DISTRIBUTION AND POPULATION STATUS OF WHISKERED AUKLET IN THE ALEUTIAN ISLANDS. ALASKA

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The little known Whiskered Auklet (Aethia pygmaea) occurs only in the Aleutian (Figure 1), Commander and Kuril islands of the North Pacific. In the Aleutian Islands it occurs from Unimak Pass to the Near Islands (Kessel and Gibson 1978), but the only documented nesting records are from Umnak Island (R.J. Gordon in litt.), Chagulak Island (Murie 1959), Atka Island (Turner 1886), and Buldir Island (Knudtson and Byrd in press).

This paper summarizes new information on the distribution of Whiskered Auklet in the Aleutian Islands, and provides a significantly higher estimate of the minimum population.

METHODS

During the period 1972-1974 we were aboard the R/V Aleutian Tern as it traveled to every major island in the Aleutians. In 1972 and 1974 nearly the entire island chain was traversed. In 1972 the trip was made during the breeding season, but in 1974 observations were made in April, prior to nesting. In 1973 observations were confined to the eastern Aleutians. Travel was generally confined to daylight hours so that continuous observations could be made. One or two observers counted birds within approximately 300 m of both sides of the ship. The Aleutian Tern traveled at 16 km/h except when near islands when the speed was reduced to as low as 8 km/h.

Island groups within the Aleutians are identified as follows: 1) Fox Islands - Unimak Pass to Umnak Island (the area of each island group ends 16 km west of the westernmost island, to include birds associated with nesting colonies); 2) Islands of Four Mountains - Umnak Island to Amukta Island; 3) Andreanof Islands - Amukta Island to Unalga Island; 4) Rat Islands - Unalga Island to Buldir Island; 5) Near Islands - Buldir Island to Attu Island.

RESULTS AND DISCUSSION

The largest numbers of Whiskered Auklets were found in the Fox Islands prior to (April 1974) and during (24-27 May 1972 and 3 July 1973) the breeding season (Table 1). Nearly 60% of 13,118 birds (approximate density $1000/\mathrm{km^2}$) recorded in this area in 1974 were near Baby Pass, where Spindler (in litt.) estimated 265 Whiskered

Table 1. The distribution of Whiskered Auklets observed in the Aleutian Islands, Alaska, 1972 to 1974.

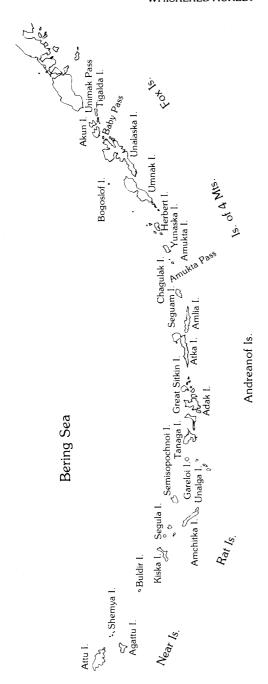
YEAR	ISLAND GROUP					TOTAL
	Fox	Is. of 4 Mt.	Andreanof	Rat	Near	
1972 (24 May to 7 July)	1702	12,100	771	527	1	15,010
1973 (3 July)	7780	-	_	_	_	
1974 (4 to 30 April)	13,118	2519	9196	14	0	24,847
¹No data						

Auklets per km² in April 1976. During the 1973 breeding season, nearly 7800 auklets were counted on 3 July at a time when one member of many breeding pairs was probably at the nest. As in the April counts in this area, birds were concentrated in Baby Pass. In 1972 the count was low because Baby Pass was not reached until after dark, so only birds in the less densely populated east end of the Fox Islands were tallied. Few Whiskered Auklets were seen west of Baby Pass in the Fox Islands during late winter or summer.

The largest single flock of Whiskered Auklets (an estimated 10,000) we found was in the Islands of Four Mountains near the west side of Yunaska Island on 30 May 1972 (Kessel and Gibson 1978). Smaller flocks were encountered near Herbert and Chagulak islands during the breeding season. In April 1974 only 21% as many Whiskered Auklets were found in the Islands of Four Mountains during the breeding season, and the late winter distribution of birds within this area was slightly more westerly than the summer distribution.

The reverse situation occurred in the Andreanof Islands, where we found over 9000 auklets prior to, but fewer than 800 during, the breeding season. Nearly 70% of the auklets seen prior to the breeding season were near the southwest side of Great Sitkin Island. Great Sitkin Island and all islands around it were intensively surveyed for birds in July 1971 by Gibson and P.C. Sekora, and Whiskered Auklets were not present. Therefore, the birds seen in the area in April 1974 bred elsewhere, probably in the Islands of Four Mountains.

Of the 527 Whiskered Auklets counted in the Rat Islands in 1972, about 200 were at Segula Island, and 300 at Buldir Island. The 14 birds identified in April 1974 were scattered over the entire area.



Pacific Ocean

Figure 1. Map of the Aleutian Islands. Alaska. showing five major island groups.

During our study, Whiskered Auklets were scarce in the Near Islands: four near Attu Island 12 June (1975) (E.P. Hoberg pers. comm.) and two near Agattu Island 1 July 1975 (Byrd). Apparently the species was formerly more common in this area, since Turner (1886) considered Whiskered Auklet abundant in the Near Islands.

Nearly all the Whiskered Auklets we saw in the Aleutian Islands were associated with tide rips where they were presumably feeding, usually within 16 km of land. Although the species was recorded throughout the island chain, its distribution was distinctly clumped. This phenomenon was particularly pronounced prior to the breeding season; 97% of the Whiskered Auklets in the Fox Islands were between the west side of Tigalda Island and the west side of Baby Pass, 98% of the birds in the Islands of Four Mountains were between Herbert and Yunaska islands, and 95% of the total in the Andreanof Islands were in two locations (30% near Seguam Island, and 65% near Great Sitkin Island). These three concentrations combined accounted for 85% of the Whiskered Auklets we saw in the Aleutians in April 1974.

The breeding season distribution is generally less clumped, with smaller flocks scattered over broader areas. The exception was the flock of 10,000 birds in the Islands of Four Mountains.

Little is known about the distribution of Whiskered Auklets after they complete nesting activities in August. The birds apparently winter near their breeding area (AOU 1957). J.L. Trapp (pers. comm.) saw 2000 auklets near the east end of the Islands of Four Mountains 21-22 September 1974, and on 27 September 1974 he counted 638 birds at the east end of the Fox Islands. Only 39% and 31% of the auklets were identified to species in the Islands of Four Mountains and Fox Islands respectively, but all those whose identity was known were Whiskered Auklets.

Although is is impossible to determine what percentage of the total Whiskered Auklets in the Aleutian Islands we actually observed in 1972 and 1974 (the two years when the entire area was censused), it is apparent that Murie's (1959:201) estimate of "at least 2000" in the Aleutians was low. We counted 15,000 Whiskered Auklets on the sea in 1972 when one bird of many pairs was probably in a nest crevice. The 1974 total of 25,000 birds counted prior to the nesting season is considered more representative of the population, and we use this as the minimum population estimate of Whiskered Auklets in the Aleutian Islands.



Whiskered Auklets, Buldir Island, Alaska, 25 May 1976 Photo by G. Vernon Byrd

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