TRIP REPORTS: PUP AND JUVENILE STELLER SEA LION CAPTURES IN SOUTHEAST ALASKA AND PRINCE WILLIAM SOUND OCTOBER - NOVEMBER 2003

ALASKA DEPARTMENT OF FISH & GAME 9 March 2004 T. Gelatt

Objective

The ADF&G Steller sea lion program has been capturing young sea lions from longterm study areas in Southeast Alaska and Prince William Sound for studies focused on identifying causes of population decline through the study of immunology, toxicology, body composition, movements, and to collect samples for pathology and archival. Since 2000 these trips have been scheduled to sample animals at times and from places that are needed to fill sampling regimes. During February 2004 we attempted to capture sea lions in Lynn Canal and Frederick Sound, Southeast Alaska.

Between 18-27 February the R/V Medeia was used to support 12 scientists capturing sea lions near Benjamin Island and Grand Point in Lynn Canal. This was a the second half of a collaborative project with Ben Wilson and Mary-Anne Lea of the University of British Columbia who were interested in investigating how juvenile sea lions pursue and catch their prey. To achieve this, we again focused our captures on large juvenile sea lions to increase the probability that they were weaned and independent from their mothers. However, unlike our trip in October where we were able to catch animals > 1 year and > 200kg, this time we were unsuccessful in capturing any sea lion > 150kg. We primarily captured smaller 8-month old pups (n = 20) and yearlings (n = 5). A variety of satellite and VHF telemetry devices and sonic tags were attached to the 5 yearlings and two pups received a vhf tag.. We used tooth eruption and body size to age the animals as: young of the year and 20-month old .Nine pups of the pups were recaptures of animals handled in October or June-July, 2004. In addition to instrumenting, all of the animals had a suite of physiological samples collected.

Vessel and Study Area

The Alaska Dept. of Fish & Game vessel R/V Medeia skippered by Wade Loofbourrow was used to capture sea lions during this trip. Figures 1a & 1b identify all haulouts and rookeries visited on these trips.

Research Crew

The following scientists comprised the field team:

: Kimberlee Beckmen, Ben Wilson, Lisa Hoopes, Lauri Jemison, Jamie King, Lorrie Rea, Dennis McAllister, Ken Pitcher, Vicki Stegall, , Greg Snedgen, , Chris Dold, , Tom Gelatt.

Capture Methods

SCUBA divers using the underwater noose method captured all sea lions. A report on the dive program is included under separate cover. Each sea lion was brought into the capture skiff and capture box using a blanket to lift them out of the water.

Morphometric and Medical Procedures

Once the sea lions were securely in their boxes, they were transported back to the charter vessel, lifted aboard, and weighed using one of two load-cell scales. When the animal was sedated, the rear panel of the box was opened, and blood was drawn from either the hind flippers or the caudal gluteal vein. Blood was extracted for serology, hematology, immunology, toxicology, isotope, fatty acid, blood metabolites, hormone, and EPO analyses. Once blood was taken, deuterium oxide (administered according to the sea lion's weight) was injected intramuscularly (IM) and ocular and oral swabs were collected. After this procedure was complete, the sea lion was unmasked and allowed to wake up. The sea lion remained in the capture box for approximately 1 to $1\frac{1}{2}$ hours. The sea lion was sedated again and the three-sided box removed from above. The three webbed straps were then secured around the body and the sea lion was intubated using a soft plastic tube inserted into the trachea. Once intubated, the straps were removed and the anesthesiologists monitored respiration rate, pulse rate, and temperature.

Procedures conducted on each sea lion included the following: Deuterium oxide injection to determine total body water; BIA (bioelectrical impedance) for body condition; length, girth, and canine measurements for age calculation; photographs of foreflippers, teeth, right and left sides of the animal, brand, and any unusual injuries; nasal swabs for Phocine Herpes analysis; oral, ocular, rectal, and vaginal swabs for chlamydia and virology analyses; hair samples for heavy metal analysis; fecal samples for contaminant and parasite analyses; blubber samples for fatty acid and toxicology analyses; milk samples for fatty acid, stable isotope, and toxicology studies or gastric fluid for gastric lipase analysis; flipper punch for genetic analysis; a vibrissae for stable isotope analysis; and a muscle biopsy to study the development of oxygen carrying capacity and to assess health. Select animals were injected with Evans Blue for studies of plasma volume.

A metabolic chamber was used to measure inspired and expired gasses of sea lions at all stages during the holding.

Satellite-Relay Data Logger (SRDL) Deployments

Sea Mammal Research Unit SRDLs were deployed by the UBC researchers on three juveniles in Lynn Canal. Additionally the UBC deployed one "Cox camera" on a 150kg juvenile. This camera is designed to take video at designated times and store the images for retrieval later. The camera is mounted on a remotely-released plate that will dis-attach from the sea lion when the signal is sent from a transmitter. All instrumented animals also received VHF transmitters

Branding

All previously unbranded sea lions were branded on their left side with a 4-character brand beginning with an "=" sign while under anesthesia. The "=" sign indicates that the natal rookery of the sea lion is not known. Sea lions already branded were noted and given an ADF&G specimen number in addition to their previous ID. The recaptures of nine previously branded pups gave us an opportunity to examine the healing and measure the growth of the brands.

<u>Results</u>

Captures

Tables 1 and 2 list the animals captured on each trip, the specimen number, brand number, capture date and location, weight, whether the animal received a transmitter, and if it was recently nursing.

Resightings of branded/tagged animals

Tables 3 and 4 list the brands that were resighted during the two trips.

SRDL Deployments

As of 5 March 2004, all of the instrumented animals had been relocated at least once and were still transmitting.

Conclusions

This was one of the only winter capture trips we have done in some time. We found that the juvenile haulout where we had been very successful capturing 2-3 year old sea lions 3 months earlier was vacant and we had a very difficult time capturing anything but pups at other sites. The pups were aggressive and curious and we spent some time attempting to capture marked animals for studies examining growth rates and condition. There were no mortalities associated with this work and on only one occasion was the respiratory stimulant Dopram given as a precaution Sea lions recovering from long anesthesia were monitored closely. As we had done in Prince William Sound in November 2003 we were able to move sea lions into the metabolic chamber at any time during holding. This allowed the researchers to collect their data immediately after capture, after the first or second anesthesia, or prior to release. The additional equipment needed for this work did not slow or hamper the capture operations and the experiments will continue during future capture trips.

We had three visitors during at the beginning of the trip; Steve Leathery and Shane Capron of the NMFS and Donna Willoya from the The Alaska Sea Otter and Steller Sea Lion Commission came out to observe the capture and handling techniques. This was a good opportunity for them to see what we do and how we do it and will hopefully lead to a better understanding of capture and sampling techniques in the future. Table 1. Steller sea lions captured at Benjamin Island and Grand Pt, Lynn Canal, Southeast Alaska between 18-27 February 2004. Included below are specimen ID number, date of capture, location of capture, sex, weight, approximate age, brand number, if a milk sample was obtained, and if a satellite data recorder was applied.

Table 3. Brand-resights of sea lions observed at Benjamin Island and Little Island, Lynn Canal, Southeast Alaska between 28 October -3 November 2003.

Brand	Branding Date	Branding Location	Sex	Resight Date	Resight Location	Suckling?
=155	06-Mar-01	Long Island (Kodiak)	Μ	30-Oct-03	Little Island	
=155	06-Mar-01	Long Island (Kodiak)	М	31-Oct-03	Little Island	
=195	08-May-01	Gran Point	F	30-Oct-03	Little Island	
=195	08-May-01	Gran Point	F	31-Oct-03	Little Island	
=195	08-May-01	Gran Point	F	01-Nov-03	Benjamin Island	
=196	08-May-01	Gran Point	Μ	30-Oct-03	Little Island	
=196	08-May-01	Gran Point	Μ	31-Oct-03	Little Island	
=196	08-May-01	Gran Point	М	03-Nov-03	Little Island	
=201	10-May-01	Gran Point	F	03-Nov-03	Little Island	
=202	10-May-01	Gran Point	Μ	01-Nov-03	Little Island	
=202	10-May-01	Gran Point	М	03-Nov-03	Little Island	
=202	10-May-01	Gran Point	М	04-Nov-03	Little Island	
=207	10-Aug-01	White Sisters	F	30-Oct-03	Little Island	
=207	10-Aug-01	White Sisters	F	31-Oct-03	Little Island	
=207	10-Aug-01	White Sisters	F	04-Nov-03	Little Island	
=380	14-Nov-02	SW Brothers	Μ	29-Oct-03	Benjamin Island	
=380	14-Nov-02	SW Brothers	Μ	30-Oct-03	Benjamin Island	
=392	19-Nov-02	Benjamin Island	Μ	30-Oct-03	Benjamin Island	
=394	19-Nov-02	Benjamin Island	Μ	03-Nov-03	Little Island	
=396	20-Nov-02	Benjamin Island	F	04-Nov-03	Little Island	
=396UNSURE				31-Oct-03	Little Island	
=397	20-Nov-02	Benjamin Island	Μ	28-Oct-03	Benjamin Island	
=397	20-Nov-02	Benjamin Island	Μ	29-Oct-03	Benjamin Island	
=397	20-Nov-02	Benjamin Island	Μ	30-Oct-03	Little Island	
=399	21-Nov-02	Benjamin Island	Μ	29-Oct-03	Benjamin Island	Y
=399	21-Nov-02	Benjamin Island	Μ	30-Oct-03	Benjamin Island	
=399	21-Nov-02	Benjamin Island	Μ	01-Nov-03	Little Island	
=400	21-Nov-02	Benjamin Island	F	29-Oct-03	Benjamin Island	
=400	21-Nov-02	Benjamin Island	F	30-Oct-03	Benjamin Island	
=400	21-Nov-02	Benjamin Island	F	03-Nov-03	Benjamin Island	Y
=401	22-Nov-02	Benjamin Island	F	28-Oct-03	Benjamin Island	
=401	22-Nov-02	Benjamin Island	F	30-Oct-03	Benjamin Island	
=401	22-Nov-02	Benjamin Island	F	04-Nov-03	Benjamin Island	Y
=413	30-Oct-03	Benjamin Island	Μ	01-Nov-03	Benjamin Island	Y
=413	30-Oct-03	Benjamin Island	Μ	02-Nov-03	Benjamin Island	
=413	30-Oct-03	Benjamin Island	Μ	03-Nov-03	Benjamin Island	
=414	30-Oct-03	Benjamin Island	М	01-Nov-03	Benjamin Island	
=414	30-Oct-03	Benjamin Island	М	03-Nov-03	Benjamin Island	
=415	31-Oct-03	Little Island	F	01-Nov-03	Little Island	
=415	31-Oct-03	Little Island	F	02-Nov-03	Little Island	

Brand	Branding Date	Branding Location	Sex	Resight Date	Resight Location	Suckling?
=415	31-Oct-03	Little Island	F	03-Nov-03	Benjamin Island	
=415	31-Oct-03	Little Island	F	04-Nov-03	Benjamin Island	Y
=417	31-Oct-03	Little Island	М	02-Nov-03	Little Island	
=419	31-Oct-03	Little Island	М	03-Nov-03	Benjamin Island	Y
=419	31-Oct-03	Little Island	М	04-Nov-03	Benjamin Island	
=421	01-Nov-03	Little Island	М	02-Nov-03	Little Island	
=421	01-Nov-03	Little Island	М	03-Nov-03	Little Island	Y
=421	01-Nov-03	Little Island	М	04-Nov-03	Little Island	Y
=422	01-Nov-03	Benjamin Island	М	03-Nov-03	Benjamin Island	Y
=423	02-Nov-03	Little Island	F	03-Nov-03	Little Island	
=424	02-Nov-03	Little Island	F	03-Nov-03	Benjamin Island	
=424	02-Nov-03	Little Island	F	04-Nov-03	Benjamin Island	
=425	02-Nov-03	Little Island	М	03-Nov-03	Little Island	Y
=425	02-Nov-03	Little Island	М	04-Nov-03	Benjamin Island	Y
=426	03-Nov-03	Benjamin Island	М	04-Nov-03	Benjamin Island	
=428	03-Nov-03	Benjamin Island	М	04-Nov-03	Benjamin Island	
=429	03-Nov-03	Benjamin Island	М	04-Nov-03	Benjamin Island	
=431	03-Nov-03	Benjamin Island	М	04-Nov-03	Benjamin Island	Y
=432	03-Nov-03	Benjamin Island	М	04-Nov-03	Benjamin Island	
F1036	27-Jun-01	Lowrie Island	М		Little Island	
F1048	27-Jun-01	Lowrie Island	F	28-Oct-03	Benjamin Island	
F1048	27-Jun-01	Lowrie Island	F	29-Oct-03	Benjamin Island	
F1054	27-Jun-01	Lowrie Island	М	31-Oct-03	Little Island	
F1090	28-Jun-01	Lowrie Island	М	30-Oct-03	Little Island	
F1090	28-Jun-01	Lowrie Island	М	31-Oct-03	Little Island	
F1136	28-Jun-01	Lowrie Island	М	30-Oct-03	Little Island	
F1136	28-Jun-01	Lowrie Island	М	31-Oct-03	Little Island	
F1142	28-Jun-01	Lowrie Island	М	02-Nov-03	Little Island	
F1146	28-Jun-01	Lowrie Island	F	04-Nov-03	Benjamin Island	
F1261	29-Jun-01	Lowrie Island	М		Little Island	
F1261	29-Jun-01	Lowrie Island	М	03-Nov-03	Little Island	
F2003	26-Jun-02	Cape Horn Rks- Forrester	М	31-Oct-03	Little Island	
F2003	26-Jun-02	Cape Horn Rks- Forrester	М	03-Nov-03	Little Island	
F2003	26-Jun-02	Cape Horn Rks- Forrester	М	04-Nov-03	Little Island	
F2009	26-Jun-02	Cape Horn Rks- Forrester	F	30-Oct-03	Benjamin Island	
F2019	26-Jun-02	Cape Horn Rks- Forrester	F	01-Nov-03	Benjamin Island	
F2095	27-Jun-02	Lowrie Island	М	28-Oct-03	Benjamin Island	
F2095	27-Jun-02	Lowrie Island	М		Benjamin Island	
F2095	27-Jun-02	Lowrie Island	М		Benjamin Island	
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Brand	Branding Date	Branding Location	Sex	Resight Date	Resight Location	Suckling?
F2095	27-Jun-02	Lowrie Island	Μ	03-Nov-03	Benjamin Island	Y
F2095	27-Jun-02	Lowrie Island	Μ	04-Nov-03	Benjamin Island	
F2121	27-Jun-02	Lowrie Island	F	30-Oct-03	Benjamin Island	
F2121UNSURE		Forrester Island complex		29-Oct-03	Benjamin Island	
F768	26-Jun-95	North Rocks - Forrester	r M	04-Nov-03	Little Island	
F786	26-Jun-95	North Rocks - Forrester	r F	02-Nov-03	Little Island	
F786	26-Jun-95	North Rocks - Forrester	r F	03-Nov-03	Benjamin Island	
H13	30-Jun-01	Hazy Islands	F	28-Oct-03	Benjamin Island	
H13	30-Jun-01	Hazy Islands	F	29-Oct-03	Benjamin Island	
H13	30-Jun-01	Hazy Islands	F	01-Nov-03	Benjamin Island	
H130	01-Jul-01	Hazy Islands	F	30-Oct-03	Little Island	
H130	01-Jul-01	Hazy Islands	F	31-Oct-03	Little Island	
H130	01-Jul-01	Hazy Islands	F	04-Nov-03	Benjamin Island	
H16	30-Jun-01	Hazy Islands	М	03-Nov-03	Little Island	
H162	02-Jul-01	Hazy Islands	М	31-Oct-03	Little Island	
H176	02-Jul-01	Hazy Islands	F	30-Oct-03	Little Island	
H176	02-Jul-01	Hazy Islands	F	31-Oct-03	Little Island	
H176	02-Jul-01	Hazy Islands	F	03-Nov-03	Benjamin Island	Y
H176	02-Jul-01	Hazy Islands	F	04-Nov-03	Little Island	
H187	02-Jul-01	Hazy Islands	М	29-Oct-03	Benjamin Island	
H187	02-Jul-01	Hazy Islands	М	01-Nov-03	Little Island	
H26	30-Jun-01	Hazy Islands	F	30-Oct-03	Little Island	
H26	30-Jun-01	Hazy Islands	F	31-Oct-03	Little Island	
H396	28-Jun-03	Hazy Islands		31-Oct-03	Little Island	Y
Н93	01-Jul-01	Hazy Islands	М	31-Oct-03	Little Island	
Н93	01-Jul-01	Hazy Islands	М	01-Nov-03	Little Island	
Н93	01-Jul-01	Hazy Islands	М	02-Nov-03	Little Island	
Н93	01-Jul-01	Hazy Islands	М	04-Nov-03	Little Island	
T23	02-Jul-00	Marmot Island	F	30-Oct-03	Little Island	
T23	02-Jul-00	Marmot Island	F		Little Island	
T23	02-Jul-00	Marmot Island	F	04-Nov-03	Little Island	
V29	03-Jul-02	Graves Rocks	М	31-Oct-03	Little Island	
V29	03-Jul-02	Graves Rocks	М	02-Nov-03	Little Island	
W13	01-Jul-02	White Sisters	F	28-Oct-03	Benjamin Island	Y
W13	01-Jul-02	White Sisters	F	29-Oct-03	Benjamin Island	
W13	01-Jul-02	White Sisters	F	30-Oct-03	Benjamin Island	
W13	01-Jul-02	White Sisters	F	04-Nov-03	Benjamin Island	
W17	01-Jul-02	White Sisters	F	03-Nov-03	Benjamin Island	
W26	01-Jul-02	White Sisters	М	29-Oct-03	Benjamin Island	
W26	01-Jul-02	White Sisters	М	30-Oct-03	Benjamin Island	
W26	01-Jul-02	White Sisters	М	01-Nov-03	Benjamin Island	
W26	01-Jul-02	White Sisters	М		Benjamin Island	
W55UNSURE	-	White Sisters			Benjamin Island	

Brand	Branding Date	Branding Location	Sex	Resight Date	Resight Location	Suckling?
W58	02-Jul-02	White Sisters	F	31-Oct-03	Little Island	
W61	02-Jul-02	White Sisters	Μ	30-Oct-03	Little Island	
W61	02-Jul-02	White Sisters	Μ	31-Oct-03	Little Island	
W61	02-Jul-02	White Sisters	Μ	02-Nov-03	Little Island	Y

Table 4. Brand-resights of sea lions observed in Prince William Sound, Alaska between 13-21 November 2003.

Brand	Branding Dat	e Branding Locati	ion Sex]	Resight Date	e Resight Locatio	on Suckling?
=269	07-Nov-01	Glacier Island	Μ	18-Nov-03	Glacier Island	
=270	07-Nov-01	Glacier Island	F	15-Nov-03	Glacier Island	
=270	07-Nov-01	Glacier Island	F	16-Nov-03	Glacier Island	
=270	07-Nov-01	Glacier Island	F	17-Nov-03	Glacier Island	
=270	07-Nov-01	Glacier Island	F	18-Nov-03	Glacier Island	
=270	07-Nov-01	Glacier Island	F	20-Nov-03	Perry Island	
=271	07-Nov-01	Glacier Island	F	15-Nov-03	Glacier Island	
=272	08-Nov-01	Perry Island	Μ	19-Nov-03	Perry Island	
=272	08-Nov-01	Perry Island	Μ	20-Nov-03	Perry Island	
=274	08-Nov-01	Perry Island	Μ	15-Nov-03	Glacier Island	
=274	08-Nov-01	Perry Island	Μ	16-Nov-03	Glacier Island	
=276	08-Nov-01	Perry Island	Μ	19-Nov-03	Perry Island	
=276	08-Nov-01	Perry Island	Μ	20-Nov-03	Perry Island	
=277	09-Nov-01	Perry Island	F	20-Nov-03	Perry Island	
=280	09-Nov-01	Perry Island	Μ	17-Nov-03	Glacier Island	
=280	09-Nov-01	Perry Island	Μ	18-Nov-03	Glacier Island	
=280	09-Nov-01	Perry Island	Μ	21-Nov-03	Perry Island	
=282	09-Nov-01	Perry Island	Μ	20-Nov-03	Perry Island	
$=286^{1}$	10-Nov-01	Perry Island	F	17-Nov-03	Glacier Island	
$=286^{1}$	10-Nov-01	Perry Island	F	17-Nov-03	Glacier Island	
=294	12-Nov-01	Perry Island	F	13-Nov-03	Perry Island	nursing
						pup
=294	12-Nov-01	Perry Island	F	20-Nov-03	Perry Island	
=313	14-May-02	Perry Island	Μ	17-Nov-03	Glacier Island	
=315	15-May-02	Glacier Island	F	15-Nov-03		
=315	15-May-02	Glacier Island	F	18-Nov-03	Glacier Island	
=317	15-May-02	Glacier Island	F		-	
=317	15-May-02	Glacier Island	F	20-Nov-03	Perry Island	
=328	18-May-02	The Needle	Μ	18-Nov-03	Glacier Island	
=363	14-Sep-02	Glacier Island	Μ	16-Nov-03	Glacier Island	
=369	16-Sep-02	Perry Island	Μ	13-Nov-03	Perry Island	
=372	16-Sep-02	Perry Island	F	19-Nov-03	Perry Island	
=376	18-Sep-02	Perry Island	Μ		Perry Island	
=434	13-Nov-03	Perry Island	Μ	21-Nov-03	Perry Island	

Brand	Branding Dat	e Branding Location	Sex	Resight Date	e Resight Locatio	on Suckling?
=435	13-Nov-03	Perry Island	F	20-Nov-03	Perry Island	
=437	13-Nov-03	Perry Island	F	19-Nov-03	Perry Island	
=439	14-Nov-03	Perry Island	Μ	19-Nov-03	Perry Island	
=439	14-Nov-03	Perry Island	Μ	21-Nov-03	Perry Island	
=440UNSURE				17-Nov-03	Glacier Island	
=442	14-Nov-03	Perry Island	Μ	19-Nov-03	Perry Island	
=442	14-Nov-03	Perry Island	Μ	20-Nov-03	Perry Island	Y
=442	14-Nov-03	Perry Island	Μ	21-Nov-03	Perry Island	
=443	15-Nov-03	Glacier Island	F	17-Nov-03	Glacier Island	
=443	15-Nov-03	Glacier Island	F	18-Nov-03	Glacier Island	
=444	16-Nov-03	Glacier Island	Μ	17-Nov-03	Glacier Island	
=444	16-Nov-03	Glacier Island	Μ	18-Nov-03	Glacier Island	
=446	16-Nov-03	Glacier Island	F	17-Nov-03	Glacier Island	Y
=446	16-Nov-03	Glacier Island	F	18-Nov-03	Glacier Island	
=447	17-Nov-03	Glacier Island	F	18-Nov-03	Glacier Island	
=448	17-Nov-03	Glacier Island	Μ	18-Nov-03	Glacier Island	
=452	19-Nov-03	Perry Island	Μ	20-Nov-03	Perry Island	
=452	19-Nov-03	Perry Island	Μ	21-Nov-03	Perry Island	
=453	19-Nov-03	Perry Island	F	20-Nov-03	Perry Island	
=454	19-Nov-03	Perry Island	Μ	20-Nov-03	Perry Island	
=455	19-Nov-03	Perry Island	F	20-Nov-03	Perry Island	
=455	19-Nov-03	Perry Island	F	21-Nov-03	Perry Island	
=457	20-Nov-03	Perry Island	Μ	21-Nov-03	Perry Island	
=458	20-Nov-03	Perry Island	F	21-Nov-03	Perry Island	Y
E15	05-Jul-01	Fish Island (PWS)	Μ	15-Nov-03	Glacier Island	
E15	05-Jul-01	Fish Island (PWS)	Μ	17-Nov-03	Glacier Island	
E17	05-Jul-01	Fish Island (PWS)	Μ	19-Nov-03	Perry Island	Y
E17	05-Jul-01	Fish Island (PWS)	Μ	20-Nov-03	Perry Island	
F1205	29-Jun-01	Lowrie Island	Μ	17-Nov-03	Glacier Island	
F2062	27-Jun-02	Lowrie Island		15-Nov-03		
F2068	27-Jun-02	Lowrie Island	Μ		Perry Island	
J_2UNSURE		Seal Rocks (PWS)			Perry Island	
J1	07-Jul-01	Seal Rocks (PWS)	Μ	16-Nov-03	Glacier Island	
J1	07-Jul-01	Seal Rocks (PWS)	Μ	18-Nov-03		
J10_UNSURE		Seal Rocks (PWS)		13-Nov-03	Perry Island	
J10_UNSURE		Seal Rocks (PWS)		20-Nov-03	-	
J101	04-Jul-03	Seal Rocks (PWS)	F	19-Nov-03	Perry Island	
J107	04-Jul-03	Seal Rocks (PWS)	F	19-Nov-03	Perry Island	
J107	04-Jul-03	Seal Rocks (PWS)	F	21-Nov-03	Perry Island	
J114	04-Jul-03	Seal Rocks (PWS)	Μ	13-Nov-03	Perry Island	
J115	04-Jul-03	Seal Rocks (PWS)	F		Perry Island	
J135	04-Jul-03	Seal Rocks (PWS)	F	13-Nov-03	Perry Island	
J135	04-Jul-03	Seal Rocks (PWS)	F		Perry Island	
J135	04-Jul-03	Seal Rocks (PWS)	F	20-Nov-03	Perry Island	

Brand	Branding Dat	e Branding Location	Sex	Resight Date	e Resight Locatio	on Suckling?
J135	04-Jul-03	Seal Rocks (PWS)	F	21-Nov-03	Perry Island	
J139	04-Jul-03	Seal Rocks (PWS)	Μ	19-Nov-03	Perry Island	Y
J139	04-Jul-03	Seal Rocks (PWS)	Μ	20-Nov-03	Perry Island	
J143	04-Jul-03	Seal Rocks (PWS)	F	13-Nov-03	Perry Island	
J143	04-Jul-03	Seal Rocks (PWS)	F	20-Nov-03	Perry Island	
J143	04-Jul-03	Seal Rocks (PWS)	F	21-Nov-03	Perry Island	
J146	04-Jul-03	Seal Rocks (PWS)	Μ	19-Nov-03	Perry Island	
J146	04-Jul-03	Seal Rocks (PWS)	Μ	20-Nov-03	Perry Island	
J15	07-Jul-01	Seal Rocks (PWS)	Μ	15-Nov-03	Glacier Island	
J174	04-Jul-03	Seal Rocks (PWS)	F	13-Nov-03	Perry Island	Y
J174	04-Jul-03	Seal Rocks (PWS)	F	19-Nov-03	Perry Island	
J174	04-Jul-03	Seal Rocks (PWS)	F	20-Nov-03	Perry Island	
J18	07-Jul-01	Seal Rocks (PWS)	Μ	15-Nov-03	Glacier Island	
J2	07-Jul-01	Seal Rocks (PWS)	Μ	18-Nov-03	Glacier Island	
J2	07-Jul-01	Seal Rocks (PWS)	Μ	21-Nov-03	Perry Island	
J32	07-Jul-01	Seal Rocks (PWS)	F	20-Nov-03	Perry Island	
J32	07-Jul-01	Seal Rocks (PWS)	F	20-Nov-03	Perry Island	
J33	07-Jul-01	Seal Rocks (PWS)	F	16-Nov-03	Glacier Island	
J33	07-Jul-01	Seal Rocks (PWS)	F	18-Nov-03	Glacier Island	
J60	07-Jul-01	Seal Rocks (PWS)	F	20-Nov-03	Perry Island	
J75	07-Jul-01	Seal Rocks (PWS)	F	15-Nov-03	Glacier Island	
T177	04-Jul-02	Marmot Island	Μ	18-Nov-03	Glacier Island	
X128	03-Jul-00	Sugarloaf Island	Μ	18-Nov-03	Glacier Island	
X13	03-Jul-00	Sugarloaf Island	F	20-Nov-03	Perry Island	
X185	07-Jul-02	Sugarloaf Island	Μ	13-Nov-03	Perry Island	
X196	07-Jul-02	Sugarloaf Island	F	20-Nov-03	Perry Island	
X222	07-Jul-02	Sugarloaf Island	Μ	20-Nov-03	Perry Island	with
						female
X252	07-Jul-02	Sugarloaf Island	F	13-Nov-03	2	
X252	07-Jul-02	Sugarloaf Island	F		Perry Island	
X252	07-Jul-02	Sugarloaf Island	F	21-Nov-03	Perry Island	

¹=286 was initially captured and tagged (but not branded) at Chiswell Island on 6 July 2000 by the National Marine Mammal Lab. ADFG later recaptured and branded this animal at Perry Island on 10 November 2001.

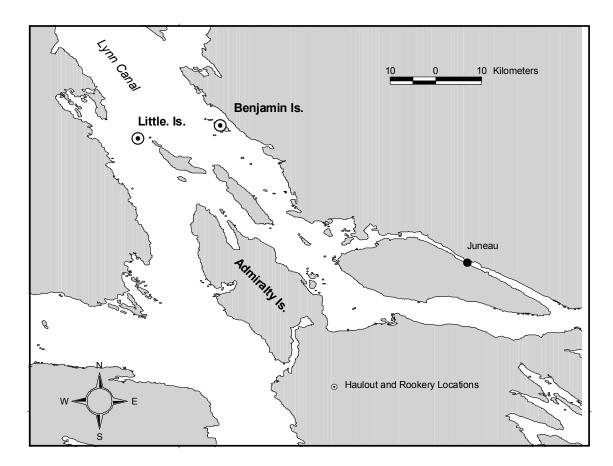


Figure 1. Haulout sites in Southeast Alaska where Steller sea lions were captured, and branded animals were resignted, 28 October-3 November 2003.

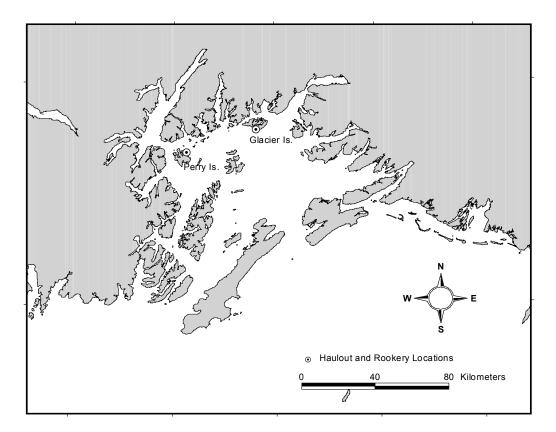


Figure 2. Haulout sites in Prince William Sound, Alaska where Steller sea lions were captured, and branded animals were resigned, 12-22 November 2003.