

LEAST AUKLET *Aethia pusilla*

Conservation Status

ALASKA: Moderate

N. AMERICAN: Moderate Concern

GLOBAL: Least Concern

Breed	Eggs	Incubation	Fledge	Nest	Feeding Behavior	Diet
June-Aug	1	28-36 d	26-31 d	crevice	surface dive	zooplankton

Life History and Distribution

This five-inch-tall alcid is the most abundant seabird in North America. Though small, they have a large appetite. Least Auklets (*Aethia pusilla*) eat almost 90% of their weight per day in microscopic marine crustaceans and other small zooplankton. Their food is often concentrated far from shore, in areas where strong vertical mixing carries it to the surface. To catch the prey, they dive beneath the surface and forage while in wing-propelled, underwater “flight”.

During the breeding season, both sexes are bedecked with three kinds of facial ornaments: a colorful red bill with a lighter tip, a dark, horny knob projecting vertically from the upper bill, and white facial plumes. There is a single line of plumes behind each eye and various plumes on the front of the face. Breeding plumage is dark gray above with variable white patches on the shoulder. Underparts are markedly variable and range from unmarked white, through spotted intermediates, to completely blackish gray. The intermediate coloration is the most common. In winter, the bill becomes blackish, they lose the bill knob and white facial plumes, and the plumage of the underparts is unmarked white.

Least Auklets breed on remote islands, on rocky beaches, sea-facing talus slopes, cliffs, boulder fields, and lava flows which provide rock crevices for nesting. Nest concentrations are usually most dense on unvegetated talus. One egg is laid on bare rock on a flat surface inside the crevice. They are a highly colonial species and generally nest in association with crested auklets.

In Alaska, breeding occurs on the Aleutian Islands, Shumagin and Semidi islands, and on isolated islands in the Bering Sea. Virtually all colonies are on volcanic islands adjacent to deep water or where deep oceanic water, filled with energy-rich crustaceans, is transported past the colonies. The single exception to this is St. Matthew Island, in the southern Bering Sea, where the auklets feed on lower quality, ocean shelf crustaceans.

Outside of North America, Least Auklets breed on the Chukotski peninsula of eastern Siberia, west coast of the Kamchatka peninsula, Commander Islands, central Kurile Islands, and on islands in the Sea of Okhotsk.

Autumn and winter are spent exclusively at sea. They remain near breeding areas year-round where waters remain ice-free.



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Alaska Seasonal Distribution

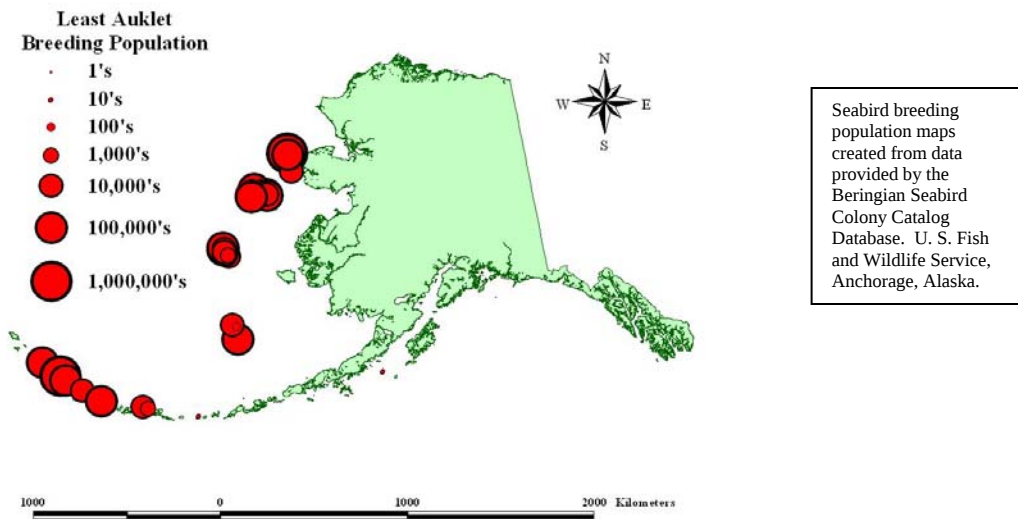
AK Region	Sp	S	F	W
Southeastern	-	-	-	-
Southcoastal	+	+	+	+
Southwestern *	C	C	C	C
Central	-	-	-	-
Western *	C	C	C	-
Northern	-	+	+	-

C= Common, U= Uncommon, R= Rare, + = Casual or accidental, - = Not known to occur, * = Known or probable breeder, Sp= Mar-May, S= June and July, F= Aug-Nov, W= Dec-Feb. © **Armstrong 1995.**

Population Estimates and Trends

No effective censusing method has been devised and population estimates for Least Auklet colonies have been difficult to interpret. Nests are hidden under rocks, colonies are large, and colony attendance is highly variable. Monitoring of populations has primarily been done by counting birds loitering on the surface of the colony. This is a small and variable percentage of the population. Colony attendance varies greatly both daily and seasonally. Auklet land attendance relates to changing weather and food conditions which also vary from year to year. This may result in large changes in surface counts of birds between years with no overall population changes.

Estimates of the total North American population range from 5.5 million to 9 million individuals at a total of 37 colony sites. The largest colonies are located on Kiska,



Segula, and Gareloi islands in the Aleutian Islands; St. Matthew and Hall islands; Singikpo Cape; St. Lawrence Island; and Diomed Island.

Little trend information is available. Least Auklet populations were monitored by the Alaska Maritime National Wildlife Refuge only at Kasatochi Island in the Aleutian Islands, where a significant negative trend was found (-5.2% per annum 1991-2003). There is no evidence on population trends in North America.

Conservation Concerns and Actions

Some large auklet colonies were extirpated from several Aleutian Islands and reduced on many other islands when arctic foxes (*Alopex lagopus*) were introduced for fur farming. A predator that is far more difficult to control is the introduced Norway rat (*Rattus norvegicus*). There is evidence of frequent predation on auklets by rats on Kiska Island. A cache of 28 auklets, killed by bites to the back of the neck, was discovered by G.V. Byrd (pers. comm., Alaska Maritime National Wildlife Refuge). Rats escaping from fishing vessels and boat harbors are a continuing and serious threat to the species.

Alaska indigenous peoples traditionally hunted auklets for food on Diomed, St. Lawrence, and the Pribilof islands. Some hunting continues today, but auklets are hunted much less than formerly. Between 1995 and 2000, approximately 9,200 auklets were taken annually for subsistence hunting in Alaska, with over 50% being taken on St. Lawrence Island. Auklets were not identified to species in subsistence surveys, but it is probable that Least Auklets were among the take. The effects of subsistence hunting and eggging on the species are unknown.

Auklets are occasionally reported to be caught and drowned in commercial fishing nets. In 2002, the bycatch of Least Auklets from the set gillnet fishery for Kodiak Island, Alaska was estimated at 18 individuals.

Colony-wide effects of human disturbance on Least Auklet breeding success are unknown, but this species is sometimes sensitive to disturbance at colonies. Flocks may repeatedly circle and fail to alight on the breeding grounds or enter nesting crevices until the disturbance passes. The Least Auklet may also be vulnerable to oil spills because of a high ratio of body surface area to mass.

Recommended Management Actions

- Continue efforts to develop reliable monitoring techniques.
- Continue monitoring Least Auklets at geographically-dispersed breeding sites.
- Reduce predation of Least Auklets with continued fox removal and rat prevention programs.
- Support efforts to minimize the incidence of fuel spills near breeding and wintering areas and measure contaminants in Least Auklet eggs.
- Work with state and federal agencies and fisheries councils to minimize the negative impacts.
- Work with the Alaska Migratory Bird Co-Management Council (AMBCC) to monitor subsistence use of Least Auklets.
- Evaluate human disturbance and minimize disturbance at colonies.

Regional Contact

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References

Armstrong 1995; Dragoo *et al.* In Press; IUCN Internet Website (2005); Jones 1993b; Kushlan *et al.* 2002; Manly *et al.* 2003; Stephensen and Irons 2003; U.S. Fish and Wildlife Service 2006, 2002, 1988; U.S. Fish and Wildlife Service Internet Website (2005).

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