TITLE: WALRUS ISLANDS STATE GAME SANCTUARY ANNUAL REPORT

REPORT PERIOD: 01 JANUARY - 31 AUGUST 1994

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,
- provide an opportunity for the public to view, photograph, and enjoy walrus.

WORK ACCOMPLISHED DURING THE PROJECT REPORT PERIOD:

Two wildlife technicians, Kiana Koenen from Alaska Department of Fish and Game (ADFG) and Ted Spencer from United States Fish and Wildlife (USFWS), were stationed on Round Island from 11 May until 16 August 1994. 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 Agreement

A cooperative agreement between ADFG, Division of Wildlife Conservation and USFWS, Marine Mammals Management, for mutual support of the Walrus Islands Sanctuary visitor program was signed and implemented in spring of 1993. This cooperative agreement was extended for the 1994 field season. As a result of this agreement, USFWS and ADFG each provided one wildlife technician and paid half of the transportation and supply costs for the program. ADFG provided all facility and logistic support during the field season. ADFG and FWS field staff shared responsibilities for sanctuary management (ADFG lead) and research (USFWS lead) activities on the island.

Alaska State Parks Volunteer in the Parks Program

In spring 1994, a volunteer program was initiated at Round Island on a trial basis. The intent of the program was to provide a first-hand educational opportunity for the

volunteer by involving them in assisting with visitor program management and ongoing wildlife research. Volunteers were solicited through the Alaska State Parks Volunteers in Parks Program. Applicants were required to be in good physical condition, have current basic first aid and CPR training and be willing to work with minimal supervision at a rugged and remote site with few amenities. A minimum time commitment of 6 weeks was required.

The volunteer program was successful. Although original plans called for 2 volunteers, only 1 was chosen because of a dramatic reduction in visitors on the island this season. Chris Lowry, a student majoring in Wildlife from Humboldt State University, California, spent from 9 June through 10 July on Round Island as the Viewing Program Assistant. Mr. Lowry experienced sanctuary management activities by assisting staff with the visitor program. His duties included greeting visitors as they arrived on the island, providing orientation and program information, and assisting staff with various sanctuary maintenance activities which included trail repair and facility upkeep. Mr. Lowry's participation in wildlife research activities included assisting staff with walrus and sea lion counts, recovering ivory from beach-cast walrus carcasses, and collecting behavioral data for the ongoing walrus disturbance study.

Department of Fish and Game Staff Volunteer For The Field Program

In addition to the State Parks Volunteer Program, we initiated an exchange program to encourage ADFG staff participation as volunteers on Round Island during the field season. The exchange program provided ADFG personnel with the opportunity to experience and participate in the Round Island visitor program. During staff rotations, permanent island personnel went off island for a week.

During the 1994 season Jim Dau, Kotzebue Area Wildlife Biologist, spent 22 June to 28 June as the first ADFG exchange volunteer. His participation permitted an off island trip by Round Island Sanctuary Manager, Kiana Koenen. While Mr. Dau was on the island his activities included: participating in visitor services, ivory collection, walrus behavioral observations and various aspects of routine maintenance. Mr. Dau's help was invaluable in splicing and replacing a section of steel boat cable which unexpectedly broke during his visit.

Emergency Medical Program

In preparation for the 1994 field season a medical protocol and medical report form was designed which details staff responsibilities, evacuation procedures, and reporting requirements. Medical supplies were supplemented with an epinephrine kit and protective CPR face shield.

In addition to CPR training, the sanctuary staff manager had Emergency Trauma Technician training and all volunteers and relief staff had Advanced First Aid training. The United States Coast Guard (USCG) was contacted prior to field season to coordinate airlift evacuation procedures in event of a medical emergency.

Camper orientation included location of first aid supplies and communication equipment in the staff cabin. In addition, staff posted an emergency information fact sheet, labeled communication radios (VHF, single side band) and telephone with user instructions, and briefed visitors communication procedures in event of an emergency.

COOPERATIVE RESEARCH:

Round Island Walrus Behavior Study

A cooperative USFWS/ADFG research program to examine behavioral responses of walrus to human activities was initiated in 1993 and continued this season. Results of information collected during the 1993 field season are summarized in a USFWS Technical Report (Kruse and Koenen, 1995). Results of data collected in 1994 are reported in an unpublished USFWS field report (Spencer 1995).

LAW ENFORCEMENT

Preseason Notification of Access Restrictions

Pre-season notification of access policies were distributed to airports, canneries, fish processors, and local lodges. This notice contained a description of the Walrus Island State Game Sanctuary, access restrictions around Round Island, and instructions for obtaining visitor permits to the island.

Cooperation with USCG in Kodiak continued this field season. USCG personnel informed ADFG staff of possible airspace violations occurring during their routine patrols of the 12-mile yellowfin sole fisheries boundary.

Airspace Violations

Staff documented 3 airspace violations. Two were Coast Guard overflights (1 was done during a routine patrol and 1 during a search and rescue operation). The third violation was a small fixed winged aircraft. No associated wildlife disturbances were witnessed.

Access Violations

Eleven vessels were observed entering closed areas near the island. These included 3 yellowfin sole related vessels within the 12-mile limit and 8 vessels within the 3-mile limit. Staff attempted radio contact of all vessels. Vessel response and compliance rate was approximately 50 percent. No associated walrus disturbances were observed. However, 4 of the 8 documented 3-mile limit violations involved vessels cutting the corner near the East Cape sea lion haul out area. Staff were unable to observe whether sea lions reacted to these violations.



VISITOR PROGRAM:

Round Island had 61 visitors this season, comprising 18 campers and 41 day use <u>sector</u> visitors (a cumulative of 134 visitor days). Visitors came from a variety of locations within the United States (Alaska, Missouri, New Mexico, New York, Ohio, Oregon), and from the countries of Israel and France. The French visitors consisted of a film crew doing a television documentary of Round Island staff research activities. This documentary is to be aired in France sometime during the winter of 1994-95. In addition to these visitors, there were 3 administrative visitors (volunteer, supervisor, and relief staff) with a cumulative of 40 visitor days.

Day use visitors

Fishermen waiting in the nearby herring fishing grounds usually make up the majority of day use visitors. The 1994 herring fishing was underway when staff 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. After herring fishing closed 13 of day-use visitors came to the island.

Campers

Visitor services to Round Island were severely constrained when Don's Round Island Charters suspended operations in May 1994. Don Winkleman failed to obtain an appropriate license from the USCG to legally transport paying passengers. This essentially stopped the only operator catering to Round Island Visitors and no other local operators were able to procure the necessary equipment and license, during this field season. The ADFG office in Dillingham sent letters to all permit holders explaining about the uncertainty of transportation out to the island.

The unavailability of reliable boat transportation sparked a renewed interest in air transport to Round Island. Three air-taxis based in Dillingham wanted to use float-equipped aircraft and a King Salmon based helicopter service wanted to use a Robertson R-22 helicopter. All requests for air access were denied by the area biologist in Dillingham because of safety concerns. Previous experience has proven that float planes can not reliably get to the island on a scheduled basis because of rapidly changing weather conditions, strong sea currents, and typically high seas. For example, during the 31 days in the month of July, Round Island staff documented only 7 days and 2 half days when aircraft access might be possible.

WILDLIFE RESEARCH:

Walrus and sea lion counts were continued on Round Island this season. In addition to these censuses, the research program initiated in 1993 to examine the responses of walrus to human activities continued.

WALRUS

Counts: Two established methods of counting walruses hauled out on Round Island beaches were used this season. These included daily east side land-based counts, and total island counts conducted from a skiff.

1) Daily Counts. Views of the most populous haulout beaches (on the north and east sides of the island) are accessible from footpaths along the shoreline. Daily counts of walrus on these beaches and in near-shore waters (within 15 meters 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. A total of 97 counts were completed from 12 May through 15 August 1994.

DAILY AVERAGE: 871

RANGE: 0 - 5949



PEAKS: The season's high count of 5949 walrus occurred on 4 June 1994. The 1993 the high count was 5044 on 2 June. Specific count data are available in the 1994 Round Island Report to the File.

2) Total Island Counts. Total island counts were conducted by observing haulout beaches with binoculars from a skiff and counting walruses. The entire island was surveyed from approximately 100-200 meters off-shore when weather, tides and time permitted. We conducted 11 total island counts. The highest walrus count made from the skiff was 3323 on 13 July.

Behavioral Observations: ADFG and USFWS staff continued monitoring walrus haulout behavior for effects of human activities. A total of 1045-2 minute behavioral scan observations were made. Results and conclusions are presented in Spencer's field report to USFWS (Spencer 1995).

Walrus carcasses: Twenty nine carcasses were sighted during this field season. An apparent rock slide on the southwest side of the island may have been responsible for 8 of these mortalities. Last year, a total of 15 carcasses were observed.

Ivory Collection: Staff recovered 20 tusks, 2 noseplates and 2 heads from walrus carcasses found on Round Island beaches.

STELLER (NORTHERN) SEA LIONS

Counts: Bi-weekly sea lion counts were conducted at East Cape/Third Beach. The peak sea lion count was 542 on 16 May. The peak date closely compares with the

peak count date for 1993 (369 on 15 May) and in 1992 (401 on 16 May). 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 was 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). Detailed count data are available in the 1994 Round Island Report to the File.

Observations: Staff searched for flipper tags and recorded any unusual observations during survey. In May, 3 juvenile animals were observed with flipper tags (464, M12, 602). One adult male with a brand number 391 was sighted on 12 May. This animal was observed by USFWS researchers hauled out on Cape Newenham in May and July of 1992 and was reported to have been 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.). One copulation was observed on 31 May. Three adult females had something tightly collaring their necks and there appeared to be swelling around the constriction. No sea lion mortalities, pups, nursing activity, or walrus/sea lion interactions were observed.

OTHER WILDLIFE

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

Red Fox: Visitors and staff confirmed at least 4 fox kits at East Cape den. Staff identified at least 7 individual adults and subadult fox. The den sight directly behind the staff cabin was occupied throughout the season by at least 3 young fox. Fox 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 first eggs and chicks observed for each species. Pelagic cormorants at East Main beach observation point were on eggs by 12 May. Chicks were visible on 27 June and had fledged by 1 August. Black-legged kittiwakes were on eggs by 13 June. The first chicks were visible on 14 July and fledgling occurred by 12 August. Common murre eggs were visible by 10 June. Murre chicks were seen on 28 July and fledged in August. On 28 June a bald eagle nest with 1 eaglet was observed in the SW corner on top of the island. Two adult eagles were present.

Other Marine Mammals: On 5 August a beluga whale carcass was observed on the rocks at North Boat Cove. Due to position of carcass and state of decomposition sex

was undetermined. Staff took total body length measurement and collected tissue samples for marine mammal research. Gray whales were the only other marine mammals observed passing the island this summer. Twenty seven gray whales were counted passing Round Island from 11 May through 15 June 1994. A cow and calf pair were observed on 2 occasions and included in this count.

FACILITIES:

New equipment included: Antenna for VHF, 2 person tent, and 1 cot.

Cabin: <u>Exterior</u> Old fuel oil storage drum developed a leak and was replaced with a refurbished drum (sanded and painted with rust inhibiting paint). Cabin walkway was rotting and staff replaced and widened it with weather treated 2 X 2's. The deck was scraped clean of old peeling paint and coated with a protective weather seal. Cabin exterior received 2 coats of weather seal protectant.

Interior All walls and ceilings (except in 4 X 8' section of back room where tools are stored) were cleaned and coated with polyurethane sealer. Office floor was painted with floor hardener. Table and counter tops were coated with varathane. Cook stove was cleaned and coated with black stove paint. New oil stove, stove pipe and firewall was installed and stove pipe and firewall were painted with heat resistant black paint. Three drying racks were installed near oil stove. All tools were cleaned and inventoried prior to storage. Food and cleaning supplies were inventoried and placed in sealed containers for on island storage.

Weatherport: A 12' X 20' plywood foundation was constructed behind the cabin garden plot and new weatherport was assembled. At close of season weatherport was disassembled. The tent's canvas and door were stored in the staff cabin and framing was stored beneath the cabin deck. Weatherport foundation was anchored in place and tarped for winter storage.

Outhouses: New toilet seats were installed in outhouses. Outhouses were coated with weather seal.

Trails: The staff improved the safety of existing trails by widening and reinforcing trails that were encroaching on cliff edges. Approximately 120 feet of new weather sealed boardwalks were added to boggy sections of trail above First and Second Beaches making a total of 245 feet of boardwalk now in place on the trail system. Stakes were cut and placed to mark closed areas throughout the trail system. Upper Traverse Trail was not opened in 1994 due to wet and deteriorating trail conditions. Grass cutting to keep trails clear continued throughout the summer. No new trails were created.

RECOMMENDATIONS

1. Facility Maintenance Needs: The interior of the visitors outhouse the 3 newly constructed camper cook stations should be painted with weather seal. Repaint existing shed and storage box. Finish painting cabin interior by applying a coat of floor hardener to the 4' X 8' section of floor in the back room area that is used for tool and battery storage and paint tool room walls and ceiling area with polyurethane.

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 approximately 100 feet 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. **Cabin**: Excavate cabin to replace leaking vapor barrier and insulation within cabin exterior walls to save foundation. Evaluate degree of structural degradation and create action plan for cabin renovation.

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

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

7. 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.

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

9. Access: a) Develop a vessel access restriction policy and design a violation reporting form, similar to the airspace policy; 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.

10. **Cooperative studies**: Seek continued cooperation with USFWS on sanctuary operations and walrus research activities during 1995. Also expand cooperation with Togiak National Wildlife Refuge (TNWR) staff at Cape Peirce. Seek staff exchange with TNWR.

11. **Management plan**: Complete a Walrus Islands State Game Sanctuary Management Plan.

12. **Commercial use permit**: Explore feasibility of developing a commercial use permit for professional photographers and a transporters permit for those that bring visitors to the island.

EQUIPMENT NEEDS

-New Weather Station -Programmable VHF -Spare kicker for inflatable boat (10hp) -Portable computer and printer -Waterproof VCR camera -Lightweight low aspect tripod -Lightweight spotting scope [Bushnell Zoom 20X-45X]

Prepared by:

Submitted by:

Kiana Koenen Wildlife Technician ADFG Lawrence J. Van Daele Wildlife Biologist ADFG

Ted Spencer Wildlife Technician USFWS