upper Saranac Lake for the first few years of Clarence's life. "My father...built his cabin on Forest Preserve land, just as most other guides did in the early days," Clarence remembers. In the winter, a wood-burning cookstove kept the family warm, and despite their limited resources, Clarence recalls those days as some of the happiest of his life.

Education was important to Clarence's

mother, so when Clarence was six, the family moved to Coreys to enroll him and his brother Bill in the one-room school there. After school and in the summer, the boys roamed the woods and explored the lakes, enjoying a freedom

unheard of today. Later, Clarence and his brother Bill boarded with a friend in Saranac Lake in order to go to the school there. They walked—and in the winter snowshoed—16 miles to Saranac Lake on Sundays and returned home on Fridays. The trip took four hours each way.

Clarence worked after school as a caddy at the Indian Point Golf Course, walked a trapline daily and picked up any other jobs he could. On the weekends, he took to the woods, helping his father

guide. By the age of nine, he was leading hunting parties by himself.

Knowing he wanted a career in the woods, Clarence attended Syracuse University College of Forestry. But when he graduated, life had other plans for him. The tough economy of the Great Depression forced him to endure a job in New York City. While there, Clarence discovered the second love of his life—flying—and attended flight school on Long Island. After a few years, he was able to return to the Adirondacks as a forestry foreman and supervisor for Civilian Conservation Corps camps. He met and married his wife, Ferne, who came to share his dedication to the Adirondacks for more than 50 years.

As a Navy pilot during World War II, Clarence flew plasma to embattled islands in the South Pacific. On returning home, he landed a job with the Conservation Department, now the New York State Department of Environmental

Conservation (DEC), as district ranger in Cranberry Lake. He held this position for 11 years, and, combining his forestry and



flight skills, was the first person in the state to fight forest fires using lake water dumped from an airplane.

By the late 1950s and early 1960s, Clarence realized that the Adirondacks would need more protection if it was to remain the wild and wondrous place he had come to know. As a Conservation Department liaison to the New York State Legislature, he surveyed 10,000 acres of wilderness over a three-year period, often on foot, to identify those areas suited for strict protection. During that time, he hiked, snowshoed, canoed or flew over virtually every acre of state-owned land in the Adirondacks.

In 1970, Governor Nelson Rockefeller created a commission to study the future of the Adirondacks and wanted Clarence to serve on the commission. The Governor had heard a great deal about Clarence's passion and expertise, but their meeting would not be the first time they crossed paths. When Clarence

arrived in Albany, he walked into the Governor's office and laid on the table the toy canoe the Governor had given him more than half a century earlier. Neither man had forgotten that chance meeting when they were children.

While on the commission, Clarence conducted an inventory of some 1,300 miles of Adirondack rivers. He did this on foot and in a canoe, classifying them for special protection and mapping the park's most primitive areas. The commission's final report led to the creation of the Adirondack Park Agency. Clarence went to work for the new Adirondack Park Agency, which was drafting land management plans for the park's public and private lands.

Even after Clarence retired in 1974 to run his flight school in Potsdam full time,

his dedication to preserving the unique and wild nature of the Adirondack Park never wavered. He joined a number of environmental organizations and today belongs to 68 different groups.

Using a 1934 Remington typewriter, Clarence has written countless letters to government officials telling them about the slow erosion of the Adirondacks to development, and the need to be unflinching in efforts to protect it. Since parts aren't available for his typewriter anymore, he now has to order custom cut ribbons.

Clarence also writes a column called "Questions for Clarence" in the *Adirondack Explorer*. In a recent column, a reader asked "What's the best thing to happen to the Adirondacks in your lifetime?" Clarence responded, "Just

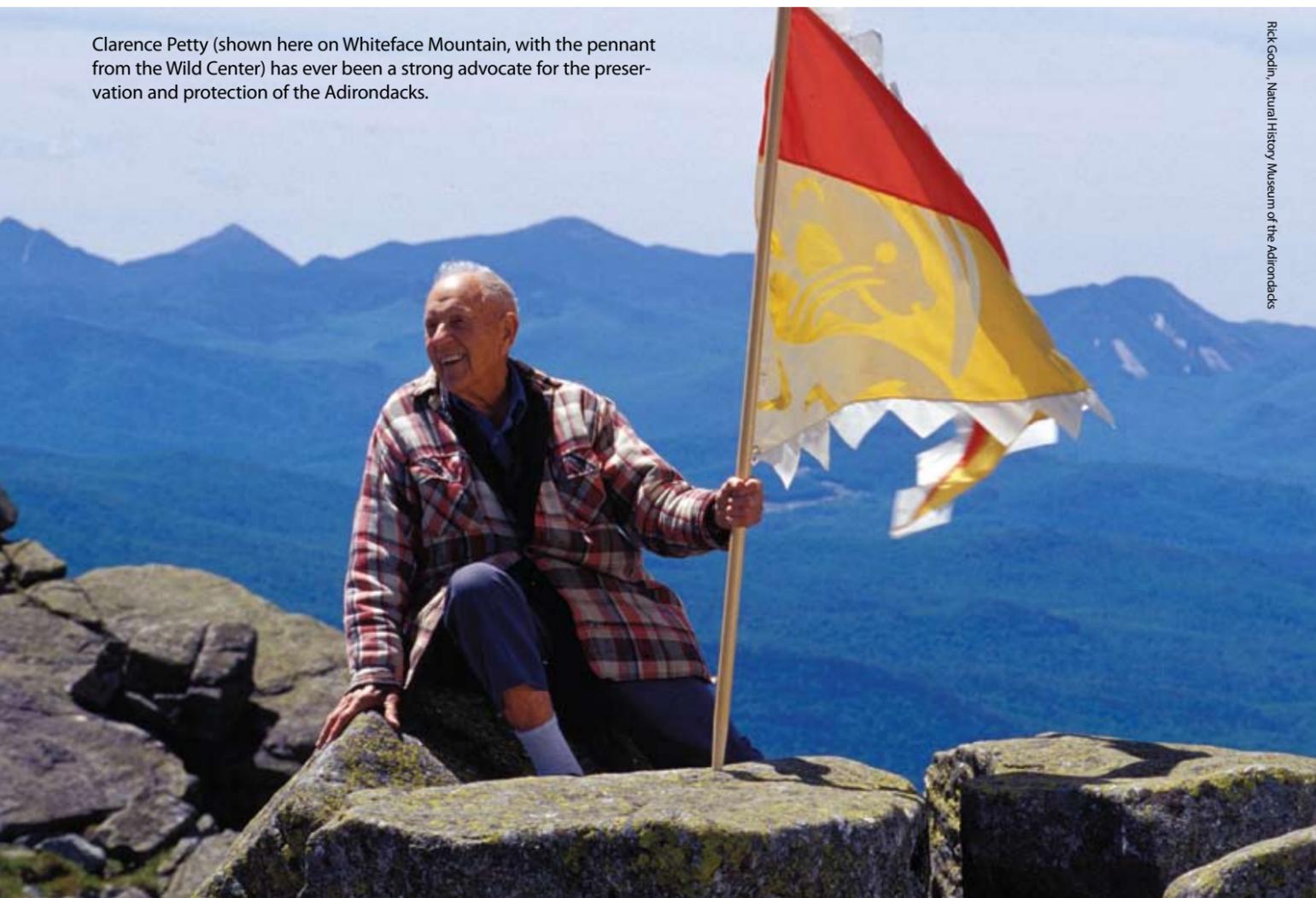
getting more Forest Preserve land is the best thing that has happened...If we didn't have the Forest Preserve, I don't think we'd have the wildlife we have here now. We're sitting in the middle of one of the most heavily populated states in the union, and you have almost all of the wildlife that was here originally."

Clarence believes that the "Forever Wild" clause in the state constitution is sacrosanct, and he has an immovable position about development in the park. "Clarence has always been in favor of conservation and preservation of the Adirondacks. Not too many old-time Adirondack residents feel that way," notes Dick Beamish, founder of the *Adirondack Explorer*.

In a 2007 letter to the *Adirondack Daily Enterprise*, Clarence explains,

**"We're sitting in the middle of one of the most heavily populated states in the union, and you have almost all of the wildlife that was here originally."**

Clarence Petty (shown here on Whiteface Mountain, with the pennant from the Wild Center) has ever been a strong advocate for the preservation and protection of the Adirondacks.



Rick Godin, Natural History Museum of the Adirondacks

Ken Rimany



Here, Clarence is pictured with Nellie Staves, another Adirondack conservation icon.

**In order to go to the school they walked-and in the winter snowshoed-16 miles to Saranac Lake on Sundays and returned home on Fridays. The trip took four hours each way.**

"I've tried all my long life to do the right thing, even though that sometimes hasn't set well with some people. But I think you have to stick up for what is right." According to Clarence, his most effective way of influencing the future of this great resource was "doing by example."

Clarence is still doing by example, although he now writes his letters and newspaper columns from an assisted living center in the Adirondacks, rather than his cabin in the woods. Betsy Lowe, Regional Director of the DEC office that covers the Adirondacks and a close friend who visits Clarence frequently, reports, "He continues to be passionate about the park and takes the opportunity to speak about issues that are important to him."

Even with issues like climate change that didn't really come to the forefront of the environmental debate until he was well into his 90s, Clarence doesn't miss an opportunity to engage officials at all

levels. "Recently, he has talked about bringing back the railroad and supporting wind power as ways to reduce our carbon footprint," Betsy said.

Clarence Petty's contributions to the Adirondacks have been honored by the Adirondack Park Agency, and in 2003 he received a Governor's Award for contributions made to the environment. The Adirondack Council established the Clarence Petty Internship Program to make sure that Clarence's activism and passion for the Adirondacks is passed on to the next generation. As Clarence says, "It is never too early to learn that the Adirondacks is a special place."

Betsy Lowe agrees. "Clarence's greatest contribution is his knowledge of the park at a time when people are losing touch with nature. There isn't anything like first-hand experience to help you become passionate about something. It enriches your life in a way that just seeing beautiful photographs cannot. It is important that

we always have a spectacular landscape that inspires us, like it does Clarence."

Not only has Clarence Petty been inspired by the Adirondacks, he shaped the Adirondack Park we know today. He did it without stepping into the limelight, but instead through hundreds of small actions: hiking thousands of miles, attending committee meetings, writing countless letters, serving on boards of dozens of small organizations.

He didn't do it for the thanks, but for the love of a magnificent place that he has called home for the past 103 years. And we owe him great thanks all the same.

**Ellen Bidell** is a citizen participation specialist in DEC's Albany office.



Introducing  
the  
*Frost Fish*

*Biologists work to restore an Adirondack native*



DEC fish & wildlife technicians Jennie Sausville and Adam Kosnick tend a trapnet on icy Lower Cascade Lake in Essex County, hoping to catch spawning frost fish.

article by Dr. Geoffrey B. Steinhart  
photos by James Clayton

*Pulling in the gill net one November morning*, I began to get excited as a flash of silver caught my eye—a possible sign that frost fish were present in this lake. I'd been working in the Adirondacks for months, trying to identify waters containing this once plentiful fish species, and I was hopeful that today I had some proof that they were still here. Looking down at the net, my excitement grew as I counted more than a dozen frost fish! It was going to be a good day.

Classified as a state endangered species since 1983, the native round whitefish (or frost fish) had once been found in more than 80 Adirondack lakes, but by 2006 was only known to exist in seven of these historical waters. A Cornell Post-Doctoral researcher, I was assisting with a research project by the New York State Department of Environmental Conservation (DEC) to discover the reason for this fish's dramatic population decline and to see whether the recovery plan developed in 1989 was working. This day we were on Buck Pond, a 19-acre lake located south of Stillwater Reservoir and west of Big Moose Lake, in Herkimer County. It was one of the lakes DEC stocked with round whitefish, and the three- and four-year-old fish I just netted were a positive sign the recovery program was helping.

Officially known as round whitefish (*Prosopium cylindraceum*), these medium-size fish are known to many as "frost fish" because they spawn late in the year (November and December), sometimes under the ice. They are olive-brown on top, shading to silver below. Their bodies are long, tubular and nearly round, and their heads are short with small, inferior (snout extends beyond lower jaw) mouths.

Frost fish prefer cold northern lakes, and are an indicator of excellent water quality. They are bottom feeders, eating a variety of invertebrates including mayfly larvae, small mollusks, crustaceans, fish and fish eggs.

Frost fish were held in high esteem during the late 1800s and early 1900s. In fact, early reports from the New York Commissioners of Fisheries spotlighted this importance:

"Give any of the old guides or fishermen of the Moose River Chain his choice between a trout and a frostfish and the chances are 9 to 10 that he will choose the frostfish..." (1882)

"Frostfish [are]....greatly prized by the public...valuable not only for human food, but also for feeding large trout and other game fishes." (1906)

Because of the reverence many people had for round whitefish, more than 10 million round whitefish sac-fry (very small fry) were stocked into a number of Adirondack lakes and ponds prior to 1900. But with the onset of World War I, the state changed its fish culture operations to focus on species like trout, which were easier to catch for dinner. Because round whitefish have very small mouths, anglers do not easily catch them, so their propagation was abandoned during and following the war. In 1933, the state streamlined their hatchery operations, including shutting down the Fulton Chain Hatchery in Old Forge, the last hatchery to raise round whitefish fry. The era of round whitefish stocking came to an end.

In the years that followed, round whitefish populations rapidly declined. By 1979, surveys conducted by DEC

*Frost fish prefer cold northern lakes, and are an indicator of excellent water quality.*

found them in only 14 Adirondack waters. By 1997, this had dropped to three.

Why did round whitefish disappear from so many Adirondack waters, but not from waters of Maine, Ontario, Quebec and in the upper Great Lakes? Studying DEC's extensive historical records, biologists have come up with several possible explanations for the fish's decline.

The single largest reason for the disappearance of round whitefish populations may be the presence of non-native species, specifically smallmouth bass, yellow perch and rainbow smelt. All three species have been widely introduced into many Adirondack waters, and all are predators of other fish, including round whitefish. In Little Moose Lake, where Cornell University researchers have more than 50 years of fishery records, a smallmouth bass removal program caused

an exponential increase in the number of juvenile round whitefish in the lake. While smallmouth bass had not yet eliminated the round whitefish population, it is clear that they were limiting the survival of young round whitefish. In many other Adirondack waters, the rise of smallmouth bass, yellow perch and rainbow smelt may have coincided with the disappearance of round whitefish and the closely related lake whitefish. This is why DEC has made it illegal for anglers to transport or spread non-native species to new waters. While smallmouth bass and yellow perch can provide exciting fishing opportunities, they can also harm native fish communities.

Another possible explanation for the decline in frost fish populations is the likelihood that many populations observed around the start of the twentieth century were actually introduced. As such, it is possible that their disappearance occurred simply because the stocked fish failed to establish themselves. Lack of suitable spawning habitat, presence of too many competitors, or simply a failed stocking attempt are all likely causes for an unsuccessful introduction.

Acid rain is thought to be another possible cause for the disappearance of frost



Dark spots (called parr marks) on the sides of this fish indicate it is a juvenile. Adult round whitefish average 8-12 inches in length and are olive-brown on top shading to silver on the sides.



**As part of the restoration project, DEC raises round whitefish for later stocking efforts. Aquatic biologists (like Richard Preall pictured here) and fisheries technicians capture wild round whitefish in November and collect eggs and milt from ripe females and males. The eggs are fertilized in the field, and then disinfected with an iodine solution mixed in bottled spring water for transportation to DEC's Constantia Hatchery. Round whitefish are raised to fingerling size and released into selected waters the following May.**

fish population. This is a problem that has plagued many fishes in the Adirondacks. Scientists believe that frost fish experience developmental problems when waters become too acidic (i.e., pH drops below 6).

Fortunately, there is renewed interest in restoring round whitefish in the Adirondacks. To accomplish this, DEC is directing federal funds called State Wildlife Grants to Cornell University to identify factors that have contributed to the decline of frost fish and to study this fish to better understand its needs. For the last few years, researchers have been conducting surveys of historical round whitefish waters. By the end of the study, 33 Adirondack lakes had been sampled. Of those, native round whitefish were confirmed in four more lakes, bringing the total to seven (eight, including one population established in the 1970s).

*The single largest reason for the disappearance of round whitefish may be the presence of non-native species.*

In addition, DEC has introduced round whitefish into eight lakes and ponds in the Adirondacks, including: Evergreen Lake and Buck Pond of Herkimer County; Trout, Little Trout and Deer Ponds of St. Lawrence County; Eighth Lake of Hamilton County; Little Green Pond of Franklin County; and Rock Pond of Essex County. Results are promising. For each of these lake stockings, there has been impressive survival and growth.

Such introductions are being conducted as “experiments” to increase the number of waters with round whitefish, and to determine what conditions are optimal for survival, growth and establishment of self-sustaining populations. For example, these stocked lakes have different fish communities—some have been reclaimed, causing them to be temporarily fishless, while others contain many predators and competitors. The lakes also differ in habitat and water chemistry. In this way, we can determine what conditions are best for healthy round whitefish populations.

Ultimately, the goal is to establish 10 to 15 naturally reproducing populations in the Adirondack region. With seven naturally reproducing populations and eight recently introduced populations, we are well on our way. The hope is that round whitefish from these waters will reproduce and spread to other suitable parts of the watershed, finding homes in traditional round whitefish lakes and ensuring a continued presence in the Adirondacks. Little Green Pond has already been the site of a small victory. An introduced population in the pond, designated to become the primary source for the



Round whitefish have a tubular body shape and a small mouth. They eat small aquatic organisms.

broodstock program, has already spread downstream to Little Clear Lake. However, to date there is no evidence of reproduction in any of the recently stocked waters.

While reestablishing round whitefish in the Adirondacks is a positive step towards maintaining this historically important fish, it is also essential because round whitefish are an important food source for other fish species. While most people are unlikely to catch a round whitefish on hook and line, the next time you catch a large lake trout, think about whether that fish grew so large eating insects, or eating fish like the round whitefish.

In the meantime, researchers like me will continue to check these lakes, hoping to have another good day.

**Dr. Geoffrey B. Steinhart** is an assistant professor and Co-Director of the Aquatic Research Laboratory at Lake Superior State University. He is continuing his work on round whitefish recovery in New York by examining the genetic diversity within existing native populations in New York and across North America.

# ROCK IN A HARD PLACE

James Clayton

## 3.9 trillion metric tons of salt lie under New York State. Getting to it can be a challenge.

By Jenna DuChene and Christine Reed

When you think of salt, you probably think of the stuff in the shaker on your dining room table, or what's used to deice the roads in winter. But do you know how much effort it takes to get this ancient mineral from the ground to our roads and tables?

Deep, deep underground lays a hidden world of glistening rooms and tunnels. Light is absent, but it's the middle of the day. It's quiet and, what's that smell? It's like an ocean breeze; maybe it's...yes, it's salt!

At least three different processes produce this important resource that is found in everything from soap to batteries, and is a vital component of every animal's life processes, including humans.

The United States is the second largest producer of salt in the world, with New York producing the third most salt of any state in the country. In New York, salt (a.k.a. the mineral halite) occurs in formations deep underground. These formations are remnants of a vast sea that covered what is today's western and central New York during the Silurian period, some 400 million years ago. Over time, the water dried, leaving behind thick salt

deposits. Today, more than 10,000 square miles (about 3.9 trillion metric tons) of salt lie under New York at depths ranging from 500 feet near Syracuse to 4,000 feet near the Pennsylvania/New York border. With salt deposits so deep and expansive, collecting it can be a challenge.

One method for mining salt is known as solution salt mining. It works basically as it sounds: water is pumped down a well and dissolves the salt. The resulting solution, called brine, is pumped back up and sold, or is dried to leave the salt behind. This is how we get our table salt. In New York, there are three sites in Wyoming County and two sites in Schuyler County where this method is used.

One of the oldest forms of salt production is the solar evaporation method. Like its name suggests, salt water from the ocean or another saline body is evaporated by sunlight, leaving the salt behind. To accomplish this, water is gathered in a concentrating pond and then in a crystallizing pond where it undergoes the solar evaporation process. While this method was prevalent in Syracuse

**These formations are remnants of a vast sea that covered what is today's western and central New York during the Silurian period, some 400 million years ago.**

in the late 1800s, today's demand for large scale commercial production of salt, combined with a rainy and cold climate, make it nearly nonexistent in New York today.

Since the early 1900s, conventional hard rock salt mining is the primary process used for mining salt for deicing and snow removal. Employing the "room-and-pillar" method during mining, solid salt pillars are carved in the underground cavern to provide roof support and the walls of salt are excavated through the use of small, controlled blasts. Front-end loaders scoop the pile of fallen salt, which is then processed in a crusher to make the salt uniform. Next, the salt is hoisted to the surface and taken away by trucks and trains.

In New York there are two active conventional salt mines—Cargill's Cayuga Mine in Tompkins County, and American Rock Salt's Hampton Corners Mine in Livingston County. The Cayuga mine is a large operation that encompasses approximately 18,000 acres under portions of Cayuga Lake and adjacent lands. In addition, the mine is 2,300 feet deep, making it the deepest salt mine in the western hemisphere.

In New York, rock salt production averages about 4.3 million metric tons annually. Last year, demand was high for

**While modern highway departments are making strides to reduce the amount of salt they use, it's still a concern.**

salt to combat the above average snowfall that occurred in the Northeast and Midwest. This has caused a salt shortage this year, which has many communities feeling the crunch and reassessing their salt usage for the remainder of this winter and in the future. Some towns have decided to use other less expensive means to treat their roads, like sand or sand-salt blends. But while these may cost less, depending on conditions, they may also be less effective.

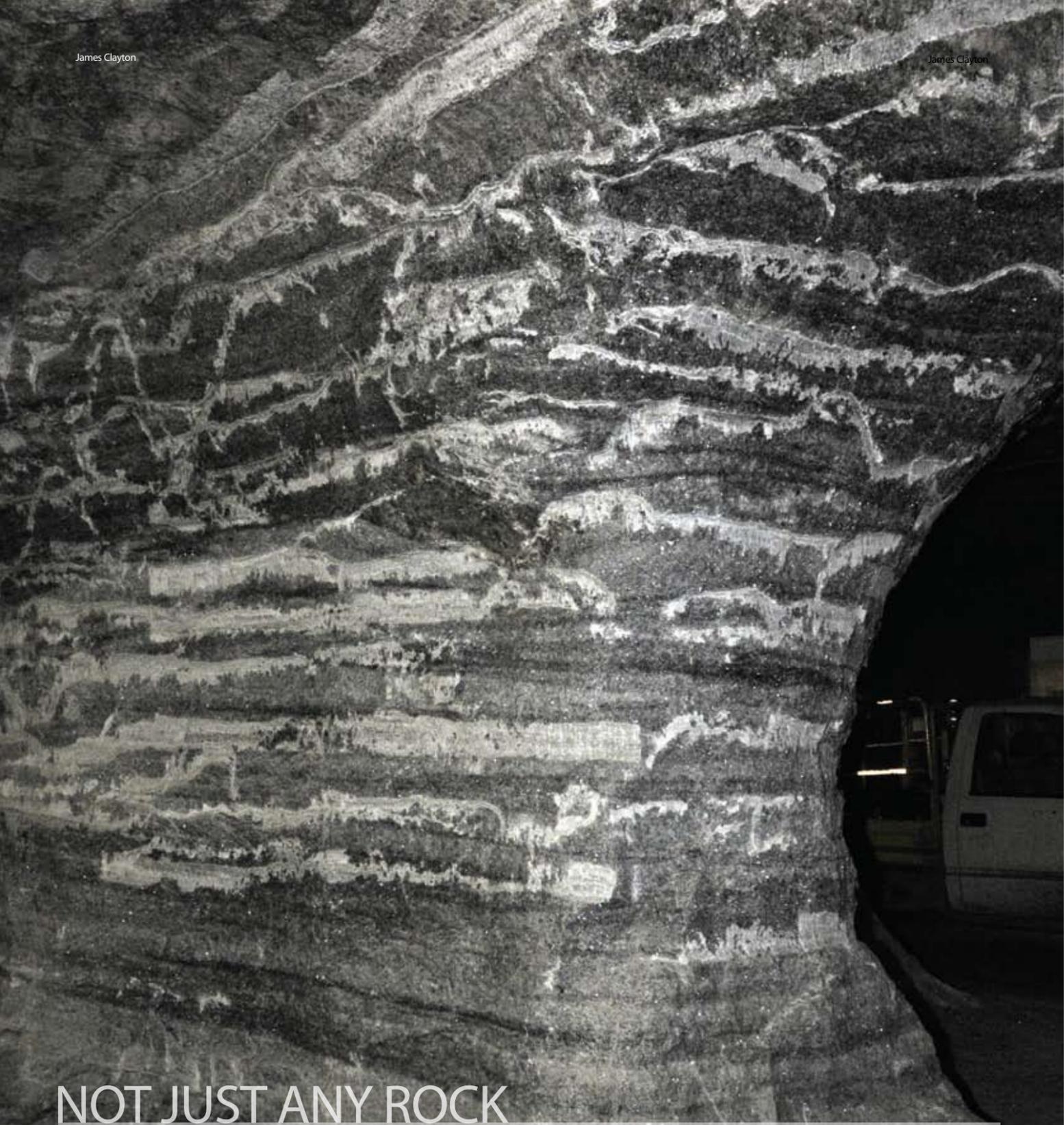
In seeking alternative methods for deicing roads, researchers have uncovered a new, unconventional method that uses beets. It seems far-fetched, but the sugar beet's byproduct, a de-sugared liquid, can withstand cold temperatures down to -30°F before freezing. Some states' transportation departments have already been testing a salt-beet combination on roads. The unique mixture has a lower freezing point than salt alone, which means it can stay on roads longer, requiring fewer applications.

This new deicer may also be easier on the environment—an option worth studying further. You see, traditional rock salt can damage trees and vegetation along roads and can increase the amount of chloride in water bodies. While modern highway departments are making strides

James Clayton



Equipment necessary for rock salt mining, is disassembled above ground and reassembled after being lowered into the cave piece by piece.



# NOT JUST ANY ROCK

Salt is used to cure meat, it's part of our oceans, and is an essential component of our bodies, so it's no small wonder it repeatedly finds a place in our society. Here are just a few ways salt has influenced the environment, our diet, our work and even our language.

- Salt is in lotions, soaps, dyes, paper, electronic circuits and rubber.
- The phrase "not worth his salt" comes from the days when Greeks traded slaves for salt.

- Salt potatoes originated in central New York, particularly Syracuse, when Irish salt workers of the 1800s threw potatoes into the boiling salt vats for their lunches.
- The final leg of the Erie Canal, from the Hudson River to the Great Lakes, was built in 1825 with money citizens paid in accordance with the day's tax on salt.
- "Salting the earth" was an ancient military practice where soldiers salted fields so crops could not grow.



James Clayton

## Protecting a Natural Resource

**In coordination with the federal Underground Injection Control (UIC) Program administered by the Environmental Protection Agency, DEC's Division of Mineral Resources oversees all aspects of solution salt mining in New York, including well drilling, plugging and operational activities. The entire process is subject to the same rules placed on oil and gas well drilling, but with some additional requirements such as monitoring the amount of fluids injected and removed to detect any leaks in the system. The Division also oversees hard rock salt mining under the Mined Land Reclamation Program.**

**Once a cavern is no longer actively mined for salt, it may be used for other purposes. For example, old caverns are sometimes used to store natural gas. Gas is pumped in during months where demand is low and pumped out when demand is high, like in winter.**



Susan L. Shafer

To decrease possible damage to the environment, DOT has limited the amount of salt used on our roads, and is continuously looking for more environmentally friendly deicing alternatives.

to reduce the amount of salt they use, it's still a concern. Scientists worry that if current land development and road salting practices continue, chloride levels in some water bodies, such as streams by long sections of road, could slowly rise to the point that the chloride becomes toxic to freshwater life.

But all road deicers have pros and cons, and beet juice is no exception. While it is true that adding beet juice to form innovative concoctions reduces salt levels, more study is needed. Experience and tests will show whether it is beneficial, of little consequence, or if it has unintended impacts, like reducing dissolved oxygen levels in nearby water bodies.

The New York State Department of Transportation (NYSDOT) is continually looking for new ways to reduce the impacts deicing has on the environment while still keeping our roads safe. Twice a year, experts from every region gather to form the Snow & Ice Community of Practice to exchange ideas about snow and ice removal in our state.

In last winter's issue of NYSDOT's electronic magazine, the department

highlighted some advances being made in deicing New York's roads. One improvement, for example, is that the department no longer uses sand to treat roads. Snow/ice program engineer Mike Lashmet explains that sand gets into drainage ditches, clogs culverts and isn't ecologically safe. The department has adopted the practice of "pre-treating" roads ahead of a storm with salt brine

**NYSDOT is continually looking for new ways to reduce the impacts deicing has on the environment while still keeping our roadways safe.**

or magnesium chloride (a more expensive type of deicer). The solutions prevent ice and snow from compacting, allowing for easier removal. In turn, this allows the department to cut back on the amount of initial rock salt applications. So far, says Lashmet, it's working.

Whether we realize it or not, salt is a large part of our lives. Through advances like these, we can better control our impact on the environment and help safeguard New York's communities.

Salty-snack lover **Jenna DuChene** is staff writer for *Conservationist*. **Christine Reed** is a geologist in DEC's Division of Mineral Resources.



James Clayton

### New ECOs

On September 26, 23 new Environmental Conservation Officers (ECOs) graduated to join DEC's police force. The graduation ceremony was held at the DEC Training Academy in Oswego County. This year's class completed DEC's Division of Law Enforcement's 18<sup>th</sup> basic training school where they underwent a six-month, in-residence training program. ECOs receive nearly the same training as state police, but they also receive specialized training. ECOs' focus lies in enforcing state environmental laws and regulations, and detecting and investigating suspected violations.

### Hellbenders Found

Like its name suggests, the hellbender's monstrous stature makes it New York State's largest salamander. It is found in only two watersheds and may be declining in both. New York lists it



Jeff Humphries

as a species of special concern and it is a candidate for federal listing by the United States Fish and Wildlife Service. To help combat the population decline, the state granted the project, "Factors Affecting the Status and Distribution of the Eastern Hellbender," carried out by SUNY College of Environmental Science and Forestry. The project has already had significant success in documenting occurrences of this large salamander. Last summer, project members found hellbenders at two new sites in central New York—one where past records show a population of hellbenders once lived, and the other a site where hellbenders were previously unknown.

### TB Found In Deer

Routine testing in October of a captive deer herd has raised some concern. The New York State Department of Agriculture and Markets found tuberculosis (TB) in one deer. It tested positive to a TB screening test and was euthanized; the autopsy confirmed the TB diagnosis. Since then, other tests have been administered to identify the specific strand of TB and the affected herd was quarantined to protect wild deer and nearby domestic animals from the danger of contamination. The

risk of any wild deer being exposed to TB is slight, but DEC is testing some wild deer in the surrounding area to make sure. Though this case doesn't show any evidence of spreading TB to humans, DEC and the Department of Health continue to monitor the situation. Hunters and those who handle deer should take basic precautions to reduce the risk of exposure. For instance, wear gloves when field-dressing deer and minimize your contact with blood and other body fluids. If you have questions about your livestock, contact New York State Department of Agriculture and Markets at (518) 457-3502.

### Northern Snakehead Removal

Last summer, DEC piloted a massive effort to remove all northern snakehead fish from the upper Ridgebury Lake/Caitlin Creek watershed in Orange County. Northern snakeheads are an invasive species native to Asia, and are capable of causing serious damage to resident aquatic species. The Caitlin Creek watershed eventually leads to the Hudson River, so if left, northern snakehead could invade much of the United States via the canal systems and the Great Lakes. DEC's Bureau of Fisheries decided to rid the lake of the invasive fish by a rotenone application. Before the treatment, DEC Region 3 fisheries staff removed live fish of other species and kept them in five, 4,000-gallon holding tanks. They were kept to restock the lake and become the brood stock after the northern snakeheads were removed. After the treatment, dead fish were removed and transported to a Department of Transportation composting facility.



Laurie Mercer

### Homage to Local Hero

In addition to native son Francis Bellamy, the man who wrote the Pledge of Allegiance, children in Mount Morris have a new hometown hero to celebrate. Residents unveiled a new blue-and-yellow historic marker on June 13, 2008 for John Wesley Powell, best known for being the first explorer to navigate the length of the Colorado River through the Grand Canyon. He was born in Mount Morris on September 23, 1834 and was a soldier, explorer, author, teacher and scientist. He was Director of the Bureau of American Ethnology at the Smithsonian Institution and for a time, served as director of the United States Geological Survey.

Powell lived on both sides of nearby Letchworth Gorge, commonly known as the Grand Canyon of the East. He died in 1902 at age 68. The new marker stands in front of Powell's family home at 43 Chapel Street.

(Pictured above are Town Historian Nick Loverde, County Historian Amie Alden, Powell's sister's descendants Maria Lombardo, Sue Benzoni and Lombardo's daughters.)

—Laurie Mercer, *Monroe County*

### New Access to Catskill Lands

In October, New York State and New York City officials completed an agreement to open 13,000 acres of city-owned property in the Catskills. Hiking, hunting, fishing and trapping on city-owned property near state Forest Preserve land in the Catskills no longer require a city permit. Now only DEC hunting, fishing and trapping licenses will be required. DEC Commissioner Pete Grannis said the new agreement is a "significant accomplishment that will boost recreational opportunities in the Catskills and is a sign of the rejuvenated partnership among state, city and local officials." DEC will patrol the new access areas, enforce regulations and further assist in land management. This agreement is the latest of many recreational improvements for the Catskills, including a new permit that grants DEC permission to manage Mount Hayden, and a Land Master Plan for the Catskill Forest Preserve, which will eventually create a northern Catskill bike corridor. A committee is also developing a work plan for a recreational boating "pilot" program at Cannonsville Reservoir.

### Ask the Biologist

**Q:** Why don't I ever see any raccoons during the winter months?

**A:** While they aren't true hibernators, raccoons become inactive during cold or snowy weather. They stay holed up in their dens for most of our cold northern winters, so you are less likely to see them. In November or early December, they retreat to a rock crevice, a hollow tree, an underground burrow dug by some other animal, or an abandoned building and remain there until the weather improves. Like bears, their heartbeat and breathing slow down, but they are alert and will awaken quickly if disturbed. True hibernators, like woodchucks and some bats, go into a coma-like state and do not awaken immediately if disturbed; they must first warm their bodies before arousing.

Warm snaps in late winter and early spring will bring raccoons from their slumber out to forage before returning for another extended sleep period.

In warmer climates, raccoons may stay active all year.

—Dave Nelson



Susan L. Shafer



### Frozen Art

While out doing field work, we came across this ice sculpture. It's near Otisco Lake and is about 12 feet tall. It was really amazing to see, but how did it get there?

Marie C. Hebdon  
Syracuse

*Thanks for the great photo. What you have here is actually a frozen artesian well. This kind of well occurs when groundwater in an aquifer is confined under pressure in poorly permeable rock. Water rises to the top by natural occurrence or if the aquifer is tapped by a well. If the pressure is great enough, water may even flow freely onto the surface, creating a waterfall-like nature piece. During winter, the water can freeze, creating an interesting ice sculpture like the one pictured here.*

—Jenna DuChene, Staff Writer

### Icy Lodging

While out cross-country skiing across a frozen pond, I noticed this hole in the ice. Upon closer inspection I saw a number of sticks that appeared to have been cut by a beaver.



The beaver lodge was nearby, tucked under the trees. Is this hole an access to their home, and what were the sticks for?

Janet Quinn  
Sackets Harbor, Jefferson County

*My family has had the pleasure of living on an active beaver pond for more than 20 years, so we've learned a lot about beavers' winter habits. What you're seeing is their access hole to and from the pond (through the ice). If winter deepens, the ice may freeze too solidly for beavers to break through. In that case, beavers can be "shut-ins," locked into their above-ground lodges and the pond below the ice surface until the weather warms.*

*Not to worry, however. Before freeze-up, beavers make a "food cache," a generous supply of twigs and branches they will use as food throughout the coldest months. These food caches are partially submerged. Winter's gathering ice freezes them in place, both preserving their food quality and making the submerged parts available as food to the "locked-in" beavers. Beavers eat the cambium or growing inner bark of twigs and branches, and leave the dead heartwood behind, which are the sticks you see in the photo.*

*As long as beavers can break through the ice, they will continue to cut and eat fresh trees. In all but the coldest temperatures, their activity will keep a hole open in the ice, often near the pond's edge. I expect the sticks you saw are from freshly cut trees, given that the beavers are able to get in and out of the pond.*

*Beavers are good recyclers, too. They will use the dead sticks as support material in both their lodges and dams.*

—Dave Nelson, Editor

### Owl House

Three years ago, in hopes of attracting woodpeckers, I made this large birdhouse. The house is 25 feet up in a large tree by the road. Each spring I've removed European starlings, but no woodpeckers. Then one sunny cold day in December I looked up to see this owl. Is this a screech-owl and would it use this house to have young? Also, will starlings chase the owl away?

Roy Vandenberg  
Rush, Monroe County

*Thank you so much for sharing your photo. How thrilling it must be to have this bird in your yard. It is a gray phase of the eastern screech-owl. According to the Birds of North America, this species comes in two color morphs, gray and rufous. Paired males and females are usually the same color, making it difficult to tell them apart, but females tend to be a bit larger. Eastern screech-owls nest between March and June, sometimes choosing human-made cavities such as bird boxes. I remember having a screech-owl nest in a box in my yard one winter when I was growing up on Long Island,*

*but I don't think it nested. Your bird may just be roosting in your box during the winter. However, it's possible it might stay and nest; some folks I know in the Albany area had one nest in a wood duck box in their yard. I am not sure if the starlings would affect the owl in your yard, but we'd be interested to hear of any updates.*

—Scott J. Stoner, DEC Research Scientist



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### REVIEW by Ray Minnick

## Letchworth State Park: Images of America series

by Thomas A. Breslin, Thomas S. Cook, Russell A. Judkins, and Thomas C. Richens  
128 pages; softcover \$19.99  
Arcadia Publishing  
[www.arcadiapublishing.com](http://www.arcadiapublishing.com); (888) 313-2665

The year was 1858. From high on the wooden Erie Railroad bridge overlooking the falls of the Genesee, Buffalo industrialist William Pryor Letchworth had his first view of the valley that was to be his home. His story and the story of how his estate, Glen Iris, would become the crown jewel of New York State Parks, are told in words and photographs in the new book, *Letchworth State Park*. As part of the Images of America series of local histories, this fine work chronicles the history of the 17 miles of the Genesee River Valley that makes up today's park.

Whether you are a first-time visitor to Letchworth, a seasoned veteran of its trails, or simply fascinated by its colorful history, *Letchworth State Park* will be a welcome addition to your bookshelf. The Letchworth State Park story is told in vintage black-and-white photographs of the people and places of the period, accompanied by appropriate and informative text.

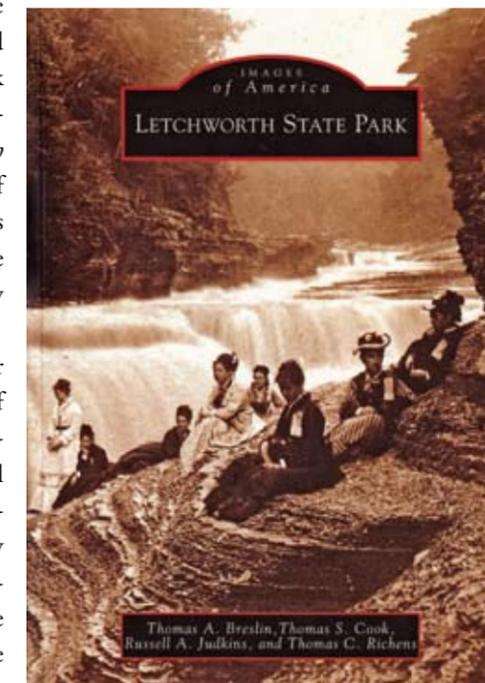
*New York State Conservationist, February 2009*

*Letchworth State Park* opens the door to the past in She-ga-hun-da, the "vale of three falls," beginning with the formation of the gorge after the last ice age. Progressing through Seneca Indian occupation, it highlights the life and influence of Mary Jemison, the "White Woman of the Genesee," an Indian captive who lived most of her life in the valley. Next came early pioneer farmers, who cleared and farmed much of the land, which later became the park.

William Pryor Letchworth was revered by the Senecas, who called him Hai-wa-ye-is-tah, "the man who always does right." The four authors of *Letchworth State Park* have done many things right as well, as each brings his own areas of expertise into play in this book.

One hundred years ago, at the close of a life of humanitarian good works, William Pryor Letchworth donated his 1,000-acre estate, Glen Iris, to the people of the state of New York as a park. Relive the history of this beautiful park through the eyes of photographers of the day, and find your connection with the past in *Letchworth State Park*.

**Ray Minnick** is a retired postmaster and previous *Conservationist* contributor. He remains active in local arts organizations in central and western New York.



# Back Trails

Perspectives on People and Nature

## Skiing Into Nature

by Frank Knight

Tall, skinny and awkward—not a promising beginning for an athlete. Certainly not for success in competitive team sports, but my “handicaps” served me well for a long and healthy life outdoors. Neither comfortable nor welcome on teams, I turned to such solo pursuits as biking, hiking and swimming.

During the long winters in my hilly Southern Tier hometown, ice skating, sledding and tobogganing were great fun. Skiing wasn't a top choice—but we did manage to survive barreling downhill on crude skis with a single toe strap. Cross-country skiing wouldn't become popular for decades.

My parents chose to spare their

into my first high school summer job as a nature counselor at a boys' camp in the Finger Lakes. After that, college majors in biology and botany led to an environmental education career where teaching often occurred outside. Many outdoor educators use canoes and snowshoes (or even skis) in public programming where getting there is half the fun.

One of my proudest outdoor accomplishments was finally learning to ski better after 60 years of practice. I took a lesson at Belleayre Mountain, and just by luck was assigned an instructor who had just taken a workshop on how to teach seniors. I was his guinea pig and he succeeded. What a rejuvenating experience! I felt as young as

*One of my proudest outdoor accomplishments was finally learning to ski better after 60 years of practice.*

son serious injury from this primitive form of skiing. They outfitted me with state-of-the-art wooden skis with spring bindings on leather boots and we went to nearby Harris Hill, modestly touted “Glider Capital of the World.” In summer, sailplanes were launched by pickup trucks. In winter, a rope tow pulled skiers to the hilltop near the glider launch. To teach me the basics, a WWII veteran ski trooper helped me earn scouting's ski badge. Inspired by my ski instructor, I stuck with skiing over the years, but never became proficient.

Scouting's merit badge quest also got me fascinated with nature. My interest in trees and birds, flowers and bees parlayed

the 15-year-old in the photo. I could ski the whole slope without stopping to catch my breath. I could relax and daydream instead of concentrating on staying upright.

As I enjoy outdoor activity well into my senior years, I wish everyone could. Many people seem to be losing or have already lost touch with nature. To counter this trend, environmental educators are using a number of popular programs to engage children in the outdoors. Some inspire entire families to investigate unmowed fields for insects, search for critters under logs, and explore pond and streamside aquatic life.

Thankfully, though, my love of outdoor activities is shared by my wife

Janet. She just retired, but is not a skier, so was eager to find a summer activity we might share. We rented kayaks and she became an instant enthusiast. After trying a variety of craft, we bought our own kayaks this summer and explore new ponds regularly. She happily fills her sketch pad while my camera and I get closer to wildlife. We've also learned that this fulfilling activity is highly self-motivating; exercise and a healthy diet enable us to continue kayaking, snowshoeing and skiing.

I've come a long way from the awkward boy who didn't know how to ski. Today it's one of the many outdoor activities I can't imagine being without. Janet and I joke that we've found the perfect senior sports; downhill skiing requires no walking and we paddle sitting down.

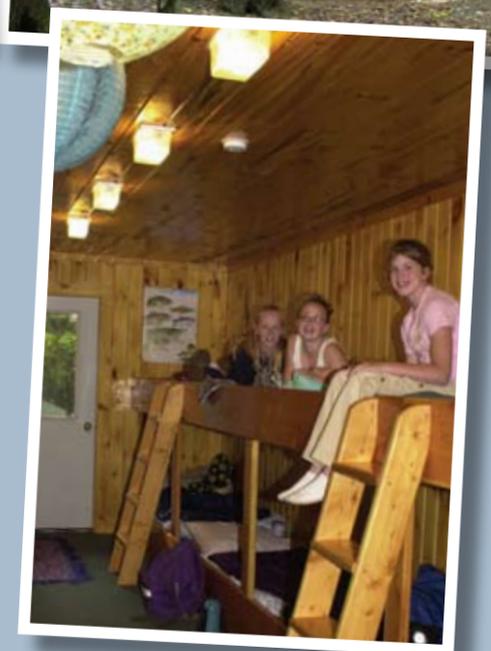
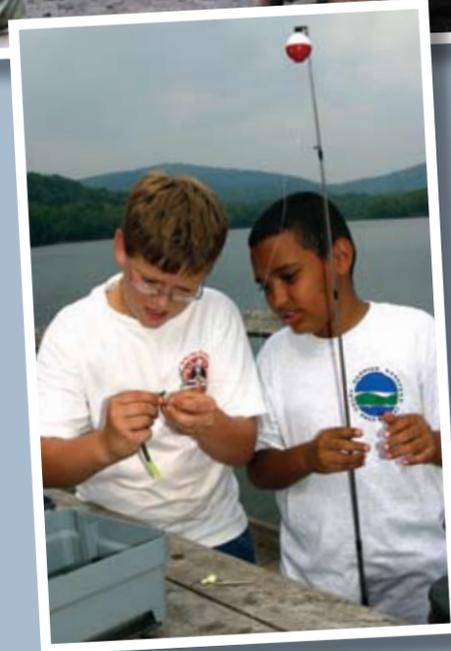
Retired DEC environmental educator **Frank Knight** enjoys wildflower photography and identification when not answering letters from *Conservationist* subscribers.



The author, Frank Knight, in 1951.

# A week at camp

## a lifetime of memories



At DEC Camps, one week is often turned into a magical experience. Children learn about the outdoors, their natural world, and create friendships that last forever.

Four camps, Colby (Northern Adirondacks), Pack Forest (Southern Adirondacks), DeBruce (Catskills) and Rushford (Western NY), host youth who are 12-14 years old. DEC also offers week-long Ecology Workshops for teens who are 15-17 years old at Pack Forest.

If you'd like to register a child for a DEC camp, please visit [www.dec.ny.gov](http://www.dec.ny.gov) and search the phrase "environmental education camps." You'll be fostering a love for the natural world that can have a tremendous impact on a young person's life.

Susan L. Shafer



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