

# U.S. Fish & Wildlife Service Yellow-billed Loon Gavia adamsii

### Status

The yellow-billed loon was designated a candidate species throughout its range in March 2009.

#### Description

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 nonbreeding season, yellow-billed loons lose their distinctive black and white plumage and molt into dull, light brown feathers.

# Range

Yellow-billed loons nest near freshwater lakes in the arctic tundra of Alaska on the Arctic Coastal Plain (ACP), northwestern Alaska and St. Lawrence Island; in Canada east of the Mackenzie Delta and west of Hudson Bay; and in Russia on a relatively narrow strip of coastal tundra from the Chukotka Peninsula in the east and on the western Taymyr Peninsula in the west, with a break in distribution between these two areas.

The wintering range includes coastal waters of southern Alaska from the Aleutian Islands to Puget Sound; the Pacific coast of Asia from the Sea of Okhotsk south to the Yellow Sea; the Barents Sea and the coast of the Kola Peninsula; coastal waters of Norway; and possibly Great Britain.

# Habitat and Habits

Yellow-billed loons nest exclusively in coastal and inland low-lying tundra, in association with permanent, fishbearing lakes. Lakes that are able

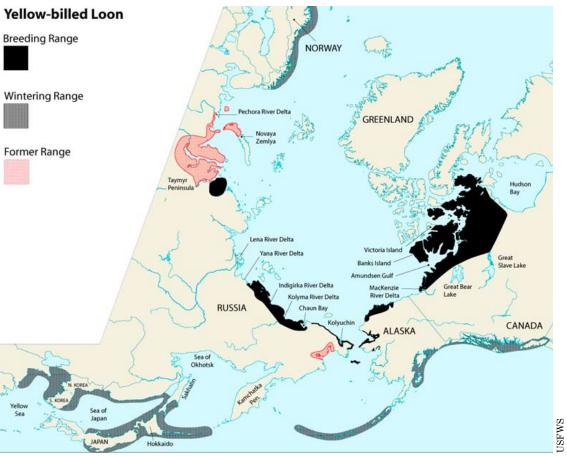


A mature yellow-billed loon in breeding plumage.

to support breeding loons have abundant fish populations; offer depths greater than two meters (six feet); are 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 probably similar to common loons



Worldwide range of the yellow-billed loon.

(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 unlikely that these birds can raise a second brood if the first is taken.

# **Population Level**

The global breeding ground population size for yellow-billed loons is unknown, but probably in the range of 16,000-32,000, with an Alaska population of 3,000-4,000. Maximum estimates based on the amount of available habitat (plus limited survey data for Canada) are 20,000 birds in Canada and 8,000 in Russia.

# Subsistence

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

# **Reasons for Current Status**

Yellow-billed loon populations are vulnerable due to a combination of low starting population size, low reproductive rate, and very specific breeding habitat requirements.

The species is listed in the Red Book by the Russian Federation as a category 3 species (rare, sporadically distributed species), is considered a Bird of Conservation Concern in the U.S., and is one of the State of Alaska's Comprehensive Wildlife Conservation Strategy species.

The Service considered the best available data about factors that could affect yellow-billed loon populations, including subsistence harvest, oil and gas development and other contaminants, climate change, fishing bycatch, and marine pollution in wintering habitat in Asia. Subsistence harvest surveys indicated a substantial level of harvest of yellow-billed loons relative to their population, although exact harvest numbers are uncertain.

# **Conservation Agreement**

In 2006, the Service, working with a variety of Native, state and federal partners, developed a conservation agreement to protect the yellowbilled loon in northern and western Alaska. This agreement represents a cooperative effort among the partnering resource agencies to take measures necessary to conserve the species and its habitats in Alaska. In so doing, the partnering agencies hope that current or potential threats in these areas can be avoided, eliminated. or reduced. The Yellowbilled Loon Conservation Agreement is available at: http://alaska.fws. gov/fisheries/endangered/ yellow billed loon.htm or can be requested from: the

- Fairbanks Fish and Wildlife
- Field Office at 907/456 0203.

The Conservation Agreement partners will continue collaborating to collect and refine information about the yellow-billed loon to help guide future management. For example, BLM has proactively worked with loon experts and the Service to identify appropriate protections for the species and its habitat. Those protections were incorporated into their Records of Decision for NPR-A, and in the commitments they made in the Conservation Agreement.

For more information, contact: U.S. Fish & Wildlife Service 1011 E. Tudor Road, Mail Stop 361 Anchorage, Alaska 99503 907/786 3309 http://alaska.fws.gov/fisheries/endangered/ yellow\_billed\_loon.htm

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