

ADIRONDACK LOONS AND LAKES NEED YOUR HELP!

Although the Adirondack Park provides suitable habitat for breeding loons, the summering population in the Park still faces many challenges. *YOU CAN HELP!*

- ❖ **Keep Shorelines Natural:** Help maintain this critical habitat for nesting wildlife and for the quality of our lake water.
- ❖ **Out on a Lake?** Keep your distance (~100 feet or more) from loons and other wildlife, so that you do not disturb them.
- ❖ **Going Fishing?**
 - * **Use Non-Lead Fishing Sinkers and Jigs.** Lead fishing tackle is poisonous to loons and other wildlife when accidentally ingested.
 - * **Pack Out Your Line.** Invisible in the water, lost or cut fishing line can entangle loons and other wildlife, often with fatal results.
- ❖ **Be an Environmentally Wise Consumer:** Many forms of environmental pollution result from the incineration of fossil fuels, primarily from coal-fired power plants and vehicles, negatively affecting Adirondack ecosystems and their wild and human inhabitants. For example, mercury accumulates up the food chain and can reach toxic levels in animals and people.

Please choose products wisely — conserve energy, recycle, and safely dispose of products that contain toxins such as mercury and lead.

FOR MORE INFORMATION:



**ADIRONDACK LOON
CONSERVATION
PROGRAM**



**WCS' Adirondack Loon
Conservation Program**
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*The Wildlife Conservation Society's Adirondack Loon Conservation Program is dedicated to improving the overall health of the environment, particularly the protection of air and water quality, through collaborative research and education efforts focusing on the natural history of the Common Loon (*Gavia immer*) and conservation issues affecting loon populations and their aquatic habitats.*

**THE WILDLIFE CONSERVATION SOCIETY IS
GRATEFUL TO ITS COLLABORATORS FOR THEIR
SUPPORT OF THE LOON PROGRAM:**

Natural History Museum of the Adirondacks -
The Wild Center
www.wildcenter.org

NYS Dept. of Environmental Conservation
www.dec.state.ny.us

BioDiversity Research Institute
www.briloon.org

Audubon Society of New York State
www.auduboninternational.org/programs/asny

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*This brochure was adapted from Maine Audubon's  
"Living in Loon Territory" brochure  
by Mike Prescott.*

## ~The Cycle of the Common Loon~



A guide to the seasonal  
cycle of Common Loons  
and conservation concerns  
affecting their populations



### ~MARCH - APRIL~

#### The return of spring and the Common Loon to the Adirondack Mountains

“The ice is out, the loons are back!” is a statement often made by those living around Adirondack lakes in late March and early April. Depending upon the distance they have to travel, the loons usually arrive on their “home lakes” soon after “ice-out”.

During the early spring, Common Loons migrate from their wintering grounds to summer territories on Adirondack lakes and ponds. They spend the winter on the open ocean in subdued gray and white plumage. Just before flying inland or shortly after returning to their summer territories, loon molt into their distinctive breeding black and white plumage. Males usually arrive on lakes approximately two weeks before the females to establish their territories for the summer months ahead.

#### What to Look for:

During the mating season, courtship behavior is very subtle. The pair swim and dive together, performing quiet ritualized behaviors, such as “bill dipping” (*not to be confused with territorial displays such as “penguin dancing” and yodeling primarily done by male loons*). These courtship rituals reestablish the pair bond of birds who have been mated for many summers. Current research indicates that approximately 80% of these long lived (20 to 30 years) birds return to the same territory and have the same mate year after year.

Please observe loon behavior from a distance during the breeding season.

### ~MAY-JULY~

#### Nest building and incubation

In late May to early June, loon pairs build a nest in a protected area, often on the shore of a small island or on a floating bog mat. An ideal nest site is sheltered from wind, waves, predators, and the activities of people. Both the male and female are involved with nest preparation. Occasionally, the first nest will fail (e.g.: from water level changes or predation of the eggs), and the loons renest. Thus, loons can be observed nesting from May until late July or even August.

The nest is constructed from nearby vegetation (e.g. reeds, grasses) and mud, and is placed just a few inches above the surface of the water so that the birds can easily get on and off the nest. One or two (very rarely three) large brown spotted eggs. The female often does the majority of incubation at night, while both adults tend the nest and incubate the eggs during the day. The tiny black downy chicks hatch in ~26-30 days.

#### What to Look for:

Please be careful when boating or paddling near the shoreline from May to July when loons are on their nests. Nesting loons can easily be disturbed, and if the incubating adult is frequently off the nest, the eggs could chill or be taken by a predator. When nesting, one adult may be out fishing alone, while the other bird remains on the nest. Sometimes when nesting loons are approached, they “hang over” the edge of the nest. This position serves as camouflage or enables them to quickly slide into the water and distract the person or predator away from the nest.



Please stay well away from loon nesting areas and observe nesting birds from a distance.



### ~JULY - AUGUST~

#### Raising and protecting the loon chicks

After the loon chicks hatch, they are moved by the adults to a “nursery bay”. This is an area away from the nest site, with shallow water and an abundance of reeds for cover. During the first two weeks of life, small chicks will often ride on their parents’ backs for warmth and protection from underwater predators.

#### What to Look for:

The adult loons usually have one or two chicks swimming near or between them. The devoted parents spend a great deal of time catching small fish for the chicks. As one adult feeds the young, the other may “peer” underwater, checking frequently below the surface to see what the feeding adult is doing.

When the chicks are very young, one adult is always in attendance. The chicks become more independent as they grow, and begin to swim and fish further away from their parents. At ~2-3 weeks, their down changes from black to brown, then at ~7-8 weeks of age, they get gray, scaly-looking feathers. The chicks are almost three months old before they have learned to fish well and are capable of flying.

Please be aware of adult loons and their chicks if you are boating on an Adirondack lake. Adult loons will warn you away with tremolo and yodel calls. If you see “penguin dancing” you might indeed be the cause.

Please back away and observe from a distance.

Loons are especially territorial with chicks, and very protective parents.

## ~SEPTEMBER – OCTOBER~

### Fall returns and loons prepare for departure

The chicks grow very fast, and, by two months, they change into their juvenile gray feathers. They retain this coloration after they migrate to the ocean in the fall. They live on the ocean for two to four years before returning to the Adirondacks to establish a breeding territory of their own.

By 11 or 12 weeks of age, they can feed themselves and begin to fly. The chicks experiment with short, practice flights up and down the lake, and then take longer flights to other lakes. As the chicks increase their independence, the adult birds socialize more with other loons, and may be seen in social groups or “rafts” on other lakes. The juvenile loons are often left for extended periods of time to fend for themselves.

The adults begin to molt into their winter plumage by late October, losing their distinctive black and white coloration. Their feathers are often found floating on the surface of Adirondack lakes after a preening session. The juveniles are almost the size of the adults in late fall, and it can become difficult to tell them apart.



### What to Look for:

Adult loons have plumage that is very dull and similar to the gray juvenile coloration. Juveniles are about the same size as the adults. Both adult and juvenile loons swim and feed away from each other or “raft” up and socialize with other birds. There may be several loons on the same lake.

Please observe the birds from a distance.



## ~NOVEMBER – MARCH~

### Migration from the Adirondacks - life on the wintering grounds

The Common Loon summering on Adirondack lakes spends the winter on the ocean. Adult birds migrate in late fall to their wintering area along the Atlantic coast. Juveniles journey to the ocean after the adults, usually waiting until the lakes start freezing up and they have to move elsewhere.

The loons must adapt to living on saltwater for the winter months. Like many other ocean-living birds, they excrete salt through a gland in their nasal passages, resulting in a salty fluid draining from their nostrils. They also change their diet to the prey that is available near the coast, such as crabs and flounder.

Loons can be exposed to different hazards while living on the ocean, especially when they molt their flight feathers in late winter and are incapable of flying until the feathers grow back in. They can be caught in commercial fishing nets or in an accidental oil spill. There are also occasional blooms of algae along some coasts (e.g.: the Gulf Coast of Florida) that produce toxins and sicken many birds.

Adults molt back into their black and white breeding plumage in late winter/early spring, and begin the cycle all over again, migrating back to the Adirondacks in April or May. The previous summer's chicks, however, spend the next several years on the ocean, not returning to the Adirondacks to find a mate and establish their own territory until they are fully mature adults.

### What to Look for:

On Adirondack lakes in late fall, Common Loons begin to migrate. Often adults will gather and feed together on larger lakes in “rafts”. Loons migrate in small groups or as individuals. Some loons wait for the last moment before “ice-up” and begin their migration in late November or December.

Loons need to run on the water for several hundred yards to get airborne. However, once in the air, they are very powerful and fast fliers. Some birds fly to the Atlantic coast in a matter of hours, making a trip of close to 200 miles in less than a day. Others stop at large lakes or rivers along the way, before finally making it to their winter's destination. You can follow the migration of some Adirondack loons on the Adirondack Cooperative Loon Program's website, [www.adkscience.org/loons](http://www.adkscience.org/loons).

If you go south during the winter and are near the coast, you may see the same loons you saw during the summer in the Adirondack Park. However, look for birds in a gray, dull plumage instead of the more striking black and white breeding coloration usually associated with loons. Other species of loons, such as the red-throated and yellow-billed loons, are also occasionally observed in the wintering areas. It takes good observation skills to be able to tell the species apart in the winter months!

As spring returns to the mountains in March and April, so will the Common Loon.



## ~ COMMON QUESTIONS ABOUT COMMON LOONS ~

### How long do loons live?

A long-lived species, common loons can live to be 20-30 years old.

### Are loons endangered?

In New York State, loons are classified as a Species of Special Concern, which means biologists are interested in monitoring their populations levels. In other states, loons are classified as threatened. Common Loons are protected under the federal Migratory Bird Act.

### Do Loons mate for life?

Color-banding studies have shown that loons do not mate for life, as once was believed. Some individuals have been known to have several mates during the course of their lives.

### How can I tell a male from a female loon?

They have identical plumage, but males can be differentiated from females in three ways:

- ❖ Males are larger than females.
- ❖ Only females lay eggs.
- ❖ Only male loons produce the yodel, an aggressive territorial call.

### Are there more than one pair of loons on a lake?

Loons are very territorial during the breeding season, and one breeding pair requires at least 25 acres for nesting and raising chicks. Depending on the size and shape of a lake, more than one breeding pair can occupy larger lakes.

### How many chicks do loons have?

Because of the tremendous amount of time and energy required to successfully rear loon chicks, adults usually raise 1 or 2 chicks per season (3 is quite rare).

### Do loons return to the same territory every year?

Loons will usually return to the same territory year after year, making them an excellent species for long-term studies.

### Where do loons migrate?

Loons migrate to the open waters of the ocean during the winter months. Based on research conducted in New York State, Adirondack loons spend the winter off the Atlantic Coast from Massachusetts south to North Carolina. Banded Adirondack loon have also been observed in the Gulf Coast of Florida in the winter.

### Is black and white good camouflage?

Loons' coloration helps protect them from predators both above and below the water. Their white belly blends in with the sky when viewed from below, and their black and white "checkerboard" back is similar to the patterns of light on water.

### How long can a loon stay under water?

An average dive generally lasts about 40 seconds.

### How deep can they dive?

Loons have been known to dive as deep as 200 feet, but will generally fish in shallower water that have more light, enabling them to locate prey fish easily.

### Why do loons have red eyes?

It is unclear why loons have red eyes - they may be a way for them to attract a mate, as the red color fades dramatically when the adults are in their winter plumage. Red is also a color that is absorbed underwater, so it's possible their eye color helps camouflage their head while diving and fishing..

### How many species of loons live in New York?

There are five species of loons in the world, all living in North America. Other species include the Artic Loon, Pacific Loon, Yellow-billed Loon, and Red-throated Loon. Only Common Loons breed in New York, primarily in the Adirondack Park. However, Red-throated and Yellow-billed Loons are occasionally observed in New York during migration.

### What are the threats to loons?

There are many threats that loons face throughout their home range. On their breeding grounds, Common Loons can be affected by:

- ❖ Lead poisoning due to accidentally eating lead fishing tackle,
- ❖ Fishing line entanglement,
- ❖ Loss of nesting habitat due to shoreline development,
- ❖ Disturbance from recreation, and
- ❖ Environmental mercury pollution and acid rain.

During migration and on their wintering grounds, loons can be exposed to:

- ❖ Botulism,
- ❖ Oil spills,
- ❖ Commercial fishing net entanglement, and
- ❖ Environmental pollutants.

### Why study loons?

At the top of the aquatic food chain, loons are excellent indicators of the health of the environment that they inhabit.

There are many organizations in North America that are working to identify and alleviate the conservation concerns impacting the air and water quality of common loons and their aquatic habitats.