

Working Waterfalls | Organic Farming | The Woodcock

NEW YORK STATE

# Conservationist

APRIL 2010

## Bullhead Bonanza

It's spring and the  
**nighttime**  
fishing is great

**Look Who's 40**  
Earth Day Milestone

**Conservationist for Kids!**  
See new issue inside



Dear Reader,

Hundreds of thousands of waterfowl flying northward, stopping to rest and refuel in wetland complexes across the state, including Oak Orchard, Montezuma, and Iroquois. Choruses of peepers and wood frogs rising from every warming woodland pond. A carpet of painted, white and red trilliums on the forest floor. And yes, the beginning of trout season on April 1<sup>st</sup>.

Sweep off the back deck. Throw that wool hat and scarf in storage. It's springtime in New York, a great time to enjoy an amazing array of outdoor experiences across the Empire State.

Upcoming festivals and events at DEC's environmental education centers will herald spring's return, welcoming families and young and old, offering wonderful opportunities to renew a connection to nature. Celebrations of Arbor Day and Earth Day (which turns 40 this year!) will remind us of our close ties to the land and the importance of caring for our environment.

To find out about DEC-sponsored events throughout the state, go to [www.dec.ny.gov](http://www.dec.ny.gov) and click on the "Events Calendar" icon on the upper right column of the homepage.

In the weeks to come, I hope you'll venture outside and consider taking a youngster along. Whether it's hiking a wilderness trail, casting a fly into a rushing stream or just taking a stroll through a local park, these shared moments will last a lifetime. And when we get our children up off the couch, away from electronic distractions to experience the wonders of the natural world, we increase the likelihood that they will become strong environmental stewards in the future.

If those aren't enough reasons to take a child on an outdoor outing, here's one more: It's a lot of fun.

I hope you have a happy, safe (and adventurous) spring.

Sincerely,

Commissioner Pete Grannis

David Paterson, Governor of New York State

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Pete Grannis, *Commissioner*

Stuart Gruskin, *Executive Deputy Commissioner*

Basil Anastassiou, *Director of Communications*

Jack McKeon, *Deputy Commissioner for Administration*

Laurel K. Remus, *Director Public Affairs & Education*

THE CONSERVATIONIST STAFF

David H. Nelson, *Editor*

Eileen C. Stegemann, *Assistant Editor*

Megan Ciotti, *Business Manager*

Jenna Kerwin, *Staff Writer*

DIVISION OF PUBLIC AFFAIRS & EDUCATION

Robert deVilleneuve, *Production*

Frank Herec, *Artist/Designer*

Jennifer Peyser-Figols, *Art Director/Designer*

Jim Clayton, *Staff Photographer*

Sue Shafer, *Staff Photographer*

Bernadette LaManna, *Contributing Editor*

John Razzano, *Contributing Editor*

Elaine Bloom, *Contributing Editor*

Ellen Bidell, *Book Review Support*

Elizabeth Borysewicz, *Staff Assistant*

EDITORIAL OFFICES

The *Conservationist* (ISSN0010-650X), © 2010 by NYSDEC, is an official publication of the New York State Department of Environmental Conservation published bimonthly at 625 Broadway, 2nd 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 (sorry, no credit card orders) 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](http://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



See page 2

THE FALLS, GLENS FALLS, N. Y.

April 2010 Volume 64, Number 5

# Contents

- 2 Workhorses of the Industrial Revolution**  
Hudson River waterfalls  
by Russell Dunn
- 6 Every Call Counts**  
Biologists monitor woodcock populations  
by Mike Murphy
- 10 Nice Fish**  
A new state record brook trout  
by Mike Raykovicz
- 12 The (not so) Simple Life**  
Seasons on a small organic farm  
by Keith Stewart
- 17 Marsh Marigold**  
by Barbara Nuffer
- 18 Bountiful Bullhead**  
Springtime night fishing  
by Sarah Piecuch
- 22 Earth Day, Every Day**  
40 years of environmental education  
by Marsha Guzewich



Departments

**27** On Patrol | **28** Briefly | **30** Letters | **32** Back Trails

**Front cover:** Bullhead in milfoil by Eric Engbretson **Back cover:** Rainbow by Susan Shafer

# WORKHORSES of the Industrial Revolution:

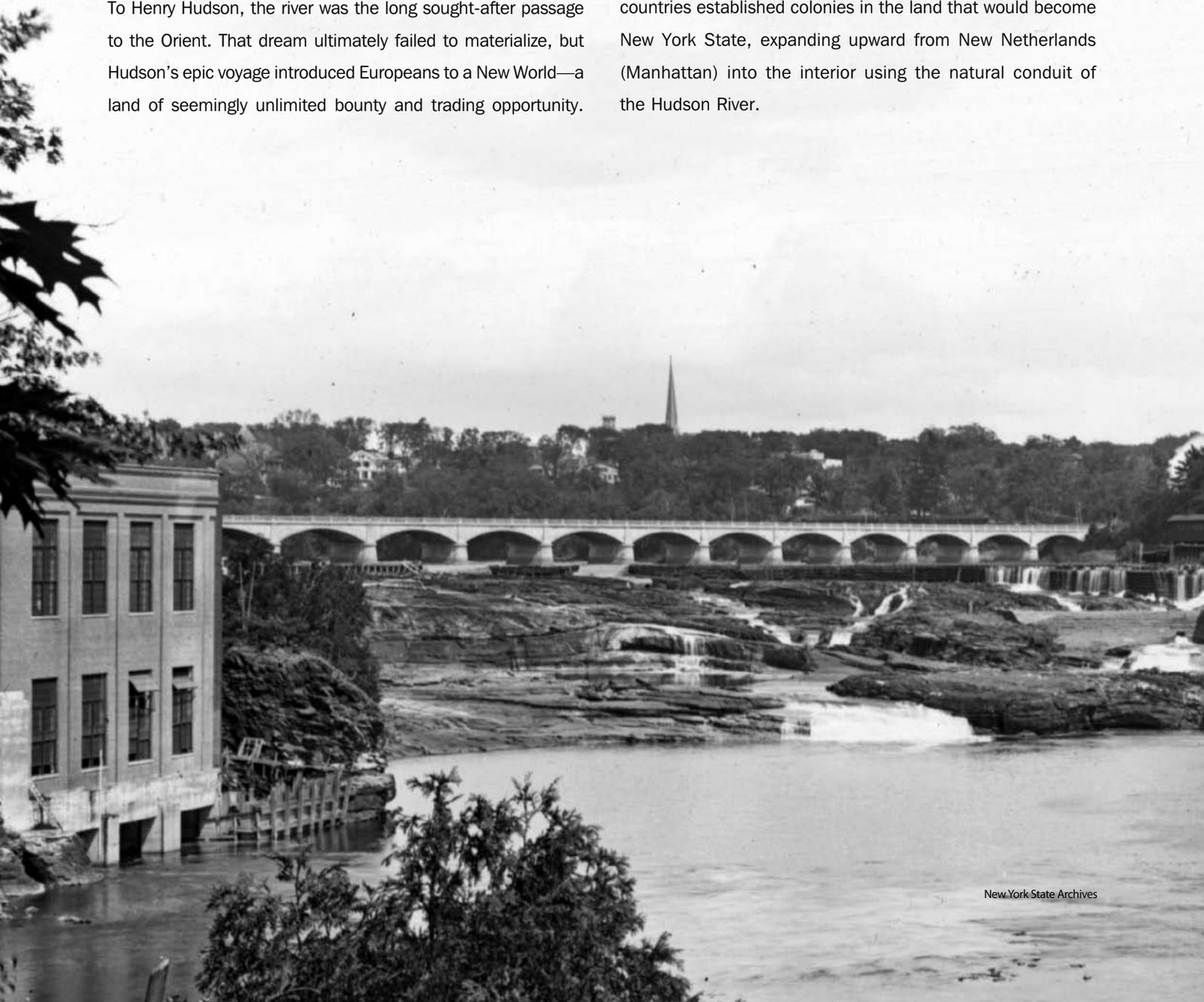
## *Hudson River Waterfalls*

By Russell Dunn

***The Hudson River has always been a river of dreams.***

To Henry Hudson, the river was the long sought-after passage to the Orient. That dream ultimately failed to materialize, but Hudson's epic voyage introduced Europeans to a New World—a land of seemingly unlimited bounty and trading opportunity.

It wasn't long before Holland, England and other seafaring countries established colonies in the land that would become New York State, expanding upward from New Netherlands (Manhattan) into the interior using the natural conduit of the Hudson River.



## These falls were placed under the yoke of early industry, turning waterwheels for factories and mills...

As droves of explorers and later, settlers, passed through the Hudson River Valley, the numerous tributaries along the lower Hudson River bustled with activity. Mills and factories were erected. These early industries made use of available power extracted from waterfalls and dams. From these beginnings, the age of hydropower and the Industrial Revolution was ushered into a young and growing America.

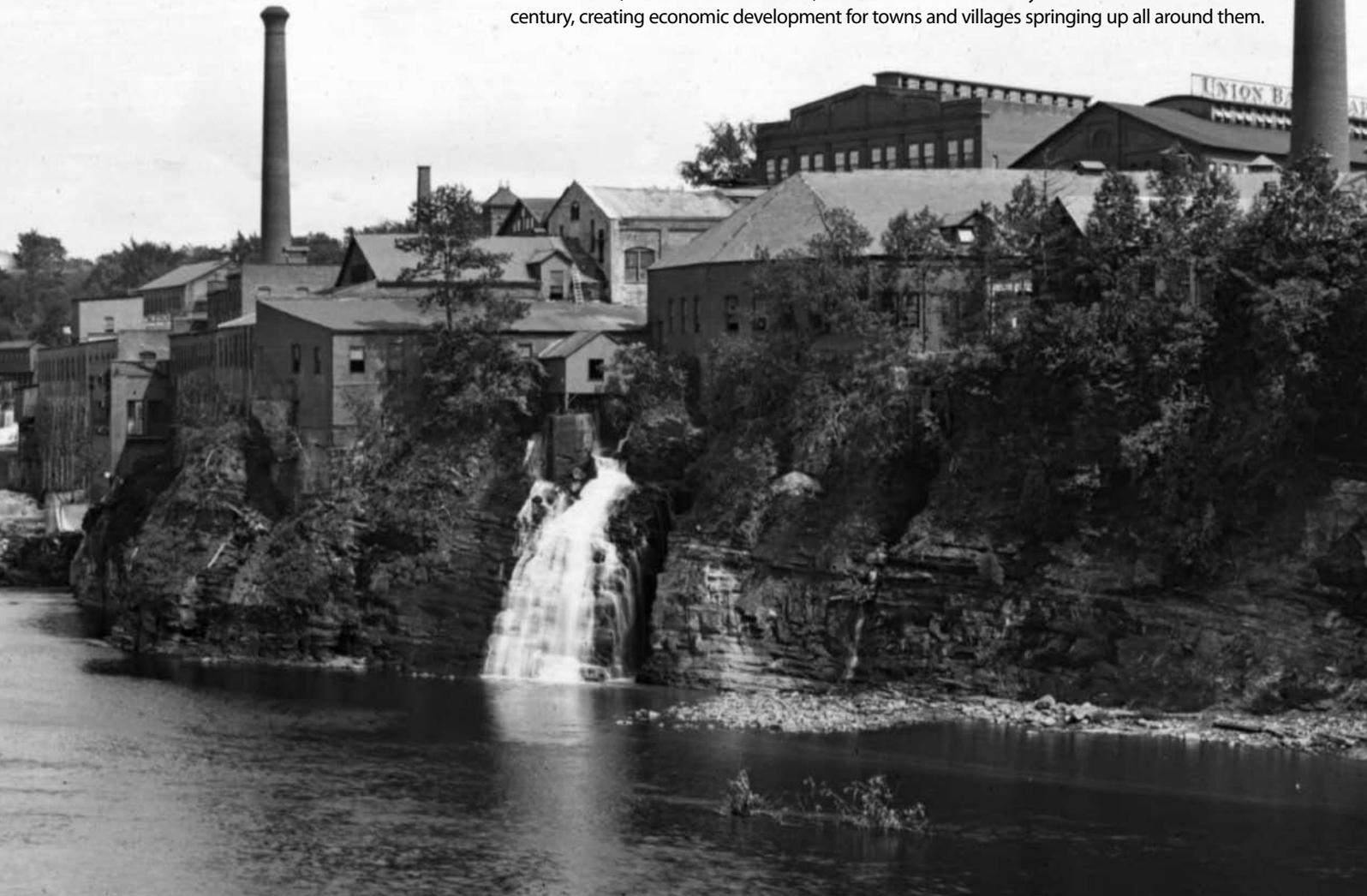
The lower Hudson—a 145-mile stretch from Albany to the Atlantic Ocean—was the conveyor belt of civilization, transporting goods and people north into the interior of New York State. Because this lower river ebbs and flows with the tides, Native Americans called it Mohicanituk, meaning the “river that flows both ways.”



New York State Archives

A rabbler at work at the puddling furnace in the Cohoes Rolling Mill.

The waterfalls, like Hudson Falls below, became centers of industry in the end of the nineteenth century, creating economic development for towns and villages springing up all around them.



The Upper Hudson, however, is not at all like its lower counterpart. From Hudson Falls to Hadley, the river is characterized by a series of substantial waterfalls; cascades that were at one time impediments to some, and opportunities to others. These falls were placed under the yoke of early industry, turning waterwheels for factories and mills to drive triphammers, vertical saws, buzz-saws, grinders, bellows, and many other types of machinery. Later, dams were built to augment the hydropower potential of the upper Hudson River. These waterfalls and dams were the workhorses of the

**From Hudson Falls to Hadley, the river is characterized by a series of substantial waterfalls; cascades that were at one time impediments to some, and opportunities to others.**

Industrial Revolution until the late 1800s, when other practical and reliable sources of energy became widely available.

Conversely, it was the absence of waterfalls on the lower Hudson River that ensured that the upper Hudson River and the numerous tributaries along the river's length became industrialized. Had there been a major waterfall on the lower Hudson River between the Palisades and Albany—a waterfall as insurmountable as seventy-foot-high Cohoes Falls on the Mohawk River's eastern terminus—then

industrial development of the vast interior of New York State would have been delayed by decades or even centuries. Large ships would not have been able to get past such a barrier to travel between Albany and the Atlantic Ocean. It wasn't until 1825 that Cohoes Falls was bypassed by the Erie Canal, finally allowing the transport of goods between the Mohawk and the Hudson without having to go over land.

The first major waterfall encountered on the upper Hudson River is Bakers Falls at Hudson Falls. There is irony in the name—one might think that the first

waterfall on the Hudson River would be called Hudson Falls, as is the town immediately adjacent. Bakers Falls is a large, sixty-eight-foot-high waterfall that prevented even the smallest vessels from progressing any further north up the Hudson River. The waterfall was named after Albert Baker, who established the first mill in the area in 1765. Bakers Falls has since been heavily industrialized and is now topped by a bow-shaped dam that extends more than 1,000 feet across the river. The village has established a viewing area near

the top of the waterfall and access to the river below the falls.

Heading upstream from Bakers Falls, going at first north and then bearing west, one soon arrives at the most famous waterfall on the Hudson River—Glens Falls. This waterfall was industrialized as early as 1763. It was named after John Glen Jr., who established a mill by the falls. Later, the waterfall was immortalized by James Fenimore Cooper in his classic eighteenth-century tale, *The Last of the Mohicans*.

Glens Falls consists of nearly forty feet of drops and plunges. Like Bakers Falls, it was sufficiently imposing to halt any vessel

trying to make its way upriver. A viewing area has been created so that tourists can look at the waterfall (and Cooper's Cave) from near its base.

From Glens Falls, now going west, progress up the river is impeded by several large dams, including the one at Spier Falls (which is really little more than a massive dam constructed on top of a tiny cascade.) But there are more waterfalls beyond these barriers.

Further west is Palmer Falls, a seventy-foot-high cascade that until recently



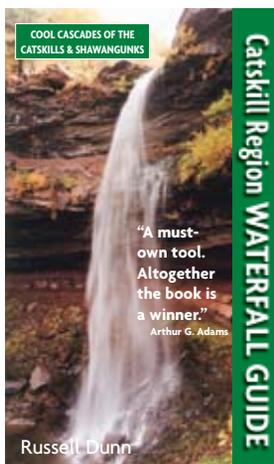
was used for power generation by International Paper Company's plant at Corinth. Palmer Falls' industrial history goes back to 1804, when Ira Haskins erected a sawmill near the falls.

Just around the corner from Palmer Falls, past a turn in the river called Big Bend, is Curtis Falls, which is part dam and part waterfall. The fall was named after Warren Curtis Jr., who founded the Corinth Electric Light Company.

Finally, after proceeding another six to seven miles upstream, we arrive at the Hudson River's most picturesque and photographed waterfall—twelve-foot-high Rockwell Falls. It was named after Jeremy Rockwell who erected a sawmill at the fall in the 1700s. Rockwell Falls can be safely viewed from the Bridge of Hope which spans the Hudson River between Hadley and Lake Luzerne.

These five prominent waterfalls on the upper Hudson River were power sources used by a number of major industries over several centuries. Entire villages, towns, and cities formed around them, creating the northern Hudson River and cityscape with which we are familiar. It is waterfalls like these that have made present New York State what it looks like today.

Licensed guide **Russell Dunn** is author of five books on New York waterfalls, including *Catskill Region Waterfall Guide: Cool Cascades of the Catskills and Shawangunks*. (Black Dome Press, 2004).



Postcards of Hudson River waterfalls (like those shown here) were popular "souvenir card" collectibles among New York residents and visitors during the early twentieth century.



# Every Call Counts

Biologists use singing-ground survey  
to monitor woodcock populations

By Mike Murphy

**Peent!...Peent!...Peent! With each nasal call, the ridiculous-looking game bird shuffled its awkward stance and turned 90 degrees. Suddenly, it burst forth into slow flight, at first at a shallow angle and then steeper, higher and higher into the sky, twittering all the while.**

Meet the American woodcock, *Scolopax minor*.

As a wildlife biologist, my job sometimes entails counting critters. But many species of wildlife are elusive and difficult to monitor, which can pose a problem. Sometimes, a species' behavior makes it much easier to find, which allows researchers an opportunity to gather important biological information. For instance, some species of game birds, like the woodcock, become much more noticeable during the breeding season when courtship rituals bring them out of hiding. Loud distinct calls or showy displays—such as a male ring-necked pheasant's crow, a male wild turkey's gobble, and a male woodcock's call and aerial show—give the animals away, making it much easier for biologists to count them.

Migratory birds, woodcock spend their winters in the southern U.S. and head north in early spring, following the receding snow. They arrive on the breeding grounds in mid-March, at a time when winter can be brutal and unforgiving. (They feed by probing the ground with their long bills to catch earthworms and other invertebrates, so as soon as “seeps” open in areas of melted



*By counting the number of displaying or peenting male woodcock in an area, ornithologists found they could monitor the bird's population over time.*

snow, woodcock are quick to follow.) After the long journey, males quickly establish "singing grounds" in abandoned fields or other open areas where they have space to perform their fascinating courtship ritual to attract females.

At dusk, a sitting male woodcock will utter a series of nasal sounds called "peents" which sound more like the buzz of a large insect than a bird. It then takes flight upwards in a spiral hundreds of feet high, circling and singing high above the ground in a chirping flight song before descending, continuing to sing as he falls like a leaf to the ground. This acrobatic aerial display is sometimes referred to as a "sky dance." Few birds in our area rival the woodcock's fervor.

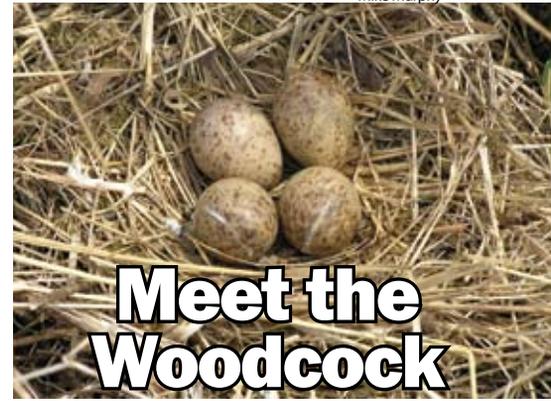
By counting the number of displaying or peenting male woodcock in an area, ornithologists found they could monitor the bird's population over time. Thus, the North American Woodcock Singing-ground Survey was born in 1968. The survey ranges from Virginia to Quebec, and is coordinated by the U.S. Fish and Wildlife Service in cooperation with the Canadian Wildlife Service and state and provincial wildlife agencies. Survey routes were established along lightly traveled roads to: minimize disturbance from vehicle traffic; provide a safe survey route for observers; and provide a quiet place to listen for peenting woodcock. New York has 100 survey routes scattered across the state.

The survey is timed to coincide with the peak of display behavior, and runs from April 20-May 10 in southern New York, and April 25-May 15 further north. For consistency, the same observer runs the same 3.6-mile route from year to year. Depending on the amount of cloud cover, the survey begins either 15 minutes (in cloudy conditions) or 22 minutes (when clear) after sunset, which is the time male woodcock call most. Run only once during the breeding season, surveys are

not attempted in strong wind, in heavy precipitation, or if the temperature drops below 40 degrees Fahrenheit, as the birds are less likely to be calling or to be heard. Observers record the number of peenting males heard during a two-minute interval at each of the ten stops along their routes. Surveys must be completed in 38 minutes, and to avoid hearing the same bird twice, stops are spaced 0.4-miles apart.

Once surveyors complete their routes, data is sent to the U.S. Fish and Wildlife Service's Division of Migratory Bird Management in Laurel, Maryland. There, federal biologists analyze the data and prepare an annual report, *American Woodcock, Population Status* (found at [www.fws.gov/migratorybirds/](http://www.fws.gov/migratorybirds/)). Biologists use this data to create management plans for the long-term health of the woodcock population, including determining bag limits and season lengths for hunting. Over the 40+ years that the survey has been conducted, data collected indicates that New York's woodcock population has declined 42% since 1968 (see Figure 1 below). Despite this drop, however, woodcock are still reasonably common in early successional habitats and during the peak of fall migration.

Biologists agree that the primary reason for the woodcock's decline is the loss of their preferred early stage forest



### Habitat Requirements:

Nesting and brood-rearing: young forests

Roosting: large fields

Feeding: alders, aspen, dense stands of young forests, fertile soils

Singing: small openings, forest clearings

### Woodcock Trivia:

Other names: timberdoodle, bogsucker, Labrador twister

\*"Little lover of swamps or bogs"—translation of former scientific name, *Philohela minor*

Females weigh 7-8 ounces

Males weigh 5-6 ounces

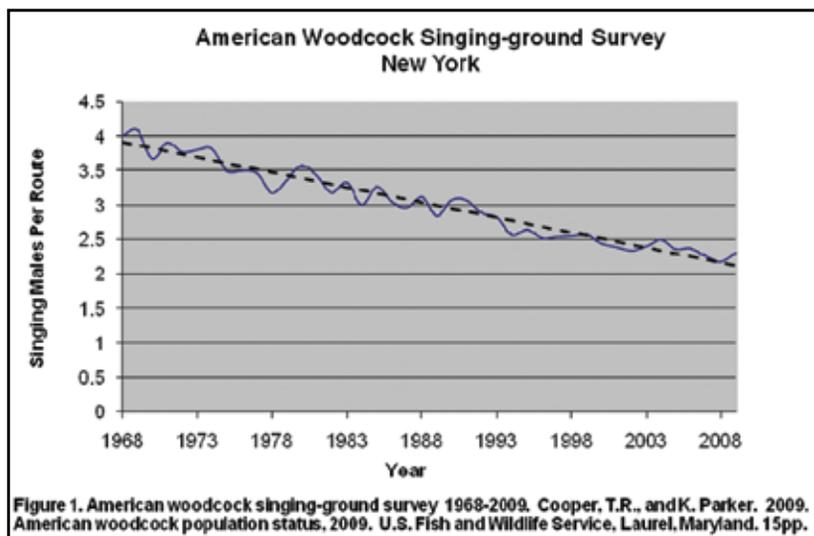
Bill is about 2.5 inches long

Females lay four eggs

Earthworms make up 50-90% of their diet

Classified as a shorebird

habitat. New York's forests have become mature, which is more suitable for deer, bear and turkey. Consequently, we have more deer, bear and turkey than we've had at any time in modern history, but the flip side is that we have fewer woodcock,



golden-winged warblers, brown thrashers and eastern towhees, as well as other kinds of wildlife that favor early succession habitat.

Compounding this problem is that clear-cutting patches of forest land, a technique known to improve habitat for woodcock and other early succession species, is not widely accepted by the public. In fact, clear-cutting is sometimes viewed as detrimental to the environment. Yet, if done properly, clear-cutting can provide benefits for many kinds of wildlife. Today's wildlife managers face the challenge of balancing diverse public demands for wildlife and the habitat requirements of woodcock and other early succession wildlife, with those of species requiring mature forests or even large open expanses of grasslands.

In the case of woodcock, clear-cuts can be as little as ½ an acre for singing grounds and five acres or more for nesting and brood-rearing cover. Clear-cutting swaths from elevated upland areas through moist bottomlands is ideal for producing a variety of habitats. Landowners interested in seeing more woodcock and wildlife diversity should consider clear-cutting small patches as a land management option in the future.

Those who have seen a woodcock will tell you what an interesting and unusual bird it is. Its long bill, round body, large eyes, erratic flight, preference for earthworms, and intriguing courtship behavior make it unique in the bird world. Biologists and birdwatchers alike delight in hearing singing males in the spring. And while they're in pursuit of

woodcock, sometimes they'll see thousands of geese headed north, hear the unmistakable call of a whip-poor-will in a far-off wood, or the nearly deafening sleigh-bell-like chorus of spring peepers in a nearby wetland.

Visit an abandoned farm field at dusk in April or May and you, too, can enjoy the sights and sounds of nature. The "little lover of bogs and swamps\*" is certain to entertain!

Biologist and hunting enthusiast **Mike Murphy** directs DEC's gamebird program from his office at the Richard E. Reynolds Game Farm in Ithaca, and is the New York State coordinator of the federal woodcock Singing-ground Survey.

\* See "Meet the Woodcock" pg. 8

Dave Larned



To learn more about woodcock, refer to the Wildlife Management Institute's *Woodcock Conservation Plan*—  
[http://timberdoodle.org/sites/default/files/woodcockPlan\\_0.pdf](http://timberdoodle.org/sites/default/files/woodcockPlan_0.pdf)

If you'd like to manage your land for woodcock, check out *A Landowner's Guide to Woodcock Management in the Northeast*—  
[www.umaine.edu/mafes/elec\\_pubs/miscrepts/ne\\_woodcock.pdf](http://www.umaine.edu/mafes/elec_pubs/miscrepts/ne_woodcock.pdf)

For further reading, see *The American Woodcock* in the October 2006 issue of *Conservationist*.

Theresa Taylor



Bob Montesano



# Nice Fish

By Mike Raykovicz

When Tom Yacovella headed into the tranquil early morning mist of Raquette Lake on June 7, 2009, little did he know that good fortune would soon place him atop the list of New York’s elite brook trout record-holders.

Every angler dreams of catching big fish, and Utica native and resident Tom Yacovella is no exception. However, big fish are rare, and record-breaking fish are even more so. A wildlife artist, Yacovella is well-known for his sculpture of a bedded white-tail buck composed entirely of shed antlers which was displayed several years ago at the New York State Fair (see *Conservationist*, October 2005).

Yacovella has had a fascination with fishing for brook trout since he was a child. Placed in the Masonic orphanage in Utica after his mother died, Yacovella spent countless summer hours fishing and catching brook trout in the small stream that ran past the orphanage camp in Woodgate where the children spent the summer. Yacovella cherished the time he spent fishing and to this day, still avidly fishes for brook trout because of the

challenge they present and the beauty of the fish.

Yacovella said whenever he targets brook trout, his goal is to catch one just a little bigger than the last. Over the years, he’s caught and released numerous brook trout weighing more than two pounds and he knows there are bigger ones to be found. Until he boated his record-breaking trout, Yacovella’s biggest brookie was a 4-pound, 1-ounce fish he caught more than twenty years ago in a small Adirondack pond.

When the wind favors his small boat, Tom likes taking it to Raquette Lake where he enjoys fishing in the solitude of the Adirondacks. Fate has a way of smiling on those who pursue a dream; little did Tom know he would not only catch the brook trout of a lifetime that day, but one that would set a new state record for the species.

## Realizing the fish on the end of his line might be bigger than any brook trout he ever caught, the fight immediately took on new meaning.

Brook trout are highly popular game fish and are often associated with remote wilderness areas such as the Adirondacks. Yacovella loves the Adirondacks and fishes there often. The pleasure of brook trout fishing, he says, comes from being part of the pristine surroundings encompassing the type of water where brookies are found. What makes Yacovella's catch so amazing is that brook trout are relatively short-lived, and fish weighing more than two pounds, while not rare, are uncommon in New York.

Launching his boat on Raquette Lake at 5:30 a.m., Yacovella had an uneventful fishing experience until the big fish hit his lure just before noon. Tom likes to fish minnow imitations and was using a three-way rig with a small floating Rapala tied to a four-foot light leader. He said he fished the lure 24 feet down, keeping it away from the lake trout that lie deeper and the bass that frequent shallower water. He said he fishes with a limber rod much like those used for steelhead, because big fish have to fight the rod rather than the reel, and there is less likelihood of losing them.

After hooking the fish, Yacovella thought a smallmouth bass took his lure. "The fish fought hard and stayed deep. From the fight, I thought I hooked a nice smallmouth bass," he said. He finally coaxed the fish high enough to see it in the clear lake water but still didn't realize he had hooked a nice brookie. "When I first saw the fish, I thought it might be a lake trout," Yacovella said. However as he brought the fish nearer the lake's surface, he noticed the distinctive red, white and black fins of a

brook trout. Realizing the fish on the end of his line might be bigger than any brook trout he ever caught, the fight immediately took on new meaning. "It's amazing the deals you begin to make with God when you have a fish this size at the end of your line," Yacovella said with a grin. "The fish fought hard, but I let the nimble rod do the work until I was able to slip my landing net beneath it," he continued.

Later that afternoon, Yacovella placed the fish on a scale and noted it weighed more than five pounds. However, he was due to leave town on a business trip, so he packed the huge trout in ice in a cooler where it remained for two days. When Tom returned, a friend mentioned that he thought the fish might be a modern-day state record for this species, so Yacovella had the fish weighed again, this time on a certified scale. He was astounded when the scale showed the fish weighed 5 pounds, 4½ ounces. Yacovella's brook trout had broken the previous state record by more than five ounces! The taxidermist told Tom he thought the fish may have lost up to four ounces of its original weight during the time it was in the cooler of ice.

Since brook trout are often found in the same water as other trout species, Yacovella took his trout to DEC's Utica office where Fisheries Biologist Dave Erway examined the fish. Erway determined it was indeed a brook trout and a new state record. The huge brook trout, a female, was 21 inches in length and had an astounding 15-inch girth.

The trout was mounted by a taxidermist, but Yacovella, being an artist, said he would paint the fish himself. "They're a beautiful fish and I've often painted them," he said. "It's only fitting I paint the fish as I see it," he added.

As with most fishermen, Yacovella wasn't out to set a new state record that June day; he only wanted to catch one nice fish. It seems like he did both.

Outdoor writer **Mike Raykovicz** enjoys fishing for native brookies and walking the woods near his home in New York's Southern Tier.

**For further reading about past state record brook trout, see Brook trout: record of a legacy on page 28 of the February 2003 Conservationist.**



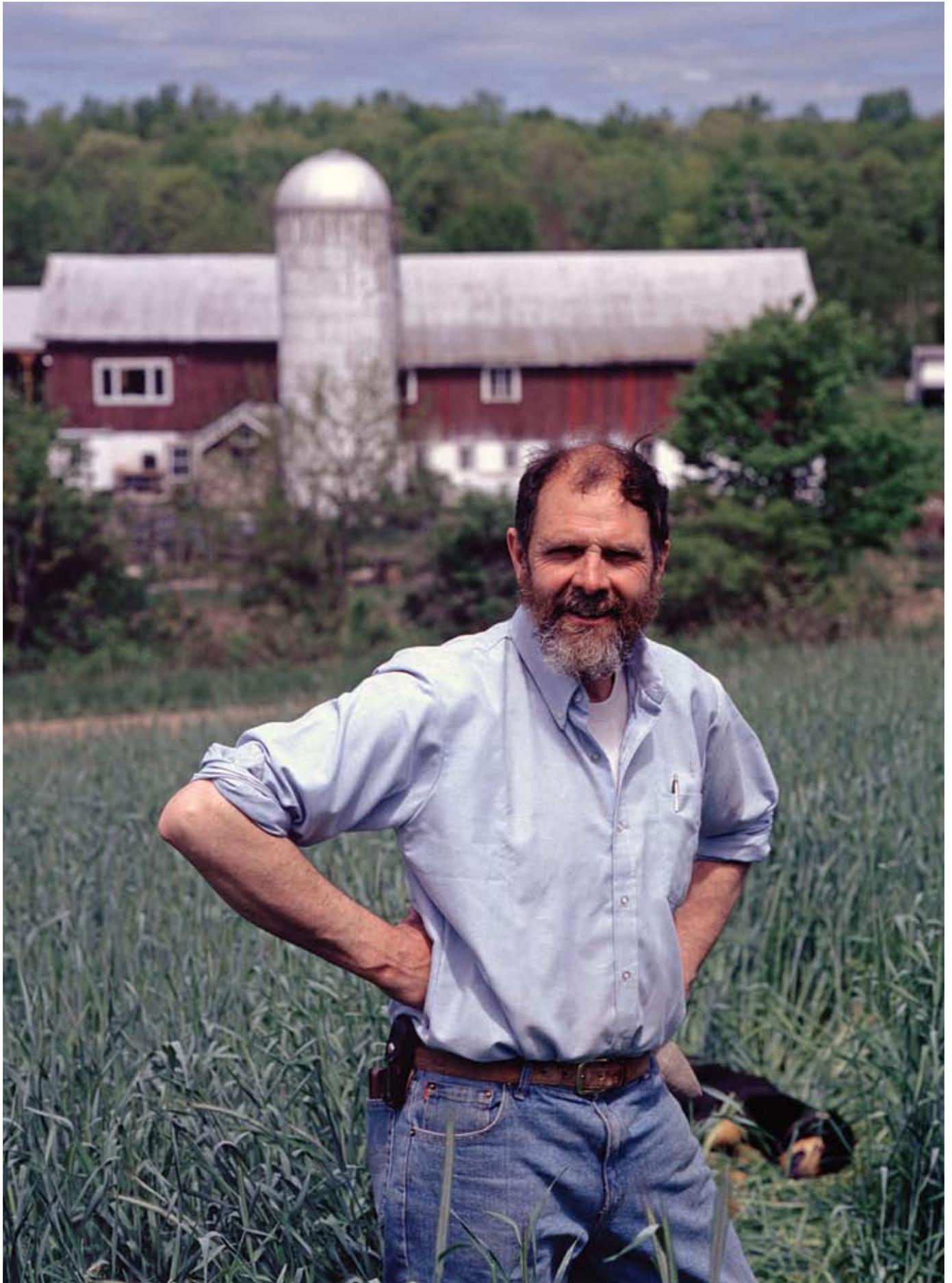
Tom Yacovella

## If You Catch a Large Fish

Each year, New York anglers catch a number of trophy-sized fish. Some, like Tom Yacovella's brook trout, may be a new state record. If you catch a really big fish, DEC wants to hear about it. You may qualify for an award in our Angler Achievement Awards Program. The program recognizes exceptional catches in several categories: annual award, catch and release, and state record.

An angler whose fish breaks the current state record receives a custom engraved plaque, an Angler Achievement Award lapel pin, and a Certificate of Achievement.

To learn more about the Angler Achievement Awards program, check out DEC's website at [www.dec.ny.gov/outdoor/7727.html](http://www.dec.ny.gov/outdoor/7727.html)



# The <sup>not so</sup> Simple Life

## Seasons on a Small Organic Farm

Story and photos By Keith Stewart

I'd been on the lookout for a couple of weeks when I finally spied them. It was a clear, cold day at the end of March, and the first dozen tiny shoots of garlic were poking up through a thick layer of mulch. They were a welcome and reassuring sight. A week later, following a day or two of

gentle rain, there were several hundred. By the 1st of May, at least 60,000 garlic plants could be seen growing in three different fields on our farm. Most of them were already six to eight inches tall and looked vibrant and healthy; they held the promise of a bountiful harvest.



Field of garlic

On our certified organic farm in Orange County, we grow at least a hundred varieties of vegetables and herbs, but garlic is our signature crop. We grow

real estate consulting firm. Much of my time was spent on the phone or struggling with columns of data on a computer. It wasn't what I wanted to be doing

satisfaction than catering to corporate clients. I began to think seriously about a major life change. Before long, I quit my job and set out to become a farmer, or

*One day it dawned on me that I would be far happier waking up each morning on a farm in the country rather than in a New York City apartment...*

more garlic than anything else. It is the crop that brings the most customers to our farmers' market stand in New York City and has garnered a fair amount of publicity for us over the many years we've been growing it. It is also a crop for which I have much admiration and affection. Garlic's exceptional culinary and medicinal properties, its ancient lineage (it's been cultivated and used by humans for 10,000 years or more, yet still retains a wild streak), and its sturdy, upright demeanor in the field, all speak well for this impressive plant.

I wasn't always a grower of garlic, or even a farmer, for that matter. Twenty-three years ago, I was living in a small Manhattan apartment and working for a

with my life, but somehow it was where I ended up. Occasionally, I would leave the office for a day to inspect farmland put up for sale and most likely headed for development. I enjoyed these trips, but at the same time felt saddened that the land, which so appealed to me, might end up with a sprawling industrial facility or a crop of new houses to replace its corn or alfalfa. Secretly, I wanted these farms to remain intact and preferred that the client change his or her mind.

One day it dawned on me that I would be far happier waking up each morning on a farm in the country rather than in a New York City apartment, and that working on a good piece of land, and looking after it, might bring me greater

at least to try my hand at farming. It was one of the best moves I ever made.

Running a small organic farm is more like a life than a job. You get to do everything: drive a tractor, till the soil, plant, nurture and harvest your crops, and finally sell them to the public. You run your own business, balance your books, watch the bottom line, and watch the weather. You make decisions, for better or worse, and move on. There's little time to second guess yourself or indulge in regret. Best of all, you work outside, watching new life unfold as you deal with the joys and frustrations of your dependence on the sun, wind and rain. And if you care about what you're doing, you'll gradually develop an ecological perspective and

Today, more and more people are choosing to buy their food from local farmers. Organic herbs and vegetables like those grown on Keith Stewart's small farm are becoming high-demand produce for the public.



work to maintain a balance between your own needs and the needs of the myriad living things that share the land with you. In the end, this balance and sense of a larger community is what is most rewarding. It's a good life, if it fits, and if you're willing to work at it, but it's not easy.

Small farmers must compete with huge agribusiness companies that control much of the food landscape in this country. Unlike small-scale, organic operations, these huge farms are often heavily subsidized by the federal government. There's also cheap imports from China and elsewhere (including Chinese garlic that comes into the U.S. for just pennies a pound), cheap labor, cheap processed foods made from subsidized commodity crops like corn and soybeans, and cheap petrochemical fertilizer and pesticides (though these are getting less cheap by the day).

All this means that small farmers in America who want to practice sustainable methods have their work cut out for them. But more and more young people are taking up the challenge and showing that it can be done. It helps that the eating public is ever more enthusiastic about fresh, local food with a human face—food that tastes good and is good for you. Every year more people want what small farmers have to offer and are eager to put their money where their mouths and stomachs are. This makes all the difference.

During the heart of summer, life on the farm is intensely busy. My seven- or eight-person crew and I will harvest those 60,000 garlic bulbs, as well as more modest numbers of onions and shallots. We will sell as many of these alliums as we can and cure the rest so we can continue to sell them right through Christmas. We'll pick a thousand pounds of flavorful, field-ripened tomatoes each week and take them to market, along with summer squash, zucchini, cucumbers, lettuces,



Life on a small farm requires hard work, like digging these potatoes, but the knowledge and cash gained from a successful season help ensure future success.

potatoes, beans, basil, parsley and more. We'll set out many thousands of transplants of cold weather greens, for mid- and late-fall harvest: different varieties of kale, broccoli, collards, Swiss chard, Italian dandelion, Oriental greens, and whatever else we can grow and our customers are keen to eat. To help the crops thrive, we'll wrestle with irrigation lines and sprinklers, and face an onslaught of fast-growing weeds, eager to produce seed before the growing season comes to an end. And, hopefully, at the end of the growing season, we'll deposit plenty of cash in the bank.

On a farm like ours, autumn is the most enjoyable time of year. The hectic pace and sometimes oppressive heat have usually passed. Cooler, more settled days make field work a pleasure. When the fall harvest is in full swing, the fruits of

our labors are plain to see. And if, as is sometimes the case, we haven't planted, or weeded, or labored quite enough, well, it's too late to do much about that, so we might as well accept what we do have and be thankful. We'll just have to make sure to do a little better next year, and make use of the new knowledge we've gained.

As I look over the fields of this year's crops, I reflect on the fact that it's the final step of the season that helps make sure our farm remains in business—setting aside at least 10,000 garlic bulbs from the summer harvest. In early October, we'll begin dividing the bulbs into individual cloves and grading them according to size. Toward the end of the month, we'll begin planting the cloves, pressing them a couple of inches down into fertile, well-rested ground with the pointed end up and the root end down. All 60,000 cloves

will be planted by hand, in long, parallel rows that follow the contours of the land. Then mulch is added—fifty odd tons of aged bedding material from a nearby horse farm. The whole process will take at least four weeks. It's hard work, but necessary to ensure the continuation of our signature crop. Once the garlic is safely in the ground and mulched for the winter, I can sit back a little and know that another season on the farm has come full circle.

And I can wait, and watch, for the first shoots of spring to burst forth from the ground.

Organic farmer **Keith Stewart** is the author of *It's a Long Road to a Tomato: Tales of an Organic Farmer Who Quit the Big City for the (Not So) Simple Life*, scheduled for updated release in June 2010. He and his wife, Flavia Bacarella, live in Orange County.



Garlic is the farm's signature crop, and it's what brings most customers to their farmers' market stand in New York City.

## Organic Opportunities

**NOFA-NY Certified Organic Farms**—Founded in 1983, the NOFA-NY Certified Organic, LLC now certifies more than 90% of the organic farms in New York State. There are currently more than 550 farms, dairies or processors that are certified organic.

<http://nofany.org/dbapplet/certifarms.html>

**NYS Community Supported Agriculture (CSA) Directory**—

a comprehensive directory to help locate a CSA near you.

(This directory is not all-inclusive.)

<http://nofany.org/dbapplet/csadirectory.html>

**Organic Consumers Association**—a grassroots non-profit public interest organization that deals with crucial issues of food safety, industrial agriculture, genetic engineering, corporate accountability, and environmental sustainability. [www.organicconsumers.org](http://www.organicconsumers.org)

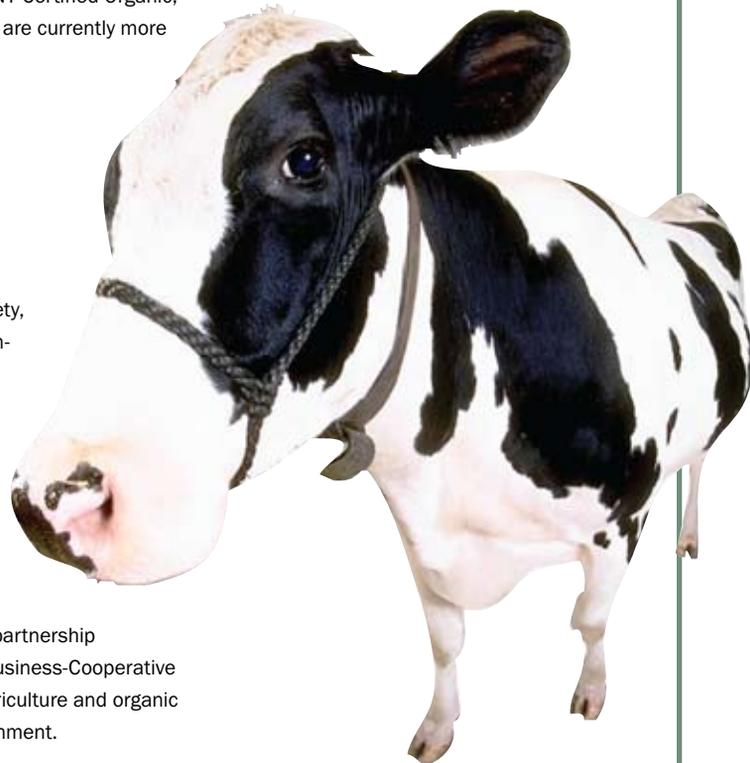
**NY Farms!**—a broad-based statewide coalition of organizations, individuals, businesses, agencies and institutions, committed to the future of New York's farms and families. [www.nyfarms.info](http://www.nyfarms.info)

**New York State Farmers' Markets**—a listing of farmers' markets found across the state. (Organized by county.)

[www.agmkt.state.ny.us/AP/CommunityFarmersMarkets.asp](http://www.agmkt.state.ny.us/AP/CommunityFarmersMarkets.asp)

**National Sustainable Agriculture Information Service**—a partnership between the National Center for Appropriate Technology and the USDA Rural Business-Cooperative Service. Launched in 1987, the service provides information on sustainable agriculture and organic farming news, and links that identify how food production can affect the environment.

[http://attra.ncat.org/farm\\_energy/food\\_miles.html](http://attra.ncat.org/farm_energy/food_miles.html)





# Marsh Marigold

*Caltha palustris*

By Barbara Nuffer

So taken was English poet Alfred, Lord Tennyson by marigold's vivid yellow flowers that he described them as shining "like fire in swamps." Indeed, marsh marigold's brilliant flowers are hard to overlook, as they welcome spring to New York State.

Marsh marigold is a member of the Ranunculaceae family, named by Pliny the Elder (23-79 A.D.) for plants that grow where frogs are found. Ranunculus is Latin for "little frog," and the abbreviated Rana is the genus of several of our native frog species.

*The common name "marigold" is an adaptation of "Mary gold"*

Indeed, marsh marigold (as its moniker suggests) grows in places where frogs can be found. It lives along the edges of streams, rivers, ponds and marshes. Its roots thrive in the rich organic mud and the plant can even be found growing vigorously in the middle of a flowing stream.

The common name "marigold" is an adaptation of "Mary gold" which refers to the flowers' presence at church festivals held in the Middle Ages devoted to the Virgin Mary. Historically, marsh marigold flowers were picked on the afternoon of April 30<sup>th</sup>, May Day Eve. Before nightfall a single flower was dropped into the letterbox of each house to protect it against evil fairies.

Some early American colonists referred to marsh marigold by another name, American cowslip. When they saw its golden flowers in the marshes, they named it for the familiar fragrant yellow flower of their English meadows, cowslip.

The glossy green, heart-shaped leaves of this herbaceous perennial plant complement the bright blossoms. The 1- to 2-inch wide flowers are made up of 5 to 9 shiny yellow sepals,

which protect developing flower buds and attract pollinators. The flowers bloom from early April until mid-June.

Marsh marigold flowers have several unique features. While they look yellow to us, they appear purple to bees. Ultraviolet light that reflects off each flower creates a black center which guides bees to the flower's nectar. The large amounts of nectar produced by marsh marigold early in spring make it an important food source for bees and flies. A line from Shakespeare refers to the

habit of the flowers opening their "golden eyes" in the morning and closing them at night.

All parts of the marsh marigold plant are poisonous to humans and dangerous to eat if untreated. Touching any part of the plant may cause skin irritation. Livestock are attracted to the bright flowers and glossy leaves, but consumption may prove fatal. Experts advise us to be careful when handling the flower and not to eat any of its parts. The Iroquois brewed a tea from the roots as an antidote for love charms. Unfortunately, it also made them very sick. Colonists ate the young tender leaves as spring greens after boiling them several times to remove poisonous compounds.

On a day with a clear blue sky, the golden flowers and shining emerald green leaves reflecting in the water are a sight to behold. So, as the snow melts into the rushing streams around New York, be sure to keep your eyes open for this bouquet of floral sunshine.

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

Photo by Eric Engbretson, [www.underwaterfishphotos.com](http://www.underwaterfishphotos.com)

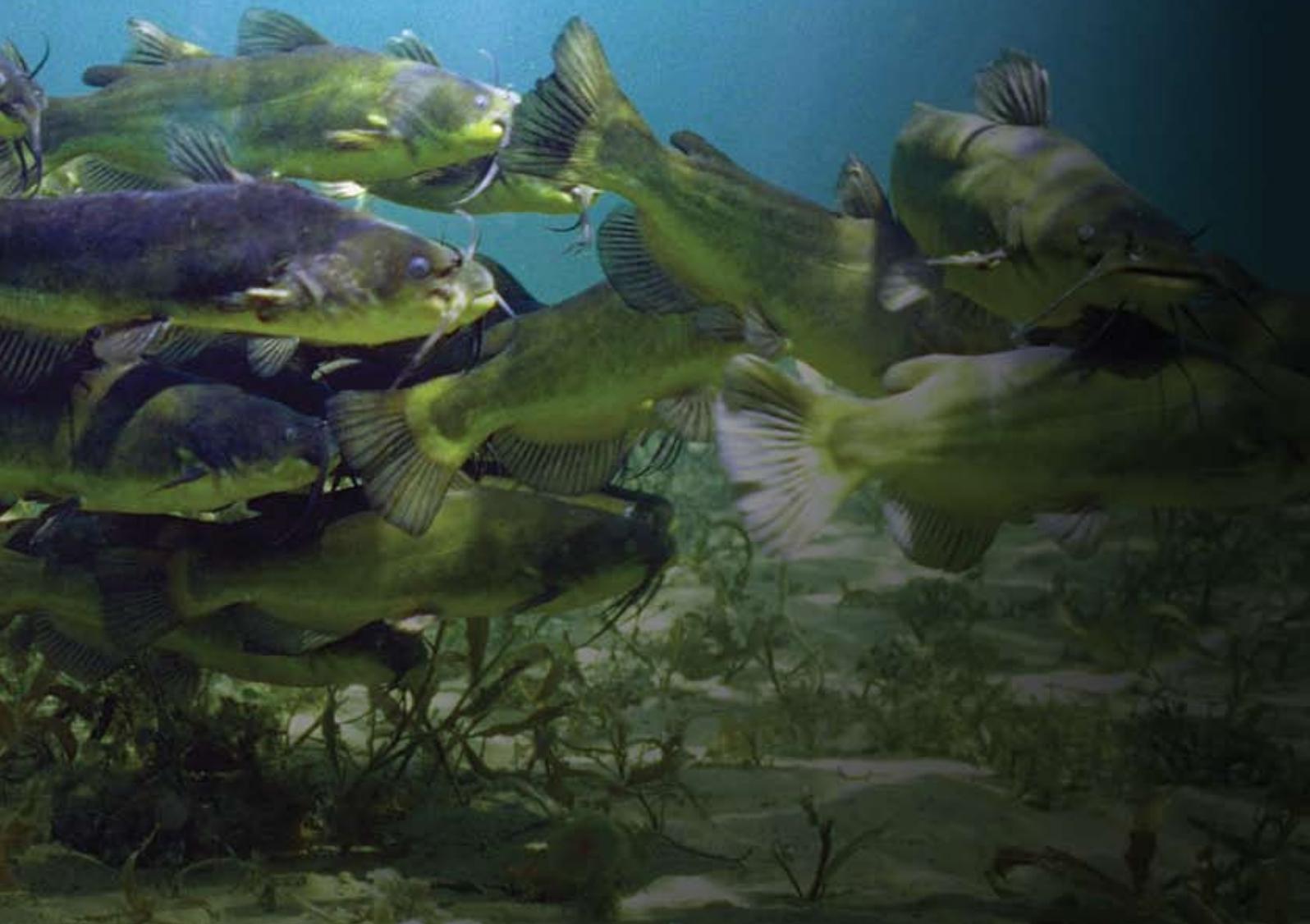
# Bountiful



# Bullhead

**Nighttime is the right time  
to catch these hardy fish**

**by Sarah Piecuch**



April means spring in New York State; sunny days alternating with warm rains encourage man and critter alike to celebrate winter's departure. Creatures emerge from all quarters, eager to be active again. Birds migrate north, fish prepare to spawn, and outdoor enthusiasts are right behind, taking it all in.

For me, April means bullhead fishing. While other anglers are off chasing the more popular trout, I look forward to the unique experience that bullhead fishing entails. Just like trout anglers who anxiously await opening day, bullhead anglers anticipate the arrival of spring, when they can enjoy the camaraderie and fun that goes along with catching and eating these tasty fish. In fact, for many northern and central New York anglers, like me, bullhead fishing and bullhead feeds are a "not-to-be-missed" annual celebration.

Bullhead fishing is distinctive because it's best done at night, affording you the opportunity to relax and observe the surrounding activity of a spring evening. Some of my best memories involve bullhead fishing at night, often in a light warm rain, with screech owls and spring peepers trilling in the background. And since it's often a group event, participants can be immersed in nature and still catch up with fellow anglers on the past winters' happenings.

Of the three species of bullhead that call New York home—yellow, black and brown—the brown bullhead is the species most commonly caught by anglers. They are one of the hardiest fishes and can be found in a wide variety of habitats, including cool Adirondack lakes, warm-water ponds, lakes, and larger, slow-moving streams.

Brown bullheads average 8-14 inches in length and can weigh up to two pounds. Members of the catfish family, they have smooth, scaleless skin and whiskers, called barbels, on their chin. They are bottom feeders, using their barbels to feel and locate food such as dragonfly larvae, worms, tadpoles, fish eggs, algae and other smaller bottom-feeding fish.



The author demonstrates how to properly handle a bullhead to avoid getting stuck by one of the fish's sharp spines—securely wrap your hand around the fish, directly behind the gills, making sure to compress the pectoral and dorsal fins against the fish's body.

While bullhead can be caught year round, day or night, from land or boat, April evenings are best for easily catching an abundance of fish from the shoreline. The rising water temperatures, warm rain, and seasonal runoff stimulate bullhead to gather in the shallows and begin feeding aggressively; a behavior that becomes more pronounced at night.

It is at this time that my fellow bullhead anglers and I grab our gear and head out for an evening of fun. Depending on the night, the shorelines of many popular bullhead waters can be dotted with the lanterns or campfires of anglers enjoying their sport.

Equipment is simple—some bait (I prefer night crawlers and leeches), a lantern, spincast rod and reel, the "bullhead rig" (a weight at the end of the line and an extra "drop line" with a hook and worm attached above the weight), a needle-nose pliers, and you are ready to go. I also like to bring a collapsing camp chair, a branch with a fork in it to rest my pole on, and a bucket to carry everything in.



Since bullhead fishing is often done at night, anglers will need a lantern or flashlight to help see. Other important equipment consists of a simple rod and reel, bait, needle-nose pliers, and a stand (can use a branch with a fork in it) to rest your pole on.

Once I've cast my bait and set my pole in the notch of the forked branch that I stuck in the ground, then it's time to sit back, relax and talk with friends. While we catch up on the latest news, we all keep a careful eye on the tip of our poles, watching for the telltale movement of the tip that indicates a fish is nibbling at the bait. Conversations are often interrupted as we take turns grabbing poles, jerking them up to set the hook, and then



The whiskers (or barbels) on a bullhead act as taste and touch sensors that help the fish locate food along the bottom.

reeling in the catch. Everyone gets into the rhythm, each celebrating the other's success.

On a good night, you can easily catch a bucketful of fish. Since bullhead are prolific and have a high tolerance for various environmental conditions, there are a lot to go around. In addition, bullhead can withstand reasonably high harvest levels and still provide good fishing and eating for years to come.

A note of caution—you must be careful when handling bullhead. They have sharp spines on their pectoral (front) and dorsal (top) fins. The spines are used for defense from predators,

and can easily puncture human skin. However, if you know how to properly grip a bullhead, you can avoid these spines. When removing a hook from a bullhead, securely wrap your hand around the fish, directly behind the gills, being sure to compress the pectoral and dorsal fins against the body. Then use your needle-nose pliers—it makes hook removal much easier.

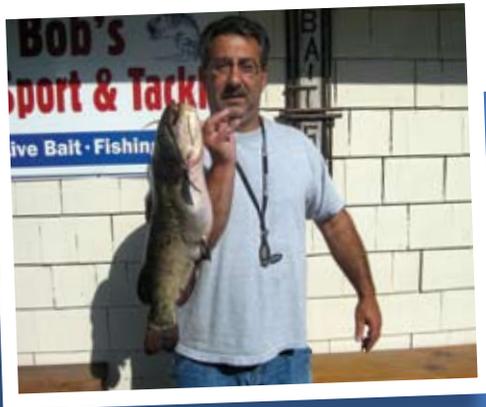
To me, spring is also the best time for eating bullheads. The cold, clear, spring waters make the meat incredibly mild and sweet. But before you begin to cook bullhead, be sure to clip off the sharp spines, and remove the head and

entrails. Bullhead can be cooked with the skin on or off and are generally cooked with the bones left in. It is easier to carefully eat the fish off the bone, rather than try to remove all the bones prior to cooking. Some anglers prepare their bullhead in a smoke cooker; while others, like me, like them battered and deep-fried.

If cooking up your own catch isn't your cup of tea, you can still enjoy the tastiness of springtime bullhead. Any time from late April to the end of May, many fire departments and Veterans of Foreign War (VFW) posts host bullhead dinners as fundraising events. More common in central and northern New York, these events are a true celebration of the bullhead bounty and are guaranteed to draw a crowd.

So this April, when the snow has melted and the warm rains have arrived, I hope you can visit a water body near you, drop in a line or two and enjoy bullhead fishing in New York State.

Wildlife Biologist **Sarah Piecuch** is employed by the NYS Department of Transportation. A resident of Monroe County, she enjoys all outdoor activities with her husband Marty and their dog Dalton.



## A Real Whopper

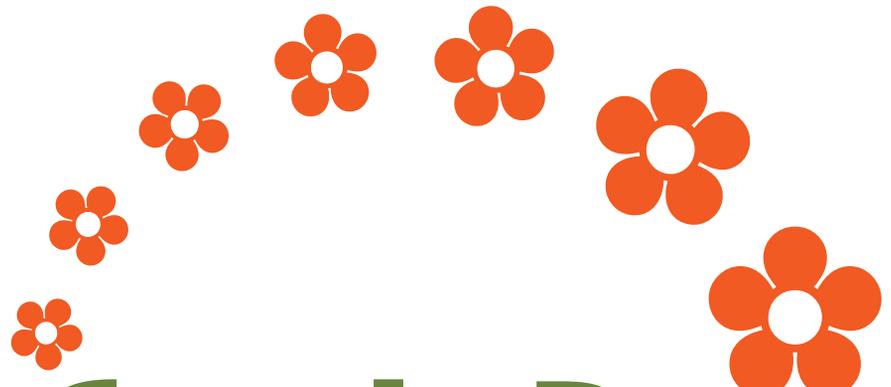
Popular sportfish, bullheads are plentiful, easy to catch, very tasty, and can be fished all year long in New York State. In early spring, they are among the few fish species available to anglers.

While most brown bullheads caught in New York waters average about one pound in weight, occasionally an angler catches a real

lunker. This huge fish was taken by Glenn Collacuro while fishing Lake Mahopac in Putnam County on August 1, 2009. Weighing in at a whopping 7 pounds 6 ounces, it is the new state record brown bullhead.



A young visitor views wildlife through a viewing blind overlooking Channels Marsh (circa 1970).



# Earth Day Every Day

By Marsha Guzewich

40 years of environmental education

As the day's final busload of bouncing children departs for their school, I look out over the fields and ponds at DEC's Rogers Environmental Education Center in Sherburne. The students—fifth-graders today, environmental stewards tomorrow—are a rare constant in the ever-changing discipline of environmental education. As I stand there watching, I start to think about how I ended up an educator at Rogers, and of the changes I've seen over the years.

It was the first Earth Day in April 1970 that was pivotal for me. Then a biology major at St. Lawrence University, I had always been interested in the environment. On that first Earth Day, I traveled by bus to Albany to take part in celebrations there. A few years later, with a Master's degree in hand and two years' teaching experience, I joined Rogers Center as a program coordinator,

meaning that I taught and oversaw lessons given to school groups, youth groups and attendees at weekend programs. Three years later, I became center director, which I remain to this day.

There have been many changes in the environmental movement since those first days so many years ago, and this, in turn, has affected the face of environmental education practiced at Rogers over the years.

Rogers Center is located on the grounds of the first state game farm. When the Conservation Department closed the game farm in the early 1960s, a Sherburne Rotarian asked National Audubon Society's Nature Centers' Division to determine if the property would be suitable for an education center. The game farm property was deemed suitable, and DEC was convinced to open its first education center.

## 1970s

Throughout the '70s, education programs dealt with environmental or conservation issues such as hunting, preparing wild game, or wildlife management. Simple titles like "pollution" or "hazardous waste" indicated our level of understanding of environmental issues at the time. People were just becoming aware of environmental problems like Love Canal in Niagara Falls. Typically the program was presented by some "expert" in the field, perhaps a professor from a local college or a DEC staff person working in the discipline. It was not unusual for a program to include a film. Looking back through printed promotional flyers, hors d'oeuvres were provided at many programs, some created from wild game. For the most part, Rogers' staff taught guided lessons for groups of school children or led general public nature walks on the trails.

Staff created a residential program; school groups came for stays of 2-4 nights and made their own meals using kitchen facilities available at the dormitory. Schools provided transportation, chaperones and evening entertainment. During the summer, the dorm was used for a teenage ecology workshop. A professor at SUNY Oneonta hosted weeklong programs for college students. Summer camp was administered by staff of the Mid-York Conservation Fund (now called Friends of Rogers).

An annual Winter Living Workshop began in the 1970s. While the workshop is still held today, its focus has changed a great deal over the years. In the beginning, people demonstrated crafts which were related to winter, made in the winter, or which used natural materials. Today's workshop involves more participatory activities for attendees—people out on snowshoes or cross country skis, taking a hike with a forester, feeding birds out of their hand, and riding a horse-drawn sleigh. If the weather is less than ideal, there are also plenty of indoor activities as well, including fly-tying, sing-alongs, and touching aquatic critters.

Between 1971 and 1972, the name changed from Rogers Conservation Education Center to Rogers Environmental Education Center; reflecting the larger organization's change from the Conservation Department to the Department of Environmental Conservation.

## 1980s

The use of films was phased out in this decade. Programs tended to integrate environmental messages into a program or trail walk. Rogers' staff began to conduct more of the weekend programs, concentrating on topics which would attract an audience. Guest presenters were still featured, but not nearly to the extent of earlier use. In 1988, Earth Day



Nick Dalmas

Visitors attend the opening of Rogers Conservation Education Center on June 10, 1968.



The author teaching a class about animals in winter (1980s).



Environmental Educator Laura Carey points out scat to participants on a "Tracks and Traces of Wildlife" walk (present day).

was celebrated for the first time at the center, and has been noted each year in some way since then. The practice of offering hors d'oeuvres (wild game or otherwise) was ended; however children still received a snack at programs specifically targeted to young audiences.

### 1990s

Emphasis began to shift from residential programming to day trips. Rather than working with students for several days, they came for a day. Lessons consisted of several topics, with about an hour spent on each topic. Teacher Workshops developed a strong following in teacher preparatory programs at colleges throughout upstate.

The focus of programming remained on natural resources, but staff began leading trips off property to explore state forests, the Finger Lakes Trail, and other natural areas of interest (bogs, fire towers, particularly good spots for wildflowers, or woodcock). We used whatever vehicle or tool necessary to enhance the exploration, be it a canoe, snowshoes, or binoculars. These trips were limited in size by the logistics of transportation, but most often were filled to capacity. Despite not being "high adventure," these trips offered people a way to connect with local natural resources, and hopefully instilled in them an interest to continue with Rogers Center outings or forays on their own.

### 2000s

Equipment advanced during this decade, with "modern" snowshoes and kayaks as alternate choices for outings. It is not unusual to have only adults on these trips, still young and active, but no longer bringing their children along. We have developed an "Active Senior Series." Some programs are given on weekdays, as we have discovered there are people who are not interested in doing programs on weekends.

Most programs are held outdoors, and some require moderate activity. We now offer programs on hiking, snowshoeing, biking, canoeing/kayaking, wildflower and bird identification and mushrooms; we cover seasonal events including spring wildflowers, bird migration, woodcock watching, fireflies and snow tracking. We also give programs on energy use and composting, and we are always supporting "buying local." And since the beginning, we tie these topics to people's own lives and use of natural resources.

While we started integrating modern electronic technology into our programming, it's not the central focus of someone's visit to a nature center. Rather, the idea remains to get people outside and connected to nature.

More recently, global warming and carbon footprints have become topics of interest. Rather than hosting specific programs on these topics, we integrate them into other subject matter. During this time, money became available for some much-needed rehabilitation work on the 40-year-old visitor center. Although not radically changed, the center incorporated energy-saving ideas into the renovations.

Reflecting on my years at Rogers, I recognize that some things about environmental education have remained essentially unchanged. We are still learning about how the world works. We must think carefully about everything we do and determine if the ecological cost is worth the end result. And we still need to

share the joy and beauty of the world with those who are willing to listen.

As I think of the many years that have passed since that first Earth Day celebration, I feel fortunate to be an environmental educator. While some celebrate Earth Day once a year, I get to celebrate it every day with the visitors to Rogers.

When we share outdoor experiences with the public, we see a level of enthusiasm and sense of wonder again and again. Letters from participants, whether children or adults, echo the same sentiments, “I loved it when we saw the...,” “I had never before touched a...” These firsthand experiences are what people take away from Rogers.\*

But some things have changed. Perhaps the most significant message I’ve witnessed in environmental education is to stay away from what might be called the “doom and gloom” school of thought. Early on, some felt that to save the world, we needed to scare schoolchildren about the terrible things happening in the rainforest or some



Exploring pond life with a young visitor.

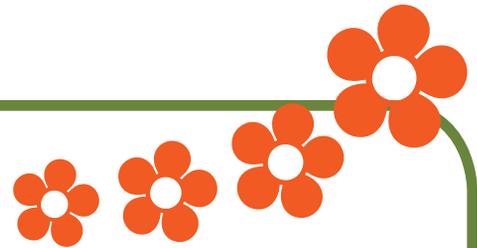
other faraway place, so they wouldn’t let that happen in their own backyard. DEC’s philosophy has never tended in this direction; rather DEC environmental educators have for years let local places serve as the basis for studying ecological concepts and understanding how the earth functions.

Tools of the trade have also changed. For example, we now use the internet to promote our programs—computers were an emerging technology at the beginning of my career. But hands-on, outdoor experiences are what people seek and are the core experience at the centers. While children of today may have watched more TV shows about a wider variety of wildlife, they are just as excited about what is happening in their own backyard. And it’s this interest and enthusiasm that keeps me energized and makes me eager to work with the next generation of conservationists!

**Marsha Guzewich** is Director of DEC’s Rogers Environmental Education Center in Sherburne.

\*For further reading, see page 27 of the February 2010 *Conservationist*.

## Ask the Educators



On reading Marsha’s article, *Conservationist* editorial staff canvassed a number of longtime DEC environmental educators, past and present, including Marsha. We asked them what changes they have seen over the course of their careers. Here’s what they had to say:

“I was student teaching on the first Earth Day. Since that time, the biggest change I have seen is that teachers no longer limit discussions of environmental issues to one day a year; instead, environmental messages are now incorporated into everyday learning.”—**Darwin Roosa, former DEC environmental educator**

“While green, eco-, ecology and environment have become universally accepted and understood concepts, we are no closer today than we were in 1970 to educating the public and children especially, about basic principles of ecology and understanding that we are a part of nature and subject to all of nature’s laws. Most people still think that nature happens at parks and has very little, if any, relevance to our daily lives.”—**Frank Knight, retired environmental educator**

“The biggest change I’ve seen is fear; fear of nature, and the outdoors. Today, people are terrified of the perceived dangers of being outdoors: rabies, avian flu, stranger danger, ticks, west Nile encephalitis, getting lost...For most kids, nature isn’t where you go for fun or solace anymore—it’s a strange and scary place. Our challenge as educators is to teach people that they can safely enjoy nature’s wonders.”—**Anita Sanchez, environmental educator at DEC’s Five Rivers Environmental Education Center**

“While a few education programs like nature walks were held outdoors, many of Rogers Center’s programs were indoor lectures and films or involved arts-and-crafts. Eventually, outdoor, hands-on programs became the focus, getting people outdoors to foster a personal connection with the natural world.”

—**Marsha Guzewich, director, Rogers Environmental Education Center**



# On Patrol

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

Carl Heilman II

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

## Real TV—Orange County

In early February, ECO Aaron Gordon responded to a complaint of a deer tangled in a snare in Warwick. Upon arrival, the complainant took the ECO to the deer and the officer noticed boot tracks leading into the woods. After ECO Mike Buckley arrived, the two officers searched the woods near the snared deer and found numerous other snares of various sizes, one steel leg-hold trap, and the same boot tracks. The ECOs followed the tracks to a house about a half-mile away. The homeowner admitted to setting the snares and knew that he had caught a deer. He said he saw an episode involving traps and snares on the Canadian television show *Survivorman* and wanted to try setting some. The officers then ordered the subject to walk through the woods and collect all his snares, which totaled 41. The ECOs seized the equipment, and issued the man several tickets, including ones for trespassing and taking deer out of season. Fortunately, the officers were able to release the deer unharmed.

## All Down Hill—Franklin County

The Titus Mountain Ski Area in Malone and its former manager were each charged with one felony and three misdemeanors after law enforcement's Bureau of Environmental Crimes Investigators (BECI) conducted a lengthy investigation. Investigators and DEC staff searched the ski area and discovered wastewater from the area was being piped directly into a culvert flowing into the Salmon River. The felony charge was for constructing and operating a waste disposal system that discharged sewage into the waters of the state. Investigators also discovered more than 100 cubic yards of solid waste buried on the property. Charges related to the illegal solid waste disposal are pending.

## Logging Lessons Learned—Lewis County

The Jefferson-Lewis BOCES forestry program recently received some unexpected support, thanks to a criminal case involving timber trespass and theft investigated by DEC Forest Rangers and BECI. Two men had purchased the right to log certain state lands, but also removed an additional 801 trees on adjacent state land. This is a violation of state and environmental conservation laws. The men were arrested and under New York State law

could have received penalties of more than \$250,000. However, based upon the defendants' immediate cooperation, and with the belief that something positive could come from a criminal action, the parties involved formulated an idea to make reparations of \$20,000 to the BOCES forestry program. The defendants received misdemeanor convictions in exchange for the reparation and reimbursement of \$15,000 for the stumpage value, plus a \$5,100 penalty paid to the State of New York. The reparation allows for the money to be awarded directly to the area where the crime occurred and allows for beneficial use by the community.

## Smoke Signals—Schoharie County

Recently, the Schoharie County Sheriff's Office contacted patrolling Sergeant Keith Isles to assist with an illegal burning complaint in the town of Wright. Sgt. Isles knew the location in question had been a problem in the past and contained several thousand waste tires. While en route miles away, he could see black smoke in the distance. When Sgt. Isles arrived, the property owner stated he was burning a brush pile and "five or six" tires were mixed in by mistake. After the fire department fully extinguished the fire, it was discovered that between 50 and 75 large truck tires had burned. Sgt. Isles issued the man tickets for illegal solid waste disposal and air contamination violations.

## ASK THE ECO

**Q:** I have a stream running through my property. I would like to do some landscaping around it and possibly make some changes to the banks. Do I need any special permit to do this?

**A:** Many streams in New York State are protected by law. This protection often includes the banks of the stream and some of the surrounding area. A permit is required for disturbing the bed or banks of many streams, so always check with DEC first before taking any action to alter a stream or the surrounding area. While it's desirable to have a well-manicured yard, that's not always the best thing for the stream and its inhabitants. (For more information, see "Permits & Licenses" on DEC's website [www.dec.ny.gov](http://www.dec.ny.gov).)



### The Good Fight

For several years, New York BASS (Bass Anglers Sportsman Society) Chapter Federation and the Salt City Bassmasters have been working to control the spread of water chestnut in the Three Rivers area of central NY, and their efforts are paying off. Since 2007, they have successfully hand pulled approximately 10,000 pounds of this invasive aquatic plant which is known to choke the waters where it occurs. Water chestnut is difficult to remove because its seeds are viable for years, so people must be sure to remove the entire plant before it can produce its nut pod. A cooperative effort that included participation from multiple area bass clubs, 14 junior bass club members, the Onondaga Water Quality Management, and Cornell Cooperative Extension, the removal program won the 2009 Berkley Conservation Award. To learn more, visit [http://berkley-fishing.com/community\\_news\\_article.php?id=2383](http://berkley-fishing.com/community_news_article.php?id=2383).

Jim Clayton



water chestnut

### Fishing the Hudson



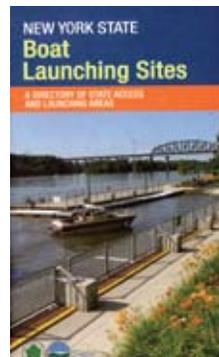
Jim Clayton

Hudson River anglers are reminded that they now need a fishing license to fish the Hudson River south of the Troy Dam. Depending on the specific location fished, and the species fished for, an angler may need a recreational marine fishing license, or a regular fishing license for freshwater, or both. When fishing downstream of the Tappan Zee Bridge, you need a recreational marine fishing

license. Upstream from the Tappan Zee Bridge, anglers need a regular fishing license when fishing for non-migratory fish (e.g. largemouth and smallmouth bass, catfish, carp, walleye, and perch), and a recreational marine fishing license if fishing for “migratory fish from the sea” (e.g. striped bass, blueback herring, or alewife). If you are fishing for both migratory fish from the sea and non-migratory fish, you need both licenses. For more information, check out [www.dec.ny.gov/permits/54950.html](http://www.dec.ny.gov/permits/54950.html).

### New Boat Launching Guide

Anglers and boaters will be happy to learn that the directory of boat launching sites in New York State has been updated. The directory is



a valuable resource that contains a list of state access and boat launching sites (grouped by county), including details such as parking capacity and ramp type for each site. It can be downloaded for free from DEC’s website

at [www.dec.ny.gov/outdoor/7832.html](http://www.dec.ny.gov/outdoor/7832.html). In addition, maps providing locations where DEC has acquired Public Fishing Rights are also available online at [www.dec.ny.gov/outdoor/9924.html](http://www.dec.ny.gov/outdoor/9924.html).

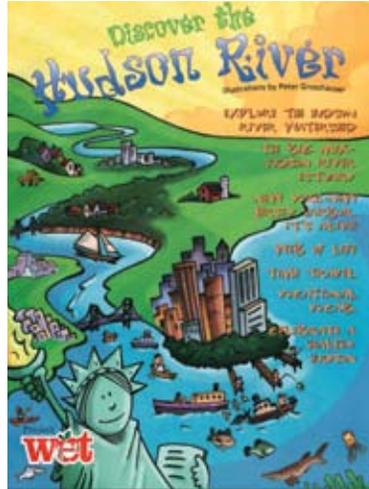
### Volunteers Needed

DEC is looking for volunteers to take part in the River Herring Monitoring Program aimed at keeping track of the Hudson River herring population. During the annual springtime spawning runs, participants collect information about the presence or absence of herring on a number of local tributaries within the Hudson River Estuary. Information gathered helps biologists learn what tributaries river herring visit, when they visit, and the environmental factors affecting the fish’s presence. During 2009, 69 volunteers participated in the program. This year’s program runs from April 1 to May 31. For more information on how you can participate, visit [www.dec.ny.gov/animals/41545.html](http://www.dec.ny.gov/animals/41545.html).



## Bringing the Hudson River to Students

The *Discover the Hudson River* booklet is now available to teachers and students in upper elementary grades. A joint venture between several organizations, led by Project WET (Water Education for Teachers), the booklet helps promote public understanding of the Hudson River in a fun and engaging way. It includes 16 pages of lively text, colors, games, activities, and maps containing information about the Hudson watershed, the variety of wildlife supported by the river, and the ways people influence and are influenced by the river. A preview of selected pages is available



on DEC's webpage at [www.dec.ny.gov/education/1902.html](http://www.dec.ny.gov/education/1902.html). A link to Project WET's online store is provided to purchase copies.

## When Size Matters

When you're talking about state record fish, size and weight matter. In our December issue, we listed the weight of the new state record walleye incorrectly at 16 pounds, 6 ounces. It should have said 16 pounds, 9 ounces.



## **REVIEW** by Jenna Kerwin

### Green's Not Black & White: The Balanced Guide to Making Eco Decisions

By Dominic Muren

144 pages; soft cover \$14.99

Barron's Educational Series, Inc.

[www.barronseduc.com](http://www.barronseduc.com); 1-800-645-3476

In a world where environmental concerns are ever-growing, it's only a matter of time before you feel bogged down by the barrage of eco-information. Is there such thing as clean coal? Is washing your clothes in cold water a smart choice? Well, Dominic Muren's *Green's Not Black & White* is here to answer questions like these and help you make informed environmental decisions.

Muren takes a new stance when it comes to sifting through today's avalanche of eco-information. Instead of planting feet firmly and taking a side, he outlines the pros and cons of a variety of topics, from eating less meat to using natural cleaning products.

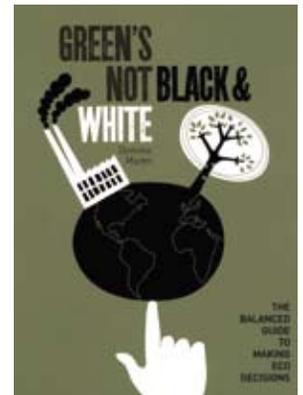
For example, you may think using bamboo has no negative consequences. Muren's information may surprise you. Bamboo is a fast-growing, renewable resource. It is produced on plantations, so it does not contribute to rainforest destruction. However, it is expensive to transport from the tropical climates where it grows, to the countries that need it. In addition, bamboo in textiles must be carefully disposed of using chemicals, so carelessness can lead to environmental problems.

The book's two-page per topic layout and bulleted facts make it an informative, but not complicated read. The colorful illustrations and photographs are an enjoyable addition, and the entertaining cartoon art mixes harmoniously with Muren's fact reporting. Airplanes on bicycles and pole-vaulting fish may seem absurd, but when absorbed with the text, they delicately present the significance of each eco-decision.

With the amount of "pro & con" information in this book, you may find yourself wondering about what your next step should be. Have no fear; Muren not only gives you the information, he offers helpful suggestions on what to do with it.

Dominic Muren cuts through a lot of the hype surrounding today's conservation efforts, and presents impartial (and sometimes surprising) facts to help you make balanced eco-decisions. I recommend this book to those confused and lost in today's Green age, or those who just want some objective answers to their environmental questions. *Green's Not Black & White* shows the hidden grey in a world of confusing and somewhat contradictory eco-information.

**Jenna Kerwin** is the staff writer of *Conservationist*.



## Future Conservationist



I thought your readers might enjoy this photo of my one-year-old son Hunter helping to plant some trees. I love taking him on new outdoor adventures.

Matthew R. Nichols  
Long Island City, Queens County

*Thanks for letting us share in Hunter's adventure. It's never too soon to introduce youth to the world around them. And given the time of year, what a great way to celebrate Arbor Day.*

—Jenna Kerwin, Staff Writer

## A Life of Dedication

I was pleased to see the *Conservationist* is now online. Van, my dad, would also have been very pleased to see that, given the fact that he worked for the magazine years ago.

Van was a commercial and fine artist. In the '30s, he worked with design and typography, which led him to employment as an art director with *Time* and *Fortune* magazines. After WWII, he was the art director for several science and medical periodicals, as well as some well-known science fiction magazines. It was then that he began his association with *Conservationist*, which was his greatest and most enduring joy.

Van was an outdoorsman at heart, and the Roosevelt conservation ethic ran strong in the family. Despite the city business, we mainly lived in the area around Hudson, Claverack and Woodstock—family stomping grounds for hundreds of years. The ethos of the *Conservationist* was a perfect fit in that way, too. I recall an extended family feel with much of the staff, several of whom became Van's close friends.

It is partly through the perspective of decades of environmental awareness that the importance of the magazine as early eco media becomes apparent. I am pleased to see you still integrate the perspectives of sportsmen with those of ecologists and natural scientists. Van would be very pleased to see that too.

W. I. Van der Poel  
Missoula, Montana



*I was unfortunate to have missed the opportunity to meet your dad, having started with DEC a year after his passing. But I imagine you must be the master of understatement, as I pored over a few back issues and found that your dad was the magazine's art director from 1948 until sometime in the early '70s. That's some tenure! I enjoyed looking through the back issues and wondering what it must have been like to produce the magazine in those times.*

*It is because of the hard work of those like your father that we continue to enjoy a reputation and a loyalty among our readers that is the envy of the industry.*

—Dave Nelson, Editor

## How Many Trees Could a Woodchuck Climb...

I took this photo the other day. I think it's proof that woodchucks can certainly climb trees!

Matthew Morris  
Stephentown, Rensselaer County

*You captured a sight that not many people get to see. While it is a common misconception that woodchucks cannot climb trees, these members of the squirrel family will indeed climb shrubs and trees in order to find food and to escape danger. Occasionally, you might even see them just lounging around in the branches. Thanks so much for sharing this great photo. (For similar photos, check out the February 1991 and 1993 issues of *Conservationist*.)*

—Eileen Stegemann, Assistant Editor



Young Hunters



My son Patrick and I participated in the Youth Turkey Hunt weekend with successful results. I called the gobbler in to Pat who connected with the large bird—23 pounds, with a 12-inch beard and 1-inch spurs. It was a fantastic (and tasty) father-son experience.

Paul Bruenn  
Putnam County

I thought you might like to see a picture of my son with the turkey he got. It was 22 lbs. and had a 9-inch beard and 1-inch spurs.

David A. Campochiaro Sr.  
Princeton, Schenectady County



*It's always great to hear of adult hunters mentoring younger generations to continue family sporting traditions. Thanks for sharing these great photos; both turkeys are respectable prizes for young hunters!*

—Dave Nelson, Editor

Correction

*In February 2010 Conservationist, the photo of the submerged shipwreck Forward, found on pages 8 and 9 of Diving into History, mistakenly lists the photographer as Charles Vandrei. The photo was actually taken by Bob Benway of Bateaux Below, Inc.*



Write to us

Conservationist Letters  
NYSDEC, 625 Broadway  
Albany, NY 12233-4502  
or e-mail us at: [magazine@gw.dec.state.ny.us](mailto:magazine@gw.dec.state.ny.us)

Ask the Biologist

**Q:** Enclosed is a photo of a wild turkey who is a frequent visitor to our backyard. I thought it was a young gobbler, but a friend says it's a bearded hen. I thought I'd consult your wildlife experts. If it's a hen, are bearded ones common? Would it be legal to shoot such a bird during turkey season? Surely it would be hard for a hunter to tell it was a hen. I do note that this one travels with hens, while gobblers are in a separate group.

John H. Northrup  
Baldwinsville

**A:** What a great photo; thanks very much for sending it. It is indeed a bearded hen. The figure varies among local populations of turkeys, but in general 5-10% of hens have beards. A hen's beard tends to be thinner than that of a jake or a tom and usually has a kink (that's a great view of a kinked beard in your photo). You can also identify a hen by the drab-colored head, lack of spurs on the legs, and relatively smaller size, although that can be tough to do without a gobbler around for reference. Hens also have buff-tipped (light to chocolate brown) breast feathers, while males have black-tipped breast feathers.



In the spring it may be difficult to tell a bearded hen apart from a male. For this reason, the hunting regulations allow for the harvest of a bearded bird during the spring (as opposed to males only). This way, hunters won't be in violation of the law if they take a bearded hen they thought was a gobbler. Very few bearded hens are harvested in the spring, so the impact to the population is negligible.

—Mike Schiavone, DEC Turkey Project Leader/Wildlife biologist

# Back Trails

Perspectives on People and Nature

## Earth Day by Pete Grannis

It's hard to believe that it's been 40 years since the first Earth Day.

My involvement with that historic gathering began in the late fall of 1969. A number of groups in New York City were discussing how to respond to Wisconsin Senator Gaylord Nelson's call for a national grassroots demonstration for environmental action. Some friends and I met in my living room to talk about how we could make a difference. We decided that the most constructive thing we could do would be to coordinate all the groups who were interested in taking part in this demonstration. Our efforts picked up speed in the beginning of 1970, culminating in the massive New York City Earth Day demonstration in April.

April 22nd, 1970 was a gorgeous day. We had convinced Mayor Lindsay to shut down 5th Avenue from midtown to 14th Street, and to close off 14th Street and Union Square Park. It was a festive atmosphere, but people were also angry about how much had gone wrong over so long; how our water was polluted, our land ruined, the air filthy, and how our government leaders didn't seem to be focused on what was happening, or much concern about how to change it.

It was the same across the nation. Millions marched for action and change—demanding an accountable government that would get involved to fix the massive problems we faced. The message sent that day in New York and cities and towns throughout America was a wake-up call to our national, state, and local governments. They understood

*Just as Earth Day 1970 was a tipping point, today we face a similar moment in environmental history.*

that things needed to change to fix the environment.

That first Earth Day gave rise to a modern environmental movement that looked at the whole environment—air, water, solid waste, land use, land abuse, land preservation, and a host of other issues. Soon after that first Earth Day, the federal government passed the Clean Water Act, which has been an instrumental law for cleaning up our nation's waters, and the Clean Air Act, the most effective weapon in our national arsenal to fight air pollution.

That first Earth Day also led me to change careers. Back in 1970, I was a tax attorney at a small city firm and there was conflict for me because Earth Day and tax day were only about a week apart. After experiencing Earth Day, I decided that I'd much rather work to improve the environment than look after peoples' taxes. Through a mutual friend, I met Henry Diamond, who was to become the first DEC Commissioner, and he offered me a job on the leadership team of this newly created environmental agency.

Since that time, progress has been phenomenal. Forty years ago, the Hudson was filled with sewage, industrial and human waste. Today, it's swimmable in almost every part of the river. The air is phenomenally cleaner; it's healthier to breathe. We've cleaned up pollution in neighborhoods and put formerly polluted sites back to good use.

As much as we've accomplished, the work continues. Just as Earth Day 1970

was a tipping point, today we face a similar moment in environmental history. This time, the issue is global climate change. Just as it was forty years ago, the fight against global warming has been spurred by a grassroots, citizen-led response to a massive environmental threat—one that demands concerted, sustained action to address. In New York State and across the globe, we've finally begun to respond. I'm proud to be back at DEC to help lead New York's efforts.

Back in April 1970, I couldn't have imagined the enormous strides we would make in the coming decades. In New York State, our continued environmental progress is the direct result of the dedicated men and women at DEC, whose daily work pays tribute to the millions of concerned citizens of all ages and backgrounds who marched, demonstrated and demanded change forty years ago.

**Pete Grannis** is commissioner of DEC.



Earth Day, April 1970. Fifth Avenue, Manhattan.

*New York State Conservationist, April 2010*



**Arbor Day—April 30th this year in New York**—is a time to celebrate the role that trees play in our lives. Trees provide clean air, create a rich landscape, and are vital to our economy. Paper, lumber, cordwood, maple syrup, fruits and nuts all come from trees.

Arbor Day was first celebrated in Nebraska in 1872 as a way to encourage farmers and homesteaders to plant trees to provide shade, shelter, food, fuel and to beautify open areas. Reportedly, more than one million trees were planted on that first Arbor Day. Today, Arbor Day continues to promote a better future, reminding us to share our knowledge of the important role trees play, and how to care for them, with today's youth.

To help celebrate Arbor Day, DEC, the Department of Agriculture and Markets, and the National Arbor Day Foundation sponsor an Arbor Day Poster Contest open to all fifth grade students in the state. The winning entry (like the two pictured here) goes on to compete in the National Arbor Day Poster Contest, and is also featured on the NYS Arbor Day Bookmark that is distributed to schools and libraries across the state.



2008 winning poster by James Farrell, Maple Hill School, Castleton (Rensselaer County).



2007 winning poster by Jennifer Valeriano, Immaculate Conception School, Jackson Heights (Queens County).

And remember to celebrate Arbor Day by planting a tree. Seedlings are available at DEC's Saratoga Tree Nursery. Visit: [www.dec.ny.gov/animals/7127.html](http://www.dec.ny.gov/animals/7127.html)

**For more information about Arbor Day and the poster contest, visit [www.dec.ny.gov/lands/5274.html](http://www.dec.ny.gov/lands/5274.html).**



Susan Shafer

Subscribe today!  
Call 1-800-678-6399

Visit online:  
[www.TheConservationist.org](http://www.TheConservationist.org)