TITLE: WALRUS ISLANDS STATE GAME SANCTUARY ANNUAL REPORT

REPORT PERIOD: 01 JANUARY - 31 AUGUST 1995

PROJECT LOCATION: GMU 17A (Round Island, Northern Bristol Bay)

PROJECT GOALS:

A management plan for the Walrus Islands State Game Sanctuary was drafted in October 1992. The plan has not been finalized and no formal management goals have been developed by the Department. In the interim, the management goals for the Sanctuary are to:

- 1) protect walrus and other wildlife within the Sanctuary;
- 2) provide an opportunity for scientific and educational study of walrus; and,
- 3) provide an opportunity for the public to view, photograph, and enjoy walrus.

WORK ACCOMPLISHED DURING THE PROJECT REPORT PERIOD:

One wildlife technician, Kiana Koenen from Alaska Department of Fish and Game, Division of Wildlife Conservation (ADFG) and 1 wildlife biologist, Susan Kruse from Fish & Wildlife Service, Marine Mammals Management (USFWS), were stationed on Round Island from 05 May to 23 August 1995. Their mutual duties included: patrolling the island for access violations, conducting daily walrus counts, conducting weekly sea lion counts, visitor services, facility/trail upkeep, and walrus disturbance monitoring/research.

PROGRESS TOWARDS MEETING GOALS:

Cooperative Staffing Agreement

A cooperative agreement between ADFG and USFWS, for mutual support of the Walrus Islands Sanctuary program was signed and implemented in spring 1993 and extended for the 1994 and 1995 field seasons. The USFWS and ADFG agreed to provide 1 wildlife biologist and half of the transportation and supply costs for the program. ADFG provided all facility and logistic support during the field season. ADFG and USFWS field staff shared responsibilities for sanctuary management (ADFG lead) and walrus research (USFWS lead) activities on the island.

Cooperative Agreement for Round Island Walrus Hunt

In March 1995, the Alaska Board of Game adopted regulations that enable ADFG to provide access permits and allow the discharge of firearms for a subsistence hunt of up

to 10 walrus on Round Island. This hunt is scheduled for the period 1 October through 31 October 1995. One person each from ADFG and USFWS will be present on Round Island to monitor the hunt, collect biological samples, and continue the walrus behavioral study.

In response to this regulation a cooperative agreement was drafted between ADFG, USFWS, the Eskimo Walrus Commission, and the Qayassiq (Round Island) Walrus Commission. This agreement provides guidelines that are consistent with the Marine Mammal Protection Act for the conservation of the walrus population, as well as preserving Round Island as a walrus haulout while facilitating the opportunity for subsistence uses of walrus.

Viewing Assistant Volunteer Program

The Viewing Assistant Volunteer Program initiated in 1994 was continued this season on Round Island. The intent of the program is to provide a first-hand educational opportunity for volunteers while they assist with visitor program management and ongoing wildlife research.

We selected 4 volunteers to come on the island as part of the 1995 program. As in 1994, the program was successful. Each volunteer contributed with their own talents that included: building tent platforms, constructing drainage systems for trails, wildlife observations, and conducting visitor orientation.

All volunteers worked well independently and as part of a team in assisting staff with the visitor program. Management duties included greeting visitors as they arrived on the island, providing orientation and program information. Volunteers also assisted staff with various sanctuary maintenance activities such as trail repair and facility upkeep. Wildlife research activities included assisting with walrus and sea lion counts, recovering ivory from beach-cast walrus carcasses, and collecting behavioral data for the ongoing walrus disturbance study.

Staff Exchange Program

The exchange program to encourage ADFG staff participation as volunteers on Round Island did not take place this season due to conflicting staff schedules and research commitments. The ADFG volunteer, Martin Stanford, acted as relief staff for an off island trip by Round Island Sanctuary Manager, Kiana Koenen.

COOPERATIVE RESEARCH:

Round Island Walrus Behavior Study

We continued a 1993 and 1994 cooperative USFWS/ADFG research program to examine behavioral responses of walrus to human activities (S. Kruse and K. Koenen,

USFWS Round Island Walrus Research Report - 1993; and, T. Spencer, USFWS Round Island Walrus Research Report - 1995).

National Natural Landmark Plant Inventory on Round Island

A National Natural Landmark project, in cooperation with ADFG, was conducted to provide managers with a 1995 baseline plant inventory on Round Island. The National Park Service provided 2 botanists who spent 28 days, from 19 June to 16 July, collecting and inventorying the plants on Round Island. The ADFG provided housing, staff assistance, and logistical support. A limited plant collection will be housed in the ADFG office in Dillingham. A final report including plant list will be in a National Park Service report to be completed by November 1995.

Round Island Acoustical Recordings

In cooperation with ADFG, Douglas Quin, an independent acoustical researcher, spent from 11-20 July recording Round Island wildlife sounds. His wildlife recordings included both air and hydroacoustical recordings of a variety of walrus sounds. Quin also collected 1 set of hydroacoustical recordings of Don Winkleman's vessel as it approached and entered Boat Cove to pick up visitors. Quin plans to provide copies of these recordings for ADFG files later in 1995.

VISITOR PROGRAM:

There were 66 public visitors this season, including 50 campers and 16 day use visitors with a cumulative total of 314 visitor days. Visitors came from a variety of locations within the United States (Alaska, Washington, Texas, California, New Jersey, Ohio, California, Utah), and from the countries of Japan, Sweden, France, Australia, Switzerland. The Australian visitors, were a 4 person film crew, doing a television wildlife conservation documentary of Round Island staff research activities. This documentary is to be aired in Australia sometime during the winter of 1995-96. In addition to these public visitors, there were 13 administrative visitors with a cumulative of 159 visitor days.

Day use visitors

Fishermen waiting in the nearby herring fishing grounds usually make up the majority of day use visitors. The 1995 herring fishing was underway when we arrived on Round Island and most fishermen were busy fishing with extended openings for herring and unable to find time for an island visit. Wind, rain, and rough seas made much of the summer uninviting and most fishermen left the area as soon as herring fishing closed. There were 10 day visits from herring fishermen and 6 day visitors after herring season ended.

Campers

Visitor services to Round Island were limited this season when Don's Round Island Charters restricted operations to 25 June to 31 July. Don Winkleman is currently the

only U.S. Coast Guard licensed operator catering to Round Island visitors. The ADFG office in Dillingham notified all permit holders explaining the uncertainty of transportation out to the island outside of this 5 week period.

VIOLATIONS:

Airspace

We documented 2 airspace violations, but there were no associated wildlife disturbances witnessed.

Access

We observed 9 vessels within the 3-mile restricted access zone. We attempted to contact 8 of the vessels by radio, and the vessel response and compliance rate was 25%.

We only saw 1 access violation that resulted in an observable walrus disturbance. It occurred when a fishing vessel approached the island and came to within 75 meters from Main Beach. There were > 1200 walrus on the beach at the time of the incident and we saw > 50 walrus leaving the beach when the vessel approached. We tried repeated radio contact with the vessel but there was no response. The incident was well documented and 2 island visitors were able to provide photo identification. We reported the access violation to Fish and Wildlife Protection in Dillingham and it is currently being investigated.

WILDLIFE RESEARCH:

We continued established walrus and sea lion counts and the research program initiated in 1993 to examine the responses of walrus to human activities (S. Kruse and K. Koenen, USFWS Round Island Walrus Research Report - 1993).

WALRUS

Counts: We used 2 established methods of counting walrus on Round Island beaches: 1) daily east side land-based counts; and, 2) total island counts conducted from a skiff.

1) <u>Daily Counts</u>. Views of the most populous beaches (on the north and east sides of the island) are accessible from footpaths. Daily counts of walrus on these beaches and in near-shore waters (within 15 m of shore) were made within 2 hours of the most convenient low tide. The daily walrus count total was derived by adding beach and near-shore counts.

We completed 107 daily counts from 06 May through 22 August 1995. The counts ranged from a low of 0 on 8 May to a high of 7804 on 27 May. (Two count days were not completed during this period due to logistics and inclement weather.)

The highest walrus count occurred during a non-census time at 1900 on 25 May when 9550 animals were counted on Main Beach and Main Beach Spit during a visit to the top of the island. The regular scheduled walrus census on that day was completed at 0844 when 1793 walrus were observed on Main Beach and in near-shore waters. In 1994 the high count of 5949 walrus occurred on 4 June, and in 1993 it was 5014 on 2 June.

2) <u>Total Island Counts</u>. Total island counts were conducted by observing haulout beaches with binoculars from a skiff and counting walrus. The entire island was surveyed from approximately 100-200 m off-shore when weather, tides, and time permitted. We conducted 4 total island counts that were all completed in June. We were unable to complete counts outside of this month because of rough seas and logistics. The highest walrus count made from the skiff was 6503 on 16 June.

Behavioral Observations: We continued monitoring walrus haulout behavior for effects of human activities. We conducted 264.5 hours of walrus behavioral observations from 11 May through 13 August 1995. We also collected anecdotal walrus observations on an opportunistic basis. The results of this study will be summarized in a USFWS 1995-96 report.

Walrus carcasses: There were 12 carcasses (10 with at least 1 tusk), sighted on land or near-shore at Round Island this field season. In 1994 there were 29 carcasses, including 8 that were crushed in an apparent rock slide on the southwest side of the island.

Ivory Collection: We recovered 5 tusks and 3 heads with tusks from walrus carcasses found on Round Island beaches.

STELLER (NORTHERN) SEA LIONS

Counts: We conducted weekly sea lion counts at East Cape/Third Beach. The peak sea lion count was 467 on 11 May. This count falls in range with peak counts for the past 3 seasons: 542 on 16 May 1994; 369 on 15 May 1993; and, 401 on 16 May 1992.

As noted in past years, many of the sea lions had moved off the main section of Third Beach by early June. They either left the area, or moved below cliffs along East Cape where it is difficult to count them due to cliff overhangs and rough terrain.

The most consistently used haulout this season was a rock ledge below the Third Beach observation point. This area was used by approximately 20 to 30 sea lions (comprised of 1 to 2 large males and an undetermined mixture of adult females, yearlings, and sub adults).

Observations: Staff searched for flipper tags and recorded any unusual observations during surveys. Flipper tags were observed on 2 occasions: 1 red tag on juvenile on 2 June and 1 red tag on subadult on 21 August.

We saw 1 adult male with a brand number 391 on 9 May. He was seen on Round Island on 12 May 1994 and by USFWS researchers while he was hauled out on Cape Newenham in May and July of 1992. He was branded in 1987 on Marmot Island, northeast of Kodiak Island (Jemison, A Status Report of the 1992 Marine Mammal Monitoring Effort at Togiak Natl. Wildl. Refuge. unpubl.).

Other unusual sea lion observations include: One female with something tightly collaring her neck and associated scarring; and; 1 adult female apparently nursing a juvenile. We did not see any sea lion mortalities, pups or, breeding activities.

There were 2 occasions when we observed walrus/sea lion interactions. One occurred on 2 June when a sea lion, of undetermined sex or age, hauled out on Main Beach with a group of > 70 walrus. We watched it for > 3 hours and witnessed it chasing 3 adult walrus back into the water as they approached the beach and intimidate 1 young walrus into backing away and changing direction. The other occasion was on 9 June when a young adult female sea lion hauled out on Flat Rock < 5 m away from a group of 22 walrus for > 4 hrs.

OTHER WILDLIFE:

Opportunistic wildlife sightings, including red foxes, birds, rodents, and other marine mammals were included in daily logs.

Red Foxes: Visitors and staff confirmed at least 3 fox kits and 2 adults at den site behind the cabin. Foxes with birds or eggs in their mouths were routinely observed by visitors and staff.

Birds: First sightings of birds were recorded in the daily log along with the first eggs and chicks observed for pelagic cormorants, black-legged kittiwakes, and common murres. Pelagic cormorants were on eggs by 14 May; chicks were visible on 13 June; and, we observed fledglings on 27 July. Black-legged kittiwakes were on eggs by 10 June; chicks were visible on 7 July; and, fledglings were not observed. Common murre eggs were visible by 10 June; chicks were visible by 10 June; chicks were seen on 16 July; and, fledglings were not observed. We sighted 2 adult eagles throughout the summer. However, the eagle nest on the top that had been used for the past 2 seasons appeared to be abandoned. We were unable to locate a new nest.

Other Marine Mammals: Gray whales were observed passing the island \geq 12 times this summer. On the following 3 occasions a phocid seal (ether harbor or spotted seal)

was observed on or near-shore Round Island: 1 on 19 June on beach below Main Beach observation point; 1 on 7 July on Second Beach; and 1 floating carcass near-shore at First Beach.

FACILITIES:

New equipment: 1 wind anemometer

- 1 telephone (remote system from Nushagak Telephone Cooperative)
- 1 Bendix/King mobile VHF radio
- 2 sleeping cots.

Cabin: We modified the existing shutters to simplify installment.

Trails: We improved the existing trails by widening and reinforcing them with small cobble. Drainage systems were created along wet sections of trail. No boardwalk sections were added to trails this season but trails were surveyed for placement of boardwalk planking to be installed in 1996. Stakes were placed to mark closed areas throughout the trail system. Grass cutting to keep trails clear continued throughout the summer. Upper Traverse Trail was not opened in 1995 due to wet and deteriorating trail conditions. No new trails were created.

Campground: Two 8' X 8' tent platforms with tie-down tent attachments were constructed and installed and received very favorable reviews from campers especially during wet and windy days. Currently there are 6 camp sites: 3 have tent platforms; 1 has 8' X 12' sand box; and, 2 are leveled with sand and grass. Five sites have a wood constructed cooking station.

RECOMMENDATIONS:

1. Facility Maintenance Needs:

a) Cabin. Secure funding and implement plan to replace existing cabin.

b) Campground. Paint interior of the visitors outhouse the 3 newly constructed camper cook with weather seal. Plan to build 2 additional tent platforms and 1 cook station.

2. Evaluate visitor carrying capacity versus expanding staff: Plans of expanding the staff to cover research or other program needs should be evaluated with regards to possible negative impact on visitor opportunities. Our estimated carrying capacity is 15 visitors and 2 staff. We currently issue 12 permits and have 3 administration permits available.

3. **Trails**: a) Plan for the addition of about 100' of weather sealed board to trails each season until trail system is covered with boardwalks throughout wetland areas.

b) Evaluate status of all existing trails for safety and condition. Continued use or permanent closure of Traverse Trail should be addressed.

4. Sanitation: Explore alternate modes of visitor sanitation facilities.

5. **Violations: On-island visitor infractions**: Develop and initiate a plan to respond to visitor infractions.

6. Liability/Safety: Obtain a formal Attorney General opinion (i.e. written recommendations) concerning: 1) Liability of transporting visitors and their gear via ADFG inflatable boat; and, 2) Extent of our responsibility for visitor safety while they are on the island.

7. **Update visitor information handouts**: Ensure that area ADFG offices and public information centers have current information.

8. Access: a) Develop a vessel access restriction policy and design a violation reporting form, similar to the airspace policy; and, b) Develop a day-use visitor access policy that includes vessel moorage, transport to and from vessels, radio-contact protocol, "open" times, and revise visitor information handout.

9. **Cooperative studies**: Continue cooperation with USFWS on sanctuary operations and walrus research activities during 1996. Also expand cooperation with Togiak National Wildlife Refuge including an exchange with Cape Peirce staff.

10. Management plan: Complete the Sanctuary Management Plan.

EQUIPMENT NEEDS

-New rain gauge for weather station
-Spare outboard motor for inflatable boat (10 hp)
-Portable computer and printer with 12 volt battery adapter
-Waterproof VCR camera
-Lightweight low aspect tripod
-Lightweight spotting scope [Bushnell Zoom 20X-45X]
-1 or 2 (8X40 or 10X30) high quality binoculars (Leitz or Zeiss)

Prepared by: Kiana Koenen Wildlife Technician ADFG/Anchorage Submitted by: Lawrence J. Van Daele Wildlife Biologist ADFG/Dillingham

Susan Kruse Wildlife Biologist USFWS/Anchorage