



The Adirondack Tremolo

2004 Winter Newsletter – Volume 3, Issue 1

Loon Migration – Linking People and the Environment

Every fall, the most common question asked of the Adirondack Cooperative Loon Program is “Where do Adirondack loons go in the winter?” The answer to this question is critically important for the development and implementation of state and federal loon conservation efforts. Knowing the seasonal migratory patterns and year-round habitat utilization of loons will enable wildlife managers to focus their efforts based on the risks the birds are exposed to throughout their range.

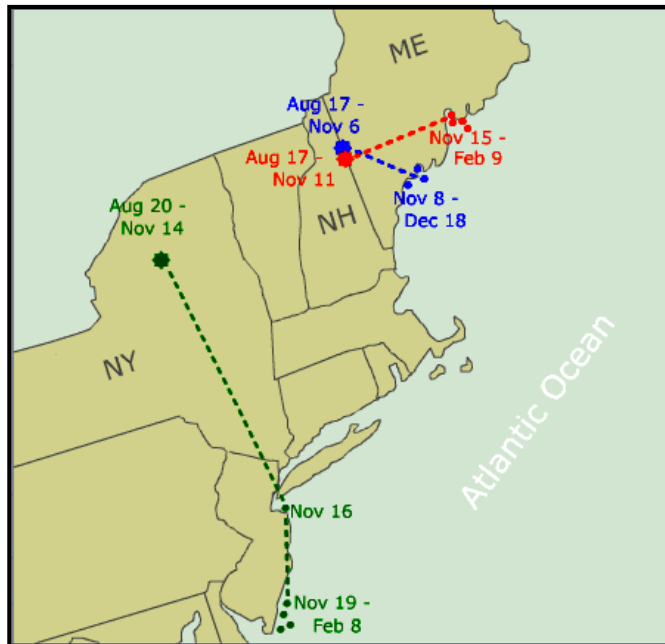
Thus, in August 2003, ACLP and U.S. Geological Survey scientists initiated an exciting study to identify the migratory paths and wintering areas of Adirondack loons. Two birds were equipped with satellite transmitters to record the birds’ southerly migrations, which, until now, had been largely unknown. Using satellite telemetry techniques, this ground-breaking loon migration project will greatly expand our understanding of Common Loon natural history by identifying migration routes, staging areas, and wintering grounds important to loons that summer in New York’s six million acre Adirondack Park.

The ACLP’s new research will complement studies conducted by the USGS and U.S. Fish & Wildlife Service, in the Midwest and New Hampshire, aimed at identifying significant habitats for North American loon populations. The information obtained from these birds about their seasonal migratory patterns and habitat selection will be valuable for the development of statewide, regional, and national loon conservation strategies. Through this innovative research, the

Adirondack Cooperative Loon Program will examine the year-round distribution of Northeastern loon populations, and provide information to better assess the impacts of how environmental factors, such as mercury pollution, acid rain, botulism and oil spills, affect loons throughout their range.

The Adirondack Cooperative Loon Program’s education efforts will be expanded to include an interactive portion of its website, www.adkscience.org/loons, which will enable Adirondack

residents, visitors, and the general public to learn firsthand about the year-round habitat requirements and conservation issues affecting the Adirondack loon population. Students throughout North America will have the opportunity to participate in ACLP’s research via the website and through classroom curricula that will focus on the ecological connections between loon breeding, migratory and wintering areas throughout their range. ACLP’s Loon Migration Education Project will provide students with the opportunity to follow in real time our scientific investigation of loon migratory movements as intriguing new developments occur in the field.



This loon migration research project is a joint effort between ACLP’s partners, U.S. Geological Survey, and the U.S. Fish and Wildlife Service. This project is funded by the New York State Dept. of Environmental Conservation through the USFWS’ State Wildlife Grants Program, a grant from the New York State Biodiversity Research Institute to the Natural History Museum of the Adirondacks, USGS, and the US Fish and Wildlife Service. The Wildlife Conservation Society’s field veterinary staff assisted with equipping loons with satellite transmitters.

Follow Adirondack Loon Migrations on ACLP’s Website, www.adkscience.org/loons!
Join ACLP and USGS scientists in tracking Adirondack and New Hampshire loons through their migration and see maps documenting their year-round movements!

ACLP'S LOON MERCURY RESEARCH

*The Adirondack Cooperative Loon Program (ACLP) is a cooperative research and education effort focusing on the natural history of the Common Loon (*Gavia immer*) and the effects of contaminants and human interactions on loon populations in the Adirondack Park of New York State.*

The Adirondack Cooperative Loon Program is a partnership of the Wildlife Conservation Society, Natural History Museum of the Adirondacks, New York State Department of Environmental Conservation, BioDiversity Research Institute of Falmouth ME, and the Audubon Society of New York State, Inc.

ACLP Steering Committee:

- Heidi Kretser and Michale Glennon – Wildlife Conservation Society
- Rick Godin and Valerie Trudeau – Natural History Museum of the Adirondacks
- David Adams – NYS Dept. of Environmental Conservation
- David Evers and David Yates – BioDiversity Research Institute of Gorham, ME
- Fred Realbuto – Audubon Society of New York State, Inc.

Program Coordinator:

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www.adkscience.org/loons

In 2003, support from the New York State Energy Research and Development Authority enabled the ACLP to expand its environmental mercury research. This study will provide a better understanding of the flow of mercury through aquatic ecosystems to concentrate in top predators such as loons. During the 2003 field season, samples were collected from loons, lake water, prey fish, crayfish, zooplankton, and lake sediments to determine mercury levels throughout the food chain.

During the 15-week field season, ACLP field staff and volunteers monitored the activities of color-banded loons on 62 lakes within the Adirondack Park. These observations allow the ACLP to determine the return rates (number of banded loons returning to the same territories) and reproductive success (the number of chicks/eggs laid and territorial loon pair that survive to fledging age). Through this intensive research, the ACLP is able to gain insight into long-term loon population trends and the impacts that mercury and other factors may have on the Adirondack loon population.

We are grateful to the many ACLP volunteers and the students and staff from the Wildlife Conservation Society, Paul Smith's College, SUNY's College of Environmental Sciences and Forestry's Adirondack Ecological Center for their assistance in our loon monitoring efforts.

ACLP's loon-mercury research will contribute to other mercury pollution studies in the Northeast, leading to increased knowledge and awareness of the impacts of environmental mercury pollution on wildlife species and aquatic habitats on a local and regional scale.

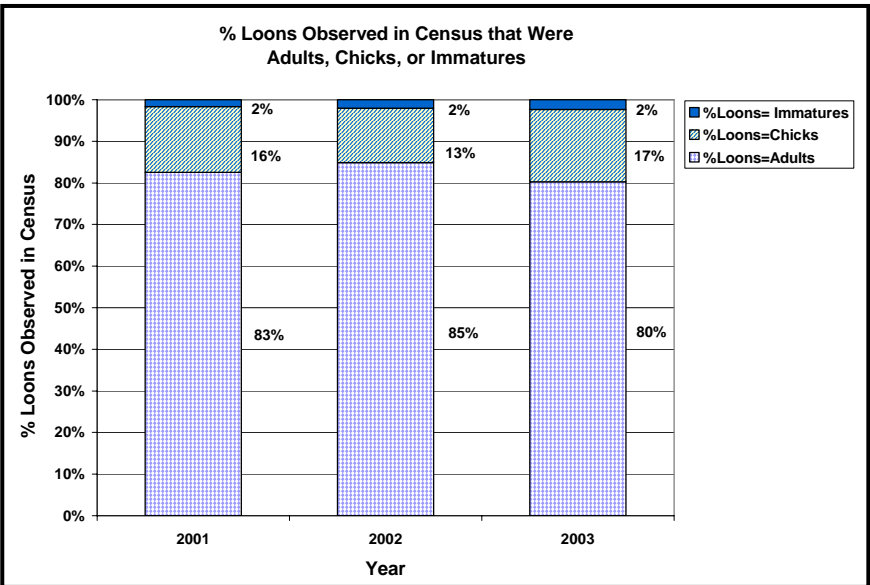
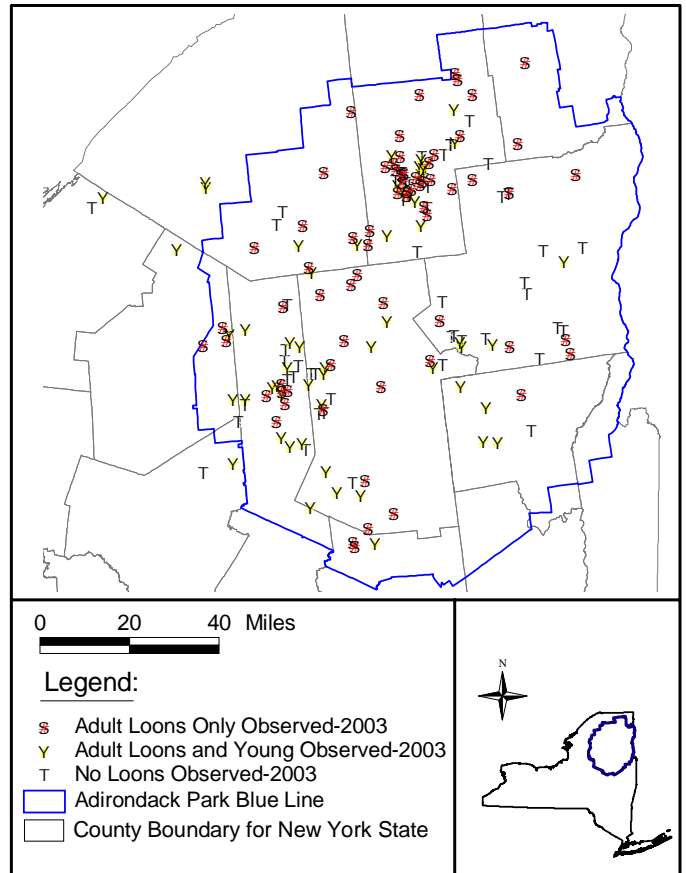


Summer 2003 Loon Census Results Are In!

On Saturday, July 19th, 2003, the ACLP conducted its third Annual Loon Census as part of a long-term study to monitor trends in the Common Loon population summering in and around the Adirondack Park. From 8-9a.m., over 370 dedicated volunteers surveyed lakes and ponds throughout the region. They reported on the number of adults and juvenile loons observed, as well as important lake attribute information, including shoreline development and vehicle accessibility, which will be used to better characterize loon habitat utilization.

Volunteers reported on 181 lakes, 172 of which were located in the Adirondack Park. The map at right represents the locations of the lakes and ponds surveyed, and where adult loons and young were observed.

A total of 472 loons were observed on 124 (69%) lakes. Of these birds, 379 (80%) were adults, 82 (17%) were chicks, and 11 (2%) were juvenile birds. The chart below indicates that the proportions of adults vs. young loons observed has remained relatively constant over the three years of the Annual Loon Census.



This season, adult loons with chicks were reported on 55 (30%) of the total 181 lakes surveyed. Adult loons without chicks were observed on 69 (38%) lakes. No loons were observed on 57 (31%) of the census lakes.

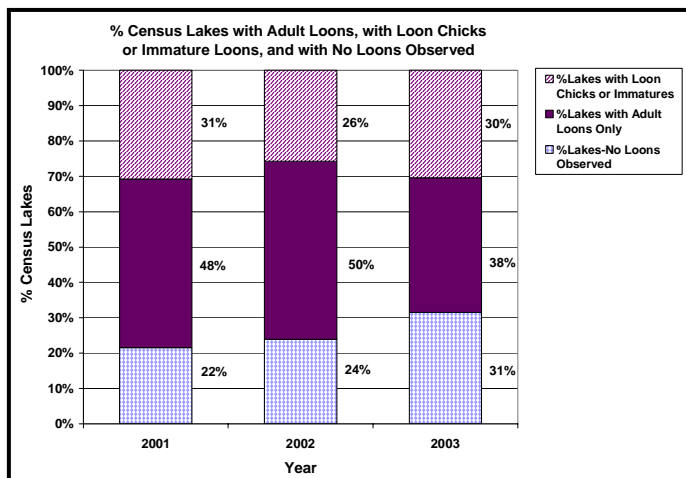
Random Lakes
Why Are They Important?

New for 2003, ACLP requested census volunteers to choose a lake from a list of randomly selected lakes in the Park. The reports from these random lakes will enable ACLP to better estimate the Adirondack loon population using statistical techniques. Accessibility to some of these sites was sometimes difficult, and we are extremely grateful to the volunteers who surveyed 38 of the random lakes, providing us with valuable information.

We encourage future census observers to continue to pick their lakes from the random lake list posted to our website. ***The more random lakes included in the census, the better we will be able to estimate the Adirondack loon population.***

The chart to the right compares the percent of census lakes where loons were observed between the three census years. Analysis of this chart indicates that the percent of census lakes with adult loons is lower and the percent of lakes without loons is higher in 2003 than in previous years. Year-to-year fluctuation in loon numbers is not unexpected in such a long-lived species.

It was a truly beautiful morning on the water, and based on our results, it appears the birds agreed! We are looking forward to another great census in 2004!



MANY THANKS TO ALL OUR CENSUS VOLUNTEERS – YOUR OBSERVATIONS MAKE THE CENSUS A SUCCESS!

To learn more about the results of ACLP's Annual Loon Census, please visit our website, www.adkscience.org/loons/

Information about participating in the July 17, 2004 Annual Census will be available in our Spring/Summer, 2004, newsletter, and posted to our website in late spring, 2004.

ACLP'S PUBLIC PROGRAMS

Public Presentations:

During the summer of 2003, ACLP presented 20 public programs and field trips to over 900 Adirondack Park residents and visitors. Through ACLP's presentations, the public has the opportunity to meet ACLP's scientists first-hand, and learn about loon natural history, environmental and anthropogenic factors affecting loon populations, and ACLP's research and education projects.

Want to learn more about loons and the Adirondack Cooperative Loon Program? Please contact ACLP to schedule a presentation for your group!



Loon Scientists Program:

Adirondack students in seventh-grade classes throughout the Park participated in the ACLP's Loon Scientists Program in the fall and winter of 2003-2004. This week-long curriculum engages students with interactive projects to learn about loon natural history, including the effects of contaminants and human interactions on the Adirondack loon population.

ACLP's Loon Scientists Program enables students to increase their awareness of conservation issues affecting wildlife and their habitats, using Common Loons as an example. In addition, participants gain a better appreciation of how their actions can assist loon conservation efforts in the Adirondack Park and North America.

Beginning in the fall of 2004, ACLP will also offer a Loon Migration Program for interested classes in and around the Adirondack Park. In addition, a web-based curriculum will be available for classes along loon migration routes, enabling students of all ages to actively participate in ACLP's research.

Teachers! Please contact ACLP if you are would like to schedule a Loon Scientists or Loon Migration Program for your classroom!

THANK YOU!

We are deeply appreciative of the continued support and assistance of people interested in loons in the Adirondack Park and the Adirondack Cooperative Loon Program. The ACLP is only able to accomplish our research and education projects through the assistance and generosity of Park residents and visitors, as well as the staff and volunteers of our partnering organizations.

We are especially grateful to the following people and organizations for their contributions to the Adirondack Cooperative Loon Program:


- ❖ Bullet Weights
- ❖ Eagle Optics
- ❖ Elk Lake Lodge
- ❖ New York State Biodiversity Research Institute
- ❖ New York State Energy Research and Development Authority – especially M. Watson
- ❖ M. Jeanne Place Charitable Foundation
- ❖ John and Evelyn Trevor Charitable Foundation
- ❖ J. and E. Griffiths
- ❖ E. Spitzer
- ❖ USGS's Upper Midwest Environmental Sciences Center – especially K. Kenow and R. Kratt
- ❖ S. Wardner
- ❖ M. Wilson

Many dedicated volunteers have also donated generously of their time and energy to assist in ACLP projects, especially our 2003 Annual Loon Census. We are greatly indebted to each of you!

The ACLP would also like to thank:

- ❖ The private landowners who generously provided access to their lakes for our weekly monitoring activities and banding research efforts.
- ❖ The many fishing supply stores and boat launches that participated in our 2003 Lead Sinker Exchange Project.
- ❖ All the concerned residents and visitors who have helped us get the lead out of Adirondack lakes and ponds!
- ❖ And last, but definitely not least, our enthusiastic and devoted field staff who have spent many hours during the 2003 field season looking for loons in a variety of conditions – although it may seem like a dream job sometimes, the long nights, blackflies and steady rain tell a different story!

You, too, can help ACLP's research and education efforts! Please send in the support form below!



YES! I WOULD LIKE TO SUPPORT THE ADIRONDACK COOPERATIVE LOON PROGRAM'S SCIENTIFIC RESEARCH AND EDUCATION PROJECTS!

Your tax-deductible donation payable to the Wildlife Conservation Society or the Natural History Museum of the Adirondacks* supports ACLP's exciting and innovative research and education endeavors.*

Enclosed is my donation* to: Wildlife Conservation Society Natural History Museum of the Adirondacks
**WCS and NHMA are ACLP's funding partners – both organizations can process donations for ACLP's projects.
(Please write ACLP in the memo line of your check.)*

I have enclosed a check, in the amount of \$ _____

Please charge my donation of \$ _____ to: Visa Mastercard American Express (WCS only)
Card # _____ Expiration Date: _____

Signature: _____

I am unable to contribute a donation at this time, but I am interested in learning more about ACLP's projects. Please keep me informed about ACLP's future activities.

I would like to volunteer with the Adirondack Cooperative Loon Program! I am interested in helping with:

- ACLP's loon mercury research (e.g.: monitoring banded loons)
- ACLP's education projects (e.g.: public or school presentations, newsletter, Lead Sinker Exchange)
- ASNY's Loon Ranger Program, monitoring loons on a lake near me

Name: _____

Street Address: _____

City, State, Zip: _____

Phone: _____

E-Mail Address: _____

Please Clip This Form and Return It To: Adirondack Cooperative Loon Program, P.O. Box 195, Ray Brook, NY 12977

Thank you for your support! Your contributions will enable us to continue this vital conservation and education effort.

Remember to Check Our Website!
www.adkscience.org/loons

- Follow the migration of Adirondack loons!
- Review the 2003 Annual Census Results!
- Discover exciting facts about these unique birds.
- Explore regional and national environmental issues affecting loons and their habitats.
- Learn about ACLP's education programs & public presentations.
- Join our loon discussions.

**Schedule a presentation about the
Adirondack Cooperative Loon Program!**

- Learn more about loon natural history and ACLP's research and education efforts.
- Please contact (518) 891-8836 or aclp2@juno.com

Want to Volunteer with ACLP?

- ❖ Assist with the Lead Sinker Exchange Project.
- ❖ Monitor banded loons.
- ❖ Present education programs.
- ❖ Become a "Loon Ranger" – contact Fred Realbuto at the Audubon Society of New York State, Inc.: (518) 767-9051x15; frealbuto@audubonintl.org.

For More Information, Contact:

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