

Tuftonboro Times
Mirror Lake Reflections
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Love is in the air on Mirror Lake! Springtime ushers in the return of creatures who have captured the hearts of all the residents on the lake: the loons. Loons are migratory and winter on the ocean. Mirror Lake loons, tracked by the Loon Preservation Committee in Moultonborough, are known to winter in Portsmouth, New Hampshire. Loons return to inland lakes for breeding as soon as the ice goes out and remain until late fall. Highly territorial, loons typically return to the same lake so Mirror Lake onlookers have enjoyed what we believe to be the same couple for many years. The belief that loons mate for life is a fable, as it is now known that a loon mate will be replaced after a death or following the successful duel of a rival. Loons can accept a new mate. Since loons typically live for 15-30 years, if each can fight off rivals and their own demise a pair can potentially be together for a long time. The oldest tracked loon in New Hampshire is actually over 30 years of age.

Loons are attractively feathered during the long mating season with their black heads, long beaks, white underbellies, checkered backs, white necklace rings around their throats, and red eyes. Their eye color helps them see underwater by filtering out blue and green. Males and females look alike although males are typically about 25% larger. The size difference can be difficult to spot. Loons need to run on the water to take flight and their weight makes lift difficult, but once in the air they are efficient flyers and have been clocked at 80 miles per hour when there are strong tailwinds. Loons are large for water birds and can weigh from seven to 15 pounds and typically measure three feet from front to back. Loons' legs are far back in their bodies which makes them excellent swimmers but awkward on shore. Their bones are dense which helps them dive and keeps them low in the water as swimmers. As divers, they can sink 200 feet and remain underwater for up to three minutes as they search for prey. Their large webbed feet and powerful leg muscles allow for speed and excellent steering underwater. If you happen upon a loon while swimming, their size and strength are quite striking! Alarming, even.

Sometimes Mirror Lake neighbors argue about whether or not the same loon couple are on the lake. Loons change appearance throughout the season which may be what leads to the confusion. When the breeding season concludes loons molt. Generally, the transformation starts in late September when plumage appears gray and white. By winter, the plumage turns dark gray and eyes are more brown than red. Juvenile loons have the same coloring as wintering adults but can be distinguished by the white-gray tips of their feathers which create a scalloped look. Loons preen daily year-round to keep their feathers aligned and oiled for the purpose of protecting their skin. A gland at the base of the tail, the uropygial gland, secretes oil which must be distributed by the loon to coat its feathers. Loons roll and shake; stick their feet in the air; flap their wings appearing to struggle taking flight; and rub their heads all over their backs as they distribute the oil. Loons also bathe which involves vigorous thrashing and diving to shake off parasites. All this activity is followed by long periods of motionless rest. Loons sleep in deep waters at night, away from predators.

The most alluring feature of loons is their call. Actually, their four calls. Loons use distinct calls: 1) the wail; 2) the tremolo; 3) the hoot; and 4) the yodel, to communicate with their family members and connect with or threaten other loons. The wail, their long melodic sound, is often heard at night as mated loons call to one another from long distances. The tremolo, also known as the "crazy laugh," serves multiple purposes including greeting, alarm, worry, or annoyance. The tremolo is used for

socializing. The hoot is used for short distances by loon families or sometimes issued to rival loons who come too close. Finally, the yodel, used only by males, is a six-second-long repetitive series of notes with a rising middle section used when defending territory. Studies have shown that each male loon has a unique, slightly distinctive yodel. Loons will combine calls during periods of high stress, particularly if their nests or chicks are threatened. Their alarm is palpable to Mirror Lake residents. In seasons where the loon pair loses a chick their mournful calls can be heard for days. A deeply sorrowful sound for all.

Mirror Lake is fortunate to have one pair of loons as couples usually need more than the 333 acres of water the lake offers. Loons are predators feeding on fish, frogs, snails, leeches, and crayfish in summer while adding crabs and sometimes even lobsters in winter. Rogue loons sometimes visit Mirror Lake for various reasons. Loons are social and sometimes the visits seem amiable, but loons will get aggressive when searching for a new mate. An interloper may engage in a "circle dance" with a rival in order to assess the competition. The dance may continue underwater and result in a stabbing from below. Sometimes no physical fight evolves. Sometimes these confrontations result in a switch of partners, especially after a failed nesting attempt.

Nesting is the pride and joy not only of the loon pair but also thrilling to Mirror Lake residents. After years of no results The Loon Society lent Mirror Lake a nest which is maintained and stored by Beth and Larry Urda. The loon pair prefers the nest close to shore, but on a small island where they bring leaves, moss, grass, needles and other vegetation to construct the nest which protects the eggs. Their preference is to continue using the same nest in the same spot year after year. Both the male and female build the nest and warm the eggs for a period of 26-31 days. If the eggs are lost or unproductive, loons can try again up to three times during the same season. Adult loons care equally for their chicks for twelve weeks when their young are able to be independent. Eggs and chicks are often lost so the longevity of adult breeders is important for the survival of the species. New Hampshire loons are known, on average, to raise one chick to fledgling every two years. Nesting is a vulnerable time and loons will assume a flattened position with heads craned forward when threatened. If adult loons are forced to abandon the nest, even briefly, the eggs are highly susceptible to predators. It's best to back away if you see a loon in a defensive posture as you may be the perceived threat even if you are just trying to look.

Chicks are our heart's delight! Able to swim at birth, but not well, these fluffy babies look adorable on their parents' backs where they rest, are kept warm, and avoid turtles, fish, eagles, and crows who find them delectable. For eight weeks the parents provide most of their food while gradually allowing them to swim and dive on their own. By twelve weeks juveniles provide most of their own food (although they will still beg parents for food) and are nearly flying. Parents leave the lake one at a time in late fall and somehow, their young know to follow within weeks.

Humans and global warming pose threats to the loon population. Lead poisoning as a result of consuming fishing tackle in New Hampshire accounted for the majority of loon deaths before protective legislation was passed. Once lead is ingested a loon will die within weeks. Entwined fishing line can also kill a loon if it impairs eating or movement. Climate change accounts for rising temperatures and increased rainfall. Both are harmful to loons and their nests. Shoreline development has significantly reduced areas for nesting while general human population growth has driven up the numbers of racoons and other scavengers who prey on loon eggs. Chemical contaminants, even some banned years ago, are still found in the food chain and have reduced the loon population or weakened their eggs. Even wakes from boats can disrupt nests and drown loon chicks. Finally, although a victory in many ways, the bald eagle population has grown. Eagles are long-time predators for loon eggs and chicks.

We've cheered silently and sometimes aloud as the Mirror Lake loons savagely fight off the two eagles who inhabit the skies of Mirror Lake. Loons are bolder and stronger than we think.

We enjoy so many natural wonders in the lakes region. Loons add sights and sounds that are cherished. Listen to their haunting calls on Mirror Lake.