

**ADAPTING TO CLIMATE CHANGE:  
A COMMUNITY WORKSHOP ON THE  
CONSERVATION AND MANAGEMENT OF  
WALRUSES ON  
THE CHUKCHI SEA COAST**

**FEBRUARY 23-24, 2012**

**IÑUPIAT HERITAGE CENTER  
BARROW, ALASKA**



*Photo Credit: Bill Tracey Sr., Point Lay, Alaska*

## **ACKNOWLEDGEMENTS**

This workshop was organized and sponsored by the U.S. Fish and Wildlife Service, Eskimo Walrus Commission, Alaska Department of Fish and Game, and the North Slope Borough Department of Wildlife Management. The workshop planning committee consisted of: Charles Brower, Joel Garlich-Miller, Vera Metcalf, Willard Neakok, Enoch Oktollik, Ronald Oviok, Sr., Leslie Pierce, and Lori Quakenbush. *Alaska Summit Enterprises* coordinated and facilitated the meeting; Cynthia Callivourssi – project manager, Christine Celentano - meeting facilitator, Karen Morgan – recorder, and Joyce Winton – travel and logistics coordinator. Billy Adams, Michael Pederson, Joseph Sage, and Ernest Nageak provided logistical support and transportation to workshop participants while in Barrow. Funding for the workshop was provided by the U.S. Fish and Wildlife Service.

**ADAPTING TO CLIMATE CHANGE:**  
**A COMMUNITY WORKSHOP ON THE CONSERVATION AND  
MANAGEMENT OF WALRUSES ON  
THE CHUKCHI SEA COAST**

FEBRUARY 23-24, 2012

IÑUPIAT HERITAGE CENTER  
BARROW, ALASKA

SPONSORED BY:

U.S. FISH AND WILDLIFE SERVICE  
ESKIMO WALRUS COMMISSION  
ALASKA DEPARTMENT OF FISH AND GAME  
NORTH SLOPE BOROUGH DEPARTMENT OF WILDLIFE MANAGEMENT

WORKSHOP PROCEEDINGS COMPILED AND EDITED BY:  
JOEL GARLICH-MILLER, USFWS

USFWS ADMINISTRATIVE REPORT, R7/MMM 12-1

MARINE MAMMALS MANAGEMENT, U.S. FISH AND WILDLIFE SERVICE,  
1011 EAST TUDOR ROAD, ANCHORAGE, ALASKA 99503

APRIL, 2012

## WORKSHOP PARTICIPANTS

### **BARROW**

Billy Adams, NSB-DWM  
Charles Brower, EWC Chairman\*  
Leandra de Sousa, NSB-DWM  
George Edwardson, Community Elder and  
ICAS President  
Taqulik Hepa, NSB-DWM  
William Hopson, NSB Fish & Game  
Management Committee  
Ernest Nageak, USFWS  
Mike Pederson, NSB-DWM  
Brian Person, NSB-DWM  
Leslie Pierce, NSB-DWM\*  
Joseph Sage, NVB  
Raphaela Stimmelmayer, NSB-DWM

### **POINT HOPE**

Steve Oomittuk, Mayor  
Ronald Oviok, Sr., EWC\*

### **POINT LAY**

Warren Harding Lampe, NSB Fish & Game  
Management Committee  
Willard Neakok, EWC\*  
Bill Tracey, Sr., Director, North Slope  
Borough Fire Department  
Marie Tracey, NSB Village Communication  
Liaison

### **SAVOONGA**

Perry Pungowiyi, Invited Guest Speaker

### **WAINWRIGHT**

Enoch Oktollik, EWC\*  
Rossman Peetook, Community Elder

### **OTHER WORKSHOP PARTICIPANTS**

Rosemary Ahtuanguak, Alaska Wilderness  
League  
Joel Garlich-Miller, USFWS\*  
Henry Huntington, Consultant  
Patrick Lemons, USFWS  
Vera Metcalf, EWC Executive Director\*  
Lori Quakenbush, ADFG\*  
John Trent, USFWS

### **WORKSHOP COORDINATORS**

*Alaska Summit Enterprises*  
Christine Celentano, Meeting Facilitator  
Joyce Winton, Logistics Coordinator  
Karen Morgan, Recorder

\*Workshop Steering Committee Member



Photo Credit: Marie Tracey

## WORKSHOP OVERVIEW

The Arctic habitat of the walrus (*Aiviq or Aghveq*) is rapidly changing. In recent years, the Chukchi Sea has become sea ice-free in late summer forcing walruses to move to coastal areas (known as haulouts) to rest on land. As sea ice cover in the Chukchi Sea declines, human activity in the region is expanding, bringing humans and walruses into frequent contact. As walruses become increasingly dependent on coastal haulout areas, local conservation and management efforts are becoming increasingly important. The coastal communities of Alaska are first hand witnesses to the effects of climate change on walruses and are well positioned to take an active role in their management.

This report is a summary of a community workshop on the conservation and management of Pacific walruses along the Chukchi Sea coast of Alaska. Workshop participants included community elders and subsistence walrus hunters from the coastal communities of Point Hope, Point Lay, Barrow, Wainwright and Savoonga, Alaska. The purpose of the workshop was to provide an opportunity for coastal communities and resource managers to exchange information and observations about the increase in use of coastal haulouts, and discuss ways to increase the involvement and participation of coastal communities in walrus research and management activities.

## LIST OF ACRONYMS USED IN THE REPORT

ADFG	Alaska Department of Fish and Game
COB	City of Barrow
EWC	Eskimo Walrus Commission
FAA	Federal Aviation Administration
ICAS	Iñupiat Community of the Arctic Slope
IRA	Indian Reorganization Act
NOAA	National Oceanic and Atmospheric Administration
NSB-DWM	North Slope Borough Department of Wildlife Management
NVB	Native Village of Barrow
OMB	Office of Management and Budget
UAF	University of Alaska, Fairbanks
UIC	Ukpeaġvik Iñupiat Corporation
UME	Unusual Mortality Event
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

## OPENING REMARKS

*Taqulik Hepa, Director, North Slope Borough - Department of Wildlife Management*

Taqulik welcomed the Eskimo Walrus Commission (EWC) and community representatives to Barrow. She noted that many changes have occurred in the Arctic in recent years which are creating new wildlife management issues. She stressed the importance of working on wildlife management issues at the local level. She cited the community polar bear patrols in North Slope Borough (NSB) villages as a positive example of how local organizations have taken a leadership role in wildlife management, with federal and state agencies providing support. She recognized the village of Point Lay for taking on a leadership role with walrus haulout management issues, and thanked the community elders for participating in the meeting. Elders have a lot of knowledge and have watched and taken care of their resources for many years.

*Joel Garlich-Miller, Wildlife Biologist-Walrus, US Fish and Wildlife Service*

Joel thanked everyone for taking the time to come talk about walrus issues. He shares Taqulik's view that the most effective management efforts are likely to occur at the local level. A fine example is the work that the community of Point Lay has accomplished to develop local programs that have been successful at reducing disturbance-related mortality at their haulout.

*Charles Brower, Chair, Eskimo Walrus Commission*

Charles welcomed workshop participants to Barrow. He noted that in 2008 the EWC adopted a resolution encouraging coastal communities to develop local ordinances concerning disturbances at coastal walrus haulout sites (Appendix A). This was a proactive step taken by the EWC to respond to the coastal walrus haulouts developing on the North Slope of Alaska. He expressed concern that walruses landing on Barrow area beaches might be considered a haulout. His personal opinion is that this level of use does not qualify as a haulout. It is his hope that one outcome from the workshop will be improved communication about walrus issues with coastal communities.

*Vera Metcalf, Director, Eskimo Walrus Commission*

Vera shared that the EWC mission statement is: "*To encourage self-regulation of walrus hunting and management of walrus stock by Alaska Natives who use and need walrus to survive.*" In addition to the 2008 resolution encouraging local initiatives to minimize disturbances at walrus haulouts, the EWC has also worked with the communities of Saint Lawrence Island to develop local marine mammal ordinances. Other recent activities and priorities for the EWC include: building research capacity in the walrus hunting community, traditional knowledge studies about walruses in Chukotka, and the development of a marine mammal disease handbook for hunters. The EWC works closely with the U.S. Fish and Wildlife Service (USFWS) on co-management activities and has a good working relationship with the North Slope Borough Department of Wildlife Management (NSB-DWM). A EWC contact list was distributed to the group along with an offer to help identify funding sources to address community needs.

# BACKGROUND PRESENTATIONS

## ***EMERGING WALRUS MANAGEMENT ISSUES ON THE CHUKCHI SEA COAST***

*Joel Garlich-Miller, Walrus Biologist, USFWS*

Female walrus and their dependent young migrate north in spring following the receding pack ice to shallow productive feeding grounds in the Chukchi Sea. Broken sea ice provides a platform for resting within easy access of offshore feeding areas, isolation from terrestrial predators, and a sheltered environment for young animals against stormy seas. Traditionally, broken sea ice has persisted in offshore areas of the Chukchi Sea through the summer and walrus have remained offshore. In recent years, the Chukchi Sea shelf has become entirely ice-free by late summer and periods without ice cover have ranged from a few weeks to three months. The recent trend of rapid sea ice retreat from continental shelf regions in July and August is expected to persist and perhaps accelerate in the future.

When sea ice retreats to waters too deep to feed, walrus abandon the ice and move to shore. Over the past decade, the number of walrus using haulouts along the Chukchi Sea coast has increased dramatically, and the season of use seems to increase with each coming year. Several tens of thousands of animals haul out in some locations in Chukotka, Russia. Up until a few years ago, the formation of coastal haulouts along the Chukchi Sea coast was primarily a Russian phenomenon; however, we are starting to see a similar pattern develop in Alaska.

The most pressing conservation concern associated with large densely packed coastal haulouts is the potential for injuries and mortalities associated with stampedes caused by disturbance events. Several thousand walrus have perished along the Russian coastline in recent years as the result of disturbances at coastal haulouts. Young animals are particularly vulnerable to trampling injuries and mortality. Some stampedes are caused by human activities such as gunfire or aircraft over-flights, and others are caused by animals such as polar bears and feral dogs drawn to the haulout sites. Trampling mortalities at coastal haulouts in Alaska have also been observed — one disturbance event at Icy Cape in the fall of 2009 resulted in approximately 150 dead walrus.

Some of the largest coastal walrus haulouts in Chukotka, Russia have formed near coastal villages. Several communities have developed local management programs to help reduce disturbances and mortalities. Efforts have included the establishment of “*quiet zones*” on beaches when walrus are present, tying up stray dogs, and keeping vehicles off the beach. To prevent disturbances, haulout visitors are accompanied by a community guide who keeps them at a safe distance and down-wind of the animals. Subsistence hunters have modified their hunting practices and are using spears instead of guns to take walrus near the haulout so they do not cause large disturbances. Some communities have appointed an elder as a haulout steward to oversee hunting efforts and visitor programs. These efforts have been quite successful, and although some disturbances and mortalities still occur, the number of mortalities is down considerably from just a few years ago.



*Photo Credit: Vladilen Kavriy, Walrus haulout near the village of Vankarem, Chukotka*

Minimizing disturbances at coastal walrus haulouts along the Arctic coast of Alaska has also become important in recent years. Outreach efforts have included public service announcements, village visits, and posters to raise awareness of emerging haulout areas and the potential impacts of disturbances. The USFWS has also developed flight advisories and guidelines for local air carriers and pilots, and has worked with the Federal Aviation Administration (FAA) to establish temporary flight restrictions over large haulout areas. It will be important to build flexibility into response plans in case walrus begin to haulout in new locations. It will also be important to establish a communication network along the coast to report haulouts when they develop so that management responses can be adapted.

Some of the most important and effective efforts to minimize disturbance related mortalities at coastal haulouts in Alaska have occurred at the local level. A large coastal haulout, composed primarily of females and calves, has formed near the community of Point Lay in recent years. The community of Point Lay took an active and effective stewardship role and minimized human activities that could result in disturbance events at the haulout. The community worked with air carriers to change flight routes into the community and made sure that visitors kept a respectful distance from the haulout. Hunters did not hunt the main herd despite its easy access. Efforts appear to be working – disturbance related mortalities at the Point Lay haulout have been remarkably low over the past two seasons.



*Photo Credit: NOAA. Coastal walrus haulout near the village of Point Lay, Alaska*

As walrus become more dependent on coastal haulouts, local conservation and management efforts are going to become increasingly important. The coastal communities of Alaska are well positioned to take an active role in conserving and managing the species. This workshop is an opportunity for resource managers and subsistence users to exchange information, ideas, and observations about the haulouts, and to discuss ways to increase the involvement and participation of coastal communities in walrus research and management activities.

### **COMMENTS AND QUESTIONS**

*Comment:* I am uncomfortable with climate models that project 50 years out – no one can predict that far into the future.

*Response:* We don't need models to show the loss of sea ice that has already occurred – walrus are already starting to occupy the coast. The models simply suggest that this is likely to continue to be the pattern in the coming years and we need to be prepared for increased use of coastal haulout areas.

*Question:* What about the walrus haulouts in the Bering Sea?

*Response:* Bering Sea summer haulouts are mostly used by adult males who don't migrate north and instead, stay behind during the ice-free season. Females and young calves generally do not come to shore, and always choose sea ice to rest on when given the choice. In the summer, they follow the ice-pack north into the Chukchi Sea and only come to shore when there is no more

ice over the continental shelf. Females and young walrus appear to be more vulnerable to disturbance related mortalities than male walrus.

*Comment:* A suggestion was made to make the herd healthier by harvesting them rather than letting them trample each other on the coastal haulouts.

*Response:* The clarification was made that no one is suggesting not hunting walrus – we are looking for suggestions to prevent unnecessary disturbances that can lead to the loss of calves, which can affect population size. There is a lot of traditional knowledge from hunters in Russia and Arctic Canada who live near coastal walrus haulouts to draw on regarding hunting techniques near haulouts without causing disturbance related mortalities or displacing animals away from hunting areas.

*Comment:* Our (Alaskan) elders also have knowledge to share. Haulout hunting can result in unnecessary dispersal of animals and deaths and carcasses rotting near villages. There was a recommendation to hunt down the coast or on isolated beaches so that the main herd is not disturbed. It was also noted that many hunters preferred to hunt on ice because it is cleaner to butcher animals on sea ice versus a sandy beach.

*Comment:* Talking about hunting issues is a touchy subject and can bring up defenses in wanting to protect our Native food and tribal way of living in order to preserve these things for our children. Before statehood, our Alaska Native people knew how to deal with land and sea animals. The participant noted respect for Joel and where he stands on these issues. Native organizations don't have enough financial resources to bring communities together, or to give presentations on how to protect their own subsistence resources. Getting this workshop funded allows us to interact as one large group.

*Comment:* We need to think about what our elders have taught us about leaving animals alone to adapt and rest before they continue heading south. Reference was made to the long migration distances walrus had to make in 2007 (sea ice moved far north away from the coast that year). There was a recommendation to focus management efforts on where the haulouts form and communicate with hunters to stay away from the herd when they are resting on the beach. We should take advice from our elders to leave them alone.

*Question:* Is there some central information source about walrus?

*Response:* There is a lot of information about walrus and management efforts available on the USFWS website (<http://alaska.fws.gov/fisheries/mmm/walrus/wmain.htm>). There are also links to scientific publications, federal regulations and other resources. If someone can't find information there, USFWS staff can help you find it.

## ***DISEASE SYMPTOMS SEEN AT THE POINT LAY HAULOUT– UPDATE ON CAUSE***

*Dr. Raphaela Stimmelmayer, Research Biologist and Wildlife Veterinarian, North Slope Borough  
Department of Wildlife Management*

In August and September 2011 some of the walrus hauled out on the barrier island near the community of Point Lay, Alaska were reported by hunters and U.S. Geological Survey (USGS) biologists to have bleeding sores on their skin. In response, USFWS wildlife biologists, the NSB-DWM wildlife veterinarian, and local hunters from Point Lay conducted two ground-based surveys near the haulout. Fifty-one carcasses were examined. The cause of death could not be determined for some carcasses, but many had injuries associated with trampling (i.e., bleeding from the nose, bruises, crushed chest, etc.). Many of the carcasses examined confirmed the presence of unusual round lesions (sores) on the skin of the face, body, and flippers. Calves and sub-adults were affected most often by these skin lesions. Several random surveys of the herd were conducted to estimate how many walrus were affected. Approximately six percent of the estimated 15,000-20,000 walrus hauled out on the barrier island appeared to have the skin condition. More sub-adults (65%) had sores than adults (35%). Live walrus with skin lesions generally appeared otherwise healthy and robust. One sub-adult male walrus was observed separated from the herd and was obviously sick; he had skin sores and blood was coming from the nose and mouth. This animal was put out of its misery and necropsied by the veterinarian to see if the cause of its illness could be determined.

Two field necropsies were conducted at the haulout; one on a fresh, beach-cast carcass of a female calf, and one on the euthanized male sub-adult. Some common findings included blood-filled lungs, soft discolored liver, smaller than normal thymus, and smaller than normal lymph nodes. Laboratory findings included inflammation of blood vessels in the skin, inflammation of the heart muscle, and inflammation of the liver (hepatitis). Preliminary laboratory findings were suggestive of a virus; however, despite exhaustive efforts, none have been identified. Several bacteria have also been found in the samples, but nothing unusual that could cause the observed symptoms. Preliminary testing for toxic algae, like paralytic shellfish poison, has been negative or at very low detectable levels. So far, the disease and where it came from remains unclear. However, a similar disease condition in young walrus at coastal haulouts has been observed in Chukotka, Russia. In Alaska, the skin condition in young walrus has only been observed at the Point Lay haulout; other Alaskan walrus hunting communities report healthy walrus.

In December 2011, the National Oceanic and Atmospheric Association (NOAA) and USFWS declared an Unusual Mortality Event (UME) for ice seals and Pacific walrus (2011 Northern Pinniped UME). An investigative team made up of scientists from many institutions has been established. Further testing is underway for possible causes including factors such as diseases, man-made and natural bio-toxins, radiation, contaminants, and nutritional, hormonal and environmental factors. Although some similarities exist between the symptoms observed in ice seals and Pacific walrus, it is still unknown if the two are related.



*Photo Credit: Anthony Fischbach, USGS. Walrus with skin lesions at the Point Lay walrus haulout, August, 2011*

### **COMMENTS AND QUESTIONS**

*Comment:* Saint Lawrence Island hunters have not encountered any sick walrus like this in our region. So far, the walrus seen this year have been healthy and fat.

*Comment:* Elders talk about the health of animals over time. We have not seen animals as sick as they are now.

*Comment:* We rely on subsistence delicacies such as *ugruk* (bearded seal) and fermented walrus to build energy for our elders. We need to share this information with our people in order to protect our continued consumption of these foods. We have had other scares in the past; some people are still scared to eat duck and geese (avian influenza). We do not want to see that happen with our seals and walrus. Communicating the laboratory test results back to our communities is important.

*Comment:* We have not seen or heard of people or dogs getting sick from touching or eating affected seals or walrus. Human health experts do, however, recommend that people avoid touching or consuming them. If you see a sick animal, it is telling you — “*don’t eat me.*” Trust that your traditional practices will guide you. You do not need agencies to tell you if something

is safe to eat. The investigative team is trying to find out what is causing the illness and to get information out to the communities about the disease investigation. Communities that have questions and/or need clarification can contact the NSB-DWM for more information.

*Comment:* Perhaps the sores are a symptom of stress. When walrus are stressed, they hit each other with their tusks and drive weak ones away from the herd. The noise associated with seismic surveys in the Chukchi Sea could cause stress in walrus because the noise can travel for many miles.

*Comment:* There are several military radar sites along the North Slope as well as chemical dumps and we all know that walrus are bottom feeders. Walrus could be picking things up from the food they eat.

*Comment:* There is concern about the Red Dog zinc-lead mine near Kivalina because a line in the water can be seen drifting northward from the dock. These things (mining products) could affect fish and marine mammals.

*Comment:* Increasing water temperature could also be a factor and could facilitate bacterial growth.

*Comment:* A recommendation was made to test ballast water from ships that travel through the area because they could be carrying bacteria or contaminants.

*Comment:* The melting ice pack is releasing elements that we do not know about. We are also starting to see strange algae blooms in our region.

*Comment:* We also have concerns about possible offshore nuclear releases.

*Comment:* The USFWS hopes to visit Saint Lawrence Island this spring to collect baseline data from healthy animals to further the investigation. We would also like to work with the community of Point Lay to collect additional samples from carcasses at the haulout. There will also be meetings with Russian colleagues in March to find out about their observations from haulouts in Chukotka and discuss ways to jointly monitor for sick walrus at coastal haulouts.

Local observations are a very important part of the ongoing walrus and seal disease investigation. If people observe animals with unusual symptoms they are encouraged to contact local wildlife officials at the numbers below:

**North Slope:** North Slope Borough Department of Wildlife Management: 907-852-0350

**Nome/Bering Strait:** Eskimo Walrus Commission: 1-877-277-4392

**Nome/Bering Strait:** UAF Marine Advisory Program: 1-800-478-2202, or: 907-443-2397

**Statewide:** NOAA Alaska Marine Mammal Stranding Network: 1-877-925-7773

## **WALRUS OBSERVATIONS FROM SAINT LAWRENCE ISLAND**

*Invited Guest Speaker Perry Pungowiyi, Traditional Hunter from Savoonga*

Perry shared a map of the walrus haulouts on Saint Lawrence Island (Appendix B), and noted that large mixed (both sexes) herds of walruses use the haulouts in the fall and early winter.

Saint Lawrence Island is 100 miles long and its narrowest point is 25 miles wide. Its Siberian Yupik name is *Sivuuqaq* which means “squeezed” – it looks like the island is being squeezed by the Creator. That is why Saint Lawrence Island is thinner in the middle. There are approximately 800 people living in each of the villages of Gambell and Savoonga.

In late spring, Savoonga hunters travel as much as 70 to 100 miles out to pursue walruses. Although they share hunting information with Gambell hunters, they try not to overlap hunting areas and speak on different radio channels. Some walruses do not migrate north in summer and remain near Saint Lawrence Island year round. A lot of clams wash up on the south side of the island when there is a southerly storm. Biologists and scientists say clams only grow in deep water, but this (shallow) area is rich in clams. When walruses are harvested in this region their stomachs are full of clams.

Some walruses are carnivorous and feed on seals. Seals are not part of the natural walrus diet, so the people of Saint Lawrence Island do not eat these seal-eating walruses. The elders say that these walruses must have lost their mothers when they were young and they were not taught to eat walrus food, so they started to eat fish and then seals instead. Their tusks are yellow and scarred from eating seals and their meat is very oily.

Saint Lawrence Island walrus haulouts form in late October, November, and December. Large haulouts form on the Penuk Islands off the eastern end of Saint Lawrence Island. Every year hunters find dead walruses on the islands. Even though there are no people there, they trample each other. Community members have observed carcasses of aborted fetuses, calves, pregnant females and large bulls. Polar bears also use this area and know where to look for dead walruses.

When Saint Lawrence Island hunters visit the Penuk Islands in the fall, the elders tell them to take only what is needed. Approaching from down-wind and hunting at the edges of the haulout are important to limit disturbances. Wind direction also determines whether Gambell or Savoonga hunters reach the haulout areas first. If hunters find dead walruses, they salvage the tusks and share the resource.

Walruses generally haul out onto sandy areas; they also haul out on one of the rocky islands. A haulout for spotted seals has also been observed near the island. There used to be thousands of seals there; however, because of disturbances, the numbers are not as high as they used to be. In recent years, Gambell hunters have also seen a lot of sea lions on the west side of the island. Although it is unknown why they are hauling out there, Perry suggests they are probably following their food source.

Perry noted that the main migratory pathway for bowhead whales and other marine mammals is to the west (Russian) side of the Island. The community is concerned about increased shipping traffic in the area. If possible, they would like ships to pass on the east (U.S.) side of the island.

They have also encountered fishing boats from Nome traveling to Saint Lawrence and the Punuk Islands to look for ivory. Perry wrote a letter to the Norton Sound Economic Development Corporation to protest the collection of walrus parts, bones, and tusks from the island (which is privately owned) but has not received a response. Fishing fleets from the south are also starting to move into the region. Perry notes concern about potential impacts because the region is such an important habitat for sea mammals and water fowl.

Occasionally, air traffic from Nome can disrupt hunting opportunities. When hunters see a plane, they call the USFWS agent in Nome and notify him that people are scaring walruses and interfering with the subsistence hunt. Perry noted that a few years ago researchers were studying walruses from a U.S. Coast Guard ship. A camera crew used a helicopter to take video footage of some walruses, and even though they stayed one mile away from the herds, with the wind direction, the animals moved off the ice when they heard the helicopter.

Saint Lawrence Island communities have recently adopted local hunting ordinances revived from the 1940s that limit the number of walruses taken per trip. This shows that they are able to manage their own resources. Although the ordinances focus on walrus trip limits right now, they may try to revive sea bird ordinances in the future. The IRA Councils worked with the EWC, Kawerak's legal counsel, and the USFWS to develop these ordinances. The Native Villages of Savoonga and Gambell received funding through a tribal wildlife grant to implement the program and are currently working to form marine mammal councils in both communities.

### **COMMENTS AND QUESTIONS**

*Comment:* We have also seen a carnivorous walrus in Barrow. We were excited to get the animal and people ate it based on a first come/first served announcement made on the radio. Some light joking followed – now you know that if you eat meat from a carnivorous walrus, you will go bald (Joke).

*Comment:* Generally, people try to stay away from larger walrus herds (on land or ice) and try to either pick smaller groups or hunt at the edges of the group. Large walrus groups are fearless and dangerous as they feel there is safety in numbers.

*Question:* Does the vegetation grow back after walrus haul out on Saint Lawrence Island?

*Response:* There is a tough sharp grass on the Punuk Island that grows back.

*Question:* Have walruses been killed by ship traffic?

*Response:* We have no idea.

# COMMUNITY OBSERVATIONS AND SHARED TRADITIONAL KNOWLEDGE

## ***WALRUS OBSERVATIONS FROM POINT LAY, ALASKA***

*Bill Tracey, Director, North Slope Borough Fire Department*

Bill shared that he is humbled to be a part of this process. He has been living on the North Slope for more than 40 years. His wife's (Marie) parents and family shared their knowledge and taught him about the animals in the area. He has seen a lot of changes in his lifetime and suggests that people need to look at what humans are doing to the planet to cause these rapid changes.

He recalled that years ago you could boat for days on the Chukchi Sea without encountering another person. Today, boats are encountered from Point Hope to the south and Wainwright to the north. Travel by boat from Barrow to Point Lay used to require the movement of ice to make head way; however, now there is open ocean and there is no ice for sea mammal or human protection. Smaller boats sometimes have to take shelter from large waves and storms. With the sea ice gone, walrus are starting to come on land because the beach is their only refuge. He also noted that some adaptation is taking place – he has seen some animals sleeping offshore in the open water.

In his observations at the Point Lay haulout, he has noted that the animals seem to arrive in pulses. You can hear them arrive from the village. Some animals arriving at the haulout are extremely tired and cannot make it all the way out of the surf. Some of the animals have shown signs of sickness on their skin and respiratory distress, and he has noticed that there is a strong smell of ammonia at the haulout.

Community members can see and hear the walrus from their homes. Point Lay is on a shallow lagoon and belugas also like the shallow waters. Belugas, seals, and walrus all use the area and the community coexists with these animals on a daily basis.

The community issued an official statement to the media that due to the risk of disturbances, they do not want them to come into the community to film and report on the haulout. Instead, they have provided the media with pictures to use in their stories. The community of Point Lay did allow one media crew to conduct local interviews and arranged for photos to be taken at a distance from the haulout. This approach worked and people left the walrus alone. Locals have also changed boating habits along the lagoon and the barrier islands in order to avoid disturbing walrus at the haulout.

Bill cautions that if communities take a “*do-nothing*” approach—someone or some other agency will step in. This is not the approach to take. Point Lay's community motto is: “*To live and let live.*” He recommends that we continue to non-invasively study these animals and use local community members who know the animals and the territory. He warns that helicopters should not be used near the haulout because they could cause a big disruption.

Bill suggests we listen to the wisdom of the community elders because they know what to do.

*Warren Harding Lampe, NSB Fish & Game Management Committee Member*

Warren shared that he is originally from Barrow and was raised living a subsistence lifestyle by his grandparents. Point Lay is fortunate to have elders to guide them about appropriate behavior with respect to walrus coming on shore. The Point Lay community understands what it means to live and let live.

With respect to media interest, the Village and IRA Council decided that they do not want disturbances at the haulout and oppose outsiders coming in to either take pictures or just take a quick look. Disturbances by hunters are not seen as a big concern because they would rather hunt a fat caribou to the south instead of traveling north past the haulout. The boating channel is next to the haulout on the barrier island so there is a need to be careful to not disturb the walrus. Warren noted that he harvested a walrus the week before the main herd arrived; however, once the main herd got there, hunters left them alone.

The people of Point Lay are capable of managing their community and know what and what not to do. Warren has worked with the USGS, USFWS, NSB-DWM, and ADFG on satellite tagging and collecting walrus samples from carcasses. He is grateful for the ongoing scientific research when done in consultation with the community. Warren recommends that if someone wants to work in the village, they should first come and explain what they are doing and keep disturbances to a minimum.

There have been efforts in Point Lay over the last two years to document subsistence use areas for oil and gas impact assessment. Steve Braund is leading the study, and has provided community hunters with GPS devices to mark traditional hunting areas by boat. Warren has taken coordinates in areas where he hunted with his grandparents and uncles when he was growing up. They are trying to get an additional two years of funding and would also like to include traditional land areas, but for now, work has focused on marine areas. He noted that the area of traditional subsistence use (both land and sea) is huge.



*Photo Credit: Anthony Fischbach, USGS. Walrus at the Point Lay haulout*

*Marie Tracey, NSB Village Communications Liaison*

Marie shared that there was a lot of sea ice during the summer months when she was growing up, but now there is hardly any. People now have to scramble to hunt *ugruk* (the skins are needed to cover their boats) and seals. The elders used to guide them in these activities; however, they are now losing elders and have to grow into the role of community elders themselves.

They never saw walruses come to shore when she was growing up. When they hear that walruses are on the beach, they notify USFWS and ask them to close the airspace, and share the news with the community via radio. The walruses haul out onto a sandy beach with grassy areas at the top of the slope. Some walruses coming ashore look exhausted and tired; they appear to be sleeping in the waves. Some walruses weigh over a ton and have to stick their tusks in the sand to pull themselves up onto the beach.

Some of the walruses she observed at the haulout site last year were sick. It was hard to witness an old sick walrus that had lost weight and had parts of its tusks missing. Sick animals are not afraid of humans, they barely move when they are sick — they are at the end of their time. They counted 106 walrus carcasses and some juvenile seal carcasses along an 11 mile stretch of beach near the haulout this season. They also observed several carcasses that had lesions/sores. Most of the walruses they saw at the haulout were healthy and they were amazing to see.

When caribou are scarce, the Point Lay community turns to the ocean for their food supply. Different food groups are needed each season. Hunters harvest from smaller groups when they hunt for walruses. Point Lay hunters are not after ivory. They hunt for food — not tusks. The community of Point Lay primarily hunts beluga and seals and is looking at what can be done to preserve our hunting areas.

The people of Point Lay did not grow up vegetarian and the store is very expensive. The community wants their children and grandchildren to be able to provide for their families and to hunt like their ancestors and community elders did. Hunters now have to buy licenses to hunt subsistence food, which is something they never had to do before. The community does not want outsiders to control when to hunt this or that. Marie finds it disturbing that some community members are being arrested because they did not have a hunting license. They do not want to see a hunting ban for walruses — they just want people to be smart and hunt from smaller groups.

As the Village Communications Liaison, Marie receives a lot of phone requests from the media to come to Point Lay to take pictures of walruses. Her response is: “*Sorry you are not going to be able to fly in and take pictures.*” Some of them expect a waiting car and to be taken straight out to the haulout for pictures. Marie asked two rhetorical questions: “*Do we want to see tourism or preserve our way of life? Do we want money or our way of life? — You choose.*” The community does not want to see an invasion into the village. She shared that NBC news came to shoot a news story and agreed to the community’s requirements. NBC employed a local boat owner so that someone from the village could watch what was going on. The village allowed the

visit and hosted a bonfire and cookout. Marie noted that the people of Point Lay want to take care of their land and wildlife just like their ancestors did.

The community has participated in tagging (tracking) studies for walrus and beluga. Tracking shows that they feed at Hanna Shoal which is where the oil companies want to drill. The question is: “*Why not drill on land?*” We need to preserve the lagoon for all wildlife. It is a sanctuary, and we want to be able to hunt and continue our subsistence way of life.

*Willard Neakok, IRA Council / EWC Commissioner*

Willard shared that he has lived in Point Lay since 1973. He remembers that there were very few walrus haulouts on shore in those days, but remembers hearing his uncles’ talk about walrus haulouts sometimes going ashore on the barrier islands to rest. The ocean has been changing for the past ten to twelve years: winters are milder, break up is earlier, sea ice is thinner, and things start growing earlier in the spring. Last summer they saw animals they had not seen before. They saw ribbon seals which are usually only seen in the Bering Sea, as well as black cormorants and other new birds. It was unusual for them to be found so far north. For the past two years, walrus haulouts have been congregating four miles north of the old village on the barrier island. He noted that it is good to see and hear the walrus haulouts before going to work in the morning but he did not enjoy the smell so much. Point Lay has been fortunate to have the help of USFWS, ADFG, and NSB-DWM to help protect and study their walrus haulout.

Last year he noticed that calves were trampled by disturbances caused by planes flying overhead. They had a village meeting to inform the community on what needs to be done to protect the haulout. They asked hunters traveling north to idle their engine when they pass by the haulout so the herd is not disturbed. They are fortunate to see and learn from the haulout so they try to keep the noise down and enjoy the experience. Everyone realizes the importance of walrus haulouts to the community. Point Lay will have another village meeting in late August as a reminder to the community of what they can do to protect the walrus haulout.

Point Lay would like to have contact information of who to call in order to restrict air space around the haulout. The last two years has been a learning experience of what needs to get done and who to call to establish protections. Willard shared his observations of a Lear jet flying towards the haulout and a sailboat sightseeing for approximately five to six hours. It is possible that barges may even start coming through to see the haulouts. Perhaps a maritime border should be considered. Willard would like to have a meeting before July or August to discuss what needs to get done. There is a need to do something to preserve the walrus haulouts for our great grandchildren.

Willard was very pleased to be a part of the walrus carcass survey project. He saw approximately 20,000 walrus haulouts on the beach and another 10,000 swimming and feeding. He and Joel traveled by boat as far north as Eleven Mile Inlet and walked the ocean side of the island to look for dead walrus haulouts. Dr. Raphaela Stimmelmayer was contacted to help conduct necropsies of fresh animals.



*Photo Credit: Joel Garlich-Miller, USFWS. Willard Neakok examines a walrus carcass near Point Lay*

One sick animal had to be put down. As Iñupiaq people, we have compassion for animals and put them out of their misery if they are suffering from injuries or sickness. Hopefully research will help find out what is going on with the walrus lesions. The information to not eat infected walruses or ringed seals has been shared with the villagers.

Walruses travel to Hanna Shoal to feed. This is a very important feeding area because the depth is just right for clams and mussels; however, it is also near where the oil companies will be drilling next summer. He is sad that they will be drilling right where walruses like to feed. Willard shared that he wrote an editorial to the Anchorage Daily News last year in opposition of exploratory drilling in the Chukchi Sea. His big concern is the potential for a blowout and noted the challenging conditions for oil recovery. An oil spill could affect all the migratory animals, bowhead/beluga whales, walruses, fish and birds. He wants his kids and grand-kids to continue to experience a subsistence lifestyle.

## **COMMENTS AND QUESTIONS**

*Comment:* A tribal resolution was passed with respect to the discharge of oil drilling material into the Chukchi Sea. It asks oil companies to haul out their drilling materials rather than discharging them into the ocean. The resolution was written because this is an important marine mammal feeding area. Salmon fingerlings can be found about 130 miles out which is where belugas feed.

*Comment:* There is high unemployment in our villages, so it is good that researchers are doing local hires.

*Comment:* A recommendation was made to share and build traditional knowledge with young hunters so that everyone in the community can stay healthy and become strengthened to deal with what is coming. Part of the communication should be to talk about ways to protect important habitat areas, restrict activities, and work on building a process of what needs to be done to preserve our traditional lifestyle.

*Comment:* Point Lay would like to speak just as strong as Barrow speaks. Our adult population unemployment rate is at least 80%. If community members are not working or collecting unemployment, they are not counted by the federal government, but they still need to eat. These are the people we need to take care of.

*Comment:* Communication at the local, state, and national level is critical to our survival. Point Lay wants to create opportunities for communication, and encourages and invites anyone who wants to work and study in Point Lay to come and visit. Even though some in the community are not in favor of offshore drilling, we invite those involved to come to our village and communicate with us so there is a two-way exchange of information.

*Comment:* Ocean transportation traffic has increased. In Wainwright, they have to remediate their beach due to erosion.

*Question:* How much are you paid to do the walrus surveys?

*Response:* We received \$250/day plus gas. We like the idea of more than one boat and made a recommendation to hire more people for 24 hour observations. We also noted the need for stronger spotting scopes in order to have accurate walrus counts — USFWS or ADFG may already have this type of equipment available.

*Comment:* USFWS has a tribal wildlife grant program that can help monitor and study haulout issues. (The Native Village of Barrow (NVB) received a grant to start an education program for young hunters.)

*Response:* Point Lay will look into this as a funding source.

## **WALRUS OBSERVATIONS FROM BARROW, ALASKA**

*Billy Adams, Subsistence Research Coordinator, NSB-DWM*

Billy shared that the world could learn a lesson from the community of Point Lay. Pride is important — people are proud when they act responsibly. He also noted that the EWC resolution to promote local management to prevent disturbances was a step in the right direction.

Barrow is a big community and it sometimes seems like there are 9,000 people hunting along the coast. It is hard to manage so many people at one time. Barrow hunters mostly hunt walrus on the ice. Walrus start arriving in Barrow the first week in July — communities further south see them earlier. There have been a lot of changes in the past 10-15 years. In recent years, weather and ice patterns have affected animal distributions so that now people need to harvest walrus on the beach, and getting sand in your meat is an issue.

Billy stated that there is a place a little ways west of Barrow called *Atuutigruaq* that is filled with a lot of old walrus remains — which shows that walrus have hauled out in these areas in the past. There are also certain places the spotted seals like to go and they have probably done this for thousands of years.

In reference to Point Lay having a dependence on beluga, the same holds true for bowhead whales in Barrow. Barrow now shares a hunt with 10 whaling communities capable of landing bowhead whales. This is something to be proud of. He noted that every community is different; Barrow hunts bowhead whales and Point Lay hunts beluga, walrus, and caribou.

Walrus need the ice so their young do not get trampled. Animals have to eat and then rest after eating. A stampede can be caused by anything — even a bee. He feels that it is important for communities to keep airplanes away from the haulouts. The FAA can reroute planes and ask pilots to fly at certain altitudes. Every year will be different, and communities need to act swiftly like Point Lay did when a large haulout forms.

One drawback about having a meeting like this is that some people may think we are law enforcement. It is important to say that coastal people are here, that we have been here for thousands of years, and that we are here to protect our way of life. Coastal people try to harvest in a responsible manner. We share a common goal of co-managing our resources. When law enforcement comes to the community it causes tension — something needs to be done to reduce the need for law enforcement presence in the villages.

Barrow primarily hunts walrus when the ice first goes offshore in the summer. People prefer to hunt on the ice but some also harvest animals on land. Walrus with calves are protected; lone walrus can be properly harvested. It is hard to say no to someone who wants to get a walrus on shore. They have to take what they need. Everyone scrambles for a piece of walrus meat. It is hard to cut up a walrus on the beach because sand gets on everything. People are going to have to learn to butcher on the beach.

The NSB-DWM is doing a good job gathering baseline health data for the disease investigation. The right people are doing the work and completing samples. It takes time to do research on what is causing the sickness. It was good that research started before the seal outbreak because we are getting closer to knowing what is causing it. Outreach is important so there is a need for increased communication with community members about management issues. It is important to do outreach and provide updates as soon as possible. The NSB has done some important radio shows that are going well. They have been asked to have longer shows (two hours vs. one hour).

*William Hopson, Traditional Hunter from Barrow*

William shared that he was born and raised in Barrow and is a subsistence hunter. He has traditionally hunted walrus in July and August. Over the last five years, they have not seen any ice or walrus. To have a successful hunt today, it is necessary to go out right after the whaling season. Hunts have moved up a month or more from when they normally were in the past. There are a few haulouts to the west of town on the barrier islands. A few walrus haul out near Barrow, and people do try to hunt them because people need walrus meat. William stated he was glad everyone was here to discuss the issue. He wonders whether a look two or three years into the future will reveal a community hunt at haulouts with 20 boats participating in one hunt in order to reduce disturbances instead of 10 different hunts. He can see that way of hunting coming and thinks it is good to think about the future and adjust techniques with the changing times.

William noted that people who do not know walrus well can be mistaken about illness. Walrus are born with red eyes and are dirty so the definition of a sick animal needs to be clarified because what an outsider may consider sick is a normal walrus to us.



*Photo Credit: Craig George, NSB-DWM. A bull walrus on the beach at Barrow Alaska*

## COMMENTS AND QUESTIONS

*Comment:* In looking for solutions to help walruses — why not try artificial ice floes to see if they work? A suggestion to use dredge tubes to create offshore resting platforms was also made. California sea lions use docks — why not see if they can work for other species?

*Comment:* A baseline study needs to be done because the oil industry is trying to extract oil. A baseline study was not done in Prudhoe Bay.

*Comment:* There is concern about how USFWS will use the information from this workshop. This information should not to be used by agencies to bring law enforcement into the villages.

*Response:* This workshop is not about regulations or law enforcement, rather the purpose is to document community concerns, and come up with ideas for local management (promote local stewardship). We need to find ways that communities can address conservation concerns so that law enforcement efforts do not become necessary. The workshop report belongs to everyone participating in the workshop and their respective communities. You can use this information as a basis for developing local community initiatives.

*Comment:* There is a law enforcement expectation of how walruses are harvested. If a hunter does not take the proper amount from a walrus, they are subject to a fine and loss of their hunting equipment. Hunters never know when law enforcements are going to come because they approach people when they beach up to check their equipment. It is important for USFWS to recognize that this is a touchy subject. There is a need for better outreach to communities about the rules so people do not get into trouble.

*Comment:* In reference to EWC Resolution 2008-01: There is a need for each village to have their own emergency plan to address unwanted disturbances at haulouts. Tribal councils need to discuss and develop plans and villages need to take ownership with the understanding that agencies like the NSB-DWM, USFWS, and the ADFG can help protect our natural resources.

*Comment:* We have historically stored meat from harvested walruses and bowhead whales in ice cellars, and the meat would keep for two to three years. Today, ice cellars are affected by global warming. Ground thaw issues and human waste contamination of the water table is becoming a problem in larger villages like Barrow and Wainwright. Refrigerators are not adequate storage for walrus meat - so alternative systems to store and keep food safe are needed. Participants were asked to take back the message to your respective communities that we need to develop solutions to address this issue. Rossman Peetook added that whaling captains have a traditional practice to not harvest a whale if they do not have a way to protect and save the meat. Ice cellars are the traditional way to store the harvest for distribution to the community. The damaged ice cellars in the community need to be rebuilt – which will cost money. Compensation is not to an individual captain but to the community, because the harvest belongs to and is shared by the all. Money to rebuild could potentially come from federal funds or the agencies who build the utilidors.

## **WALRUS OBSERVATIONS FROM WAINWRIGHT, ALASKA**

*Rossman Peetook, Community Elder. Rossman shared his observations and thoughts in Iñupiaq with translation provided by Enoch Oktollik and Billy Adams.*

Rossman started hunting walruses in 1939. He was eight years old and his older brother wanted him to come along with the group. They went out on an old whaling boat towing a small skin boat. When they got near the walruses, they turned off the motor and gathered to pray. They got into the skin boat and paddled towards the walrus herd. This was his first experience and he was scared. He and his brother were left behind and he started to cry. He was so frightened when the walruses started to make a lot of grunting noises. He tried to hide behind his brother when they started to harvest the animals.

All animals have a cycle. Their movements have a pattern that is unique. The movements seen in the past are different from today's movement patterns — the bowheads have started to migrate earlier; a big change. Now people only have a short window to hunt before the ice goes away.

The weather has also changed dramatically. There has been a lot of thick snowfall in recent years, much more than in the past. Sometimes when rain follows a snowfall, a crust is created and prevents animals from getting to the grass or produces jagged edges that can cut up their legs. It can be a dangerous time to be an herbivore. There is sorrow for these animals because they are wounded and cannot get to the grass. There is a great love for these animals, so hunters do not want to see them suffer. His father taught him how to hunt. When he started to hunt on own, his father said to shoot the animal in the neck but to not injure them in the rump or guts. The animal has to be taken care of swiftly or it will get injured and run away.

He has been working with the Alaska Eskimo Whaling Commission on conflict avoidance agreements with the oil and gas industry. Many years ago, hunters did not want any distractions or interference before they hunted. Dependent on weather, there are only a few days to get an animal as they migrate through. In the past, they had to hunt for their dogs as well. In those days, dog teams were used to travel, so they had to gather food for the whole winter for both themselves and their dogs. Nowadays, other means of travel are used so only enough walrus meat for people to eat is gathered.

The currents can be very dangerous — they can take people far away so they have to act fast to get food for their community. He shared that he once went to Point Franklin (30 miles out of Wainwright) on a hunt with his son and the current was so swift that when they were done butchering they were near Barrow.

He has seen how a walrus will separate from the herd when it is sick. When other walruses approach a sick animal they can sense that the animal is different from the others and will leave it alone. Hunters feel sorrow for sick animals and put them out of their misery.

Nowadays, when the ice comes from the south in June, it keeps traveling north. Walruses need the ice to rest and now they haul out on land because they are tired from being in the water. The

season of travel and migration movements have really changed and have impacted a lot of people. Whether it is *ugruk* or walruses, we hunt these animals on the ice. When a lot of the walruses get on the ice, they can lower it so it looks level with the water. When spooked, they get off the ice which causes it to rise and makes it dangerous. He agrees with, and seconds the idea about making artificial ice bergs for walruses to rest on offshore.

Oil and gas activities have impacted our hunting grounds and caused disturbances during the hunting season. We only have a short period of time to gather animals. Elders do not want any interference at all and are serious about getting food for survival. When they hunt, they work really hard and have to act swiftly after the animals are sighted. Our elders taught us to gather only what we need. In the past, the cycles were always predictable and now the movement of the animals has changed dramatically. He shared that he is humbled that others now know more than he knows.

The unusual mortality of ringed seals this summer, along with their permanent hair loss, has been observed in his community. We do not know what the illness is. He wonders whether there will be any chemicals found in these animals that we should be looking at. He would be very happy if someone could tell him whether there are updates on ongoing investigations.

*Enoch Oktollik, City Mayor and EWC Commissioner*

Enoch shared that he grew up in Point Hope. Walrus hunting in Wainwright is different — they do not get the big bulls he saw in Point Hope. He remembers hunting out of Point Hope with Ronald Oviok, and seeing some very big bulls popping up out of the water. Wainwright hunters rarely see walruses with huge tusks —some of the walrus may be big, but their tusks are small.

Enoch noted concern that human disturbances may be interrupting walrus migrations and haulout use. Air traffic near walrus haulouts needs to be controlled and he recommends notifying pilots each year. Enoch noted that everyone impacts walruses in some way when they go out on the ocean. He feels that too many studies are being conducted on sea mammals in the name of education. University work can impact the Native and subsistence way of living. Communities know how to manage their resources — the animals should be left alone.

Walruses know how to use the ocean and now they are being pushed onto land. He noted that he has seen walruses sleeping together offshore in open water creating their own haulout (with their bodies). He and his crew were amazed to see this, and they did not want to disturb them.

Enoch noted that in Kaktovik, they put whale bone piles close to the islands and now polar bears are roaming around there. Now people want to go there to see the bears. He asks: “*what is their motivation?*” He feels that people should leave these animals alone. Animals that people have been eating all their life should not be used as a tool to attract people to come, take pictures, and make posters.

He recalls Joel bringing the people from Chukotka to Wainwright to share their approach to develop a local haulout management plan. It was a good visit, so Wainwright residents hosted a big community event. More community meetings like this one are needed to educate ourselves and talk about these issues. Law enforcement agents should also visit the village to let everyone know what the hunting rules are so that people do not get into trouble.

### ***WALRUS OBSERVATIONS FROM POINT HOPE, ALASKA***

*Ronald Oviok, Sr., City Councilman and EWC Commissioner*

Ronald shared that he grew up in Point Hope and learned to hunt from community elders. Point Hope used to be like a long straight finger, which is what its Iñupiaq name “*Tikigaq*” means, but is now more like a curved finger because of erosion. He was told by his elders that when walrus came to Point Hope in mid-fall (August and September) they would get five shooters from the community to harvest walrus when they came to shore (that was when ammunition was hard to get). When they harvest walrus they tell a story. “*We are just like them, the walrus, when we talk about them, they listen and hear.*” In the spring, the males come and are harvested but their meat and skin are hard. But in the fall, the females are tender and fat. Elders are always happy when walrus are tender and fat!

In the fall, walrus come to shore at Cape Lisburne to rest in big groups and nobody bothers them. It is the same when thousands of walrus are resting on the ice — they are too dangerous to hunt so we leave them alone. We hunt along the coast like everyone else. When he was growing up, community elders were respected; however, times have changed, and our young hunters do not always listen to their elders.

Ronald noted that the people of Point Hope are concerned about global warming. Sea ice conditions have changed — 20 years ago the ice was eight feet thick and now it is only 3-4 feet thick. The community is also concerned about the impact of disturbances of marine mammals from seismic activities. He noted that it is getting tough to find the animals we hunt.

*Steve Oomittuk, City Mayor*

Steve shared that his people live in a cycle of life passed down from generations. Our knowledge is thousands of years old. We know when each animal is coming, how to prepare, and where to be. We are starting to see changes in the ocean. Animals are taking different migratory routes. We are seeing more traffic in our ocean. Not that long ago we lived in sod houses with no electricity. The ocean is our way of life — our garden. We want to make sure it is protected. Without animals, we have no identity and no food. We need to protect all the animals that migrate north — not just walrus but also the whale, the seal, and the duck. A lot of traditional knowledge is gained when you live a subsistence way of life.

## WORKSHOP RECOMMENDATIONS

Recommendations from workshop participants to address emerging conservation and management issues associated with the increased dependence of walrus on coastal haulout areas are summarized below. Community members also developed community-specific recommendations during community breakout sessions (Appendix C).

### ***REDUCING DISTURBANCES AT COASTAL HAULOUTS***

Workshop participants agreed that efforts to address disturbance at coastal haulouts was needed to minimize mortality levels. Participants also noted that disturbances could lead to the accumulation of walrus carcasses near communities resulting in increased interactions with predators, and that disturbances could drive walrus away from subsistence hunting areas.

Aircraft over-flights were identified as a primary source of disturbance to walrus herds along the coast. Aircraft noise in traditional hunting areas can also impact hunting opportunities and success. Recommendations to reduce disturbances at coastal haulouts from aircraft over-flights included education and outreach to pilots operating in the area, flight advisories with guidelines, and flight restrictions over haulout areas when walrus are present.

Boat traffic along the coast was also identified as a disturbance concern. Some of the issues and recommended solutions are site specific; for example, the travel corridor in the shallow waters of Kasegaluk Lagoon requires boaters to travel in close proximity to the coastal haulout site at Point Lay. The community of Point Lay has requested that boats slow to near idle and motor quietly past the haulout site when animals are present. Supply barges and sightseeing vessels operating near haulouts are also of concern. The development of education materials for marine vessels, and approach guidelines and restrictions for vessels operating near coastal haulouts was recommended. There is also a desire to increase communication between communities and marine vessels to avoid interference with subsistence hunting activities.

In order to reduce disturbances, the haulouts need to be identified and their locations communicated so that protection measures can be put in place. The coastal communities are important to the development of this process. There was a recommendation to develop a contact list and establish a communication network to exchange information about the haulouts during the active season so that site specific protection measures can quickly be established.

Media interest in access to large walrus haulouts and people wanting to see walrus and take pictures at the haulout has put a lot of pressure on the small rural community of Point Lay. Point Lay has been very proactive in dealing with the media, and has limited access to the haulout to reduce the risk of disturbances. Their efforts have included a formal statement discouraging

unnecessary visits to the haulout to reduce the risk of stampedes. They have provided their own photographs for media use rather than allowing them to take their own pictures. They encourage all visitors to the haulout area to travel with a local guide whose knowledge of the area and walrus behavior can help prevent disturbing the animals.

Hunting activities can also cause disturbances. The elders have knowledge to share regarding proper hunting techniques and this knowledge should be used to guide hunters on ways to reduce disturbance to walruses at coastal haulouts. Specific recommendations included:

- Avoid hunting large groups of walruses (on land or ice) – it can be dangerous.
- Hunt away from the main herd to minimize trampling mortalities.
- Target solitary or small groups of animals.
- Look for hunting opportunities before (or after) major concentrations form.
- Hunt walruses on sea ice (when available); this reduces the risk of trampling deaths and also provides a clean surface for butchering (no sand in your meat).
- Take note of the wind direction when operating near haulouts and remain downwind (walruses have a good sense of smell).
- Hold cultural exchanges and training on hunting techniques that are successful at other coastal haulouts.
- Plan a community hunt rather than many individual hunts to avoid repeated disturbances at haulouts.

Research activities can also cause disturbances at coastal walrus haulouts. Recommendations for walrus researchers to reduce disturbances included:

- Researchers should work with knowledgeable locals who know the area and walrus behavior to avoid disturbing animals.
- Researchers should consult with local communities about ways to minimize impacts to walruses at the haulouts and prevent interference with subsistence hunting activities.
- Researchers should avoid using helicopters near coastal haulouts – there is a significant danger in creating a disturbance.
- Researchers should evaluate whether their project is worth the risk and consequences of disturbances - noting that the advice of the community elders is to not disturb the animals resting on the coast.

## ***DEVELOPING LOCAL MANAGEMENT AND RESPONSE PLANS***

The EWC has encouraged coastal communities to work towards developing local ordinances and management plans to reduce disturbances to walrus resting on the coast. Workshop participants were supportive of this idea and recommended that communities interested in developing local ordinances work through their tribal governments. Community elders play an influential role in shaping community behavior and should be included in the process. Likewise, active hunters in the community who are most likely to be affected by community decisions should also be involved in the process to ensure that there is community buy in and support.

Potential funding sources for developing and implementing local management programs include USFWS Tribal Wildlife Grants, and co-management funding under section 119 of the Marine Mammal Protection Act. It was also noted that the Office of Management and Budget (OMB) has established a tribal liaison position in Kotzebue. The position's focus is to find funding specifically for tribes to implement federal programs and laws such as the Marine Mammal Protection Act and Endangered Species Act. The EWC also offered support to help communities find funding to develop community-based programs.

It was noted that the community of Point Lay has already adopted many practical protection measures to reduce disturbances at their large haulout, and they have also taken an active role in walrus research and monitoring efforts. The community has been successful at preventing disturbance events and mortality at the haulout has been extremely low. Recommendations to improve response planning and preparedness included holding a community meeting prior to the haulout season to discuss protection measures and developing a communication plan with appropriate officials to get protection measures in place quickly when the haulouts form.

## ***RESEARCH RECOMMENDATIONS***

There was general interest among workshop participants to see increased involvement and participation of community members in walrus research and management efforts on the North Slope. Community members have great traditional and local knowledge of their territory and the behavior of animals which can contribute greatly to the success of research projects. There was a recommendation to consult with local communities prior to doing a research project at a coastal walrus haulout. The community can provide good advice about how to accomplish the work and prevent disturbances. It was also noted that compensating hunters fairly for their time and effort will help improve participation in biological sampling programs.

A number of recommendations regarding priorities for walrus research were generated at the workshop:

- Explore the potential for developing offshore artificial platforms to serve as resting habitat for walruses.
- Investigate the impacts of climate change and changing ice conditions on marine mammals and subsistence hunters.
- Test the ballast water from ships that travel through the area for bacteria that might be causing the observed disease symptoms in seals and walruses. Other possible causes of the observed skin lesions include: environmental contaminants from mining operations and military sites, compounds released from the melting polar ice pack, and new algal blooms seen in the Arctic.
- Conduct baselines studies of important habitat areas prior to oil and gas development to understand potential impacts.
- Identify impacts from oil and gas activities in hunting grounds and whether they cause disturbances during the hunting season.

Workshop participants also recommended that resource management agencies invest in training for students and help them pursue careers in resource management. It was noted that there are some student scholarships available to students interested in biology including the Mathew Iya scholarship, established through the Pacific Walrus Conservation Fund (contact EWC, USFWS, or ADFG workshop participants for additional information).

## ***COMMUNICATION AND OUTREACH***

Participants noted that communication and outreach in coastal communities on walrus conservation and management activities is critically important. In order to promote stewardship efforts, people need to understand the issues. Walrus managers, researchers, EWC representatives, and the NSB-DWM were encouraged to make regular visits to the communities to share information about ongoing walrus research and management issues, and to let communities know how they can become involved. People are very interested in hearing about walrus issues at all levels (local, regional, and international).

Workshop participants stressed the importance of sharing the traditional knowledge of community elders, both with scientists and within the community. The elders have great knowledge and experience with the animals and how to hunt them efficiently and sustainably. Specific recommendations regarding communication and outreach include:

- Share the traditional knowledge of the elders with younger hunters. Part of the communication should be to talk about ways to protect haulout areas and provide guidance on responsible hunting techniques.
- Communicate safety concerns and risks to people's health regarding sick seals/walrus as food and communicate the results of studies in a timely and culturally sensitive manner to avoid scaring people from eating their food.
- Communicate research and testing results back to the communities in a consistent and timely manner. Ensure scientific terminology is translated into simple terms so all may understand and participate in the discussion.
- Radio talk shows are a good way to engage coastal communities on the North Slope on wildlife management issues.
- Visit participating workshop communities to share and discuss this report.
- Increase outreach and education in the communities regarding hunting rules and regulations so people can avoid trouble.
- Make use of the local (Barrow) USFWS liaison office for outreach.

## APPENDIX A – EWC RESOLUTION 2008-01

### Eskimo Walrus Commission

#### Resolution 2008-01

##### **A Resolution to Minimize Disturbance of Hauled-Out Walrus**

WHEREAS, the Eskimo Walrus Commission was formed in 1978 with representation of 19 walrus hunting communities throughout the Northern, Northwestern, and Western Alaska coastal communities; and

WHEREAS, a stated purpose of the Eskimo Walrus Commission is to conserve and enhance marine resources such as walrus, and

WHEREAS, the continued health of the walrus population is important for the subsistence of coastal Alaska Native people of the Bering, Chukchi, and Beaufort Seas, and

WHEREAS, rapid decline in summer sea ice extent and quality in the Arctic have resulted in a greater number of walrus moving to the Chukchi Sea's shoreline, and

WHEREAS, the extent and quality of summer sea ice in the Arctic is predicted to continue diminishing, and

WHEREAS, groups of walrus are expected to continue spending more time on land where they are more prone to disturbances, and

WHEREAS, when disturbed on land, walrus frequently stampede in a manner that results in mortalities and can lead to site abandonment, and

WHEREAS, there is great concern about the future consequences of the changes in sea ice and walrus ecology on the health of the walrus population;

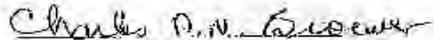
NOW THEREFORE BE IT RESOLVED THAT the Eskimo Walrus Commission is strongly urging communities to implement ordinances and guidelines regarding hunting and disturbance of groups of walrus while they rest on shore, and

BE IT FURTHER RESOLVED THAT the Eskimo Walrus Commission seeks input from communities about their concerns and suggestions for effectively protecting walrus while they rest on land, and

BE IT FURTHER RESOLVED THAT the Eskimo Walrus Commission urges their co-management partner, the U.S. Fish and Wildlife Service, to ensure that new and existing

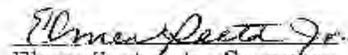
Eskimo Walrus Commission Resolution 2008-01

development and transportation initiatives conduct activities in a precautionary manner with respect to preventing disturbance to hauled-out walrus.

  
Charles D.N. Brower, Chair

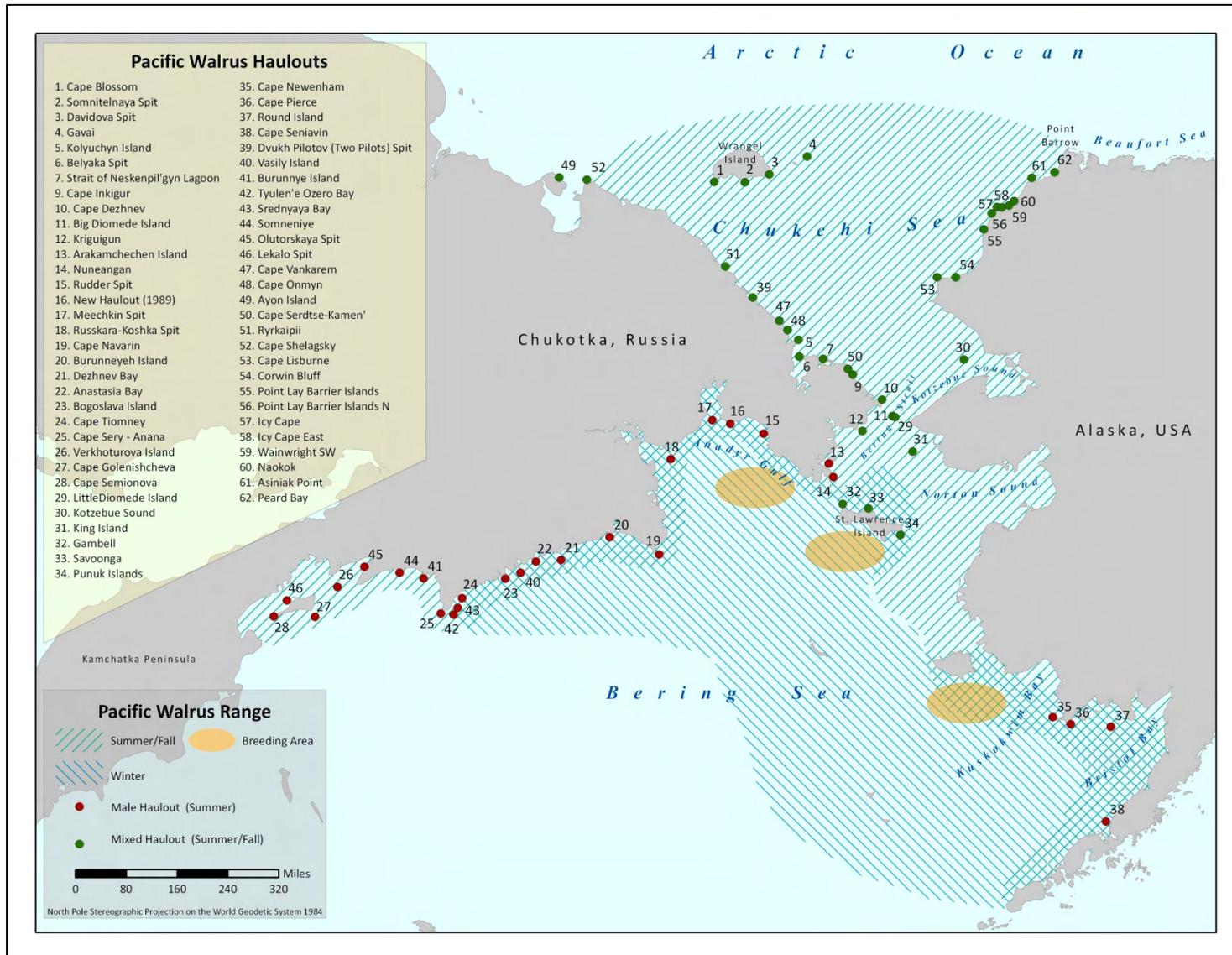
**CERTIFICATION:**

I, the undersigned Secretary of Eskimo Walrus Commission hereby certify that the foregoing resolution 2008-01 was adopted by majority vote of the Commissioners. Passed this 15<sup>th</sup> day of January 2008 at a duly called meeting of the Eskimo Walrus Commission.

  
Elmer Secto, Jr., Secretary

Eskimo Walrus Commission Resolution 2008-01

# APPENDIX B – MAP OF COASTAL WALRUS HAULOUTS



## APPENDIX C: COMMUNITY RECOMMENDATIONS

### ***POINT LAY***

#### Communication and coordination:

- Develop and distribute a contact list (including agency and community contacts) prior to the haulout season so that people know who to call when animals show up on the beach.
- Set up a teleconference with community and agency representatives (USFWS, NSB, FAA, and the U.S. Coast Guard) prior to the haulout season to get protective measures in place.
- Hold a community meeting prior to the haulout season to develop plans.
- Present information about walrus research and management efforts in the classrooms – walrus researchers and NSB staff should plan on presenting information to students.

#### Haulout Studies:

- Continue to involve community members in walrus haulout monitoring projects.
- Consider establishing a base camp on the barrier island during the haulout season (noting the difficulty in crossing the lagoon during shallow water conditions).
- Explore the possibility of setting up observation towers equipped with web cameras at the haulout to allow remote monitoring of walruses and unwanted ships and planes.

#### Equipment and supplies needed to conduct haulout studies:

- *Communication equipment:* 150 watt VHF radios (recommendation to use a different frequency to avoid interference with village communications), Satellite phone for emergencies, fax machine for sending information to community communication centers.
- *Shelter:* Camouflage tents (2). It was noted that there is an old building built by students on the barrier island. Suggestion to talk to village council regarding its use during the field season. Blinds at haulouts are needed as a warm up place to get out of elements and to accomplish observations without scaring animals.
- *Camp supplies:* Stove, coffee pot, thermos, propane fuel (not gas, worried about smell causing stampede), water containers, emergency food (ready to eat), lanterns, bucket.
- *Safety equipment:* PLB or SPOT locators, flares, a shot gun with slugs and cracker shells to keep bears away, fire starter.
- *Observation equipment:* Two spotting scopes with built in cameras to allow zooming in for pictures of lesions or sick animals.

## **BARROW**

Barrow does not have well developed haulouts near the community, but does get some animals showing up on local beaches. Minimizing public interactions with walrus on area beaches is the primary management issue at present.

### Local control and management structure:

- Recommendation for the Native Village of Barrow (NVB) to take the lead on local walrus management issues – backed up by locals and the NSB-DWM.
- Recommendation to create a local task force to address walrus management issues in the community – include the NVB, ICAS, UIC, COB, NSB, hunters, and Community elders.
- Consult local task force and the EWC regarding the development of local ordinances (will not affect traditional hunt). Discuss issues and how to deal with them with elders and active hunters and then take the information back to the community to share and seek their approval and buy in. Put these guidelines in place before a situation arises.
- Develop a response plan that can be referred to clarify who will take the lead role.
- Develop a system to get air restrictions in place over haulouts.

### Funding:

- Work with the EWC to identify and pursue funding for local management programs.

### Communication and coordination:

- Increase communications among EWC, NVB, NSB, and USFWS on walrus issues.
- Barrow is a regional hub and can help facilitate communication with the other villages.

### Outreach and education:

- Utilize local radio shows to raise awareness of walrus haulout issues on the North Slope.
- Utilize local USFWS liaison office in dealing with haulout issues.
- Develop educational videos.
- Develop school curriculum, and have elders share their knowledge and traditional ways.

### Improve/reduce interactions with USFWS law enforcement:

- Recommendation to have the local USFWS community liaison evaluate situations before law enforcement comes to the community.
- Work with the local task force to try to resolve law enforcement issues locally.

### Hunting at haulouts:

- If large haulouts form near the community like in Point Lay, and nutritional needs need to be met, consider coordinating community hunting efforts to reduce disturbances. Invite other hunters with experience hunting at coastal haulouts to share their experience.

## ***POINT HOPE AND WAINWRIGHT***

Representatives from Point Hope and Wainwright worked together to develop a list of recommendations for their communities:

- Develop awareness programs in the communities and educate young hunter about proper walrus hunting techniques.
- Take what you can take from harvested walrus – do not waste.
- Remove unwanted carcasses away from the community to avoid predators.
- Encourage our children to pursue careers in wildlife management, and encourage the USFWS and the State of Alaska to recruit our youth.
- Increase communication with marine vessels to avoid disturbances to subsistence hunting.
- Invite the USFWS and other agencies to regularly visit communities and present information about walrus issues. The visit by Chukotka hunters in 2009 was very effective at raising awareness on these issues in the communities. It was noted that July or August, after whaling, is a good time to visit the villages.
- Increase communication with law enforcement officers regarding wildlife regulations.
- Develop walrus haulout plans (local ordinances). Integrate Native language, culture, and the wisdom of community elders into the process.
- Revisit old treaties and our native rights concerning subsistence hunting.
- Establish communication with neighboring communities regarding the migration of sea mammals and birds.
- Integrate our native language into walrus issues and interpret the information from our elders to our children.

## ***BERING STRAIT REGION***

### Regional experience sharing:

- Promote hunter knowledge exchanges. Bering Strait participants would like to visit Point Lay when walrus are there to observe what is being done (learn from each other). Note the availability of a walrus hunting video that shares the traditional hunting practices of Saint Lawrence Island hunters; you can contact the EWC for a copy of the video.

### Research planning and approvals:

- Increase community involvement in walrus research activities. Note that research results are not always shared in a timely manner, and hunters need to be fairly compensated for their sampling efforts. This would improve community participation in sampling projects.
- There is a need to study the impacts of climate change and changing sea ice conditions on marine mammals and on subsistence hunters.

### Harvest guidelines:

- Hunters need to get better (clearer) directions on salvage requirements for harvested walrus. Noted that parts of the current salvage guidelines are unclear and this has caused confusion and problems for some hunters. Need to make the rules clear so hunters are not fined.

### Local hunting ordinances:

- The reintroduction of local hunting ordinances on St Lawrence Island is moving forward. Local advisory councils in Savoonga and Gambell will meet and review them.

### Shipping traffic:

- There is no mechanism in place to monitor real time vessel traffic through the Bering Strait. There is a proposed workshop to discuss this issue in the fall of 2012.
- There is a need for a better understanding of the regulatory environment concerning Arctic shipping. We need to have a close look at the federal regulations, and work closely with the U.S. Coast Guard on shipping traffic issues.
- There is no voice speaking for subsistence users in the International Maritime Organization which is a concern.

*Participant Comment on increased shipping traffic:* With the ice pack receding, Arctic shipping should be our number one focus as it can affect all the marine animals in the food chain. Native tribes need to come together and support one another on this issue as we all live off the same animals. We need to give these Native organizations our full support in dealing with traffic going through the Bering Straits to the Arctic. Marine mammals are our soul food, and we can't get it anywhere else in the world. It is our responsibility to protect our resources for future use.

## WORKSHOP PARTICIPANT REFLECTIONS

*“I hope that a proclamation will result from this workshop for us to work together. We all need to work together to protect the Arctic Ocean for the greater good.” — Enoch Oktolik, EWC Commissioner Wainwright*

*“Thank you everyone for coming to Barrow, especially our elders. It was a heartfelt, productive, and humbling meeting. I will help carry this workshop information forward to other villages.” — Joe Sage, Wildlife Director, Native Village of Barrow*

*“Deepest thanks to our elders for their wise words and the EWC and USFWS for organizing the meeting. A special thank you to Point Lay residents for leading the way on walrus issues on the coast. We need to continue dialogue with hunters, who have valuable information about climate change and wisdom and advice on how to adapt to changes.” — Taqulik Hepa, Director, NSB-DWM*

*“It doesn’t matter who we are, we are all here to conserve our resources for a sustainable life in this harsh environment.” — Ernest Nageak, USFWS Tribal Liaison, Barrow*

*“Conservation and science work best together when local people take the lead and agencies step back and support their efforts.” — John Trent, Wildlife Biologist, USFWS*

For a copy of this report contact:

Marine Mammals Management, U.S. Fish and Wildlife Service  
MS-341, 1011 East Tudor Road, Anchorage, Alaska 99503

1 (800) 362-5148