

## RHINOCEROS AUKLET *Cerorhinca monocerata*

### Conservation Status

**ALASKA: Low**

**N. AMERICAN: Low Concern**

**GLOBAL: Least Concern**

Breed	Eggs	Incubation	Fledge	Nest	Feeding Behavior	Diet
June-Sept	1	39-52 d	48-55 d	burrow, crevice	surface dive	fish, marine invertebrates

### Life History and Distribution

The Rhinoceros Auklet (*Cerorhinca monocerata*) is an unusual member of the Alcidae family. “Auklet” is a misnomer, since this bird is not a close relative of the small, plankton-feeding alcids called auklets, but is actually related to the more brightly colored, parrot-billed puffins (*Fratercula spp.*). It is similar to puffins in many aspects of its biology, but its outward appearance differs noticeably. This bird is pigeon-sized with drab, mostly gray plumage that is darker on the back, lighter gray on the throat and breast, and white on the underparts. The eyes are yellow and it has a thick, orange bill with a brown tip. During the breeding season, the head is rather ornate with two white plumes on either side of the head and a pale yellow, rhinoceros-like “horn” projecting above its upper bill. Both sexes have the same size horn. The function of this prominent feature is unknown.

Nesting occurs on offshore islands throughout the temperate waters of the North Pacific. Males and females dig burrows with their bills and long, sharp claws. The burrows are usually dug in deep soil on grassy slopes or beneath forests. If soil is lacking, they will nest in crevices or natural cavities.

Unlike other puffins, the Rhinoceros Auklet is mainly a nocturnal visitor to its colonies. This may be an adaptation in response to kleptoparasitism (stealing of food by other birds) and predation by gulls (*Larus spp.*) and raptors. During the day, this species tends to stay on the open sea to feed. The adult waits for nightfall before venturing ashore to feed its young and remains hidden in the burrow until about two hours before sunrise. This is the only nocturnal auk that carries fish externally (crosswise in their bills) to hungry chicks back at the colony. All of the other nocturnal auks bring food in a gular pouch in the throat.

This species breeds from Japan in the west, to the Gulf of Alaska in the east, and south to southern California. In Alaska, it breeds on Chowiet Island in the Semidi Islands, Middleton Island and the Chiswell Islands in the Gulf of Alaska, and St Lázaria and Forrester islands in Southeast Alaska. It is also a probable breeder on Buldir Island in the Aleutian Islands in very small numbers (~30 birds) (J. Williams pers. comm., Alaska Maritime National Wildlife Refuge). The breeding colony previously recorded on Sud Island in the Barren Islands was not found in 1994, but Rhinoceros Auklets are still seen in summer around the



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Barren Islands and are probably still breeders in the area (A. Kettle pers. comm., Alaska Maritime National Wildlife Refuge).

The North American breeding population winters in Pacific waters, from Southeast Alaska to southern Baja California. The bulk of the breeding population appears to winter off California.

Birds that breed outside North America do not move far outside the breeding range, but occur as far south as Tokyo, and occasionally Kyushu and northeastern China.

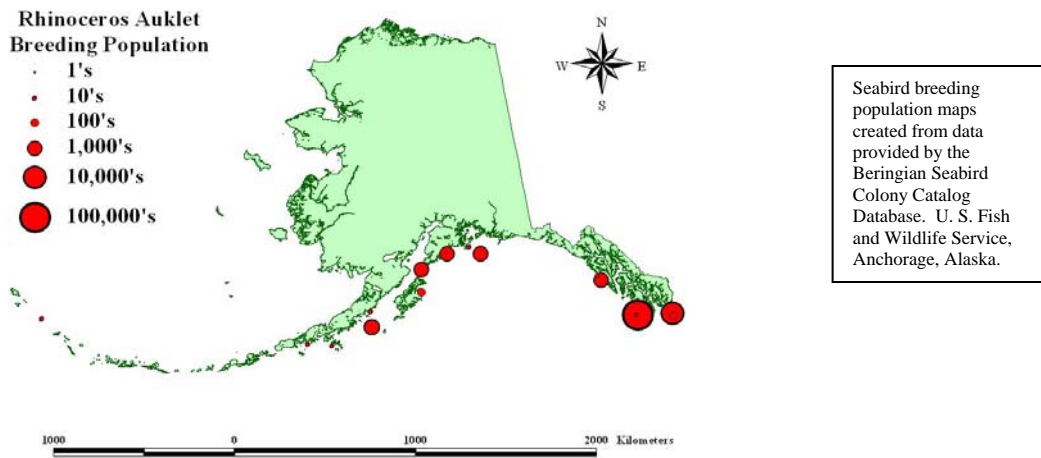
### Alaska Seasonal Distribution

AK Region	Sp	S	F	W
Southeastern *	U	U	U	+
Southcoastal *	R	R	R	-
Southwestern *	R	R	R	R
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.

### Population Estimates and Trends

Population estimates are generally unreliable because of the difficulty in counting nesting birds. Burrows are long and sometimes branched making nest chambers hard to access. World population estimates are extremely rough. The total population is estimated at 2-3 million individuals including nonbreeders. The breeding



population is estimated at 1.5 million birds. In North America, >95% of the population breeds in British Columbia (73%), Washington (13%), and in Southeast Alaska (12%) where most of the birds are found at eight large colonies. Breeding also occurs in Oregon and California.

Rhinoceros Auklets increased by 4.6% per annum at both Middleton Island and the Semidi Islands between the mid-1970s and 2003. There is no trend information available for other breeding sites in Alaska. Populations appear to have increased in British Columbia and perhaps Washington.

### Conservation Concerns

Populations of this secretive and poorly known species are potentially threatened by introduced mammalian predators, oil pollution, and bycatch in fishing nets.

Disturbance and trampling of burrows by humans, mammals, and surface nesting or roosting birds can cause nest loss and lowered reproductive success. Populations have been reduced at some sites by the introduction of mammalian predators such as the arctic fox (*Alopex lagopus*) in Alaska, and raccoons (*Procyon lotor*) and rats (*Rattus spp.*) in British Columbia. At Helgesen Island, B.C., raccoons reduced the population from 13,000 to 2,000 pairs between 1986 and 1993.

A large proportion of Rhinoceros Auklets breed at just a few large colonies in North America and winter in continental-shelf waters off California. This makes them potentially vulnerable to the effects of major oil spills. The Rhinoceros Auklet was the second most common species killed in the *Apex Houston* oil spill off central California.

High mortalities have also been documented in the California and Washington gillnet fisheries.

Abundant dead birds on California beaches during the 1983 El Niño event suggest that major changes in oceanographic conditions can lead to heavy mortality.

### Recommended Management Actions

- Assess population size and document trends at colonies throughout Alaska.
- Continue monitoring Rhinoceros Auklets at geographically-dispersed breeding sites.
- Reduce predation with continued introduced predator removal and prevention programs.
- Continue to work with state and federal agencies and fisheries councils to minimize the negative impacts of fisheries interactions.
- Support efforts to minimize the incidence of fuel spills near breeding and roosting areas and measure contaminants in Rhinoceros Auklet eggs.
- Minimize human disturbance at nesting sites.

### Regional Contact

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### References

Armstrong 1995; Dragoo *et al.* In Press; Gaston and Dechesne 1996; IUCN Internet Website (2005); Kushlan *et al.* 2002;  
U.S. Fish and Wildlife Service 2006, 2002.  
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