CASSIN'S AUKLET Ptychoramphus aleuticus

Conservation Status

ALASKA: High N. AMERICAN: Moderate Concern

GLOBAL: Least Concern

Breed	Eggs	Incubation	Fledge	Nest	Feeding Behavior	Diet
May-Aug	1	37-42 d	41-50 d	burrow, crevice	surface dive	zooplankton, squid, fish

Life History and Distribution

Like many of its relatives, this chubby little seabird nests on offshore islands that are far removed from the activities of humans and predatory mammals. It spends its life on the open sea and only comes ashore during the breeding season. Even then, it spends the daylight hours resting and feeding on the open ocean and arrives on the colony well after dark. Unless it is incubating eggs or brooding small chicks, it returns to the sea before dawn. Like many nocturnal birds that need to find their mates and young at night, the Cassin's Auklet (*Ptychoramphus aleuticus*) is vocal on the colony. In the wee hours of the morning, there is a chorus reminiscent of swarming frogs.

In keeping with their secretive character, both males and females have mostly dull, grey-brown feathers all year round; the belly is white. The only decorations on this nondescript plumage are small, white crescents above and below the eye, which are too small to be seen at any distance. The featherless parts of the bird are more colorful. The feet are bright blue, and there is a pale pink patch on the lower half of the bill. The eyes, which are brown in the young, become a striking metallic grey in the adult.

Cassin's Auklets are opportunistic in their nest site selection. Sometimes they nest in natural cavities such as rock crevices, under debris or driftwood, or in artificial nest boxes. Usually, they nest in burrows that they dig with their sharp toe nails. The burrows can be distinguished from those of other seabirds by pinkishpurple spatters among the droppings at the mouth of the burrow. These spatters are remnants of a "soup" of small oil-rich crustaceans, or hard-shelled animals, that they carry in a special "gular" pouch to their chicks. This pouch develops prior to the breeding season and shrinks before fall migration. In spring and early summer, the auklets may feed on larval or juvenile fish, which are also oil-rich.

There are breeding colonies of Cassin's Auklets along the west coast of North America, from the Aleutian Islands to Baja California. The largest colonies in Alaska are located on Chagulak Island in the Aleutian Islands, the Nigrud Island group, Hunter and Umga islands in the Sandman Reefs, Castle Rock in the Shumagin Islands, Suklik Island in the Semidi Islands, and Petrel and Lowrie islands in Southeast Alaska.



Copyright Ian Jones

The winter range is poorly known. Southern populations are mostly resident and northern populations (Alaska and British Columbia) migrate further south after the breeding season. A greater number of Cassin's Auklets are seen in California waters in the fall and winter than nest in California, Oregon, and Washington combined. No other information is available on timing or routes of migration.

Alaska Seasonal Distribution

AK Region	Sp	S	F	W
Southeastern *	U	U	U	U
Southcoastal	R	R	R	-
Southwestern *	С	С	С	С
Central	-	-	-	-
Western	-	-	-	-
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.

Two subspecies are recognized. The northern form, *Ptychoramphus aleuticus aleuticus* is found from Alaska south to Guadalupe Island off the coast of northern Baja California. The northern form is larger and heavier. The southern form, *P.a. australe*, breeds off the west coast of Baja California from the San Benito Islands, south to Asuncion and San Roque Islands.



Seabird breeding population maps created from data provided by the Beringian Seabird Colony Catalog Database. U. S. Fish and Wildlife Service, Anchorage, Alaska.

Population Estimates and Trends

The total estimated population is at least 3.6 million individuals. The core of the population is in British Columbia, Canada (>2.7 million). Triangle Island, B.C. has the largest colony in the world with approximately 1.1 million breeding birds, although this colony is presently declining.

The U.S. Fish and Wildlife Service Beringian Seabird Colony Catalog estimates 473,000 Cassin's Auklets at 53 colonies in Alaska.

Populations of Cassin's Auklets appear to be declining at several locations throughout the species' range. Some historic colonies have disappeared, mainly due to introduced predators. No recent trend information is available for Alaska.

Conservation Concerns and Actions

Major concerns for Cassin's Auklets in Alaska include introduced predators, oil spills, and mortality from fisheries interactions. Historically, the Alaskan population was probably much larger, but fur farmers and other settlers introduced foxes, rats, and other mammals, which extirpated vast numbers of this species. The arctic fox (*Alopex lagopus*) extirpated large breeding colonies of Cassin's Auklets in the Sanak Islands, off the tip of the Alaska Peninsula. Cassin's Auklets also disappeared from the Aleutian Islands of Adugak, Keegaloo, the Ilak Islands, and from small islands off Amlia Island. Common Ravens (*Corvus corax*), and river otters (*Lutra canadensis*) are also known to prey on this seabird in Alaska.

Cassin's Auklets may be less vulnerable to oil spills during the breeding season than other closely related species. They do not "raft" or float in huge numbers near breeding colonies daily. Instead of carrying out their social activities near nesting areas (e.g. pairing, mating, and displaying to each other), like some species, they perform these behaviors while scattered on the open ocean. Mortality from oil spills depends on the season and location. In December 1988, Cassin's Auklets made up about 32% of the birds that were killed along Vancouver Island and 0.8% of the birds found dead along the Washington coast from the *Nestucca* oil spill. Mortality also occurs from drowning in high-seas and coastal gillnets. Currently, the magnitude of the interaction with commercial fisheries is unknown.

Recommended Management Actions

- Continue efforts to derive reliable monitoring techniques.
- Determine breeding population numbers of Cassin's Auklets in Alaska.
- Develop standardized methods for monitoring populations.
- Implement a regional monitoring program.
- Complete a nesting inventory.
- Measure productivity.
- Determine wintering areas and migration routes.
- Reduce predation of Cassin's 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 Cassin's Auklet eggs.
- Work with state and federal agencies and fisheries councils to minimize negative impacts of commercial fisheries.
- Evaluate human disturbance and minimize disturbance at colonies.

Regional Contact

Branch Chief, Nongame Migratory Birds, Migratory Bird Management, USFWS, 1011 E. Tudor Rd., Anchorage, Alaska 99503 Telephone (907) 768-3444

References

Armstrong 1995; Bailey 1993; IUCN Internet Website (2005); Kushlan *et al.* 2002; Manuwal and Thoresen 1993; U.S. Fish and Wildlife Service 2006, 2005, 2002. *Full credit for the information in this document is given to the above references.*