

/// THE DIRT



Surge in humans threatens bald eagles

The growing human population has caused habitat loss, putting bald eagles and other raptors in danger. PHOTO COURTESY OF BEACON INSTITUTE/CHRIS LENNEY

By Terry Platz

The following is part two of a Q&A by Terry Platz of Beacon Institute for Rivers and Estuaries of Clarkson University with Peter Nye, retired leader of the New York State Endangered Species Unit, New York state Department of Environmental Conservation. Nye, one of the nation's top bald-eagle biologists, led the recovery effort to save New York's bald eagles from extinction. He will talk about his experience on Thursday at Beacon Institute's Center for Environmental Innovation and Education at Denning's Point in Beacon.

Your work with bald eagles began in 1976 in response to the sudden collapse of the eagle population caused by DDT. What would you say is the most important factor for the survival of endangered raptors in the 21st century?

Nye: In a word or two, limiting human activity on the planetary landscape. And here, several "activities" come immediately to mind. Obviously pollution and environmental contaminants played a significant role in the decline and endangerment of bald eagles and other raptors in the last half of the 20th century.

However, we've made enormous progress in identifying and eliminating much of this pollution and contamination. Although the potential for future, serious contaminants exists, I don't see this as an extinction factor going forward; this was not the primary factor leading to the massive decline of bald eagles in our country.

IF YOU GO ...

What: "Bald Eagles: Rising from the Brink of Extinction" with Peter Nye and Andrew Revkin. Peter Nye led the recovery effort to save New York's bald eagles from extinction, motivated by one remaining pair in the state. Nye shares his inspirational story with interviewer Andrew Revkin, "Dot Earth" blogger for The New York Times.

When: 7 p.m. April 18.

Where: Beacon Institute for Rivers and Estuaries, Clarkson University, Center for Environmental Innovation and Education, 199 Denning Ave., Beacon.

Cost: Free and open to the public. Advance online registration is requested.

Web: www.bire.org.

Although DDT and its breakdown products (DDE) and other compounds such as PCB, mirex, mercury, dieldrin, etc., had drastic effects on raptor reproduction and survival, these were merely "the straw that broke the camel's back," coming along well after major declines had already occurred. By the time DDT was introduced in New York, I estimate our bald eagle population had already declined by more than 80 percent from our historic numbers pre-European settlement. Why? Human occupation and alteration of the landscape.

Many eagles were shot and killed, but outright destruction of their habitat was the single biggest factor.

Consider the massive changes that occurred to New York's landscape since Europeans arrived. There was an immediate need to clear land for settlements and agriculture, along with the need for firewood, and significantly, ship's masts made from towering and straight white pines, bald eagles' favored nesting trees.

All such lumber along water courses (Hudson River, Delaware River, etc.), the most favored and necessary habitat for bald eagles, was the quickest and easiest to take out. As our population quickly grew,

so did the need for ever more clearing, firewood, lumber, and space. Even in the Adirondacks, considered our wildest and most remote area, some estimates say that up to 80 percent of all the landscape there was cleared by the end of the 1800s. And our population and "needs" continue to grow.

The world population hit 7 billion people in 2012, and is expected to add 50 percent more people, topping 10 billion, before this century ends; some estimate we could reach 10 billion as soon as 2050. In the United States, it took us only 38 years to increase our total population from 200 million to 300 million, a milestone we hit in 2007. It is estimated now that we will hit 400 million here by 2035, only 22 years from now. This may be surprising to some that the United States is the third most-populous country in the world. So, we've got lots of people demanding lots of space on a finite amount of property. This, to me, is the most significant and threatening concern for the future of bald eagles, all wildlife (and plants) and ourselves.

Some analysts have questioned the sustainability of further world population growth, citing the growing pressures on the environment, global food supplies and energy resources; technological ad-

vances, which have provided for us and kept up so far, can only do so much. Even if we are not unequivocally converting our remaining lands to developed areas, our effect on all "undeveloped" lands (if indeed there is such a thing) is pervasive. Think of the remotest place on earth, the top of Mount Everest, where so many people are attempting to go; long lines and waiting in unbelievable conditions occur. Or in our own Adirondacks, where such human pressure on remote, high-elevation alpine habitats exists, that it has us considering access permits, similar to other parks and green space such as in Baxter State Park in Maine, and many others. In a sense, we are loving our remaining open-areas to death. We want to observe, re-create, re-connect, re-energize in these remaining "wild" areas, often affecting their ecology and the living things that reside there. This is not to say we cannot and should not use such areas, but I would argue that we need to do so more intelligently as to the effects on and needs of the resources existing there. Also, there are undoubtedly places so unique and critical, that we simply should stay out of them. All places cannot be all things to all people.

Our greatest challenge going forward is to ensure that we understand our surroundings and fellow creatures, and that we intelligently plan for and allow for all to persist. A good and simple question to leave you with is this: are the habitats in New York now occupied by bald eagles still going to be here and suitable in 2050? If not, we will see eagles (and other species) re-commence their decline.

Terry Platz is associate public affairs officer for the Beacon Institute of Rivers and Estuaries in Beacon. The Dirt is a regular feature in My Valley.

/// RIVER LIFE

March 21



Eileen Cunningham saw a seal eating a fish near the Saugerties lighthouse recently. PHOTO COURTESY OF U.S. FISH & WILDLIFE SERVICE

Saugerties: I saw a seal eating a fish about 25 feet off Lighthouse Point by the Saugerties Lighthouse today. It then swam to about 15 feet from me, I suppose to get a look. I had my binoculars: I only saw its head and neck but they were gray and smooth with large dark eyes.

— Eileen Cunningham

This was almost certainly a harbor seal. While they can be seen, on occasion, almost any time in the estuary, especially in winter when they haul out on ice floes, spring is their season. As schools of river herring and shad ascend the river, the seals are not far away.

— Tom Lake

New Paltz: Well after dark as I was driving on Shiverstown Road a small, white, furry mammal ran across the road in front of me. It was not a cat — its body was lower and more elongated and its head and ears were much smaller. It was an ermine, a short-tailed weasel. It bounded along the power line clearing, almost instantly blending in with the snow on the field.

— Deb Weltsch

March 24

Staatsburg: I had noticed owl pellets under a pine tree in my yard for the last few weeks. Today I saw more of them so I looked up inside the tree and saw a long-eared owl looking back.

— Karen Simmons

March 25

Rhinebeck: Visiting my feeder for the past week, along with red-winged blackbirds, various woodpeckers, common redpolls, wrens, chickadees and other finches, was a northern mockingbird. ... I was also privy to a pair of mourning doves' mating activities. There was still snow several inches deep ... but the wetlands across the road were teeming with life. A great blue heron winged past. ... The first fat robin arrived and stayed for awhile. Slowly the spring season is on its way.

— Joanne Engle

Poughkeepsie: Upon arriving for my Monday morn-



Michael Fraatz saw two killdeer like this one in Poughkeepsie recently. PHOTO COURTESY OF U.S. FISH & WILDLIFE SERVICE

ing shift at the "Home of Rock N' Roll," two killdeer were calling away, maneuvering between the open field area containing two large radio towers and the small pond adjacent to the parking lot.

— Michael Fraatz

March 27

Furnace Woods: The barred owl chorus began in the usual way, with the male and female calling back and forth: "Who cooks for you, who cooks for you all?" And then, cacophony — a full five minutes of grunts, groans, mutterings, and wheezes.

— Christopher Letts

"River Life" contains excerpts from the Hudson River E-Almanac, compiled by Tom Lake for the state Department of Environmental Conservation. Email trlake7@aol.com. To get the E-Almanac, email hrep@gw.dec.state.ny.us.

Species Spotlight

EASTERN COTTONTAIL

By Shanán Smiley

Looks like: Cottontail rabbits grow up to 17 inches long and weigh about 3 pounds. They have brownish-gray fur and a white tail that looks like a piece of cotton.

Lives in: Heavy brush, forests with open areas nearby, and edges of swamps. Cottontails burrow in the ground or under brush piles.

Food web: The cottontail diet changes throughout the year, with vegetation providing food in summer and bark and twigs in winter. These rabbits are prey for fisher, coyote, fox, bobcat, hawks and large owls.

Threats: Cottontails are trapped for fur and when they get into people's gardens. They are often hit by cars.

Frequency: Common

Reproduction: Mating occurs throughout the spring and summer and young are born about a month later. A litter can have as many as 7 young and females can give birth to as many as 4 litters a year.

Fun facts: Cottontail populations fluctuate because many are born some years, but are then heavily preyed on so that fewer survive to reproduce the following year.



An eastern cottontail can have up to four litters per breeding season with as many as seven young in each litter. PHOTO COURTESY OF DAVID JOHNSON