Natural Heritage &
Endangered Species
Program

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MASSACHUSETTS SPECIES OF SPECIAL CONCERN

Common Loon
(Gavia immer)

Order: Gaviiformes
Family: Gaviidae

DESCRIPTION: Loons represent the entire order of Gaviiformes, and have no close relatives. The Common Loon is named appropriately as it is the most common of the loons, and it is also known as the Great Northern Diver. This heavy, goose-sized water bird varies considerably in size, ranging from 28 to 36 inches long with a wingspan of 5 feet. It has a thick, black, pointed and evenly tapered bill, held horizontally. In summer, its head and neck are black, glossed with green, with a broad,white collar of black-and-white lines on the sides of its mid-neck; its back is cross-banded black with white spots. In winter (October to March), its crown, hind neck, and upper parts are greyish to dark brown, its bill is grey, and its throat and under parts are white. The loon's eyes are bright red from a pigment in its retina that filters light and allows the bird to see underwater. loons have powerful legs and large, webbed feet that are located far back on the body, a feature that aids them in swimming and diving.

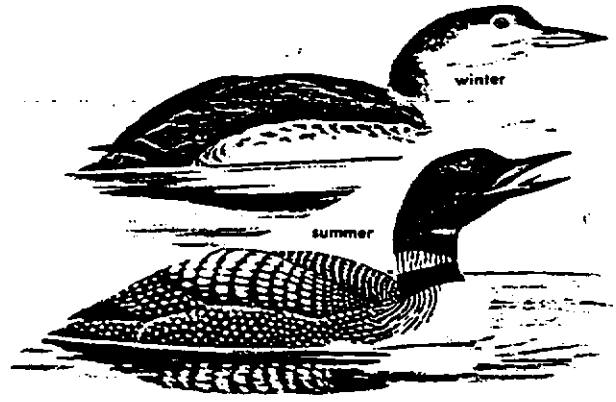
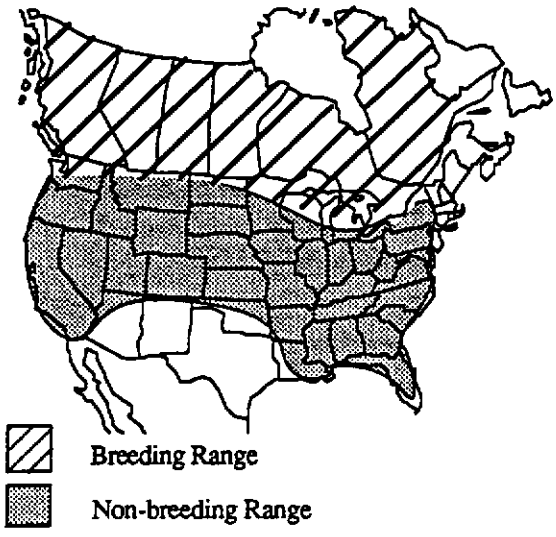
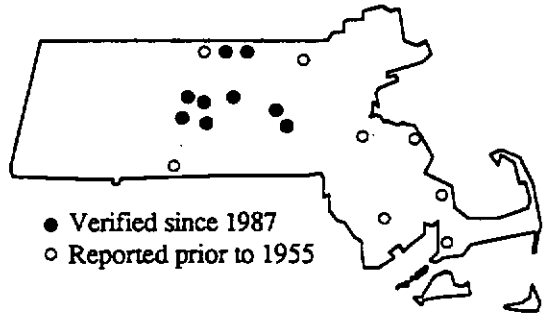


Illustration by Arthur Singer from Birds of North America. Western Publishing Co., Inc. 1966

RANGE: The Common Loon's summer breeding range extends from Alaska to northern California, across Canada to Newfoundland, and south to Wisconsin, Minnesota, northern New York, and Massachusetts. It winters along the Pacific and Atlantic coasts as far south as Baja, California, southern Florida, and the Gulf of Mexico. Today, most nesting populations of loons survive in Canada and Alaska.





Massachusetts Breeding Distribution
of the Common Loon

DISTRIBUTION IN MASSACHUSETTS: Loons returned to Massachusetts in 1975 after almost a century's absence; They occur statewide as migrants and regularly put down on larger lakes and reservoirs inland, and in summer they nest at the Quabbin Reservoir and three other lakes in Worcester County. On Cape Cod, Common Loons are found primarily in salt waters, bays, and estuaries, sometimes many miles offshore. Their principal spring and fall migration route is close to the mainland, crossing the Cape near the Cape Cod Canal.

HABITAT: The Common Loon is more water-dependent than any other inland bird, only coming to the shoreline in spring to breed and nest. It nests on islands or tall aquatic plants in large, clear northern lakes and ponds, and often returns to the same nesting site for years. In winter, the loon inhabits oceans and bays along the coast from Maine to Texas.

LIFE CYCLE / BEHAVIOR: As the Common Loon builds its nest within a few feet of the shoreline, it is very sensitive to disturbance and will sometimes abandon a nest if repeatedly disturbed by motorboats, canoes, or hikers. The loon lays two olive-brown, lightly spotted eggs in a substantial mass of vegetation near the edge of water, usually on an island. Adult loons alternate nest-sitting throughout the 28-day incubation period, and once each chick has hatched, the white egg-membrane and pieces of eggshell are carried off and dropped in deep water by one of the parents. Both parents feed the young for about 6 weeks. At about 11-weeks (by fall), the chicks fledge and migrate to the coast, where they may remain for as long as three years until sexually mature. Common predators of the Loon's eggs and chicks are raccoons, skunks, ravens, and crows.

The call of the Common Loon is a wild, maniacal laugh along with a mournful wail. It often calls at night, except in winter when it does not call at all. It rides low in the water while swimming, and the fact that it has been found as deep as 200 feet below the water's surface testifies to its expert diving ability. The loon is awkward on land as its legs are set far back on the torso and it has to propel itself forward on its front like a wheelbarrow. Once flying, however, the loon has fast, uninterrupted wing-beats and can reach speeds of over 75 miles per hour during migration periods. The Common Loon migrates in small flocks, mostly to the coast; its northbound migration period on Cape Cod averages from March 30th to June 3rd, southbound from September 1st to November 30th. The loon relies on its excellent eyesight to locate its prey: small fish, crustaceans, shellfish, frogs, aquatic insects, and some water plants. The Common Loon is a voracious feeder--an adult pair and 2 chicks can eat 430 kg of fish in one season. Highly territorial, loons behave aggressively when threatened and have been known to kill intruders.

POPULATION STATUS: The Common Loon is protected under the Federal Migratory Bird Treaty Act, and is considered endangered or threatened in the northern United States and Canada. It is listed as a species of Special Concern in Massachusetts, but because of accelerated management efforts that include monitoring and floating nest rafts, its breeding population in this state has increased from one recorded pair in 1975 to 11 pairs in 1992. Lead poisoning, induced by the ingestion of fishing sinkers lost by anglers, appears to be the foremost cause of adult loon mortality on New England lakes. Loons eat minnows being used as bait, and may swallow the hook and sinker, or ingest the sinkers from the lake bottom when swallowing small stones to aid their digestion. When swallowed by the loon, the lead sinker causes the bird to ingest a toxic level of lead that causes the breakdown of its red blood cells and kidney failure. Also, acid rain, caused mainly by pollutants from power plants and automobiles, contaminates lakes with mercury, aluminum, and cadmium, metals which reduce loons' reproductive success and render them more susceptible to infectious disease. Acid rain causes some large lakes to become clearer; while these lakes attract loons, their acidity does not allow many fish to be supported for the loons to feed on. Additional threats to loons are pesticides, shoreline development, growing numbers of recreational boaters, and flooding of nests due to human control of water levels in nesting areas.

REFERENCES:

Massachusetts Wildlife, Fall 1992, v. XLII, No. 4. Author: Peter Mirick.

Loon Conservation: acidified lakes & habitat selection, by Rob Blair. Center for Conservation Biology, update v. 5, #2, Fall/Winter 1991.