

NEW YORK STATE  
**Conservationist**

for  
**Kids!**



**A Turkey Tale**

# Welcome to NEW YORK STATE Conservationist for Kids!

Jim Clayton

## In this issue:

You can go just about anywhere in New York State today and there's a pretty good chance you'll see

## WILD TURKEYS.

But that wasn't always the case. What happened to the wild turkeys? Theirs is a conservation success story and will help you understand how dedicated wildlife managers work to maintain healthy wildlife populations.

Send us a photo of yourself enjoying the outdoors.

### Contact us at

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### or e-mail us at

[cforkids@gw.dec.state.ny.us](mailto:cforkids@gw.dec.state.ny.us)

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You'll get six issues of the award-winning **Conservationist** magazine each year, plus **Conservationist for Kids** in the October, February and April issues.

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### Visit

[www.dec.ny.gov](http://www.dec.ny.gov) for links to lots of information about the outdoors. Check out DEC's online newsletter for families, *Outdoor Discovery*. Every two weeks readers receive articles about nature with fun activities for kids, plus lists of upcoming events at nature centers near you.

Go to [www.dec.ny.gov/public/43355.html](http://www.dec.ny.gov/public/43355.html) to sign up and have it e-mailed directly to you.

Cover photo courtesy of National Wild Turkey Federation (NWTf)

# A

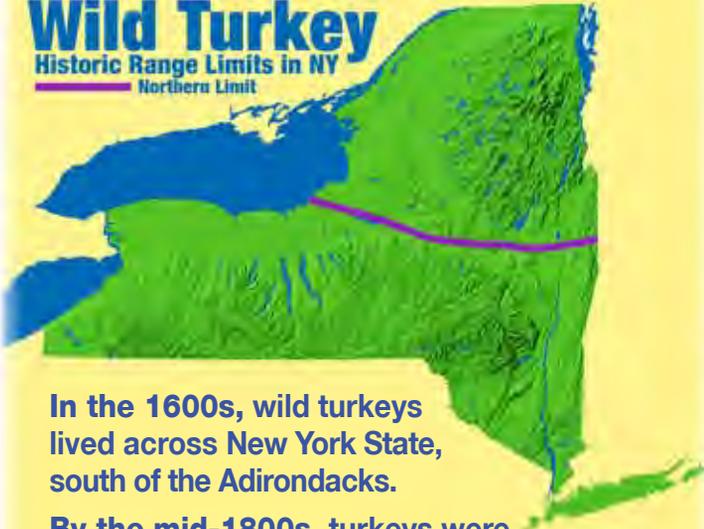
Eric Dresser

# TIMELINE

1600

2000

## Wild Turkey Historic Range Limits in NY Northern Limit



In the 1600s, wild turkeys lived across New York State, south of the Adirondacks.

By the mid-1800s, turkeys were completely gone from New York.

Today, they can be found everywhere in the state, including the high peaks of the Adirondacks and even in our largest cities.

**In the 1600s**, when Europeans arrived in what is now New York State, most of the land was covered by forests. Many kinds of wildlife lived in the forests, including wild turkeys. Early settlers cut down forests to make open areas for farming and to use the wood for building. The settlers did not understand how to balance needs of wildlife with their own needs. They cut a lot of forests, and important wildlife habitat was lost. There were no regulated hunting seasons in those days, and settlers hunted turkeys for food year-round. Wild turkeys sometimes wandered into barnyards, where they caught diseases and parasites from domestic turkeys kept by the settlers. This combination of habitat loss, unregulated hunting and domestic poultry diseases meant hard times for turkeys. **By the mid-1800s, wild turkeys were no longer seen in New York State.**

**By the late 1800s**, about three quarters of New York State was cleared of forests. Around the same time, some people began leaving their farms and moving into cities. Over time, some of the farmland became overgrown with brush and, later, with trees, making it suitable habitat for wild turkeys once again. Around 1948, a small group of wild turkeys moved into western New York State from northern Pennsylvania. They were the first wild turkeys back in New York in 100 years.

Find out what happened on the next page! →

## Habitat:

the key for all wildlife—the right amounts and kinds of food, water, shelter and space (the size of the animal’s home range), all arranged in a way that they can use

**DID YOU KNOW**  
that turkeys  
roost (sleep)  
in trees?



## Wild Turkey Habitat:

woodlands with different kinds of trees, places for roosting and good ground cover for nesting, plus a variety of foods, including plants, insects, fruits, beechnuts, acorns; also farm fields where waste grain is available



Wildlife managers help species survive by conserving their populations and habitats or, in some cases, by restoring species and their habitats that have declined or disappeared from New York. Turkeys are an important part of the forest ecosystem and food web, feeding on plants and insects, while being a food source for other wildlife. They are also an important part of our state's heritage and are a species that people like to hunt.

## Restoring Turkeys in New York

### When wild turkeys were found

in New York State in the late 1940s, it was clear that there was once again good habitat for them here. If left on their own, it could take many years for wild turkeys to spread into all the areas they once lived. The New York State Conservation Department (now the Department of Environmental Conservation) decided to help them by raising young for release into the wild. During the 1950s, eggs were collected from turkey nests in the wild and hatched at a game farm in Chenango County. Once they were old enough, the poults (young turkeys) were released into the wild at different sites across the state.

Almost 3,200 game farm turkeys were released during the program, but the farm-raised wild turkeys weren't wild enough to survive on their own. Only a few survived long enough to produce their own young in the wild.

Wildlife managers thought it might be better to capture and move wild turkeys that already knew how to survive. The **"Trap & Transfer"** program began in the spring of 1959. A flock of turkeys netted in Allegany State Park was moved to nearby Cattaraugus County. Wildlife managers were pleased to see that the birds survived and the hens laid eggs and raised young in their new location. The success of this new technique was key to wild turkey restoration.

From the 1960s through the 1990s, more turkeys were trapped and transferred. In all, about 1,400 turkeys were moved within New York State. They survived and reproduced, spreading across the state. They now number more than 250,000. New York was on the leading edge of wild turkey trap and transfer, and sent wild turkeys to the New England states, New Jersey, Minnesota, Rhode Island, Delaware, and the Canadian province of Ontario to help restore their populations as well.

# How **Trap & Transfer** Worked!



1

A cannon-fired net was set up in an area where turkeys were known to feed. Food was set out in front of the net to attract the turkeys.



2

This worked best in the winter. Natural food sources were limited due to the weather, and easy-to-get food was an attraction. Wildlife managers hid and waited for turkeys to arrive and begin feeding. (See the net on the right?)



3

They fired the cannons when the birds were within range of the net, and the net was thrown over the turkeys.



4

The birds were quickly removed from the netting.



5

Each bird was weighed, measured, and had a metal band attached to its leg before it was placed in a box for transport.



6

The turkeys were taken to a new area with suitable habitat and released together as a flock.

**Wildlife managers returned later to check on the turkeys and see how well they survived in their new home. Helpful information was also provided by hunters and others who observed the birds in the wild. Once turkey populations were large enough, a regulated hunting season was allowed with strict limits on where people could hunt and how many birds a hunter could take.**

# To help turkeys survive and thrive we need to understand



## Wildlife managers use science

to understand the threats that wildlife face: loss of habitat, poor habitat quality, disease, predators, weather, and more. They study animals and their habitats to understand what they require to survive, why their populations change over time, and how they can help wildlife overcome threats. They use the data they gather to make wise choices to help wildlife. The wildlife they help may be rare, common, or over-abundant (too many). What they learn helps them to keep wildlife populations at a level that their local habitat can support.

This information was essential to the wildlife managers who worked to restore turkeys to New York State. It helps today's wildlife managers ensure that turkey populations are healthy now and in the future.

## How we study turkeys



When a band is found and reported or "called in," biologists get information about the bird it came from, starting with where and when it was banded and where and when the band was found.

Sometimes people find the carcasses (dead bodies) of birds killed by predators or hit by cars and call in the band. Every year more than 100,000 hunters harvest more than 35,000 turkeys. When hunters harvest turkeys, they must report each one to DEC. This information, along with reports of birds with leg bands, helps biologists better manage the turkey population.

Satellite transmitters allow biologists to follow an animal's movements when they are out of sight.

With radio or satellite transmitters, researchers can learn how long turkeys survive, or track a hen to a nest to learn about the fate of her eggs or poults.



Pennsylvania Game Commission

## What have wildlife managers learned about turkeys?

The dense forests of the 1600s were not the best turkey habitat. People who study turkeys learned that a mix of woodlands with nearby old fields and crop fields offer turkeys more variety, with appropriate areas for nesting, feeding, raising young, and roosting in trees. Where this combination of habitat types is found, turkey populations flourish.



NWTF

Wild turkeys can fly 40 to 55 miles per hour, and they can run more than 12 miles per hour.

Turkeys are the largest and most popular game bird in New York State.

They can even swim!



**Other than humans,** the greatest threats to turkey survival today are predation and weather. Raccoons, skunks, and opossums are experts at sniffing out and eating turkey eggs. If the eggs survive and hatch, the young poults might be caught by a variety of predators, including hawks and foxes. Cold, wet weather in spring and summer make it hard for poults to stay



DEC

warm, and some die of hypothermia when their body temperature falls too low. Even though adults are large and can run and fly quickly, they can be killed by predators such as coyotes. Add to this the challenge of trying to survive a cold, snowy winter, and you quickly realize that it's tough out there for a turkey!

## Conservation Challenges

While turkeys are now common in New York State, upland sandpiper populations are falling as the grassland habitat they depend upon disappears. Their population today is less than half of what it was 20 years ago. DEC is working with Audubon New York to encourage landowners to protect upland sandpipers and other grassland birds by preserving and improving their habitats. With the help of concerned people, grassland habitats and the wildlife that depend on them will survive.



Philip Jeffrey

## Paying for Wildlife Conservation

Most of the money for wildlife improvement projects in New York State comes from the sale of hunting, fishing, and trapping licenses, and from the federal government. Money from license sales goes into a special account called the Conservation Fund. It is used for helping all kinds of wildlife, such as butterflies, bears and eagles.

In 1937, Congress passed a law that guaranteed funding to states for wildlife conservation. The Federal Aid in Wildlife Restoration Act says that anyone who buys guns, ammunition or archery equipment must pay a special tax. This money is

given to the states to help them manage wildlife populations and the habitats they depend upon. This money makes it possible for states to plan and carry out important wildlife conservation projects.

These federal funds have been used for many projects—the care of lands set aside for wildlife habitat; research on specific species such as turkeys, grouse, songbirds, deer and bats; restoring species like eagles and falcons—to name just a few. Since the start of the program, New York State has received more than \$150 million.

### TOMS or GOBBLERS

**ADULT MALES**  
(at least 2 years old)

Reach 17 to 20 pounds

Feathers are very dark; head featherless with white, blue and red skin

Have beards under their chins and spurs on backs of their legs

Sound is a "gobble"

### HENS

**ADULT FEMALES**  
(at least 2 years old)

Reach 10 to 13 pounds

Feathers are brown; head with few feathers and blue-grey skin

Make yelp, cluck and purr sounds

### POULTS

**YOUNG MALES or FEMALES**  
(up to 6 months old)

From about 6 months old until they become adults, males are called jakes, and females are called jennies

Sounds include peep, purr and putt.



Edmund J. Coppa



NWTF

# The OUTSIDE Page



Eric Dresser

## CITIZEN SCIENCE: Keeping Track of Turkeys

We often learn by watching something and recording what we see. The more eyes that are watching, the better the quality of the information gathered. Taking notes about your observations over weeks, months, or even years can help you discover if habitats and wildlife populations are changing.

Each year, DEC receives information from many volunteers—also known as “citizen scientists”—about turkey populations. If you see turkeys when you go outdoors, you could be a citizen scientist, too, and help the

biologists who are helping the turkeys. All you need to do is complete a form when you see turkeys and send the form to DEC. The information is used to figure out if changes are happening in the turkey population and why.

The winter flock survey takes place from January through March, and the summer sighting survey runs during August. Information and forms are available at [www.dec.ny.gov/animals/1155.html](http://www.dec.ny.gov/animals/1155.html) for the winter and summer surveys.

### Hunter Education and the Youth Turkey Hunt

Every hunter must have a hunting license. All first-time hunters must pass one or more courses before they can get a hunting license in New York State. Trained instructors certified by DEC teach safe and responsible outdoors practices and the important role of hunters in conservation. To learn more about the Sportsman Education Program go to [www.dec.ny.gov/outdoor/7860.html](http://www.dec.ny.gov/outdoor/7860.html).

For many families, hunting is a long-standing tradition passed on from generation to generation. A springtime youth turkey hunt encourages this tradition. Go to [www.dec.ny.gov/outdoor/27836.html](http://www.dec.ny.gov/outdoor/27836.html) to learn about New York's Youth Turkey Hunt for 12- to 15-year olds.



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### For more information:

DEC's wild turkey web page [www.dec.ny.gov/animals/7062.html](http://www.dec.ny.gov/animals/7062.html)

National Wild Turkey Federation [www.nwtf.org/](http://www.nwtf.org/)

All About Birds from the Cornell Lab of Ornithology [www.allaboutbirds.org/guide/Wild\\_Turkey/id/](http://www.allaboutbirds.org/guide/Wild_Turkey/id/)

All About Turkeys by Jim Arnosky (Scholastic, New York, 2008)

High Ridge Gobbler: A Story of the American Wild Turkey by David Stemple and Ted Lewin (Boyd's Mills Press, Honesdale, PA, 2001)

Returning Wildlife - Wild Turkeys by John Becker (KidHaven Press, Farmington Hills, MI, 2002)

Wild Turkeys by Dorothy Hinshaw Patent (Early Bird Nature Books/Lerner Publications Co., Minneapolis, MN, 1999)

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION New York State CONSERVATIONIST FOR KIDS Volume 4, Number 1, Fall 2010

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## **Conservationist for Kids**

### Supplement for Classroom Teachers – A Turkey Tale

#### **Wildlife Management**

One of the New York State Department of Environmental Conservation's (DEC) many and varied responsibilities to the people of the state is wildlife management. The goal of wildlife management is to keep common species common and to keep rare species from going extinct. Game species such as deer and turkeys are plentiful, and wildlife managers work to ensure the sustainable harvest of these species by hunters. Other species are less abundant, and managers monitor, protect, or restore these species and their habitats to secure their continued presence in the state. Where wildlife and people interact, wildlife management guided by sound science is a necessity for the health and safety of both wildlife and people.

Wildlife managers study the relationships among various aspects of ecosystems (e.g., predators and prey and the habitats they depend upon). They work to ensure that there is sufficient, appropriate habitat for wildlife and that ecological systems continue to function properly. DEC's wildlife managers work with other government agencies, non-profit groups, land owners and others to conserve, study, protect and enhance wildlife populations and habitats. In so doing, they contribute to the survival of wildlife species within our state. As human populations grow and expand into natural areas, interactions between people and wildlife become more common. Wildlife managers also work to limit negative interactions between people and wildlife. Though we may like to see deer, we don't want them so plentiful that they damage forest ecosystems through overbrowse or become a road hazard. Likewise, we don't want bears at our bird feeders or trash cans, but we like to know they're in the woods.

Many times wildlife managers let nature take its course. At other times, they deem it appropriate to step in and lend a hand, as was the case with wild turkeys. After years of habitat loss and unregulated hunting, wild turkeys were absent from New York State from the mid-19<sup>th</sup> to the mid-20<sup>th</sup> century. The presence of wild turkeys across the state today testifies to the perseverance of wildlife managers, as initial attempts to restore wild turkeys to their former range failed and a new technique—trap and transfer—was attempted and succeeded. According to the National Wild Turkey Federation, "The comeback of the wild turkey is arguably the greatest conservation story in North America's history." New York State became a leader in the effort to restore wild turkeys to their former range, so much so that turkeys from New York were used to repopulate other states.

#### **This Issue's "Outside Page"**

Citizen scientists contribute to conservation efforts and wildlife studies across the state every day. This issue's "Outside Page" encourages readers to participate in the annual winter and summer surveys of turkey populations. Participants help turkeys by helping DEC biologists track changes in distribution and abundance. Reporting forms are easy to complete and submit. General information about wild turkey research by DEC can be found at [www.dec.ny.gov/animals/48808.html](http://www.dec.ny.gov/animals/48808.html) while forms are available at [www.dec.ny.gov/animals/48756.html](http://www.dec.ny.gov/animals/48756.html) and [www.dec.ny.gov/animals/48732.html](http://www.dec.ny.gov/animals/48732.html) for the winter and summer surveys, respectively. You may also want to review the most recent survey results via links from these web pages to show your students how their contributions to the research into New York's wild turkeys may be used.

#### **Teacher Workshops**

For teachers who have participated in a Project WILD workshop, the activities listed below complement the fall 2010 issue of *Conservationist for Kids*. Visit [www.dec.ny.gov/education/1913.html](http://www.dec.ny.gov/education/1913.html) for information about workshops and about how to obtain curriculum and activity guides.

- Let's Talk Turkey
- What's That, Habitat?
- Habitat Rummy
- Planting Animals
- Pay to Play
- Oh Deer!

# Supplemental Activities for the Classroom

## Turkeys Aren't the Only Ones

Turkeys are not the only species whose population in New York State has been restored through the efforts of wildlife managers. Have your students work in small groups to research and report on other species that have been successfully restored or for which there are ongoing restoration projects. Information about fish and wildlife restorations in New York can be found at [www.dec.ny.gov/animals/30919.html](http://www.dec.ny.gov/animals/30919.html) (Suggestions: bald eagle, river otter, peregrine falcon, wood duck).

## Habitat Loss and Fragmentation

Large-scale clearing of New York State's landscape for timber and agriculture in the 18<sup>th</sup> and 19<sup>th</sup> centuries was a major factor in the decline of wild turkeys. As the state's forests recovered, so did turkeys. Unfortunately, there are species whose habitats are still being lost or fragmented through human development or vegetative succession. Some of these species are still relatively abundant (e.g., ruffed grouse, American woodcock), while others are threatened or endangered (e.g., Karner blue butterfly, Henslow's sparrow). Have your students work in small groups to identify specific examples of habitat loss and species that are affected. (Suggestions: grasslands and upland sandpipers; shrubland/young forests and golden-winged warblers; wetlands and cricket frogs)

- Upland sandpipers [www.dec.ny.gov/animals/59582.html](http://www.dec.ny.gov/animals/59582.html)
- Golden-winged warblers [www.dec.ny.gov/animals/59568.html](http://www.dec.ny.gov/animals/59568.html)
- Cricket frogs [www.dec.ny.gov/animals/7120.html](http://www.dec.ny.gov/animals/7120.html)

## Resources

DEC's information page on wild turkeys [www.dec.ny.gov/animals/7062.html](http://www.dec.ny.gov/animals/7062.html)

DEC's wild turkey brochure [www.dec.ny.gov/docs/administration\\_pdf/turkey.pdf](http://www.dec.ny.gov/docs/administration_pdf/turkey.pdf)

DEC's wild turkey poster [www.dec.ny.gov/docs/administration\\_pdf/turkey2.pdf](http://www.dec.ny.gov/docs/administration_pdf/turkey2.pdf)

DEC's Species Conservation page (including the New York Nature Explorer, State Wildlife Grants)  
[www.dec.ny.gov/animals/279.html](http://www.dec.ny.gov/animals/279.html)

DEC's "Animals, Plants and Aquatic Life" gateway page [www.dec.ny.gov/23.html](http://www.dec.ny.gov/23.html)

National Wild Turkey Federation (NWTF) [www.nwtf.org/](http://www.nwtf.org/) (Follow links to find background info, photos, sounds; look in newsletters and *Jakes* magazine for turkey-related activities.)

"Eastern Wild Turkey" bulletin from NWTF [www.nwtf.org/conservation/bulletins/bulletin\\_01.pdf](http://www.nwtf.org/conservation/bulletins/bulletin_01.pdf)

Cornell Cooperative Extension publication on wild turkeys

[www2.dnr.cornell.edu/ext/info/pubs/Wildlife/NYwildlife/eastern%20wild%20turkey.pdf](http://www2.dnr.cornell.edu/ext/info/pubs/Wildlife/NYwildlife/eastern%20wild%20turkey.pdf)

U.S. Fish and Wildlife Service information about the Wildlife and Sportfish Restoration Program

[wsfrprograms.fws.gov/Subpages/AboutUs/AboutUs1.htm](http://wsfrprograms.fws.gov/Subpages/AboutUs/AboutUs1.htm) (includes a PowerPoint presentation you can download)

"Birds of North America" from the Cornell Lab of Ornithology and American Ornithologists' Union

<http://bna.birds.cornell.edu/bna/species/022/articles/introduction>

"Tails by Mail" learning kit on wild turkeys, available for loan from Five Rivers Environmental Education Center; information at [www.dec.ny.gov/education/38095.html](http://www.dec.ny.gov/education/38095.html)

*The Wild Turkey: Biology and Management*, edited by James G. Dickson (Stackpole Books, Mechanicsburg, PA, 1992)

*Additional websites and books for children are listed in Conservationist for Kids magazine.*

*Conservationist for Kids* (C4K) and an accompanying teacher supplement are distributed to public school fourth-grade classes three times each school year (fall, winter and spring). If you would like to be added or removed from the distribution list, if your contact information needs to be changed or if you have questions or comments, please e-mail the editor at [cforkids@gw.dec.state.ny.us](mailto:cforkids@gw.dec.state.ny.us)

Printable activity sheets and links to other resources are on DEC's website. You will also find back issues of C4K and the activity sheets and teacher supplements associated with each of them. Visit [www.dec.ny.gov/education/40248.html](http://www.dec.ny.gov/education/40248.html)

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