# WILDLIFE OBSERVATIONS AT WALRUS ISLAND, PRIBILOF ISLANDS, ALASKA, JULY 20, 2006



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## **ABSTACT**

On July 20, 2006, a team of biologists from Alaska Maritime National Wildlife Refuge with support from National Marine Fisheries Service and International Pacific Halibut Commission volunteers, conducted a survey of wildlife on Walrus Island, Pribilof Islands, Alaska. Walrus Island is designated an "intermittent" monitoring site on the Refuge, meaning that it should be surveyed at least every 10 years. The primary breeding species in 2006 were red-faced cormorant (68 birds and 7 nests), common murre (679 birds), black-legged kittiwake (154 birds and 20 nests), and Steller sea lion (159 adults and 27 pups). Results of this survey show continued decrease in numbers of common and thick-billed murres, but more black-legged kittiwakes were counted in 2006 than in previous surveys (1987 and 1997). In addition, the number of northern fur seals recorded by the Refuge on the island has risen sharply (1 in 1987, 15 in 1997, and 120 in 2006).

# INTRODUCTION

Walrus Island in the Pribilof Island group is one of several intermittent seabird monitoring sites on Alaska Maritime National Wildlife Refuge (AMNWR). The objectives of the intermittent site monitoring are to confirm information from more frequently monitored sites in each region and to determine whether suggested trends are more widespread. Furthermore, these surveys are used to identify local conservation problems at intermittent sites. Seabirds and marine mammals at Walrus Island have previously been surveyed by AMNWR in 1997 and 1987 (Byrd, G.V. 1987, Byrd, G.V. 1997).

## STUDY AREA AND METHODS

Walrus Island, located at 57° 11' N, 169° 56' W, lies approximately 12 km east of Northeast Point, St. Paul Island. It is a small, low island, approximately 1 km long and 100 m wide, rising only 12 m in elevation, level on top, and composed of irregular masses of volcanic rock. Vegetation is sparse, consisting of scattered tufts of short grass matted down by fur seal scat and more noticeable growths of blooming *Cochlearia officinalis*.

Historically, breeding seabirds have been found nesting on the low coastal cliffs and interior talus at Walrus Island. In the past the island had been described as a "solid mass of murres" and photographs show multitudes of murres densely packed on the interior of the island. In addition, glaucous-wing gulls (*Larus glaucescens*) and parakeet auklets (*Aethia psittacula*) have been noted in considerable numbers (Gabrielson 1940, Peterson and Fisher 1955) Arctic foxes (*Alopex lagopus*) have reached Walrus Island at least once, probably by pack ice, and their presence corresponds to murres abandoning the interior areas of the island (Bailey 1993). Walrus Island is a Steller sea lion (*Eumetopias jubatus*) rookery site, an endangered species.

On July 20, 2006, from 14:30 hours to 17:30 hours, Monica Farmer (AMNWR), Karin Holser (volunteer) Aaron Mibus (International Pacific Halibut Commission) and Greg Thomson (AMNWR), surveyed seabirds and marine mammals on Walrus Island. All counts were made using 10x binoculars from land-base positions except for kittiwakes on the southwest cliffs,

which were counted from the boat as overland access to that area of the island was blocked by numerous fur seals. In addition, the murres on the seaward side of "Middle Rock" (an off shore islet less than 50 m long, located approximately midway along and some 20 m off the west coast of Walrus Island) were counted by boat. We also kept counts of all birds observed and searched for foxes, their pups, and fox dens. The day was overcast and foggy with a west wind of approximately 10 kts. The survey crew skiffed to Walrus Island from the St. Paul small boat harbor (about 24 km one way) in a 17' Avon W520 inflatable boat. We were able to land and moor the boat on Walrus Island adjacent to Middle Rock.

#### RESULTS

# **Breeding Seabirds**

Red-faced cormorant (*Phalacorax urile*). We counted a total of 53 adults and 15 immature birds. Seven nests were observed, each attended by an adult. Contents of the nests could not be ascertained. Our numbers continue a downward trend for this species on Walrus Island (Table 1).

Black-legged kittiwakes (*Rissa tridactyla*). We counted 154 birds and 47 nests of this species from land. In addition, 40 kittiwakes (unknown species) on 20 nests were counted by boat at a colony on the southwest side of the island. Notwithstanding, our counts of black-legged kittiwakes are roughly double previous counts (Table 1).

Common murre (*Uria aalge*). We counted 679 common murres, most on Middle Rock, as was noted in the 1997 report. This is fewer then previous counts (Table 1). The majority of the birds appeared to be non breeders; we did note however several birds in a brooding posture.

Thick-billed murre (*Uria lomvia*). We saw only 6 thick-billed murres, which is substantially lower than previous counts (Table 1).

## **Breeding Mammals**

Steller sea lion (*Eumetopias jubatus*). We counted 159 adults and 27 pups. There were 108 adults and 35 pups in 1997. Sea lions were seen along both east and west shores with pups. One animal was seen with a rope tight around the neck. Another animal was branded "A11"

Northern fur seal (*Callorhinus ursinus*). We counted 120 fur seals, noting among them 8 bulls and 16 sub-adult males. Notably, past AMNWR surveys recorded 1 (1987) and 15 (1997) fur seals. We encountered fur seals at inland areas, the greater concentration on the south end of the island.

Arctic fox (*Alopex lagopus*). We saw only 2 arctic foxes on this survey. Our search for a den was unsuccessful, but we not able to examine the 1997 den site because fur seals were gathered in that area and we elected not to disturb them. No fox pups were seen, and the remains of 1 adult carcass was collected. Ten years ago 10 adults were seen, 4 den sites were confirmed with litters ranging from at least 1 to 6 pups (Byrd 1997).

#### Other Wildlife Observations

Least auklets (*Aethia pusilla*) were numerous; we estimate about 2000 present on the island, some with full gular pouches. We counted 10 parakeet auklets and saw a flock of 15 ruddy turnstone (*Arenaria interpres*). Only 1 red-legged kittiwake (*Rissa brevirostris*) was sighted roosting among black-legged kittiwakes.

## **CONCLUSIONS**

Our survey indicates that the numbers of red-face cormorants and murres continue to decline at Walrus Island, with thick-billed murre numbers falling to only 6 birds from a high of 120 in 1987. However, black-legged kittiwake numbers have more than doubled since 1997. Reproductive success appeared below average for black-legged kittiwakes in 2006, corresponding to the poor breeding season this species had on St. Paul. The number of arctic foxes has declined since a decade ago. The majority of murres continue to occupy areas inaccessible to predatory foxes (vertical cliffs and off shore rocks). Fur seals are present in higher numbers than previously recorded by AMNWR.

Vegetation on the island has previously been described as sparse, but photographs from 1989 show more conspicuous grass coverage than we saw, particularly on the southern half of the island (Refuge files). The growth of native grasses seemed inhibited by extensive layers of dried, matted marine mammal scat. The reduction of vegetation by marine mammals at Walrus Island has previously been documented (Kenyon 1962). We did not see *Saxifraga* sp. and *Puccinella* sp. as was recorded in 1987. We had the impression that much of the island had been awash recently.

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Table 1. Comparisons of seabird counts between 1987, 1997 and 2006 at Walrus Island, Pribilof Islands, Alaska.

Year	Red-faced Cormorant	Red-faced Nests	Black-leg. Kittiwake	Black leg. Nests	Common Murre	Thick-bill. Murre
1987	131	34	88	66	1313	120
1997	95	21	69	50	1021	50
2006	68	7	154 <sup>a</sup>	47 <sup>a</sup>	677	6

<sup>&</sup>lt;sup>a</sup>Does not include 40 kittiwake species and 20 nests counted on the south west side of the island by boat.

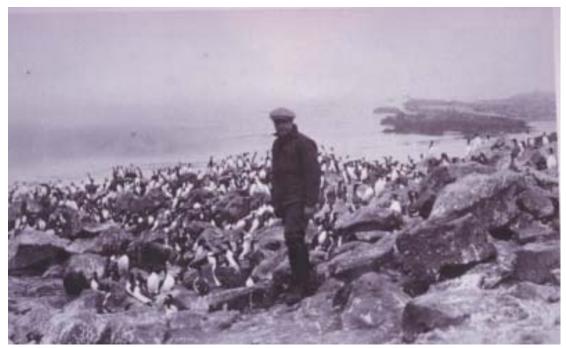
Table 2. Status of kittiwake nests seen on July 20, 2006 at Walrus Island, Pribilof Islands, Alaska.

Status	Number of Nests	Percent of Total	
Empty nest	7	10.4	
Adult attending empty nest	19	28.4	
Adult with 1 egg	2	3.0	
Adult with 2 eggs	0	0.0	
Egg only	2	3.0	
Adult with 1 chick	8	11.9	
Adult with 2 chicks	2	3.0	
Adult on nest, contents unknown	27	40.3	
Mean brood	1.2		
% Active		35.0 <sup>a</sup>	
Total nests	67		

 $<sup>^{</sup>a}n = 40$ 



View on Walrus Island, north looking south, in 2006



Historical photograph of murres on Walrus Island, date unknown. Refuge files.



Common murres on Middle Rock in 2006.



Fur seals on south end of Walrus Island in 2006.