



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

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June 8, 2018

MEMORANDUM FOR: Jon Kurland, F/AKR PRD

FROM: Tom Gelatt, F/AKC MML Alaska Ecosystem Program

SUBJECT: 2018 Alaska Steller Sea Lion and Northern Fur Seal Field Studies  
Planned by the Marine Mammal Laboratory Authorized by  
MMPA/ESA Permit Numbers 18528 and 14327-01.

The following are field study activities planned to be conducted in 2018 by the Marine Mammal Laboratory Alaska Ecosystems Program in Alaska under authority of MMPA/ESA permit number 18528 for Steller sea lions, and permit number 14327-01 for northern fur seals. This list of activities fulfills the NMFS Regional notification requirement described in the permits under Section F.1. Updates and any changes will be provided throughout the year.



## Steller Sea Lion 2018 Alaska Field Activities, Permit 18528

### Aerial surveys

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#### *Population abundance aerial survey*

Dates: June 23 - July 11  
Aircraft: NOAA DeHavilland Twin Otter N56RF  
Location: Eastern Gulf of Alaska to central Aleutian Islands.  
Description: Aerial survey for the purpose of indexing trends of non-pups and pups using a manned NOAA DeHavilland Twin Otter aircraft. Digital images are acquired of each site from the survey aircraft for later counting and analysis in the laboratory.  
Personnel: AFSC/MML: K. Luxa (PI), B. Hou; SWFSC: M. Lynn (PI). Other: two pilots and a mechanic.

### Vessel-based surveys

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#### *Vital rates survey*

Dates: July 13-27  
Location: Eastern Aleutian Islands, western Gulf of Alaska.  
Vessel: M/V *Pŭk-ŭk* (pronounced puck-uck), single hull/self-propelled 85 tons (unladen), length 72 ft, hull material steel, hull color black, superstructure color white, flag US, call sign WDE4062. A small inflatable outboard-powered skiff will be used to access haulouts and rookeries.  
Description: To assess vital rates, reproductive behavior, and movements; ship-supported skiff-based and on-land observations will be conducted at haul-outs and rookeries.  
Personnel: AFSC/MML: K. Sweeney (PI), B. Birkemeier, M. McCormley; a skiff driver will be provided by the vessel.

#### *Vital rates, population abundance and pup health survey*

Dates: June 20 – July 4  
Vessel: USFWS M/V *Tiglax*, single hull/self-propelled 415 tons (unladen), length 120 ft, hull material steel, hull color blue, superstructure color beige with blue trim, stern-mounted A-frame, flag US, call sign WZ3423. A small (17 ft) inflatable outboard-powered skiff will be used to access haulouts and rookeries (no call sign).  
Location: Western – central Aleutian Islands. Trip will begin and end at Adak.  
Description: Ship-supported studies including capture of pups in the western/central Aleutian Islands at Attu, Agattu, and Kiska Islands for health assessment; also visit haulouts and rookeries in the western/central Aleutians to look for marked sea lions, use an un-manned hexacopter to collect aerial survey data, attempt to tag killer whales, and collect data cards with images from remote cameras on rookeries.  
Personnel: AFSC/MML: T. Gelatt (PI), B. Fadely (coPI), R. Towell, B. Caruso, K. Sweeney (hexacopter), A. Altukhov (remote cameras), P. Wade and A. Kennedy (killer whales). ADFG: M. Keogh (Physiologist) and S. Engstar.

## Northern Fur Seal 2018 Alaska Field Activities, Permit 14327-01

### Land based abundance surveys of northern fur seals

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#### *St. Paul Adult Male Counts*

Dates: July 6-16  
Location: St. Paul Island  
Description: Adult male fur seals are counted early in the breeding season (July) prior to the arrival of most adult females and the peak of pupping. Seals are counted from vantage points overlooking the rookeries from clifftops, catwalks, and other remote vantage points.  
Personnel: John Bengtson, and 1 biologist TBD

#### *St. George Adult Male Counts*

Dates: July 6-16  
Location: St. George Island  
Description: Adult male fur seals are counted early in the breeding season (July) prior to the arrival of most adult females and the peak of pupping. Seals are counted from vantage points overlooking the rookeries from clifftops, catwalks, and other remote vantage points.  
Personnel: Rolf Ream

#### *St. Paul Live Pup Surveys*

Dates: August 5-29  
Location: St. Paul Island  
Description: Fur seal pups will be captured by hand, and marked by clipping a small patch of guard hair from the top of their heads or back. A sample of pups will be sexed and weighed for monitoring. Counts of marked pups are made for mark-recapture analysis. Counts are conducted from vantage points overlooking the rookeries from clifftops, catwalks. Counts of dead pups will be made by walking through a sample of rookeries.  
Personnel: Rod Towell, and up to 13 additional biologists TBD (to capture, shear, sample, and weigh pups).

#### *St. George Live Pup Surveys*

Dates: August 13-26  
Location: St. George Island  
Description: Fur seal pups will be captured by hand, and marked by clipping a small patch of guard hair from the top of their heads or back. A sample of pups will be sexed and weighed for monitoring. Counts of marked pups are made for mark-recapture analysis. Counts are conducted from vantage points overlooking the rookeries from clifftops, catwalks. A UAS will be also tested as an alternate sampling tool to estimate the ratio of sheared:unsheared pups on St. George rookeries, and to map terrestrial habitat use. Counts of dead pups will be made by walking through a sample of rookeries.  
Personnel: Jeremy Sterling, and up to 6 additional biologists TBD (to capture, shear, sample and weigh pups).

### **Northern fur seal vital rates**

(Research not funded; opportunistic observations will occur during other research trips, and tagging will occur only if funds are obtained for travel.)

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#### *St. Paul tag sighting and behavioral observations*

Dates: July 13 – August 3  
Location: St. Paul Island, Polovina Cliffs and Zapadni Reef Rookeries  
Description: Opportunistic observations at rookeries to identify tagged animals and record reproductive status and behavior.  
Personnel: Ward Testa

#### *St. George tag sighting and behavioral observations*

Dates: July 6 - 22  
Location: St. George Island, South Rookery  
Description: Opportunistic observations at rookery to identify tagged animals and record reproductive status and behavior.  
Personnel: Rolf Ream

#### *St. Paul and St. George adult female and pup tagging*

Dates: September 23– October 9  
Location: St. Paul Island, Polovina Cliffs and Zapadni Reef Rookeries  
St. George Island, South Rookery  
Description: Depending on acquisition of funds, activities would be conducted for ~1 week at each island over the duration of this field project. Adult females will be captured by hoop net or noose for flipper tagging and weights. A subsample of females will have blood and tissue samples as well as swabs collected for disease and contaminant studies. Fur seal pups will be captured by hand, weighed, sexed, and flipper tagged. A subsample of pups will have blood samples as well as swabs collected for disease and contaminant studies. Fecal samples to determine diet will be collected opportunistically during these activities.  
Personnel: R. Ream, W. Testa, T. Gelatt, D. Johnson, and up to 8 additional biologists TBD.

### **Northern Fur Foraging Ecology Studies**

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#### *St. Paul summer foraging ecology*

Dates: August 13-26  
Location: St. George Island, North Rookery and other sites around the island.  
Description: Animals will be captured for deployment of satellite tags and cameras to monitor behavior and habitat use during summer foraging. Animals will be recaptured after returning from a foraging trip to recover the instruments and to obtain blood samples.  
Personnel: Jeremy Sterling, and additional biologists TBD.