



Loon Scientists Program

WHAT IS THE LOON SCIENTISTS PROGRAM?

The Loon Scientists Program is a captivating education curriculum offered to middle school classes in the Adirondack Park. Based on the Adirondack Cooperative Loon Program's current research, this inspiring classroom program gives students a chance to learn about real-world issues in wildlife conservation.

WHY LEARN ABOUT LOONS?

The Common Loon (*Gavia immer*) is a Species of Special Concern in New York. Long-lived and high on the food chain, loons are excellent indicators of the health of aquatic habitats. Loon populations are potentially vulnerable to rapid change from a variety of sources, including air pollution leading to acid rain and environmental mercury contamination.

Human recreational activities also have potential to directly impact loon populations. Paddlers, jet skiers, and motorboat users on Adirondack lakes may frighten loons off their nests or swamp nests or chicks with their wakes. Loons and other wildlife suffer from lead poisoning when they accidentally ingest abandoned lead fishing tackle. Shoreline development reduces availability of habitat for nest sites.

WHAT ARE SCIENTISTS TRYING TO LEARN?

The Adirondack Cooperative Loon Program conducts research to determine the status and trends in the Adirondack breeding loon population, the impact of environmental mercury contamination on this population's reproductive success, and to identify the migratory patterns and wintering areas of Adirondack loons. Initiated in 2001, ACLP coordinates its studies with similar research throughout northeastern North America to better understand the impact of mercury pollution on the breeding loon population throughout the region.



N. Schoch, ACLP, 2003

ACLP also seeks to minimize anthropogenic impacts on loon populations and their habitats by increasing public awareness about conservation issues affecting loons and aquatic ecosystems in North America. The results of ACLP's research will be used by wildlife managers and policy-makers, as well as the public, to ensure that loons remain an integral and vital part of New York's wildlife heritage, and that their haunting calls continue to echo across Adirondack lakes for generations to come.

HOW CAN YOU GET INVOLVED?

- ❖ Sign up for the Loon Scientists Program to share the excitement of loon research and conservation with your middle school students.
- ❖ Visit ACLP's citizen science website, www.adkscience.org/loons, to learn more, share your ideas, and participate in loon research.

WHAT IS THE ADIRONDACK COOPERATIVE LOON PROGRAM (ACLP)?

The ACLP is a collaborative research and education effort studying the natural history of Common Loons, and the effects of environmental pollution and human interactions on the loon population in the Adirondack Park.

THE ACLP IS A PARTNERSHIP OF:

Wildlife Conservation Society

www.wcs.org

Natural History Museum of the Adirondacks

www.wildcenter.org

New York State Dept. of Env. Conservation

www.dec.state.ny.us

BioDiversity Research Institute

www.briloon.org

Audubon Society of New York State, Inc.

www.auduboninternational.org/programs/asny



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Loon Scientists Program

**WE OFFER TWO OPTIONS FOR
MIDDLE SCHOOL CLASSES:**

**OPTION ONE:
LOON SCIENTISTS PROGRAM**



WHAT MAKES THIS PROGRAM SPECIAL?

The Loon Scientists Program gives middle school students the opportunity to explore science-in-action, meet loon educators and scientists, and develop key science and math skills. We go beyond a simple lecture program to provide a rich, hands-on learning experience. This program uses real-life data from ACLP's current research to help your students meet key performance objectives.

WHY STUDY LOONS?

Like humans, loons are at the top of the food chain. These magnificent birds reflect the health of the environment we share with all wildlife. Tap into your students' natural interest in wildlife to investigate important science concepts!

ACLP EDUCATORS WILL VISIT YOUR CLASS!

The ACLP's experienced educators will meet with your students to share exciting visuals and lead classroom activities.

WHAT ACTIVITIES AND TOPICS ARE INCLUDED?

Students explore loon natural history, learn first-hand how scientists study loons, and discover how environmental pollution can affect wildlife and their habitats, using the Adirondack loon population as an example. Students analyze real data, graph results, and present their findings. We include slide programs and videos for students to see scientists-in-action. Students also discover methods to help loons and other wildlife in the Adirondacks and beyond, encouraging them to become better citizens of our shared environment.



WHAT IS THE FORMAT?

The full Loon Scientists Program is designed to be a 5-session classroom program. We offer 2 sessions with visiting scientists and provide detailed lesson plans for teachers to lead 3 additional classes continuing the research and exploration. We recommend setting aside one week of science instruction time.

HOW MUCH DOES IT COST?

The fee for the full Loon Scientists Program is \$125/class/day or \$300/day (for more than 2 classes) plus mileage reimbursement. The Program qualifies for aid through the Exploratory Enrichment program of the NYS Board of Cooperative Educational Services.

IS THE LOON SCIENTISTS PROGRAM ALIGNED WITH NEW YORK STATE LEARNING STANDARDS AND FRAMEWORKS?

Absolutely! For example, the Loon Scientists Program is closely tied to the following NYS Learning Standards:

- ❖ **Science:** The Living Environment - e.g.: reproduction & development; food webs; impacts of human activities on the environment
- ❖ **Analysis, Inquiry, and Design**
- ❖ **Mathematics** - e.g.: mathematical reasoning; modeling
- ❖ **Interconnectedness** - e.g.: magnitude & scale; patterns of change
- ❖ **Interdisciplinary problem solving** - e.g.: connections; strategies
- ❖ **Creative Writing**



**OPTION TWO: LOON
RESEARCHERS ACTIVITY Packet**

As an alternative to the full Loon Scientists Program, we offer a short packet of lesson plans for middle school teachers to guide their students on an exploration of loon natural history and research. This option, which does not include visiting ACLP educators, costs \$25 for the curriculum.

FIND OUT MORE! PLEASE CONTACT:

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