

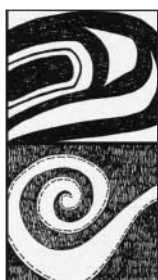
# A Cooperative Effort Between Alaska Native People and Federal Agencies On Marine Mammal and Bird Stranding

## Final Report

To the North Pacific Marine Research Program/University of Alaska Fairbanks  
School of Fisheries and Ocean Sciences  
PO Box 757220  
Fairbanks, Alaska 99775-7220  
Grant Number: 00-0030



Photo 1. MMSR Field No. 0001-DL-DG, A dead stranded beluga calf sent from Naknek to NMFS Stranding Coordinator and to the AK Sea Otter and Steller Sea Lion Commission for the Extended Stranding Training.



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Sea Otter and  
Steller Sea Lion  
Commission

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Beluga Whale Calf. Mr. Grossi called NMFS to report a dead beluga be observed on the beach, found dead stranded July 6 or 7, 2000 Naknek, Alaska. He volunteered to box and freeze, for shipment to NMFS. NMFS Western Alaska Stranding Coordinator Mahoney contacted TASSC for use in Extended Stranding Training for Level II or III responders. On its right side, Mr. Grossi wrote "A gift to the Native People of Alaska From Dominic Grossi."

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## Foreword

The Alaska Sea Otter Commission, a tribal consortium, was formed in 1988 to restore Alaska Native governance over the northern sea otter. In 1998, at the request of member tribes, the Commission expanded its role to advocate on behalf of Alaska Native relationships with Steller sea lions and the organization officially expanded to The Alaska Sea Otter and Steller Sea Lion Commission (TASSC). TASSC is composed of member tribes from six regions across coastal Alaska: Southeast, Chugach, Cook Inlet, Kodiak, Bristol Bay and Aleutian/Pribilof.

Recognizing and advocating active participation of Alaska Natives in marine mammal co-management, in 1995 TASSC sought and received funding from the Administration for Native Americans to implement a Sea Otter Biological Sampling Training Program to work with those that harvest the northern sea otter. The program involves training and equipping subsistence users to conduct necropsies on sea otter taken for subsistence. To date, 378 sea otters have been sampled for research, taken from subsistence harvests, strandings or other mortalities.

*A Cooperative Effort Between Alaska Natives and Federal Agencies on Marine Mammal and Bird Strandings*” evolved naturally from existing TASSC programs, such as the Sea Otter Biological Sampling Program. The design is to equip local residents around the Bering Sea with the knowledge, tools and contacts necessary for an effective response to local stranding events.

Stranding and stranding response networks receive considerable attention in the continental United States. In comparison, Alaska, although it has over 34,000 miles of coastline, has historically received very little funding for stranding response, affording little attention towards stranding events. A few notable exceptions exist, for example, several years ago, three gray whales trapped by ice near Barrow, Alaska, received national attention and efforts were made to promote the survival of the whales, including the use of an icebreaker to form a corridor to open water.

Along Alaska’s coastline, there are approximately 125 communities. Only a handful of these are served by rail or roadways. Otherwise, travel to each of these areas is via air carrier or boat. Travel to these areas and communities is prohibitively expensive.

For example, recently during several cold winters, pack ice moved southward from the Bering Sea into Bristol Bay and locked the shore in ice. Sea otters during these events were cut off from their food source and in their search for open water, were found miles inland or far offshore. High levels of mortality occurred and this was documented through formal survey, yet travel to Port Heiden, a Bering Sea/Bristol Bay community where sea otters hauled out during these both of these events, exceeded \$800 per round trip. Funding is rarely available for people to respond to situations like those that happened in Port Heiden. It is

important that local people have the tools and knowledge to effectively respond to these events. Once trained, the costs to respond is reduced. This was certainly true in Port Heiden.

This program, “*A Cooperative Effort Between Alaska Natives and Federal Agencies on Marine Mammal and Bird Strandings*” originated to increase awareness in communities surrounding the Bering Sea on stranding events and to provide a mechanism for local community members to respond. TASSC recognizes that coastal Alaska Native people track stranding in and around their communities. Alaska Native peoples salvage dead marine mammals for customary use and for art. Through local and traditional knowledge, people know which beaches to watch and scan those beaches for salvage purposes. Oftentimes, local people have questions as to why the animal stranded. We believe that through this program and others like it, scientific data can be collected to help answer these questions. TASSC believes that scientific data from these stranded dead animals can be collected locally while recognizing and observing customary practices and protocols.

In this final report you’ll read how we met and exceeded the grant objectives. Further, we have included informational sidebars and photos of stranding events to which workshop participants responded. TASSC hopes these side bars and this final report help increase awareness of Alaska Natives’ effort in reporting dead stranding events along Alaska’s vast coastline.

In conclusion, although the grant ended June 2001, TASSC will continue to advocate for data collection and salvage of stranded dead marine mammals, assist in facilitating stranding response in rural Alaska and seek the funds to make this possible. We will continue to seek partnerships to continue education and outreach on strandings and Alaska Native people.

We hope you’ll enjoy reading about our efforts towards furthering stranding response in Alaska.

## Introduction and Background

In June 1999, the Alaska Sea Otter and Steller Sea Lion Commission (TASSC) received a grant from the North Pacific Marine Research Program through the School of Fisheries and Ocean Sciences, University of Alaska, Fairbanks, to train coastal Alaskan residents in marine mammal and bird stranding response protocols. The grant was titled: *“A Cooperative Effort Between Alaska Natives and Federal Agencies on Marine Mammal and Bird Strandings.”*

### **Title IV of the Marine Mammal Protection Act**

Stranding response for marine mammals is mandated through Title IV of the Marine Mammal Protection Act (Title IV). Title IV mandates the Secretary of Commerce<sup>1</sup> in consultation with the Secretary of Interior<sup>2</sup>, the Marine Mammal Commission and other knowledgeable individuals, to establish and maintain a “Marine Mammal Health and Stranding Response Network” to:

- (1) facilitate the collection and dissemination of reference data on the health of marine mammals and health trends of marine mammal populations in the wild;
- (2) correlate the health of marine mammals and marine mammal populations, in the wild, with available data on physical, chemical, and biological environmental parameters; and
- (3) coordinate effective responses to unusual mortality events by establishing a process in the Department of Commerce in accordance with section 404.<sup>3</sup>

Title IV also details data collection and dissemination of procedures and practices related to strandings, the establishment of stranding response agreements, unusual mortality event response and funding, establishment of a National Marine Mammal Tissue Bank and subsequent analysis, and authorization for appropriations for Title IV implementation.

Under the Marine Mammal Protection Act, marine mammal “take” and “harassment” is prohibited by law. Both “take” and “harassment” have broad definitions, but as defined

in the MMPA, marine mammal “take” includes the collection of biological samples for scientific purposes. However, under Section 112(c)<sup>4</sup> a take exemption can be granted.



Photo 2. MMSR Field No. 0101-00-DW  
Orca Calf 11'5" long, reported dead stranded on 9-25-01 in Izembek Lagoon, Cold Bay, AK. Preliminary examination of the upper stomach contents revealed: Pinniped whisker, flipper bone digits, nail and bird feather remains.

<sup>1</sup>The National Marine Fisheries Service is housed in the Department of Commerce. The National Marine Fisheries Service has management authority as mandated by the MMPA for all marine mammals with the exception of polar bears, walrus, sea otters and manatees. This includes all cetaceans and pinnipeds.

<sup>2</sup>The U.S. Fish and Wildlife Service is housed in the Department of Interior. The USFWS has management authority as mandated by the MMPA for polar bear, walrus, sea otters and manatees.

<sup>3</sup>Section 404 details a framework for unusual mortality event response through the establishment of a working group, response timing, establishment of a contingency plan, and onsite coordinators.

<sup>4</sup>Section 112(c) states: [Contracts, Leases, and Cooperative Agreements.]  
- The Secretary may enter into such contracts, leases, cooperative agreements, other transactions as may be necessary to carry out the purposes of this title or title IV on such terms as he deems appropriate with any Federal or State agency, public or private institution or other person.

## Implementing Title IV

To implement Title IV, the National Marine Fisheries Service developed stranding networks throughout the nation, with regional Stranding Coordinators to facilitate stranding response. Through Section 112(c), a Letter of Authorization was developed that provides the legal ability for an individual to respond to a marine mammal stranding within certain specified bounds. Additionally, Title VI provides a release of personal liability for an individual with a Letter of Authorization under Section 112(c) in the stranding response through the designation of federal employee status for the stranding response, provided there is no gross negligence or willful misconduct and the actions taken are within the bounds of the agreement.

### Grant Objectives and Methods

The side bar to the right details the actual grant objectives and methods. The subsequent pages give greater detail how such objectives were fulfilled, products produced, and what was learned.

TASSC's effort involved two *Marine Mammal and Bird Stranding Response Workshops*, and an additional *Extended Stranding Training*. The workshops were held in Anchorage, Dillingham, and Seward respectively, where a total of 55 participants learned about stranding response procedures, Title IV and the programs derived thereof.

Workshops sessions involved learning about the laws and responsibilities of Title IV and the NMFS Stranding Network Authorization Process, the

### Grant Objectives

1. **Develop a network of Alaska Native participants within the current stranding network maintained by the National Marine Fisheries Service;**
2. **Hold one training session outside of Anchorage in a rural community or region on the stranding protocol;**
3. **Provide technical assistance and coordination with communities on winter stranding events including the transport of biological samples for analysis.**

### Grant Methods

1. Develop stranding workshop in Anchorage to train at least 20 individuals from Alaska's coastal communities.
  - Meet with NMFS, USFWS, and ADF&G scientists on participation in project.
  - Send letter of invite to communities with survey to determine impact on species protocol.
  - Finalize agenda, participants, presenters, and place of workshop.
  - Put together packets for distribution and hold stranding workshop.
2. Develop a network of Alaska Native participants within the current stranding network maintained by the National Marine Fisheries Service.
  - Create database of workshop participants.
  - Provide list to NMFS and USFWS
3. Hold one training session outside of Anchorage with a rural community or region on the stranding protocol.
  - Select one regional site to hold workshop.
  - Determine species list for stranding protocol.
  - Select scientists to participate.
  - Select date for workshop and hold workshop.
4. Providing technical assistance and coordination with communities on winter stranding events.
  - Develop hotline phone number for questions,
  - Provide assistance with movement of samples to appropriate federal agency,
  - Develop and provide mini-stranding kits for each community's use,
  - Develop public support and media relations for stranding events,
  - Develop poster and brochure on stranding program.

Marine Mammal Stranding Report Form (MMSR) with hands on data collection, Community Forums-Sharing the Knowledge, Field Techniques (Safety and Hygiene), Migratory Bird Identification Techniques, Beached Bird Surveys, Case Histories of Stranding with Local/Traditional Knowledge and Stranding Field Kit Equipment overview.

TASSC developed *The Field Guide to Strandings in the Bering Sea* (Appendix A) and the Stranding Field Kit to ensure participants have the tools necessary to respond to marine mammal and bird strandings.

The project was funded for \$100,000 for a one-year grant beginning June 1999 through June 2000. TASSC received a one-year extension through June 2001.

## Grant Method 1 ...planning for a cooperative effort...

### 1. Develop stranding workshop in Anchorage to train at least 20 individuals from Alaska's coastal communities.

- Meet with NMFS, USFWS, and ADF&G scientists on participation in project.
- Send letter of invite to communities with survey to determine impact on species protocol.
- Finalize agenda, participants, presenters, and place of workshop.
- Put together packets for distribution and hold stranding workshop.

### Planning Activities

TASSC planned for the first workshop to be in Anchorage in winter 1999/2000. Planning meetings were held, in person and on the phone, to develop the framework for the Marine Mammal and Bird Stranding Response workshops. Agencies involved in planning for the first workshop included: TASSC, National Marine Fisheries Service, U.S. Fish and Wildlife Service Marine Mammal Management division and the Migratory Birds division, U.S. Geological Survey Alaska Biological Division, University of Alaska Marine Mammal Museum and School of Fisheries and Ocean Science, and the Alaska SeaLife Center.

Additionally, TASSC staff sent an invitation notice and survey (Appendix B) to all Alaska tribal governments

### ... Cooperating with ...

Bristol Bay Native Association,  
Tribal Government of St. Paul,  
Manokotak Village,  
National Marine Fisheries Service Alaska Region,  
Traditional Council of Togiak,  
Native Village of Pilot Point,  
Native Village of Mekoryuk,  
U.S. FWS Migratory Birds,  
U.S. FWS Togiak Refuge,  
U.S. FWS Marine Mammals Management,  
Clark's Point Traditional Council,  
State of AK/ADF &G, Subsistence Division,  
Assoc. of Village Council Presidents,  
Egegik Village Council,  
UAF/ Marine Advisory Program,  
Native Village of Savoonga,  
Native Village of Chignik Lake,  
U.S. Environmental Protection Agency,  
Alaska Native Harbor Seal Commission,  
Yakutat Native Marine Mammal Commission,  
Qawalangin Tribe of Unalaska,  
Native Village of Quinhagak,  
Native Village of St. George,  
Native Village of Eyak,  
Native Village of Gambel,  
The Nature Conservancy,  
UAA/ Institute for Circumpolar Health,  
Rural Alaska Community Action Program  
Alaska SeaLife Center,  
Native Village of Port Graham,  
Kipnuk Traditional Council,  
Kodiak Tribal Council,  
Native Village of Kwigillingok  
Traditional Council of Togiak,  
Aleutian/Pribilof Island Association,  
Eskimo Walrus Commission

surrounding the Bering Sea. The survey centered on determining interest in learning how to obtain quality biological data in a dead stranded event. If a community was interested, then we asked what marine mammals and birds would be of interest to help determine the most important species for which stranding protocols should be developed.

All respondents were interested in seals, followed closely with 80% interested in walrus and migratory birds. Other species included: beluga with 20%, sea otter with 40%, large whales with 40%, sea birds with 40%, killer whale with 30%, and Steller sea lion with 40%.

With the questionnaire responses analyzed, staff proceeded to finalize a participant and presenter list (see pages 72-75 of the Field Guide), and the agenda for the first Marine Mammal and Bird Stranding Response Workshop (Appendix C).

### **The Field Guide to Strandings in the Bering Sea**

The Field Guide to Stranding in the Bering Sea (Appendix A), otherwise termed “Field Guide”, was developed concurrent with planning the Anchorage workshop. The Field Guide provides participants with a concise resource guide of what samples to collect and whom to contact. Also included in the Field Guide are examples and associated keys for the Marine Mammal Stranding Report (MMSR) form and the Beached Bird Survey form. The various chapters were contributed and compiled by federal, tribal and university participants in the planning process. The Field Guide was an integral part of the workshop packets and distributed to all grant participants.

A resource guide, such as the Field Guide, on strandings that details what samples to collect needs updating every three to five years, with emphasis on those species newly listed under the Endangered Species Act as endangered and/or threatened, or under the Marine Mammal Protection Act as depleted. TASSC is aware of this importance and will continue to seek funds to update the Field Guide and distribute to workshop participants.

## **Grant Method 2 ...becoming a stranding network member ...**

### **2. Develop a network of Alaska Native participants within the current stranding network maintained by the National Marine Fisheries Service.**

- Create database (Paradox) of participant's in stranding workshop.
- Provide list to NMFS and USFWS

### **NMFS Stranding Network Authorization Process**

Becoming a NMFS Stranding Network Volunteer (LOA letterholder) involves entering into an agreement with the National Marine Fisheries Service to carry out the purpose of Title IV of the MMPA. The Field Guide details and the workshop sessions involved learning the MMPA

Stranding Laws and The Letter of Authorization (LOA) purpose and responsibilities. TASSC was fortunate to have Kaja Brix, Eastern Alaska Stranding Network Coordinator and Barbara Mahoney, Western Alaska Stranding Network Coordinator explain “how” and “why to become a LOA Letterholder” at all workshops. The workshop participant contact information was provided to the NMFS Alaska Stranding Coordinators at the end of each workshop so that LOA agreements could be sent.

Developing a network of Alaska Native participants within the current stranding network maintained by NMFS was achieved through this grant. Yet, not all the workshop participants choose to become letterholders. A question voiced by many of the participants was “*Why must one be become a holder of a Letter of Authorization if we already are investigating dead marine mammals?*” This a legitimate question since coastal Alaska Natives have harvested and utilized marine mammals for generations, and cause of death will often be investigated regardless of letterholder status. A LOA seemed unnecessary, too complicated, and potentially damaging. For example, utilizing stranded marine mammals has become interwoven into many Alaska Native cultures, and in many coastal Alaska villages, when a whale strands and salvage is feasible, celebration occurs with traditional dancing and feasting.

Because of this traditional use and with the passage of the MMPA with the inclusion of Title IV, TASSC foresees the need for continued education and outreach for Alaska’s coastal peoples to report unusual strandings in their local area. To be really effective, education and outreach needs to occur in a culturally sensitive manner. Further, it should be understood and accepted that biological scientific collection can occur in harmony with traditional Alaska Native salvage of dead stranded marine mammals.

Another questions from workshop participants was “*Why does the NMFS LOA involve all marine mammals but sea otter, walrus, polar bear and manatee?*” This too is a legitimate questions and is often a point of confusion. These species are under the jurisdiction of U.S. Fish and Wildlife Service, Marine Mammals Management, and these species are not included in the Letter of Authorization provided by the National Marine Fisheries Service. Although this clearly is an issue that must be resolved, what is clear is that the national MMSR will be utilized for these species and that the reports of stranded animals, be it dead or alive, are directed to USFWS Marine Mammals Management.

**MMSR Field No. 0101-OR-NG  
July 7, 2001**

“Two dead stranded Walrus about 1.5 miles apart, possibly been dead for a week. Unusual to see walrus wash ashore in the area... examined and found no bullet”

Locality Details: 16-18 miles from Kwigillingok, South/Southeast Eastern Shore of Cape Ivonoff. N. George responded. MMSR forwarded to FWS Marine Mammals Management

**MMSR Field No. 0101-EL-CP  
June 26, 2001**

“Found by Defenders of Wildlife floating in Kalekta Bay/Unalaska Is. Very decomposed, forearms missing, stomach and intestinal track missing, possibly scavenged by birds.”

Locality Details: Kalekta Bay/Unalaska Is. Submitted via Qawalangan Tribe of Unalaska to TASSC Sea Otter Biosampling Program. - BS00-0035. MMSR forwarded to FWS Marine Mammals Management.

## Grant Method 3 ... the workshops...

3. Hold one training session outside of Anchorage with a rural community or region on the stranding protocol.

- Select one regional site to hold workshop.
- Determine species list for stranding protocol.
- Select scientists to participate.
- Select date for workshop & hold workshop.

### Alaska Marine Mammal and Bird Stranding Workshops

The grant objectives and methods called for two workshops: one in Anchorage, Alaska and one in a rural Alaskan community. TASSC held three workshops: one in Anchorage January 30, 2000, one in Dillingham, Alaska February 26, 2000 and one in Seward April 19, 2001.

Selecting scientists to participate involved those that responded to the questionnaire and agencies involved in the planning meetings. Representatives from the Indigenous People's Council on Marine Mammals (IPCoMM) were also invited. A listing all the organizations and agencies TASSC cooperated with for the all the workshops is located in the sidebar on page 3. A complete listing of names and contact information is on pages 72 - 75 of the Field Guide. An updated list with names with contact information has been forwarded to all participants involved in this grant.

Determining the species list began with the species identified in the survey effort (Appendix B). The planning meetings hosted many more species. After numerous contacts with the UAF Marine Mammal Museum it was discovered that the last publication for strandings in Alaska was published in 1979, by F.H. Fay, *A Field Manual of Procedures for Postmortem Examination of Alaskan Marine Mammals*. Alaska needed a more comprehensive, updated guide that covered all the desired species with current agency contact information. A table listing each species and the desired sample collection (matrix) is covered on page 34 of the Field Guide (Appendix A).

All the workshop agendas detailed the laws and responsibilities surrounding Title IV of the MMPA, Field Guide overview and case histories of stranding events. Yet each workshop was unique in design, content and number of participants. Appendix C includes all three workshop agendas.



Photo 3. January 2000  
Kate Wynne, Richard Takak, Ricardo Lopez, Joseph Pleasant and Roy Ashenfelter measure for morphological data collection in the MMSR at the Anchorage workshop.

## The Anchorage and Dillingham Workshops

Fifty participants and interested persons attended the *Alaska Marine Mammal and Bird Stranding Workshops* in Anchorage and Dillingham. The agenda topics involved representatives from federal agencies, tribal governments and Alaska Native organizations. The sidebar below details topics covered in the workshops.

Both workshops extensively covered the Marine Mammal Stranding Report (MMSR) form. NMFS Stranding Coordinators Brix and Mahoney covered important details in filling out the form accurately.

### Description of workshop topics:

**NMFS/FWS The Laws...Overview...Define Stranding** - How NMFS and FWS define and fulfill the requirements in Title IV of the MMPA.

**Manual Overview - Stranding Field Kit** - How the manual is arranged and Stranding Field Kit inventory.

**Case Histories of Stranding** - Sea Otters, Whales and Seals stranding examples

**Field Techniques (Safety and Hygiene)** - What works when cutting up that decomposed 40' whale in bear country and safety information.

**Matrix** - A listing of what samples to collect and why.

**Stories of the Press** - Some tips and techniques for working with the media

**Marine Mammal Stranding Report (MMSR)** - The key to all the information asked and why.

**The Field Guide to Strandings in the Bering Sea** - What to collect and why for: Small Pinnipeds, Large Pinnipeds, Walrus, Polar Bear, Sea Otters, Whales and Migratory Birds

**NMFS Stranding Network Authorization Process** - Necessary information one needs to know when you become a Stranding Network Volunteer.

**AMMTAP Program** - Brief overview of the program and contaminant sampling needs.

**IPCoMM** - Overview of the Indigenous People's Council for Marine Mammals

**GIS and your Resources** - Information and the value of mapping your resources.

**Research Protocols** - Respecting traditional knowledge.

**Community Forums - Sharing The Knowledge** - What workshop participants are currently doing in their Natural Resource Programs.

**Developing and Funding Research** - Money, money, money, where is it?

**Communication Network** - Who can you call. Workshop participant contact information.

**Stranding Response Kit Field Equipment** - Overview of the kit used to investigate a marine mammal or bird stranding event.

**Migratory Birds** - Conducting a Beach Bird Survey, case histories of bird die off events and bird identification (keying).

Kate Wynne, UAF Marine Advisory Program provided a stranded Dall's porpoise calf (*Phocoenoides dalli*) for hands on data collection at the Anchorage workshop. With the porpoise, workshop participants were able to see how morphological data can be collected in a consistent manner. Professor Wynne provided great hands-on and personal experience based on her years of stranding response.

Heather Johnson-Schultz and Shawn Stevenson of USFWS Migratory Birds Department provided several shorebirds for hands on data collection. Information on documenting an Alaska Beached Bird Survey (see pages 65 - 69 of the Field Guide) and case histories of shorebird die offs was discussed.



Photo 4. January 2000 Seth Stevensen, Nancy George, Joe Clark and David O. David discuss bird identification techniques. at the Anch. workshop.

## Extended Stranding Training

*The more experience one gets in responding to stranding, the more one gets an idea of what scientific data to collect and how to proceed in the process.*

After responding to an orca stranding near Cordova, Alaska (see Appendix G news articles) TASSC staff realized the amount of cooperation needed to necropsy a 24' whale. With this in mind, staff developed the Extended Stranding Training, held April 18 - 20, 2001 in Seward Alaska. The purpose of the two-day workshop was to further expose participants to stranding situations, and to gain hands-on experience taking measurements and collecting tissue samples through a mock-stranding event held on Lowell Point Beach.

In cooperation with the Alaska SeaLife Center, Alaska's only live stranding center, five people from St. Paul, Dillingham, Unalaska, Bethel and Ketchikan, traveled to Seward for the classroom and mock-stranding sessions. The sidebar to the right details topics covered during the training. Participants were selected for their knowledge and past experience with strandings.

The Anchorage office of the National Marine Fisheries Service donated a beluga calf that was found dead stranded in Bristol Bay during the summer of 2000. Additionally, we used a beach-cast sea otter from the Seward area to complete the mock-stranding event. The Alaska SeaLife Center donated meeting space and a portion of their staff members were able to participate in the classroom and mock-stranding sessions.

The Extended Stranding Training workshop packets included a Field Guide, MMSR forms, Cetacean Data Records (Appendix E), an Alaska Marine Mammal Winter Mortality Survey Field

<b>Description of Extended Stranding Training workshop topics:</b>
<b>Welcome and Tour of the Alaska SeaLife Center</b> - How, why and what the center does when responding to live strandings.
<b>Pictorial Necropsy of Eyak</b> - A pictorial account of how a 24' Orca can be measured and sampled.
<b>Documenting Orca Inlet Sea Otter Mortality Event Yrs. 1995-2000</b> Why and how Native Village of Eyak and TASSC documented a sea otter die off in Orca Inlet, Prince William Sound..
<b>Overview of Stranding Events on Alaska's Coastline</b> - Case history of stranding events.
<b>Marine Mammal Stranding Report (MMSR)</b> - The key to all the information asked and why.
<b>The Cetacean Data Record</b> - Overview of what the different measurements that are required (appendix e).
<b>Conducting a Marine Mammal Winter Mortality Survey Protocols</b> (appendix f) Developed from Determining Sea Otter Mortality in Tribal Boundaries to Determine Population Trends Protocols (TASSC 2000) , a procedure for systematally documenting marine mammal mortality.
<b>Beluga and/or Sea Otter Necropsy</b> - A hands on event on the beach.



Photo 5. April 2001 After discussing how to proceed with the necropsy, Dolly Garza and Candance Stepetin take photos, while Joe Shaishnikoff, Donna Willoya, Jennifer Hooper and George Walker look on.

Notebook on Rite in the Rain paper, and protocols to conduct a Marine Mammal Winter Mortality Survey (Appendix F). The Marine Mammal Winter Mortality Survey Protocols were adapted from the Determining Sea Otter Winter Mortality in Tribal Boundaries to Determine Population Trends (TASSC 2000) and provide a method for systematic documentation of winter mortality for an area.

Participants were provided with a tour of the Alaska SeaLife Center in addition to the presentations. The completed Cetacean Data



Photo 6. April, 2001. Dolly Garza collects the beluga calf heart and Chris Price acts as data recorder.



Photo 7. April, 2001. Colleen Kelly behind camera/Seward Phoenix LOG. Candance Stepetin, Dolly Garza, Helen Chythlook, Donna Willoya and Joe Shaishnikoff

Record for Eyak, the orca that stranded in Cordova in July of 2000 was provided during the Pictorial Necropsy of Eyak presentation as further educational materials.

In addition to the workshop topics, during the mock stranding event, the participants were asked to work with the media. TASSC called several newspapers to cover the training. TASSC, SeaLife Center, NMFS and USFWS staff referred all media questions back to the participants.



Photos 8 and 9 MMSR Field No. 0001-00-MK Orca 24' long. Live stranded July 11, 2000 am, in Hartney Bay, approximately 3 miles from Cordova, Alaska. Determined dead the evening of July 11 and necropsied the next day. The orca was identified as AT 1 and commonly known as Eyak to killer whale researchers at North Gulf Coast Oceanic Society.

Eyak live stranded approximately 400 feet from a road system. Traffic to view Eyak was stated as "it's a traffic jam out there". The Native Village of Eyak called TASSC staff because they were concerned about the number of people too close to Eyak while he was alive and after death. Additionally, after death but prior to moving Eyak to a more suitable beach for necropsy, an individual had taken a sledge hammer to the teeth.

## Grant Method 4

...the poster and brochure with hotline numbers, plus the field kit ...

### 4. Providing technical assistance and coordination with communities on winter stranding events.

- Develop hotline phone number for questions, concerns, and stranding events.
- Provide assistance with movement of samples to appropriate federal agency.
- Develop and provide mini-stranding kits for each community's use.
- Develop public support and media relations for standing events.
- Develop poster and brochure on stranding

### The Stranding Poster and Brochure with hotline numbers

TASSC developed a poster and brochure (Appendix D) that explains Alaska Native use of stranded marine mammals, the need for data and tissue sample collection and toll-free contact numbers for TASSC, USFWS Marine Mammals Management, USFWS Migratory Birds, and NMFS. The stranding poster and brochure was sent to all participating organizations, agencies and tribal governments along Alaska's coastline.

### Stranding Field Kit or Bering Sea Gut Bucket

The Stranding Field Kit or 'gut bucket' is only for investigating strandings and holds supplies necessary for collecting the data and samples detailed in the Field Guide. The side bar details the kit inventory, all of which will fit into a five gallon plastic bucket with lid.

Development of the kit contents evolved from several sources. Kate Wynne with the University of Alaska Fairbanks Marine Advisory Program listed what she utilized when investigating a dead stranded marine mammal. The Sea Otter Biosampling Kit list was looked at because it was developed to complete a full necropsy of a sea otter out in the field. TASSC realized a stranding response kit must be compact, available, and easily maintained.

#### *Stranding Field Kit (Bering Sea Gut Bucket)*

Knives a variety of blades (8-12" long)  
sharpener, hacksaw w/ extra blades

Measures 50ft tape ,  
1 m fiberglass tape measure  
20-50 ft. of string or clothesline  
inch/cm plastic ruler

Bags 1-gal Ziploc freezer bags (20+)  
qt. Ziploc freezer bags (10+)  
33-gal garbage bags (10+)

Labels - on Waterproof Paper or Writable Metal Tags,  
Tooth envelopes, Shipping Labels

First Aid Wet wipes, Eye Wash, Band-aids, Dr. Bronner's  
Peppermint Soap, Betadine - Iodine Solution

Alcohol to rinse forceps, knives, scissors

Camera - waterproof & disposable

Gloves, examination type, always powderfree

Notebook - write in rain field book

Scissors - dissecting (small)

Clip board

DMSO/genetic vials

Duct Tape

Formalin (1 liter bottle)

Forceps

Pliers

Paint pens

Sharpies

Tooth Elevator (large-#46)

Reference Materials:

*Guide to Marine Mammals  
of Alaska, 1992 by Kate  
Wynne*

*Marine Mammals Ashore, A  
Field Guide to Strandings,  
1998 CD-ROM Version, By  
J. R. Geraci and V.J.  
Lounsbury*

*Field Guide to Birds of America, Third Edition, National  
Geographic Society*

*Beached Marine Birds and Mammals of North America West Coast,  
1980, FWS-OBS-80-03*



Important safety information for the Stranding Field Kits is listed on page 17 of the Field Guide and all workshop participants attended sessions on kit maintenance and up keep. Forty Stranding Field Kits were made and sent out to workshop participants.



Photo 10 MMSR Field No. O101-00-CM Orca 22'3" long, dead stranded, Hinchinbrook Island, Alaska. A necropsy and exam was conducted July 3, 2001 by C. Matkin, D. Willoya and L. Jack utilizing the Stranding Field Kit.

### **Public Support and Media Relations**

On the coast line of continental United States, a dead marine mammal attracts attention. Why did it die? What are they going to do with it? In 1970, prior to the passage of the MMPA, Oregon Highway Patrol decided that blowing up a whale is the best way to get rid of the animal. Just recently (July 29, 2002) about 50 pilot whales live stranded on Cape Cod, Mass. and over 100 individuals assisted in the rescue effort.

In Alaska Native villages, when a whale strands, news travels fast. What kind is it? How big and whose skiffs in the village will we use? Will they need someone to stand guard for bears?

Because of the attention a dead marine mammal attracts, TASSC asked NMFS Stranding Coordinator Barb Mahoney to supplement the manual with tips and techniques for working with the media (see Appendix A, Chapter 3, pages 22 - 31).

During the Extended Stranding Training TASSC staff instructed the participants to work with the media. TASSC staff will refer to the participants if approached by the media. It is important to realize that the media can become a wonderful tool in gaining public support for strandings. Please see Appendix G for new articles generated from this grant.

## Conclusions

To many coastal Alaska Native people, genuine interest in why a marine mammal died has occurred for generations. Interest in cause of a genuine marine mammal death has motivated stranding response for generations.

Since Alaska Natives have harvested and utilized marine mammals for generations, cause of death will be investigated regardless of an LOA Letterholder. Often in coastal Alaska villages a celebration with dancing and feasting accompanies a whale stranding.

TASSC foresees the need for education, outreach and the understanding on the part of scientists for successful cooperation. The Alaska Native historical use of stranded marine mammals provide the perfect situation for the purpose and responsibilities detailed in Title IV of the MMPA in collaboration in stranding response.

Stranding response along Alaska's coastline has occurred on two culturally different situations, historical Alaska Native response and what is mandated in Title IV of the MMPA. Outreach with education and understanding must continue for Alaska's coastal people to report unusual strandings in their local area. In addition, scientific culture can benefit from biological scientific collection by rural residents who are interested and are in these remote areas.

Finally, the costs of responding to a stranding in rural Alaska can be expensive. Transporting a cooler full of samples can range from \$20.00 to \$125.00. Present funding stranding response is minimal for Alaska's 34,000 miles of coast line. TASSC staff will continue to seek funding to fund stranding response along Alaska's coastline.

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And finally, we would most like to acknowledge the efforts of local people around coastal Alaska and their interest and response to marine mammal and bird strandings.

## **References**

Fay, F.H., L.M. Shults and R.A. Dieterich. 1979. A field manual of procedures for postmortem examination of Alaskan marine mammals. Insititue of Marine Science and Institute of Arctic Biology, University of Alaska, Fairbanks. Fairbanks, Alaska. 51 p.

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