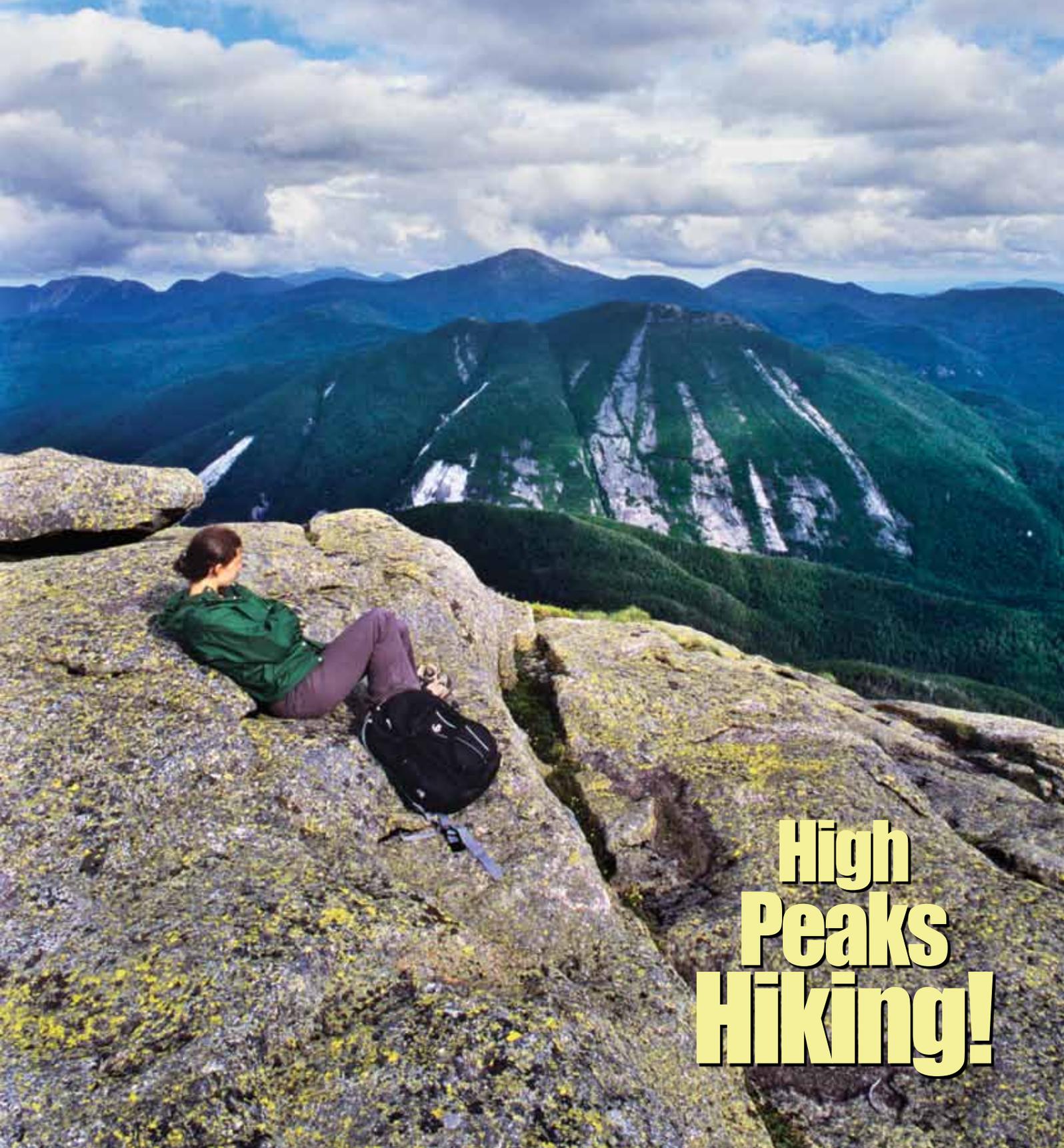


Helderbergs | NYC Botanic Gardens | Goatsuckers

NEW YORK STATE

Conservationist

JUNE 2012



High
Peaks
Hiking!



Dear Reader,

I recently spent a morning planting trees at Five Rivers Environmental Education Center in Delmar in celebration of Earth Day, sharing my morning's task with children, some more than 40 years my junior. I was reminded of the importance of sharing our love of the outdoors, our respect for the environment, and instilling a sense of stewardship of our natural resources with generations to come.

Later that same week I planted a symbolic tree at the State Capital for Arbor Day. First celebrated 140 years ago in Nebraska, Arbor Day celebrates the important role that trees play in our everyday lives, whether for paper and wood products, to heat our homes and shade our yards, or simply to provide a beautiful forested landscape.

Two more opportunities to connect today's youth with nature are right around the corner. DEC designates the last full weekend of June, the 23rd and 24th this year, as "Free Fishing Days" in New York. On that weekend, no license is required to fish New York's lakes, streams and coastal waters. It is a tremendous opportunity to share a special time outdoors with a young person, and show them how much fun they can have with a simple rod and reel instead of the latest electronic gadget. With a little luck they'll get a nibble or a catch that could give a lasting thrill and change their lives forever.

I encourage you to also check out the Great American Backyard Campout®, hosted nationally by the National Wildlife Federation, which occurs on June 23rd this year. Backyard camping offers children—and parents—a safe and fun way to experiment with camping: the security of home with the experience of being outdoors at night. Consider inspiring your children by spending a night under the stars. And don't forget the marshmallows!

And if you're feeling adventurous, no matter where you live in New York, a campground, a lake, a stream, or the ocean is nearby for your enjoyment. If you don't already have a favorite spot, visit our website (www.dec.ny.gov) to find a state campground, state forest or park where a comfortable campsite and amenities await.

So take the kids, grandkids, or grandparents in your family fishing, camping, or both! Indulge in the sights and sounds of the great outdoors. Feel the sunshine, and build memories to last a lifetime.

You'll be glad you did.

Regards,
Commissioner Joe Martens

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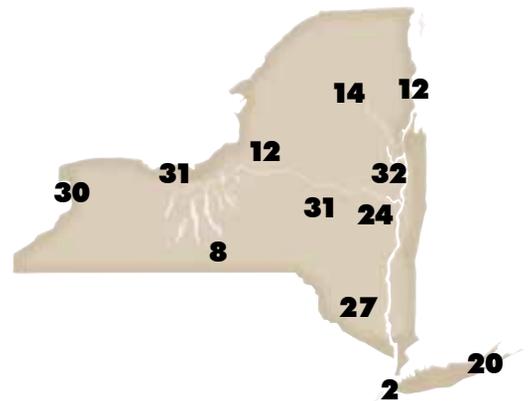


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Azaleas in bloom at the Brooklyn Botanic Garden





Joseph DeSciote

Oases in the City: New York's Botanical Gardens

By Ellen Bidell

Ever heard the analogy that the city can be a jungle? Well, plan a visit to one of New York City's botanical gardens and you'll be transported into the jungles of the Amazon or Southeast Asia. From there you can stroll through the cherry tree blossoms of Japan or the deserts of the American Southwest. Two of the city's biggest gardens boast extensive collections, landscaped to bring the sights and scents of far-away locations to the hustle and bustle of the concrete jungle.

The New York Botanical Garden

Located in the Bronx, the New York Botanical Garden (NYBG) occupies 250 acres of dramatic rock outcrops, rolling hills, waterfalls and ponds. More than one million plants in 50 themed gardens delight the more than 750,000 people that visit the garden each year.

The NYBG was established in 1891 as part of an effort to create a cosmopolitan world capital in New York City. The design of the garden was inspired by Columbia University botanist Nathaniel Lord Britton and his wife Elizabeth Gertrude Knight Britton. It is located on property owned by the City of New York and funded in part by New York City Department of Cultural Affairs.

The centerpiece of the garden is the Enid A. Haupt Conservatory, a Victorian-style glasshouse that was declared a New York City landmark in 1975. There are eleven interconnected galleries within the conservatory, each representing a different habitat. The Palms of the World houses one of the world's largest collections of palms (more than 50 species). Two tropical rainforests (lowland and upland) include some of the rarest plants on earth, as well as 8,000 orchids.

The Azalea Garden opened in spring 2011 and holds one of the largest and most important collections of azaleas in the world. Located in the heart of the botanical garden, visitors can meander along woodland paths through the collection of almost 3,000

Nancy Bryan Luce Herb Garden

azaleas and rhododendrons which are in full bloom by Mother’s Day.

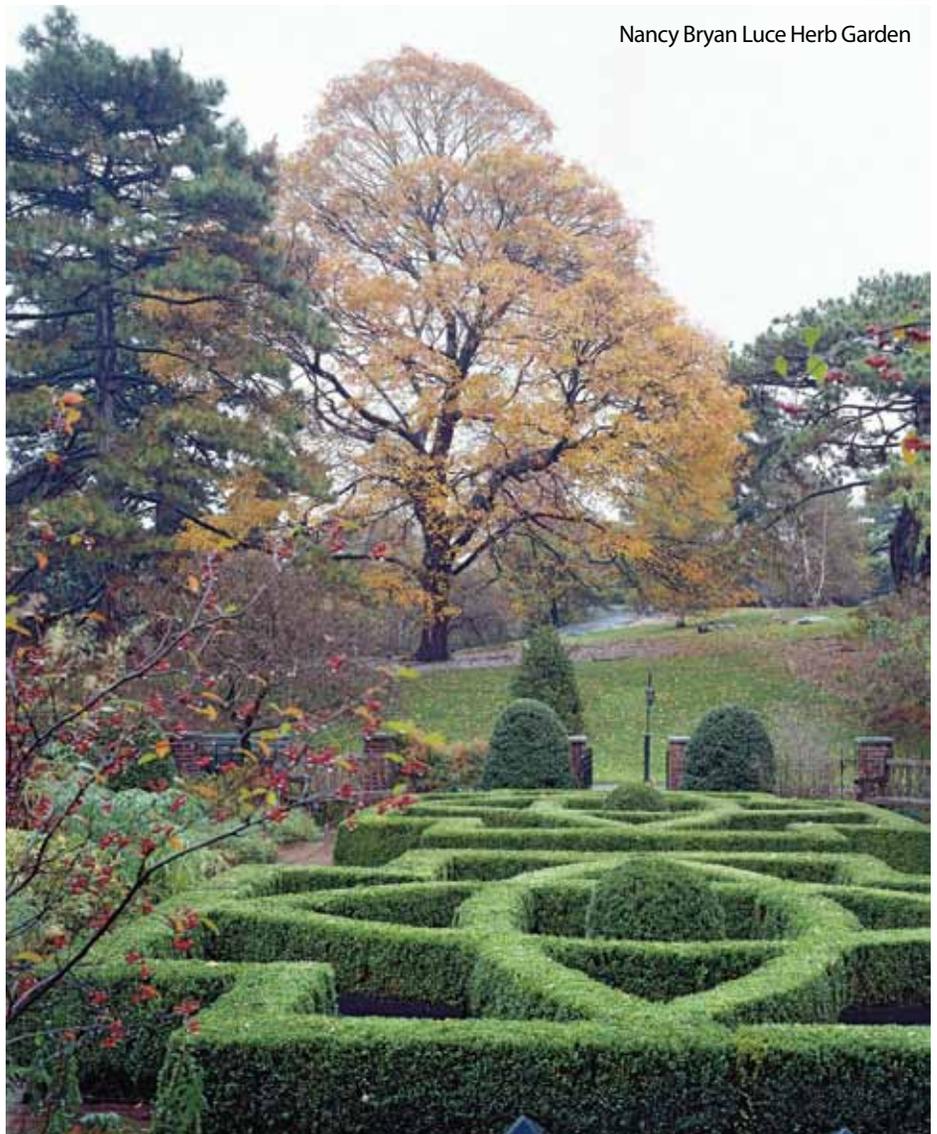
The alpine-inspired landscape of the Rock Garden takes you into a natural setting that seems far from the skyscrapers of the city. A waterfall, a 150-year-old black oak, natural rock outcrops and shade gardens provide the backdrop for the two-and-a-half acre oasis.

Botanical gardens aren’t just about showy blooms and intricately designed landscapes. Research, preservation and education play integral roles in the operations. The NYBG is one of the four largest research herbariums in the world. Its collection of preserved plant specimens aids with the study, conservation and sustainable management of the earth’s diverse plant life.

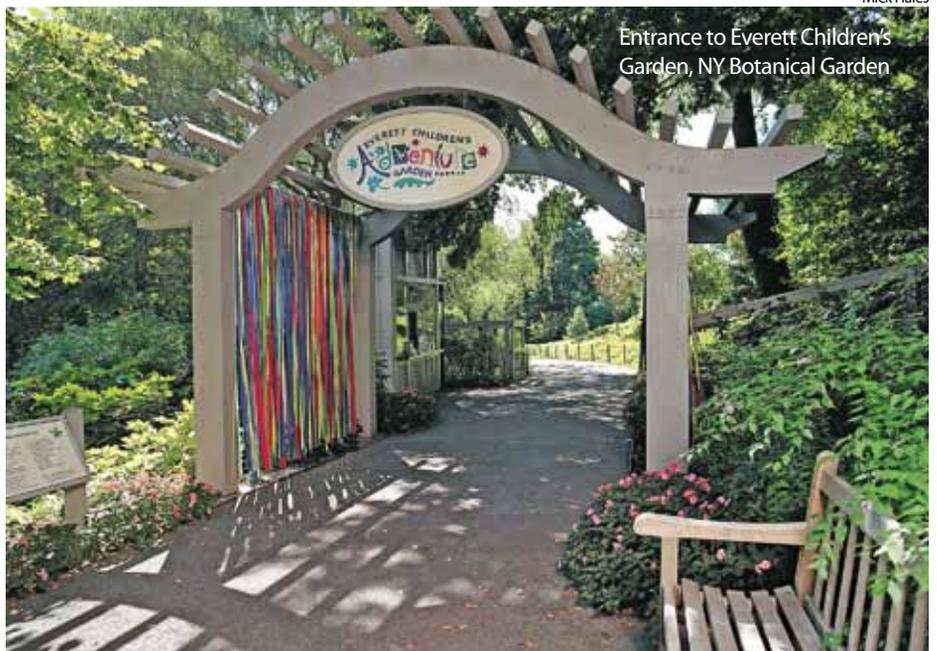
Garden scientists are involved in field research programs all over the world, including North America, the Caribbean, Brazil, Southeast Asia and the Pacific. The NYBG scientists conduct cutting-edge research in habitat destruction, sustainable forestry, natural resource management, plant molecular biology and the complex relationship between plants and people.

The Garden runs the largest educational program of any botanical garden in the world, educating more than 275,000 people each year, including children, teachers and families. There were 800 public programs in 2010, including daily tours, cooking demonstrations and weekly home gardening demonstrations, attended by more than 35,000 visitors.

Children are encouraged to touch the plants and displays of the Everett Children’s Adventure Garden, which features a 12-acre indoor and outdoor garden. There are a variety of hands-on activities, including building bird nests big enough for a child, and netting insects in the wetland areas.



Entrance to Everett Children’s Garden, NY Botanical Garden



Brooklyn Botanic Garden

Although smaller in size than the NYBG, the Brooklyn Botanic Garden (BBG) has nearly as many visitors each year. Founded in 1910, the BBG encompasses 52 acres with 12,000 different types of plants. Like the NYBG, it is located on property owned by the City of New York and funded in part by the NYC Department of Cultural Affairs, as well as the NYS Office of Parks, Recreation and Historic Preservation. The BBG is dedicated to education, research and a display of horticulture.

The Japanese Hill-and-Pond Garden was the first Japanese garden created in a public American garden and remains one of the oldest and most visited Japanese-inspired gardens outside Japan. The garden features a blend of old and new styles: an ancient hill-and-pond style and the more recent stroll-garden style. Visitors are treated to wooden bridges, stone lanterns, a torii (Japanese gateway), and a Shinto shrine along the meandering paths. The Japanese Garden and Cherry Esplanade come alive with the Hanami celebration during the month of April. The event celebrates the Japanese cultural tradition of enjoying each moment of the cherry blossom season. At the end of Hanami, the two-day Sakura Matsuri (cherry blossom festival) includes Taiko drumming, martial arts, Bonsai demonstrations and Minbu folk dancing in a celebration of traditional and contemporary Japanese culture.

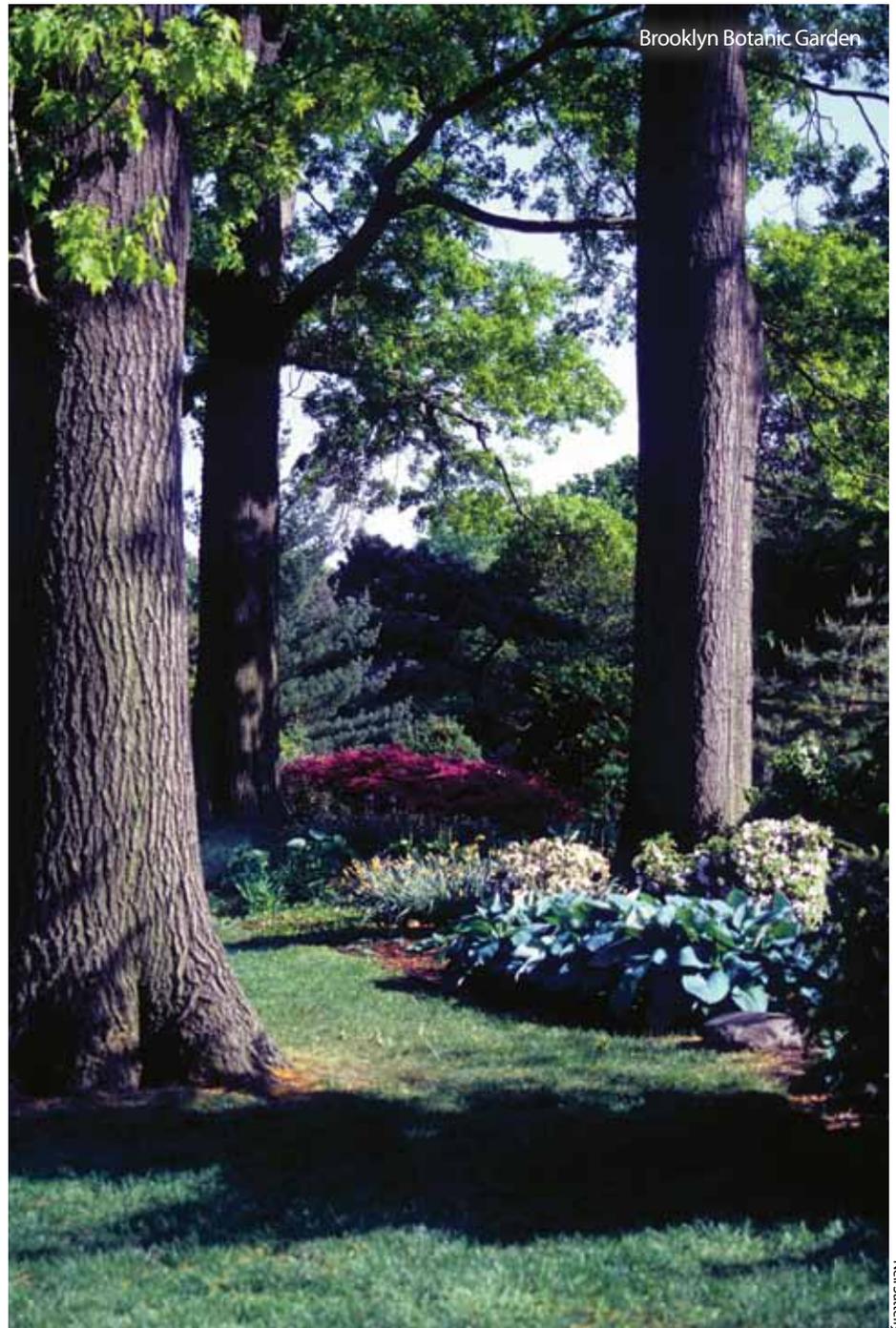
One of the most popular attractions at BBG is the Cranford Rose Garden. During the month of June, tens of thousands of roses in a variety of colors decorate the arches, lattices and formal beds of the garden. The Cranford Rose Garden is one of the largest collections in the United States, with more than 5,000 rose bushes of 1,400 varieties.

A truly unique garden, the Alice Recknagel Ireys Fragrance Garden was

built in 1955 as the first of its kind in the United States. The garden is designed for visitors who are visually impaired. People are encouraged to touch and smell the plants, which are identified by Braille labels. The gardens grow in raised beds, which are just the right height for wheelchair access. Like all collections in the BBG, the garden beds are arranged by theme: plants with scented leaves, plants to touch, fragrant flowers and kitchen herbs.

The Children's Garden is the oldest of its kind in continuous operation, and more than 800 neighborhood children now garden there each year. They learn about nutrition and sustainable gardening. Other education programs reach 150,000 children on an annual basis, and adults can learn about planting, flower arranging and composting.

Like NYBG, the Brooklyn Botanic Garden also supports and conducts





cutting-edge research. One such study is the New York Metropolitan Flora project, a multi-year effort to document the flora in all counties within a 50-mile radius of New York City. The goal of the project is to preserve rare plants, assist in the planning of parks and greenways, repair degraded habitats and design home gardens with native plants.

While research plays a vital role in the mission of any classic botanical garden, the visitors come for the flowers and trees. No matter the time of year,

there is always something to see and do at the botanical gardens of New York City. The landscapes change with the seasons, making each visit a little different from the last. Whether you want to walk through the rainforest or meander through a rose garden, sit quietly beside a waterfall or dance at a Japanese festival, the botanical gardens of New York City will give you a glimpse into the habitats of the world, near and far.

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



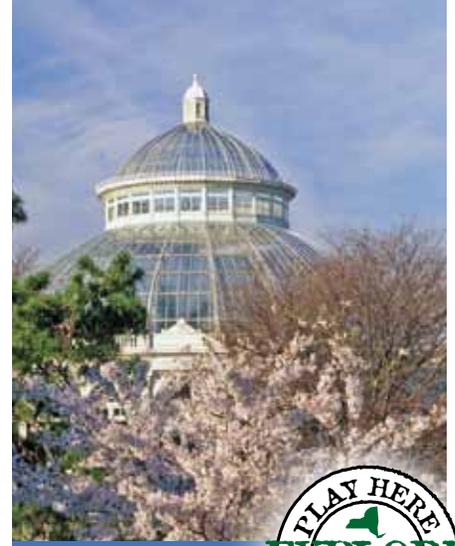
Neil Satterly

Rock Garden, Brooklyn Botanic Garden



Neil Satterly

Visitors come from miles around to enjoy the stunning flowers at the Brooklyn Botanic Garden.



NY Botanical Garden



The New York Botanical Garden

The New York Botanical Garden is located at 2900 Southern Blvd. in the Bronx, close to Botanical Garden Station off the Metro-North Harlem local line. (It's just 20 minutes from Grand Central Terminal in Manhattan.)

Hours: Tuesday – Sunday from 10 a.m. to 6 p.m. Closed most Mondays and Christmas Day.

For directions and current admission fees, visit the Garden's website at www.nybg.org/visit/directions.php.

Brooklyn Botanic Garden

The Brooklyn Botanic Garden is located at 900 Washington Avenue in Brooklyn.

Hours: Tuesday–Friday from 8 a.m. to 6 p.m. Saturday—Sunday from 10 a.m. to 6 p.m. Closed Mondays.

For directions and current admission fees, visit the Garden's website at www.bbg.org/visit/directions.

Note: New York City is home to several botanical gardens. In addition to the two profiled here, visitors to the city may also enjoy seeing the Queens Botanical Garden, and the Snug Harbor Cultural Center & Botanical Garden.



photo courtesy of Jerry Michael

MASTER STEWARDS *of the Woods*

by Gary Goff, Rich Taber and John Razzano
photos by Gary Goff except where noted

With a commitment to wise stewardship borne of owning their own woodlands, Master Forest Owners counsel their peers on how to properly manage their forests to provide plant and wildlife habitat, while at the same time using their forests for recreation, timber and other forest products.

Did you know that more than three-quarters (or approximately 14 million acres) of New York's forest land is privately owned? That's nearly three times the forest holdings of the state government—including the Adirondack and Catskill forest preserves! With so much land privately owned, the stewardship of NY's forests largely lies in the hands of the roughly 650,000 private forest owners.

New York's forests cover nearly 63 percent of the state's landscape and are home to a multitude of plant and animal species, including many irreplaceable native varieties. Activities associated with New York's forests employ tens of thousands of people and annually contribute \$4.6 billion to the state's

economy. Keeping our forests healthy is essential, and something that for most property owners is a daunting task that they can't tackle alone.

Enter the New York Master Forest Owner Program (MFO) run by Sr. Cornell Cooperative Extension Associate and founder Gary Goff. Supervised from Goff's office at Cornell University, the MFO program trains volunteers who help private forest owners with information on everything from properly harvesting timber to reducing real estate taxes. The program draws on experts from government, industry and academia, as well as the New York Forest Owners Association (NYFOA) and sporting groups seeking to preserve game habitat.

Above: Jerry Michael stands in a plantation of sugar maples (wrapped to protect them from deer browsing) at his Tree Farm in Lisle.



Certified volunteers stay up-to-date via many educational events such as this woodwalk.

More than two decades ago, NYFOA member John Marchant approached Goff with the idea of replicating a program he attended that trained forest owners how to teach their peers wise forest management. Using that peer-to-peer program as a model, Goff worked with his colleagues at Cornell, NYFOA and DEC to develop a curriculum to train volunteers. After arranging for instructors and finding sponsors (e.g. the Ruffed Grouse Society), he launched the first New York MFO program in 1991.

Someone interested in becoming a Master Forest Owner volunteer applies for one of 20 slots to attend the four-day program held each September. The program is advertised primarily through county Cornell Cooperative Extension (CCE) offices and NYFOA chapters, so few applicants are turned away. Goff reviews the applications to determine the candidates' forest management experience, as well as how much time and energy each candidate is willing to devote as a volunteer.



As part of the training, new MFOs visit Wagner Hardwoods sawmill in Cayuta.

Forest Owners Under Pressure

When times are hard and bills pile up, forest owners will sometimes cut all the best trees on their land (called high-grade logging) to sell as a way to pay their real estate taxes. High-grade logging generally leaves only diseased and low-grade timber, severely degrading the property. In other cases, some property owners under financial hard times are forced to sell land that has been in families for generations. If you are a forest owner or know of a forest owner in this situation, contact an MFO volunteer (see sidebar "For More Information"). Volunteers can provide information on tax-saving programs and refer forest owners to experts who can offer advice on how to optimize the economic benefits of their forests so their woodlots can help pay for themselves.

Training takes place at the Arnot Teaching and Research Forest in Van Etten, a 4,200-acre forest about 15 miles south of Cornell. "There's no cell phone reception, which is a good thing," quips Goff. Recruits don't need any distractions during their intense training schedule. Trainees arrive on a Wednesday afternoon. After checking in, they enjoy dinner, introductions and socializing before retiring to rustic cabins where they rest up for the busy days ahead.

Thursday through Saturday are packed with activities and information, starting with breakfast at 7:00 a.m., followed by indoor classes. Topics range from forest ecology and wildlife biology, to effectively communicating with landowners and managing real estate taxes. After lunch, trainees gather notebooks and other materials and head into the woods for fieldwork.

Outdoor lessons involve everything from identifying trees and estimating “stumpage” (timber) values, to finding and posting property boundaries. Trainees discuss the day’s lessons at dinner and then have downtime before heading back for a 7:00 p.m. class. A visit to nearby Wagner Hardwoods sawmill (where trainees see how timber becomes lumber), an evening owl prowl, quiet fishing on one of Arnot’s ponds, and other fun activities are program favorites.

Sunday is “wrap-up time” and the pace slows. After three hours of program review and an exercise on getting started as MFO volunteers, graduates are presented with their Master Forest Owner Volunteer certificates.

Once certified, MFOs are ready to meet with woodlot owners in their communities. They listen to the owner’s concerns and questions, and offer advice on where to get assistance. Friends, neighbors and relatives are usually the first contacts for the new volunteers, but they also receive referrals through county Cornell Cooperative Extension offices or NYFOA chapters. Once MFOs have found or been referred to forest owners who need help, they schedule half-day visits in order to walk their client’s property and evaluate the condition of their woods. With new knowledge gained from the training program and hands-on experience, MFOs now have the confidence they need to put forest owners on the path toward better management of their woodlots.

Jerry Michael and Dean Faklis are two excellent examples of successful MFO volunteers. Jerry is a program veteran, working since 1995 as an MFO from his home in Binghamton. Over those 17 years, he has made more than 125 visits to private forests, making him one of the program’s most prolific volunteers. Jerry picks up the story from here:

“Many of my visits in recent years have been to forested properties recently purchased by folks from the greater New



Participants learn how to properly use a compass.

York City area. Generally, they are inexperienced with forest management issues but are well-educated and accustomed to seeking out the resources they need to make good stewardship decisions.

“Two properties I visited in 2009 are cases in point. Both woodlots had been severely degraded by ‘high-grade’ logging (cutting only the most valuable trees), which left mostly diseased beech and low-value trees. I pointed out that poor past management had severely compromised the sawtimber and wildlife productivity of their woodlots, and fixing that would require intensive management for many years, potentially at considerable cost.

“Fortunately, both forest owners had the means to pay for forest stand improvement, and they agreed that restoration of their forests was a high priority. I gave them the list of cooperating foresters maintained by DEC, so they could pick a forester to work with them on developing and implementing a management plan. I left feeling energized by their enthusiasm and commitment to follow through.”

Dean Faklis is a rising star, beginning his MFO career only three years ago. He lives in Springwater, south of Hemlock Lake in the Finger Lakes region. Dean has demonstrated a gift for “thinking out of the box” about how to help forest owners and the wider community through his work as an MFO. He explains:

“Springwater is blessed with pristine waterways, abundant wildlife, and majestic forests. But we have long, cold winters, which make the cost of home heating a challenge. Fortunately, it is possible to manage our forests responsibly and provide clean-burning wood heat at a relatively low cost. But for seniors with limited ability to harvest enough wood, purchasing firewood or heating fuel is the only option. With firewood nearing \$250 per full cord and fuel oil headed back to more than \$4 per gallon, for some folks it comes down to a choice between ‘heating or eating.’ There are government assistance programs to help now, but we can’t rely entirely on them forever.



The MFO program holds regional, annual “refresher workshops” for volunteers. Here MFOs visit a bog on Diane Church’s property in St. Lawrence County.

“In response to this problem, the Springwater Wood Bank, organized and staffed by volunteers, was started as a free supplemental fuel assistance program. They work with the Livingston County Office for the Aging and Catholic Charities of Livingston County to help people in need. While they can’t build a power plant or eliminate the need for buying heating fuel, the neighbors at the wood bank make timber stand improvements to their woodlots and donate some of the harvested wood as firewood to help seniors in need. Only some of the trees are removed (much like weeding a garden) and put to good use as a home-grown source of heat for our folks.

“The wood bank started in 2010 and the supply of free firewood was limited to heat emergencies. They hope to expand the free firewood effort as supply and demand

become better understood. Firewood suppliers also receive free information on woodland improvement and free site visits under Cornell’s MFO program.

“There’s an old saying, ‘Firewood warms you twice: once when you cut it and once when you burn it.’ When you help your neighbor through a program like the wood bank, it warms you a third time. Lending a hand to people and forests, now that’s good stewardship!”

The MFO program is now entering its 22nd year of providing private forest owners with the information and encouragement they need to manage their woodlots for years to come. Since 1991, nearly 400 certified MFO volunteers have visited more than 3,000 private forest owners who collectively own about 190,000 acres of woodlands.

That’s impressive, but there’s still a lot of work to do, especially considering that the number of private forest owners in New York increased by almost 200,000 between 1994 and 2006! The good news is that there are many educational programs and technical services available through non-profit, government and industry organizations.

Looking back over the last two decades, Gary Goff is grateful and hopeful, saying “We’re very fortunate to have the sponsorship of the Robert H. Wentorf Jr. Foundation, the USDA Renewable Resources Extension Program, the NY Forest Owners Association, and Cornell Cooperative Extension. And of course, the close support of DEC forestry staff has been invaluable.”

“In 2008,” continues Goff, “we surveyed forest owners who had been visited by an MFO volunteer. The survey results showed that the knowledge, dedication and community spirit of the volunteers delivered via the MFO Program over the past 20 years has accomplished a lot. Almost all the surveyed forest owners would recommend a MFO visit to other forest owners, and many found that working with MFO volunteers benefitted their bottom lines—either through sales of timber and non-timber forest products, or enrollment in a tax-saving program. We’ve laid a good foundation that will carry the program well into the future.”

Gary Goff is a senior extension associate in Cornell University’s Department of Natural Resources. **Rich Taber** is a program assistant with Cornell Cooperative Extension of Chenango County and also a MFO volunteer. **John Razzano** is a contributing editor to the *Conservationist*.



For More Information

Visit the New York Master Forest Owner Program website at www.cornellmfo.info for more information about the program and a listing of volunteers in your area. Applications are available on the website if you’re interested in becoming an MFO volunteer. To view a list of cooperating foresters, go to www.dec.ny.gov/lands/46800.html on DEC’s website. Visit the New York Forest Owners Association website at <http://nyfoa.org> to learn more about that organization, their members and how they can help woodlot owners.





Highlighting the rich diversity of New York's natural resources

Meet the Burbot (*Lota lota*)

By Randy Jackson



Eric Engbretson



Tom Brooking/Cornell University

The only species of strictly freshwater cod, the burbot has many names—none of them particularly flattering. But whether you know it as eelpout, dogfish or lawyer, the burbot is a unique fish that should be admired, and one that could serve as an indicator of how global environmental changes could impact New York's fishes.

The burbot is unusual looking, with a head like a catfish, a body like an eel, and very small scales that make it smooth and slimy to the touch. It is a true coldwater fish and generally avoids waters warmer than 55° F.

Burbot inhabit a number of northern waters around the globe. In New York, they are at their southernmost range (in eastern North America) and occur sporadically across the state. They can be found in the cooler waters of some of the state's deeper lakes, such as Canandaigua,

Otsego and Champlain, as well as Oneida Lake. In addition, they also occur in the upper reaches of the Susquehanna and Allegheny Rivers, and tributaries of the St. Lawrence.

Burbot are the only freshwater fish in the state to spawn in midwinter. Spawning takes place when water temperatures are between 32° and 40° F, often under ice cover. Because of this need for colder water temperatures, the recent temperature increases in many New York waters could negatively impact burbot

numbers, and could reduce their distribution in the state. If so, burbot would be among some of the first species impacted if our climate warms.

Historically, burbot have gained a bad reputation among anglers. This is because burbot are aggressive predators whose preferred foods are crayfish and other fish species, including several popular gamefish. Prior generations of biologists and anglers viewed the burbot as a threat to the production of these sportfish and therefore a nuisance that

Burbot Facts

Looks like a cross between a bullhead and an eel.

Has a prominent, single chin barbel (whisker).

Usually lives in lakes, but is also found in some streams where there is cool water and plenty of hiding places. Sporadic distribution in New York.

Only freshwater fish that spawns in midwinter in NY. Forms spawning "fish balls" of 10 to 12 fish.

Frequently caught by anglers (especially when ice-fishing at dusk & dawn), but few anglers eat them.

USFWS/Robin West



needed to be removed. Early stories from Oneida Lake tell of ice fishermen building wind breaks out of burbot they caught, believing that removing them would help the more favorable walleye and yellow perch populations.

While many people still believe that removing burbot from a water will benefit other fish species, biologists now know that burbot are an important part of healthy, native fish communities, and contribute to the balance between predators and prolific forage fish.

Another misconception by the public is that burbot are inedible. However,



The state record burbot, caught in 1991.

like its marine cousin the Atlantic cod, burbot provide flaky, white meat fillets that have a delicate flavor. Captured from cold waters, and with a little attention to remove the darker meat from fillets, burbot can be among the tastiest of freshwater fish—they are excellent fried, baked or broiled, and in many regions where burbot are held in regard, the meat is boiled, dipped in butter and called poor man's lobster.

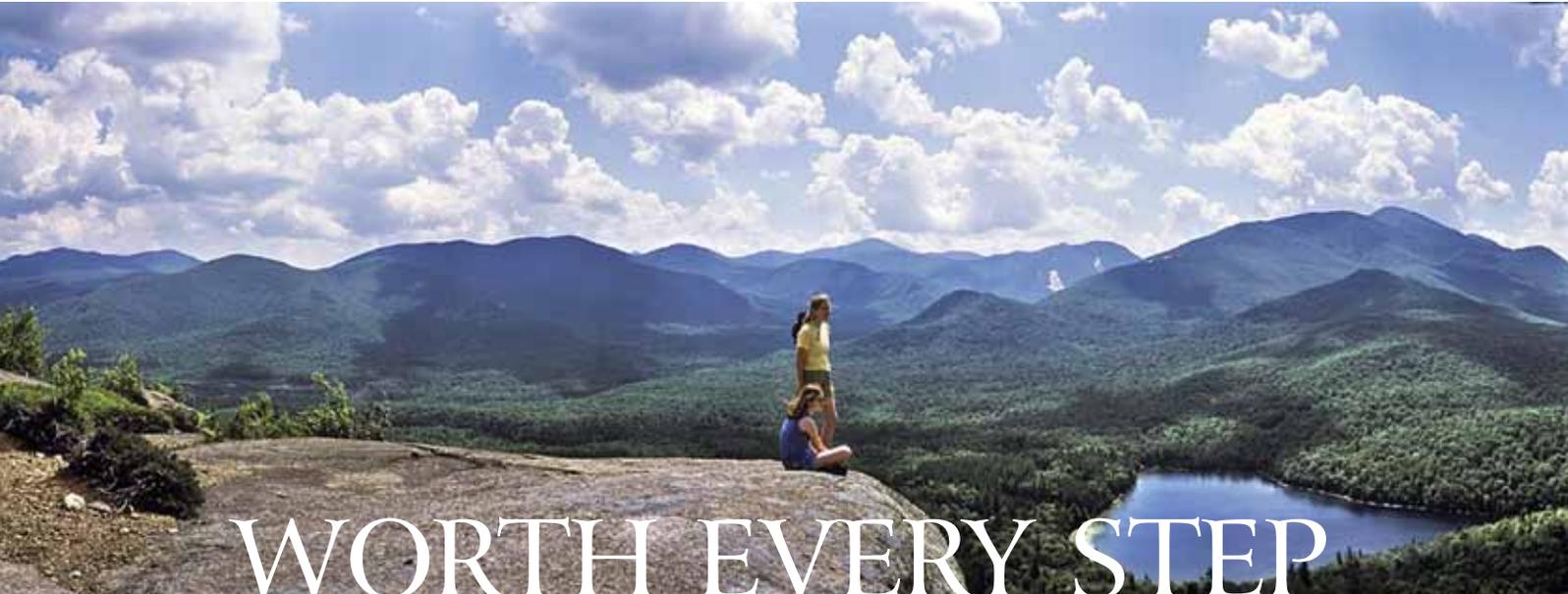
Because burbot are active during the winter, they can provide great fishing opportunities for winter anglers. Burbot are readily caught through the ice using many of the same techniques used for walleye, such as jigging with a jig "tipped" with baitfish or using a tip-up

with a baitfish. Fishing can be particularly productive when burbot move from deep waters to shoal areas to spawn in late winter. Caught on light tackle, burbot can be excellent fighters, and they can reach sizes many of New York's other sport fish do not. The New York State angling record for burbot is a 16-pound, 12-ounce fish from Black River Bay.

The burbot is one of New York's unique fishes, and an important part of the state's natural heritage. If you're lucky enough to catch one, consider keeping and serving it for dinner. You may just be pleasantly surprised!

Randy Jackson is a senior research associate at Cornell University.





WORTH EVERY STEP

—conquering the high peaks

By Lt. Tom Caifa

photos by author, except where noted

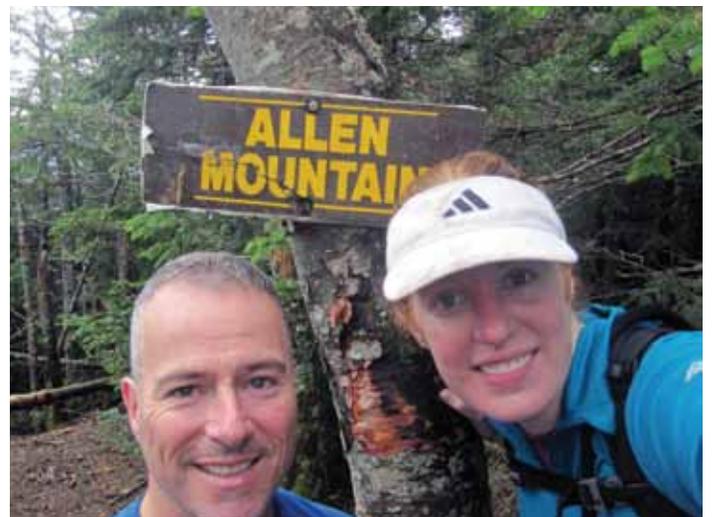
I'm going to admit something that most hardcore hikers won't: on my first serious overnight hike, I couldn't wait to get back to the car. And my girlfriend wanted to brain me with a rock. Anything that could go wrong, did; think rain, lightning, rolled ankles and massive blood donations to insects. The day was bad enough, but the night was miserable. It was pouring rain. A small stream started forming in our tent. Lightning lit up the night every few minutes. As the storm approached, I heard a tree fall. Needless to say, we didn't sleep a wink until the rain stopped at about 4 a.m.

To give you an idea of how bad it was, when we pitched our tent at dusk I could see at least five other tents nearby. In the morning they were all gone except one, and the couple that owned that tent was preparing to leave in a hurry. I could hear the girl screaming at the guy as he packed everything up. He only spoke once, and I'll bet you he wished he didn't, because one millisecond after he uttered the words "It's all part of the camping experience," his soon to be ex-girlfriend went from bad to ballistic.

That memorable event was about 20 years ago and I didn't hike again for a long time. Why would I? If I want to stay in shape, I can go to a nice, climate-controlled gym. I can run or bike on clean, firm roads right outside my door. I can stay warm or cool depending on the time of year. I can stay dry. I don't have

to swat bugs. I don't have to wash mud out of everything. Sounds antiseptic, doesn't it? I'm sure some of you think I'm bordering on blasphemy right now. Well, before you nail an ADK brochure to my front door in protest, please read on.

Two years ago, I went for a run and pulled a muscle in my calf...for the fifth time. Same muscle, same calf. Doctors were no help. They sent me to physical therapy, which helped me heal



The author with DEC Wildlife Biologist Melissa Neely on the trail to Allen Mountain.

each time but obviously wasn't addressing the underlying cause of my problem. I tried everything. Finally I got sick of waiting around for my next injury and swore off running for the foreseeable future. Naturally, I had to find a substitute to plug into my workout regimen. I was already biking about as much as I wanted to, so that was out. Then I got the idea to try hiking again. Of course, me being me, I had to go "whole hog" and decided to tackle a high peak. At 42 years old, I was no dummy (compared to 20 years ago, anyway) so I bought a good pair of hiking boots, a decent daypack and a three-season shell jacket. I also chose a hike that I could handle. It was tough, but I thoroughly enjoyed myself and couldn't wait to do the next one. Then I thought, maybe I could do all the high peaks. Why not? After that, I never looked back. Two years and three months later, I had hiked them all.

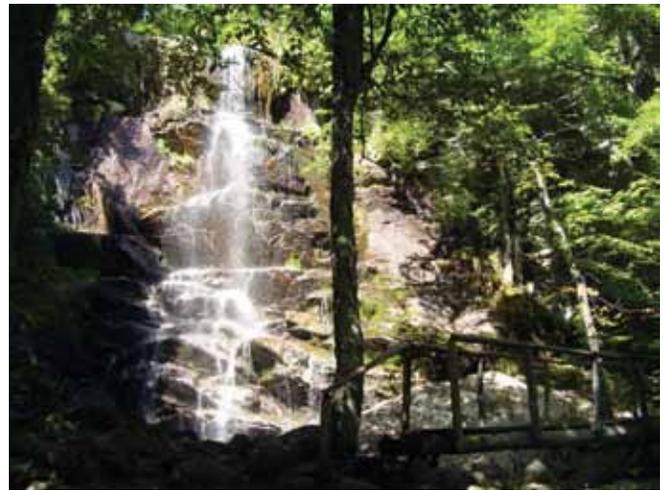
"I bet you can't do just one."

Now, I know what a few of you hardcore hiking enthusiasts are thinking: "Big deal, I've done the 46 high peaks eight times over with nothing but a bent knife, an apple, and a two-pound tent that cost a whole paycheck." Good for you. For the rest of us, read on.

The Adirondack Mountains are pretty cool. The views from the top are incredible; that goes without saying. But you will also see great stuff along the way. I've seen waterfalls that look like they are straight off a postcard. I've seen a fisher scoop up a vole and take off in the blink of an eye. I've seen an osprey grab a fish out of the water. I've seen double rainbows over Mount Marcy.

Hiking the 46 Adirondack peaks above 4,000' is a thinking person's activity. Let me say that again: you need to think about what you are doing. Keeping fit amidst civilization is like checkers. Jump, jump, jump, king me. Getting your fitness on in the woods is more like chess. You need to study the board, know what all your pieces can do and then make a plan. Think back to the disaster I mentioned in the beginning. As bad as it was, we made it infinitely worse by not being prepared. And if we had just paid a little more attention to the weather forecast, we probably wouldn't have been there at all.

I don't know about you, but I like to exercise my brain. In today's world, it's all too easy to put in the earplugs and tune out. Learning to use a map and compass is not that hard. Besides, a certain satisfaction comes from knowing that once you've mastered them, you'll never be truly lost. Even packing the right gear requires some thought. You want to bring the essentials (and different hikes can have different essentials) but you can't bring the kitchen sink. You have to think about food, water and shelter.



Beaver Meadow Falls



Base camp near Allen Mountain



Damage from Hurricane Irene can be seen along a stream near Johns Brook Lodge.

You have to think about where to start, when to start, and when to head back. You need to pay attention to trail markers, keep an eye on the weather, and plan for the unexpected. Remember, your cell phone may not work in the back country, and there's no support van to give you a ride and some apple juice if you have problems. There is also that satisfying feeling you get by giving another hiker something he needs, but forgot to bring. It makes you feel self-reliant and that, my friends, is a feeling that's not easily topped.

For a novice hiker, it can be a lot to absorb. Is it really worth it? Absolutely! And it's really not as hard as you might think. You just need to get started and ditch the excuses.

Common excuses for not hiking:

Excuse #1: *It's too hard.* Actually, some of the 46 Adirondack high peaks aren't that bad. If you start with the easier mountains, you can build your confidence and ease into the journey. You can learn from your mistakes on popular, nearby routes where it won't matter as much, and tweak your routines.

Excuse #2: *I don't have the time.* Many of the 46 can be done as day hikes.

Excuse #3: *It's too hard to prepare.* The internet is your friend. You can find information online about individual mountains, proper gear, how to pack correctly, etc. Buying the right boots and gear is as easy as going to a reputable outdoor store. And of course, finding an experienced hiker and bending his or her ear goes a long way.

Excuse #4: *Rain, mud and bugs suck.* True, black flies and mosquitoes do suck (literally), but their presence can be minimized with repellent or just by avoiding certain places and times of year. Minding local weather forecasts can greatly reduce your risk of getting caught in bad weather. In doing the 46, I only got caught in the rain three times. Always bring along a light rain jacket for those unpredictable moments. And hey, a little mud never hurt anybody. In fact, mud was your best friend when you were five years old.



Santanoni lean-to



Relaxing at Johns Brook Lodge



Inside Johns Brook Lodge



Carl Heilman II

Excuse #5: They're too far away. Turn the trip into an adventure. If you live more than three hours away, you can always stay overnight. There are hotels and motels galore. Towns like Keene and Lake Placid can make great getaway locations. Or you can camp. You can even stay in one of the many lean-tos in the high peaks, available on a first-come, first-served basis. Other great options would be either the ADK Loj at Heart Lake or the Johns Brook Lodge, both operated by the Adirondack Mountain Club.

Excuse #6: I do marathons, triathlons, secret missions, etc. The high peaks would get in the way. I once went hiking with a female triathlete. When we got to the top, she said, "Wow, this is cool." Enough said.

Excuse #7: It would take too long. Nobody says you have to do them all. But I bet you can't do just one. And what better way to exercise? Five years from now, you won't get any satisfaction from having worn out that treadmill.

So don't do what I did. Instead of starting with a rain-soaked, bug-infested disaster, plan ahead. Pick a bluebird day, get an early start, and go climb a peak. You'll be glad you did. And your treadmill will forgive you in time.

ECO Lieutenant **Tom Caifa** has contributed to the *Conservationist's On Patrol* page since 2008.

What to Pack

#1



top to bottom, left to right: Hiking poles, rain shell, daypack, first aid kit, GPS, map, Adirondack Mountain Club guidebook, 100 oz. hydration bladder (fits in my pack), toilet paper, water filter, rope, sunglasses, bandana, camera.

#2



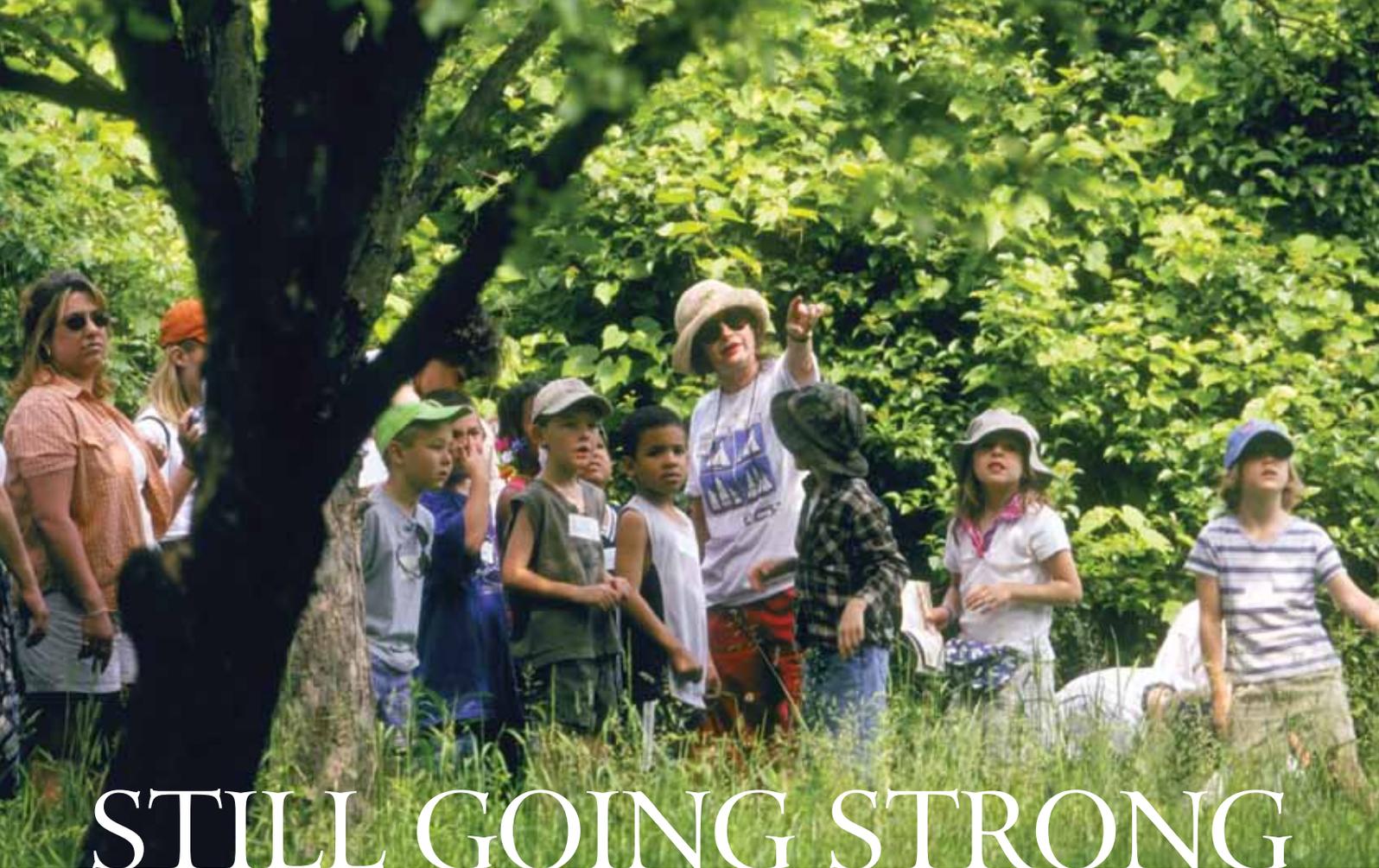
(small gear bag inside my pack) Emergency blanket, plastic rain poncho, moleskin and athletic/medical tape (work great for preventing blisters), headlamp, compass, knife, whistle, extra batteries, waterproof matches in waterproof orange container, lighter, string, garbage bag.

Get Started



Based on the time commitment required, terrain, and ease of staying on the trail, here are the author's picks of the easiest high peaks:

- 1. Cascade and Porter (done together, they are still probably the easiest)
- 2. Big Slide
- 3. Phelps
- 4. Esther (done alone without doing Whiteface)
- 5. Tabletop



Thomas Lindsay

STILL GOING STRONG

— Five Rivers celebrates 40 years of connecting New Yorkers to nature

By Craig Thompson and Gina Jack

This June, Five Rivers Environmental Education Center celebrates its 40th anniversary. A one-of-a-kind environmental education and cultural resource center, Five Rivers is located on 455 acres on the outskirts of Delmar in Albany County. The property is a popular spot where

Nick Drahos



area residents and visitors find a medley of natural habitats linked by 10 miles of nature trails, with convenient access to view and learn from this natural diversity.

What we now call Five Rivers Center started out in 1933 as the Delmar Experimental Game Farm, one of half a dozen

Nick Drahos



game farms operated by the (then) New York State Conservation Department which were dedicated primarily to the propagation of (and additionally in the case of Five Rivers, the study of) upland game birds. From 1933-36, Civilian Conservation Corps Camp S-72 also occupied

Joseph Corbett



From 1966-71, what is now the visitor center was used as a sign shop for the Delmar Zoo (pictured at right).



Public education has been a focus of DEC's Five Rivers Center for its entire 40-year history.

the grounds, assisting in the operation of the game farm. In 1941, the Wildlife Resource Laboratory was established and began innovative field work with other game species such as waterfowl, white-tailed deer and snowshoe hare.

Public interest in, and access to, the game farm began to increase in 1948 when game farm staffer Clint Bishop started to assemble a small menagerie of animals in outdoor cages. Several abandoned barracks from the site's former CCC camp were remodeled as public exhibition areas. This exhibition became known locally as the Delmar Zoo. For more than 20 years, thousands of school groups and families enjoyed this collection, thereby establishing a vibrant connection between the community and the facility.

The proposed abandonment of the game farm and zoo in 1970 and, more importantly, the potential dissolution of the special bond that had developed with the community, gave rise in the fall of 1971 to the charitable, not-for-profit corporation Five Rivers Limited (a.k.a. "Friends of Five Rivers," which recently

celebrated its 40th anniversary as well). This citizens support group's strong advocacy to keep this vital relationship alive ultimately resulted in the establishment of the Environmental Education Center in 1972.

The Friends group provides an extraordinary range of opportunities for citizen involvement and participation at the Center, reminding all that the true focus of the Center's operations is not the trees or the trails; rather it is the people who share a strong commitment to environmental stewardship working together. This strong public/private partnership continues as DEC and the Friends work hand-in-hand to ensure the success of the site as an outdoor classroom for all ages, a place to find quiet respite from the busy day, a community asset for recreation, and an island for wildlife in an ever-encroaching suburban community.

Visitors to Five Rivers are hard-pressed to go away empty-handed if they're looking for wildlife viewing opportunities. Deer and squirrels are a common sight, while turtles and frogs delight

visitors in the warmer months. Locals know that it's one of the best places in the area, year-round, to spot New York's state bird, the eastern bluebird—especially along a trail of bluebird nest boxes. More recently, wild turkeys have become a fixture on the landscape. Birding enthusiasts will find more than 225 species on record at Five Rivers.

Citizen science programs play a strong part in the array of public programs offered each year at Five Rivers. Visitors receive training and hands-on guidance in how to participate in programs including Woodcock Watch, FrogWatch, Firefly Watch, Butterfly Census, Bat Count, and the Great Backyard Bird Count. Whether through the programs at the Center or at home, visitors to Five Rivers contribute to scientific research on wildlife.

Over the years, efforts have been made to improve wildlife habitat at the site. For Earth Day this year, volunteers—including DEC Commissioner Joe Martens—planted 300 trees to create roosting sites for grassland birds adjacent to a recently acquired 60-acre parcel of fallow field. If all goes as hoped, the site will become more attractive for bobolinks and short-eared owls, among others.

Since its inception, Five Rivers Environmental Education Center has welcomed more than 3 million people, making important contributions to environmental literacy, stewardship, civic pride, and to the physical and emotional well-being of visitors of all ages; not to mention to the conservation of New York's natural and cultural resources.

Craig Thompson is director of Five Rivers Environmental Education Center. **Gina Jack** is an environmental educator in DEC's Albany office and editor of *Conservationist for Kids*.



USFWS/Dave Menke

GOATSUCKERS of New York

By John L. Turner

Judging from the sun’s position above the pitch pines flanking the western horizon, I had about half an hour before it set. After that it would be another half an hour before twilight faded and darkness fully fell. And dark was a necessary condition if I was to succeed in my mission—to hear, on this mid-June, early-evening hike in the southeast section of the Dwarf Pine Plains of Westhampton, the onomatopoeic songs of whip-poor-wills (*Caprimulgus vociferus*) and chuck-will’s-widows (*Caprimulgus carolinensis*), two of the three species of “goatsuckers” that occur in New York State.



Sam Bobbing

As a group, goatsuckers have large eyes and funnel-shaped mouths to aid in capturing insects in flight.

The goatsuckers, which include common nighthawks (*Chordeiles minor*), the third member of this family found in

New York, belong to the Caprimulgidae family. This family name comes from the Latin “capra” meaning a female goat, and “mulgeo,” to milk an animal. Why the name “goatsucker” was given to these birds isn’t clear, but the most offered explanation involves people who saw these birds regularly flying around goats and sheep as they fed in the pasture, the birds being attracted to the insects the hoofed animals stirred up. Couple this behavioral tendency with the fact they have very large, supple, pink-lined mouths and someone with a vivid imagination must have thought they suckled goats.

With goatsuckers on my mind, I hiked east through the pine-scented woodlands on a series of sandy trails and roads for nearly two miles, finally coming to a “T” intersection. Making a right turn, I walked about 50 yards and stopped next to a small shrub oak thicket trying to decide whether it made sense to continue given the gathering darkness which made it increasingly difficult to see. Within seconds of stopping I heard the first resounding “whip-poor-will” emanating from the forest on the far side of the thicket. I enjoyed the rhythmic song for several minutes before beginning the walk back. Cupping my ears to listen for more calls, I was soon rewarded with another whip-poor-will, and several hundred yards farther my ears picked up a third in the distance. Just as I came to an intersection a chuck-will’s-widow announced its presence in front of me and in the distance to the northwest another whip-poor-will. By the time I reached the car, I had heard nine whip-poor-wills and two chuck-will’s-widows. It was a great evening!

Ten weeks later I connected with nighthawks. While this species has historically bred on Long Island, and continues to breed in low numbers throughout the state, I know them more as a fall migrant. On late summer evenings, dozens pass over the island on their southbound sojourn to South America, where they spend the winter. During fall migration, a few to a dozen birds fly together in loose flocks as they feed on the wing, zipping to and fro in an unmistakable flight pattern. It was several such southbound birds foraging for insects on a North Fork farm on a late September afternoon that completed the year’s goatsucker trifecta for me.

Despite the name, nighthawks are not hawks, and although they can be active at night foraging on insects attracted to lights, they are actually more active at dawn and dusk. (One of my

strong childhood memories is watching nighthawks foraging around the light fixtures that illuminated a softball field in Smithtown.)

There are two subfamilies of goatsuckers that call New York home: the nighthawks (common nighthawk) and nightjars (whip-poor-will and chuck-will’s-widow). Nighthawks have pointy wings designed for sustained powered flight and feed by “hawking” aerial insects as they zip and zoom about the sky. In contrast, the wings of nightjars are more rounded, and these birds feed closer to the ground. Nighthawks also lack the bristles—specialized feathers that



Goatsuckers lay their eggs on bare ground or leaf litter.

Michael Allen

photo courtesy of auburnbirdbanding.org



whip-poor-will

Benjamin Van Doren



common nighthawk

surround the mouth, reminiscent of cat whiskers—possessed by whip-poor-wills and chuck-will’s-widows. These bristles appear to help deflect larger insects into their large gaping mouths, and may also protect their eyes. Nighthawks also have smaller eyes and probably can’t see as well in the darkness as nightjars whose eyes shine red due to a light-gathering membrane found in their eyes.

Goatsuckers nest in unprotected open settings on the ground. The colors in their plumage—varying shades of earth tones (browns, rusts and tans), along with some grays, white and a little black mottling—combine to form intricate patterns that perfectly mimic leaf litter or tree bark. As a result, you’re unlikely to spot one resting on the forest floor until it flies away from its resting place (see *Conservationist*, June 2004 Letters section).

New York’s goatsuckers lay their typical clutch of two oval, mottled eggs on bare ground or leaf litter: amidst sand and pebbles for nighthawks, and on leaves and twigs for nightjars. Research shows that whip-poor-wills tie their egg-laying to the full moon, perhaps the only bird whose reproductive cycle is known to be connected to the phases of the moon. The young hatch out near the next full moon, a time when the adult birds can

presumably see better and forage more efficiently for the insect prey they feed their rapidly developing young.

When disturbed near their nest, whip-poor-wills will often express their agitation by making a call that has been described as a ‘quirt.’ Several years ago on a hike in the Dwarf Pine Plains, I came around a gentle bend to be met by a whip-poor-will that began quirting. It sat by the right edge of the sandy trail beneath a waist-high pine bough. The quilt call sounded like a cross between the cluck of a chicken and the sound of a water drop forcefully hitting the water. The calling bird suddenly flew up, hovered in the middle of the trail about ten feet off the ground while it flashed the white in its fanned outer tail feathers for several seconds, then darted into the pines. This tail-flashing display often occurs when intruders are near the bird’s nest, so I quickly moved on.

While whip-poor-wills and common nighthawks have widespread breeding distributions throughout New York, chuck-will’s-widows just make it into the southern portion of the state, and are a relatively new addition to the state’s avifauna. The first known confirmed breeding took place in 1975, and the only locations known to harbor breeding

chuck-will’s-widows are on Staten and Long Islands.

All three goatsucker species are declining, both in New York State and throughout much of their range. In the state’s first breeding bird atlas, conducted from 1980-1985, for example, whip-poor-wills were reported as possible, probable, or confirmed breeders in 564 census blocks. Twenty years later, they were recorded in fewer than half of those locations. Chuck-will’s-widows experienced a 62% decline in the number of reported census blocks in the same time period, while common nighthawks showed a 71% decline. These drops are mirrored on a national level; U.S. Breeding Bird Survey data from 1966 through 2006 shows an annual rate of decline for common nighthawk, chuck-will’s-widow, and whip-poor-will of 1.7%, 1.6%, and 2.2%, respectively. While loss of habitat in both their



buff-collared nightjar

National Audubon Society, Inc.



potoo

Bill Hubick

THE CAPRIMULGIFORMES

In addition to common nighthawks, whip-poor-wills and chuck-will’s-widows, five other species of goatsuckers live in North America: the lesser and Antillean nighthawks, buff-collared nightjar, common pauraque, and the common poorwill, one of only a handful of birds known to go into torpor, a state akin to mammalian hibernation. These eight North American caprimulgid species belong, in turn, to a larger order of birds called Caprimulgiformes. Consisting of five families and 118 species found throughout Asia, Australia, and Central and South America, this order of very interesting and diverse birds includes frogmouths, potoos, and the oilbird, the only bird in the world known to possess the ability to echolocate, as can bats and dolphins. These bird groups, especially the potoos and frogmouths, look comical, almost cartoonish with large, forward-facing eyes adorned with what appear to be, but are not, eyebrows. To me they appear to be the most human-looking of all birds.



Bill Hubick

breeding and wintering ranges appears to be the primary force, other factors include pesticides, road-kills, and excessive predation from species like raccoons and feral cats that are an outgrowth of increasing suburbanization.

More than a century ago, naturalists noted nighthawks hawking over cityscapes and soon realized they were nesting there, using flat pebble and gravel roofs common at the time as a surrogate for their “natural” nesting habitat of pebble beaches, forest openings, burned over areas, and rocky outcrops. The presence of nighthawks nesting in, and foraging over, cities was reinforced to me by a spring and early summer spent in Albany back in the early 1990s. On many early evenings when the weather was conducive for nighthawks to feed on the wing, I’d watch up to a dozen or so birds flitting to and fro over the state capitol and state office buildings, occasionally

making a noticeable nasal “peenting” call as they hunted for the small flying insects that made up the bulk of their diet.

Efforts are underway to combat the decline in man-made nesting habitat used by common nighthawks. The loss of roof habitat stems from the increasingly widespread use of rubberized and PVC waterproof roofs in place of gravel and pebbles. To counter this trend, nighthawk enthusiasts have been creating nesting habitat on roofs in the form of “nesting patches” composed of pea-stone gravel.

Recently, the New Hampshire Audubon Society (NHAS) and the Pennsylvania Game Commission have experimented with placing nest patches on building roofs. To date, those efforts have proven unsuccessful, but biologists are learning and continue to try new methods.

In searching for nesting nighthawks in New Hampshire, biologist Becky Suomala learned of a nest situated in a

dangerous location, next to a heavily trafficked parking lot in a concrete manufacturing factory. But due to the concern and involvement of factory workers, the nighthawk successfully fledged both young, leading Suomala to note: “The chicks only survived because people took interest and cared.” It struck me that this factory experience epitomizes the predicament which goatsuckers generally face: in an increasingly human-dominated world, it is clear that if these fascinating species are to survive in the decades and centuries to come, it will only be because enough people took interest, became concerned, and acted upon that concern.

Author of Exploring the Other Island - A Seasonal Guide to Nature on Long Island, John Turner is co-founder of the Long Island Pine Barrens Society.

LIMESTONE LAYERS

—how Helderberg fossils helped shape my life



By John Van Hoesen
photos by author unless noted

It doesn't take much to excite a six-year-old. For me, it was as simple as going for a ride with my father in the early 1980s in one of his many reconditioned Volkswagen buses. The high bench seats, expansive windshield, circus-like horn, and the odd fact that most were red made even a routine trip to the gas station seem like a ride at the local fairgrounds.

All too often, however, while I was transforming the road and endless supply of potholes into the tortuous path of an imaginary fire truck racing to save the day, I was jolted back to reality when my father would stomp on the brakes and throw the bus into reverse. We would end up perched precariously on the edge of the road looking down into an expansive ditch. My father would then wander into the ditch or walk across the road to pick up a rock—but not just any rock. Usually they were

flat, semi-rectangular and almost exclusively of the limestone persuasion. Neither my father's fascination with orphaned rocks nor the growing pile he saved made any sense to me until he started building rock walls and flower gardens.

My father also built the house I grew up in. It was originally a seasonal cabin nestled on five acres near Thompson's Lake in the Helderberg Mountains of upstate New York. One of the reasons it remained seasonal for so long was the extremely thin soil covering the local bedrock. When he converted the cabin into a year-round home, rather than blasting through rock for a foundation, he excavated down to bedrock, then built the foundation higher than the surrounding ground. He used his "rock collection" to build walls and raise the ground around the foundation and cover the exposed cinder blocks.

Helderberg limestone fossil



His decision not to use dynamite resulted in the most fascinating geologic feature of the house: the basement floor. It was a modestly flat surface of limestone riddled with ancient fossils—brachiopods, corals, and mollusks called tentaculites. Similar fossils were exposed in the seven-foot-high hearth my father built using the best specimens gathered from our property and local ditches.

Growing up surrounded by geology tutors in the rock walls, basement floor and hearth, my early interest in paleontology was probably unavoidable.

Although the surrounding area was littered with fossils, my interests quickly expanded to include rocks and minerals. My parents gave me a rock hammer and a guidebook when I was nine, and I began spending my time sifting through the rock walls bordering our property and splitting open slabs of exposed ledge in our backyard. Each swing of the hammer brought me closer to the discovery of a new fossil and eventually left our neighborhood shimmering with hundreds of rock fragments reflecting the sun.

My first guidebook, which quickly became filthy and tattered, was dark navy blue with amethyst crystals and an exquisite geode on the cover. It taught me to build my first rock collection. I realized my patience for tedious attention to detail at an early age as I carefully dabbed a small spot of yellow paint on each specimen, numbered it, and recorded its sampling location and brief description in a small notebook. For some reason, I also thought it was necessary to memorize Mohs Hardness Scale and wander around reciting it to people—yes, I was one of *those* kids.

While exploring our land and the exposed ledges along the lakeshore, I began asking about plants and flowers, so my parents added a few more field guides to the bookshelf. Soon I could identify local trees, ferns and flowers—though I remained most interested in rocks and was convinced I would become a paleontologist. I was fascinated by the various textures and the sulfur- and oil-like smells I found in different limestones, but mostly I enjoyed the quest; not knowing what I might find with each swing of the hammer. In my mind, I was a scientist collecting specimens, recording data and identifying rocks.

I eventually finished two advanced degrees in geology. During my studies,

I became fluent in the “language” of geology and my relationship with the landscape of my childhood stomping ground changed. Rather than thinking in terms of a singular rock, I recognized the variety of limestone present in the Helderberg Mountains, in my father’s rock

walls, and our hearth. I had learned that this ubiquitous rock, which I used to see as gray and homogenous, could be categorized into specific formations with names like Manlius, Kalkberg, Coeymans and Becraft. Not only could I recognize individual formations, I understood that



Close-ups of stones in the hearth (pictured above) of my childhood home



Rock wall at author’s childhood home

these formations were associated with specific ages, and I began seeing them in chronological order resting upon one another like German chocolate cake.

Based on the presence of fossils I'd known all my life, I could now tell that the piece of limestone I plucked from our rock pile was roughly 350 million years old. The hearth was no longer just limestone. It was a mosaic of geologic time spanning almost 60 million years, telling a story about how those rocks formed—in deep or shallow water, rough or calm water—and revealing many life forms that no longer exist. What were once just rocks had become time capsules recording the very evolution of Earth.

Even though I enjoyed exploring the neighborhood, towards the end of my college days I grew impatient to leave home and venture west where everything seemed bigger, wilder and better in all ways imaginable. I drove across the country to graduate school in Nevada—the first of many cross-country travels.

And although I developed a geologic and aesthetic appreciation for the barren nudity of Death Valley, the way Yellowstone geysers allude to Earth's internal combustion engine, and the volcanic totems that watch over the Pacific Northwest, I discovered that I feel most connected with landscapes built on some form of carbonate bedrock. For example, on my first trip to Kentucky's Mammoth Cave, when I saw familiar friends in the rocks and forests (lily-of-the-valley, trillium, purple-stemmed cliffbrake, and flowering dogwood) I realized that I was also drawn to the ecology of carbonate rocks; that these rocks were just a substrate nurturing the landscape with which I was so familiar.

Returning home after graduate school, I no longer saw rocks or even formations; instead, I saw my home through a lens sharpened by studying the geological evolution of North America. The rocks that I used to classify into formations based

Frank Knight



Frank Knight

on fossils or whether they were deposited in calm, shallow water now represented former ocean basins or the mountains that eroded into them. These former mountains were created the same way as the early Appalachians and modern-day Himalayas. That cycle is what I saw when I returned home to the Helderberg Mountains. I was able to look past simple observations of rocks and begin to tell their struggles—my perception had changed from recognizing words to writing novels.

I am convinced that my father's own rock collection (albeit singular in taste and abruptly collected) helped develop my practical engineering skills and passion for geology. When, after so many springs of dampness and mildew, my

father finally decided to pour a cement floor in the basement, I was torn between being a pragmatist and a geologist. I vividly remember crawling all over that floor inspecting its fossils, feeling its greasy texture on my knees and the distinct smell of wet limestone. So while I understood the need to pour a new floor, I felt like something meaningful was lost in the name of progress.

My parents recently sold their house, and I'm still struggling to accept that I can't wander the rock walls, browsing their contents like shelves in a library. I can no longer sit in the living room and calculate how many millions of years are mortared to the hearth. Nor can I wait for the snow to melt in the spring so I can watch the bloodroot and ram's-head lady's-slipper poke out of the duff. But I am certain that this place—my childhood playground and laboratory—will influence where I eventually build a home of my own and make my own rock piles.

John Van Hoesen is currently an associate professor of geology and environmental studies at Green Mountain College in west-central Vermont. He spends as much time as possible capturing the beauty and resulting manifestations of Earth processes through photography.

On Patrol

Carl Heilman II

Real stories from Conservation Officers and Forest Rangers in the field

Contributed by Forest Ranger Andrew Jacob
Written by Bernadette LaManna

Each year, DEC forest rangers and ECOs are called upon to prevent and battle wildfires: unplanned fires in remote or lightly developed areas. Most wildfires are caused by debris burning, arson, campfires and unsupervised children—in other words, by people. Open burning is the single greatest cause of wildfires in New York State. This is especially true in the spring before ‘green-up’ when plants sprout their new foliage.

Beginning in 2010, New York instituted a new open-burning regulation that bans brush burning statewide from March 16 through May 14. Forest ranger data indicates that this new ban resulted in 33 percent fewer wildfires caused by debris burning in 2010 when compared to the previous ten-year average. Unfortunately, some people continue to defy the ban, and their actions often have catastrophic results.

DEC photo



Tamarack Fire

On the afternoon of Saturday, April 7, DEC forest rangers and staff from the Ulster County Fire Coordinator’s Office joined dozens of fire department personnel from Ulster, Sullivan, Dutchess and Orange counties in responding to a blaze at the Tamarack Lodge in the Town of Warwarsing.

At and around the site, they suppressed multiple structural fires and related wildfires, while striving to protect other structures and using aerial surveillance to look for additional fires. Crews worked late into the evening to bring the fires under control. Early the following morning, they returned to the area to extinguish hotspots and debris that had rekindled.

The “Tamarack Fire,” a wildland-urban interface fire (one that burns or threatens to burn buildings and other structures), destroyed at least 10 residences and 34 other structures, displaced 18 people and injured a firefighter. Evidence suggests the fire was caused by the careless and unlawful burning of debris by a property owner, who was subsequently arrested and charged with several counts, including arson—a felony. The case is pending.

Crescent Bow Fire

Just days after the Tamarack Fire, another fire (the “Crescent Bow Fire”) occurred in the southeast part of the state. Forest rangers and ECOs were among the first to spring into action on Monday, April 9 when the alarm sounded for the Crescent Bow fire in Suffolk County. This fire scorched more than 1,100 acres of state, county and federal lands. During the height of the fire, winds gusted up to 40 mph.

Forest Ranger Chris DiCintio coordinated aerial surveillance between state and county helicopter resources. He also directed bucket drops from the state police helicopter and completed aerial mapping of the fire. ECOs helped with evacuation efforts and directed local volunteer firefighters to access points close to the fire. Rangers from the operations center at the state Department of Homeland Security Emergency Services supported regional fire management and suppression efforts. Overall, DEC staff and volunteers spent five days patrolling the nine-mile fire perimeter, looking for hotspots and downing other burning material that had remained standing.

Rangers Charles Kabrehl, William Giraud and Capt. Edward Russell are assisting the Suffolk County Arson Squad in determining the fire’s cause and origin. Although it is still under investigation, the fire is known to be human-caused.

Despite regulations designed to prevent wildfires, New York remains at serious risk for them, especially during extended droughts like the one this spring. Wildfire prevention is everyone’s responsibility. And we all benefit when we do our part to keep New York State safe from wildfires.

To learn more about wildfires, and to watch a public service announcement on open burning on DEC TV, visit www.dec.ny.gov/lands/4975.html.

Don't Harass Loons

Summer is a great time to spend outdoors with family and friends, and to enjoy the wonderful recreational opportunities found in New York State. It's important to remember, though, that sometimes that means sharing space with wildlife. The Biodiversity Research Institute would like to remind people that summer is when loons nest and raise their young. Common loons are protected by both state and federal laws, and disturbing them is illegal. ECOs will ticket people who approach nesting loons or loons with chicks, so please remember to admire the birds from a distance. Be sure to visit www.briloon.org/advkloon for more information about loons and the Biodiversity Research Institute.

For the Love of Fishing

The American Sportfishing Association (which represents the interests of the sport-fishing industry, and helps to ensure we have clean water, abundant fish and places to fish) recently commissioned two studies to examine: 1) nationwide sales of state fishing licenses; and 2) why people stop fishing, what keeps them from fishing as much as they'd like, and what would make



people return to fishing. Top reasons why people fish include: relaxing, spending time with family and friends, catching food and being outdoors. The major reason for fishing less was cited as "not enough time," though simply being invited to accompany another angler would encourage many anglers to return to the sport more often. For more information on these studies, visit www.rbff.org and www.southwickassociates.com, and for recreational fishing ideas, visit DEC's fishing webpages at www.dec.ny.gov/outdoor/fishing.html.

New York is Climate Smart

Recently, Saratoga Springs became New York's 100th Climate Smart Community by adopting the program's ten-point pledge to address climate change, and by press time 103 communities had taken the pledge. Launched in 2009, the Climate Smart Communities program is sponsored by five state agencies and has guided and supported local climate change leadership across the state. Each community on the list is applauded for its leadership in reducing greenhouse gas emissions—from the Town of New Castle, the first Climate Smart Community to the most recent inductee, the Town of Brant. Furthermore, the Town of Babylon, another Climate Smart Community, was recently selected to partner with the Earth Day Network (EDN) and several other U.S. cities to further reduce their carbon emissions through the adoption of alternative energy policies. The program is part of EDN's Billion Acts of Green®-Campaign for Communities and has been recognized by the Clinton Global Initiative for its commitment to prevent one million pounds of new carbon emissions. Check out "A



James Clayton

BRIEFLY

Change in Climate” in the February 2010 *Conservationist* or visit www.dec.ny.gov/energy/50845.html for more information on the Climate Smart Community program and to see if your community is Climate Smart.

Clean Water for All

This year marks the 40th anniversary of the Clean Water Act, the nation’s law for protecting our waters. An earlier act was revised in 1972 and again in 1987 to better protect and restore our rivers, streams, lakes, wetlands and coastal waters. We have made great progress in reducing pollution, but many challenges remain. To see what we’ve achieved in the past 40 years, and to look toward the next 40 years, visit <http://water.epa.gov/action/cleanwater40c> on the Environmental Protection Agency’s website.

Manhattan Hawk Deaths

DEC recently posted a detailed report highlighting the causes of death of four adult, red-tailed hawks found in Manhattan during February and March. DEC’s Wildlife Health Unit performed necropsies (animal autopsies) and found evidence of rodenticide poisoning in three of the four birds. The cause of death in the fourth hawk was undetermined. Visit www.dec.ny.gov/animals/81470.html and click on the link to read the full report.

Cycling the Erie Canal Guidebook

Parks and Trails New York recently produced a newly revised *Cycling the Erie Canal* guidebook. The 144-page book is packed with information on attractions, historic sites, visitor centers and parks, updated color maps that include the newest sections of the trail, and much more! It’s great for walkers, hikers, bikers, boaters



James Dayton

and anyone in-between, and its high-quality spiral binding and convenient 9" x 5" size make it easy to tuck inside a saddle bag or backpack. You can order your copy by visiting www.ptny.org/guidebook/index.shtml on the Parks and Trails New York website.

Fraudulent Emissions Inspections

DEC recently fined certified inspectors at auto sales businesses in the Bronx for fraudulent emissions inspections. Investigations revealed the inspectors used electronic simulators

instead of the actual vehicles to carry out more than 5,000 false state emission inspections over a two-year period. The fraudulent inspections jeopardized human health and the environment, and were direct violations of DEC’s motor vehicle emission inspection regulations. In addition to fines imposed by DEC, the NYS Department of Motor Vehicles imposed fines totaling \$50,400 and revoked station and inspector licenses. Visit www.dec.ny.gov/chemical/8391.html for more information on the NYS Motor Vehicle Inspection and Maintenance programs.

Parks & Trails NY



Sunflower Fox

One afternoon I was surprised to see a gray fox apparently eating sunflower seeds that had fallen from our bird feeder. Is this normal behavior for what looks like a well-fed fox? The fox was alert and wary of humans as I would expect it to be.

Mark Yonteff



It appears this fox may have stumbled upon an easy meal. This often happens in developed areas, as foxes and coyotes may sometimes establish their dens very close to homes or offices. By mid-summer, young pups emerge to explore their local environment and eventually wander off as both young and adults disperse to a larger area. It is common, then, to see much activity, but to avoid conflicts with foxes (as well as with any animal) people must not feed them. This is certainly true of obvious “hand-outs” or feeding stations, but it also applies to the untidy placement of garbage or the use of an unreasonable amount of bird seed. And, as always, people should avoid contact with wild animals.

—Gordon R. Batcheller, Chief Wildlife Biologist

Stumpy Sturgeon

While diving in the Niagara River last summer, I came across what I thought was a lake sturgeon, but the tail anatomy seemed strange. Is this a lake sturgeon with a damaged/missing caudal fin (tail)?

Jim Sanders

Buffalo, Erie County



We checked with our fisheries biologists who offered a couple of possible explanations including that the caudal fin could be curled away from the camera, or it could be a hatchery defect. Looking at the photo, it appears that the caudal fin is missing and that the fish might be using the dorsal and anal fins as an artificial caudal fin. Our biologists agreed it's possible the defect may have happened in the hatchery, but didn't find record of any hatchery fish being released into the Niagara River. However, sturgeons were stocked into the Genesee River not too far away!

—Eileen Stegemann, Assistant Editor

Mini Mantids

Every spring I purchase praying mantis egg cases, as they are such great garden buddies. This year I frequently checked the one I hung outside of my kitchen window and was fortunate to see the babies as they began to hatch.

Marjory Greenberg-Vaughn

Saugerties, Ulster County

Great photo! Ambush predators with quick reflexes, praying mantids dine on moths, crickets, flies, grasshoppers, and any insect that happens across their paths—even their own kind.

—Jenna Kerwin, Staff Writer



Snacking Herons

I was attempting to photograph this great blue heron at Ring’s Pond when suddenly he snatched a huge largemouth bass from the water!

Maureen Moore
Cornwall, Orange County



I captured this picture of a great blue heron that stalked and caught a chipmunk in my backyard. I had no idea that a heron would consider chipmunk food.

Vern Jakubowski
Wilton, Saratoga County



Though surprising to many people, herons will eat chipmunks and other small rodents. The majority of a heron’s diet is fish, but it will also eat turtles, snakes, insects, frogs and even other birds, as well as small rodents like voles, chipmunks, mice, etc. This is especially true when herons return in the spring before ice-out.

—Conservationist staff

Laid-back Plover

This fanciful plover did not present with the usual feigning injury dance that most killdeer do when harm to their nest is perceived. Instead, a settling back onto the clutch was its only business.

Laurie Dirkx
Ontario, Wayne County



Early returning migrants, killdeer can be heard high overhead in spring, calling out their name with their plaintive cries. They nest completely in the open, often in sites disturbed by humans, such as in gravel parking lots, railroad yards, building or excavation sites, or anywhere with enough loose gravel to make a suitable nest site. Rather than hiding their nests, they rely on the camouflaged coloring of their eggs and employ a “broken wing” behavior to distract potential predators from the exposed, but difficult to find, nest site.

—David Nelson, Editor

Big Brown

I thought you might like to see the 27-inch brown trout I caught last June on Charlotte Creek, between Summit and Oneonta.

George Novellano

Congratulations on an impressive catch!
—Conservationist staff



What is It?

If you guessed it’s a bird on a tree trunk, then you guessed right. If you guessed this is a yellow-bellied sapsucker on a birch tree, then you really know your birds!

Lydia Green of Wolcott sent us these pictures of a yellow-bellied sapsucker that was visiting her yard. She remarked on how well these birds blend in with their environment. We agree.

Small-sized woodpeckers, yellow-bellied sapsuckers are found throughout the state. They make neat rows of shallow holes in trees and return later to eat the sap that oozes out—hence their name—and the insects that are attracted to the sap.



Back Trails

Perspectives on People and Nature

John Bulmer

Life Is Where You Look by John Greenwood

Jeff Nadler

As a leftover milkman, it's in my blood to be up early in the morning. On my birthday, I decided to take an early morning June walk as a gift to myself.

In my little corner of the world in Wilton, New York, I am surrounded by hundreds of homes where once there were forests, fields and farmland. You might find that sad, but honestly it has been a great place to raise my family. As I came to the end of my road, I stopped to listen to the chorus of songbirds, and to reflect on the serenity that surrounded me in this now highly developed area. After all, it was six o'clock on a Sunday morning. It was then that I heard the most beautiful song coming from high atop a light pole in a nearby parking lot. I approached it slowly. I could not believe what I was hearing.

The sounds were crisp and distinct, but rapidly changing, as if mechanical. Chirp, chirp, chirp, whistle, whistle, caw, caw, caw; the concert grew louder and more intriguing. Was that the sound of a kitten's meow? I swear I heard a cricket on top of that light pole. For a brief moment, I thought I heard a seagull's cry, but there were no gulls in sight.

One of the most amazing creatures I have ever experienced—a mockingbird, was providing this medley of natural sounds. If you have never witnessed this display of talent, you will not believe your ears. My heart raced; I wanted to somehow capture nature's personal birthday gift to me. No one would believe what I was listening to right smack dab in the middle of new homes, townhouses and offices. We can despise or embrace technology and growth, but just as I was about to go down



the path of longing for the good old days, I reached into my back pocket and pulled out one of life's most revered technological wonders: a cell phone. It was only a few days old and has more options than a new Toyota. Earlier in the week as I researched its abilities, I remembered seeing an audio icon with the word "recorder" listed below it. Could I actually use this phone to record these sounds? Now, if I could just figure out how to record before the concert ended. With slightly more technological skill than a cement block, I was able to push the record button, and the taping began.

This feathered master of imitation, the mockingbird, can recreate sounds that you cannot imagine. Here are just a few I was able to identify: seagull, robin, bullfrog, whip-poor-will, chipmunk, crow, nuthatch, and as I mentioned previously, a kitten's meow. Just when I thought I had watched enough Animal Planet and National Geographic Channel to see and learn everything humanly possible about

nature's wonders, it happened: the most amazing sound to ever echo through the treetops came from that little bird of grey, black and white. This was a sound that would make any man, woman or child stop dead in their tracks and listen—the piercing shrill of a modern-day car alarm. I cannot replicate the sound with words, but that mockingbird, the size of a quart of milk, blasted off a half-dozen shrills and whistles unmistakably identified as a human-manufactured car alarm, and I just recorded it on my cell phone.

There are many gifts in my life: a beautiful wife, healthy, warm-hearted sons, harvest moons, and Cape May sunsets, but this was something special. I have a newfound appreciation for technology, and I have a new mantra to live by: "Life is where you look."

With this essay, **John Greenwood** of Gansevoort won first place in DEC's Great Stories from the Great Outdoors contest in January, 2011.

DEC photo



James Clayton



Susan Shafer



Susan Shafer

June 23-24

Feel free to fish!

Each year, the last full weekend in June is designated as Free Fishing Weekend in New York State. During those two days, anyone can fish the state's waters without a license. This event began in 1991 to give people an opportunity to sample the incredible fishing New York has to offer. Panfish, bass, walleye, pike, salmon, trout and musky are just a few of the many freshwater fish species that you can fish for during New York's Free Fishing Days. And since no license is required, it's the perfect time to introduce a friend or relative to the sport. In 2012, New York's Free Fishing Weekend is Saturday, June 23 and Sunday, June 24.



James Clayton



Make it an event!

In addition to Free Fishing Days, there are a number of "Free Fishing Events" held in various locations across the state. Usually occurring between April and October, Free Fishing Events are DEC-sponsored events (such as family fishing clinics) in which participants get hands-on experience while learning about topics like fish identification, fishing equipment and techniques, fisheries management, angling ethics and aquatic ecology.



To find an event near you, or for more information about Free Fishing Days, check out DEC's website at www.dec.ny.gov or contact your DEC Regional Fisheries Office.



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