The Outside Story



ATANDO

Return of the Eagles By: Michael J. Caduto

To the delight of all who revel in the grace and beauty of nature, bald eagles are soaring above New England in numbers unseen for over a century. We've come a long way since the days when poor farming and logging practices denuded our forests, choking streams with silt and compromising the food chain. We now know that if you degrade the eagle's habitat and pollute the water you affect the entire web of life, including fish-eating birds in the skies above.

Human regard for wild animals has also changed. "In the 1800's, it was not uncommon for eagles to be shot for stealing fish and chickens." said John Buck, a wildlife biologist and Nongame Bird Project Leader for the Vermont Department of Fish and Wildlife (VDFW).

Concern over the decline of bald eagles and other birds inspired the Migratory Bird Treaty Act, which was enacted by the U.S. and Canada in 1916. The Bald and Golden Eagle Protection Act of 1940 created even stronger protections, aiming to conserve migratory birds and preserve essential habitat.

However, eagle populations continued to decline. The use of DDT and other pesticides after World War II caused widespread nest failures from weakened eggshells and stunted embryonic development. In 1949, the last productive bald eagle nest in New Hampshire was recorded at Lake Umbagog.

According to Margaret Fowle, Conservation Biologist for Audubon Vermont, eagles never disappeared entirely from the Northeast, but fewer than 100 birds remained. By the mid-1970's, nesting was limited to Maine and New York.

The Environmental Protection Agency's 1972 ban on DDT and passage of the Clean Water Act set the stage for the eagle's rebound. More recently, the shoreline protection acts in Vermont and New Hampshire promise to reduce the negative impacts of construction on eagle habitat.

Starting in 1976, the New York Department of Environmental Conservation worked with the Cornell Lab of Ornithology and the U.S. Fish and Wildlife Service (USFWS) to raise bald eagle chicks. During a process called "hacking," they placed captive-bred eagle chicks in the nests of adult eagles in the wild, which then fostered the chicks. In 1982, Mass Audubon and the Division of Fisheries and Wildlife began another hacking program at the Quabbin Reservoir.

Between 2004 and 2008, 29 subadult eagles were released in Vermont during a collaborative effort between VDFW, National Wildlife Federation, USFWS, Outreach for Earth Stewardship and Central Vermont Public Service. "None of those birds appear to have settled in Vermont," said Buck. "All of our nesting pairs are the result of population expansion from neighboring states." Vermont's first successful eagle nest was found in 2008 at the Springfield Reservoir.

New Hampshire Audubon has managed that state's bald eagle project in collaboration with the New Hampshire Fish & Game Department and the USFWS. And said Chris Martin, Senior Biologist at New Hampshire Audubon, "TransCanada provided a significant grant that boosted bald eagle recovery efforts in New Hampshire and neighboring Vermont."

Biologists and volunteers have studied and protected bald eagle populations for more than 35 years: counting numbers and nests, posting nesting and roosting sites, installing guards to thwart predators, and tracking individuals by banding and monitoring young. As a result, "New Hampshire's breeding population has been doubling roughly every five years over the past 20 years," said Martin. "Over-wintering populations have also been increasing steadily."

In 2015 and 2016, during the annual Midwinter Bald Eagle Survey, record numbers of 90 or so eagles were recorded in New Hampshire (about 60 adults), with most spotted in the Lakes Region and along the Connecticut and Merrimack Rivers. Vermont's winter counts also spiked, with 81 eagles seen in 2015 and 59 in 2016, including around 30 adults, mostly near Lake Champlain and the Connecticut River.

The bald eagle was removed from the federal endangered species list in 2007, but is still considered threatened in New Hampshire and endangered in Vermont. Eagles continue to be harmed by eating fish or carrion contaminated with lead from

fishing tackle or ammunition as well as mercury from the environment, poisoned bait intended for other animals, electrocution from power lines, human disturbance at nest sites and by being hit by cars and trains as they feed on carrion.

"There's a sense that since eagles are off the federal list, they're doing well," said Fowle. "But there's still climate change and other threats. We need to be good stewards if we want to have them here for a long time."

"Eagles are an environmental success story," said Buck. "They're imbedded in the folklore of this country. It's magnificent to see a bald eagle. They are a beloved creature."

Readers who would like to become involved in the Bald Eagle survey or monitoring activities can contact Chris Martin at New Hampshire Audubon, cmartin@nhaudubon.org; or Margaret Fowle at Audubon Vermont, mfowle@audubon.org.

Michael J. Caduto is an author, ecologist, and storyteller who lives in Reading, Vermont.

The illustration for this column was drawn by Adelaide Tyrol. The Outside Story is assigned and edited by Northern Woodlands magazine, northernwoodlands.org, and sponsored by the Wellborn Ecology Fund of New Hampshire Charitable Foundation: wellborn@nhcf.org



This article is reprinted with the permission of the Center For Northern Woodlands Education. A not for profit organization, Northern Woodlands seeks to advance a culture of forest stewardship in the northeast by increasing understanding of and appreciation for the natural wonders, economic productivity and ecological integrity of the region's forests. Subscribe or donate at www.northernwoodlands.org.