

ALASKA FISHERIES SCIENCE CENTER National Marine Mammal Laboratory Alaska Ecosystems Program



Summary of the 2016 Steller Sea Lion Research Coordination Meeting

Report date: February 8, 2016

Researchers conducting field studies of Steller sea lions in Alaska meet annually to ensure coordination of field activities, a meeting also attended by researchers undertaking field studies in Russia or Canada, at captive facilities, and by other interested parties. The main purpose of this coordination is to minimize potential disturbance to Steller sea lions and to maximize collaboration and sample or data sharing opportunities. A group of 11 researchers and others met on January 29, 2016, in Anchorage, Alaska to share 2016 Steller sea lion research plans. There are only three research groups with plans for Alaska Steller sea lion field studies in 2016. Groups presenting information were the NMFS/AFSC National Marine Mammal Laboratory Alaska Ecosystem Program (NMML), North Pacific Wildlife Consultants (NPWC), Alaska Department of Fish and Game (ADFG), Alaska SeaLife Center (ASLC), and the University of British Columbia (UBC). Additional information was provided about Aleutian Islands activities through the Aleutian and Bering Sea Islands Landscape Conservation Cooperative (ABSI), and of research-related management actions undertaken by the NFMS Alaska Regional Office Protected Resources Division.

Alaska Department of Fish and Game (permits 18537 and 18786)

Most field work planned by ADFG is pending funding, indicated by a status of "3" in the table below (a status of "1" indicates the project is funded) and thus is speculative and dependent upon receiving funding through several sources of competitive grants. Funding currently exists to conduct surveys and install remote camera systems at Cape Newenham. ADFG is also exploring installing a camera system on St. Lawrence Island.

Date Range	Region	Description	Status
All year	SEAK	Skiff/land-based observations of haulouts in Lynn	
		Canal. Day trips. (For continuation July 2016	1&3
		onward, status = 3).	
20 Apr-Jun	EGULF	Skiff/land-based observations of haulouts/rookeries	3
		in Prince William Sound. Day trips. 1-2 trips.	3

ADFG 2016 planned field studies (permits 18537/18786)

Date Range	Region	Description	Status
20 May-15 Jul	SEAK	Land-based observations at Lowrie Island field camp. Includes reproductive rate surveys. Scat collection.	3
May-Nov	BERING		
28 Jun-15 Jul	SEAK	Skiff/land-based observations of haulouts/rookeries in central-northern Southeast Alaska. One cruise. Includes reproductive rate surveys. Scat collection at rookeries and selected haulouts.	3
7-18 Jul	EGULF	Skiff/land based observations of haulouts/rookeries in Prince William Sound. Cruise. Includes reproductive rate surveys.	3
12-22 Jul	CGULF	Skiff/land based observations at Barren Islands, especially Sugarloaf Island, westward through Ushagat. Includes reproductive rate surveys.	3
Aug-Oct	SEAK, EGULF	Capture for marking, genetic sampling: northern SEAK, PWS. Timing uncertain.	3
Jan-Jun	BERING	Land based observations and camera deployment at St Lawrence Island; exact dates depend on sea lion presence. (For continuation July 2016 onward, status = 3)	1&3
Quarterly	SEA/EGULF	Quarterly scat collection, camera deployment and servicing, eDNA sampling.	3
Apr-Aug	BERING	Land based observations conducted by SSL staff and Round Island sanctuary staff (Bristol Bay).	1
Mar-Apr	EGULF	Aerial surveys at Alsek River/Dry Bay.	1
Jun	EGULF	Land based observations at Cape St. Elias, Kayak Island.	
Mar-Dec	SEAK	Capture for fishery gear research: efficacy of removing flashers from ingested gear. Capture, mark, satellite tag.	3

ADFG 2016 planned field studies (permits 18537/18786)

NMFS Alaska Fisheries Science Center National Marine Mammal Laboratory (permit 18528)

Most of the studies listed below are likely to have funding, with the exception of the fall adult female capture trips. Pending successful funding, Suzanne McDermott (AFSC) will test a towed underwater camera system to conduct fish surveys near rookeries and in untrawlable habitats during the summer pup work. In addition to the Alaska studies, NMFS/AFSC/NMML is funding North Pacific Wildlife Consulting (NPWC) to conduct population surveys and vital rates estimation field work at Medny Island and Kozlova Cape in the Russian Far East. NPWC is undertaking additional similar studies funded by the Japanese Fisheries Agency in the Kuril Islands and Sakhalin Island areas.

Date Range	Region	Description
~25 May- 1 Aug	E Gulf/E Aleu	Marmot and Ugamak Island field camps to conduct
		reproductive phenology and behavior surveys, and
		collect marked-animal data to estimate survival and
		reproductive success.
~30 May-13 Jun	E Gulf- E Aleu	Ship-supported (Norseman) skiff-based observations
		to assess vital rates, reproductive behavior,
		movements and diets (scat collections will be
		conducted at haul-outs).
23 Jun-10 Jul	W Gulf- E Aleu	Population abundance aerial survey using
		DeHavilland Twin Otter; all haulouts and rookeries in
		western Gulf of Alaska and eastern/central Aleutian
		Islands.
23 Jun-7 Jul	W/C/E Aleu	Ship-supported (<i>Tiglax</i>) studies with unmanned aerial
		system (UAS)-based surveys of sites between Attu
		and Unalaska Island; killer whale darting and surveys
		in the Aleutian Islands; servicing of remote camera
		systems; resights; underwater camera fish surveys of
		subtidal habitats.
~1-11 Oct	W/C Aleu	Adult females to be captured by remote delivery of
		injectable sedatives (by dart gun) and subsequently
		instrumented, measured and sampled. If funding
		available.

Alaska SeaLife Center (18438-00)

Remote monitoring and other studies of the Chiswell Island rookery will continue as funding allows. Pending successful competitive funding, ASLC and ADFG will handle pups to collect samples for a study of endocrine system function.

Date Range	Region	Description
01 Jan-31 Dec	EGOA, Chiswell	Continue remote video monitoring. Field work will
	Island and nearby	consist of $3-6$ site visits for video system maintenance
	haulouts	and repair and to opportunistically collect carcasses,
		and aborted fetuses. We may collect scat during some
		repair visits but have no funding for dedicated scat
		collections this year. Remote video observations may
		end by mid-summer depending on funding.
Late June or	EGOA, Chiswell	Brand and sample pups (blood, hair, whiskers(?))
early July	Island	pending funding for ADFG proposal (Mandy Keogh)

ASLC 2016 planned field studies (permit 18438-00)

University of British Columbia

UBC is funded to continue studies that a) track molt progression, and is expanding this study to include thermal imaging; b) test the efficacy of different anesthetic agents, including desflurane; and c) test microwave transmission technology to measure body composition. Open-water projects continue and are funded. UBC has submitted proposals to obtain funding for analysis of scats collected in Southeast Alaska in 2015, and to apply DNA quantification techniques to diet analysis from scats.

NMFS Alaska Regional Office – Management Update

Updates were provided on several management activities of interest to researchers:

- The NMFS Steller sea lion Critical Habitat review that incorporated and considered results from decades of research is the review process; there will be opportunities to comment on the proposed rule and draft Biological Report during a public comment period.
- The NMFS Alaska Regional Office has held discussions with the Aleut Marine Mammal Commission and hunters and tribal members from Atka Island about establishing a biosampling program. Interested researchers are encouraged to participate and consider the potential for other collaborations.
- A meeting to review Post-Delisting Monitoring Plan efforts for the eastern DPS of Steller sea lions is being planned for early spring of 2016 in Seattle.
- Researchers are encouraged to review how their sea lion research is represented within Steller sea lion recovery actions catalogued in the publically searchable "Environmental Conservation Online System (ECOS)" at http://ecos.fws.gov
- Remember to notify the Alaska Regional Office of field research at least two weeks prior to staring the activity.

Other Information

The Aleutian Life Forum conference will be held in Unalaska during August 16-20, 2016, to bring together scientists, managers, industry, community and tribal leaders to present and discuss pressing conservation issues. More information is at <u>http://www.aleutianlifeforum.com/</u>.

A consensus emerged that the timing of this coordination meeting may be better scheduled for October, prior to NOAA and NPRB competitive proposal calls, to further maximize opportunities for collaboration.