MERCURY RISING: Bald eagles in region face new threat

More Photos

Click thumbnails to enlarge
MERCURY RISING: Bald eagles in region face new threat - The Daily Freeman

1/18/2009

AFTER BEING pushed by humans to the brink of extinction and then re-establishing habitats in the Hudson River Valley and Catskill Mountains, bald eagles are again facing a manmade threat to their existence.

A Maine-based environmental organization has found an alarming accumulation of mercury in the blood and feathers of both juvenile and adult bald eagles in the Catskills.

While environmentalists say there is not yet conclusive scientific data to indicate the eagles are being harmed by the mercury levels in their systems, the study has found mercury levels in Catskills eagles to be close to those associated with neurological and reproductive problems in the common loon in the Adirondack Mountains and in Maine. The study also seems to support the belief that the Catskill Mountains region is a likely “hot spot” for methylmercury.

ACCORDING TO a recently released report by the BioDiversity Research Institute, a nonprofit environmental organization based in Gorham, Maine, eagle chicks in the Catskill Park exhibited the highest blood mercury levels among eagles statewide.

The institute, along with The Nature Conservancy and the New York State Department of Environmental Conservation, conducted a five-year study of juvenile and adult eagles across the state to determine the risk to bald eagles from methylmercury, a highly toxic element that can damage the central nervous system and cause birth defects, neurological problems and developmental delays. It was the first study to evaluate the relationship between fish and bald eagle concentrations in the northeastern United States.

CHRIS DeSorbo, the lead investigator of the study and director of the BioDiversity Institute’s raptor program, said that, in the course of the study, which covered the period 1998 to 2006, tests were conducted on the blood and feathers from 65 eaglets in 41 territories statewide, including 32 samples from 16 territories in the Delaware/Catskills region. Mercury levels in the feathers of 37 adult eagles from 35 territories statewide, including 15 samples from 12 territories in the Delaware/Catskills region, also were tested.

DeSorbo said bald eagles are particularly at risk from mercury because they have a long life span and feed primarily on fish. Current studies of bald eagle populations in Maine, he said, seem to indicate that mercury may be negatively affecting the birds’ ability to reproduce and survive.
“We were concerned that, if mercury was getting into eagles in high concentrations, it would start causing problems,” said David Braun, director of conservation science for The Nature Conservancy’s Eastern New York region. “We already knew mercury is a problem for the common loon in the Adirondacks and in Maine. If we could identify mercury pollution problems in eagles in New York, we knew it would be a crucial piece of environmental information and would shape how we as advocates would move forward.”

PAST STUDIES have shown that high mercury concentrations in loons have led to lethargy and behavioral disorders that have made it difficult for the birds to feed, reproduce and sit in their nests.

The bald eagle study revealed that eagle chicks in one-quarter of the territories sampled in the Catskills region had elevated mercury levels and that mercury levels in eaglets sampled in lakes and reservoirs in or near the Catskill Park boundary were the highest in the state. It also found that no eagle chicks sampled in areas outside the Catskills region had mercury concentrations of concern.

One-third of the adult eagles in the Catskills region were found to have accumulated mercury in their bodies at levels associated with harmful effects in other fish-eating birds, like the common loon. Statewide, one-fourth of the adult eagles tested were found to elevated mercury levels.

ONCE SO plentiful throughout the region that they were killed indiscriminately as a nuisance, the bald eagle — a symbol of the United States — was on the verge of extinction by the early 1900s.

To protect the remaining bald eagles, Congress adopted the federal Bald Eagle Protection Act of 1940, which prohibited the killing or selling of bald eagles. At the same time, the emergence of the pesticide DDT (dichloro diphenyl trichloroethane) poisoned fish, the primary food source for eagles, and caused the shells of the eggs from state’s only nesting pair of eagles to become so fragile that they collapsed during incubation.

A national ban on DDT in 1972, the 1975 initiation of the state’s Endangered Species Program and the passage of the federal Endangered Species Act of 1993 began a dramatic turnaround for the bald eagle.

IN 1975, the state Department of Environmental Conservation launched an eagle restoration program, headed by Peter Nye, who today is head of the agency’s endangered species division.

That effort really began the dramatic comeback in the eagle population. By January 2008, 573 bald eagles were tallied statewide, up from the 324 counted a year earlier. Significantly, the number of immature eagles rose during that period from 125 to 234.

IN 2007, the environmental group Hudson River Sloop Clearwater scored a victory in its effort to prevent or mitigate the ongoing killing of bald eagles along the Hudson River rail corridor.

Working with a pro-bono attorney, the environmental organization reached a landmark agreement with the state Department of Environmental Conservation and three rail companies — Metro-North, Amtrak and CSX — for the railroads to clear the tracks twice weekly of dead animal carcasses — a major attraction to bald eagles, which are opportunistic feeders. The rail companies also agreed to report eagle fatalities or injuries along the tracks and begin to accumulate data to help create a habitat conservation plan for the eagles.

“That was a very excellent victory that we had,” said Manna Jo Greene, a Cottekill resident and environmental director of Hudson River Sloop Clearwater. “It was no small request on our part, and it really ended up being a very positive collaborative process.”

Greene said that although the effort still is in its infancy, there has been a noticeable decline in the number of eagles killed by trains. Before the accord was reached, she said, 13 bald eagles were killed by trains in one year alone.

THE FIGHT to protect eagles in the Catskill Mountains from the effects of mercury may not be as easily won, but a recent agreement between the U.S. Environmental Protection Agency and nine states, including New York,
could bode well for the raptors’ future.

On Friday, state Attorney General Andrew Cuomo announced that his office, leading the nine-state coalition, reached a settlement with the EPA requiring new limits on the amount of mercury and other toxic pollutants that cement plants can discharge. In 2007, the coalition filed a lawsuit against the EPA for adopting air emission standards for cement plants that did not adequately control mercury and other air pollutants. The settlement requires the EPA to propose new standards for emissions from cement plants by March 31, 2009, and to adopt final standards in 2010.

“Cement plants are among the worst mercury polluters in this country,” said Jim Pew, an attorney with Earthjustice, which joined in the lawsuit.

THE CATSKILLS region receives some of the worst mercury contamination in the nation, in large part due to cement plants, coal-fired power plants, waste incinerators and other smokestack industries, generally located in the Midwest. A naturally occurring element, mercury is transformed into the highly toxic methylmercury by a number of environmental factors that are particularly prevalent in the Catskills region. Environmental experts say the few federal regulations governing mercury emissions are woefully inadequate to address the issue.

Methylmercury accumulates in the sediment of lakes and other water bodies in the region and makes its way up the food chain, eventually finding its way into the fish that inhabit the waterways.

Since 2001, the state Department of Environmental Conservation has tested mercury levels in 148 lakes, reservoirs and ponds across the state.

And although mercury poses no threat to drinking water supplies, the state Department of Health has placed consumption restrictions on fish found in 63 water bodies — including the Ashokan and Rondout reservoirs in Ulster and Sullivan counties, North and South lakes in Greene County and the Schoharie Reservoir in Schoharie County — due to mercury contamination.

Comments

The following are comments from the readers. In no way do they represent the view of DailyFreeman.com.

esopusdave wrote on Jan 18, 2009 10:00 AM:
"Let's drink to all the things we have been assured are safe, only to learn later are harming us. Lead, asbestos, tobacco, Thalidomide, X-rays... All our federal agencies have been stripped of the power to protect us and redirected to protect big business from responsibility. Imperial Rome had lead that drove their leaders to imbecility. Imperial global corporations give us lead, mercury, radiation, pesticides, mad cow, PCB, and ten thousand other poisons. The problem starts at the top. It can't be solved at the bottom by fighting each toxin one at a time. Ralph Nader was vilified by big business for winning many important battles that protect us from their deadly greed. Say what you like, Ralph saved millions of lives. It is time to pick up his torch and demand our new government stands up to the global corporations and protects the people."

Login To Comment

You must be logged in to post a comment.

*Member ID: 

*Password:

Remember login? [ ]

(requires cookies)
Not Registered? Sign up today for free!

Do not use usernames or passwords from your financial accounts!

Note: Fields marked with an asterisk (*) are required!

*Create a Member ID: 
*Choose a password: 
*Re-enter password: 
*E-mail Address: 
*Year of Birth: 

(Children under 13 cannot register) 

*First Name: 
*Last Name: 
Company: 
Home Phone: 
Business Phone: 
*Address: 
*City: 
*State: 
*Zip Code: 

Create Account