

CRESTED AUKLET *Aethia cristatella*

Conservation Status

ALASKA: Moderate

N. AMERICAN: Moderate Concern

GLOBAL: Least Concern

Breed	Eggs	Incubation	Fledge	Nest	Feeding Behavior	Diet
May-Aug	1	34-41 d	35 d	crevice	surface dive	mostly zooplankton

Life History and Distribution

The Crested Auklet (*Aethia cristatella*) is a small, peculiar-looking seabird with a bright orange bill (during breeding season) and an eye-catching crest ornament, which is present in both sexes. Males and females prefer mates with large crests and have a distinctive tangerine odor to their plumage.

During the breeding season, this bird is found only in the Bering Sea and adjacent North Pacific Ocean, and nests in colonies on remote coastlines and islands. They are an extremely social species and nest in mixed colonies with Least Auklets (*Aethia pusilla*) ranging in size from a few hundred to possibly more than a million pairs. Nests are located deep in rock crevices on sea-facing talus slopes, cliffs, boulder fields, and lava flows making it difficult to census them.

Summer foods include marine invertebrates and less frequently fish and squid. Crested Auklets often forage in large flocks. To capture their food, birds dive from the surface and pursue the prey in underwater “flight”.

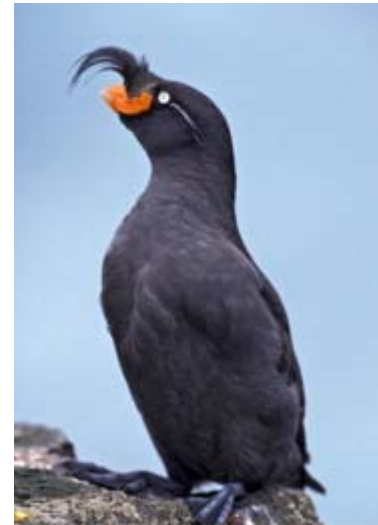
In Alaska, Crested Auklets are found in the Bering Sea, on the Aleutian Islands, and on the Shumagin Islands. A total of 43 colony sites are known with notable centers of breeding abundance in the northern Bering Sea and the western Aleutian Islands. Virtually all colonies are on volcanic islands adjacent 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 where the auklets feed on lower quality (less nutrient-rich), ocean shelf crustaceans.

Alaska Seasonal Distribution

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

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.**

They also breed in Russia on the central Kurile Islands, the Chukotski peninsula, and on islands in the



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Okhotsk Sea. The winter range is poorly documented, but Crested Auklets are usually present near breeding areas where the waters remain ice-free. In Alaska, there is some southeastward movement in winter to the Gulf of Alaska.

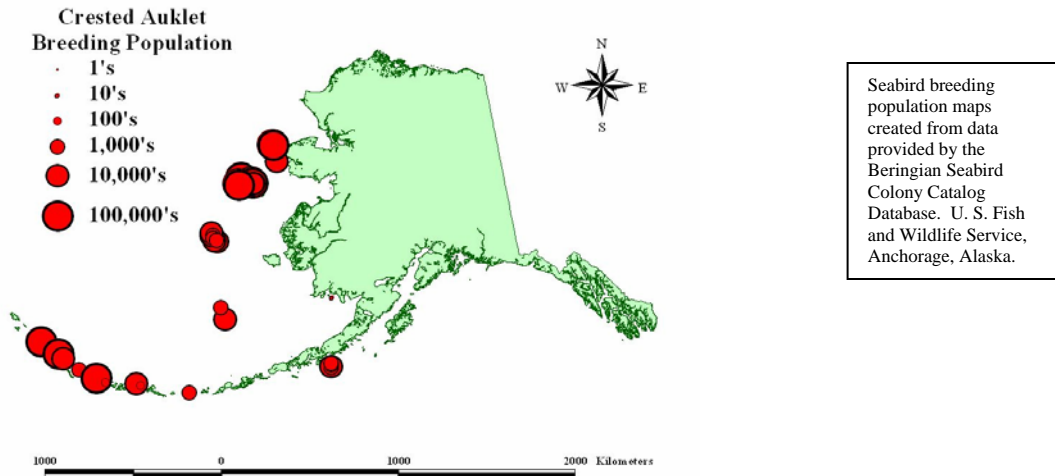
Population Estimates and Trends

Numbers of birds on the surface at a colony and the nearby sea represent only a small, variable, and poorly understood proportion of the total population. Colony sizes are estimated from numbers of adults visible on the surface of a colony site. The total North American population is estimated at about 2.9 million birds. The largest breeding colonies are at Sirius Pt. on Kiska Island in the central Aleutian Islands and at Kongkok Bay, on St. Lawrence Island. The global population is estimated at approximately 6 million individuals.

Little information is available on global trends. There is no evidence for an overall population trend in North America, although some information is available on local population changes. Crested Auklet populations were monitored by the Alaska Maritime National Wildlife Refuge only at Kasatochi Island in the Aleutian Islands, where a significant positive trend was found (+7.0% per annum 1991-2003).

Conservation Concerns and Actions

Crested Auklets face several threats including



disturbance at colonies, predation from introduced predators, oil spills, collisions with fishing vessels due to attraction to light, and entanglement in driftnets.

If disturbed, birds will continue to circle the colony and not alight or enter the nesting crevice until the disturbance has passed. They are particularly sensitive to disturbance at nesting crevices. Handling of incubating adults could result in nest abandonment.

This species was extirpated from several Aleutian Islands and reduced on many other islands when arctic foxes (*Alopex lagopus*) were introduced for fur farming. Red foxes (*Vulpes vulpes*) also killed an estimated 800 Crested Auklets in a three month period at Big Koniugi Island in the Shumagin Islands. A far more difficult predator to control is the introduced Norway rat (*Rattus norvegicus*). There is evidence of frequent predation on auklets by rats on Kiska Island. Rats escaping from fishing vessels and boat harbors are a continuing and potentially serious threat to the species.

Crested Auklets are highly vulnerable to oil spills because of large local concentrations at breeding and favored wintering areas. Beached, oil-soaked corpses have been found on Buldir Island in the western Aleutian Islands.

Human activities where bright lights are employed at sea, particularly during bad weather (e.g. oil and gas development, fishing vessels, oil tankers) also represent a potential danger to the species. Birds may be killed by collisions with the light source. In one incident near Kodiak Island, 6,000 Crested Auklets came aboard a brightly-lit crab fishing vessel resulting in high mortality.

Auklets are occasionally reported to be caught and drowned in monofilament driftnets. Other indirect impacts of commercial fishing such as those related to food availability are difficult to ascertain and further study is required.

Alaska indigenous peoples traditionally hunted auklets for food on Diomedea, St. Lawrence, and the Pribilof islands. Some hunting continues today. 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 Crested Auklets were among the take. The

effects of subsistence hunting and eggging on the species are unknown.

Recommended Management Actions

- Restore Crested Auklet populations and distribution to pre-fox, pre-rat introduction conditions.
- Maintain an Alaska-wide population of at least year 2000 levels.
- Continue study of effective monitoring techniques.
- Implement a systematic census of the Alaskan population.
- Survey populations at index locations and maintain a monitoring program in Alaska.
- Complete a nesting inventory.
- Determine wintering locations.
- Reduce predation of Crested 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 Crested Auklet eggs.
- Work with state and federal agencies and fisheries councils to minimize the negative impacts of fisheries interactions.
 - Educate ship crews about light pollution and care and release of birds that come aboard.
- Work with the Alaska Migratory Bird Co-Management Council (AMBCC) to monitor subsistence use of Crested Auklets.
- Evaluate human disturbance and minimize disturbance at index colonies.

Regional Contact

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References

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

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