LOONS



The Iconic Waterbirds

Written and Photographed by

STAN TEKIELA

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Adventure Publications Cambridge, Minnesota

Dedication

Dedicated to William (Buck) Huber, a man whose love for loons and photography helped inspire this book.

Acknowledgments

I would like to thank technical editor Jim Paruk, Ph.D., Professor of Biology, Northland College, Ashland, Wisconsin, whose extensive knowledge of loons significantly contributed to the accuracy of this book.

Thanks!

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Loons: The Iconic Waterbirds

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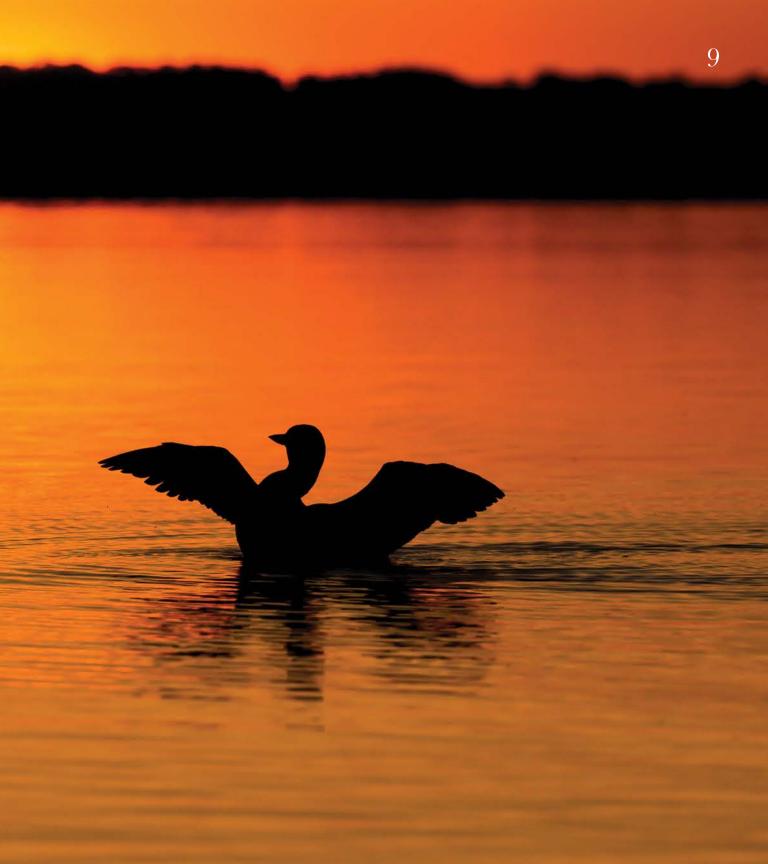
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Our wonderful loons

As a professional naturalist and wildlife photographer, I often spend days, weeks or sometimes months observing, studying and photographing a subject—and the loons in this book are no exception. In these pages you will find images that took me over 30 years to gather. Many of the behaviors described in the text I personally witnessed and photographed. As much as I enjoyed researching, writing and photographing, I hope you'll enjoy this book about our fascinating loons even more.

Enjoy the Loons!

Stan Tekiela







Fascinating loons

The striking black-and-white breeding plumage and deep red eyes of the Common Loon befit its elegance and grace. Loons are physically amazing, with large, powerful feet that propel the birds underwater at speeds fast enough to overtake fish. They have wings capable of carrying them thousands of miles to wintering grounds and back again with the changes of the seasons. The call of the loon catapults our memories to a time spent camping or brings to mind a lakeside summer vacation. Yes, loons have fascinated people for thousands of years—just as they do today. Here is the story of the Common Loon.

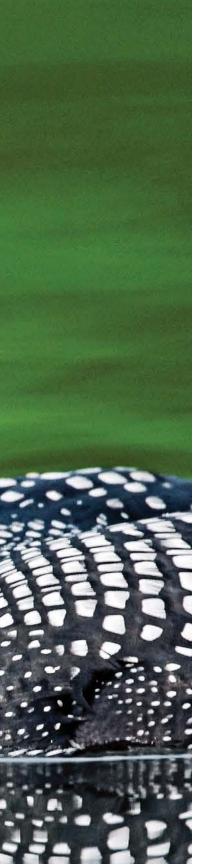
Myths of the creation

Several native cultures tell stories of how the loon was created. According to one, the loon and the crow were once men. They were good friends and did everything together. One day they decided to go fishing. One of the men caught lots of fish. The other man caught none. The man who had no fish became so upset that he hit his friend, cut out his tongue and threw him overboard. The Great Spirit felt sorry for the beaten man and turned him into a beautiful loon, while his friend was turned into a crow.

A story from Finnish culture tells us when the first loon was created, it didn't have legs or feet. Nature realized its mistake and flung a pair of legs and feet at the bird as it was leaving, which is why the legs and feet are located so far back on the loon's body.







Folklore of the necklace

Loons have played a part in the lives of native peoples around the world. Many ancient cultures have stories and myths about loons. There are various folktales about loons restoring sight to blind children or healing the failed sight of medicine men. Legend has it that a loon would carry an afflicted person on its back to the bottom of a lake, once, twice, again and again until enough water washed over the person's eyes to restore his or her eyesight. It has been said that a grateful person made the loon a gift of thanks—a necklace of white shells—and hung it around the loon's neck for all to see. To this day, all loons wear a necklace of white plumage resembling the strand of white shells given in gratitude long ago.

The lore of the call

A story about the loon's call comes from Micmac Indian culture. A man named Glooscap came to visit the Micmac tribe one day. The people enjoyed his company so much, they did not want him to leave. Even so, after a few days he had to move on. Because the Micmacs were so lonely, Glooscap appointed Kwee-moo, the loon, as his special messenger. Glooscap said he would return whenever the loon called because his call could be heard from far away. Today we know that special call as the wail of the loon.

Down through history it was thought that loons could predict the coming of rain. Some cultures believed the call of a loon triggered rain. These notions are why the loon is also called the Rain Crow.

More recently, the peculiar laughing call of the loon led to the phrase "crazy as a loon."







The five species of loons

Loons are in their own order, the Gaviiformes. The loon family, called Gaviidae, comprises five species. Each species can be found in North America: Common Loon (*Gavia immer*), Yellow-billed Loon (*G. adamsii*), Red-throated Loon (*G. stellata*), Pacific Loon (*G. pacifica*), and Arctic Loon (*G. arctica*). All nest in Alaska, and all but the Arctic Loon nest in Canada. The Common Loon is the only species that nests in the lower 48 states. Loons are closely related to grebes.

Origins of the scientific name

In 1758, Linnaeus, the father of the genus and species naming systems, gave loons and grebes one genus name, *Colymbus*, from the Greek word *kalymbis*, meaning "diving bird." The British insisted on calling the genus *Colymbus*, while the Americans wanted separate names to reflect the differences between loons and grebes. The dispute was resolved in 1789 when the International Commission of Zoological Nomenclature abolished the name *Colymbus* and called the loon genus *Gavia*, Latin for "aquatic bird," crediting the name to German naturalist Johann Reinhold Forster. Forster traveled around the world with Captain James Cook in the 1700s and recorded many species, including the loon.

The species name of the Common Loon, *immer*, is from the Latin *immergo*, meaning "to immerse" or "to submerge."







Origins of the common name

The common name "Loon" is thought to have originated with early European settlers in North America and is based on an old Scandinavian word *lom*, meaning "lame" or "clumsy," referring to its awkward movement on land.

The French name for the loon, *plongeon*, translates to "diver." In most parts of the world, the loon is called Diver, Hell-diver, or Great Northern Diver for its ability to dive to great depths akin to hell.

Popular names around the world

Popular common names for the Common Loon include Big Loon, Black-billed Loon, and Ring-necked Loon. In Great Britain it is also called Walloon, Immer Goose, Greenhead, Great Northern Diver, Ember Diver, or just Diver. In Norway and Sweden it is called Islom or Ice Loon.

An old but popular name for the Common Loon in northern Europe is Ember Goose, which relates to its species name *immer*. The legend of the Ember Goose describes how the loon got its distinctive coloration—by being doused with ashes and embers.

Loons are often referred to as feathered fish because they spend so much of their livers underwater or on the surface of the water. They touch land only at birth, during mating, and while nesting.





Range

In the mid-twentieth century it was believed that loons could survive only on clear wilderness lakes without human disturbance. The idea that loons need wilderness has now been disproved. The limiting factor in loon habitat is not the presence of people, but rather the availability of safe nesting locations undisturbed by people and free from predators such as raccoons and skunks. In addition, they need clear water (because loons hunt by eyesight) and the availability of small and large fish.

The range of the Common Loon in North America spans most of Alaska to across Canada and south to many northern tier states such as Minnesota, Wisconsin, Michigan, New York, Vermont, New Hampshire, and Maine. While loons nest mainly in North America, small populations also breed in Greenland and Iceland. Many Common Loons winter in northern Europe and the British Isles.

General population

With more than 11,000 large lakes and hundreds of thousands of small lakes, Minnesota has more loons than any other state in the continental US-about 12,000 individuals. Maine is next, with approximately 4,100 loons. The rest of the states have stable or growing populations.

Only 1-2 pairs of loons occupy an area of about 2 square miles (5.2 sq. km). The resident loons defend their territory against all other loons, thus keeping the population density down. Some people think populations of loons should be controlled because of the amount of fish they eat. This is an argument that focuses too much on human desires and not on what is needed to maintain a healthy ecosystem that includes loons.

Loons can live up to 30 years. The majority of deaths occur in the first 1-2 years of life. If a loon can make it to adulthood, it usually will live a long time and reproduce often enough to offset the high mortality rate of young birds.



The decline of the loon

Loons once nested as far south as lowa, Illinois, and Pennsylvania. They were at their lowest population and most limited range during the 1970s. The reduction was, in part, due to destruction of habitat, including increased human disturbance during nesting, chemicals in the environment, and water pollution. The expansion of birds such as Ring-billed Gulls, which feed on loon eggs and very young loons, has also played a role in the decline of the loon.

Human disturbance and nest failure

It is often thought that loons need wilderness lakes to nest. I have observed loons successfully nesting and raising their young on lakes lined shoulder-to-shoulder with year-round homes and summer cabins. Loons can nest and raise young on lakes with a high density of human dwellings and a high degree of recreational activity. Some places have heavy boat traffic (especially on weekends), personal watercraft, and legions of fishermen. At these areas, loons navigate among water-skiers, fishermen and recreational boaters, usually without major incident. While it may not be an ideal place for loons, it appears that they can successfully reproduce on these lakes.

However, having said that, human disturbance is still the number one reason for the decline of the loon, now and in the past. Loss of nesting sites, disturbance during nesting by roaming domestic dogs and cats, and especially waves from powerboats and personal watercraft washing over nests and eggs are just a sampling of causes of nest failure.





Fishing line

Discarded monofilament fishing line is another danger to loons. Contact with discarded line results in entangled wings, which renders a loon flightless, to bills tied shut, causing a slow, by starvation. In many areas, entanglement in fishing line is the second most common cause of death in loons.

Sick or injured loons

Sick or injured loons are often found on land. For whatever reason, when a loon feels ill or is injured it tends to gravitate toward land. Land-bound loons should be reported to a local wildlife rehabilitator or wild animal clinic.

Great care must be taken when trying to "rescue" a loon because its large heavy bill can inflict serious damage to the human body. It is best to leave the job of picking up a loon to someone who is experienced with these circumstances.

Coastal water threats

Loons also have a high mortality rate during winter. Loons spend the winter on coastal waters, where they are exposed to many hazards such as oil spills and to recreational boating. Entanglement in commercial fishing nets is a major problem for loons. It seems that no matter where they go, contact with people is a constant threat.





Mercury poisoning

Mercury in the environment is also a problem for loons. Mercury poisoning affects the nervous system, impairing vision and coordination. With reduced abilities to catch fish, loons quickly become weak and die.

A survey sampling loons showed that about 5-10% in the Great Lakes region and some 20% in the New England states had low mercury levels, but even low levels of mercury reduce reproduction success. Loon observers have noted an increase in the number of adult loons but a decrease in the number of chicks hatching—which may be an indication of mercury poisoning. Since loons are long-lived birds, a short disruption of breeding can be tolerated. Long-term reproduction failures will lead to the demise of the bird, as it nearly did during the middle of the last century, when loons were affected by the insecticide DDT.

Lead sinkers

Lead in the form of fishing sinkers is the leading cause of adult loon mortality. One study showed that 52% of autopsied loons died from acute lead poisoning. Loons swallow lead sinkers when they ingest small stones (grit) at the bottom of lakes. Split shot sinkers are the perfect size and shape for loons to confuse with grit, which aids digestion. After ingestion, a loon will start showing symptoms in only a few days.

Once the bird has reached this point, the mortality rate is nearly 100%.

Just a single split shot sinker can kill a loon.





The recovery of the loon

With a better understanding and respect for loons, the future for loons is promising. We have come a long way since the 1960s-70s, when our water and air pollution was at its worst. Many birds such as loons were heavily contaminated with chemicals (DDT), heavy metals, and more, causing a tremendous drop in population—the lowest ever for loons. The Endangered Species Act and Clean Water Act, combined with widespread environmental education and sound scientific studies, are making it possible for loons and other birds and animals to make remarkable recoveries. While it may not be possible for loons to return to their historic range, with proper guidelines and policy decisions, we can keep the loons we have for a long time to come.

Differences of the sexes

Males are generally larger than females, up to 20%. Their heads are slightly larger and they have longer, heavier bills than females. However, no one trait can be used to accurately identify the sexes. It's very difficult to distinguish between male and female loons unless they are sitting side by side for comparison.







About the author

Naturalist, wildlife photographer, and writer Stan Tekiela is the originator of the popular Wildlife Appreciation series that includes *Cranes, Herons & Egrets*. Stan has authored more than 190 educational books, including field guides, quick guides, nature books, children's books, and more, presenting many species of animals and plants.

With a Bachelor of Science degree in natural history from the University of Minnesota and as an active professional naturalist for more than 30 years, Stan studies and photographs wildlife throughout the United States and Canada. He has received national and regional awards for his books and photographs and is also a well-known columnist and radio personality. His syndicated column appears in more than 25 newspapers, and his wildlife programs are broadcast on a number of Midwest radio stations. You can follow Stan on Facebook, Instagram, and Twitter, or contact him via his website, naturesmart.com.



Agile, Nurturing, Distinctive . . . the Common Loon

Their stunning beauty inspires us. Their haunting calls fill us with nostalgia. Loons are reminiscent of joyful days at the lake, of time spent with family. Their arrival each spring signals the end of winter, that warmer days are ahead. Feel sentimental with every turn of the page in *Loons*. Award-winning author, naturalist and wildlife photographer Stan Tekiela presents stunning photographs and insightful descriptions of a loon's life. The result is a book unmatched by any other on the market, worthy of a place on any coffee table or shelf.

Give it a try. Open this book to any page, and prepare to be struck with wonder.

