



Common Loon

Gavia Immer

BY HARRY VOGEL

Science and magic combine in loons as in no other animal. Loons are prominent in Native American myths and legends for good reason; the call of a loon in the night, or a close encounter on a misty lake, can be a life-changing experience. What accounts for our fascination with this fantastic creature? In part it might be the mystery of a bird (whose origins are lost in prehistory), which leaves our common world for the water's depths and then reappears after an improbable time at an impossible distance. It

might be envy at a life lived simply and ruggedly in tune with nature. Some large part might be admiration for birds that care for their few (one or two) young with attentiveness and vigilance that would be the envy of any human parent.

Loons are long-lived birds. Once thought to mate for life, studies of banded individuals have revealed that quaint notion to be false, but we have no evidence that loons practice anything less than serial monogamy. A loon's physiology is heavily skewed toward swimming and diving. The placement of the legs at the far back of the body and other adaptations have cost loons their mobility on land—one of the reasons why a loon's nest is always built right at the water's edge. Small islands in a sheltered cove are favorite sites. Unfortunately, people like to nest on these sites as well, and our buildings and other shoreline alterations have displaced loons from many of their traditional dwellings. The increased recreational use of our lakes that accompanies these built-up shorelines has also challenged loons.

One human practice especially has dogged our loons: the use of lead fishing sinkers and jigs. Loons have no teeth, so they swallow fish whole and then ingest small pebbles from the lake bottom. These stones are held in the gizzard as surrogate teeth to grind up food. Lost lead fishing sinkers are exactly the right size and shape to be picked up by loons, and, once ingested, they are abraded and dissolve into the blood stream. Perhaps even more commonly, loons can swallow a fish that has escaped from an angler's

line and still trails a hook and sinker, or strike directly at a lead-headed jig being trolled through the water. Whatever the method of ingestion, the result is invariably fatal. The good news is that loons can swallow non-lead sinkers (a wide variety of alternatives exist and are readily available) with little or no ill effect.

Another challenge for our loons is contaminants, especially those that bioaccumulate in long-lived animals over time, and biomagnify at higher levels of aquatic food webs. Mercury is a potent neurotoxin that affects hatching success of loon eggs and the ability of adult loons to secure a territory and incubate eggs. More recently, we have found new consequences of our conveniences—flame retardants, stain repellants, and byproducts of combustion—in loon eggs, in concentrations that have been shown to affect the health and/or reproductive success of other birds. These new threats have joined climate change and other man-made challenges to cause five consecutive years of declines in the number of loon chicks hatched in New Hampshire—a trend that cannot continue if loons are to grace our lakes and move our spirits in years to come.

New Hampshire's lakes held just 247 pairs of loons in 2008. Loons are still abundant in Maine and small populations exist in Vermont and Massachusetts, but historical populations as far south as Pennsylvania could not cope with the rapid changes in our modern world.

The Loon Preservation Committee (LPC) was formed in 1975 in response to dramatically declining loon populations. LPC has discovered that loons are uniquely able to illuminate threats to other wildlife and to aquatic environments. This insight has led LPC to monitor the health and productivity of loon populations as sentinels of environmental quality. The continued existence of these spirits of our northern lakes will rest on fostering a culture of respect and appreciation that will allow loons to thrive.

Harry Vogel is the senior biologist and executive director of the Loon Preservation Committee in New Hampshire. The LPC will have a brand new, Web site available in the early spring of 2009.

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