



The Harpoon

Unaaq, Naulik, Cavek, Narulkarcuun

Ice Seal Committee

"Ensuring Alaska Native's Ability
to Hunt Ice Seals."

Volume 1, Issue 1 Spring 2010

Featured Articles

**Five regions of the
Ice Seal Committee.**

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**The first adult bearded seal
to be captured and
instrumented in Alaska!**

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**Kotzebue IRA—
Where do seals go?**

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**Art/Photograph contest—
Win Prizes!**

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A Message from Chairman Goodwin

Hello fellow ice seal users. We at the Ice Seal Committee are working on your behalf to promote issues and projects concerning our ability to hunt ice seals. We have compiled this newsletter to introduce ourselves and show you what kinds of projects we are involved with. If you have questions about these projects, concerns about ice seals or other information please contact us. We appreciate you taking the time to read this and look forward to discussing ice seals further with you.

Quyanuk,

John Goodwin

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Front Page Photo– Albert Simon hunting seals, Hooper Bay.



Bearded



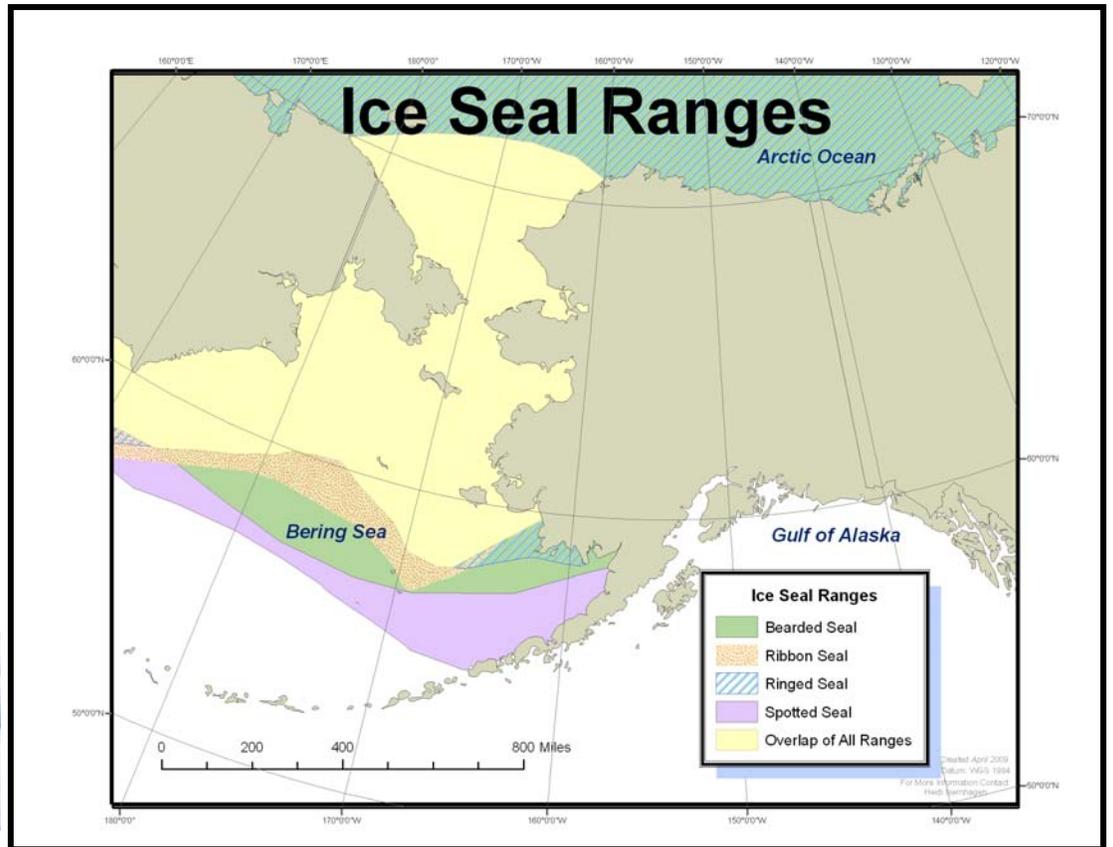
Ribbon



Ringed



Spotted



Ice Seal Committee

Who are they? What do they do for me?

Greetings from the Ice Seal Committee. If you use seals that live in or around sea ice in your subsistence way of life you need to know what we are doing for you. We are your Alaska Native organization focused on subsistence ice seal users. If you have questions about seal health, population, research, or anything else concerning ice seals we are the place to ask. The Ice seal Committee represents five regions in Alaska (Bristol Bay, Yukon-Kuskokwim Delta, Bering Strait, Northwest Arctic, and North Slope) where ice seals occur. One Native representative from each region makes up the Ice Seal Committee. Please read further to see what we do and how you can help protect the subsistence culture and way of life.

ISC Priority Issues and Concerns

The Ice Seal Committee feels the following issues and concerns are important to address in their co-management duties. Check out the page # indicated to see how the Ice Seal Committee is addressing each of these issues and concerns.

- Identify population status and trends (page 7-11)

Ice Seal Committee Co-Manages Ice Seals

Q. What does co-management mean?

A. Co-management means that the Ice Seal Committee makes management decisions with the National Marine Fisheries Service (NMFS) regarding seals that are important to us.

Q. How does the Ice Seal Committee have authority to co-manage ice seals?

A. Section 119 of the Marine Mammal Protection Act authorizes NMFS to enter into a co-management agreement with the ISC. The agreement, signed in 2006, allows for effective co-management of ice seals.

Q. So what does that really mean for me the Subsistence user of ice seals?

A. It means that you have a person representing you and your region's subsistence users when the National Marine Fisheries Service makes decisions that could affect you or your way of life.

Q. Who is my representative to the Ice Seal Committee and how do I contact them?

A. Below is a list of the representatives and how to contact each of them. We encourage you to contact your representative if you have any questions or concerns about ice seals.

Members	Office	Region	Contact
John Goodwin	President	Maniilaq (Northwest Arctic)	907-442-3181
Harry Brower, Jr.	Vice President	North Slope Borough	907-852-0350
Molly Chythlook	Secretary	Bristol Bay Native Association	800-478-5257
Sandy Tahbone	Representative	Kawerak (Bering Strait)	907-443-4265
Edward "Sam" Mark	Representative	Association of Village Council Presidents (Y-K Delta)	907-556-8167 ext 413

Our Vision as Committee

Members

"My kids and grandkids will be able to eat seals like I do."

Core Purpose

Ensure Alaska Natives' ability to hunt ice seals

Core Values

Traditional Knowledge; Sharing; Community;
Nutrition; Culture; Respect for Nature;
Bridging local knowledge and
western science

- Identify contaminants and their sources (page 10)
- Determine health of seal populations (page 10)
- Collect harvest data (page 5-6)
- Develop hunter education programs (page 6)
- Identify affects of climate change (page 7-11)
- Insure community feedback of research results (this newsletter)

Ice Seal Committee- Five Regions



North Slope Borough (NSB)

The North Slope Borough is the regional governing body for the eight communities on the northern slope of Alaska. Six of the eight communities are along the coast from Point Hope on the Chukchi Sea to Kaktovik on the Beaufort Sea. Anaktuvuk Pass and Atkasuk are further inland.

Department of Wildlife Management

The NSB is the only borough in the nation to have a Department of Wildlife Management. The department works with subsistence hunters on various marine mammal projects including an ice seal biomonitoring program.

Regional Representative to ISC

North Slope Borough's representative to the ISC is Harry Brower, Jr. of Barrow. Harry is the Deputy Director of the NSB Department of Wildlife Management. His alternate on the Ice Seal Committee

is Taqulik Hepa, she is the Director of Wildlife Management.

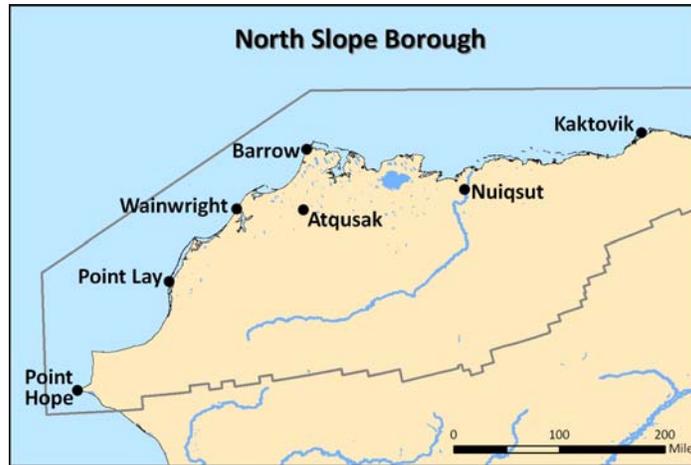
Ice Seal Committee Administration

The North Slope Borough administers a pass-through agreement between the National Marine Fisheries Service and the Ice Seal Committee. The support staff for the ISC are NSB employees.

Ice Seal Projects

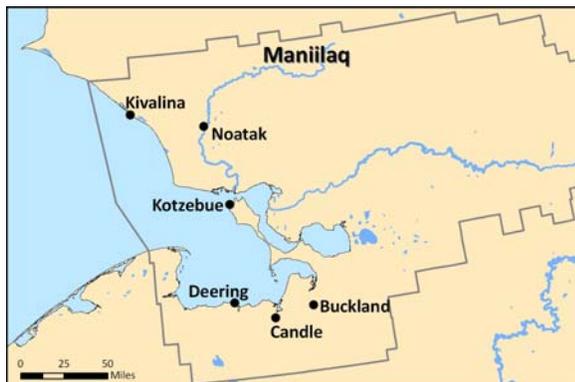
The North Slope Borough is starting a tagging project to track seal movements. The goal of the project is to build a community based tagging program. The project has been approved by the NSB Fish and Game Management

Committee, Ice Seal Committee and the communities where the tagging will occur. Local hunters will be hired to deploy the tags, because of their intimate knowledge of seals in their area. The two communities are Wainwright and Barrow.



Maniilaq Association

Maniilaq is the regional non-profit service organization. There are 12 federally recognized tribes from Deering to Kivalina along the coast and inland.



Maniilaq was founded in 1966 under the name NANA, but became Maniilaq in 1971. Maniilaq advocates all native issues including health, housing, and political rights.

Representative to the ISC

Maniilaq's representative to the ISC is John Goodwin from Kotzebue. John is a subsistence user and co-investigator on a seal tagging project (discussed on page 7). Raymond Stoney from Kiana is his alternate.

Ice Seal Committee Supported Project

Kotzebue IRA Seal Tagging Project (page 7)

Kawerak Incorporated

Kawerak Inc. is the regional non-profit service organization for the Bering Strait region. There are 20 tribal governments along the coast from Stebbins to Shishmaref including the island communities of Diomede, King and St. Lawrence. Kawerak was incorporated in 1973 and provides services and culturally relevant programs for its residents and promotes self-determination for member villages.

The Kawerak region includes Inupiaq, Central Yupik, and Siberian Yupik cultures. English is a second language to many communities and a majority of tribal members continue to practice their

customary and traditional way of life of subsistence-hunting, fishing, and gathering from the lands and waters.

Kawerak Ice Seal Projects

Kawerak works cooperatively with the Alaska Department of Fish and Game on ice seal biomonitoring. Samples of harvested seals are collected by hunters. Samples are tested for a variety of things including contaminants and diseases. The information is brought back to the communities and shared with the subsistence users.

Representative to the ISC

Kawerak's representative to the Ice Seal Committee is Sandy Tahbone from Nome. Sandy is the Subsistence Resources Director for Kawerak, Inc. Kawerak currently does not have a designated alternate for the Ice Seal Committee.

Ice Seal Committee Supported Projects

Effective use of small caliber rifles on ice seal harvest (Ahmasuk 2006). In an effort to decrease struck and loss, Ahmasuk performed this study. More information is available from Kawerak Inc.



Association of Village Council Presidents (AVCP)

AVCP is the regional non-profit service organization for the Yukon-Kuskokwim region. There are 56 federally recognized member tribes, from the Yukon delta up to Russian Mission, the Bering Sea Coast down to Platinum and up the Kuskokwim River to Stony River and Lime Village. AVCP was incorporated in 1964 and provides services and culturally relevant programs for its people and promotes self-determination for member villages.

The AVCP region includes the Cup'ik, Yup'ik and Athabascan cultures. Villages are not connected by roads. English is a second language for many communities and a majority of tribal members continue to practice their customary and traditional way of life of subsistence – hunting, fishing and gathering from the lands and waters.



Continued top of next page

AVCP continued.

Ice Seal Harvest Monitoring

AVCP partnered with the Alaska Department of Fish and Game's Arctic Marine Mammal Program to collect ice seal harvest information in three communities – Quinhagak, Tununak, and Hooper Bay. Year one was successful and we met with the communities, presented the results, and they all agreed to a second year of harvest monitoring. This information is important to our subsistence needs. Each household that participated will be entered into a drawing for a drum of fuel.

(IUM)

The AVCP regional marine mammal group is the Imapigmiut Ungungsiit Murillkestiit (IUM, "watchers of the sea"). There are 26 tribal representatives that

make up the IUM but, are unable to meet on a regular basis due to funding. The Ice Seal committee has funded two meetings of the IUM, which resulted in a seal hunting guide for use in schools.

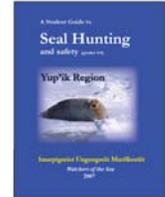
Representative to the ISC

AVCP's representative to the ISC is Edward "Sam" Mark from Quinhagak. He is a member of the IUM and was elected in May 2008 to represent the region on the ISC. Edward is the Natural Resources Director for the Native Village of Kwinhagak.

Ice Seal Committee

Supported Projects

- Seal Hunting Workbook →
- Ice Seal Harvest Monitoring
- Funded two IUM meetings



Bristol Bay Native Association (BBNA)

BBNA is the regional non-profit service organization for the region. There are 31 federally recognized member tribes, from Togiak Bay to Iliamna and down the Alaska Peninsula area. BBNA was incorporated in 1973 and provides services and culturally relevant programs for our people and promotes self-determination for member villages.

The BBNA region includes the Yup'ik, Cup'ik, Athabaskan and Aleut cultures. Villages are not connected by roads except between Dillingham and Aleknagik and King Salmon and Naknek. English is a second language for many communities and majority of tribal members continue to practice their customary and traditional way of life of subsistence – hunting, fishing and gathering from the lands and waters.



include questionnaires about climate change and Traditional Ecological Knowledge regarding ice seals.

Bristol Bay Marine Mammal Council and Qayassiq Walrus Council

The BBNA regional marine mammal groups are the Bristol Bay Marine Mammal Council (BBMMC, 7 members) and the Qayassiq Walrus Council (QWC, 9 Commissioners) which deal mainly with walrus but the regional reps will report other marine mammal information during their meetings. The tribal representatives that make up both of the councils meet on a regular basis.

Ice Seal Harvest Monitoring

BBNA partnered with the Alaska Department of Fish and Game's Arctic Marine Mammal Program to collect ice seal harvest information in two communities – Togiak and Twin Hills. Two years has been successfully completed and plans are to do another harvest survey the third year which will

Representative to the ISC

BBNA's representative to the ISC is Molly Chythlook from Dillingham. Molly is the Natural Resources Director for Bristol Bay Native Association Natural Resources Department. Frank Logusak from Togiak is the alternate for the ISC. Frank is the Chair of the QWC and a member of BBMMC and Eskimo Walrus Commission.

WHERE DO SEALS GO?

2009 KOTZEBUE SOUND COMPARATIVE RINGED AND BEARDED SEAL TAGGING PROJECT

Introduction:

This cooperative project is a great example of how subsistence users can get involved in scientific research and make it better. **The hunters and KOTZ IRA wanted to know where the seals went when they weren't in Kotzebue Sound.** Using traditional knowledge of seal behavior the hunters captured seals alive and biologists showed them how to put satellite transmitters on. This cooperative project will compare the seasonal movements, habitat use and foraging behavior of bearded seals and ringed seals in the Chukchi and Bering seas by tracking individuals of each species that were tagged in fall 2009.



Principal Investigators -Kathy Frost, Alex Whiting, and John Goodwin

Research Assistants- Brenda and Pearl Goodwin, Cyrus and Levi Harris, and James Monroe

Permit- Alaska Department of Fish and Game Scientific Permit No. 358-1787.

Project Objectives:

- 1) Acquire baseline data about habitat use and foraging of bearded and ringed.
- 2) Improve ice seal co-management by strengthening partnerships between ice seal subsistence users, tribal governments and state and federal agencies.
- 3) Increase stewardship of ice seals by involving

hunters in the collection of data that will be used in management decisions.



Methods:

- Tribal members were involved in all stages of the study, including planning, tagging and biological sampling.
- Field operations were located at the Sisualik spit.
- Both bearded and ringed seals were caught using standard "seal nets."
- Samples included sex, genetic (skin), blood, blubber, and body measurements.
- **Eleven bearded and 12 ringed seals were successfully satellite tagged.**
- Monthly movements can be tracked at www.kotzebueira.org under the projects link.

Cooperators and Funding Sources:

Native Village of Kotzebue

Alaska Department of Fish and Game

National Fish and Wildlife Foundation

Selawik National Wildlife Refuge

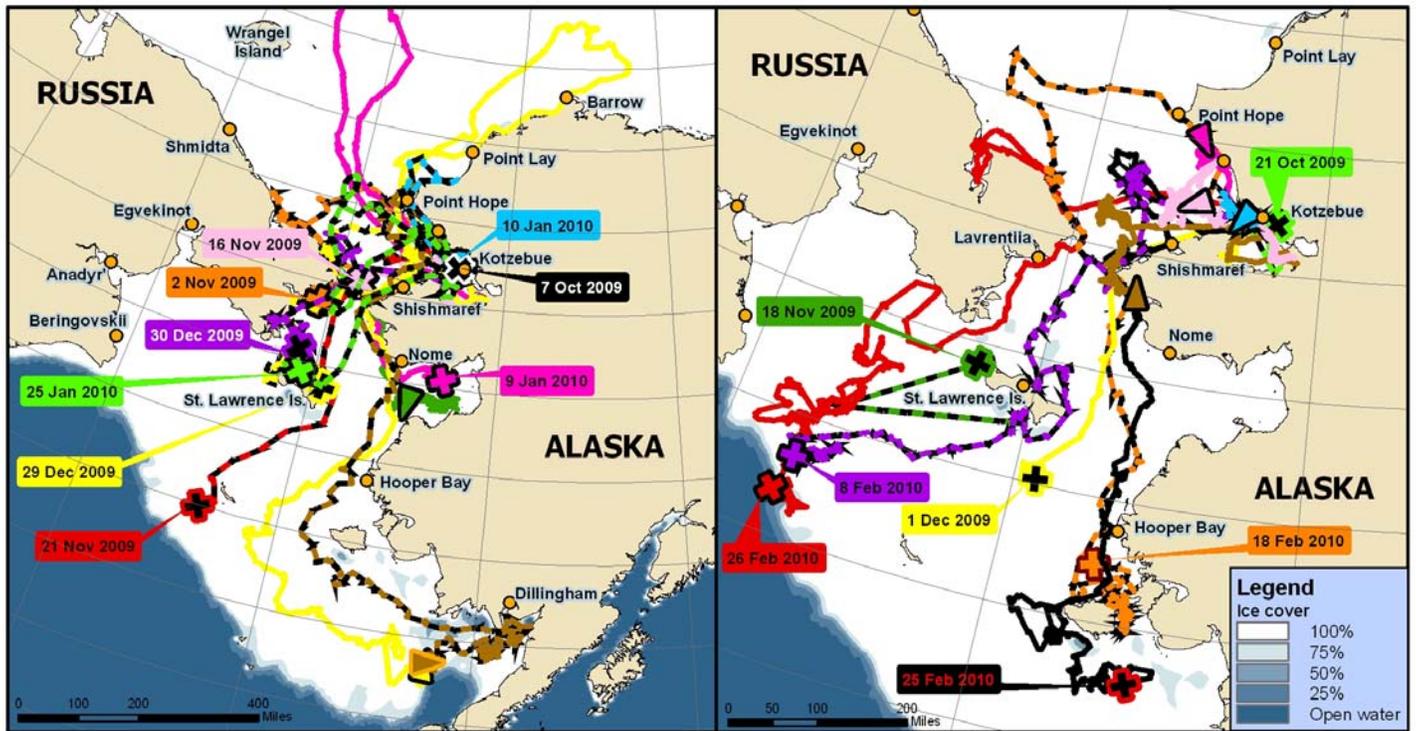
National Marine Fisheries Service

Shell Exploration & Production

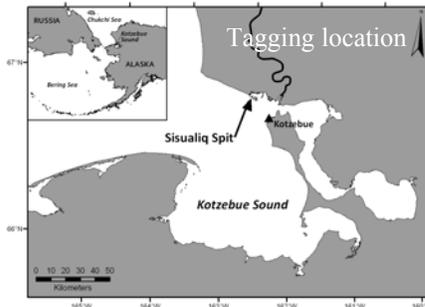
U.S. DOI Tribal Wildlife Grants Program

Ice Seal Committee

WHERE DO SEALS GO? CONTINUED.



Tag placement



Tagging location



Tagged bearded seal

Continued on back page- more detailed movement maps

ICE SEAL QUIZ- MATCH THE SEAL WITH THE PHRASE

Ringed



Spotted



Ribbon



Bearded



1. Largest ice seal that feeds mostly at the bottom of the ocean on crabs and shellfish.
2. Spends the most time at sea and dives deeper than other seals.
3. Spends most of its time on the ice edge, difficult to tell apart from harbor seals and loves to eat fish.
4. Smallest ice seal that uses claws to dig lairs and maintain breathing holes in pack ice.

Answers

1. bearded seal 2. ribbon seal 3. spotted seal 4. ringed seal

NMFS and ISC track bearded seal movement

Introduction:

In Alaska, bearded seals tend to occupy the shallow waters of the Bering and Chukchi Sea shelf, areas also of interest to developers of oil and gas resources. With concerns for a warming Arctic, decreasing sea ice, and increasing oil and gas interest there is a need to determine how these changes could affect bearded seals. To assess the potential impacts of climate change and human activities, it is critical to document and quantify the importance of areas used by bearded seals for breeding, molting, feeding, and migrating. Researchers from the National Marine Mammal Laboratory, and Alaska Native hunters from Kotzebue (Fig. 1) tagged two sub-adult and **one adult male ugruk (the first adult bearded seal captured and tagged in Alaska)** with satellite-linked dive recorders (SDRs) as part of a pilot study in Kotzebue Sound (Fig. 2).



Figure 1 – The field team (left to right): Virgil Naylor, John Jansen, Michael Cameron, Henry Goodwin, Noah Naylor, Peter Boveng, John Goodwin, Shawn Johnson and Jeff Barger. (Pearl Goodwin, David Barr and Shawn Dahle are not pictured)

Methods:

- Bearded seals were captured in large-mesh nylon nets.
- Seals were mildly sedated and extracted from nets measured and weighed.
- Each seal received two tags: One tag to collect haulout data and one tag for haulout and diving data.
- Seals were released and the two tags communicated with satellites to show where the seals were..

Results (map Fig. 3):

- The seals travelled north along coast in the summer

and followed the ice edge south in the fall.



Figure 2 – An adult male bearded seal, instrumented with an SDR, just before entering the water.

- The seals did not haul out during the summer when ice was absent.
- Foraging dives to the sea floor averaged 165ft, but the adult dove up to 820 feet. Dives lasted for 6-10 minutes on average, but the adult dove for up to 20 minutes.

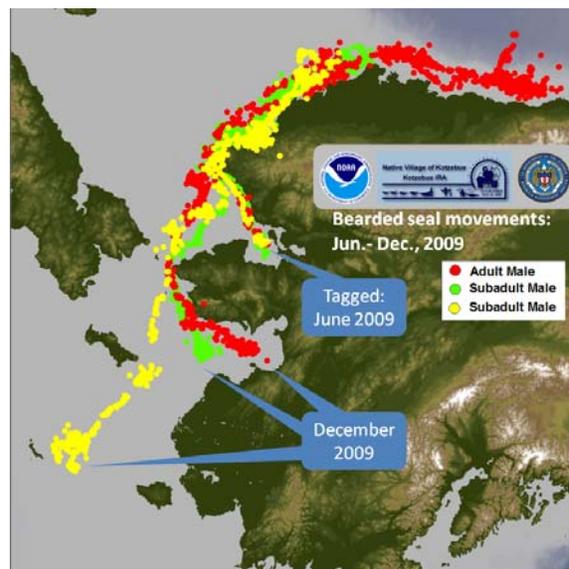


Figure 3 – Movements of three bearded seals tagged in Kotzebue Sound in June 2009.

Expectations and Future:

- As the sea ice recedes in the spring the seals will likely follow the ice edge north into the Chukchi Sea.
- Now that these methods have proven successful, the capture work will be expanded in 2010 to include areas near both Kotzebue and Wainwright.
- For more information visit http://www.afsc.noaa.gov/nmml/species/species_bearded.php or www.kotzebueira.org.

For more information contact: Michael Cameron email: michael.cameron@noaa.gov phone: (206) 526-6396
Peter Boveng email: peter.boveng@noaa.gov phone: (206) 526-4244
John Goodwin phone: (907)-442-3181

Ice Seal Biomonitoring

Ice Seal Biological Monitoring Program

The Alaska Department of Fish and Game, Arctic Marine Mammal Program receives samples collected by subsistence seal hunters from seven communities (Fig. 1). A list of what we sample and what we learn is at the far right.

How is the information used?

The information is used to determine the health of seals and status of populations. We bring the information back to each community each year to show what samples we collected and what we learned. Recently the information was used by the National Marine Fisheries Service to help determine that ribbon and spotted seal populations in Alaska **should not be listed as threatened or endangered**. The information will also be used to determine if ringed and bearded seals should be listed as threatened or endangered. Contaminants testing shows that lead, mercury, and cadmium levels are lower in Alaska than in Canada and the Canadian seals are considered safe for consumption.

Lori Quakenbush

ADF&G AMMP
1300 College Road
Fairbanks, AK 99701
or call **1-800-478-7346**
or email lori.quakenbush@alaska.gov



Figure 1 - The 7 communities currently participating in biological monitoring.

What we sample and what we learn.

- Body measurements for body condition
- Stomachs for diet analysis
- Liver, kidney, blubber, muscle for contaminants
- Heart, lung, liver, gall bladder, intestine for parasites
- Skin for genetics
- Female reproductive tracts for productivity
- Teeth (jaw) for aging
- Traditional knowledge by questionnaire

What can you do with an unusual or sick seal?

Please contact us (information below) and we will arrange to have the seal or part of the seal sent to us for examination. If that is not possible please take pictures and email them to lori.quakenbush@alaska.gov.

Thank you hunters! — Information from harvested seals is extremely valuable for understanding the status and health of the seal populations. We could not gather this information without the involvement and contribution of the hunters and the support of communities.



Check out the ADF&G Marine Mammal website at:
<http://www.wildlife.alaska.gov/index.cfm?adfg=marinemammals.icesealbio>

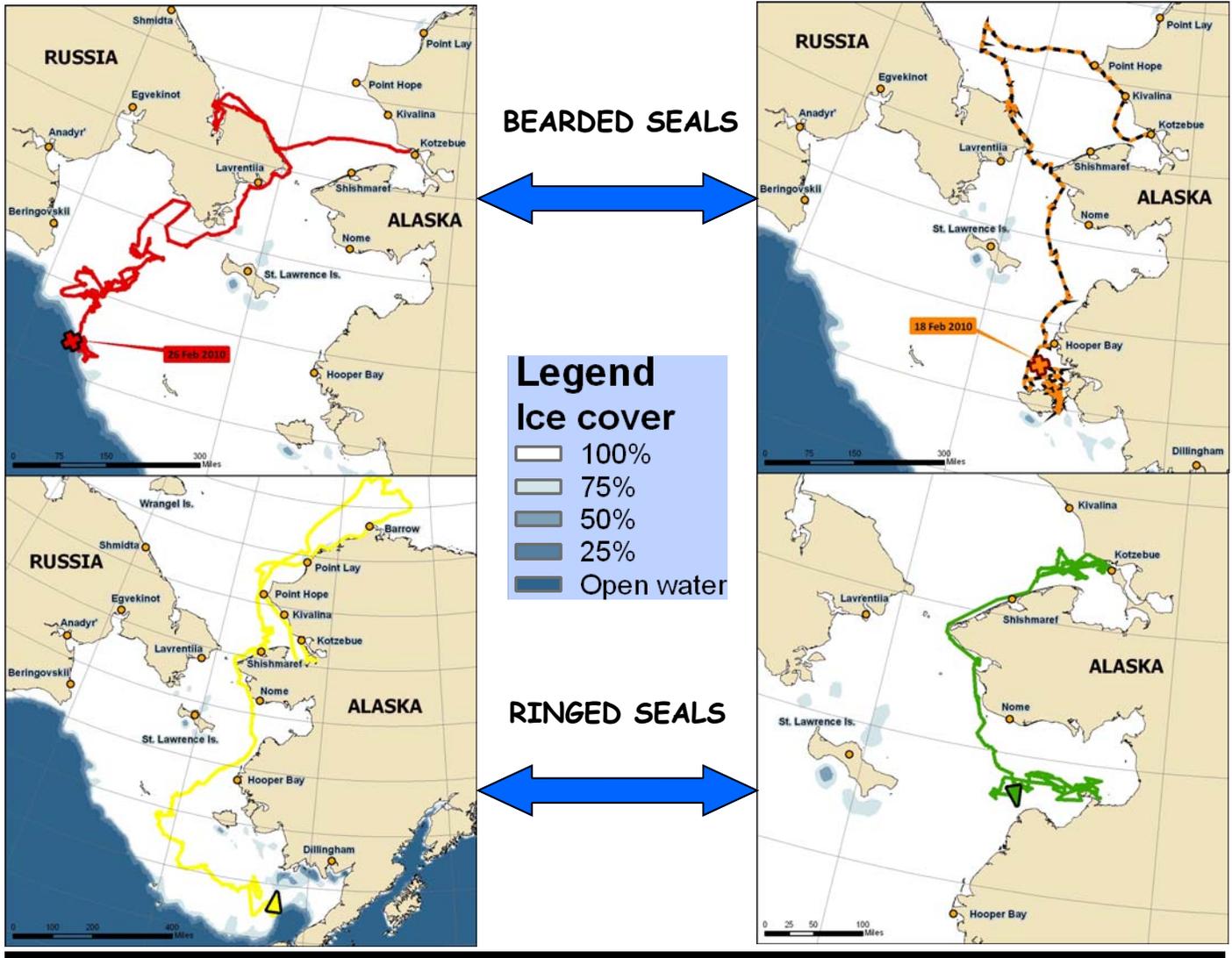
Samples collected under NMFS permit # 358-1787 and ADF&G Animal Care and Use Assurance #06-16

Feedback is Encouraged!

If you have topics, questions, concerns, or ideas for articles please contact us.

Ice Seal Committee Newsletter
Mark Nelson
1300 College Road
Fairbanks, AK 99701
email: mark.nelson@alaska.gov

WHERE DO SEALS GO? CONTINUED FROM PAGE 9



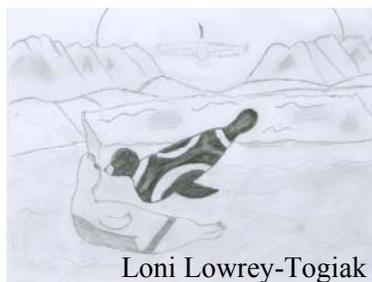
Drawing and Photograph Contest—Show us your talent!

Send us your best pictures, artwork (drawing, painting, etc.) or photograph to win prizes such as camping gear, hats, shirts, or gas. Entries will be used in the next issue of The Harpoon.

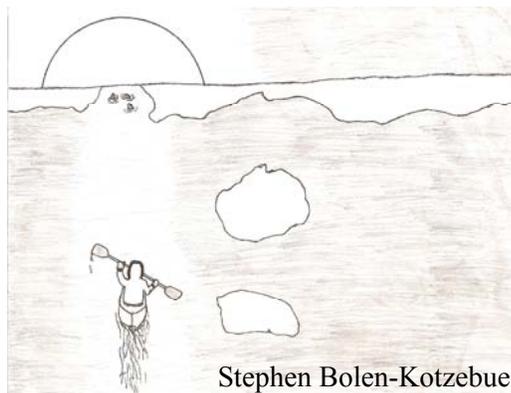
Send to
Ice Seal Committee Newsletter
Mark Nelson
1300 College Road
Fairbanks, AK 99701



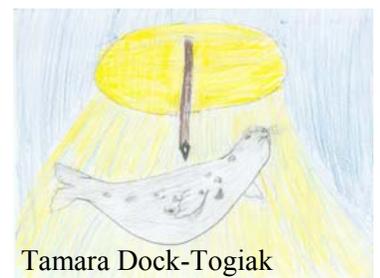
Jerry Haley-Togiak



Loni Lowrey-Togiak



Stephen Bolen-Kotzebue



Tamara Dock-Togiak