



U.S. Fish & Wildlife Service

Yellow-billed Loon

Gavia adamsii

The yellow-billed loon (Order *Gaviiformes*, Family *Gaviidae*) is the largest of the five loon species, and similar in appearance to the common loon (*Gavia immer*). Yellow-billed loons are most easily distinguished from common loons by their larger yellow or ivory bill. During the non-breeding season, yellow-billed loons lose their distinctive black and white plumage and molt into dull, light brown feathers.

Yellow-billed loons breed in the freshwater treeless tundra of Alaska (sparsely in western Alaska and the foothills of the Brooks Range, more abundantly on the North Slope); in Canada east of the Mackenzie Delta and west of Hudson's Bay; in arctic Russia in the relatively narrow strip of coastal tundra from the Chukchi Peninsula in the east to the Taymyr Peninsula and the areas of the Novaya Zemlya and Pechora Rivers in the west; and, rarely, in far northern Norway and Finland.

The wintering range of the yellow-billed loon includes nearshore coastal waters from south-central Alaska south to Puget Sound; from the Pacific coast of Siberia south to the Yellow Sea; and, occasionally, in northern Europe from Great Britain to Norway.

Yellow-billed loons nest exclusively in coastal and inland low-lying tundra, in association with permanent, fish-bearing lakes. Lakes that are able to support breeding loons must have abundant fish populations; offer depths greater than two meters (six feet); never freeze to the bottom; are



A mature yellow-billed loon in breeding plumage.

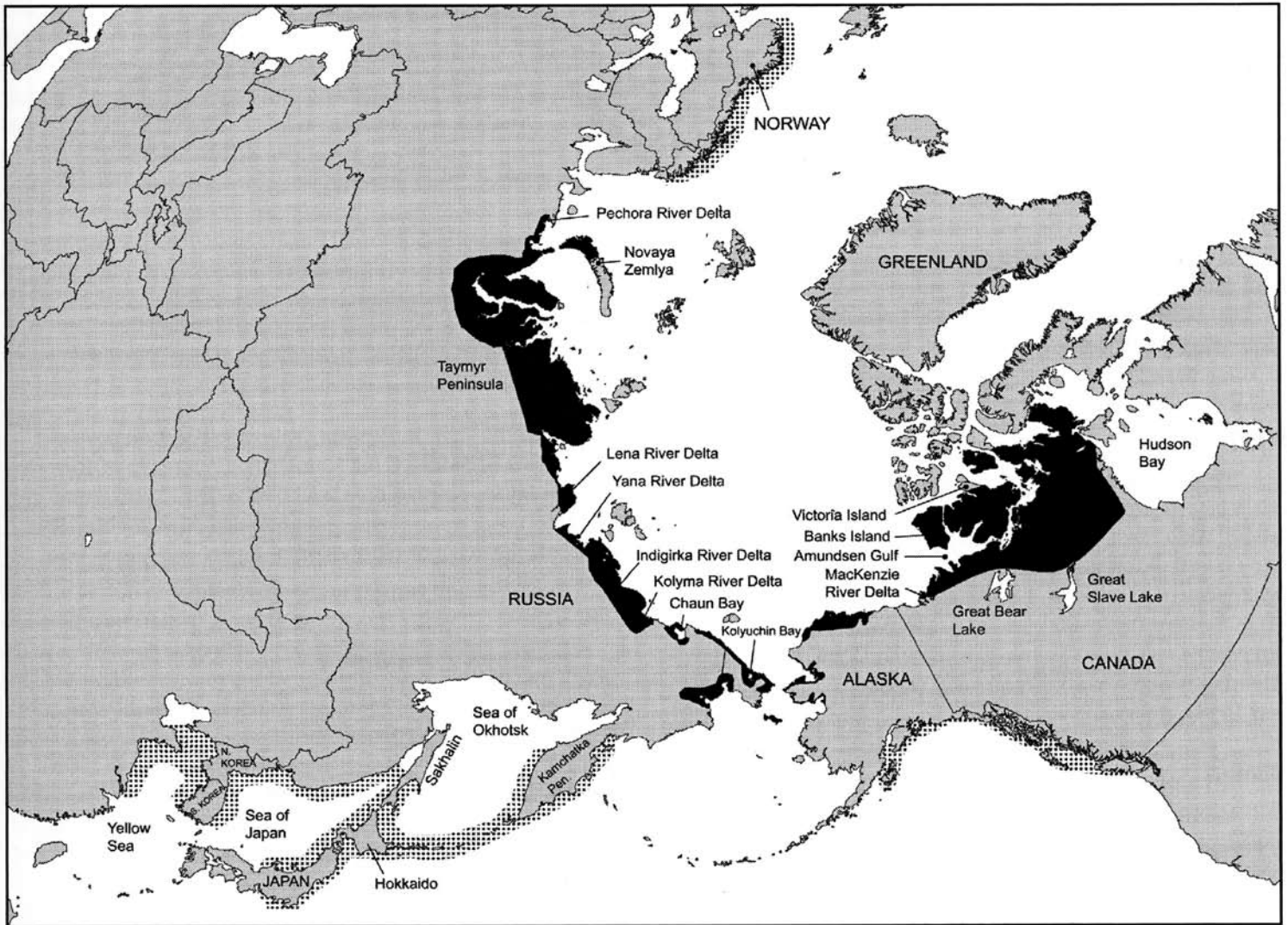
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large (at least 13.4 hectares [ha]); are often connected to streams that may supply fish; feature highly convoluted, vegetated, and low-lying shorelines; and provide both clear water and dependable water levels.

It is thought that loons occupy the same breeding territory throughout their reproductive lives. There is no reliable scientific information on lifespan and survivorship, but as large-bodied birds with low clutch size, yellow-billed loons are probably what is known as “K-selected;” that is, they are long-lived and dependent

upon high annual adult survival to maintain populations.

Nest sites are usually located on islands, hummocks, peninsulas, or along low shorelines, within one meter (about three feet) of water. Nests are constructed of mud or peat, and are often lined with vegetation. One or two large, smooth, mottled brown eggs are laid in mid- to late June; hatching occurs after 27 to 28 days of incubation (the latter chore is handled by both sexes). Although the actual age at which young are capable of flight is unknown, it is



World-wide yellow-billed loon breeding (black) and wintering (hatched) range.

probably similar to common loons (from eight to nine, but possibly as many as 11, weeks). The young leave the nest soon after hatching, and the family may then move between natal and brood-rearing lakes. Both males and females participate in feeding and caring for young. Though yellow-billed loons might occasionally replace their eggs after nest predation, the short Arctic summer makes it impossible for these birds to raise a second brood if the first is taken.

The total Alaska yellow-billed loon population, including those birds not occupying breeding areas during summer, is estimated to be between 3,700 and 4,900. Based on anecdotal local density and habitat information, an estimated 8,000 yellow-billed loons are thought to breed in Canada and 5,000 in Russia. Combining these

figures, the worldwide breeding-ground yellow-billed loon population is estimated at 16,500.

There is no legal harvest of yellow-billed loons allowed in the United States. However, in Alaska's North Slope Region only, a regional total of up to 20 yellow-billed loons may be kept if inadvertently caught in subsistence fishing nets and used for subsistence purposes.

Yellow-billed loons face potential threats on both freshwater breeding territories and marine waters used during migration and the non-breeding season. In freshwater breeding areas, factors associated with oil and gas exploration and development may impact loon productivity by making breeding habitats temporarily or permanently unsuitable. Infrastructure associated

with oil fields may increase the numbers of potential nest predators like ravens, gulls, and arctic foxes.

Changes in freshwater chemistry or pollutant loads associated with oil and gas development may render breeding habitats unsuitable. Contaminants in both marine and freshwater habitats place yellow-billed loons at risk. Oil spills and changes in marine ecosystems (i.e. forage fish) can also be sources of mortality and compromise habitats used by loons.

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