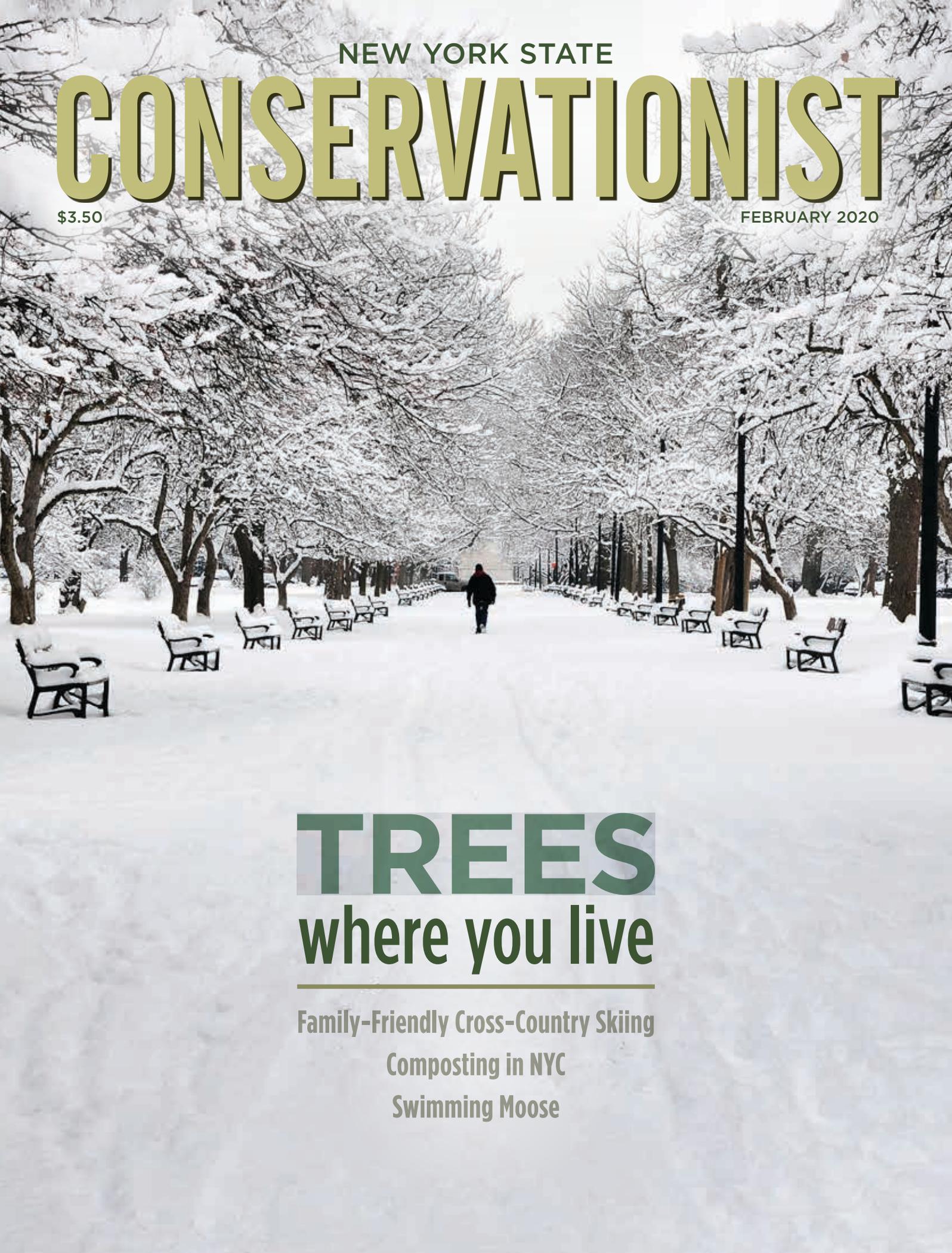


NEW YORK STATE

# CONSERVATIONIST

\$3.50

FEBRUARY 2020



## TREES where you live

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Family-Friendly Cross-Country Skiing

Composting in NYC

Swimming Moose

Dear Reader,

This year, the Department of Environmental Conservation is celebrating our 50<sup>th</sup> anniversary. The agency was created on July 1, 1970 to combine state programs that protect and enhance the environment under a single agency. The core of DEC's mission, 50 years ago and today, is to conserve, improve, and protect our state's air, land, and water to enhance the health, safety, and welfare of all New Yorkers.



In this issue of the *Conservationist*, we highlight the creation of DEC (pg. 16) and how the state's environmental needs have evolved over the past five decades. You can read how DEC has addressed those changing needs, and how our agency continues to play a leading role on issues that affect our lives and our future.

You can also learn about cross-country skiing (pg. 2), an activity that is fun for the whole family and can be done anywhere in the state, even in your own backyard. You can also read about a Wildlife Management Area (WMA) comprised of a variety of ecosystems that is actively managed to provide critical habitat for a rare and threatened wildlife species, while also offering great opportunities for hiking, fishing, hunting, and even snowshoeing (pg. 26).

This edition also includes the latest issue of *Conservationist for Kids*, with a focus on amphibians and reptiles. Even adults will enjoy this special pullout section.

Every issue of the *Conservationist* includes spectacular photography and beautiful artwork. In the August 2019 issue, we noted the passing of Jean Gawalt, a former DEC Wildlife Biologist and artist who contributed numerous drawings and paintings that were featured in issues of the *Conservationist*. This issue includes several pages showcasing just a few pieces of Jean's wonderful artwork, which I'm sure you'll enjoy.

In addition, you can read about the benefits trees provide, even in our cities, towns and villages (pg. 13), and New York City's efforts to reduce waste while helping to revitalize soils, save money, and generate energy (pg. 22). I encourage everyone to read these articles to learn more about the different ways we can better protect our environment.

As we celebrate DEC's 50<sup>th</sup> anniversary, our agency will be hosting special events and activities across New York State. To learn about activities taking place near you, and how you can get involved, check our website at [www.dec.ny.gov](http://www.dec.ny.gov). New York has had a long and proud tradition of concern for the environment, and I hope you will join us for one of these programs.

All the best,  
Basil Seggos, Commissioner

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**CONSERVATIONIST**

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Andrew M. Cuomo, Governor of New York State

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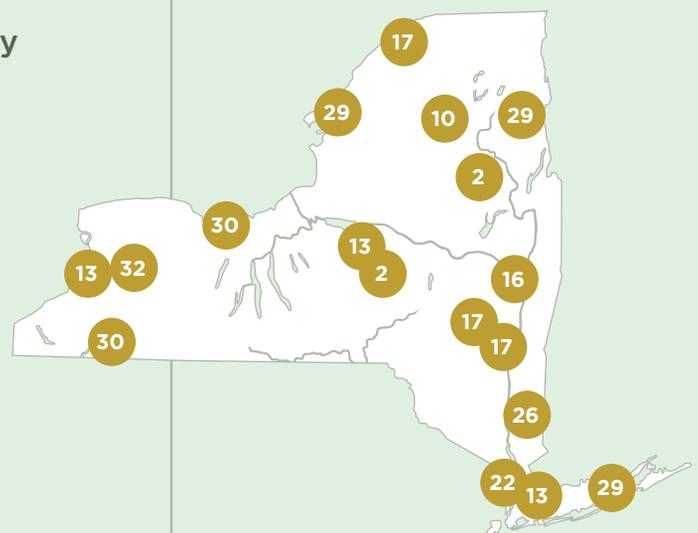
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SPECIAL INSERT

# CONSERVATIONIST





# Cross-Country Skiing: A Lifetime Sport

BY KAREN WILLIAMSON | PHOTOS BY AUTHOR

I like winter.

I like clean, white snow glistening in sunlight. I like how a full moon lights up a snow-covered landscape as if it were day. I like to watch snow falling—as long as I don't have to drive in it.

My affinity for snow has made cross-country skiing an important part of my life since I was in my early twenties (let's just say I'm in late middle age now). More importantly, it has been an important part of my family's life for 40 years. We are living proof that cross-country skiing is truly a sport for all ages; it is great exercise and can be enjoyed in many ways, from the challenge of competitive racing to a leisurely ski out the back door.

I began cross-country skiing years ago, when I was living and working in New Hampshire. I'm from Buffalo, so winter to me is something to be enjoyed, not feared. I grew up skating on the local pond, sledding down "snow mountains" left by plows, and photographing the beauty of new-fallen snow in fields near my home in Elma, Erie County.

I had been interested in trying skiing for a while. My mother was a downhill skier in the 1940s and early '50s on the hills south of Buffalo. Unfortunately, she broke her leg while on a rope tow, so when I asked about joining my school's ski club, she said "No." To this day, I'm not sure if that "No" came from the expense of downhill skiing for four kids or the fact that she had broken her leg doing it.

When I graduated college and was on my own, cross-country skiing looked like a reasonably priced, fun way to enjoy winter. Everyone said you could just put on a pair of boots and some skis, grab some poles, and away you go! So, I went to the local sports shop and got fitted with a brand-new cross-country ski package: boots, skis, and poles.

During that year-and-a-half I lived in New Hampshire, I learned to ski on my own in a local park situated along the Bellamy River near Dover. It was beautiful, and right behind my apartment. I could ski from my front door. Well, ok, I had to walk across the parking lot first and then put on my skis, but you get the point.



A scenic ski trail near Wanekena, NY.

“ After we had children, things changed, but it did not eliminate our winter skiing.”

Then I moved back to New York State to attend Syracuse University for grad school. I continued to ski, in Oakdale Cemetery and Heiberg Memorial Forest with friends. I thought I was getting pretty good, until I met my soon-to-be husband. He lived two hours northeast of Syracuse. We met through work, at a meeting in Canton, and he suggested that we go skiing sometime. I told him that I skied too, and that it sounded like fun.

When the snow finally came in January, we went skiing for our first time together, in the Adirondacks. When he saw me ski, he said “I thought you said you could ski—you’re *walking* on skis.” Turns out that he had learned to ski in a class in college and was already doing citizen races and even marathons. I had taught myself to ski so I had some learning to do if I wanted to keep up.

Thus began my indoctrination into the world of serious skiing, and eventually, cross-country ski racing. I spent that first winter learning how to kick and glide, climb hills without sliding backwards, and control my speed on



Cross-country skiing is a great winter family activity. The author’s son started coming along at 3-months old on his father’s back before graduating to his own skis the next year.

downhill slopes—all while trying to keep up with several experienced skiers. By March of that first winter, I was deemed to have progressed to the point where I was ready for a pair of second-hand racing skis. Well, maybe not ready, since I nearly ran over another skier on a long downhill trail at Mt. Van Hoevenberg. However, my racing career began that March as I managed to complete 35k of the 50k Tug Hill Tourathon (a Nordic Ski Race that has been held in Winona State Forest for 32 years, now named the Winona Forest Tourathon).

From that point on, skiing was our winter activity. We discovered backcountry trails in the Adirondacks, groomed trails at ski centers in the Adirondacks and the Capital Region, and we skied inn-to-inn in Jackson, New Hampshire. We entered some local, shorter races and I eventually managed to finish two marathons—the Tug Hill Tourathon and the Chautauqua Overland Ski Marathon.

After we had children, things changed, but it did not eliminate our winter skiing. We continued to race during the winter after having our first child, but quickly found

that changing weather and race schedules did not always work with the availability of babysitters. We found that when you bring children along, a ski center with a lodge and groomed trails was better than backcountry trails. At three-months old, our eldest son rode on my husband's back in a child carrier. He was swaddled in a snowsuit and wearing a pair of my husband's goggles for eye protection. He thought that was great fun, until the day my husband did a faceplant and our son pitched forward. Because the child carrier was sturdy and he was strapped in, he didn't fall out; but he wasn't happy, and he let us know it!

The next winter, our son was ready for his first pair of strap-on skis. He didn't go far—we still carried him when skiing, or he played in the lodge—but he thought that the skis were great fun. As he grew, he gradually skied a little farther each time, and we were careful to keep things fun and make sure these adventures were not too long. We often alternated skiing and childcare so that each of us could get some longer, faster skiing in.

Enjoying groomed trails at Garnet Hill.



All trails on DEC lands are open to cross-country skiing in the winter.



Then baby number two arrived. Our favorite ski center near us—Lapland Lake Resort in Northville, Hamilton County—had “pulks” (sleds you can put your little one in and pull them behind you). Our daughter thought the pulks were the perfect place for a nap, so we were able to keep skiing as a family. By now our son was four and could ski easy, shorter trails on his own.

Around this time, my mother retired and became interested in a local senior citizen cross-country ski program in Orchard Park, south of Buffalo. So, I gave her my first starter package of skis, poles, and boots, as I had moved on to more specialized, faster gear. She had a ball for a couple of years getting back into skiing—without the rope tow!

Throughout elementary school and middle school, our children skied with us, or occasionally participated in a Bill Koch youth ski league race if there was one nearby. Our son started getting interested in racing. Our daughter, not so much. Competitive endurance sports are not her thing, but she continued to ski with us as a family.

By the time our eldest entered high school, my husband and I had long stopped racing ourselves, but our son was now skiing for the Guilderland High School Nordic ski team. His coaches—Barb Newton and Jon Mapstone—espoused a no-cut philosophy, believing that in addition to fielding a competitive team, they were introducing their athletes to a lifelong sport. We became active ski team parents, hosting all 45-plus skiers for the annual pasta dinner at our home and cheering them on at races.

Today, my husband and I are retired, and still skiing. We continue to enjoy skiing fast (albeit for short distances) on groomed trails at the Western Turnpike Golf Course in Guilderland, and at our old favorite, Lapland Lake Resort. We also enjoy skiing on off-track trails in the Adirondacks and the Albany Pine Bush Preserve.

If you are looking for a way to enjoy winter, beat cabin fever, and get some healthy exercise while you're at it, consider cross-country skiing. As you can see from our family's story, it doesn't matter how old you are, and it's not expensive. Trail fees and equipment rentals at ski centers are a fraction of the cost of downhill day passes, and if you have your own gear (or rent some from a local shop), you can often find beautiful, free trails in parks or local nature preserves close to home.

See you out there!

**Karen Williamson** is a freelance photographer and writer from Guilderland and Saranac Lake. Before retiring, she was a writer and photographer with NYS and the U.S. Department of Agriculture for more than 30 years. You can see her photography at [karenwilliamsonphoto.photoshelter.com](http://karenwilliamsonphoto.photoshelter.com).

## If You Go

- Take a lesson, it's well worth the cost. You will have more fun if you know how to stop and get up after you fall. And you will fall, it's part of the sport. You'll also learn how to: ski up hills without sliding backwards; control your speed on hills; and especially kick-and-glide on the flats instead of walking on skis. Also, many ski centers offer learn-to-ski programs for kids, while adults get to ski alone.
- Dress properly. “Properly” does not mean the same clothing you wear for downhill skiing. It's easy to work up a sweat cross-country skiing, and chances are you will be hot, wet, and uncomfortable in downhill ski clothes. Think layers: sweat-wicking base, insulating middle, wind-resistant outer, and maybe an extra synthetic vest on the coldest days. No cotton; it holds water and you'll get cold and wet.
- Carry water and a snack; you are burning calories and you will get thirsty.
- Carry a map of the area you are skiing in and a cell phone. Even if you think you know the area well, things look different in winter, and it's easy to get turned around. Put your cell phone in an inside pocket; even then, note that batteries tend to discharge quickly in the cold.
- Interested in learning more about racing? New York State has a vibrant, friendly ski-racing community for all ages. In most races, you compete against others in your age group. Some races (often called “citizen races”) are aimed at beginning or casual skiers. For more information, check out the New York State Ski Racing Association's website at [nyssra.org](http://nyssra.org).
- And, for those of you ready to tackle the backcountry on skis, take all the appropriate precautions and bring emergency gear. Check DEC's website at [www.dec.ny.gov/62.html](http://www.dec.ny.gov/62.html) for more information. Remember: Be safe and have fun!

**Editor's note:** There are several facilities located across New York State where you can find cross-country ski trails and amenities similar to those listed in this article. You can find more information at [www.iloveny.com/things-to-do/winter/cross-country-areas/](http://www.iloveny.com/things-to-do/winter/cross-country-areas/) or <http://crosscountry skiing.com/>. Also, check out DEC's website at [www.dec.ny.gov/outdoor/353.html](http://www.dec.ny.gov/outdoor/353.html).

## SPECIES SPOTLIGHT

# THE DARK-EYED JUNCO

BY TOM LINDSAY; PHOTOS BY AUTHOR



A male junco puffs its feathers for warmth.



“Variable” is a word used in North American field guides to describe the plumage of the dark-eyed junco yet it barely hints at the visual differences between the five distinct groups of this bird found across the continent. The white-winged junco, gray-headed junco and Oregon junco (as well as its pink-sided variant) are primarily western birds, and until 1973 were considered separate species. In fact, they may interbreed where their ranges overlap and cause birders much confusion. Fortunately for New Yorkers, the slate-colored *Junco hyemalis hyemalis* subspecies is the one most often encountered in the Empire State.

### Description

The plumage of the sparrow-sized, slate-colored form of dark-eyed junco has been described as showing “leaden skies above, and snowy ground below.” The males depicted in most field guides sport a dark gray upper body, white belly, light-colored bill (often pinkish with a dark tip) and white outer tail feathers—those feathers being the key to identifying the bird in flight. Females are lighter and show some brown amid the gray, but again, the shades of gray and amounts of brown are quite variable.

### Habitat, Diet, and Behavior

The junco flock that arrives in my suburban Capital Region backyard just after Thanksgiving stays well into March. Some of these birds may have spent the breeding season in the evergreen forests of the Adirondacks or southern Canada, as the majority of dark-eyed juncos nest in elevations higher than 1,000 feet. As for their winter range, New York State juncos have demonstrated that migration can be a relative thing; banding records show some wintering in the Carolinas or in Georgia, with others flying only a few dozen miles from their nesting territory and simply dropping to a lower elevation.



Conifers are an important part of junco breeding habitat.



Female junco



At feeders, juncos may display a hierarchy.

Conifers are a crucial part of the junco breeding habitat, and evergreens are equally important in choosing a winter territory. Chiefly a ground-nesting bird, the dark-eyed junco also shows a preference for feeding low. Their summer diet features a large percentage of invertebrates and berries, and once those become scarce, juncos forage for seeds. This makes them frequent visitors to winter backyard birdfeeders. Together with mourning doves, juncos pick sunflower seeds off the snow beneath hanging tube feeders. They also sift through seed mixes found on low, stable tray feeders, alongside house finches, house sparrows, cardinals, jays, and other backyard regulars.

Junco flocks tend to return to the same winter territories each year, and use the same roost spot each night during their stay. The flock that claims our yard as part of its winter territory numbers about two dozen, and I liken them to a benign avian motorcycle club. “Dark jackets over white t-shirts” is my poetic spin on their plumage. My backyard junco gang rolls into town with a distinct hierarchy in place, a decidedly small number of females among them, and a large dose of attitude toward many of the year-round residents. I’ve observed that they like to chase away other species from winter food sources.

### Life History

Dark-eyed juncos move to breeding locations from late March to April. Males arrive first and sing from tall trees. While juncos are among the most numerous breeding birds in the Adirondacks and higher Catskills, they also show a strong nesting presence in the highlands of western New York. According to *The Atlas of Breeding Birds in New York*, the two- to three-acre woodland territory established is “large for a sparrow” and will regularly include “an opening in the forest canopy surrounding a rock outcrop or an exposed soil bank.” Females lay a clutch of three to five eggs, which hatch in 12 to 13 days.

In New York, the dark-eyed junco may produce a second brood.

While the slate-colored form of the dark-eyed junco may lack the brilliant color of other bird species, I look forward to their arrival and the opportunity to observe the flock behavior these snowbirds exhibit. It’s also the chance to share a New York winter with two dozen friends, which is just fine with me.

A frequent contributor to *Conservationist*, **Tom Lindsay** is a photographer and musician.

To learn more about dark-eyed juncos, visit Cornell’s website at [www.allaboutbirds.org/guide/search](http://www.allaboutbirds.org/guide/search) or check out the New York State Breeding Bird Atlas at [www.dec.ny.gov/animals/7312.html](http://www.dec.ny.gov/animals/7312.html).



### Fun Facts

- The farther south a flock appears, the higher the percentage of females present—many female juncos migrate earlier and go farther south than most of the males.
- The seeds of the ragweed plant are a favorite food of juncos.
- A group (flock) of juncos establishes and reinforces their hierarchy with threat displays, which include vocalizations, wing flashing, and spreading of the tail.
- Due to their high population (estimated at 630 million birds), their relative tameness, and their attraction to backyard bird feeders, the dark-eyed junco is one of North America’s most recognized birds.



# REUSABLE BAGS

## the wave of the future

BY KAYLA MONTANYE

**CRUNCH, CRUNCH, CRUNCH.** The hard-packed snow collapses under my snowshoes as the sun gleams brightly through the trees. Everything sparkles as it bounces off the snow. Without a cloud in the sky, it's a brisk winter day made for sunglasses and sunscreen. My stomach is grumbling, so I find a fallen tree and stop for lunch. A light breeze blows, a few cross-country skiers slide by. Birds are swooping and chirping, and rabbits are out hopping around. Everything is waiting for spring's arrival.

I hear something rustling under a bush. It looks reddish-brown—a red squirrel perhaps? I squint my eyes and lean closer. The breeze picks up and it rustles some more. It looks like it's coming out from under the bush. A gust of wind comes up and out it tumbles. I sigh with disappointment—it's a plastic bag. The number of ways it could have found its way to this spot are endless. Littered on a roadway somewhere and swept up by the wind and carried here, stuck on the antler of a deer that finally shook it off, or maybe it simply fell out of the backpack of another snowshoer.

We've all encountered similar situations, though we often just ignore them. Another plastic bag—ho hum, right? But it's not surprising to encounter a wayward plastic bag—they have become a fixture of our society, a way to store or



J. Craig

carry materials that is quick and easy. Unfortunately, these bags come with a price that goes well beyond the seemingly free cost to use them.

When improperly disposed of, plastic bags pose threats to fish and wildlife, clog machinery at recycling facilities, and litter the pristine outdoor places we love and enjoy spending time in with our friends and family. But hopefully that's going to change—as of March 1, 2020, anyone required to collect tax will no longer be able to provide plastic carryout bags to customers.



**Did you know that New Yorkers use more than 23 billion plastic bags a year? That's three times the 7.7 billion people in the entire world! Or put another way, that's approximately 1,150 bags per person per year.**

The idea of no plastic bags may seem shocking. They have become such a standard feature of our lives to the point where we truly feel they are an absolute necessity. But while there are some exemptions in the law, for the most part, here in New York State, we are waving goodbye to the plastic carryout bag. So, what are we supposed to use instead?

I recognize that changing our habits is hard, and it makes me think back to when I first started using reusable bags at the grocery store. I would get to the grocery store only to find I had left my bags behind, so I started putting them in my car. Then I would get into the grocery store and realize I left them in my car. I have to admit that while I sometimes went back out for them, other times I didn't. I would think to myself, "I forgot my bags in my car and it's freezing out, so I guess this isn't so bad just this once." But everyone remembering their bags "just that once" is what starts to make a difference and is what helped me form a new habit.

Is this about being perfect with absolutely zero instances where you forget a reusable bag? No. No one is perfect. The goal is to bring your reusable bags with you more often than not, so that over time it becomes your new routine. And remember that it isn't just about bringing reusable bags to the grocery store. After I mastered bringing (aka, remembering) my reusable bags to the grocery store, I started realizing that I needed to take them to more places, like a variety of retail stores. I also bring them to home improvement stores, and I even put a couple of small ones in a suitcase for vacations. Not every item that exists out there is suitable to put in a reusable bag, but the vast majority are. I now keep reusable bags in a variety of easy and convenient spots, such as in my car and in the coat closet, and I also have one that folds up into a compact pouch that is clipped on my purse.

Also, there are so many different types of reusable bags available that make it easy for people to find the type of reusable bag that suits them and their shopping and errand trips best. Something for everyone truly exists. Possibilities range from compact bags to oversized ones, produce and bulk foods bags, easy to carry backpack styles, and crossbody bags. The options are endless and

make it clear that we can indeed replace plastic carryout bags with environmentally friendly, reusable bags.

Of course, change can be difficult. But, in this case, it's not that hard. In fact, carrying reusable bags will quickly become a habit once you decide what works best for you. And with the plastic bag ban taking effect March 1, 2020, you can expect to see a number of new options to choose from.

Remembering your reusable bag means conserving natural resources, creating less litter, and keeping New York beautiful for future generations. It's an easy way to help protect our environment—which is something we should never forget.

**Kayla Montanye** works in DEC's Division of Materials Management in Albany.

**For more information on reusable bags and the upcoming bag ban, check out DEC's website at <http://on.ny.gov/byobagny> or email DEC at [plasticbags@dec.ny.gov](mailto:plasticbags@dec.ny.gov).**





I spotted what looked like three moose swimming across the pond in a line.

# An Adirondack Encounter

## A Woman, a Dog, and a Moose Train

BY ELLIE GEORGE | PHOTOS BY AUTHOR

I was hoping to see a moose this year. I hadn't seen one in the Adirondacks for about three years, but it was now September—moose mating season, the most likely time to spot a bull (male) since they are roving and searching for receptive cows. My young lab, Maple, needed exercise, so I decided to take her for a hike into a pond in a boreal area where I had found moose tracks in previous visits over the years. It was the middle of a bright, cool day, so I didn't expect to find much wildlife activity, but you never know.

As soon as we started hiking down the trail, I spotted fresh moose tracks. Some were big and deep, with widely

splayed toes, certainly the sign of a mature bull. I put my foot down next to the track to take a photo for size comparison. The hoof print was wider than my boot and almost as long. And I have big feet. There were lots of tracks, so at first, I thought maybe the bull had also returned, but I couldn't find any tracks going back up the trail.

Maple was hiking off leash, and I had a bell on her collar so I could keep track of her when she made short forays into the brush. When we got to the pond, I noticed the water level was very high, with shrubs in about a foot of water—the beavers had been busy damming the outlet this summer. Maple went for a swim, and I scanned

the water for signs of loons, beavers, or other wildlife. Then my eyes grabbed onto a thin, dark line about a quarter of the way across the pond. Instantly, my brain registered moose!

Staring hard, I couldn't believe what I was seeing—there were *three* moose swimming across the pond in single file. A cow moose led, followed closely by its calf, and just a little farther behind was a young, but mature bull. I quickly started taking photos, but I had the regular lens on my camera, not my telephoto lens, which was in a bag in my backpack. Fortunately, I realized I would probably have time to switch lenses before the moose made it across the

pond, so I scrambled to take off my pack. Then I thought to put Maple on a leash, in case she spotted the moose and decided to investigate.

While holding the leash between my legs, I struggled to get out the telephoto lens, glancing at the moose and noticing that the bull had caught up to the cow and calf. Now, it looked like a train of moose, with the cow being the engine and the bull the caboose. I fumbled with the lenses and managed to switch them. I started clicking away while the moose train continued its journey across the pond. I was shaking with excitement, my heart pounding.

Meanwhile, Maple was nosing around in the bushes, looking for tasty snacks. Her bell was jingling with

every movement, and the shutter of my camera was clicking.

Fortunately, the moose were making their own noise as they swam through the water, and probably couldn't hear us.

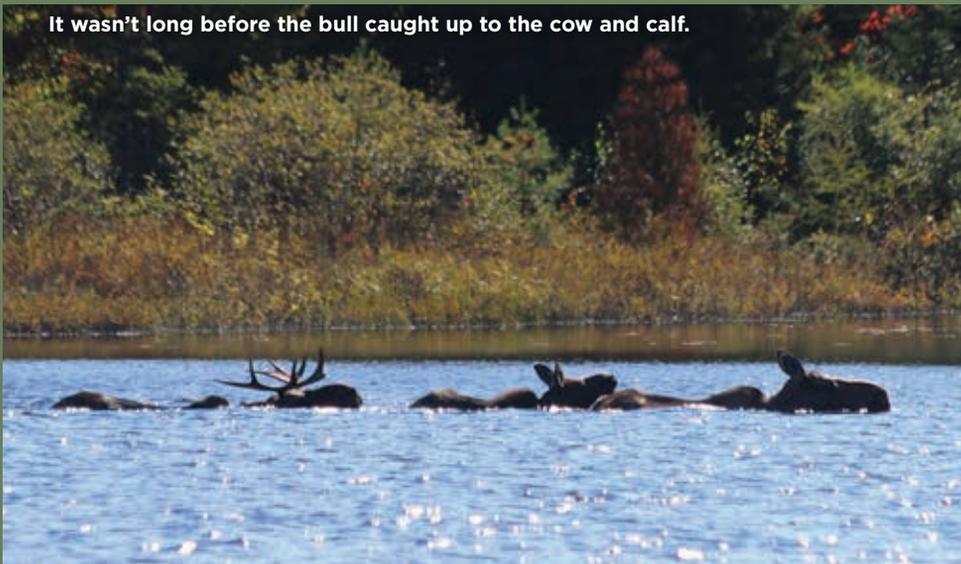
The cow reached shore, and I expected her to immediately climb up the bank, head into the woods, and disappear. Instead, she stood in the shallow water and started eating aquatic plants. Her calf also stood in the shallows, but it reached out to the shoreline shrubs and trees, and nibbled on their leaves. The bull, however, stayed half submerged in slightly deeper water, and did not feed at all.

**“ Now, it looked like a train of moose, with the cow being the engine and the bull the caboose.”**

The cow switched to feeding on shrub and tree leaves, and slowly ambled through the shallow water, moving along the shore toward the dog and me. Her calf followed, and so did the bull, though it remained half in the water not feeding. By now I was sure they could hear Maple's bell and my camera; the cow and bull looked in our direction a few times. I kept thinking: would they run away? Would the cow come charging toward us in defense of her calf? Would the bull charge us in defense of his breeding prospect? I glanced away from the camera to get a better sense of how much space there actually was between the moose and me and determined that I had enough time to hightail it out of there if a moose made a move toward us. I also decided that if they browsed their way much closer, I would leave immediately.

As I continued to watch, the cow turned toward the bull for the first time and he uttered a strange sound: a combination of a low moan and a high whistle that started low in pitch, rose to a high pitch, and then dropped back to a low pitch again. The bull also stuck out his tongue, probably to taste the air for the cow's pheromones. However, he did not do a flehmen

**It wasn't long before the bull caught up to the cow and calf.**



**When they reached the shore, the cow and calf started eating, while the bull just stood there half submerged in the pond.**



As the cow disappeared into the woods, the calf and bull quickly followed.



behavior (a “grimace” involving curling his upper lip to bare his teeth and sniff for pheromones). The cow merely turned back to browsing.

Then, either the dog or I must have made too much noise or some type of movement that caused both the bull and cow to look in our direction. The cow then slowly turned and walked back in the shallows, the way she had come, with her calf following. The bull watched me and then looked at them. The cow climbed the bank and, in two steps, melted into the forest. When the calf followed, the bull turned to join them. With his back toward me, he climbed the bank and disappeared. One moment ago, there was more wildlife biomass than I had ever seen in one place; now there was none.

I hastily gathered up my pack and camera bag and led the dog back up the trail. I wanted to be gone in case

the moose were headed our way. I kept Maple on a leash and walked fast back to the car. I loaded her into the back and started organizing my camera gear. I found the lens cap of my small, regular lens, but couldn’t find the lens. Darn—I left it at the pond when I switched lenses. So off Maple and I went. As I approached the pond, I heard the same strange, low moaning sound the bull had made. How close were they? I spotted my camera lens right near the water where I had left it, scooped it up, and quickly hiked out.

On my way home, I kept thinking about the awesome experience I just had. To be able to watch those three magnificent wild creatures interacting normally, barely influenced by my presence, was remarkable. And to see all three together was wonderful, especially since moose are generally solitary



A large, fresh moose track.

creatures, except for the cow-calf bond. I was surprised that the bull kept his distance, waiting for the right time, and wondered how long the three would be together.

Life is made of moments. This was one of the most special moments for me, made even sweeter because it happened in my home, the Adirondacks, not in some faraway place.

Adirondack resident **Ellie George** loves the outdoors and looking for moose.



# *The Forests Where We Work, Live, and Play*

BY CHRISTINA MCLAUGHLIN

If you've enjoyed a shaded sidewalk while walking your dog, noticed the leaves change colors on a village street, or picnicked in a town park, you've benefited from urban forestry. The word "urban" may make you think of large cities, but the urban forest doesn't just refer to city trees.

Urban forests are anywhere there are built environments—cities, towns, and villages—and stretch across suburbia. This includes street trees, town and city park trees, trees in municipal rights-of-way, and neighborhood trees in your front yard. Our urban forests feature trees where people work, live, and play.

We don't often think about the benefits trees provide. But trees are superheroes, capable of tackling some of the biggest problems we face in exchange for a little space, water, and care. Adding trees to our cities, towns, and villages has been shown to:

- Improve public health—both physically and emotionally. Trees clean our air and water, leading to healthier people, and being in a treed environment reduces stress.
- Capture stormwater runoff and reduce flooding.
- Reduce energy usage in buildings in the summer by providing shade, and reduce energy use in the winter by blocking cold winds.
- Moderate city temperatures, helping counter the heat captured by buildings and streets.
- Absorb carbon dioxide and store carbon, helping mitigate climate change.

Urban trees can have a tough life, though, which is why we need to protect and manage them. Urban Forestry is the practice of caring for trees in built environments. In addition to suffering from storms, insect and pest damage, drought, and the effects of aging, like their forest siblings,



Urban forests are anywhere there are built environments, such as cities, towns, villages, and suburbia. Here, a tree provides a peaceful, shady spot for a visitor outside the NYS Capitol Building in Albany.

urban trees also contend with snow plows, road salt, car accidents, limited root space, utility work, and soil compaction from pedestrians, cars, and sidewalks.

The invasive emerald ash borer has swept across the state, and dead ash trees now line some roads and neighborhoods. As trees are removed for a variety of reasons, they may not be replaced, leading to a decline in the urban tree canopy. A Nature Conservancy study found that four million urban trees are lost each year in the U.S. New York is losing 6,720 acres a year of canopy coverage in urban settings, which has caused a loss of \$1 billion worth of ecosystem benefits like carbon capture, water filtration, stormwater management, and air filtration.

With all the benefits trees provide, planting more is an obvious choice, and it's happening right now. The MillionTreesNYC initiative successfully planted one million trees across the city. The Arbor Day Foundation's new Time for Trees Initiative aims to plant 100 million trees around the globe and inspire 5 million people to continue planting by the 150<sup>th</sup> anniversary of Arbor Day in 2022. Planting trees is usually part of Arbor Day celebrations in towns and villages around the state, and hosting a tree planting event at any time can be a great volunteer opportunity for your community and a way to increase awareness and gain support for neighborhood trees.

Urban forestry is about a lot more than just planting. Healthy trees need maintenance and care throughout their life, such as periodic pruning and possible care after storm events. Managing the urban forest can be a challenge for cities and towns, which is where DEC's Urban and Community Forestry (UCF) program can help. The UCF program offers grants to municipalities to grow and maintain their urban forestry programs, and also provides training and workshops across the state for municipal employees and tree care professionals. There are several ways to help your community trees (see callout box), and we encourage you to get involved.

The next time you hear the phrase "urban forestry," remember that urban trees are trees for you and me! We may take that for granted at times, so take a minute to look around at the trees in your neighborhood and those you pass on your way to work or school, and try not to smile. It won't be easy.

**Christina McLaughlin** is the Urban & Community Forestry Volunteer Coordinator in DEC's Division of Lands and Forests.



## You Can Help

If you love the trees in your neighborhood, here are ways you can get involved in urban forestry:

- Encourage your town, village, or city to become a Tree City, which will help protect and expand the number of public trees in your community. [www.arborday.org/programs/treecityusa/index-become.cfm](http://www.arborday.org/programs/treecityusa/index-become.cfm).
- Join your municipality's tree board, or help them start one.
- Join the NYS Urban Forestry Council, the advisory board for DEC's UCF program, and partner in urban forestry around the state <http://nysufc.org/>.
- Encourage your child's school to become a Tree Campus K-12 with the Arbor Day Foundation and to participate in the annual 5th Grade Arbor Day Poster Contest. [www.dec.ny.gov/education/25420.html](http://www.dec.ny.gov/education/25420.html).
- Sign up for the DEC Delivers topic "Forest Plants and Land Conservation" to learn more about the trees you see. [https://public.govdelivery.com/accounts/NYSDEC/subscriber/new?topic\\_id=NYSDEC\\_22](https://public.govdelivery.com/accounts/NYSDEC/subscriber/new?topic_id=NYSDEC_22).
- Join your local ReLeaf Committee or attend a workshop. ReLeaf is a statewide network of committees that brings together urban forestry professionals, municipal staff, and interested members of the public to provide training, support, and resources to communities. Watch the UCF activity page for events and meetings near you. Also consider joining us at the annual ReLeaf Conference! The 2020 Conference is July 23-25 in Buffalo, NY. [www.dec.ny.gov/lands/30859.html](http://www.dec.ny.gov/lands/30859.html)

# 50 Years of Progress:

## DEC & Earth Day Mark Golden Anniversaries

It's hard to believe that it's been 50 years since the creation of the New York State Department of Environmental Conservation (DEC).

The legislation establishing DEC was signed by Governor Nelson Rockefeller as part of the celebration of the first Earth Day, April 22, 1970, and the new agency began operations on July 1. DEC assumed the functions of the former Conservation Department and incorporated the programs and responsibilities of New York's Water Resources Commission, Air Pollution Control Board, Pesticide Control Board, the Natural Beauty Commission, and various other tasks performed by the state departments of Health and Agriculture & Markets.

In this and future issues of the *Conservationist*, we will take a look back on the creation of DEC and examine some of issues and challenges that the agency has dealt with over the years, and how environmental needs have evolved during the past five decades.

DEC has played—and continues to play—a primary role on issues that affect both our daily lives and our future:

- Reducing pollution of our air, land, and water. It's clear to see that our waterways are cleaner today, yet the agency remains vigilant in its efforts to ensure high quality water is available to all New Yorkers.
- DEC and its partner agencies have made great strides regarding the disposal and cleanup of solid and hazardous waste sites. Since its inception, DEC has overseen the cleanup of nearly 1,800 contaminated waste sites throughout the state, and has closed hundreds of local, unlined landfills.
- The agency plays a lead role in New York's commitment to reduce harmful air emissions, including those that produce acid rain, and is a leader in efforts to reduce greenhouse gas emissions from industrial plants and motor vehicles.

Our readers know that “the environment” is a broad term that encompasses many things in our daily lives, including some we may take for granted. DEC oversees one of the nation's strongest environmental agendas in order to protect our natural resources and public health, including efforts to combat climate change, our greatest environmental challenge.

DEC also responds to immediate challenges, such as petroleum spills, industrial pollution, and severe flooding. In addition, DEC develops strategies to provide accessible outlets for outdoor recreation and to ensure that our forests and natural resources are healthy and sustainable.

Over the years, the *Conservationist* has highlighted key environmental issues and told the stories of people who work every day to protect and improve our world. We will continue to share these stories, which provide an important human perspective to the environmental challenges we face.

As we strive to address current challenges, we remain committed to celebrating outdoor traditions that have long been part of the character of New York. So, readers can expect articles that encourage them to connect with nature—and offer ways to enjoy all that our state has to offer.

Fifty years ago, New York took an important step in creating a broad, diverse agency focused on critical issues that affect us now and will affect us well into the future. It is fitting that our agency's history dates back to the first Earth Day. After all, at DEC, every day is Earth Day.



Governor Nelson Rockefeller signs the legislation establishing DEC on the first Earth Day, April 22, 1970.



# On Patrol

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

CONTRIBUTED BY ECO LT. LIZA BOBSEINE AND FOREST RANGER CAPT. SARAH B. GEESLER

### Halloween Flooding—Hamilton County

On October 31, Forest Rangers assembled a Swiftwater Rescue Team in preparation for the significant rain event predicted to impact Central New York and North Country areas. Eight inches of rain fell that evening and into the next morning, causing many local rivers to flood. Rangers utilized an airboat to rescue four individuals stranded by rapidly rising flood waters along the Sacandaga River. In addition, swiftwater rescue techniques were used to rescue another two individuals from a residence in the Town of Wells, and an elderly couple from the Town of Hope was rescued with an all-terrain vehicle. Rangers also assisted the NYS Office of Emergency Management with response coordination at the State Emergency Operations Center in Albany. A total of 57 Forest Rangers were involved in response efforts in many counties across northern New York State.



### Endangered Lemur as a Pet—Delaware County

Acting on a tip, ECO Ben Tabor investigated a complaint of a person allegedly in possession of a ring-tailed lemur in the Town of Colchester. Diligent work paid off and the animal was located and seized. A summons was issued to a 58-year old woman for illegal possession of wildlife. She pled guilty and paid a \$125 fine. Ring-tailed lemurs are an endangered species. Pebbles the lemur was successfully relocated to a new home and has acclimated well with her many new friends.



### Emergency Beacon Rescue—St. Lawrence County

On December 17, St. Lawrence County 911 contacted DEC's Ray Brook Dispatch regarding a distress signal received from an inReach emergency beacon in the Five Ponds Wilderness Area at Cat Mountain Pond. Due to the remote location and winter conditions, 10 Forest Rangers responded with two airboats to expedite personnel transport and rescue efforts. With coordinates provided by 911, a 38-year-old male hiker from West Point was found on foot in the early morning hours by Ranger Nathan Shea. The hiker was evacuated by airboat but declined medical care and was transported by family members to Tupper Lake. The hiker admitted he was not fully prepared for the hike and did not have winter-weight boots or enough food.

### Bass Poachers Plead Guilty—Ulster County

In December, three Brooklyn men pled guilty to charges including the taking of black bass out of season and illegal commercialization of protected wildlife. ECOs Jason Smith and Lucas Palmateer issued tickets to the men at the Ashokan Reservoir after finding them with 35 smallmouth bass attached to a stringer line hidden on the shoreline. Two of the defendants' vehicles were customized to carry tanks to hold and transport the fish. One vehicle was registered to a retail fish market in New York City. All three men were also charged with failing to wear personal flotation devices and trespassing; one of the men was also charged with fishing without a license. The men paid \$2,425 in total fines and the New York City Department of Environmental Protection revoked their access passes and boat permits.



THE  
ARTWORK  
OF

# Jean Gawalt

BY CONSERVATIONIST STAFF

As we reported in our August 2019 issue, longtime *Conservationist* and Division of Fish & Wildlife artist, Jean Gawalt, passed away last spring. Jean was a biologist, a naturalist, an artist, and a scientific illustrator who went to great lengths to ensure he accurately represented whatever species he was working on. He was meticulous in his detail, collecting specimens (when possible) to use as models to make sure his renderings were scientifically accurate.

Jean's artwork has appeared in the magazine for decades. He was the art director for *Wild in New York*—an eight-page insert included in the magazine from 1992-1998. He also produced the majority of the artwork for the more than 30 pullouts featured in the magazine highlighting the state's wide variety of wildlife species. These pullouts were (and still are) very popular. You can see them at: [www.dec.ny.gov/pubs/104996.html](http://www.dec.ny.gov/pubs/104996.html)

On these pages we are providing just a sample of the wonderful artwork Jean produced. Great art is timeless.









**Thank you, Jean.**

# FOOD WASTE IN THE CITY

A purple bowl filled with various food scraps, including a whole fish, a carrot, a banana, and some leafy greens, resting on a dark, speckled surface. The bowl is positioned centrally, and the text 'FOOD WASTE IN THE CITY' is overlaid on top of it in large, white, bold letters.

Composting, fighting climate change, and creating energy in the “city that never sleeps”

BY JAMES L. SIMPSON

While others may view food waste as a problem, New York State sees it as an opportunity. Instead of paying to haul food waste to landfills, there are better options for the environment and New Yorkers.

In New York City, the Department of Sanitation (DSNY) developed an innovative plan to collect food waste, which will reduce the City's carbon footprint, help revitalize soils, save money, and create energy. The goal is to develop a circular economy for organic material based on the sustainability principles of reduce, reuse, and recycle. Indeed, collecting food waste and composting are beginning to thrive in New York City.



“ Dealing with food waste in a city the size of New York is a big challenge, but one that is being tackled head on.”

The City has implemented an ambitious zero waste plan, targeting a 90 percent reduction in landfill use by 2030. Approximately one-third of NYC waste is organic material (food scraps, food-soiled paper, and yard waste). Historically, this one-third was part of approximately 2.5 million tons of waste sent to landfills every year, costing the City an estimated \$411 million dollars.

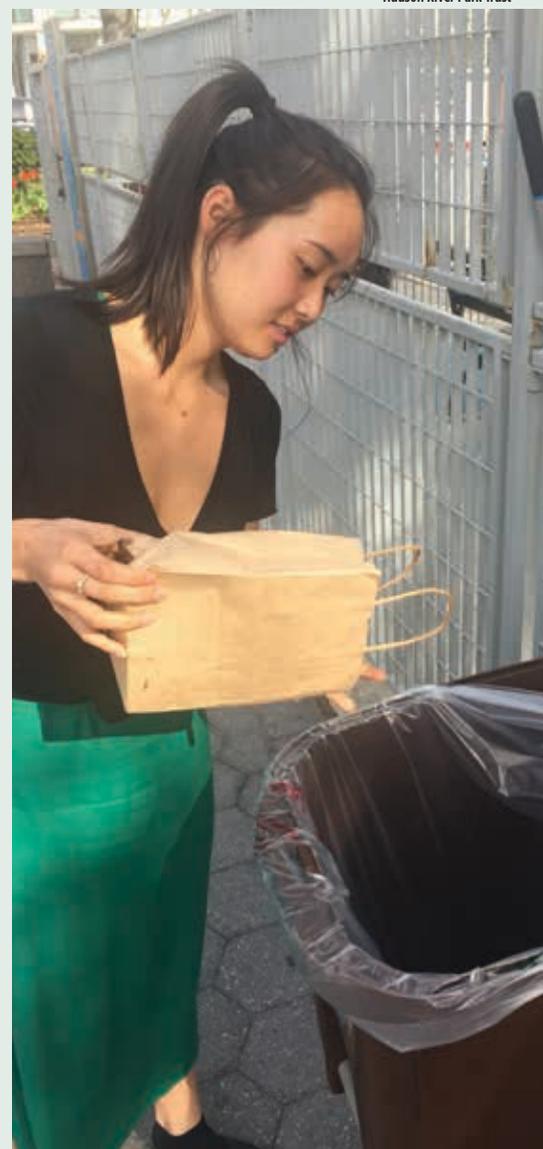
In addition to saving money and landfill space, diverting food waste from landfills also helps reduce the production of harmful greenhouse gases. When organic waste decomposes in a landfill it generates methane gas, while properly composted organic waste does not. The difference is oxygen. Microorganisms that break down waste need oxygen from the air to do

their work, but landfill decomposition occurs anaerobically (in the absence of oxygen), producing methane, a powerful greenhouse gas that has approximately 28 times the impact of carbon dioxide.

Composting food waste is a benefit long known to farmers and gardeners, and is a great example of a win-win situation. Compost helps enrich soils, reduces the need for chemical fertilizers, encourages the production of beneficial bacteria, and lowers the carbon footprint. It also helps build a circular economy for food waste— food scraps are collected and composted, and when that compost is added to soil, it helps nourish plants and grow more food.

So, how do New York City residents compost? I live on the 6<sup>th</sup> floor of a 150-unit apartment building, so I can't simply build a compost bin in my backyard. In fact, most of New York City's 8.6 million residents do not have backyards. However, food waste recycling and composting is a viable option in NYC, and it's only growing. Indeed, DSNY Commissioner Kathryn Garcia said she wants DSNY to lead the nation in food waste recycling.

Despite urban living (or maybe because of it), composting is beginning to prosper all over the City. New Yorkers throughout the five boroughs now have options for disposing of their food scraps, including food scrap drop-off sites, curbside pickup, and composting at community sites or at home.



Composting food waste cuts costs and creates clean energy.

## Community and Home Composting

The DSNY established the NYC Compost Project in 1993 and has partnered with seven local non-profit organizations to provide education and support to residents who want to make and use compost locally to help rebuild the City's soils. All NYC Compost Project partners host year-round educational and volunteer opportunities, including composting workshops, volunteer workdays at compost sites, and trainings to teach residents and community groups how to make and use compost.



Digesters at the Newtown Creek treatment plant break down bioslurry to create biogas, which is used to generate renewable energy.

## Drop-off Composting

In the past decade, a large network of NYC food scrap drop-off sites was developed. Organizations that operate independent food scrap drop-off sites are listed on a map on the DSNY website: [www.nyc.gov/dropfoodscraps](http://www.nyc.gov/dropfoodscraps). There are more than 160 sites in the five boroughs, and the number continues to grow rapidly. Many of these are at Greenmarkets or near subway stops, and most drop-offs have someone present to educate and encourage prospective composters, and to answer questions.

The environmental non-profit GrowNYC operates more than 60 staffed drop-off sites, and most are open year-round. The group has seen a 25 percent growth in volume each of the past several years. The bulk of the food scraps collected is composted by NYC Compost Project staff from Earth Matter on Governor’s Island, Big Reuse in Queens and Brooklyn, and the Queens Botanical Garden.

The NYC Compost Project, hosted by Big Reuse, describes itself as “part of a community-scale composting network that works to rebuild our soils by providing New Yorkers

with the knowledge, skills, and opportunities they need to produce and use compost locally.” Big Reuse has 14 community drop-off sites in Queens, and collects food scraps from local farmers markets. The compost produced is used for public greening projects led by community groups, schools, and individuals. Recently, the NYC Compost Project opened a second site near the Gowanus Canal.

## Curbside Composting Collection

The City’s curbside organics collection expanded from a pilot project to include many neighborhoods and schools, but

recently it stopped expanding due to logistical challenges. DSNY distributed brown-colored bins in the participating areas for residents to dispose of food scraps, and picks up the material in garbage trucks, similar to New York City programs for recyclables and trash. The program now serves 3.5 million New Yorkers. The City is now focused on aggressive outreach and education to ensure that the quantity and quality of food scraps that are collected comply with composting standards.

Ultimately, the curbside food waste is delivered to industrial composting facilities or digesters in the tri-state area, including the DSNY-owned Fresh Kills Compost Facility. In 2019, more than 2,250 tons of the finished compost produced at the site was distributed (at no cost to City residents) to community gardens, street tree stewards, city agencies, and nonprofit organizations.

## Waste to Energy—Circular Economy of Organics

New York City recently initiated an ambitious plan to convert collected food scraps into energy at its Newtown Creek wastewater treatment plant, which uses a digester to convert solids from wastewater into biogas. The produced biogas is used as fuel for its boilers.



Tons of organic food waste collected by NYC Sanitation is pre-treated, converted into bioslurry, and delivered to the Newtown Creek plant.



## Managing Wasted Food

BY KRISTINE ELLSWORTH,  
DEC DIVISION OF MATERIALS MANAGEMENT

For centuries food has served as more than just a source of survival. Whether it be the morning bagel and coffee shared amongst coworkers, the half-gallon of ice cream devoured during times of emotional distress, or the smorgasbord of food laid upon the table during a potluck with friends, food remains at the epicenter of our lives. Despite this shared dependency and yet unique relationship with food we each hold, we continue to throw away more food than ever before.

DEC is focused on shifting how we think about the food we waste and how we can divert that food away from our garbage cans to more beneficial uses. Here are a few things everyone can do.

1. Reduce the amount of food you are wasting. We can all take small actionable steps to reduce the amount of food we waste, especially at home. Shop wisely by planning meals and making a shopping list. Plan portions appropriately and save leftovers for meals throughout the week. Learn how to properly store or freeze food items to prevent them from spoiling.
2. Support your donation community. Encourage businesses, such as your local grocery store or favorite restaurant, to consider donating excess food.
3. Recycle food scraps. Learn how to compost at home or participate in a food scraps drop off program in your area or residential food scraps collection service.

DEC recently awarded grants totaling more than \$4.3 million to 111 projects across the state to help reduce hunger—\$3.2 million was awarded to 27 municipalities to initiate or expand programs to reduce wasted food, donate wholesome food to those in need, and recycle food scraps. In addition, \$1.1 million was awarded to 84 emergency food relief organizations to reduce the amount of food wasted by supporting donation partnerships and increasing infrastructure to accept and distribute more fresh food.

To learn more about composting at home and how to use compost, visit: [www.dec.ny.gov/chemical/8799.html](http://www.dec.ny.gov/chemical/8799.html).

Visit [www.dec.ny.gov/chemical/8799.html](http://www.dec.ny.gov/chemical/8799.html) and click Food Scraps Drop-Off Programs on the right hand side of the page to learn about a food scraps drop-off program in your area or residential food scraps pick-up service.

If you are interested in learning more about the NYS Food Donation and Food Scraps Recycling law, visit: [www.dec.ny.gov/chemical/114499.html](http://www.dec.ny.gov/chemical/114499.html)

Interested in starting a composting facility? The regulation of composting facilities depends on the location, quantity and type of material you are composting. Email [organicrecycling@dec.ny.gov](mailto:organicrecycling@dec.ny.gov) for assistance.

As part of the City's zero waste plan, it has started to augment this process by using food waste as an ingredient to produce biogas. The process begins at a transfer station in Brooklyn that receives food scraps collected from curbside pickups, and some material collected by GrowNYC. This organic waste runs through a processing system that filters out contamination (e.g., plastics and other garbage). The facility then processes the organic waste into a bioslurry (a fertilizer made from the liquid discharged from the processing system), which is delivered to the Newtown Creek plant.

The Newtown Creek plant feeds about 35- to 40-thousand gallons of bioslurry each day into the digesters, which consists of about 150 tons of food waste. Digesters heat this material and stimulate the breakdown of the waste with anaerobic bacteria, which converts the material into biogas. Although anaerobic decomposition is bad in landfills because of the methane produced, anaerobic decomposition in these digesters generates energy, allowing the City to convert food waste into energy. Newtown Creek has the potential to digest up to 15 percent of the City's residential organic waste and plans to use the biogas to support residential and commercial energy use. Currently, the plant produces enough biogas to offset the greenhouse gas equivalent of heating 2,500 homes.

New York State is leading a broader effort to change the way food waste is handled. Under a new State law, the New York State Food Donation and Food Scraps Recycling Law, which takes effect January 1, 2022, large generators of food scraps, such as restaurants, grocery stores, colleges and universities, hotels and motels, and others, will be required to separate and donate edible food, and also may need to recycle all remaining food scraps.

Dealing with food waste in a state the size of New York is a big challenge, but one that is being tackled head on. Education plays a key role in starting organics collection and drop-off programs, and is helping to change people's behavior by letting them know about these options. New York City has taken up the challenge, as have other communities across the state. New programs will help alleviate waste issues, while also creating opportunities that will improve the quality of life throughout the state.

As I exited the subway on my way to work recently, I saw a DSNY poster that read "If you can compost here, you can compost anywhere." New York City's experience collecting food waste from drop-off sites and curbside pickup demonstrates new circular economies at work, and while there have been challenges along the way, if New York City can make composting work, any municipality can.

**James L. Simpson** is an Assistant Counsel in DEC's Long Island City office.

# CRANBERRY MOUNTAIN WILDLIFE MANAGEMENT AREA

BY NATHAN ERMER

Located in the Town of Patterson, in the northeast corner of Putnam County and within New York's Hudson Highlands, the Cranberry Mountain Wildlife Management Area (WMA) is a popular recreational destination for local residents and long-distance travelers alike. Just 50 miles north of Manhattan and less than a mile from the state boundary with Connecticut, the WMA provides critical habitat for a rare rabbit found in few other locations within New York. It also contains a 1.5-mile stretch of Haviland Hollow Brook, which supports one of the southernmost wild brook trout fisheries in the state.

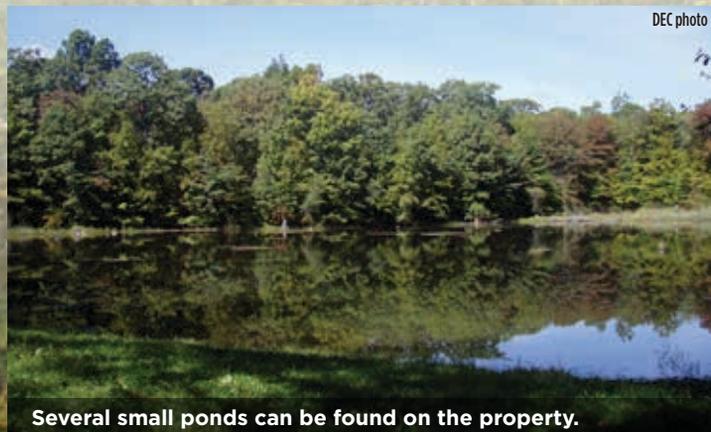
The land for this WMA was first acquired in the 1960s, with two initial purchases totaling 465 acres. Thousands of acres surrounding the WMA were part of the Putnam County Cooperative Hunting Area. The "Co-op" program, created by the 1957 NYS Fish and Wildlife Management Act, allowed the then Conservation Department to administer public access on enrolled private lands. While the program has been significantly reduced from its heyday in the 1960s, '70s, and '80s, it helped to create a strong tradition of downstate hunters traveling to the Hudson Valley for recreational possibilities.

When the Putnam County Co-op was dissolved in 1981, substantial public recreation opportunities were lost. However, some of these opportunities were reestablished

with the acquisition of several large additions to Cranberry Mountain in 2011 and 2013. The WMA now encompasses about 1,100 acres.

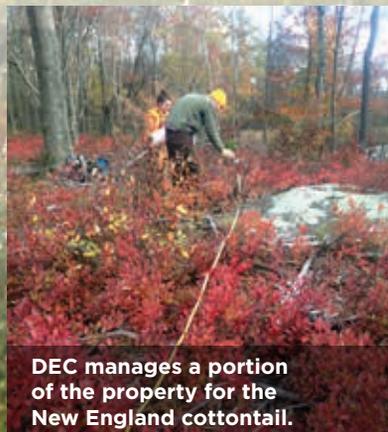
Cranberry Mountain is dominated by upland hardwood forests, with various types of oak (red, white, black, and chestnut) and maple (red and sugar) being the most abundant tree species. Additionally, there are 15 acres of maintained fields that are surrounded by approximately 30 acres of early successional habitat created by DEC over the last decade. The WMA also contains several small ponds, the largest encompassing 2.5 acres. There are 30 acres of forested wetland and floodplain forest associated with the riparian corridor of Haviland Hollow Brook. This small stream, fed by cold, high-gradient headwater tributaries in both New York and Connecticut, provides the cool water necessary to sustain a native brook trout population.

Wildlife at the WMA include typical species such as white-tailed deer, turkey, wood thrush, and red-shouldered hawk, as well as less common species such as worm-eating warbler and cerulean warbler. Additionally, DEC stocks the fields of the WMA with ring-necked pheasants to provide additional hunting opportunities. The WMA's larger waterbodies support largemouth bass, sunfish,

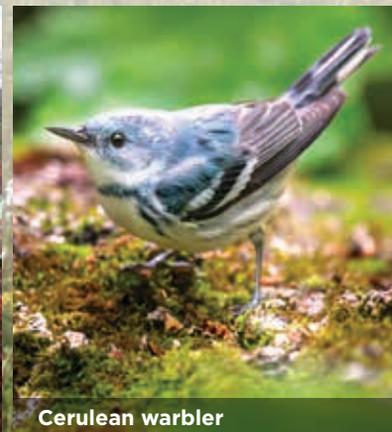


DEC photo

Several small ponds can be found on the property.



DEC manages a portion of the property for the New England cottontail.



Cerulean warbler

**LOCATED IN THE TOWN OF  
PATTERSON, PUTNAM COUNTY  
SIZE: APPROXIMATELY 1,100 ACRES**



bullheads, and chain pickerel, while several vernal pools provide breeding habitat for wood frogs, spring peepers, and spotted and marbled salamanders.

The area is home to a population of New England cottontail, the only native rabbit species in southern New York east of the Hudson River. Loss of the rabbit's preferred young forest habitat and competition with the introduced Eastern cottontail have caused dramatic declines in New England cottontail populations across their range. Along with five other northeastern states, New York is part of an initiative to help increase the number of New England cottontails through research and habitat management. Since 2013, DEC has created 30 acres of young forest at Cranberry Mountain through active management. Furthermore, a Habitat Management Plan was created for the WMA in 2016, and one of the goals includes the creation of an additional 150 acres of young forest.

Cranberry Mountain WMA is an ideal destination for outdoor recreation. The area is popular with big and small game hunters, and the property's larger ponds and Haviland Hollow Brook provide good fishing opportunities. Additionally, there is a five-mile trail network that can be enjoyed throughout the year by hikers and other visitors (on snowshoes when appropriate).

**Nathan Ermer** is the Regional Wildlife Manager in DEC's New Paltz office.



Tom Keilman

Hunting is a popular activity here.



Amahda Cheeseeman

New England cottontail

## Site Features



**NOTES:** Open year-round. Hunting, hiking, bird watching/photography, and fishing are popular activities. A network of woods roads serves as excellent walking trails, providing access to much of the area. DEC is developing a demonstration area for the Young Forest Initiative to educate the public about the benefits of young forests for various wildlife species, including the New England cottontail.



**DIRECTIONS:** The WMA is located in northeast Putnam County between NYS Route 22 and the Connecticut border. Access can be gained from parking lots on Haviland Hollow Road and Stage Coach Road in the Town of Patterson.



**CONTACT:** For more information, visit [www.dec.ny.gov/outdoor/76952.html](http://www.dec.ny.gov/outdoor/76952.html) or call DEC's New Paltz office at 845-256-3098.



Visitors can enjoy snowshoeing on a five-mile trail network.



## Shoreline Resilience Projects

New York awarded \$60 million in state funding for 38 projects to strengthen shoreline protections and increase resiliency across Jefferson and St. Lawrence counties. Funding was provided from the Lake Ontario Resiliency and Economic Development Initiative (REDI). Through REDI, the state has committed up to \$300 million to rebuild the shoreline and improve resiliency in flood-prone regions along Lake Ontario. Nearly \$25 million will be used to replace docks with floating docks, relocate infrastructure, and install shoreline stabilization and more at publicly owned regional docks and boat launches in Alexandria, Clayton, Hammond, Lyme, Orleans, Alexandria Bay, Cape Vincent, Dexter, Sackets Harbor, Waddington and Ogdensburg. For more information on these and other REDI projects, visit: [www.ny.gov/lake-ontario-flooding/regional-projects-selected-redi-commission#top](http://www.ny.gov/lake-ontario-flooding/regional-projects-selected-redi-commission#top).



Andy Breedlove

## DEC's Newest Uniformed Officers

Thirty Environmental Conservation Police Officers (ECOs) and 14 Forest Rangers recently graduated from DEC's 22<sup>nd</sup> Basic School for Uniformed Officers, and began their careers with DEC. The graduates will join the 275 ECOs and 131 Forest Rangers currently serving across the state. This year, ECOs will be celebrating the 140<sup>th</sup> anniversary of the establishment of New York's first Fish and Game Protectors, and Forest Rangers will be commemorating 135 years since their predecessors, Fire Wardens, first began patrolling New York's Adirondack and Catskill forest preserves.



Robin Kuiper



Robin Kuiper

## Visit Camp Santanoni

The public is invited to join DEC and Friends of Camp Santanoni at the 7<sup>th</sup> Annual Winter Weekend events at Camp Santanoni in the Adirondacks during the weekend of March 14 and 15. Cross-country skiers and snowshoers will have access to the historic camp properties located in the Town of Newcomb, Essex County, to take a break from their activities, tour the buildings, and view interpretative displays. For more information, check DEC's website [www.dec.ny.gov/lands/94034.html](http://www.dec.ny.gov/lands/94034.html).

Robin Kuiper



Meads Meadow Trail, Overlook Mountain, Catskills

## First Day Hikes

On New Year's Day, 9,449 people celebrated the new year by participating in one of the 83 hikes offered by DEC and the NYS Office of Parks, Recreation and Historic Preservation as part of the 9th annual First Day Hikes program. New York's diverse landscape contains thousands of miles of trails for hikers of all abilities. Participants in a First Day Hike were able to visit a favorite park, historic site, wildlife area, or trail, and enjoy some great views of wildlife and New York's amazing natural resources. Thanks to all the families, individuals, and groups who showed up at locations across the state to help ring in 2020! To learn more about hiking trails in New York, visit: [www.dec.ny.gov/outdoor/351.html](http://www.dec.ny.gov/outdoor/351.html).

Robin Kuiper



Goodnow Mountain, Adirondacks



Prospect Mountain, Adirondacks

## Long Island CleanSweepNY

Long Island farmers and businesses disposed of more than 77,000 pounds of unwanted pesticides and other chemicals at two collection events held this past fall in Suffolk County as part of DEC's CleanSweepNY program. A total of 77,458 pounds of chemical wastes were collected at the events, including pesticides, school chemicals, paint, aerosol containers, mercury, and various engine fluids.

CleanSweepNY is an effort to safely and economically dispose of canceled, unwanted, or unusable pesticides and other chemicals from agricultural and non-agricultural businesses, such as professional pesticide applicators, schools, cemeteries, marinas, and golf courses. Since the program's inception in 2002, more than two million pounds of chemical wastes have been collected across the state, as well as more than 910 pounds of liquid elemental mercury. For more information, visit: [www.cleansweepny.org](http://www.cleansweepny.org).

Elizabeth Keegin Colley



## Be a Citizen Scientist

You can help DEC gather information for the third New York Breeding Bird Atlas; 2020 marks the beginning of a five-year effort to map the distribution of breeding birds throughout New York. Anyone can participate—novices and experienced birders alike. Ideally, volunteers visit all of the various habitats within a designated block—each block measures three miles on each side—to find as many species of breeding birds as possible. With 5,332 blocks to cover, there are lots of opportunities. More than 1,000 volunteers are expected to participate. The project is organized through the coordination of several groups including DEC, Audubon New York, the New York State Ornithological Association, and the Cornell Lab of Ornithology. To learn more, visit: [nybirds.org/ProjAtlas.htm](http://nybirds.org/ProjAtlas.htm).



### First Fish

Colton Wickham, age 7, caught his first fish while ice fishing with his father last winter.

NANCY WICKHAM  
GREENVILLE

*Congratulations Colton! Ice fishing can be a fun family activity to enjoy in winter. To learn more about ice fishing and safety, check out "Fun in Ice: The Thrill of Ice Fishing" in the February 2019 Conservationist, or visit DEC's website at [www.dec.ny.gov/outdoor/7733.html](http://www.dec.ny.gov/outdoor/7733.html).*



### Beautiful Bobcat

We spotted this beauty in a field near our house. What a fantastic sight to see!

KATRINA QUINLAN  
WEST CAMP, NY

*Judging by the number of pics we receive, it seems as if more people are spotting bobcats in the wild. Check out the "Species Spotlight" on the bobcat in the December 2019 Conservationist.*



### Leaving a Trail

I took this picture while checking my trail cams. There were only deer tracks around. I have never seen deer make a continuous furrow like this.

JOHN TUCKER  
ALLEGANY COUNTY

*While it's difficult to tell from the photo, this could have possibly been made from rooting by a pig. Pig tracks can easily be mistaken for deer tracks, and this could be the work of an escaped domestic pig. DEC appreciates reports like this, as we are working hard to prevent introduction and establishment in New York of the invasive and highly destructive Eurasian boar. To learn more about these boars, check out DEC's website at [www.dec.ny.gov/animals/70843.html](http://www.dec.ny.gov/animals/70843.html). And if you suspect you have seen a Eurasian boar, please report it to your local DEC wildlife office.*

—JEREMY HURST, DEC WILDLIFE BIOLOGIST



### Cardinals Rule

We have counted 20 or more male cardinals at one time at one of our bird feeders. Usually, there are just as many females, but they do not show up as well.

MICHAEL WHITE  
HILTON, NY

*Wow! In the fall and winter, cardinals can form large flocks of up to several dozen birds. A favorite at backyard birdfeeders, cardinals hop through low branches and feed and forage near the ground.*



### Ask the Biologist

**Q:** While hiking on Castle Rock Mountain in the Blue Lake area, I noticed this silken-type ice found on sticks lying on the ground. The icy texture was beautiful. What exactly am I looking at and what causes this?

—GREG CHOUFFI

**A:** This is called hair ice, named for its resemblance to strands of hair. The ice is fairly uncommon, and only forms on moist, rotting wood when the temperature is slightly under freezing and the humidity is high. When the spongy interior of the wood fills with water and freezes, hair ice expands out from the wood's pores.

—CONSERVATIONIST STAFF



### Keep Off!

We have found this squirrel deterrent to work very well. There are no squirrels around at all whenever this barred owl comes for a visit (although, birds don't like it either). Actually, it usually perches in a nearby tree and hunts for mice and has not tried to catch a squirrel or bird.

ALISON LESKE

*We ran a Back Trails article in the December 2018 Conservationist about outwitting squirrels that are getting into birdfeeders. We received several pictures of various contraptions that our readers built, but this is the first natural security guard photo!*

### Author Mix Up

Due to an inadvertent error, we mislabeled the author byline of "A Look Back—The Owl and the Buck" in the October 2019 issue. It should have read "By Peter R. Schoonmaker." Our apologies.

### Calendar Correction

Please note that on the May calendar page it incorrectly lists "Pike, Pickerel, Walleye Season Opens" on May 1, 2020. Pike, pickerel, and walleye seasons do not open until the next day, Saturday, May 2. We regret this error.



### A Winter Snack

Aaron Winters sent us this photo of a great blue heron enjoying a tasty fish snack it caught while "ice fishing" on Irondequoit Bay.

### CONTACT US!

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# Back Trails

Perspectives on People and Nature



## Owl Echoes and Recreation Conservation

BY CONRAD BAKER

It was 5:18 a.m. on a Wednesday in January. The sky was clear, cold, and silent. I was warm in bed, in the “cabin” built for staff at DEC’s Reinstein Woods Environmental Education Center. Something had stirred me. Then I heard it again... who HOO who who...

I glanced up through the blinds. There hung the silhouette of a grand owl, holding the bending arm of a black cherry tree overlooking the parking lot, bowing as she called... who HOO who who. Her voice throbbed in my chest as I lay there. I absorbed every detail: how very far out on the branch she sat; where she looked; how frequently she called; her tone. She called one more time, turned her head to the east, lifted her wings, and vanished.

It was a precious opportunity. Many of us develop professionally in a climate that passively decries the conveniences of urban life as generally poisonous to the earth. It may be that a majority of us only breathe outside air on our walks from the door to our transportation and back again.

It seems to me that fewer and fewer people take long walks outdoors, camp, or fish. Maybe sooner than we think, people will only encounter nature through a huge camera lens in their cars or in a park.

But, there are powerful glimmers of hope if one looks for them.

As I have become more professionally connected to a few nature centers and environmental education centers in Western New York, I have noticed an apparent rising public interest in outdoor recreation. For example, while working last winter at Reinstein Woods—a 292-acre nature preserve with old growth forests, in Cheektowaga—we rented out more than 100 pairs of skis, breaking the previous record of 80.

On another day at Reinstein, I watched a very young explorer lead her dad into the environmental education center. She held his sleeve in one hand and a plastic pair of binoculars in the other. Suddenly, she let go of her father’s arm and sailed over to a superb collection of owl taxidermy.

“Harry Potter’s owl! Baby owls! Spooky owl,” she cried to the snowy, screech, and barred owls, delirious with joy. She stopped at the great horned owl and simply exclaimed “Wow.”

“Hi,” I began, but she was ten miles ahead of me.

“Do you have this kind of owl here?” she asked.

“Funny you should ask,” I replied, and I pointed to the tree where the owl had just visited me, and told her the tale.

We had a blast hooting like great horned owls, chanting like barred owls, whinnying like eastern screech owls. We blew on the huge great horned owl flight feather, listening for the faintest whisper. We looked through the gnarly carnage of an owl pellet, looking for skulls, ribs, eyes in the regurgitated remnants of the owls’ meals.

My new friend was about six years old. Her father said she grew up in downtown Buffalo and learned about Reinstein Woods when an educator led a program on animal tracks at her school. I was pleased to see that nature still holds appeal, even as it seems to be disappearing. Her starry-eyed enthusiasm for the natural world verified my feelings that the naturally curious can bloom into outdoor enthusiasts, if only given the chance. And perhaps that outdoor enthusiast will become a cross-country skier, a snowshoer, or even an owler.

A self-professed obsessive insect collector, birder, and writer, **Conrad Baker** is an Environmental Education Intern at DEC’s Reinstein Woods Nature Preserve.

# Give Mother Nature a Boost

## Plant Trees and Shrubs from **DEC's Nursery**



### Want free trees from the Nursery for your class?

Sign up for our FREE School Seedlings program. Any school or youth education-based organization in New York State may participate; applications are accepted January 2 through March 31. Visit our website at [www.dec.ny.gov/animals/9393.html](http://www.dec.ny.gov/animals/9393.html) to learn more or apply.

Did you know there are more than 19 million acres of forests in New York State, and that 14 million acres of those forests are privately owned by people like you? While New York is one of the leading states in woodland acreage, challenges such as over browsing by deer, competition from invasive species, and human development pose constant threats to today's forests. We can give Mother Nature a boost and maintain New York's forests by planting seedlings from the spring sale at the William F. Fox Memorial Saratoga Tree Nursery.

The Nursery has more than 50 species available at low costs that can help increase the variety of trees and shrubs on your property. When it comes to a healthy forest, diversity is key—planting a variety of species helps protect your forest from the impacts of invasive pests and diseases. If you're not sure what tree species you want, try one of the Nursery's mixed packets like the pollinator packet or wildlife habitat packet for an assortment of seedling species tailored to your specific needs. No matter your selection, when you supplement your property with trees and shrubs from the Nursery, you'll be helping protect and enhance New York's forests for generations to come!



**Browse this year's species selection  
and get started with your order at:**

**[WWW.DEC.NY.GOV/ANIMALS/9395.HTML](http://WWW.DEC.NY.GOV/ANIMALS/9395.HTML)**



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