St. Paul Island co-management research and activities

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Pribilof Islands, Alaska



St. George

Otter

Alaska

Bering Sea

Aleut Community of St. Paul Island

- Pre-contact: Seagoing & bird culture
- 1786: 'discovered' by Russian explorer G. Pribylov
- 1867: U.S. Purchase of Alaska continued forced labor
- 1952: Tribal Government was founded
- **1984 85**: Emergency Rule ended commercial fur seal industry; Subsistence harvest provisions created under Federal regulations
- 2001: Signed Co-Management Agreement with NMFS
- 2018/2019: Revised Co-Management Agreement



MMPA - Co-Management

Marine Mammal Protection Act Section 119:

- Close cooperation and communication between Federal agencies and Alaska Native Organizations, hunters and subsistence users.
- Co-Management Agreement encourages the exchange of information regarding the conservation, management, and subsistence use of marine mammals in U.S. waters in and around Alaska.





St. Paul Island Co-Management

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1988 - Depleted under MMPA

1997 - Endangered under Endangered Species Act Unknown population status

ACSPI Goals - Co-Management

- Participate in equitable joint management with NMFS
- Ensure cultural continuity and sustainable connections between tribal members and marine mammals
- Contribute valuable information and data that advances research and management
- Implement management measures that recover/ stabilize marine mammal populations



ACSPI Roles in Co-Management

- Complete local research and management activities that Address Conservation/Recovery Plan needs
- Advocate for cultural continuity and sustainability of marine mammals
- Liaison between agency and community to ensure effective communication



St. Paul Island co-management research and activities

- 1.3.1 Monitor and manage subsistence harvests
 - ECO manages n. fur seal sub-adult male harvests
 - Self-monitoring in place since 2010
 - Recent Action: Altered season end to minimize accidental female takes



* Number scheme corresponds to NFS Conservation Plan Objectives

1.3.2 Develop and implement harvest sampling programs

- Body Length (cm), teeth
- Blubber thickness (mm)
- Liver, Blubber, Fur, Muscle, Blood, Vibrissae, Bile





2.6 Assess and monitor pollutants

- Alaska Marine Mammal Tissue Archival Program (AMMTAP), NIST
- L. Rea, Marine Ecotoxicology and Trophic Assessment Laboratory METAL Lab, UAF
- State of Alaska Division of Public Health: consumption guidelines

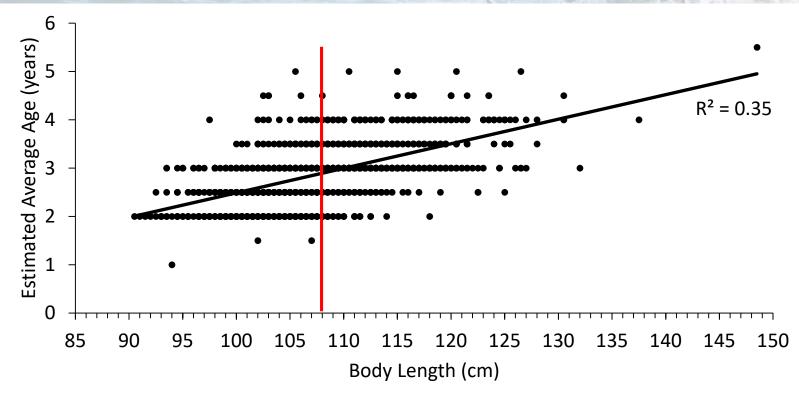


State of Alaska Epidemiology

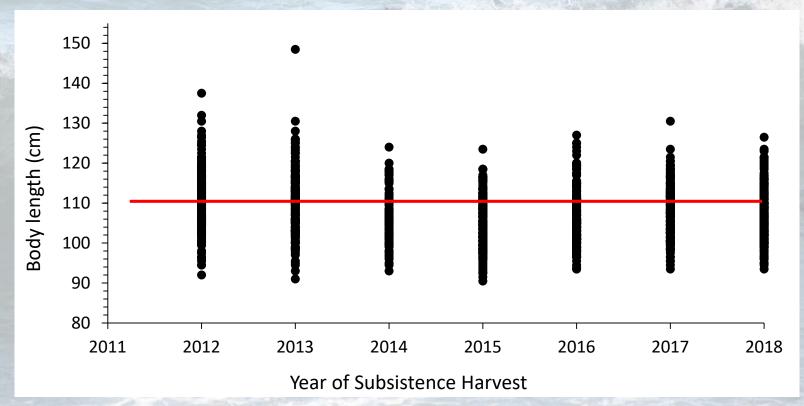




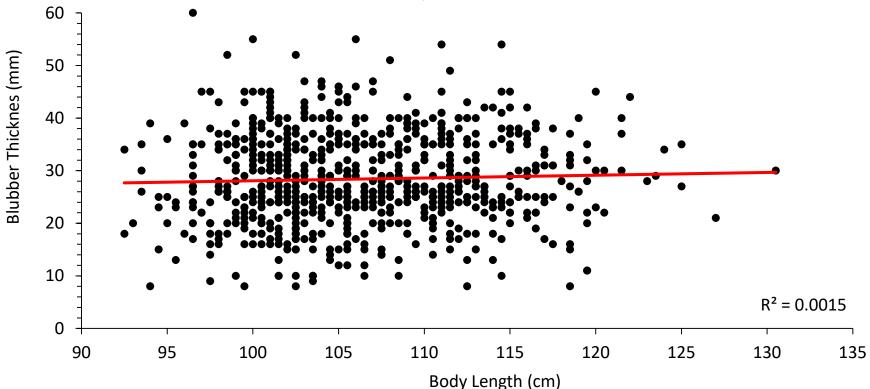
Length-at-age of harvested sub-adult males



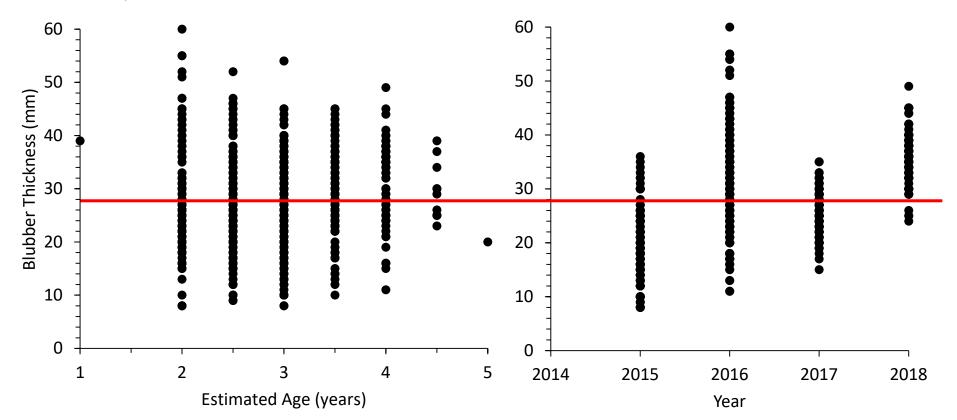
Length over time of harvested sub-adult males



Body condition of harvested sub-adult males



Body condition of harvested sub-adult males



- 1.1 Improve understanding of the sources, fates, and effects of marine debris
 - > Local research; participation in global efforts
- 1.1.2 Remove marine debris and incorporate surveys of debris in northern fur seal habitat
 > Regular clean-ups of critical fur seal habitat
- 1.1.3 Examine the fate of entangling debris
 > New partnerships to address entanglement issues:



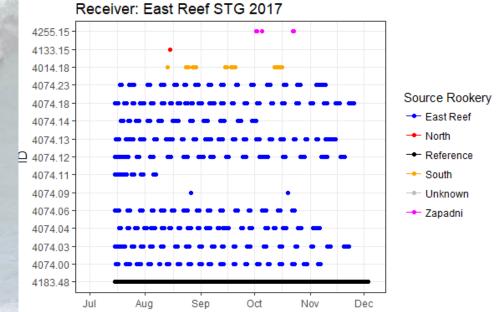






 2.4 Conduct studies to quantify effects of human activities (e.g. research, hunting, tourism, vehicles, discharges, facilities) at or near breeding or resting areas





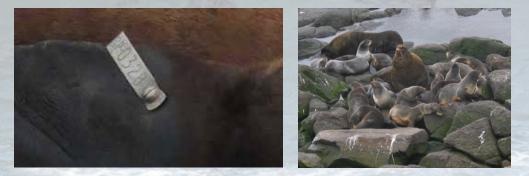
Opportunities for co-management

Immediate opportunities for co-management

2.5 Undertake conservation or management measures as necessary to eliminate or minimize deleterious impacts to fur seals

3.1.9 Promote joint research and collaborative programs

- Complete research to identify necessary management measures
- Room to improve and expand co-management research
- Tag/ resight collaboration opportunities





Immediate opportunities for co-management

3.1.3 Estimate pup survival

- funded annual cohort tagging, re-sighting 2007 2017
- Not funded 2018 unprecedented year in Bering Sea
- 2019 likely unfunded
- 3.1.3 Estimate stock vital rates
 - Unfunded; potential in VHF collaborative project

Loss of data impacts community and agency





Value of co-management data and participation to the NPFMC

Co-management within NPFMC process

- Tribal Government possess unique and comprehensive body of indigenous and traditional knowledge
- ECO conducting long-term western scientific data collection
- Holistic local research and management capabilities that are sensitive to the community
- Positioned to be a valuable partner moving forward

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