

Electric Vehicles | Ice Fishing | Manhunt

NEW YORK STATE

Conservationist

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To the Rescue!

NEW YORK STATE Conservationist

Volume 70, Number 4 | February 2016

Andrew M. Cuomo, Governor of New York State

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Dear Reader,

DEC's Environmental Conservation Officers (ECOs) and Forest Rangers are on the front lines of protecting our environment and helping people safely enjoy the outdoors. In this edition of the *Conservationist*, we're focusing on their heroic efforts in the field.

Our 330 uniformed ECOs and 134 Forest Rangers are the visible faces of DEC. Whether it's checking hunting licenses deep in the woods of the Southern Tier, helping to rescue an injured hiker on an Adirondack peak, seizing illegal elephant ivory, or investigating illegal dumping in New York City, these men and women work long and arduous hours to ensure that our natural resources are enjoyed and preserved for future generations of New Yorkers.

As full-fledged State Police officers, ECOs and Forest Rangers are also called upon for some of New York's most important police work, as was the case this past summer when two convicted felons escaped from the Clinton Correctional Facility in Dannemora. Tech Sgt. Walter J. Maloney was one of the dozens of ECOs and Forest Rangers who assisted in the search. You can read the details of his adventures which provide an interesting look into the preparation and training of our ECOs.

ECOs and Rangers are often the first to respond to life-threatening situations. After an unfortunate snowmobile accident last year in Moose River Plains, a victim was lucky that Forest Ranger Jenifer Temple was close by. Temple shares her report about the rescue efforts she and several other Forest Rangers conducted, showcasing the important role our Rangers play in protecting the state's forests and the people who use these great natural resources from all kinds of dangers.

As always, our 'On Patrol' section features regular highlights of our ECOs and Rangers, which can range from saving an injured bald eagle, to catching illegal deer hunters, or searching for a lost hiker. These are just some of the ongoing examples of the more than 22,000 calls, cases and investigations our ECOs and Forest Rangers are involved in annually.

The work of our ECOs and Forest Rangers is essential. In 2016, I'm making it a priority to support their efforts, and we'll be reporting more on their work across the state. Next time you see an ECO or Forest Ranger, be sure to say thanks for their efforts!

Warm Regards,

Basil Seggos, Acting Commissioner



Department of
Environmental
Conservation



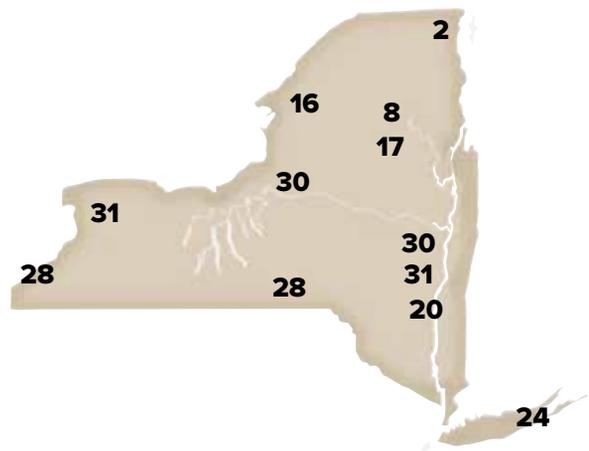
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Nicole M. Draina

February 2016 Volume 70, Number 4

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MANHUNT!

By Tech Sgt. Walter J. Maloney
Division of Law Enforcement

photos by DEC unless otherwise noted

Editor's Note: In the summer of 2015, two convicted murderers escaped from the Clinton Correctional Facility in Dannemora, New York. Following is one ECO's account of what it's like to be involved in one of the largest manhunts ever conducted in New York State.

Monday, June 8th; 7:15 PM

I was watching the evening news at home with my wife. The prison escape led the news on almost every channel. The manhunt was in its second day, and an increasing number of law enforcement personnel were being called to the area.

I have been involved in several fugitive searches in my 19-year career with DEC's Division of Law Enforcement (DLE). As we watched the news, my wife casually wondered if I would be asked to join in the search. That evening my state-issued cell phone rang. It was the Region 5 Captain, Dan Darrah, and it was GO! time. My wife had her answer.

NY State Police Major Chuck Guess, the Incident Commander, was requesting tactical teams that could operate in the rural wooded environment to assist with the search. I spent the next several hours calling other DLE members from across the state. I advised everyone to plan on an extended detail and to prepare their gear for a rugged trip into the Adirondack wilderness. We were to rally at a hotel in Plattsburgh the next evening and get our orders.



ECOs and forest rangers searched miles of remote logging roads and cabins in the Adirondack woods.



Convicted murderers Richard Matt and David Sweat escaped from state prison and were on the run for nearly three weeks.

Tuesday, June 9th; 10:00 PM, Plattsburgh

I can sleep almost anywhere. However, that night in the hotel I tossed and turned. My mind raced with questions about what the next day would bring. Did I pack the right gear? Did I have enough food and water if logistics were not already in place? Was my alarm set? The checklist played over and over again in my mind like a broken record.

Wednesday, June 10th; 6:30 AM, Dannemora

We arrived at the command post, a converted school building in Dannemora. We assembled in the gymnasium for the briefing. Many agencies were represented. I heard from friends who had been on the search for a few days that nothing had been found. The escapees just seemed to vanish after popping out of a manhole cover three days earlier.

We listened to the briefing and received an Incident Action Plan with photos of the inmates and the type of clothing and footwear they might be wearing. At the end of the briefing, Incident Commander Guess addressed the 250 law enforcement members gathered in the gym. He urged us to be cautious and reminded everyone that the two men were convicted murderers; one of their victims was a police officer. If we didn't already think this was serious business, we did now.

We broke into our assigned search divisions and started poring over maps with the New York State Forest Rangers, who were organizing the search area into grids. We split into five-man teams and headed to our assigned search grids. Our task was to locate any possible sign of the inmates in the wooded areas, and check remote cabins and structures in which they could be hiding. We continued this task throughout the day. The going was slow because there were so many areas to be searched. Every shed, cabin, barn and dog house was a potential hiding spot. Methodically clearing all potential hiding areas was a huge undertaking.



That afternoon we heard radio chatter about activity at a house on an adjacent road. One of the corrections officer search teams thought they saw someone enter a house, but no one answered when they knocked on the door. The NY State Police Special Operations Response Team (SORT) responded and asked us to maintain a perimeter around the house. Although the effort lasted several hours, the house proved to be vacant.

During the day it had been raining; after hours of walking through the thick brush that was wet from the light rain, we were drenched. Fortunately the temperature was mild, so it wasn't all that uncomfortable. We just learned to tolerate being wet.

At approximately 4:00 PM, our team leader received a call requesting our assistance with a NY State Police bloodhound tracking unit. While our lieutenant and the K-9 handler worked the track, ECO Luke Billotto and I provided security for the team. We were working an area that was relatively flat and had been recently logged. There was also an old railroad bed that would have been a likely travel lane for the escapees. At times the track took us down logging roads that were easy to traverse. At other times, the bloodhound pushed through beaver swamps, creeks and drainages. Where the dog went, so did we!

The track continued for what felt like miles. Sometimes the bloodhound circled back around to an area we already covered. The handler would try again, and off we would go. The tracking continued for hours. The K-9 handler felt confident that his

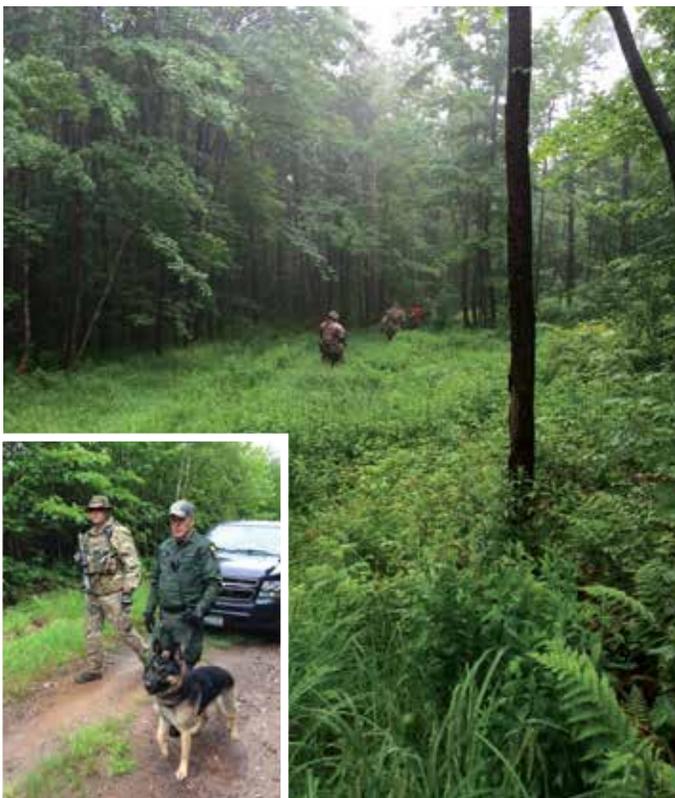


dog was onto something, but he couldn't say for sure it was the inmates. At one point the bloodhound really started to pull the handler on the 30-foot lead. It was the first time I noticed the dog act as if it was really interested in something. The handler alerted everyone to be on sharp lookout. It had already been a 12-hour day, but the excitement released enough adrenaline to give us that burst of energy we needed to stay focused.

Until now, the bloodhound had been quiet as a church mouse; never once did it bark or yelp. Suddenly the hound began baying the way only a hound can, which made the hair on the back of my neck stand on end. The dog was on the run and so were we! The K-9 handler was getting dragged by the dog, and yelling at us to stay close. We tried, but we were carrying 50 pounds of wet gear and wearing body armor. How close to the fugitives were we? I expected to find one of them behind every tree we passed.

The handler requested air support to assist with the search. Running across an open field, I relayed our coordinates from a wrist-worn GPS via radio to one of our support units on the road. Within minutes a helicopter circled overhead, using infrared to detect any heat source or movement. While this was taking place, the command post had sent all available units to the area to set up a containment perimeter on the local roads.

The scent trail led along the old railroad bed, which had a pretty steep drop-off on one side. The dog took the K-9 handler and his partner down the embankment. A search of the area proved negative, and the helicopter did not report any movement other than ours. By about 10:00 PM, we ended our effort for the night. A new dog and search team would begin first thing in the morning to see if they could pick up any fresh scent.



DEC German shepherds and state police bloodhounds were used for tracking the escaped convicts.

We returned to our hotel and finally sat down to a hot meal. But our day wasn't done yet: we still had to dry our gear and perform firearms maintenance. What a first day! I think my head finally hit the pillow around 1:00 AM; I was out fast.

Thursday, June 11th; 5:30 AM

In the morning, the hotel staff was kind enough to start breakfast early. We watched the news while we ate. Nothing new had happened while we slept. We reported to the command post and got our assignment for the day. This cycle continued through the weekend, without much really developing. These two men had literally disappeared into the Adirondack wilds.

Friday – Sunday, June 12th – 14th

During this time, the search for the fugitives took on the feeling of a well-orchestrated North Country deer drive. Corrections Emergency Response Teams served as “drivers,” while we set up “watch.” Five hundred corrections officers moved in a line, while we moved into position ahead of them. I usually hunkered down behind an old stone wall, in a patch of blowdown, or if I was lucky, in a hunter's tree stand.

Sunday, June 14th; 7:00 PM

A few of us were allowed to rotate home. Working conditions and time away were beginning to take their toll. There hadn't even been much time to call home during the detail. I sent a text message to my wife every now and then to let her know I was safe.

I left Plattsburgh on Sunday evening, and was lucky enough to catch some of my son's baseball tournament in Cooperstown on Monday. In his first at-bat, he sent a line drive over the left field fence known as the “Green Monster” for a three-run homer. At that moment, the bugs, swamp, cold, sweat, mud and trail food were distant memories.



Police worked in grids, searching small patches of land at a time, looking for any clues left behind.

Jason Hunter, Watertown Daily Times



ECO Jennifer Okonuk keeps watch as officers search a home looking for Richard Matt and David Sweat.

Wednesday, June 17th; Owls Head

The hunt continued while I had a few days off. The search area had expanded westward, to a remote area called Owls Head. A camp owner reported seeing an individual run into the woods. For the next three days, we worked that area from sunrise to sunset, looking for sign and checking remote hunting camps. We worked closely with local forest rangers who had intimate local knowledge and access to some of the gated areas. We found nothing out of order.

Thursday, June 18th

We searched so many seasonal camps Thursday and Friday that I lost count. While patrolling one particular lease property, our tracker discovered an interesting track. Unfortunately, it was not from one of the inmates, but from a wandering moose. We never did get a look at the moose, but we did see a few black bears during the detail.

Friday, June 19th

An Allegany County woman claimed to see two individuals acting suspiciously near Friendship. Almost at the other end of the state, Friendship is a long way from Dannemora, but if someone caught the right rail car, they could have made that trip. I was allowed to rotate home again for some R & R.

Saturday, June 20th; home

On Saturday evening, while my family and I were at the movies, my cell phone vibrated in my pocket. Major Matt Revenaugh wanted to know if we could be at the Friendship fire



ECOs and rangers traveled hundreds of miles during the search.

house at 8:00 AM. It looked like I would be spending Father's Day in Allegany County. I started texting some of the other officers and put them on notice for an early morning road trip. We left the theater and headed home so I could pack.

Sunday, June 21st; Friendship

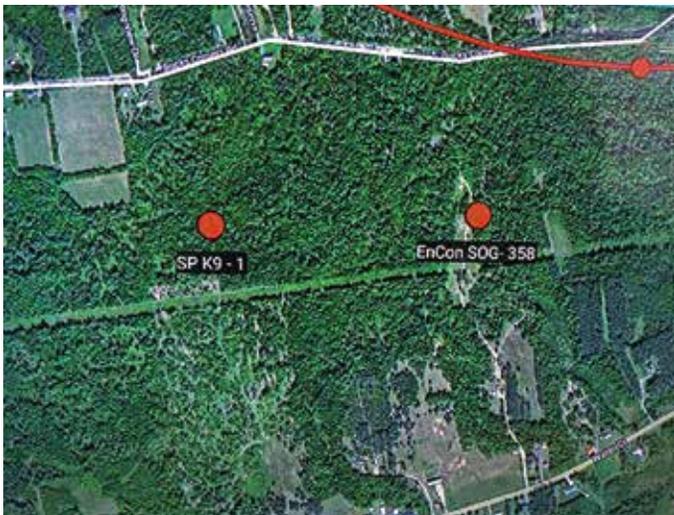
We met at 4:00 AM and drove the 250 miles to Friendship. Arriving at the command post, we received the briefing and our assignment to patrol a 2,300-acre area known as Coyle Hill State Forest. Working with our own K-9 units, we checked likely travel lanes and areas that bordered the interstate and rail bed. We did get one hot track that resulted in the sighting of a black bear, but that was about it.

Toward the end of the day, the command post leadership deemed the woman's sighting to not be credible. As soon as we were cleared to return home, my cell phone rang again. Major Revenaugh told us that hard evidence of the inmates' possible location had just been located. DNA evidence recovered from a

camp near Owls Head belonged to one of the inmates. He asked us to return to Dannemora for a big push Monday morning. We fueled up the patrol vehicle, grabbed some food, and made the road trip back to the North Country. We arrived at the hotel around midnight. I set my alarm for 4:45 AM.

Monday – Thursday, June 22nd – 25th; Dannemora

When we arrived at the command post, there was a buzz in the air. Focus shifted to methodically checking all the camps, cabins, trailers and other structures in the area near where the evidence was found. We completed each task and got our next assignment. We moved on foot for several miles looking for any evidence that someone had passed through and clearing any structures that we encountered. We used our own DLE K-9 units for these patrols; it was very reassuring to have that German shepherd with us. We felt pretty confident that no one would be sneaking up on us or get away if we encountered them.



DEC's Special Operations Group members maintained a perimeter while the state police and other law enforcement agencies conducted a search of the woods.

Friday, June 26th; Titus Mtn. Ski Center

The command post had been moved to the Titus Mountain Ski Center. Local support was growing; home-cooked meals were provided to us. One of the local schools had their kids make goodie bags with hand-written notes to the officers involved in the search. That kind of personal touch can go a long way to lifting morale.

On Friday, we were assigned to the Quick Reaction Force, a unit on standby that can respond quickly if need be. Toward the end of the day, a report came in that a person traveling on State Highway 30 believed that the trailer they were towing had been fired upon. Initially thinking they had blown a tire, they were surprised to find a bullet hole.

As I worked on my laptop, things happened fast. Within a few seconds, phones starting ringing and radios began to chatter. A tactical unit from the U.S. Customs and Border Protection

reported that they were in contact with one of the inmates. Shots had been fired. The location of the second inmate was unknown. The incident happened only a few miles from the command post. Our 10-person team was ready to go. Within a minute we were headed to the scene. FBI, border patrol and state police SORT team members were arriving. We identified a dirt road on the map where we could help form a perimeter. As we set up, we received confirmation that one inmate was deceased, and the other's location was unknown. DEC Special Operations Group (SOG) members and the Vermont State Police maintained the perimeter while FBI, border patrol and state police pushed the wooded area trying to flush out the other inmate. We maintained this position for several hours, well into darkness.

At approximately 10:00 PM, the New York State Police gave the order to stand down. We left the area along with the Vermont State Police and returned to the command post.

Saturday, June 27th

The DEC SOG members from Alpha Team (my team) were rotated out and sent home. We were told to be prepared for a Monday return if the search for the other inmate continued.

Sunday, June 28th; home

While getting my gear ready for travel, I received word that the other escaped inmate was apprehended only a few miles from the Canadian border by an alert state police sergeant on a roving road patrol, ending the three-week manhunt. I was disappointed I wasn't there to see it, but relieved that it was over!

Technical Sergeant **Walter J. Maloney** works in DEC's Albany headquarters, and wishes to thank the following brothers in green who proudly served during this detail: **Lt. M. Blaising, Lt. B. Gillis, Tech Sgt. C. Nielsen, Tech Sgt. A. Panipinto, Tech Sgt. G. Scheer, ECO L. Billotto, ECO K. Swan, ECO D. Lucas, ECO S. Daly, ECO T. Fay, ECO J. Ryan, ECO P. Sherman, ECO T. McNamara, ECO R. Johnson, ECO M. Krug, and ECO J. Curinga.**





RESCUE IN THE SNOW

By Forest Ranger Jenifer Temple
Photos by DEC

Being a New York State Forest Ranger, you never know what your day will bring. You begin every day trying to prepare for anything that may come your way, and leave your headquarters hoping you've got everything you may need. In winter, this becomes harder when you have to put all those things on a snowmobile and head into an area that has miles and miles of trails on some of the remotest state lands in the Adirondacks.

Forest Rangers have been heading out to the Moose River Plains during winter for years, and have seen their share of snowmobile accidents. Keeping this in mind, rangers head out to the Plains on a weekly basis for radar enforcement in the hopes of slowing people down enough to prevent at least one accident from occurring. This was our plan when Rangers Scott, Miller, Lomnitzer and I decided to head out to the Plains on Monday, January 19, 2015, Martin Luther King holiday.

Snowmobilers had been hitting the trails hard all weekend, so we were surprised that there were hardly any snowmobilers out that day. Only one group of sleds went by. They acted as if they wanted to gun it, but seemed to know we were there, so we called ahead to tell Rangers Scott and Lomnitzer to keep an eye out for them. When the group reached the other rangers, however, the groomer was close by and everyone was going slowly.

At 1:45 PM we were discussing calling it a day, when DEC Dispatch in Ray Brook called to report there was a snowmobile accident approximately three miles from the Cedar River Flow. We all grabbed our gear, jumped on our sleds and headed in the direction of the Flow.

There are two trails to choose from at the Flow: Lomnitzer and Miller took the left trail that headed toward Cedar River Road; Scott and I went straight across the Cedar River Dam onto a trail which goes through the Squaw Valley Easement. Our trail was very narrow and bumpy and it slowed us down considerably.



Rangers meet to coordinate search efforts such as this search for missing hikers on Mt. Marcy.

Approximately a half mile down the trail, a snowmobiler flagged me down to tell me about the accident. He said the accident was about 2.5 miles further, and that the man was in rough shape. I asked him to also tell Ranger Scott (who was just behind me) so that he could relay the news to the other rangers, and I continued on toward the accident.

Finally reaching the accident scene, I grabbed my first aid gear and headed to a mound lying under a bunch of rescue blankets in the middle of the trail. When I looked under the blankets I found a man lying on his left side in the fetal position. His friend informed me that this was the exact position that he landed in after striking a tree with his snowmobile.

I crouched down, introduced myself as a New York State Forest Ranger and Wilderness Emergency Medical Technician. I asked if he minded if I examined him to find out what was going on. His response was “Please, just don’t let me die out here.” He stated that he was in a lot of pain, was having a hard time breathing, and he thought he had broken his back, so he



Rangers began to assess the victim's condition.

didn't want me to move him. I assured him that I did not plan on moving him, but that I did need to examine his body to find out the extent of the damage. I began by assessing his vitals. He was alert, his pulse was 86 and strong, but his respirations were 28 and labored/shallow.

Ranger Scott inquired whether he could do anything and I asked if he could make sure that there was an Advanced Life Support provider responding with the Indian Lake Ambulance. He contacted Ranger Miller who informed him that a paramedic was enroute, whereupon Scott asked them to make sure the fire department went to the Squaw Valley Easement Road where the trail out would be shorter and smoother for the victim. Local familiarity helps rangers do their job better.

Ranger Scott jotted down the vitals and continued recording the patient's history while I began the head to toe exam. The victim had extensive pain in the right shoulder, right back and right rib cage area. I was barely touching him and he told me it felt like I was crushing him.

There was no pain to the right abdomen, pelvic or leg area. He was able to move both legs and had no pain or tingling, but stated that his right arm felt very heavy and was hard to hold up. I could see that a portion of his chest was sunken in; it was obvious that the side that he was lying on had multiple broken ribs that were affecting his breathing.

We decided we needed to request a helicopter. I then took another set of vitals and waited for Indian Lake Ambulance to get to us with the backboard, Stokes basket (stretcher/ litter) and a paramedic. His pulse was getting weaker, but all we could do was wait and be ready in case the patient needed us to breathe for him and/or begin CPR.

Within a few minutes, Indian Lake Fire Department personnel showed up. I briefed the paramedic; he did another head to toe exam and decided to backboard the patient out. I helped stabilize his neck while the paramedic removed his helmet. We maneuvered the backboard behind the patient, straightened his legs and carefully rolled him onto the board.

The patient was hoping that being on his back would help his breathing, but it didn't. Around this time we heard that we were not getting a helicopter due to bad weather. No one was happy to hear this news. We put the patient into the Stokes basket and then into the rescue sled.

Since Ranger Lomnitzer knew the area well, he led the fire department out the shortest route. When they reached the ambulance, they requested a helicopter again, but were denied. The patient was going to have to fight to breathe for another hour or so as the ambulance made its way to the closest hospital in the Adirondacks.



Rangers carefully prepared the victim (who suffered extensive injuries) for transport.



Make sure that you have a safety kit prepared and carry it with you on even the shortest trips.

Back on the trail, while I gathered my first aid gear together, Rangers Scott and Miller interviewed the subjects that were snowmobiling with the patient. From their stories, the rangers were able to determine that the patient had lost control after hitting a deep gully in the trail. He had come out of the gully on the wrong side (left) of the trail and tried to correct himself toward the right side. Unfortunately, he overcorrected and ended up hitting a tree while the right side of his sled was airborne. The impact threw the left side and back of his body against the tree and onto the trail.

The exact speed at which the seasoned snowmobiler was going was not determined, but we later learned it was enough to cause two collapsed lungs, four broken vertebrae and multiple broken ribs.

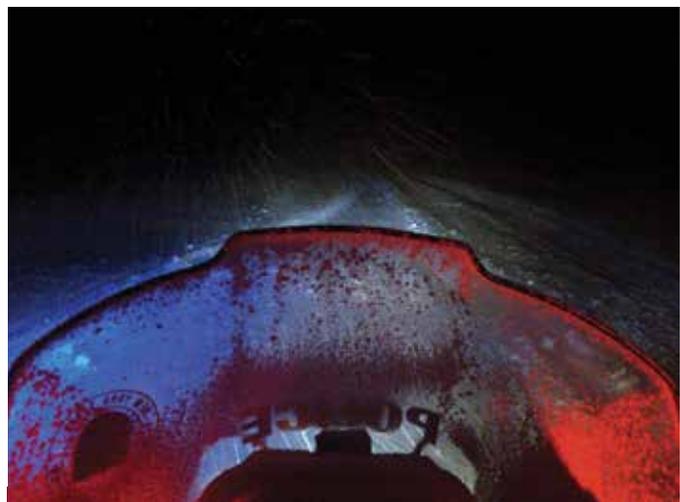
The strange thing is that these were the same guys we had been watching from the beginning of the day!

Epilogue: A few days later, we learned that the victim was well on his way to recovery—just waiting for his second lung to fully inflate. He was very lucky!

DEC Forest Ranger **Jenifer Temple** is assigned to the Moose River Plains Wild Forest and West Canada Lake Wilderness.

Note: A previous version of this story appeared in the March 2015 issue of the New York State Snowmobile Association's publication "New York Snowmobiler Online."

New York State Conservationist, February 2016



Snowmobiling Safely

Snowmobiling is a fun outdoor winter activity, and New York has more than 8,000 miles of snowmobile trails. Make your snowmobile outing a safe one.

Follow these simple safety rules:

- Always wear a snowmobile helmet
- Stay together, and stay on the trail
- Drive a prudent speed
- Be prepared for the weather: dress appropriately, carry emergency gear, and know how to reach emergency services
- Never drink alcohol and drive (it's illegal)

Remember, you must carry registration and proof of insurance documents on you, not the snowmobile, at all times while snowmobiling.

For more information about snowmobile requirements and snowmobile safety, contact the Office of Parks, Recreation & Historic Preservation at (518) 474-0446 or check out their website:

<http://nysparks.com/>.



SILENCE IS GOLDEN

the allure of electric vehicles



By Brendan Woodruff

Photos by Jim Clayton unless otherwise noted

Through the open window, I can hear the sound of birds singing in the adjacent field as I press my foot on the brake and the car comes to a stop. I sit at the stop sign for a moment and listen. Silence. Then I put my foot on the “gas” pedal and feel the car accelerate more quickly than I’m used to. Still, it’s almost silent.

What struck me most from my first experience driving a purely electric car was how similar it was to driving a gasoline-powered vehicle. There were a few subtle differences of course, including the lack of engine noise, almost immediate acceleration, and having to unplug it before driving. But overall, on my drive through the countryside in my friend’s Smart ForTwo electric, it was hard to tell there was any difference between the driving experiences of the past and the future.

Long considered a pipe dream, electric vehicles (EVs) and their charging infrastructure are now popping up on New York’s roadways and parking lots in ever-growing numbers. While EVs may seem like a futuristic concept, they actually predate fossil fuel-powered vehicles. In fact, the first EV in the U.S. was built and driven by chemist William Morrison in Des Moines, Iowa in 1890. Of course, the vehicle more closely resembled a horse-drawn carriage than today’s cars, and had a top speed of only 14 miles per hour, but EVs proved to be popular and by the beginning of the twentieth century they made up roughly one-third of all vehicles on the road.

Over time, however, EVs lost much of their popularity due to their limited range when compared to gasoline-powered vehicles, which also had the advantage of being able to refuel much more quickly. The switch to gasoline-powered vehicles didn’t come without its drawbacks, however. The combustion of fuel in these engines leads to the creation of large amounts of air pollution,



The first electric vehicle was built by William Morrison in 1890.



Depending on a user's driving habits, plug-in electric hybrid vehicles can get more than 250 mpg.

Next time you're in the market for a vehicle, consider joining the thousands of New Yorkers who are already driving electric.

including carbon monoxide, nitrogen oxides and hydrocarbons. Nitrogen oxides contribute to acid rain, and also interact with hydrocarbons to create ground level ozone that causes both short-term (coughing and wheezing) and long-term (permanent lung damage) health problems. While gasoline-powered vehicles have become cleaner over time, they still represent the largest source of carbon dioxide (CO₂—a greenhouse gas) emissions in New York. Burning one gallon of the gasoline blend currently sold in the state produces 18.95 pounds of carbon dioxide. This equates to 0.75 lbs. of CO₂ per mile driven on average for light-duty vehicles.

Limiting air pollution and greenhouse gas emissions was one of the driving forces behind the recent push to develop the current generation of EVs. Since EVs don't burn fuel onboard, they do not directly emit any air pollution or greenhouse gasses. Instead, EVs draw power from an electrical source that is then stored in batteries and used by an electric motor to propel the vehicle. The amount of emissions generated by driving an EV are

Robin Lucie-Kuiper



Electric vehicles are increasing in popularity.

thus related to the emissions from the generation of the electricity used to charge it. This makes it possible to have emissions-free driving if the car is powered by renewable energy sources, such as wind and solar. But even if an EV draws its electricity from the New York power grid, EV miles are cleaner than gasoline miles since New York generates much of its power from emissions-free sources.

While the carbon output of EVs is already lower than that of gasoline powered vehicles, electric miles will get even cleaner in the future. Through the Regional Greenhouse Gas Initiative (RGGI), New York's cap on the amount of carbon emissions from electric generation continues to decrease. NY Governor Andrew Cuomo has also set a goal of getting 50% of the state's electricity from clean renewables by 2030.

Another advantage of EVs is the fact that they cost less to drive than gas-powered vehicles. While the price of gasoline has gone up and down over the past few years, the cost of electricity stays relatively constant. Based on average electricity rates in 2014, the cost to drive an EV in New York was the equivalent of paying \$1.49 for a gallon of gas. In addition, maintenance costs are lower for EVs.

Consumers can find two types of EVs on the market today: battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). BEVs are powered solely by an electric motor and store all of their energy in a battery pack. The majority of the BEVs on the road today have a range of between 84 to 110 miles on a single charge, with some luxury models getting more than 200 miles.

PHEVs feature both an electric motor and a gas engine. The electric motor can power the vehicle for a certain range (generally between 11 to 50 miles) before a gas engine turns on and allows the vehicle to operate like a traditional gasoline-powered car. The electric range of PHEVs is usually enough for an owner to make their daily commute on all electric miles, while also allowing for occasional longer trips using the gas engine.

Driving an EV can require more planning on the part of the user. For instance, unlike traditional vehicles that can quickly refuel at a gas station, charging an EV takes longer and is typically completed in places where the vehicle is parked for extended periods



A simple plug unit allows users to charge their vehicles at home relatively quickly via a 240-volt outlet.



Plug-in electric hybrid car



An all-electric vehicle

of time. This means that the majority of charging takes place at an owner's home overnight, giving the vehicle enough charge for them to meet their daily driving needs. Fortunately, many workplaces are now installing charging stations for their employees to be able to charge while at work, which increases their daily range. There is also an increasing amount of public charging infrastructure being built in places such as

grocery stores, shopping malls, municipal parking lots, and along highways.

There are currently three different levels, or speeds, of EV charging. These include level 1 charging, which is the equivalent of plugging the EV into a wall outlet and adds roughly 2 to 5 miles of range per hour. Level 1 charging is mainly used for charging overnight and in places where the vehicle is parked for long periods of time. Level 2 charging is faster, adding 10-20



EV charging station at SUNY Albany, NY has more than 1,000 publicly available EV charging outlets across the state.

miles of range per hour, and constitutes most of the chargers in public parking lots. There are also DC fast chargers, which charge up to 80% of a vehicle's battery in roughly 25 minutes and are found along highways to allow for long-distance travel.

Since the introduction of modern EVs in 2010, New York State has been a leader in their deployment; as of fall 2015, there were more than 12,000 EVs on the road. In addition, there are now more than 1,000 publicly available charging outlets at more than 450 locations throughout the state. The State has also set ambitious goals to increase these numbers through the ChargeNY initiative, which will lead to more than 40,000 EVs on the road and 3,000 charging stations in the state by 2018. New York has also adopted regulations requiring larger auto manufacturers to produce and sell EVs, which will increase the types and varieties of EVs on the market in the near future.

New York is a signatory to the eight-state Zero-Emission Vehicle (ZEV) Memorandum of Understanding that is coordinating efforts between states on the east and west coasts to put

3.3 million ZEVs on the road by 2025. In addition, New York is working with partners from across the globe as part of the International ZEV Alliance to expand the EV market and set ambitious goals and targets for EV and other zero-emission vehicle adoption. DEC is also leading by example in the deployment of EVs by beginning to incorporate them into its fleet, rolling out workplace charging infrastructure for its employees, and installing public charging stations at its facilities.

If you are thinking about joining the growing ranks of New York EV drivers, there are a few things to consider. While EVs typically cost more due to the price of their battery packs, there is a federal tax credit of up to \$7,500 to offset that premium. The tax credit is based on the size of the battery, so BEVs typically are eligible for the entire credit, while PHEVs may qualify for a smaller amount. In the coming years, automakers will release a number of new models of both BEVs and PHEVs, including BEVs that will have a range of 200 miles on a single charge and cost less than \$30,000 after the credit. When looking at the range of the vehicle, take into account that EVs tend to have a shorter range in cold weather, so make sure you have extra range for your commute in the winter months.

Next time you're in the market for a vehicle, consider joining the thousands of New Yorkers who are already driving electric. With their lower operating costs and ease of use, you will save money over the life of the vehicle, and you'll be helping to clean our air as well.

Brendan Woodruff works in DEC's Pollution Prevention Unit in Albany.

EV Info



For more information on electric vehicles, check out the following websites:

- NYSEERDA's ChargeNY website: www.nyserda.ny.gov/chargeny
- IRS website on Tax Credit: www.irs.gov/Businesses/Qualified-Vehicles-Acquired-after-12-31-2009
- EVs on the Market and Their Ranges: www.fueleconomy.gov/feg/evsplash.shtml

Find Charging Stations in Your Community:

- US Department of Energy's Alternative Fuels Data Center: www.afdc.energy.gov/locator/stations/
- Plug Share: www.plugshare.com

On Patrol

Carl Heilman II

Real stories from Conservation Officers and Forest Rangers in the field



Bald Eagle Release — Sullivan County

ECO Matt Baker assisted Kathy Michele, a DEC-licensed wildlife rehabilitator, in capturing an injured bald eagle along the Willowemoc River in Livingston Manor. The bird was taken to the Delaware Valley Raptor Center for treatment of an injured wing. Four months later, Officer Baker, Ms. Michele and Bill Streeter, also from the Raptor Center, banded and released the eagle where it had been found. Without hesitation, the eagle took flight and returned to the wild.



Hunting with Dogs — St. Lawrence County

ECOs Jon Ryan and Troy Basford heard a dog barking in the woods. Based on previous complaints and other evidence, they realized the dog was being used to hunt deer. A search produced the dog as well as six hunters, each of whom received a ticket for hunting deer with the aid of a dog.

Pheasants Seized — Columbia County

ECO James Davey and Trooper James Lydon were off duty and pheasant hunting early one morning at Stockport WMA. There they watched as a hunter flushed out and shot three pheasants. He then ran across the field and shot two more birds that had landed a short distance away. Officer Davey and Trooper Lydon confronted the hunter and seized the birds. Officer Davey then charged the man with taking pheasants in excess of the two-bird bag limit and failure to carry a hunting license while afield.

Untagged Deer — Jefferson County

ECO Steven Bartoszewski responded to a complaint of deer being taken illegally in the Town of Antwerp. Upon locating the suspect, Officer Bartoszewski found the carcasses of five antlerless deer. Some were not tagged, while others were tagged incorrectly. The suspect admitted he shot the deer that morning and did not have tags for any of them. The officer ticketed him for illegally taking antlerless deer, as well as for taking deer other than permitted by the Fish and Wildlife Law. The deer meat was given to the Venison Donation Program for needy local families.

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

Missing Hiker Found — Ulster County

Following a late fall day hike, members of a New York City hiking club found themselves unexpectedly spending the night in the Woodland Valley area of the Slide Mountain Wilderness. After hiking nearly four miles to the 3,780-foot summit of Wittenburg Mt., they began descending while there was still daylight. Around 3 PM and about 1.5 miles from the trail head at Woodland Valley Campground, they realized a female member of their party was missing.

Four hikers returned to the trail to look for her. Just after 6 PM, they called the Ulster County Sheriff's Office for assistance. After DEC was contacted, Forest Rangers Marie Ellenbogen, Kevin Slade and Kenneth Gierloff responded.

It was difficult to interview the Korean-speaking hikers, so the rangers contacted Language Line Services to translate. The hikers provided the missing woman's name and a description of her clothing. Throughout the night, the rangers searched the trails ascending Wittenburg. The forecast called for light drizzle followed by heavy rains at dawn.

A request was made for additional rangers to respond by 6 AM, and 16 rangers at Woodland Valley Campground joined the search. By 10:30 AM, the missing woman was located along Woodland Creek, two miles upstream from the campground. She had injured her ankle but was otherwise okay. After she was reunited with her group, the hikers returned to the city, tired but relieved.

Adirondack



HARD WATER

By Nicole M. Draina
Photos courtesy of author

At 5:30 AM on a Saturday, in the heart of winter in Northern New York, most people are bundled under layers of blankets, tucked away in a house far from the cold. However, my dad, our friend David and I are drowsily preparing for a fun morning of ice fishing. We don our many layers of clothes: two pairs of pants, snow pants, a shirt, a thicker shirt, jacket, gloves, and of course a hat. Dad, who is a winter warrior, almost always wears less than me, and I feel like an immobile Michelin® Man next to him.

After a light breakfast, we gather our gear for the day ahead of us. A large black sled sits in the back of our garage. It is filled with a gas auger (for drilling holes in the ice), tip-ups, a jigging rod, snacks, lures, line, pliers, chairs and a pop-up shanty. In short--everything we'll need for the day.



Dad and David prepare the site for a comfortable day of ice fishing.

Some days we simply hook up our sled to the back of the snowmobile and drive onto the frozen waters of Great Sacandaga Lake, which is in our front yard. Other times, like today, we venture a little further down the road, up the hill, and over the mountain to Piseco Lake, an Adirondack gem west of Speculator. On the way, I think about how the summer sport of fishing has in recent years extended into the winter months, and smile when I think how much I enjoy it, even if many of my friends think I'm nuts.

After an hour or so of driving, we arrive at an isolated boat launch on Piseco and quickly unload the truck. We are fortunate that on this particular windy day, the snow is not more than a half a foot deep; we will not have to sweat off ten pounds trudging to our location.

As we begin to walk across the frozen surface, a loud boom echoes across the lake. The thunderous sound emanates from the ice and resonates deep in our chests. A novice ice angler would halt, afraid of the ice shattering beneath their feet. But we continue on, familiar with this sometimes frequent occurrence when the temperature is below zero, and knowing it means that the ice is just contracting from the cold. Still, we instinctively scan the ice to make sure it is safe.

When we reach "our spot" about two football fields from shore, we check the area for signs of weak ice before setting up shop. We know from experience that ice is generally safe to walk on when it's three to four inches thick, but there are several danger signs to look for when it comes to weak ice. One concern is "man-made" hazards, such as docks that are left in year-round. Sometimes owners will place a bubbler system in the water by the dock to keep the water from freezing and damaging the dock. Since we are far from shore, however, this isn't a worry today.

The presence of pressure ridges—big areas of ice that push up against each other to form ridges—is another concern.



Dad checks the depth of the water using a tip-up fitted with a weight.

Think of these like faults on the Earth's surface. Ice that pushes against itself at a fault area begins to form a mini mountain range in the ice. These areas have weak or thin ice (and in some cases, even have open water), and can be hard to spot on a vast white lake, so we always look ahead with caution.

Areas of running water—such as where streams enter and exit a waterbody—are also potential danger spots for ice anglers. Ice is weaker in these locations. If you are unfamiliar with the area you intend to fish, stop in at a local bait shop and ask

the owner about the location of inlets and outlets, as well as the locations of any other known unsafe areas.

One time, my dad and I watched a truck drive out onto the ice where a stream entered the lake. The front tires broke through the weak ice and were immersed in the water. Luckily, the water in that area was very shallow and the truck was able to be pulled out.

Slush can be another concern for ice anglers. While a warm day can make it more comfortable for the angler, it can cause slush to form on top of the ice. This

makes for sloppy fishing and can mean weaker ice. Fortunately, ice tends to be heartily thick on many Adirondack lakes—sometimes reaching three feet in thickness. In the end, if you use some common sense and play it safe, you shouldn't get into any trouble and you'll have a great day fishing.

My dad is in charge of drilling the holes. He pulls out the gas auger—preferred over a hand auger in areas like this with more than a foot of ice—and drills five holes for each of us. The noise disrupts the surreal quiet of winter for a short time, but the auger quickly slices through the thick ice.

We begin to set up our tip-ups. Dad and David each wander to a hole with a tip-up, attach a weight to the end of the line, then drop it into the dark depths. They are checking how deep the water is so we know where to set the bobber. When they are ready, I walk over and hand them a baitfish to put on the hook. Once the line is baited and dropped in the water, we secure the flag on the lever and place it gently on top of the hole. We repeat this for each hole and then sit and wait for the first fish.

Sometimes when it's windy we set up our small pop-up shanty: a semi-permanent hut that shields us from the wind. Today, we simply sit outside, taking in the scene around us. The branches on the trees that grace the border of the lake are drooped heavily with snow from the previous night's wet snowfall. As I look around, a small smile plays at my lips. I am always astounded by this view of the majestic Adirondack Mountains that encompass us: peaks covered in snow that drift down to the vast white ice. Suddenly, the sun peaks out from the clouds and the landscape glistens. It's a magical sight.

As we continue to wait, I reflect on how fortunate I am to be able to venture into the wilderness and enjoy this year-round pastime. I am humbled by this



Dad shows off his yellow perch.

natural world, and comforted knowing the memories I make here will never be lost with time. I've learned many valuable lessons, and have been highly entertained, listening to stories told by Dad and David. They make being out on the ice on a cold winter's day truly fun.

It's not long before we have our first strike. I don't remember who saw the flag pop up first, but we all quickly jump from our seats. Despite waddling like a penguin because of all my layers, I reach the hole first and grab the tip-up to set the line. My dad and David gave me the honor of pulling the fish up. It's always a mystery to find out what's on the other end; it can range from a small perch, crappie or pumpkinseed, to a large walleye, lake trout or even a northern pike.

Continuing to pull the line up at a steady pace, I am finally rewarded with a colorful yellow perch. It has a whopper of a belly! After posing for a quick iconic fishing picture, I release the perch back into the hole and watch it disappear into the cold water below.

Ice fishing is an extraordinary sport to experience in the chilly winters of New York. Every year I look forward to the first time Dad, David and I venture out

onto the ice. The excitement of catching that first fish, and the memories made give you an indescribable feeling. So if you're looking for something different this winter, try ice fishing for yourself. You may just be surprised by how much you like it.

Former *Conservationist* intern and ice-fishing enthusiast **Nicole M. Draina** is a senior at SUNY Potsdam.



The author with a lake trout she caught.

WHY DID THE SALAMANDER CROSS THE ROAD?

By Karen Schneller-McDonald
Photos by author unless otherwise noted

When you look in a forest in winter, what animals do you see? Deer? Squirrels? Maybe a woodpecker, or an owl? Often, we may notice only a fraction of the hundreds of species present because many small animals, like salamanders and frogs, are hidden from view. But if your timing is right, you may get a chance to catch a glimpse of some of them.



Retired ECO Lt. Dick Thomas

Chilly rains in late winter or early spring bring several salamander species forth from their underground winter hibernacula in the forest duff to begin their annual migration to small wetland pools where they breed. These shallow wetlands (preferably without fish) include intermittent woodland pools (called vernal pools) that may dry much of the year.

This migration—400 feet or more to the pool—is a formidable cross-country journey for creatures that are only several inches long and have short legs. They must trek through leaf litter, up and down steep slopes, and sometimes through a snowdrift, but every spring they are drawn back to the pool where they were hatched. With a lifespan of up to 20 years or more, some of these salamanders have been making the same journey to the same pool for a long time.

The largest number of these migrators are spotted salamanders—striking black salamanders with many bright yellow spots. Other species, such as the less common blue-spotted and Jefferson salamanders (listed by New York State as Species of Conservation Concern) also breed in wetland pools. Both are related to the spotted salamander and have similar life cycles that include an aquatic larval stage.

Problems arise, however, when migrating salamanders must cross roads that separate their forest burrows from wetland pools. Depending on where you are in New York, the spring migration can occur anytime from late February into early April. At well-travelled crossings on a migration “big night” when conditions are just right, large groups of several salamander species (as well as frogs which also use vernal pools to breed in) may cross in the same place at the same time. There can be 10, 20, or even 100 individuals squirming, hopping and walking; determined to reach that breeding pool. At big crossings, death on the road can take a large toll on local populations.

In the Hudson Valley where I live, DEC’s Hudson River Estuary Program organized the Woodland Pool Project. This program brings together volunteers of all ages in the late-March drizzle, flashlights trained on salamanders that must be carried safely across the road, one at a time. On small country roads, volunteers equipped with safety vests and traffic cones quickly move the

amphibians to safety. At each crossing they record the salamanders’ species, size, their direction of travel, and the weather conditions. Wildlife managers use this information to identify which wetlands are important breeding sites, and to plan future crossing assistance. It’s become a popular event.

But protecting salamanders requires much more than helping them across the road. What happens after they lay their eggs in wetland pools? Where do they go? And what happens to the aquatic larvae after the eggs hatch?

During the 2014 breeding season, I regularly visited a vernal pool in Ulster County’s Town of Esopus to track salamander development. I took some photos and recorded the following notes.

May 12—Water in the pool appears shallow, but my knee-high boots sink in almost to the top in watery muck. Adult salamanders have already laid eggs and left the pools, returning to the surrounding woodlands. (Note: Females lay 100-300 eggs in several jelly-like

masses. These masses are often attached to underwater plants or branches. Some pools can contain hundreds of egg masses. Depending on the water temperature, eggs will hatch in four to seven weeks.) Many egg masses here have already hatched or are now hatching. Some egg masses are tinted green from algae; this doesn’t harm the eggs or salamander larvae. The larvae are aquatic, measure approximately 5/8-inch, and have large heads, gills, small weak legs and



Salamanders breed in vernal pools created by snow melt and rain.



It can take salamanders several months to develop from eggs (1) through the larval stage (2, 3).

vertically flattened tails for swimming. They disperse into the leaves and plant debris at the bottom of the pool. Only about ten percent will survive to leave the pool.

June 23—Warm weather and little rain have caused the pool to shrink in size; open water is surrounded by wide muddy

edges with a deep mucky layer of leaves. The larval salamanders continue to hide in the thick leaf cover at the bottom of the pool, along with fingernail clams and an array of aquatic insects like damselfly larvae. The larvae are now about double their size at hatching—1½" to 1¾" long. They have developed very large feathery gills and larger legs. Voracious

predators, they feed on small crustaceans and insects, including mosquito larvae. In turn they are preyed upon by large aquatic insects, adult newts, crayfish, turtles, frogs, snakes and wading birds.

July 10—The pool has expanded after extensive rains. Larvae are more active and some rest on top of leaves at the bottom of the pool; others are found near logs and woody debris in the water. They are now 1¾" to 2½" long, with stronger back legs and a head that is more proportional to body size. Gills are still large.

July 25—Dry weather caused the pool to shrink again, with open water fringed by a wide area of deep leaf litter and black mud. Bright green moss decorates some of the fallen branches and logs in the muck. Larvae in the pool were similar in size and appearance to those I saw on the 10th; one was further along the path to metamorphosis, with much stronger legs and a chunkier body. They are hard to find, as they seek sheltered areas around stumps and woody debris in the water, hiding from predators. The pool is alive with frogs, including green frogs, wood frogs and peepers.

I discovered some recently metamorphosed salamanders (just over two inches long) hiding beneath logs in the deep, damp, muddy leaf litter at the pool's edge. Checking the nearby area, I found one young salamander beneath a log in the woods. It had already travelled about 50 feet from the edge of the pool. I know more young salamanders will emerge from the water throughout the next few weeks, and continue to move into the surrounding woods.

August 29—The vernal pool contains no more standing water. A thin layer of silt coats the deep layer of leaves that retain the moisture of the still-mucky mud at the bottom of the pool. I found newly emerged spotted salamanders under logs



Only about 10% of the salamander larvae will survive to leave the pool.



Young salamanders leave the water to move into the surrounding woods.



Spotted salamanders average 6 – 9 $\frac{3}{4}$ " in length within 25 feet of the pool's former high-water line. The surrounding woods are dry, so the salamanders have sought out cool, moist cover beneath leaf litter, rocks, logs, and in underground tunnels. The tunnels are usually within a few inches of the surface, though they may be several feet below ground. On damp or rainy nights, the salamanders may emerge to hunt for food.

Like most amphibians, salamanders are sensitive to water contamination. This makes them good indicators of the ecosystem's health: if their population is stable, the ecosystem is likely doing well; if their numbers decrease, it could indicate there's a problem. As salamanders utilize both woodlands (where the adults spend most of their time) and

wetlands (for breeding and larvae development), their population trends in these areas can help scientists determine how these habitats are doing. Additionally, since both habitats are important for watershed health, when we protect salamander habitat, we also protect watersheds.

Trees in our woodlands provide shade that keeps wetland pools and the forest floor cool, which in turn helps maintain ground moisture. Trees also stabilize soil, controlling erosion and providing areas for groundwater recharge. Salamander breeding pools are part of the mosaic of small wetlands that store water throughout a watershed, connect groundwater and surface water, maintain stream flow during drought, and reduce the effects of flooding.

If wetland pools are contaminated (for example from pesticides or road salt in stormwater runoff), salamander eggs and larvae may not survive. Likewise, when we fill in vernal pools and other small wetlands, we lose valuable salamander habitat and also diminish the watershed's capacity to store water.

Whether or not we see them, salamanders that breed in vernal pools need our protection. Our best reminder is the

annual migration, when we can see them firsthand, if we know when and where to look. Helping a salamander cross a road leaves a lasting impression on volunteers of all ages, and it's a great way to involve kids.

Give your children and grandchildren the opportunity for an unforgettable experience of discovering a migration crossing, finding a salamander in the beam of a flashlight, and personally escorting it to safety in darkness and drizzle. And if you're like me, you may return home damp and chilly, but exhilarated by the adventure, to wonder over a hot chocolate: How do they know where to go? How do they find their way?

But that's another story.

Wetland specialist and natural resources consultant **Karen Schneller-McDonald** is president of Hickory Creek Consulting, and the author of *Connecting the Drops: A Citizens' Guide to Protecting Water Resources*.

Note: See "Lend a Helping Hand" for how to get involved with a salamander migration. And for more information on salamanders, see *Conservationist's* "Woodland & Vernal Pool Salamanders" at www.dec.ny.gov/pubs/4791.html.

Lend a Helping Hand



DEC photo

Helping salamanders safely cross the road during their spring migration to breeding pools can be a rewarding experience. If you'd like to find out if there's a local program that identifies and monitors salamander road crossings, or if you'd like to start a program, contact your regional DEC wildlife office. For a list of DEC offices, visit DEC's website at www.dec.ny.gov/about/50230.html.

Protection of salamander breeding pools and surrounding woodland is as important as rescuing individuals from death on the road. You can take action to protect salamanders at any time of the year. The first step is to understand the importance of small wetlands and salamander natural history, followed by a year-round effort to protect their habitat (wetlands and adjacent woodland). This requires action at the community level, including:

- Protecting wetland pools from filling and grading, and adjacent woodlands from tree clearing;
- Protecting water quality throughout the watershed (groundwater as well as wetlands and streams);
- Promoting local understanding of the importance of small wetlands to watershed health;
- Creating local inventories of breeding pools and salamander activity;
- Promoting stormwater management "best practices" that allow stormwater runoff to be slowed down, stored, and purified by natural systems like vernal pools and other wetlands;
- Crafting and supporting local water resource protection laws and ordinances to ensure the survival of wetland systems and salamanders into the future.



Hunting Sea Ducks by the Seashore

By Josh Stiller



Stephen Ikeguchi holds a black scoter as Jack looks on.

Chris Spies

If you spend any time along the Long Island shoreline during winter, you may have noticed a few souls in small, ice-covered craft that look more like naval vessels ready to storm Omaha Beach than duck hunting boats. You may have wondered who in their right mind would go into the ocean this time of year enduring sub-freezing temperatures, frozen bays, and unforgiving inlets. In fact, why would anyone be out there at that time of year? Those hardy souls are sea duck hunters, and they wouldn't have it any other way.

On Long Island, sea duck hunting is a deep-rooted tradition. Since the 1950s, New York and states along the Atlantic Flyway (a bird migration route that generally follows the Atlantic Coast of North America and the Appalachian Mountains) have allowed a special sea duck hunting season that includes scoters, eiders and long-tailed ducks. Bag limits and season lengths have varied over the years, up to a maximum of 107 days and a 7-bird daily bag limit. Despite these liberal opportunities, relatively few people have what it takes to hunt sea ducks.

Sea duck hunting typically requires significant investments in boats, decoys, anchors and effort. On the other hand, hunting for dabbling ducks (such as mallards or wood ducks) on small wetlands and streams requires very little equipment. But if

you're willing to make the investment, Long Island provides a tremendous opportunity to pursue a unique set of waterfowl species that winter in New York's coastal waters.

A typical hunt begins at the boat ramp an hour or more before daylight. If Mother Nature is on your side, you're greeted by open water, but more often than not you arrive to a few inches of ice. If you're like me and grew up on freshwater, you'd see four inches of ice and expect the hunt to be over before it began. However, for salty baymen, that just means it's time to break out the trusty ax or sledgehammer. Four to six inches of freshwater ice might as well be concrete, but saltwater ice is much softer and plowing through it is possible with some time and effort. Once the boat is in the water and loaded to the brim with decoys, people, and a dog, it's time to head out.

After successfully navigating the bay, breaking into the open ocean at zero dark thirty can be a strange feeling. The lonely bel-lowing of the inlet buoy horn and the total darkness of the ocean horizon are constant reminders that sea duck hunters are alone in their pursuit. Beyond a handful of commercial fishing vessels, boats are rarely encountered—the recreational fishing fleet has long been winterized and fish have moved to their deeper offshore haunts.



Chris Spies

Hunters have to break through a thin layer of ice to get their boats to open water.



Retrieving dogs have as much fun sea duck hunting as do the hunters.

As you motor through the darkness looking for just the “right” spot in the vast openness, it is wise to prepare your hands for the long, cold, and often painful process of setting decoys. Whereas a puddle duck hunter typically uses a handful of decoys on individual lines, sea duck hunters use strings of 6-18 decoys clipped on a single “long-line.” Intuitively, it would seem easier to set decoys this way, but considering water depth, tides, cross-winds and waves, maneuvering the boat to place decoys in a specific configuration can be a daunting task. If you successfully deploy multiple decoy strings without creating one gigantic knot, you’ve just orchestrated a small miracle.

The next challenge is to orient the boat so you’re close enough for good shooting, but far enough away to allow birds to attempt landing in the decoys. Typically this is about 10-15 yards away from the closest string of decoys.

If you’ve done everything right, your fingers are numb, the decoys are in place, the boat is double-anchored, and it’s finally time to hunt. As the motor is quieted, the monotonous steady sound of the buoy horn returns. With any luck, the bellowing is soon replaced by the whistling wings of surf scoters (*Melanitta perspicillata*), the relentless whe-oo-hoo of black scoters (*Melanitta nigra*), and boisterous ow-owooolee of long-tailed ducks (*Clangula hyemalis*) buzzing the decoys in the early morning light.

With the right equipment and knowledge, a sea duck hunter is treated to fast-paced, close, decoying birds. In many situations, sea ducks are much more likely to commit and attempt to land in the decoys than puddle ducks, but don’t be fooled: shooting at close distance in a wide open area is not as easy as it might seem. Considering the constant wave action and the lightning speed for which sea ducks are known, good shooting is far more difficult than when standing firm in a marsh. If your aim is true, however, you’re treated to a beautiful bird in the hand.

The ultimate “success” for a sea duck hunter includes a drake of all three scoter species [black, surf and white-winged (*Melanitta fusca*)], a long-tailed duck, and last, but certainly not least, the handsome common eider (*Somateria mollissima*). At first glance, the beauty and elaborate plumage of the eider and aptly named long-tailed duck are far superior to the three scoters. However, with the scoters in hand, the subtle plumages and extravagant bills are quite stunning. At the right sun angle, their plumages come to life; the apparent black matte finish turns iridescent, with a deep purple to almost greenish hue. Complementing its gaudy multi-colored, knobbed bill, the drake surf scoter has striking white eyes. The drake white-winged scoter has the same stunning white eyes, but sports a very different yet equally gaudy multi-colored bill. Perhaps the most simply decorated sea duck is the black or common scoter. Its trademark feature is its bright yellow bill that stands out like a beacon on its final descent into the decoys.

In addition to the fantastic wing-shooting and chance to see these beautiful ducks up close or in hand, sea duck hunters are often treated to spectacular scenes that the faint-of-heart are unlikely to ever encounter: from an inquisitive gray seal attempting to steal a downed duck, to the sight and sound of a northern gannet colliding with the water at top speed, to the distant, eerie call of a common loon.

An interesting recent phenomenon around Long Island is the increase in wintering common eiders. At one time it was rare to see more than a handful of eiders in any given area. More recently, however, hunters and bird watchers alike have been treated to rafts that sometimes number in the thousands. Whether or not this apparent trend will continue is unknown. For the time being, however, the influx of eiders gives hunters a great chance of harvesting one of each of the common species of sea ducks in the Atlantic Flyway, something that is possible in few other states.

A sea duck hunt typically ends in the late morning when most of the birds have so gorged themselves on mussels as to render them nearly flightless. Perhaps the only unpleasant part of a late-season sea duck hunt on Long Island's waters is the seemingly endless chore of retrieving the ice covered decoys; the excitement and anticipation of the hunt is over, but the work remains.

Over the past 10-15 years, biologists and hunters alike have become concerned about the status of sea duck populations. Sea ducks have small clutch sizes, are slow to sexually mature

(2-4 years), and accurately monitoring their population levels is challenging compared to other waterfowl species. In addition to these life history traits, sea duck hunting equipment has vastly improved over the past few decades. If you talk to an old bayman, they will regale you with stories of their formative years chasing sea ducks using nothing more than an open white bay boat and handful of plastic jugs painted black or white. Now, a typical sea duck rig includes 50-60 highly detailed "magnum" sized decoys, motion wing decoys, and high definition paint jobs on the extravagant boats used to chase them. Because of these concerns, biologists in the Atlantic Flyway have adjusted hunting regulations and invested in better monitoring programs to ensure that sea ducks remain abundant and the rich tradition of pursuing them around Long Island and other coastal waters continues.

I can't fully explain why we do what we do. Perhaps it has to do with the comradery of good friends in the duck boat. Or maybe it is the feeling of accomplishment one gets from persevering through extreme conditions. Maybe if you're lucky enough to experience a successful sea duck hunt in the open ocean waters along Long Island one day, you'll be hooked and find you're one of those hardy souls that call themselves sea duck hunters.

A seasoned sea duck hunter, **Josh Stiller** is a wildlife biologist in DEC's Albany office.

Chris Spies



Josh holds his harvest of common eiders after a long day of duck hunting.

Innovative Walleye Study

The first year of a study to characterize walleye movements throughout Lake Erie is now complete. Together with other Lake Erie fisheries agencies and the Province of Ontario, DEC has been studying walleyes through a network of stationary acoustic receivers located on the lake bottom and surgically implanted acoustic tags in fish. When a tagged fish swims near a receiver, the signal from the tag is recorded. Anglers who capture acoustic-tagged walleye will receive \$100 for returning the transmitter and fish. Tag return and compensation information can be found on an orange tag visible on the back of each tagged walleye. To learn more about Lake Erie's fisheries program, see "Lake Erie Fisheries Research" on DEC's website, or contact Don Einhouse, Lake Erie Fisheries Research Unit Leader, at 716-366-0228.



DEC photo John Goerg

Outdoor Sports' Big Impact

NYS ranks third nationwide in the number of licensed anglers and hunters. In several New York counties, the number of resident licenses sold equaled more than one-third of the county's population. Two-thirds of state participants fish exclusively, 28 percent fish and hunt, and nine percent hunt exclusively. Consumer spending on these activities totaled more than \$5 billion in 2011—the most recent year for which such figures are available. In the last five fiscal years, revenue from annual license sales to fish, hunt, and trap have contributed an average of \$45.3 million a year to the NYS Conservation Fund, the primary funding source for DEC's Division of Fish, Wildlife and Marine Resources.



Sarah Davies

Free Ice-Fishing Weekend

To encourage outdoor enthusiasts to try ice fishing, DEC recently announced that Feb. 13 and 14, 2016 will be a free ice-fishing weekend in New York State. On these days, anyone can fish the freshwaters of New York State for free. No license is required. In 2014, Governor Cuomo expanded free fishing days from two to eight days per year. For more information, visit DEC's website.

Adirondack Bike Tour

Registration is open for the August 20-27, 2016 fully supported, week-long road bike tour to benefit the Adirondack Park. The route begins and ends in Hadley-Lake Luzerne, NY, and includes overnight stops in Ticonderoga, Keeseville, Saranac Lake, Indian Lake and Northville. A "layover day" in Saranac Lake will allow riders to tour the Lake Placid/Saranac Lake area by bike or simply enjoy the Olympic Region's amenities. Registration fee includes three catered meals daily, fully stocked rest stops, prime camping spots, hot showers, baggage service, on-course safety support, a wellness tent, and a beer/wine garden and live entertainment. Total mileage for the week will be 350-425 miles, depending on options, with daily routes ranging from 53 to 69 miles. For more information on what promises to be a great event, visit www.cycleadironacks.com



Ed Woltmann

Grants to Combat Aquatic Invasive Species

Two million dollars in grants from the NYS Environmental Protection Fund will soon support eligible projects to prevent the spread of aquatic invasive species (AIS) in the state’s waterways. New York is particularly vulnerable to AIS because of how often ocean-going vessels travel through the Great Lakes. AIS such as zebra mussels and spiny waterflea can spread easily to other inland waterbodies through the state’s canal system and recreational boating and angling. For more information on how boaters and anglers can help prevent the spread of aquatic invasives, visit www.dec.ny.gov/animals/48221.html.



DEC photo

Flood Patrollers Critical to DEC’s Success

When Hurricane Irene and Tropical Storm Lee hit NYS in 2011, DEC’s flood-fighting efforts were successful thanks in part to staff who volunteered as flood patrollers. Flood patrollers are critical to protecting communities from flood damage, and it is essential they be properly trained. DEC’s Region 7 recently held Basic Flood Patroller and Flood Fighting training, with almost 100 people participating.

Training included classroom instruction, live demonstrations, hands-on learning at the Kirkwood training levee and a visit to a levee project along the Susquehanna, Chenango and Tioughnioga Rivers. The newly trained volunteers are now prepared to inspect levees and floodwalls during emergency flood events.

Spruce Lake Bridge Completed

A bridge replacement project on the Perkins Clearing Easement Tract in Hamilton Co. is complete, and the Jessup River Road is now open to motor vehicle traffic all the way to the Spruce Lake Trailhead. The new bridge enables hikers, hunters, anglers and other recreationists to more easily access the Northville-Placid Trail, Spruce Lake, and the lands and waters of the West Canada Lake Wilderness in the Adirondacks.



DEC photos

Burn Ban Begins March 16

Due to the high fire-risk season, NYS’s open-burning ban runs from March 16 to May 14 each year, although people may burn downed limbs and branches from May 15 through March 15 annually. However, burning leaves is not allowed unless they are still on tree limbs. It is illegal to burn trash or household waste at any time. In addition to reducing air pollution, the burn ban has reduced wildfires by about 33% since its inception.



Outta My Way

While I was on my ATV, I came upon this bird. It wouldn't scare, and every time I moved, it ran at me, coming as close as two feet away. When I left, it chased me by sticking its neck out and running.

Heather Curvin
Knox

This male ruffed grouse was probably defending its territory. Males make drumming sounds with their wings to attract females and warn off other males. They react to motorized equipment like your ATV because it sounds like another male drumming.

Tree-climbing Bunny

We took this photo in our backyard orchard in Queensbury. It illustrates just how far a rabbit will go to find food! I didn't know a rabbit could climb.



Dan Green
Queensbury

In winter, rabbits will feed on twigs and the bark of young trees. This tree is perfectly suited for the rabbit to "climb" while remaining nearly horizontal.

The Bucks Stop Here

We live in the country and these deer have been frequent visitors to our backyard. Is it common to see several bucks together? Joanne Graham
Genesee County



Great photo! As the rut ends and winter snows make finding food more difficult, deer are more likely to gather in larger groups like this. A couple of months ago, these bucks would have been unlikely to tolerate each other's presence!

Flight Snacks

These flying squirrels have been visiting our feeder for the last several nights. They will feed until full and then disappear for the night. They don't seem afraid at all.

Douglas Jones
Canastota



Who can resist those eyes? Somewhat misnamed, flying squirrels do not actually fly, but rather glide. By extending their feet, they cause the large flaps of skin found along the sides of their bodies to stretch tight, forming a wing-like structure. Flying squirrels can often be regular visitors to birdfeeders, though primarily at night.

Nice Day to Ice Fish

Last February, we took advantage of good ice-fishing weather. We were out for three hours and had a great time. Everyone except for me caught fish. Ernie (10 years old; pictured) caught both a crappie and a perch. His brother Owen (5 years old) and my father each caught a perch. Jared Greene
Coxsackie



That smile says it all. Be sure to check out the article about ice fishing on page 17.

Winter Sunset

I thought I'd share this scenic photo taken in my backyard. Tom Clark
Wyoming County

That's quite a backyard shot! Yet another example of how beautiful winter in New York can be.



Uninvited Guest

I thought your readers might enjoy these photos of a pine marten who decided to help itself to this freshly harvested deer in Newcomb. David Rozelle
Adirondacks

(For more information on the pine marten, check out "Meet the Marten" in the December 2007 Conservationist.)

Ask the Biologist

Q: I found these large tracks on our driveway in New Baltimore, Greene Co. They were mixed in with deer tracks. Can you tell us what made them? Cougar? Dog?—Lynn Rhenisch

A: Your pictures are very telling. The obvious nails on the toes show that these are dog tracks, and they look like they are from a large dog at that! Cat tracks do not show the nails, as their claws are normally retracted.—Dave Nelson, *Conservationist* Editor



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BackTrails

Perspectives on People and Nature

John Bulmer

Ice fishing is good...for you

by Dave Nelson

Last fall, word drifted through social media that a friend of a friend from a long time ago, in a galaxy far, far away had just retired. He'd had a good career, taught a lot of folks about natural resources, and was going to be able to spend more time pursuing his favorite form of outdoor recreation.

That would be ice fishing.
Good...for you, I thought.

*...living in New York State,
we are going to experience
winter in all its, um, glory.*

Now let me come clean. I've never even been ice fishing, which I realize is something akin to a misdemeanor in these parts of upstate New York. Fishing? Sure! Ice fishing? Nope. Warm water, please. Top water lures, if you must know. Jitterbugs, floating Rapalas, and the like.

Hearing about my friend's friend's retirement brought me back more than 30 years to my grad school days. Attempting to associate more than just a face with this name, I went deep into the dark recesses and increasingly Random Access Memory that is my mind these days, and recalled a few details about him: occasionally crossing paths while I was in the field and he was working at his woods job; his beaming smile and firm handshake; his charming way of spinning yarns. And the thing I remembered most of all? His no-holds-barred, downright passion for ice fishing.

Come to think of it, the word "passion" might not be strong enough. He was one of those crazies who actually wanted winter to come earlier, last longer, and be colder. "Dang warm weather," he'd mutter.

Early in the winter, he'd get all jittery, anticipating the hard-water season, watching the ponds make ice, and watching his calendar the way I mark mine for deer hunting. His eyes would light up an already excited face, and I'd listen to him, politely.

But then, as we parted company, I'd shake my head inwardly. Good...for you, I thought. Turn up the heat.

Being a reflective sort, I realize that if I tried real hard, there might just be a thing or two about my pursuits that others could find a bit, well, odd. Hard to believe, I'm sure. For example: sitting in a tree stand all day, waiting for a deer. Bushwhacking a trailless mountain peak, because it's there. Or sprinting through the parking lot at the grocery store, pushing a cart full of groceries, and then jumping up on the footrest. Wheeee! That's me, still a kid at age 55.

"Good...for you," they might say, or shake their heads inwardly as we part company. To each their own.

So whether you prefer donning snowshoes for an evening winter hike to listen to a mated pair of great horned owls hooting under a full moon (like me), or clipping on 35-year-old, 3-pin cross-country ski boots to ski through a forest glade on a sunny afternoon (like me), or lacing up size-12 ice skates to play hockey on a frozen pond on a starlit night (like me), or—Heaven forbid—slipping on felt-lined, Vibram-soled insulated boots good to 35 below to go ice fishing (like m-m-m...my friend), winter in New York sure offers a lot of different ways to enjoy the great outdoors.

And that's a good thing. One thing is certain: living in New York State, we are going to experience winter in all its, um, glory. We might as well learn to enjoy it! Think of snow as an opportunity—to go skiing, that is. Pond ice as a chance to unleash your inner twelve-year-old, on his way to the National Hockey League.

And to all those ice anglers out there: good...for you. Just don't expect me to join you. That is, until the sun is warm and the skates are thawed out from last night's game of shinny.

When it comes to ice fishing, *Conservationist* Editor **Dave Nelson** has yet to cross the threshold from observer to participant.



**This
spring:
help the bees
and plant
some trees.**

Help Bees: Plant Trees

During the past few decades, native bee and honey bee populations have declined. Habitat loss, pests, diseases and pesticide use have all contributed to this decrease. But you can help our bee and honey bee populations (as well as other pollinators like flies, butterflies, moths, wasps and beetles) by growing plants that provide them with food.

In addition to annual and perennial flowers, trees and shrubs are important food sources for bees. Maples and willows, for example, bloom in early spring, providing nectar and pollen when most other flowers aren't available. Pollen is an important source of protein for larval and newly emerged bees. Shrubs like dogwoods, roses and viburnums are other good choices for pollinators.

DEC's State Tree Nursery at Saratoga sells bee-friendly tree and shrub seedlings from January through mid-May. Good choices include:

- Maples (red and sugar)
- Sycamore
- Buckeye
- Willow (pussy, streamco)
- Bristly locust
- Rose (rugosa, Virginia and wetland)
- Viburnum (highbush cranberry, arrowwood, nannyberry)
- Dogwood (gray, red stem, silky)
- Crabapple
- Sand cherry
- Buttonbush
- Wild grape
- Black cherry

ORDER YOUR HARDY SEEDLINGS TODAY!

For details, visit DEC's website at www.dec.ny.gov/animals/7127.html



Salamanders, see page 20

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