NEW YORK STATE

CONSERVATIONIST

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DECEMBER 2019

MEET THE ELUSIVE BOBCAT

Whose Tracks are Those? | **Canadaway Creek WMA** | **2020 Calendar**

Dear Reader,

Welcome to winter!

In this issue, we are providing a calendar to use throughout the year to plan activities—we even include special days that celebrate our environment, and hope these will inspire you to take advantage of our beautiful lands and waters, and also be good stewards of our natural resources. And I'm sure you'll love the photos for each month, which showcase some of the many reasons New York is a special place.

For many New Yorkers, December is a busy month, with activities ranging from holiday celebrations to tracking prey through the snow. I hope you will brave the colder temperatures to enjoy some of the great adventures offered throughout the state and consider starting off the new year with a First Day hike. It's a great time to join old friends and meet new ones as you hike through beautiful winter settings. And don't forget, in January DEC begins accepting reservations for the agency's four Educational Summer Camps—a great way for 11-to-17-year-olds to learn outdoor skills, explore the natural world, and make new friends.

In the coming year, DEC will be celebrating a special occasion—the 50th anniversary of our agency. We are proud of what we have accomplished over the past five decades, yet know we have much more to do to protect our environment and the amazing resources that define our state and nation. Clearly, we face many challenges, but, as we have since 1970, we are determined to provide a healthy and sustainable environment. During the years, the magazine will highlight some of the great environmental work DEC and others are doing.

I do have to share some sad news. On October 2nd, Environmental Conservation Police Officer Corey Hornicek, passed away at the age of 32. Corey was a Region 3 Officer who exemplified the best of law enforcement, helping to protect public safety and our environment. He was an important part of our DEC family and will be sorely missed.

As the year is drawing to a close, we look forward to what lies ahead in 2020. We thank you for being a loyal reader of the *Conservationist*, and hope to see you out on the trail, on the lake, or maybe at a DEC campsite—in addition to our anniversary, 2020 marks the hundredth anniversary of the first state-run campsites. New York has so much to offer, and by reading the *Conservationist*, you can learn about a variety of sites and activities that will connect you to our environment.

Happy Holidays and Best Wishes,
Basil Seggos, Commissioner

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Andrew M. Cuomo, Governor of New York State

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Tom Venner

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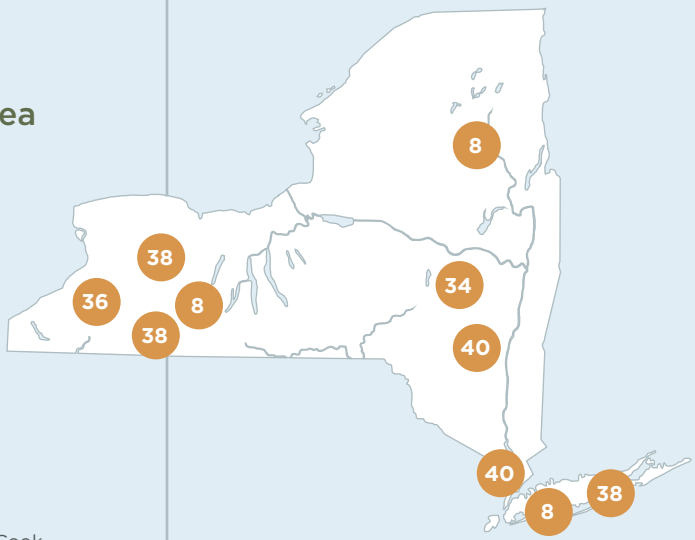


FRONT COVER: Bobcat by Melissa Groo | **BACK COVER:** Pheasant by Robert F. Cook

DECODING Trickster Tracks

BY LINDA J. SPIELMAN

The cottontail rabbit plays the role of trickster in many Native American stories, and experienced trackers would heartily agree with that label. Typical cottontail tracks are oblong in shape, with toes and pads that are generally indistinct due to the thick fur that covers the soles of the feet. In both front and rear prints, the toe arrangement is asymmetrical, with one toe set ahead of the others.

You've been interested in animal tracks forever. Maybe you have a tracking guide, look for tracks every chance you get, and sometimes dream about discovering wolf tracks or following a mountain lion trail. Or maybe you simply encountered tracks while hiking and wondered what animal made them. If you are stymied by tracks you feel you should be able to identify, well, take heart, you're not alone.

Animal tracks show more variability than most other natural things. Every meeting between foot and earth is affected by factors both in the animal itself and in the surface it moves on. It's little wonder that tracks clearly matching the ones pictured in the typical tracking guide are the exception rather than the rule. As confusing as this may seem, it is possible to make sense of track variants.

The following are a sample of mammal tracks you may encounter during your outdoor pursuits, and some tips on how to identify them. [Note: In some descriptions I discuss "middle pad," which refers to the pads behind the toes that appear in both front and rear tracks. Middle pads are also known as metacarpal and metatarsal pads, palm pads, or secondary pads.]

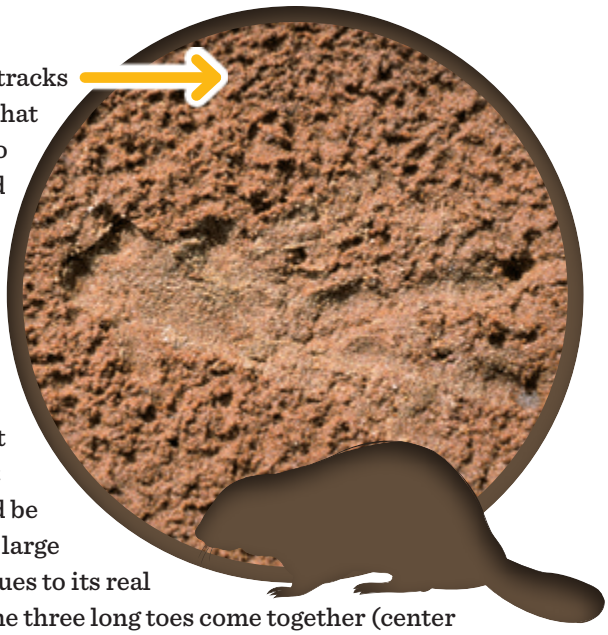
But rabbits (and hares) have an unusual ability to expand their feet laterally, because the bones that connect the digits to the lower leg are less tightly bound together than those of most other animals. It's as if your fingers could separate all the way back to the heel of your hand instead of just to your palm. When spread to the maximum, a rabbit's hind foot is almost as wide as it is long, which provides extra support for when they're moving on deep, soft snow. Such tracks may resemble snowshoe hare prints, and people sometimes will mistakenly believe the tracks were made by a hare. A good way to distinguish between cottontail rabbit and snowshoe hare tracks is to measure the width of the hind track, which in cottontails ranges from $\frac{7}{8}$ inch (for tightly closed toes) to 2 $\frac{1}{2}$ inches (for widely spread toes); snowshoe hare track widths range from 1 $\frac{1}{2}$ to 5 inches.

A cottontail track with spread toes and minimal heel registration may look like a feline or canine print. But the middle pad of the rabbit is poorly defined, and the central mound area is more diffuse.

RABBIT Tracks

The clawed toes of the cottontail can take on yet another appearance when they sink deeply into soft mud. Here, the claws and toes together create depressions that are shaped like tear drops. Some of the toes are deep and obvious, but others are so light that the track appears to have only three toes. Considering the softness of the mud, it's notable that some of the middle pads barely left an imprint and the heels didn't touch down at all. It's as if the rabbit flexed its heels upwards and moved on its tiptoes in order to minimize contact with the mud. Only feet with great flexibility like a rabbit's could create tracks like these.

Beaver tracks can also appear different and be puzzling. These typical beaver tracks were made by a beaver standing erect on its two hind feet. Because the sand was soft and the beaver's whole weight was carried by the two hind feet, the track details show clearly. Toes, middle pads, and the digital connections between the two registered clearly, and we also see heel impressions and the webbing spread between the toes.



This other set of beaver tracks has a very different look. That is because it is actually two tracks: the right rear ahead of and partly covering the right front. The left edge of the composite track is the heel of the front foot, and the three long toes of the hind foot can be seen on the right. A beaver print like this, with three robust toes and no webbing, could be mistaken for the track of a large bird. But there are some clues to its real identity. The area where the three long toes come together (center of the photo) is wider than the central joint of a bird's foot, and one of the inner toes of the beaver's hind foot made a light impression just above the upper long toe. On the left side, the front track is too wide to be the backward-pointing toe of a bird. It may be surprising that a beaver could leave such a minimal hind track, but beavers have a remarkable ability to walk lightly and control the amount of contact they make with the ground.

BEAVER Tracks

WHITETAIL DEER

Even a whitetail deer can leave a confusing track. At first glance, these tracks may look like a duck that's walking towards the lower right. But reverse the orientation and it's obvious that these are deer tracks in which only the outside edges registered. This happened because there was firm sand under the thin, loose surface layer, and the deer that made the track was young enough that it still had prominent hoof walls. The hard, outer edges of a deer hoof gradually wear down as the animal ages; in mature animals the entire underside of the foot registers in tracks.

While deer often leave obvious prints in the snow, in this case the deer was walking on deep, crusty snow. The animal broke through the surface, and the impacts of first the front foot and then the hind foot pulverized the crust and looser snow underneath. The result was a roughly rectangular hole, the left edge formed by the dewclaws (digits on the feet—usually higher on the legs—that generally don't make contact with firm ground when an animal is standing) and the right edge by the tips of the hooves. When I see a track like this, where the dewclaws seem to have given the deer additional support, I understand why evolution favored the retention of dewclaws in deer and their relatives.

RED FOX

Like most canines, these red fox tracks show the typical features associated with this group: tight toes, minimal claw impressions, small middle pads, distinct central mounds, and the well-known (to trackers) canine X—the shape formed by the intersection of the major ridges. Two characteristics unique to the red fox can also be seen: the bar, or chevron, in the front middle pad, and the soft outlines of the toes and pads caused by the hair on the undersurfaces of the feet.

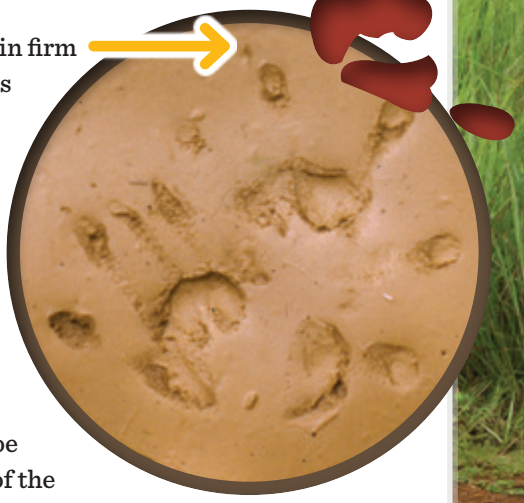
In a much more yielding substrate, a fast-moving red fox's track looks very different. As the foot pushed against the sand, the toes dug in and spread laterally, the middle pad sank down and backward, and the dewclaw registered above and to the left of the middle pad.

MINK

Mink, like all mustelids (minks, weasels, otters, and their kin), have five toes arranged in asymmetrical crescents in both front and rear tracks, a pattern that is usually easy to recognize. But a look at the mink tracks here tells us there can be considerable variation. The claw marks vary from pin pricks to triangular extensions of the toes, and the imprint of the middle pads varies from distinct to barely present. Most of the variation here can be attributed to the differing depths to which the feet sank in the substrate. But in all four prints the inner toe impression is lighter than the others. This is typical for the mustelids, and it's not uncommon for the inner toe to be missing entirely in the tracks of minks and their relatives.

In soft mud, the mink print looks different. The toes are more widely spread, digital impressions connect the toes with the middle pad, and webbing (rarely seen in tracks, but present in most minks) shows between the toes.

OPOSSUM



The opossum prints made in firm mud show the left hind tracks just behind and partly on top of the left front tracks, a common arrangement for a walking opossum. The toe impressions are small ovals, some isolated from the middle pads and some with light digital connections. Claws show as tiny pricks just beyond the toe tips, and the protuberances of the middle pads are partly separated from each other. The tracks in softer mud display the digits and toes registered as finger-like grooves.

The triangular marks of the claws at the tips of the toes are blunt and robust, and the middle pads are deep, continuous depressions. When compared, the two photos illustrate how the firmness of the surface impacts the depth of the track and therefore the track's appearance.

Looking at animal tracks and trying to discover what species left them is a fun activity, and the endless variety of tracks makes it all the more challenging. Track variants can reveal interesting details of animal lives, such as the subtle adjustments they make when they're moving on unstable surfaces, the surprising amount of flexibility and muscular control in many animals' feet, or the importance of seemingly extraneous appendages, such as dewclaws, in providing extra support.

So next time you are outdoors, pay attention to the tracks you find and be open to what those tricky tracks can teach you.

Linda J. Spielman lives in central New York. Her book, *A Field Guide to Tracking Mammals in the Northeast*, was published in 2017. You can visit her blog at www.lindajspielman.com/blog/

SPECIES SPOTLIGHT

THE BOBCAT

BY BILL RHODES

On soft padded paws, a seldom seen but surprisingly common predator silently stalks the borders of New York State's forests, fields, farms, and suburban backyards. Sometimes mistaken for a very large housecat, the bobcat, *Lynx rufus*, quietly goes about its business, hunting prey, seeking mates, and caring for its young, all while generally hidden just out of sight.

About twice the size of a typical domestic cat, the bobcat is not often seen, but is easily identified by its large size, back legs slightly longer than front, and short 'bobbed' tail tipped in black. Its dense fur varies in color from shades of tan, red, and/or gray. Most bobcats sport black spots, though these may appear faded on some. Like its close relative the lynx, the bobcat has upright black-haired ear tufts, although they are not as prominent as those seen on the lynx and may be difficult to spot from a distance.

The bobcat's range stretches from southern Canada into central Mexico. Despite the growth of suburban areas and the density of the human population in New York, its numbers appear to be increasing in the state, as is its range. Today, with the exception of Long Island, bobcats can be found in most New York counties.

Description/Diet/Behavior

An adult bobcat can vary considerably in size, ranging from about nine pounds to more than 30 pounds in weight. Males are generally larger than females, averaging 21 pounds, as compared to 14 pounds for females. Mature adults generally measure 30 – 34 inches from nose to tail, with another five to six inches added for the short tail.

A bobcat's long, muscular hind legs are quite effective for leaping towards prey, and cause the bobcat to exhibit a "bobbing" gait when walking. Depending on its prey, the bobcat is either an ambush hunter, blending into the underbrush and waiting for a hapless squirrel or rabbit to come close, then leaping out and catching it with its sharp, retractable claws, or a stalker, stealthily tracking prey until an opportune time comes for a short, fast dash and bite.

Bobcats are solitary; they only come together to mate, beginning in late winter and lasting into the early spring. The male takes no part in rearing the kittens, and the mated pair separate soon after mating.

A male bobcat's range is generally larger than the female's; a large male may roam as many as 40 square miles, while the female more commonly travels about half that. The size of


Melissa Groo


Melissa Groo

the range is also somewhat dependent on the abundance of prey and of other bobcats—the more abundant the prey and competitors, the smaller the range. Bobcats mark their territory in various ways—claw marks left on trees, spraying urine, and leaving feces—and the ranges of individual bobcats tend not to overlap, other than marginally at their edges.

The bobcat primarily eats small mammals. Eastern cottontail rabbits are its preferred food choice, but it also eats squirrels, mice, and voles. Occasionally a bobcat will attack a deer, but that usually involves an injured or older animal or fawn. Prey choices vary by season and relative abundance, and the bobcat will even eat insects, fish, small birds, and farmyard chickens if it is able to find and catch them. In addition, the bobcat is an opportunist and will sometimes hunt domestic cats and small dogs.

Equipped with excellent vision and hearing, the bobcat is an efficient hunter. Although it can be active at any time of day, it tends to be crepuscular, meaning it is most active and hunts its prey from twilight to midnight, and then again in the early morning, from predawn to a few hours after sunrise. Its pupils can open quite wide, allowing it to see well in dim light. Bobcats also are excellent climbers, and, while they don't care for water, they can swim quite well and have been recorded swimming fairly long distances across rivers and lakes.

Unlike its cousin the Canada lynx, whose range extends far into northern Canada and has fur-lined and extremely broad feet that act as furry snowshoes, the bobcat is not especially well-adapted for walking or running in deep snow, and seeks to avoid it. The bobcat does not hibernate, and young bobcats may succumb to very cold and prolonged winters, especially if prey is scarce or hard to find.

Life History

In the wild, bobcats live about seven years, sometimes as long as 10. The oldest bobcat held in captivity lived to be 32 years old. Bobcats mate once a year, most often from mid-January through March, and the female's gestation period is about two months. Females find secluded places to use as a den—often under rock ledges or rock piles, in brush, or in the hollows of fallen trees—and generally give birth in April and May to as many as six kittens, though the average litter is two to four.

Kittens are less than a pound at birth and measure about 10 inches in length. Born defenseless with their eyes sealed shut, they nurse and will open their eyes by the ninth or tenth day. The kittens start exploring their immediate surroundings at about one month old and are weaned around two months. Soon after, they begin to travel with their mother, and by the fall of that first year, they begin to hunt for themselves. As they become more proficient and less dependent, the kittens quickly go their own way, generally before the first snowfall, although there are records of kittens staying with their mother until the following spring.

The bobcat has learned to live in proximity to people, including areas adjacent to suburban sprawl. While preferring the forest edges for cover, open areas provide abundant prey species, and the milder winters of the southern and western parts of the state may contribute to their spread.

So, next time you are out for an early morning or evening walk, be aware that the large "tabby cat" with the short tail you spot walking along the forest edge or along the edge of a suburban golf course may not be a domestic cat at all—you may have seen a hungry bobcat seeking its meal!

Bill Rhodes is a retired life sciences and healthcare industry executive. He is a freelance writer and avid naturalist.

Cover shot and above photos of bobcats by **Melissa Groo**. You can view more of her work at **www.melissagroo.com** and at National Geographic's image collection. Also, look for an article highlighting her work in a future issue of *Conservationist*.

Fun Facts

- The bobcat's fur is dense, short, and soft. It is generally shorter and more reddish in the summer and longer and grayer in the winter. Spots occur on some bobcats and are faded on others.
- Like all cats, the bobcat's tracks exhibit direct registering, meaning the hind prints fall directly into/on top of the front prints. These prints show four toes, but no claws, as these are retracted when the bobcat is walking or running.
- Bobcats are opportunistic predators, and have been recorded catching geese, swans, and even sheep and goats, although rabbits are their preferred food.
- Bobcats are rarely found near areas with high human populations, such as urban centers.


Carl Heilman II

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

In Memoriam

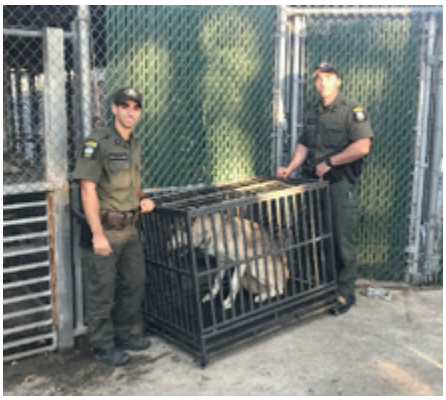
On Oct. 2, ECO Corey Hornicek died unexpectedly at the age of 32. A native of Sullivan County, Hornicek graduated from the 21st Basic School for Uniformed Officers in August 2017, and was assigned to DEC Region 3, where he patrolled Orange and Rockland counties. Corey exemplified the best qualities of DEC and law enforcement, including a great love of the outdoors. He was an avid angler and hunter, and like most sportsmen, he had a deep respect for conservation and the law. He demonstrated his commitment to public service not only on the job, but as a volunteer for the Hortonville Volunteer Fire Company in Sullivan County.

Friends and colleagues praised Corey's leadership abilities and the skills and instincts he exhibited on the job, and his selflessness and commitment to public service. Our deepest sympathies are with his wife, Kayla, who Corey married while he was attending the Basic Academy. We salute Corey, a good man we lost far too soon.

Double Waterfall Rescue—Ontario County

In early October, Forest Ranger Timothy Carpenter responded to High Tor WMA to assist Naples VFD and the Ontario County rope rescue team with a stranded hiker who had fallen into a gully between two waterfalls. The hiker fell when he had reached out for a tree for support and missed, causing him to fall into the gully. He lost consciousness upon impact and suffered injuries to his head and core. Technical rope rescue was needed to extract him safely from the gully. He was carried out to EMS and transported by air to the nearest hospital.

West Virginia Wolf Dogs—Nassau County

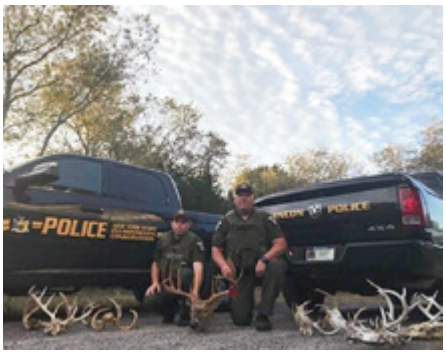


On October 4th, ECO Zachary Prentice received a call concerning an individual in Hempstead who allegedly possessed two wolves. An investigation revealed paperwork that documented the two large canines as wolf hybrids that had been purchased in West Virginia. Possession of a wolf-dog hybrid as a pet is prohibited in New York State. The wolves were seized and safely transported to Holtsville Ecology Center. A DNA test will be administered to find the percentage of wolf hybridization. The owner was issued an appearance ticket for possession of wild animals without a permit.

Hoist for Heart Health—Essex County

In late September, Ray Brook Dispatch took a call from a hiking party of three on the north side of Mount Colden reporting a woman in the group was highly fatigued and unable to walk due to a preexisting heart condition. Rangers Praczkajlo and Mecus responded via a State Police helicopter and performed a hoist rescue from the trail, which was at nearly 3,500 feet in elevation. The young woman was airlifted to Adirondack Medical Center in Saranac Lake for additional medical treatment. The two remaining hikers were provided headlamps and continued their hike out to the trailhead under their own power.

Illegal Harvest—Suffolk County



In late September, ECOs Jeremy Eastwood and Brian Farrish received tips from local hunters on Long Island about a large buck that was allegedly shot on a nuisance permit in the town of Riverhead. A person was circulating a photo of himself posing with a massive whitetail buck. Nuisance permits are issued on a limited basis to address overpopulation and damage to agricultural crops, but have strict conditions that must be followed. During their investigation, the officers learned that the individual had failed to turn in antlers from multiple deer, as well as violating several other rules. The antlers were seized, and he was cited for the illegal bucks and for violating the conditions of his nuisance permit.

NEW YORK STATE

CONSERVATIONIST

2020 CALENDAR

Introducing the new *Conservationist* 2020 Calendar, featuring previous covers of the magazine. Each December, we will include a calendar as part of the issue. If you have a photo you think would be good for next year's calendar, please email the original image file to magazine@dec.ny.gov.

JANUARY

FEBRUARY

MARCH

APRIL

MAY

JUNE

JULY

AUGUST

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

From the Digital Collections of the New York State Library.

JANUARY

FULL MOON RISING BEHIND WHITEFACE MOUNTAIN
by Carl Heilman II
December 2017

NOTES:

- Whiteface Mountain is located outside the beautiful village of Lake Placid, and was home to the 1932 and 1980 Winter Olympics.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	1 New Year's Day First Day Hikes	2 ◐	3	4
5	6	7	8	9	10 ○	11
12	13	14	15	16	17 ◑	18 Winter Weekend at Camp Santanoni
19 Winter Weekend at Camp Santanoni	20 Martin Luther King Jr. Day Winter Weekend at Camp Santanoni	21	22	23	24 ●	25
26 DEC Summer Camps Registration Opens	27	28	29	30	31	

REMINDERS:

FEBRUARY

RED FOX
by Aaron Winters
February 2015

NOTES:

- Adult red fox have a year-round red coat that is typically much more striking during the winter months; a washed out orange to cherry red.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26	27	28	29	30	31	1
2 Groundhog Day	3	4	5	6	7	8
9	10	11	12	13	14 Valentine's Day	15 Free Fishing Weekend Winter Weekend at Camp Santanoni
16 Free Fishing Weekend Winter Weekend at Camp Santanoni	17 Presidents' Day Winter Weekend at Camp Santanoni	18	19	20	21	22
23	24 National Invasive Species Awareness Week	25	26	27	28	29

REMINDERS:

MARCH

SPRUCE GROUSE
by Jeff Nadler
December 2017

NOTES:

- In New York, the population of spruce grouse is concentrated where Franklin and St. Lawrence counties meet in the Adirondack Foothills.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	◐ 2	3	4	5	6	7
8 Daylight Saving Time Begins	○ 9	10	11	12	13	14
15	◑ 16	17 St. Patrick's Day	18	19 Vernal Equinox	20	21
22	23	● 24	25	26	27	28
29	30	31	1	2		

REMINDERS:

Photo: Angelena Ross

APRIL

BROWN TROUT
by Eric Engbretson
April 2011

NOTES:

- The largest brown trout caught in New York was 33 lb. 2 oz., 38 inches from Lake Ontario (1997).
- On April 22, 1970 the first Earth Day legislation was signed, creating the NYS Department of Environmental Conservation to oversee all environmental concerns through one agency. The new entity combined the duties of the old Conservation Department with some programs from the NYS Department of Health and state commissions.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	1 Trout Season Opens	2	3	4
5	6	7	8 Passover Begins	9	10	11
12 Easter	13	14	15	16 Passover Ends	17	18
19	20	21	22 50th Anniversary of Earth Day	23 Ramadan Begins	24 Arbor Day	25
26	27	28	29	30	1	2

REMINDERS:

MAY

BLUEBIRD
by Laurie Dirkx
April 2017

NOTES:

- Bluebirds are one of the first birds to return north in the spring.
- DEC Campgrounds opened to visitors 100 years ago.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26	27	28	29	30	1 Spring Turkey Season Opens Pike, Pickerel, Walleye Season Opens	2 I Love My Park Day
3	4	5	6	7 ○	8	9
10 Mother's Day	11	12	13	14 ◑	15 Green Your Commute Day Most DEC Campgrounds Open	16
17	18	19	20 Adirondack Park Established 1892	21	22 ●	23 Ramadan Ends
24	25 Memorial Day	26	27	28	29 ◐	30
31	REMINDERS:					

JUNE

FOX KIT
by Melissa Groo
June 2016

NOTES:

- Fox pups are usually born in a den in March or April, nearly hairless, blind, and helpless. Weaning occurs between 8-10 weeks of age, at which time they venture out of the den and begin hunting with their parents by 3 months.
- This is the time of year that people see young wildlife. Remember, "If You Care, Leave Them There" www.dec.ny.gov

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31	1	2	3	4	○ 5	6 National Trails Day
7	8	9	10 Get Outdoors Day	11	12	◑ 13
14 Flag Day	15 National Pollinator Week	16	17	18	19	20 Black Bass Season Opens Summer Solstice
● 21 Father's Day	22	23	24	25	26	27 Free Fishing Weekend
◐ 28 DEC Summer Camps Open Free Fishing Weekend	29	30	1	2	3	

REMINDERS:

JULY

LACE-TIPPED DARNER
by Jeremy Martin
June 2011

NOTES:

- Darners are one of the largest dragonflies in North America, and can be up to 4 ¾" long.
- The NYS Department of Environmental Conservation opened its doors on July 1, 1970, and immediately began to wrestle with the urgent environmental problems of the day.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	29	30	1 DEC opens its doors 50 years ago	2	3	4 Independence Day
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21 NYS Conservation Commission Established 1911	22	23	24	25
26	27	28	29	30	31	

REMINDERS:

Photo: Barb Hager

AUGUST

BOREAS PONDS
by Carl Heilman II
June 2018

NOTES:

- Located in the High Peaks of the Adirondacks, the 20,758-acre Boreas Ponds Tract offers recreational opportunities for hikers, bikers, skiers, paddlers, horseback riders, hunters, and anglers.
- Leave No Trace when hiking or camping. www.lnt.org

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26	27	28	29	30	31	1
2	3 ○	4	5	6	7	8
9 Smokey Bear's Birthday	10	11 ◑	12	13	14	15
16	17	18 ●	19	20	21	22
23	24	25 ◐	26	27	28	29
30	31	REMINDERS:				

SEPTEMBER

BOBCAT
by Angie Berchielli
August 2013

NOTES:

- Bobcats often use rocky ledges and rock piles for shelter, breeding, and raising young.
- Salmon are moving upstream to spawn. Visit the Salmon River Fish Hatchery Open House on Sept. 26th.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30	31	1	2 ○	3	4	5
6	7 Labor Day Most DEC Campgrounds Close	8	9	10 ◑	11 Patriot Day	12
13	14	15	16	17 ●	18 Rosh Hashanah Begins	19
20	21	22 Autumnal Equinox	23 ◐	24	25	26 Free Fishing Day National Hunting & Fishing Day National Public Lands Day
27 Yom Kippur Begins	28	29	30	1	2	

REMINDERS:

Photo: U.S. Fish and Wildlife Service / Gary Kramer

OCTOBER

ADIRONDACK FALL FOLIAGE
by Mark Bowie
October 2010

NOTES:

- The intensity and duration of autumn foliage is affected by a number of factors, including temperature, sunlight, and soil pH.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
27	28	29	30	1 Small Game and Archery Southern Zone Deer Seasons Open	2	3
4	5	6	7	8	9	10
11	12 Columbus Day	13	14	15	16	17
18	19	20	21	22	23	24 Regular Northern Zone Big Game Season Opens
25	26	27	28	29	30	31 Halloween

REMINDERS:

NOVEMBER

MATURE WHITETAIL BUCK
by Eric Dresser
October 2014

NOTES:

- Only male deer have antlers, which fall off every winter and are regrown every summer.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 Daylight Saving Time Ends	2	3 Election Day	4	5	6	7
◑ 8	9	10	11 Veterans Day Free Fishing Day	12	13	14
● 15 America Recycles Day	16	17	18	19	20	◐ 21 Regular Southern Zone Big Game Season Opens
22	23	24	25	26 Thanksgiving	27	28
29	○ 30	1	2	3		

REMINDERS:

DECEMBER

DRAKE PINTAIL
by Tyler Breen
December 2015

NOTES:

- Northern Pintails travel at almost 50 mph during migration. They are one of the first ducks to migrate south in the winter.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	1	2	3	4	5
6	7 ◑	8	9	10 Hanukkah Begins	11	12
13	14 ●	15	16	17	18 Hanukkah Ends	19
20	21 ◐ Winter Solstice	22	23	24	25 Christmas	26 Kwanzaa Begins
27	28	29 ○	30	31		

REMINDERS:

VAN HORNESVILLE FISH HATCHERY

BY LARRY KROON

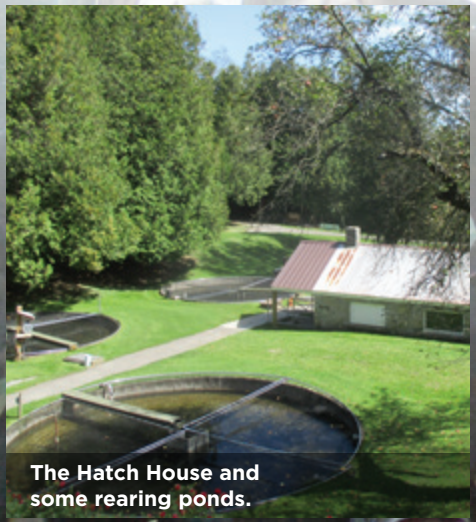
Just a short drive from Cooperstown, nestled among the green valleys along State Rte. 80, sits the Van Hornesville Fish Hatchery. It is the smallest of DEC's nine trout rearing facilities, yet each year it produces about 31,000 lbs. of healthy, good-sized rainbow trout (*Oncorhynchus mykiss*) for stocking throughout the streams and lakes of New York State.

In a typical year, hatchery staff raise approximately 60,000 eight-inch fish and 35,000 nine-inch fish for stocking. In addition, they also raise 80,000 to 100,000 fingerlings (3-5 inches) for transfer to other hatcheries.

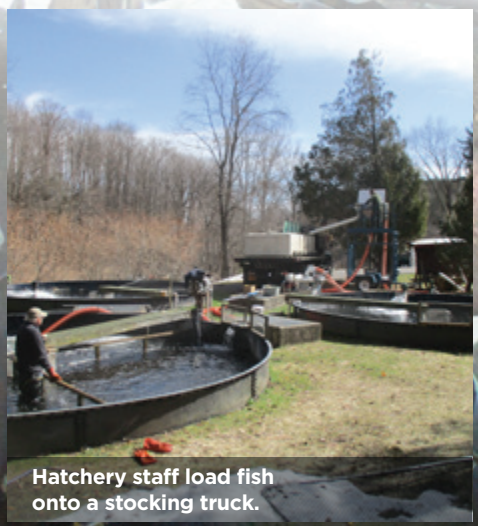
Fertilized eggs arrive in the fall and are carefully tended in the 14 hatch house troughs. Once the fry outgrow their trough home, they are counted and systematically moved to the outdoor raceways to continue growing. As early spring approaches, the trout are moved to concrete ponds, where they will be maintained until it's time for stocking at about 18 months of age. Hatchery personnel (and lots of very enthusiastic and dedicated volunteers) will stock these colorful fish in designated waters across the state. Van Hornesville Hatchery staff and volunteers also stock brown trout, brook trout, walleye, tiger musky, and lake trout obtained from other state hatcheries into Capital Region waters as needed.

While this may sound like a typical hatchery setup, the water at Van Hornesville is extremely HARD. The Water Hardness scale sets 0-60 mg/l of CaCo3 as soft, and greater than 181 mg/l as very hard. Water assays from the hatchery show a calcium carbonate level of about 1500 mg/l and an extremely high sulfate concentration of about 1675 mg/l! This mineral combination becomes problematic as it will precipitate out as the water temperature rises, appearing as whitish crystals on sink faucets or shower heads. This can really foul the aeration diffusers and encrust various portions of the water transport system that provides the fish habitat. The hard water can also complicate fish egg fertilization by clogging the micropyle (hole in the egg), preventing sperm from penetrating and fertilizing the egg. The hatchery circumvents this issue by bringing in 380,000 fertilized (eyed) rainbow trout eggs from DEC's Randolph Fish Hatchery in Cattaraugus County (see April 2019 *Conservationist* article).

Yet, in spite of its hardness, the water supply for the hatchery is excellent for supporting the growth of rainbow trout. The local topography is the result of a karst system, a type of landscape that produces an abundance of crystalline clear water, sharp ravines, and crevices. The hatchery water supply comes from springs that are a tributary to the



The Hatch House and some rearing ponds.



Hatchery staff load fish onto a stocking truck.

Each year the hatchery produces 31,000 lbs. of rainbow trout.

LOCATED IN SOUTHERN HERKIMER COUNTY, ON CHYLE ROAD, IN THE VILLAGE OF VAN HORNESVILLE

Otsquago Creek, which ultimately flows into the Mohawk River. These springs combine to provide a total of 400 gallons per minute (gpm) of crystal-clear water to the fish culture ponds. In the karst system, water travels through underground channels before it arrives at the main and hatch house springs. The water source remains a mystery to this date, despite attempts to determine its origin.

The constant water flow and its stable 48°F temperature combine to provide optimum growth conditions for rainbow trout. Even hot summer days will not cause warmwater temperature stress, and the fish are less susceptible to disease. Likewise, during the winter, the ponds do not freeze, and the fish continue to feed and grow. An added benefit is that since the water comes from inside the earth just prior to entering the ponds, it is less likely to contain human contaminants and fish pathogens.

The Van Hornesville Fish Hatchery is a picturesque spot to bring your family to enjoy the outdoors, learn about fish culture, and dream about catching one (or two) of the brightly-colored rainbow trout that are stocked in our waters. So stop by and enjoy one of New York's unique and unsung natural attractions.

Larry Kroon is the Manager at Van Hornesville Fish Hatchery.

If You Go

The Van Hornesville Hatchery provides opportunities for people to learn about rainbow trout and see firsthand how DEC is rearing these fish. There are tanks and ponds full of rainbow trout of different ages and sizes, offering closeup views of these colorful fish.

LOCATION: 1285 Chyle Rd., Van Hornesville, NY 13475; From Rt. 80

VISITOR HOURS: Open 8:30 a.m. – 3:30 p.m. daily, year-round.

SPECIES RAISED: Rainbow trout

PHONE: (315) 858-0857

SPECIES SPOTLIGHT

Rainbow Trout/Steelhead (*Oncorhynchus mykiss*)

- Native to the western U.S., Alaska, and Canada, rainbow trout were introduced into New York waters in the 1870s.
- New York is home to two types of rainbows. The first, simply called rainbow, is found mostly in medium to large streams or small to medium-size lakes. The second, called steelhead, is only found in lakes Champlain, Ontario, and Erie, and their tributaries. Steelhead are anadromous (spawn in streams but live most of life at sea) and use these large lakes as their sea.
- Although the species generally live in coldwater streams and lakes, unlike native trout, rainbow trout are more tolerant of warm water and are found throughout the state.
- Rainbow trout are often very colorful; they get their name from the pink or red band often present on their sides.
- A popular gamefish, rainbows often put up spectacular fights when hooked, frequently making a series of acrobatic jumps. Mature rainbows may weigh one or two pounds in streams, and more than 15 pounds in the Great Lakes.

CANADAWAY CREEK WILDLIFE MANAGEMENT AREA

BY EMILIO RENDE

Along the broad and deeply dissected upland plateau of Chautauqua County lies the Canadaway Creek Wildlife Management Area (WMA). It is located four miles northeast of the Village of Cassadaga and six miles southeast of the Village of Fredonia. The area comprises 2,190 acres, with a landscape of steep slopes covered primarily with deciduous forest interspersed with conifer plantations. Canadaway Creek runs through the property and is the drainage system for the area.

The U.S. Department of Agriculture (USDA) acquired the property in the 1930s under the Bankhead-Jones Farm Tenant Act, and in the late 1950s, the title was deeded to the State of New York.

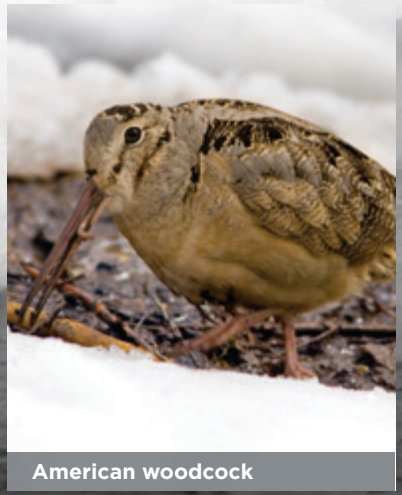
From the early 1940s through the mid-1950s, the USDA established many conifer plantations on the area. When the DEC, then known as the Conservation Department, acquired the area twenty years later, staff thinned and pruned the plantations. DEC also initiated forest hardwood cutting and thinning, mowed abandoned pastures, and planted grain, legumes, fruit-producing shrubs, and conifers for wildlife. Additionally, the state added water features such as marshes, potholes, and ponds, and constructed numerous roads for public access and site management.

In 1971, DEC established a management plan for the area, identifying reforestation, wildlife habitat improvement, and the development of public access as the major improvements to be conducted here. The plan guided management on the WMA through the mid-1980s.

In 1988, the WMA was included as part of the Boutwell Hill Unit Management Plan. At that time, DEC used timber management to create wildlife habitat. In 2015, DEC's Bureau of Wildlife established the Young Forest Initiative to increase young forest habitat on WMAs across the state. This type of habitat benefits species such as American woodcocks, wild turkeys, and many songbirds. A Habitat Management Plan adopted in 2017 will guide future management activities on the WMA.

The primary management objective for the Canadaway Creek WMA is to maintain high quality habitat for ruffed grouse through a forest and habitat management program. Other wildlife species that use the area and will benefit from these practices include white-tailed deer, cottontail rabbits, woodcock, wild turkeys, and a variety of songbirds. Secondary management objectives are designed to protect and maintain special wildlife habitats on the WMA, such as deer wintering areas, raptor nest sites, and several small marshes and ponds.

Visitors can enjoy fishing.



American woodcock

Birding is a popular activity on the WMA.

LOCATED IN THE TOWN OF ARKWRIGHT, CHAUTAUQUA COUNTY; SIZE: 2,190 ACRES

The WMA also supports a variety of recreational opportunities. The most popular are hunting, trapping, and fishing. Common game species include white-tailed deer, black bear, gray squirrel, wild turkey, ruffed grouse, wood duck, mallard, and blue- and green-winged teal. Some of the common furbearers that can be found here include red fox, gray fox, coyote, raccoon, muskrat, and beaver. Additional recreational opportunities include hiking and cross-country skiing.

Birdwatchers visiting the site may encounter field sparrow, savannah sparrow, song sparrow, bobolink, eastern meadowlark, goldfinch, northern flicker, pileated woodpecker, eastern wood-pewee, and eastern kingbird. Several species of warblers can also be found, such as blue-winged, yellow, chestnut-sided, magnolia, yellow-rumped, black-throated green, mourning, and common yellowthroat. In addition, visitors may spot some birds of prey, such as broad-winged hawk, red-tailed hawk, red-shouldered hawk, American kestrel, barred owl, and northern harrier.

With its rich forests, abundant wildlife, and a variety of recreation opportunities, the Canadaway WMA is a great spot to visit any time of the year.

Emilio Rende is a Wildlife Biologist in DEC's Allegany office.

Site Features

NOTES: Open year-round. Public roads, administrative roads, trails, and several parking areas provide good interior access to the area. There are three parking areas along Route 75 and two along Center Road. Visitors should note that the interior roads are not maintained during the winter months.

Hunting, fishing, trapping, hiking, and wildlife viewing are all popular activities. A connector trail, the Earl Cardot Eastside Overland Trail, runs through the WMA and is part of a county-wide trail for hiking and cross-country skiing. In addition, there is a snowmobile trail in the county-wide trail network that also runs through the area.

DIRECTIONS: From Interstate 86, take Route 60 north to Cassadaga, then head east on County Route 72 for approximately 5 miles. There are unpaved parking lots on both Center Road and Meadows Road.

CONTACT: For more information, visit www.dec.ny.gov/outdoor/82659.html or call the Region 9 DEC office at 716-372-0645.

Savannah sparrow

Broad-winged hawk

Canadaway Creek is picturesque in all seasons.

Worth A Look

I was sitting in my car on a country road in Livingston County when I spotted this. You have to look closely. I just love how short-eared owls roost in plain sight in an open field.

ELIZABETH MARSHALL
RUSH, NY

Short-eared owls winter, sometimes in significant numbers, at concentration areas located throughout the state, including the Finger Lakes region, the Lake Ontario lake plains (especially in Jefferson County), several sites in the Hudson Valley, and on the shores of Long Island.

Ask the Biologist

Q: I discovered this creature in a shallow waterbed off a dock in Freeport, Long Island. It was about 18" long and moving slowly. Is it a snake, eel, or something else?

—MARGARET SILBERGER,
WANTAGH, NY

A: That is an ocean pout, a native fish that is typically found in deeper, cooler waters. It is odd for one to be found off a dock, so it's possible that an angler caught it and brought it back to shore before releasing it dockside.

—STEPHANIE REKEMYER, DEC
DIVISION OF MARINE RESOURCES

Just Hangin' Out

Laura Ann sent us these photos of a turkey and a deer browsing for food together in Medford, NY.

Frequently seen in the fall, white-tailed deer and wild turkey are often found in the same areas. Both eat acorns and nuts as part of their diets.

Conservationist for Kids Goes International

This past spring, DEC retiree Dennis Farrar went to South Africa to visit his niece, Augusta Mead, a former DEC intern, who was working as a Peace Corps volunteer at an elementary school. Augusta taught English and Environmental Science, and used *Conservationist for Kids* to help students practice their English skills and learn about the environment in New York State.

Battling Bucks

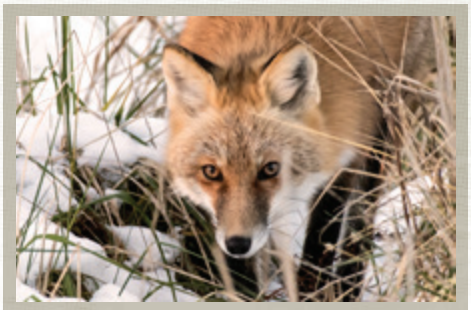
Last fall, Forest Ranger John Kennedy was contacted by a Reinstein Woods Nature Preserve volunteer, informing him that two male deer were entangled by their antlers and unable to free themselves. Ranger Kennedy notified ECO Scott Marshall for assistance. The two bucks were both standing and moving left to right trying to free themselves, but to no avail. With the aid of a reach pole, the officers separated the two animals. Although exhausted, both deer ran away in opposite directions and appeared to be in good health. DEC biologist Jeremy Hurst explained that this occasionally happens during the fall when males spar during the rutting season.

On the Shy Side

I love taking pictures of all the birds that visit my feeders. This vibrant-colored male cardinal seemed camera shy to me.

JANIE FERGUSON
CAMERON MILLS, NY

Thanks for sending us this picture-perfect shot of a male cardinal, Janie!



Sly Fox

Tom Venner from Monroe County sent us this photo of a beautiful red fox.

Adult red fox have a year-round red coat that is typically much more striking during the winter months. The coat colors can range from a washed-out orange to cherry red.

Sunning Snowy

I was lucky to get this great shot of a resting snowy owl.

BILL COMBS, JR.
COBLESKILL, NY

Snowy owls breed in the treeless arctic tundra. Some migrate to southeastern Canada, the Great Lakes states, and New England in the winter, providing New Yorkers a chance to see these beautiful birds of prey.

CONTACT US! @ magazine@dec.ny.gov

Conservationist Letters
NYSDEC, 625 Broadway
Albany, NY 12233-4502

facebook.com/NYSDECtheconservationist

Restoring Critical Marine Habitat

This past September, Governor Cuomo announced the "Revive Mother Nature" initiative. The new initiative is to be fully unveiled in Cuomo's 2020 State of the State in January and is an aggressive nation-leading initiative to restock and restore aquatic habitats throughout the state. The governor made this announcement at an event that he and DEC Commissioner Basil Seggos attended where thousands of juvenile shellfish were released in New York City's Hudson River Park. The release was part of the Governor's additional announcement of $2.8 million in funding to restore marine habitat in New York Harbor to support the Hudson River Park's Estuarine Sanctuary Management Plan, expand the Soundview Park oyster reef in the Bronx River, and enhance the state's extensive shellfish restoration initiative.

New Upper Esopus Fire Tower Opens in the Catskills

The new Upper Esopus Fire Tower at the Maurice D. Hinchey Catskills Visitor Center is now complete and open to the public. The fire tower offers unencumbered views of the Upper Esopus Valley and surrounding Catskill mountains. Because the fire tower is located on the visitor center grounds, people can experience tower views without having to undertake the typically challenging hike of several miles to reach a Catskills fire tower. The visitor center also features a 0.75-mile, accessible loop trail that traverses around the center, and serves as a gateway for outdoor enthusiasts to learn about opportunities to enjoy the great outdoors in the Catskill Park. The Upper Esopus Fire Tower represents a legacy of DEC forest rangers and fire towers throughout the Catskills and the state.

Brook Trout Found in Previously "Fishless" Adirondack Lake

DEC recently discovered a self-sustaining brook trout population in Lake Colden, a high-elevation lake in the Adirondack High Peaks that had been deemed "fishless" for decades due to the negative effects of acid rain. The lake's fish resurgence is attributed to improved water quality as a result of decades of increasingly stringent state and federal standards designed to significantly reduce airborne pollutants that cause acid rain. High-elevation lakes and their brook trout populations were severely impacted by acid rain, and the Lake Colden brook trout discovery is the first time a sustaining fish population has been recorded in a lake where the impacts of acid rain caused it to become fishless.

Milestone Anniversaries

It may be hard to believe, but 2020 will mark the 50th anniversary of both the creation of DEC and the celebration of the first Earth Day, as well as 100 years since the first state-run campground opened. Throughout 2020, the *Conservationist* will be commemorating these historic milestones, and we are inviting our long-time readers to share any memories they have about the events of 50 years ago, or stories about time they spent at a DEC campground, by emailing us at magazine@dec.ny.gov.

A week at camp, a lifetime of memories.

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Foster a love for the natural world that lasts a lifetime

DEC Educational Summer Camps for 11- to 17-year-olds

DEC camps are affordable and fun, they introduce outdoor skills, offer optional hunter education programs, and feature highly qualified, exceptionally trained staff.

Visit www.dec.ny.gov/education/29.html for additional information.

- ★ **CAMP COLBY** (Northern Adirondacks)
- ★ **PACK FOREST** (Southern Adirondacks)
- ★ **CAMP RUSHFORD** (Western NY)
- ★ **CAMP DEBRUCE** (Catskills)

Robert F. Cook