

Coordination of Proposed Steller Sea Lion Field Research Activities in Alaska, 2007

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Background

Until the late 1990s, most research on Steller sea lions in Alaska was conducted by relatively few groups using the Steller Sea Lion Recovery Plan (NMFS 1992) for guidance, and thus coordination was straightforward. Because of a large increase in scientific activity and funding, mostly through Congressional appropriations starting in FY01, a framework for a comprehensive and coordinated research program was created as an organizational tool (Ferrero and Fritz 2002). Studies were also categorized based on which multiple hypotheses proposed for the Steller sea lion decline were being addressed.

Since December 2000 at least 20 meetings have been held for coordination, collaboration and information dissemination among Steller sea lion researchers (listed in Appendix 1). As part of this coordination, researchers conducting Steller sea lion studies in Alaska, in particular of animals in the wild, coordinate to minimize disturbance to sea lions and increase collaboration to better address research questions. Formal meetings are held at least annually, typically for a half to full day, with presentations made by each institution describing their overall research program plans and how studies (in progress or proposed, in the field or captivity) address recovery needs and fit into the comprehensive program, results to date, and field activities for the forthcoming year. Until 2002 these meetings were principally between the National Marine Mammal Laboratory (NMML) and the Alaska Department of Fish and Game (ADFG), with other investigators generally working through one or both of these groups logistically and as permit co-investigators. As other institutions increased their study efforts and obtained independent permits, this coordinating group grew to include NMML, ADFG, the Alaska SeaLife Center (ASLC), and the University of British Columbia/North Pacific Universities Marine Mammal Research Consortium (NPUMMRC), University of Alaska Fairbanks (UAF) and the Aleutians East Borough (AEB). Coordination among researchers became a condition of all Steller sea lion research permits since at least the year 2000. Minutes and short summaries of these meetings were provided to the NMFS Office of Protected Resources Permit Division (F/PR) and to the NMFS Alaska Regional Office.

Steller sea lion field research was largely curtailed in 2006 by court order, and NMFS is currently preparing an Environmental Impact Statement (EIS) evaluating potential impacts of research on Steller sea lions. All Steller sea lion researchers were requested by F/PR to submit new research applications by December 1, 2006, and both the draft EIS and permit applications are scheduled to be released for public comment in early 2007.

As a result of discussions concerning the draft EIS and new permit application review process among the Marine Mammal Commission (MMC), F/PR and NMFS Alaska Fisheries Science Center (AFSC) on December 28, 2006, the AFSC agreed to complete several action items in response to MMC concerns regarding coordination of research and potential for duplication:

- 1) Staff a quarter-time position to serve as a research coordinator (this was assigned to Dr. Brian Fadely of NMML);
- 2) Convene a research coordination meeting in association with the Alaska Marine Science Symposium (held in Anchorage, Alaska January 23, 2007);
- 3) At this meeting compile a list of research activities by research group, by island, and by date (included in this report);
- 4) Provide a summary of this coordination as a white paper to the MMC (this report);
- 5) AFSC also agreed to review how captured animal information is maintained and tracked among research groups (included in this report).

In the discussions of December 28, 2006, the MMC also expressed concern about what '*bona fide*' research is, and whether research is needed to promote the recovery of ESA-listed stocks. This is an issue that goes beyond the Steller sea lion research program, and the MMC agreed to develop comments as potential guidance, but all agreed that the research identified in the Draft Steller Sea Lion Recovery Plan (NMFS 2006) was a good starting point. Concern was expressed that the draft Plan identified more research than might be necessary to promote recovery, but others thought the research recommended in the draft Recovery Plan should be considered to contribute to recovery (by definition). It was agreed that the NMFS Permit Office, not the Steller sea lion research coordinator, would make a decision regarding necessary research. This group also discussed the issue of research on ESA-listed species that is "*de minimus*" in impact, and could also be done legally under the ESA.

January 2007 Coordination Meeting

Prior to the January 28, 2007 meeting, permit-holders and permit applicants were contacted by email and asked to complete a spreadsheet listing with as much detail as possible their field activities anticipated for 2007 assuming: 1) working under the Court-ordered provisions through May 31; 2) receiving a new permit based on their applications on June 1; and 3) an FY07 budget based on expectations when planning their permit application. The resulting list is thus a best estimate of studies likely to be conducted during 2007, but subject to change based on permitting, budget, weather, logistics, and other factors. Permit holders are responsible to notify the NMFS Regional Office and other investigators of changes to current plans as soon as they are finalized.

Permit holder/applicants planning to conduct field research on Alaska Steller sea lions are NMML, ADFG, ASLC, NPUMMRC, UAF, AEB and Oregon State University (OSU). Additional information was provided by The Alaska Sea Otter and Steller Sea Lion Commission (TASSC), Jan Straley of the University of Alaska Southeast (UAS), Craig Matkin, and the Pribilof Island Tribal Council. All of these latter groups do not conduct research on haulouts or rookeries, but rather are permitted to either collect or receive samples from killed or harvested sea lions, and thus are not included in the coordination matrix.

The meeting on January 23, 2007 was different than past meetings in that there was a short time period available for the meeting, a broad range of attendees beyond that typical for a coordination meeting attended (Appendix 2), representatives from F/PR and MMC were present, and little information on FY07 budgets was available. Thus, much of the discussion focused on the EIS/permit application review process, and on the new coordination matrix. In lieu of in-depth discussions of each research program, participants provided brief overviews of planned field activities, and were reminded to ensure that research activities proposed in their permit applications are linked to the Draft Recovery Plan (NMFS 2006) research tasks.

Coordination matrix for proposed 2007 field activities

The coordination matrix includes fields for region, site, longitude, latitude, start date, end date, date comment, activity, contact, and comments (Appendix 3). Thus, even if precise dates or locations of activities were not yet known with certainty, temporal and spatial bounds could be established for comparison with activities of other researchers. Activities were grouped into 16 categories associated with aerial surveys, land-based observations, skiff-based observations, scat collections, pup counts (on rookeries), pup handling, pup branding, captures (of >2 month olds), and video observation (Table 1). This database was then sorted and examined for areas of potential overlap or overuse to alert the appropriate researchers where further coordination is necessary. Activities planned by OSU (Markus Horning) are associated with ASLC field work, and NPUMMRC activities are likewise planned to be associated NMML and ADFG field work, and thus neither OSU nor NPUMMRC require separate field operations assuming cooperation with the other entities.

Distribution of research activities by region indicates that sites located within the eastern Aleutian Islands, and western, central and eastern Gulf of Alaska are utilized by multiple groups (Table 2). Although both NMML and ADFG conduct activities in Southeast Alaska, the NMML component is for aerial surveys only (Table 3). Tables 4-10 summarize activity types by site within each Aleutian Island and Gulf of Alaska region. Sites associated with ≥6 visits per year by researchers from more than one institution in the eastern Aleutian Islands (Table 6), and the western (Table 7) and central (Table 8) Gulf of Alaska are associated with seasonal aerial and skiff-based monitoring activities of AEB and UAF plus NMML activities. Inspection of the coordination matrix (Appendix 3) suggests several areas for further coordination.

1. Eastern Aleutian Islands, Amak Island and Sea Lion Rocks (Amak): quarterly aerial surveys, skiff-based observations and landings for scat collection planned by AEB occur at similar times to some NMML aerial survey, skiff-based observations, and scat collecting activities in June.
2. Western and central Gulf of Alaska, multiple sites: same overlap as identified in #1.
3. Central Gulf of Alaska sites around and near Kodiak Island: similar timing of UAF replicate aerial surveys and NMML aerial survey. This overlap was designed by UAF/NMML to provide pre- and post-NMML aerial survey monitoring. See UAF permit application for additional details. Scat collections at some similar sites are likewise coordinated.
4. Eastern Gulf of Alaska: Perry, The Needle, and Glacier: broad timeframes of ASLC and ADFG capture trips overlap, and thus require further coordination.

Since many of the proposed activities are similar to previous years, investigators have coordinated many of these activities during the past several years. However, this coordination matrix enhances the ability of those unfamiliar with the Steller sea lion research program to identify where research activities are occurring throughout Alaska among several permit holders, information that is not provided within permit applications to this level of detail. Fields linking field activities to the Draft Recovery Plan research recommendations (NMFS 2006) and other guidance (Ferrero and Fritz 2002) could be added in future versions. However, such information is currently available in permit applications.

Database tracking of captured sea lions

In Alaska sea lions are captured and marked by (or in association with) NMML, ADFG, and ASLC, and each group maintains individual databases unique to their study designs. However, basic information on all captures, recaptures, and resights of those animals is contributed to a centralized database maintained at NMML that spans 1985-2006, and includes sea lions captured and marked as pups at Russian rookeries. Permit conditions also require inclusion of a table in annual permit reports listing animals captured, recaptured, and the associated procedures performed. Once sufficient sample sizes have been collected, this combined database will enable analysis of potential effects associated with multiple handlings during a lifetime of an individual on reproductive success and survival.

Literature Cited

Ferrero, R.C. and L.W. Fritz. 2002. Steller sea lion research and coordination: a brief history and summary of recent progress. US Dep Commer., NOAA Tech. Memo. NMFS-AFSC-129, 34 pp.

NMFS. 1992. Recovery plan for the Steller sea lion (*Eumetopias jubatus*). Prepared by the Steller Sea Lion Recovery Team for the NFMS, Silver Spring, MD. 92 pp.

NMFS. 2006. Draft Revised Recovery Plan for the Steller sea lion (*Eumetopias jubatus*). National Marine Fisheries Service, Silver Spring, MD. 285 pp.

Table 1. Proposed number of terrestrial site visits in 2007 by each institution and type of Steller sea lion research activity.

Activity	ADFG	AEB	ASLC	NMML	UAF	Grand Total
Aerial survey		124		283	13	420
Replicate aerial survey (n=8)					13	13
Quarterly aerial survey (n=2)					12	12
Skiff-based observation	66	4		206		276
Skiff-based observation/scat collection		108				108
Quarterly scat collection (n≤ 3)					4	4
Quarterly scat collection (n≤ 2)					1	1
Captures: juveniles			21			21
Captures: pups	2					2
Captures: adult females			1			1
Pup counts/handling					16	16
Pup counts					11	11
Pup handling/branding			1	2		3
Pup counts/handling/branding					1	1
Land-based observation	1				3	2
Video observations			4			4
Grand Total	69	236	27	522	45	899

Table 2. Proposed number of terrestrial site visits in 2007 by geographic region and institution.

Institution	W ALEU	C ALEU	E ALEU	W GULF	C GULF	E GULF	SE AK	Grand Total
ADFG							2	67
AEB			16	220				236
ASLC						27		27
NMML	18	95	130	88	146	24	21	522
UAF					45			45
Total	18	95	146	308	191	53	88	899

Table 3. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in Southeast Alaska.

Site	Aerial survey	Land-based observation	Skiff-based observation	Grand Total
BENJAMIN			5	5
BIALI ROCK	1		1	2
CAPE ADDINGTON	1		1	2
CAPE BARTOLOME	1		1	2
CAPE CROSS			1	1
CAPE FAIRWEATHER	1			1
CAPE OMMANEY	1		1	2
CIRCLE POINT			1	1
CORONATION	1		1	2
DOROTHY			1	1
EASTERLY			2	2
EMMONS			1	1
FORRESTER COMPLEX			1	1
FORRESTER/C HORN RK			1	1
FORRESTER/EAST RK			1	1
FORRESTER/FORRESTER ISLAND			1	1
FORRESTER/LOWRIE		1		1
FORRESTER/NORTH RK			1	1
FORRESTER/SEA LION RK			1	1
GRAN (LEDGE) POINT	1		3	4
GRAVES ROCK			1	1
GRINDALL	1		2	3
HARBOR POINT			1	1
HAZY	1		1	2
HORN CLIFF			1	1
INIAN			1	1
JACOB ROCK	1		1	2
KAIUCHALI (BIORKA)	1		1	2
LARCH BAY	1			1
LITTLE ISLAND			2	2
MET POINT			3	3
MIST			1	1
PATTERSON POINT			1	1
POINT CAROLUS			2	2
POINT LEAGUE (STEVENS PASSAGE)			1	1
POINT LULL			1	1
POINT MARSDEN			1	1
POINT MARSH	1		1	2
ROUND ROCK			1	1
SAIL			1	1
SAKIE POINT			1	1
SEA LION ISLANDS	1		1	2
SEA LION ROCK (PUFFIN BAY)	1		1	2
SOUTH MARBLE	1		2	3
SUNSET	1		1	2

Table 3, continued.

Site	Aerial survey	Land-based observation	Skiff-based observation	Grand Total
TARR INLET			2	2
TENAKEE CANNERY POINT			2	2
THE BROTHERS			1	1
TIMBERED	1		1	2
TURNABOUT			1	1
WEST ROCK	1		1	2
WHITE SISTERS	1		1	2
WOLF ROCK	1		1	2
YASHA			1	1

Table 4. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in the western Aleutian Islands.

Site	Aerial survey	Pup counts/ handling	Grand Total
AGATTU/CAPE SABAK	1	1	2
AGATTU/GILLON POINT	1		1
ALAID	1		1
ATTU/CAPE WRANGELL	1	1	2
ATTU/CHICHAGOF POINT	1		1
ATTU/CHIRIKOF POINT	1		1
ATTU/KRESTA POINT	1		1
ATTU/MASSACRE BAY	1		1
BULDIR/EAST CAPE	1		1
BULDIR/NW ROCKS	1		1
BULDIR/ROOKERY	1	1	2
DAN'S ROCKS	1		1
INGENSTREM ROCKS	1		1
NIZKI	1		1
SHEMYA	1		1

Table 5. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in the central Aleutian Islands.

Site	Aerial survey	Pup counts	Pup counts/ handling	Grand Total
ADAK/ARGONNE POINT	1			1
ADAK/CAPE MOFFET	1			1
ADAK/CAPE YAKAK	1			1
ADAK/CRONE ISLAND	1			1
ADAK/LAKE POINT	1		1	2
AGLIGADAK	1			1
AMATIGNAK/KNOB POINT	1			1
AMATIGNAK/NITROF POINT	1			1
AMCHITKA/BIRD	1			1
AMCHITKA/CAPE IVAKIN	1			1
AMCHITKA/CHITKA POINT	1			1
AMCHITKA/COLUMN ROCK	1	1		2
AMCHITKA/EAST CAPE	1			1
AMCHITKA/OMEGA POINT	1			1
AMCHITKA/ST. MAKARIUS	1			1
AMLIA/CAPE MISTY	1			1
AMLIA/EAST CAPE	1			1
AMLIA/SVIECH. HARBOR	1			1
AMUKTA+ROCKS	1			1
ANAGAKSIK	1			1
ATKA/CAPE KOROVIN	1			1
ATKA/NORTH CAPE	1			1
AYUGADAK	1	1		2
BOBROF	1			1
CARLISLE	1			1
CHAGULAK	1			1
CHUGINADAK	1			1
CHUGUL	1			1
FENIMORE	1			1
GRAMP ROCK	1	1		2
GREAT SITKIN	1			1
HERBERT	1			1
IGITKIN/SW POINT	1			1
IKIGINAK	1			1
ILAK	1			1
KAGALASKA	1			1
KAGAMIL	1			1
KANAGA/CAPE CHUNU	1			1
KANAGA/CAPE MIGA	1			1
KANAGA/N CAPE	1			1
KANAGA/SHIP ROCK	1			1

Table 5, continued.

Site	Aerial survey	Pup counts	Pup counts/ handling	Grand Total
KASATOCHI/NORTH POINT	1		1	2
KAVALGA	1			1
KISKA/CAPE ST STEPHEN	1		1	2
KISKA/GERTRUDE-BUKHTI	1			1
KISKA/LIEF COVE	1		1	2
KISKA/PILLAR ROCK	1			1
KISKA/SOBAKA-VEGA	1			1
KISKA/SOUTH HEAD	1			1
KISKA/WITCHCRAFT POINT	1			1
KONIUPIJI/NORTH POINT	1			1
LITTLE TANAGA STRAIT	1			1
OGLIUGA	1			1
OGLODAK	1			1
RAT	1			1
SAGIGIK	1			1
SALT	1			1
SEA LION ROCK (KISKA)	1			1
SEGUAM/FINCH POINT	1			1
SEGUAM/LAVA COVE	1			1
SEGUAM/LAVA POINT	1			1
SEGUAM/SADDLERIDGE	1		1	2
SEGUAM/SW RIP	1			1
SEGUAM/TURF POINT	1	1		2
SEGUAM/WHARF POINT	1			1
SEMISOPOCHNOI/PETREL	1			1
SEMISOPOCHNOI/POCHNOI	1	1		2
SEMISOPOCHNOI/SW KNOB	1			1
SEMISOPOCHNOI/TUMAN POINT	1			1
SILAK	1			1
SKAGUL/S. POINT	1			1
TAG	1	1		2
TAGALAK	1			1
TANADAK (AMLIA)	1			1
TANADAK (KISKA)	1			1
TANAGA/BUMPY POINT	1			1
TANAGA/CAPE SASMIK	1			1
TWIN ROCKS (KISKA)	1			1
UGIDAK	1			1
ULAK/HASGOX POINT	1		1	2
UNALGA+DINKUM ROCKS	1			1
YUNASKA	1		1	2

Table 6. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in the eastern Aleutian Islands.

Site	Aerial survey	Land-based observation	Pup counts	Pup counts/handling	Skiff-based observation	Skiff-based observation/scat collection	Grand Total
ADUGAK	1			1			2
AIKTAK	1				2		3
AKUN/AKUN BAY	1				2		3
AKUN/AKUN HEAD	1				2		3
AKUN/BILLINGS HEAD	1			1	2		4
AKUN/JACKASS POINT	1						1
AKUTAN/BATTERY POINT	1						1
AKUTAN/CAPE MORGAN	1						1
AKUTAN/NORTH HEAD					2		2
AKUTAN/REEF-LAVA	1				2		3
AMAK+ROCKS	5				2	4	11
BABY	1						1
BASALT ROCK	1						1
BOGOSLOF/FIRE ISLAND	1		1		2		4
EGG	1				2		3
EMERALD	1				2		3
INNER SIGNAL	1				2		3
KALIGAGAN	1						1
OGCHUL	1				2		3
OLD MAN ROCKS	1				2		3
OUTER SIGNAL	1				2		3
POLIVNOI ROCK	1				2		3
ROOTOK/EAST	1				2		3
ROOTOK/NORTH	1				2		3
SAMALGA	1				2		3
SEA LION ROCK (AMAK)	5			1	2	4	12
TANGINAK	1				2		3
THE PILLARS	1				2		3
TIGALDA/ROCKS NE	1				2		3
TIGALDA/SOUTH SIDE	1				2		3
UGAMAK		1					1

Table 6, continued.

Site	Aerial survey	Land-based observation	Pup counts	Pup counts/handling	Skiff-based observation	Skiff-based observation/scat collection	Grand Total
UGAMAK/NORTH	1				2		3
UGAMAK/ROUND	1				2		3
UGAMAK/UGAMAK BAY	1				2		3
UMNAK/CAPE ASLIK	1				2		3
UNALASKA/BISHOP POINT	1				2		3
UNALASKA/CAPE IZIGAN	1				2		3
UNALASKA/CAPE SEDANKA	1				2		3
UNALASKA/CAPE STARICHKOF	1				2		3
UNALASKA/CAPE WISLOW	1						1
UNALASKA/KOVRIZHKA	1						1
UNALASKA/MAKUSHIN BAY	1				2		3
UNALASKA/PRIEST ROCK	1				2		3
UNALASKA/SPRAY CAPE	1				2		3
UNALASKA/WHALEBONE CAPE	1						1
UNIMAK/CAPE LAZAREF	1						1
UNIMAK/CAPE LUTKE	1				2		3
UNIMAK/CAPE SARICHEF	1				2		3
UNIMAK/SCOTCH CAP	1						1
UNIMAK/SENNETT POINT	1				2		3
VSEVIDOF	1				2		3

Table 7. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in the western Gulf of Alaska.

Site	Aerial survey	Pup counts	Pup counts/handling	Skiff-based observation	Skiff-based observation/scat collection	Grand Total
ATKINS	5		1			6
ATKULIK	5				4	9
BIG KONIJI	1					1
BIRD	5			2	4	11
CASTLE ROCK	5			6		11
CATON	5				4	9
CHANKLIUT	5				4	9
CHERNABURA	5					5
CHERNI	1					1
CLUBBING ROCKS	1					1
CLUBBING ROCKS NORTH	4			2	4	10
CLUBBING ROCKS SOUTH	4			2	4	10
EGG (SAND POINT)	5				4	9
HAGUE ROCK	1					1
HUNT	1					1
JUDE	5	1		2	4	12
KAK	5				4	9
KUPREANOF POINT	5			2		7
LIGHTHOUSE ROCKS	5	1		2	4	12
MITROFANIA	5			2	4	11
NAGAI/MOUNTAIN POINT	5			2	4	11
NAGAI/RK W OF CAPE WEDGE	1					1
OLGA ROCKS NE	5			2	4	11
OLGA ROCKS SW	5			2	4	11
OMEGA	1			2		3
PAUL	4			2	4	10
PINNACLE ROCK	5		1	2	4	12
ROCK	1					1
SANAK	1					1
SEA LION ROCKS (SHUMAGINS)	5			2	4	11
SEAL CAPE	5				4	9

Table 7, continued.

Site	Aerial survey	Pup counts	Pup counts/handling	Skiff-based observation	Skiff-based observation/scat collection	Grand Total
SOUTH ROCKS	5				4	9
SOZAVARIKA	1					1
SPITZ	5			2	4	11
SUSHILNOI ROCKS	5			2	4	11
THE HAYSTACKS	5			2	4	11
THE WHALEBACK	5	1		2	4	12
TWINS	1					1
UMGA	1					1
UNGA/ACHEREDIN POINT	5			2	4	11
UNGA/CAPE UNGA	1			2		3
WOSNESENSKI	5			2	4	11

Table 8. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in the central Gulf of Alaska.

Site	Aerial survey	Land-based observation	Pup counts	Pup counts/handling	Pup counts/handling/branding	Pup handling/branding	Quarterly aerial survey (n=2)	Quarterly scat collection (n≤2)	Quarterly scat collection (n≤3)	Replicate Aerial survey (n=8)	Skiff-based observation	Grand Total
AFOGNAK/TONKI CAPE	1											1
AGHIYUK	1											1
AIUGNAK COLUMNS	1											1
CAPE DOUGLAS	1											3
CAPE GULL	1											3
CAPE KULIAK												2
CAPE NUKSHAK	1											3
CAPE UGYAK	1											3
CHIRIKOF	1			1								4
CHOWIET	1											3
EAST CHUGACH	1											3
ELIZABETH/CAPE ELIZABETH	1											3
FLAT	1											3
GORE POINT	1											3
KILOKAK ROCKS	1											3
KODIAK/CAPE ALITAK	1											3
KODIAK/CAPE BARNABAS	2					1		1		2		6
KODIAK/CAPE CHINIAK	2					1		1		2		6
KODIAK/CAPE IKOLIK	2									1		5
KODIAK/CAPE KULIUK	1											3
KODIAK/CAPE PARAMANOF	1											1
KODIAK/CAPE UGAT	2					1		1		2		6
KODIAK/GULL POINT	2					1		1		2		6
KODIAK/MALINA POINT	1											1
KODIAK/STEEP CAPE	1											1
KODIAK/SUNDSTROM	1											1
KODIAK/TOMBSTONE ROCKS	1											1

Table 8, continued.

Site	Aerial survey	Land-based observation	Pup counts	Pup counts/handling	Pup counts/handling/branding	Pup handling/branding	Quarterly aerial survey (n=2)	Quarterly scat collection (n≤2)	Quarterly scat collection (n≤3)	Replicate Aerial survey (n=8)	Skiff-based observation	Grand Total
LATAX ROCKS	2					1		1		1	2	7
LONG ISLAND	2	1				1	1	1		1	2	8
MARMOT	2	1		1	1	1	1			1	2	9
NAGAHUT ROCKS	1										2	3
NAGAI ROCKS	1										2	3
NOISY	1											1
NUKA POINT	1										2	3
OUTER (PYE)	1		1								2	4
PERL	1										2	3
PERL ROCKS	1										2	3
PUALE BAY	1										2	3
RK NEAR SEA OTTER	2				1					1	2	6
ROCK											2	2
SEA LION ROCKS (MARMOT)	2					1				1	2	6
SEA OTTER	2	1				1		1	1	1	2	8
SHAKUN ROCKS	1										2	3
SHAW	1										2	3
SITKINAK/CAPE SITKINAK	1										2	3
SUD	1										2	3
SUGARLOAF	1	1				1						3
SUTWIK	1											1
TAKLI	1										2	3
TWOHEADED	2					1		1	1	1	2	7
UGAIUSHAK	1											1
UGAK	2					1				1	2	6
USHAGAT/NW	1											1
USHAGAT/ROCKS SOUTH	1										2	3
USHAGAT/SW	1										2	3
WEST AMATULI	1										2	3

Table 9. Number of visits for Steller sea lion field research activities proposed for 2007 at sites located in the eastern Gulf of Alaska.

Site	Aerial survey	Captures: adult females	Captures: juveniles	Captures: pups	Pup handling/branding	Video observations	Grand Total
AIALIK CAPE	1						1
CAPE FAIRFIELD	1						1
CAPE HINCHINBROOK	1						1
CAPE JUNKEN	1						1
CAPE PUGET	1						1
CAPE RESURRECTION	1	1	3			1	6
CAPE ST. ELIAS	1						1
CHISWELL ISLANDS	1				1	1	3
DANGER	1						1
GLACIER	1		3	1			5
GRANITE CAPE	1						1
HOOK POINT	1						1
MIDDLETON	1						1
NATOA						1	1
PERRY			3	1			4
POINT ERLINGTON	1		3				4
POINT LaTOUCHE	1						1
PROCESSION ROCKS	1		3				4
RABBIT	1						1
RUGGED	1		3				4
SEAL ROCKS	1				1		2
SEAL ROCKS (KENAI)	1					1	2
STEEP POINT	1						1
THE NEEDLE	1		3				4
WOODED (FISH)	1						1

Appendix 1. List of Steller sea lion research program coordination meetings (and materials available) held during 2000-2007.

1. December 2000: Research Coordination Meeting between NMML and ADF&G. Minutes describe coordination of field research for 2001, collaboration of projects, and which group would take the lead on various studies. A separate meeting of a smaller group discussed satellite telemeter programming and data analysis so that data collected by both groups would be comparable.
2. January 2001: Steller Sea Lion Research Planning Meeting. Minutes describe a meeting held at the AFSC to “communicate, cooperate and coordinate efforts to spend the Steller sea lion funds in the most productive ways possible.
3. January 2001: Overview of Funding History, FY00 Activities, and FY01 Funding Allocations, Steller Sea Lion Research Coordination Meeting: This is a short report of the different funding allocations up to FY01 and was provided to the researchers participating at this meeting held at NMML.
4. May 2001: Steller Sea Lion Decline: Is it Food II: This was a 2-day workshop held at the Alaska Sea Life Center in May, 2001 to present data and host discussions of evidence for and against hypotheses for factors that might be related to the decline of Steller sea lions. Twenty-four sea lion scientists participated.
5. August 2001: Steller Sea Lion Research Coordination Workshop. Report summarizes a workshop held at the Alaska Fisheries Science Center in July 2001. The focus of the meeting was to assemble a draft framework to organize the various research projects by topic as a tool for identifying associations and lines of communications. The final draft was then to be used for further planning and coordination discussions.
6. December 2001: Steller Sea Lion Research Coordination Meeting. Minutes describe a meeting held between scientists from ADF&G and NMML Steller sea lion research programs at NMML on Dec. 4-5, 2001. The meeting was held to discuss plans for the upcoming 2002 field season and to discuss the distribution of research priorities. The minutes clearly state that one of the primary results of the meeting was the agreement of the partitioning of satellite telemetry research to NMML and physiological research to ADF&G.
7. December 2001: Steller Sea Lion Branding review, 2001: This meeting was held at NMML following the coordination meeting earlier the same week to discuss the results of Steller sea lion branding during the summer of 2001. Participants included NMML, ADF&G, Oregon Fish & Wildlife, US Fish & Wildlife Service (Rogue Reef, Oregon).
8. March 2002: Steller Sea Lion Principal Investigators Orientation and Coordination Meeting. This report is the agenda and abstracts of a meeting held in Anchorage 19-21 March, 2002. The meeting was sponsored by NMFS and the AFSC and featured research presentations by virtually all of the NMFS-funded Steller sea lion researchers as well as

researchers funded by the SSLRI and the Cooperative Institute for Arctic Research

9. June 2002: Steller sea lion Research and Coordination: A Brief History and Summary of Recent Progress. NOAA Tech Memo by R. Ferrero and L. Fritz. As stated in the abstract, “In cooperation with the entities that received funding, the National Marine Fisheries Service developed a research coordination framework to clarify the context of individual research projects, to show their relationships to each other and to link them to the underlying hypotheses that might explain the continued decline of Steller sea lions”.
10. September 2002: Steller Sea Lion Bioenergetic Modeling Workshop. This was a workshop for investigators modeling Steller sea lion foraging, bioenergetics and population dynamics. The goals were to: (1) review the range of potential bioenergetics and foraging behavior models that could be applied to Steller sea lions, (2) examine the extent to which these models are being researched to address important management issues for SSLs, (3) discuss the current research - particularly research sponsored by NMFS, and report progress and potential areas of difficulties, and (4) encourage the development of synergistic links between different research groups researching bioenergetics and foraging behavior models in SSLs. Workshop was hosted by NMFS and attended by SSLRI- funded and other researchers.
11. December 2002: ADF&G/NMML Research Coordination Meeting. Coordination meeting between ADF&G and NMML for field research and collaborative studies in 2003.
12. January 2003: Marine Science in the Northeast Pacific: List of abstracts from an annual joint symposium held in Anchorage that was the follow up to the meeting listed above from March of 2002. This meeting again got Steller sea lion researchers together to present and discuss projects. It was held jointly with scientists funded by at least five other granting agencies.
13. March 2003: Brand Resight Workshop Summary: This reports on a meeting held March 5-7, 2003 at ADF&G in Anchorage. The purpose of the meeting was to bring together all of the scientists conducting brand resight work on Steller sea lions in order to design a common data collection method and ensure consistency in collection methods. In addition, plans were made to share personnel, databases, methods, and boats.
14. February 2004: NMML/AKR PRD Coordination Meeting: Meeting between NMML and Alaska Region Protected Species Division to discuss management, research, and coordination needs for Steller sea lions and northern fur seals.
15. February 2005: Steller Sea Lion Field Work Coordination Meeting: Minutes from a meeting held at the Alaska Fisheries Science Center on Feb. 7, 2005. This was one of the annual meetings initiated by researchers to discuss plans for field work in ensuing months. Twelve scientists from NMML, the ADF&G, and the Alaska Sea Life Center (ASLC) participated.

16. February 2005: NMML/AKR PRD Coordination Meeting: Meeting between NMML and Alaska Region Protected Species Division to discuss management, research, and coordination needs for Steller sea lions and northern fur seals.
17. December 2005: Steller Sea Lion Field Work Coordination Meeting: Minutes from a meeting held at the Vancouver Aquarium on Dec. 4, 2005. As with previous meetings, the objective was for Principal Investigators to discuss plans for field work and opportunities for collaboration and coordination. Plans were made to avoid disturbance of sea lion haulouts in Prince William Sound during research conducted by two groups.
18. February 2006: AKR/AFSC Protected Resources Coordination Meeting: Meeting between NMML and Alaska Region Protected Resources Division included discussions of Steller sea lion and northern fur long-term management and research needs, and research coordination.
19. February 2006: Steller Sea Lion Branding Methods/Analysis/Results Workshop: This workshop was held Feb. 8-10, 2006 at NMML and included all of the Steller sea lion researchers permitted to conduct branding or brand resighting of Steller sea lions. The workshop focused on the current methods of brand-resighting being employed by different research programs to examine the results of the previous 5-6 years of branding and brand resighting, and included discussions, plans and intentions for the future. In addition, presentations on studies examining reproductive rate and maternal behavior were also discussed. Scientists from NMML, ADF&G, ASLC, ODF&W, and private contractors participated.
20. January 2007: Steller sea lion field work coordination meeting. As with previous meetings, the objective was for Principal Investigators to discuss plans for field work and opportunities for collaboration and coordination. New for this meeting was a request for all investigators to submit field plan details to NMML in advance of the meeting to better show coordination to highlight and mitigate areas of potential increased disturbance.

Appendix 2. Attendees at the 2007 Steller seal lion research coordination meeting, January 23, Anchorage, Alaska.

Name	Affiliation
Brian Fadely	NMFS-AFSC-NMML
Michael Payne	NMFS-F/PR
David Erikson	URS Corp.
Anne Southam	URS Corp.
Rich Kleinleder	URS Corp.
Jon Isaacs	URS Corp.
Andrew Trites	NPUMMRC
Don Calkins	ASLC
Lowell Fritz	NMFS-AFSC-NMML
Tylan Schrock	ASLC
Jo-Ann Mellish	ASLC
Kate Wynne	UAF
Jane McKenzie	UAF
Cathy Foy	AEB
Tom Gelatt	NMML
Doug DeMaster	NMFS-AFSC
John Bengtson	NMFS-AFSC-NMML
Sarah Norberg	ASLC
John Skinner	ASLC
Ward Testa	NMFS-AFSC-NMML
Andreas Fahlman	UBC-MMRU
Donna Willoya	TASSC
Leslie Cornick	APU
Anne Hoover-Miller	ASLC
John Maniscalco	ASLC
Mike Simpkins	MMC
Randall Davis	Texas A&M
Bill Wilson	NPFMC
Lorrie Rea	ADFG
Russ Andrews	ASLC
Shannon Atkinson	ASLC

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W ALEU	ATTU/CAPE WRANGELL	52.910	172.465	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	ATTU/CAPE WRANGELL	52.910	172.465	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
W ALEU	ATTU/KRESTA POINT	53.003	172.633	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	ATTU/MASSACRE BAY	52.783	173.150	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	ATTU/CHICHAGOF POINT	52.943	173.265	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	DAN'S ROCKS	52.775	173.292	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	AGATTU/GILLON POINT	52.402	173.355	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	ATTU/CHIRIKOF POINT	52.829	173.433	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	AGATTU/CAPE SABAK	52.375	173.722	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	AGATTU/CAPE SABAK	52.375	173.722	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
W ALEU	ALAID	52.775	173.858	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	NIZKI	52.750	173.983	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	SHEMYA	52.733	174.145	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	INGENSTREM ROCKS	52.637	174.520	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	BULDIR/NW ROCKS	52.386	175.847	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	BULDIR/ROOKERY	52.338	175.901	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W ALEU	BULDIR/ROOKERY	52.338	175.901	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
W ALEU	BULDIR/EAST CAPE	52.360	175.973	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/CAPE ST STEPHEN	51.875	177.212	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/CAPE ST STEPHEN	51.875	177.212	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	KISKA/SOBAKA-VEGA	51.825	177.317	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/LIEF COVE	51.953	177.340	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/LIEF COVE	51.953	177.340	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	KISKA/PILLAR ROCK	52.120	177.363	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/GERTRUDE-BUKHTI	51.907	177.475	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/WITCHCRAFT POINT	52.048	177.493	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KISKA/SOUTH HEAD	51.952	177.608	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TWIN ROCKS (KISKA)	51.920	177.618	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TANADAK (KISKA)	51.947	177.780	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEA LION ROCK (KISKA)	51.880	177.980	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	RAT	51.833	178.206	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AYUGADAK	51.756	178.405	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AYUGADAK	51.756	178.405	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
C ALEU	AMCHITKA/BIRD	51.663	178.628	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMCHITKA/COLUMN ROCK	51.539	178.821	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMCHITKA/COLUMN ROCK	51.539	178.821	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C ALEU	AMCHITKA/CHITKA POINT	51.590	179.008	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMCHITKA/ST. MAKARIUS	51.350	179.233	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMCHITKA/OMEGA POINT	51.357	179.387	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMCHITKA/CAPE IVAKIN	51.408	179.404	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMCHITKA/EAST CAPE	51.371	179.466	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEMISOPOCHNOI/TUMAN POINT	51.963	179.482	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEMISOPOCHNOI/SW KNOB	51.915	179.509	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEMISOPOCHNOI/PETREL	52.023	179.615	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEMISOPOCHNOI/POCHNOI	51.955	179.767	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEMISOPOCHNOI/POCHNOI	51.955	179.767	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
C ALEU	AMATIGNAK/NITROF POINT	51.217	-179.130	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	UNALGA+DINKUM ROCKS	51.561	-179.071	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMATIGNAK/KNOB POINT	51.250	-179.067	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ULAK/HASGOX POINT	51.315	-178.982	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ULAK/HASGOX POINT	51.315	-178.982	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	KAVALGA	51.576	-178.862	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	OGLIUGA	51.616	-178.657	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TAG	51.558	-178.575	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TAG	51.558	-178.575	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
C ALEU	SKAGUL/S. POINT	51.583	-178.567	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	UGIDAK	51.583	-178.508	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	GRAMP ROCK	51.481	-178.343	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	GRAMP ROCK	51.481	-178.343	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
C ALEU	ILAK	51.477	-178.307	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TANAGA/BUMPY POINT	51.917	-177.975	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TANAGA/CAPE SASMIK	51.600	-177.933	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KANAGA/CAPE CHUNU	51.658	-177.642	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	BOBROF	51.900	-177.450	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KANAGA/SHIP ROCK	51.778	-177.345	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KANAGA/CAPE MIGA	51.940	-177.183	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KANAGA/CAPE	51.942	-177.150	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ADAK/LAKE POINT	51.623	-176.993	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ADAK/LAKE POINT	51.623	-176.993	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	ADAK/CAPE YAKAK	51.592	-176.952	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ADAK/ARGONNE POINT	51.828	-176.907	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ADAK/CAPE MOFFET	51.972	-176.722	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C ALEU	ADAK/CRONE ISLAND	51.671	-176.608	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KAGALASKA	51.872	-176.311	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SILAK	51.816	-176.246	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	LITTLE TANAGA STRAIT	51.818	-176.232	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	GREAT SITKIN	52.100	-176.175	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	IGITKIN/SW POINT	51.983	-175.958	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ANAGAKSIK	51.848	-175.883	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	CHUGUL	51.917	-175.767	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TAGALAK	51.960	-175.615	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	FENIMORE	51.978	-175.544	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KASATOCHI/NORTH POINT	52.185	-175.517	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KASATOCHI/NORTH POINT	52.185	-175.517	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	IKIGINAK	51.975	-175.483	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	OGLODAK	51.983	-175.442	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KONIUJI/NORTH POINT	52.225	-175.142	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SALT	52.175	-174.642	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ATKA/CAPE KOROVIN	52.308	-174.457	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	ATKA/NORTH CAPE	52.403	-174.297	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMLIA/CAPE MISTY	52.040	-173.833	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMLIA/SVIECH. HARBOR	52.030	-173.398	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SAGIGIK	52.008	-173.155	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMLIA/EAST CAPE	52.095	-172.983	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	TANADAK (AMLIA)	52.070	-172.960	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AGLIGADAK	52.102	-172.904	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/SW RIP	52.262	-172.633	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/SADDLERIDGE	52.351	-172.573	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/SADDLERIDGE	52.351	-172.573	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	SEGUAM/TURF POINT	52.259	-172.520	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/TURF POINT	52.259	-172.520	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
C ALEU	SEGUAM/LAVA COVE	52.267	-172.475	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/FINCH POINT	52.390	-172.462	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/LAVA POINT	52.275	-172.400	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	SEGUAM/WHARF POINT	52.360	-172.322	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	AMUKTA+ROCKS	52.454	-171.298	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	CHAGULAK	52.567	-171.175	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	YUNASKA	52.690	-170.606	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C ALEU	YUNASKA	52.690	-170.606	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C ALEU	CARLISLE	52.925	-170.083	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	HERBERT	52.724	-170.076	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	CHUGINADAK	52.778	-169.698	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C ALEU	KAGAMIL	53.035	-169.683	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	SAMALGA	52.767	-169.250	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	SAMALGA	52.767	-169.250	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	SAMALGA	52.767	-169.250	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	ADUGAK	52.912	-169.175	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	ADUGAK	52.912	-169.175	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
E ALEU	VSEVIDOF	52.978	-168.488	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	VSEVIDOF	52.978	-168.488	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	VSEVIDOF	52.978	-168.488	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UMNAK/CAPE ASLIK	53.417	-168.408	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UMNAK/CAPE ASLIK	53.417	-168.408	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UMNAK/CAPE ASLIK	53.417	-168.408	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	OGCHUL	52.995	-168.404	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	OGCHUL	52.995	-168.404	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	OGCHUL	52.995	-168.404	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	THE PILLARS	53.190	-168.240	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	THE PILLARS	53.190	-168.240	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	THE PILLARS	53.190	-168.240	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	BOGOSLOF/FIRE ISLAND	53.928	-168.034	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	BOGOSLOF/FIRE ISLAND	53.928	-168.034	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	BOGOSLOF/FIRE ISLAND	53.928	-168.034	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
E ALEU	BOGOSLOF/FIRE ISLAND	53.928	-168.034	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	POLIVNOI ROCK	53.266	-167.967	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	POLIVNOI ROCK	53.266	-167.967	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	POLIVNOI ROCK	53.266	-167.967	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	EMERALD	53.292	-167.858	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	EMERALD	53.292	-167.858	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	EMERALD	53.292	-167.858	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE IZIGAN	53.227	-167.656	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE IZIGAN	53.227	-167.656	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/CAPE IZIGAN	53.227	-167.656	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/KOVRIZHKA	53.847	-167.167	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
E ALEU	UNALASKA/SPRAY CAPE	53.617	-167.158	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/SPRAY CAPE	53.617	-167.158	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/SPRAY CAPE	53.617	-167.158	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE STARICHKOF	53.692	-167.073	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE STARICHKOF	53.692	-167.073	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/CAPE STARICHKOF	53.692	-167.073	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/MAKUSHIN BAY	53.714	-167.016	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/MAKUSHIN BAY	53.714	-167.016	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/MAKUSHIN BAY	53.714	-167.016	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/BISHOP POINT	53.973	-166.958	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/BISHOP POINT	53.973	-166.958	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/BISHOP POINT	53.973	-166.958	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE WISLOW	54.017	-166.750	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/WHALEBONE CAPE	53.483	-166.667	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/PRIEST ROCK	54.008	-166.377	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/PRIEST ROCK	54.008	-166.377	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/PRIEST ROCK	54.008	-166.377	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUTAN/REEF-LAVA	54.135	-166.103	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUTAN/REEF-LAVA	54.135	-166.103	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUTAN/REEF-LAVA	54.135	-166.103	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	INNER SIGNAL	53.788	-166.091	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	INNER SIGNAL	53.788	-166.091	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	INNER SIGNAL	53.788	-166.091	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE SEDANKA	53.842	-166.083	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNALASKA/CAPE SEDANKA	53.842	-166.083	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNALASKA/CAPE SEDANKA	53.842	-166.083	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	OLD MAN ROCKS	53.870	-166.082	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	OLD MAN ROCKS	53.870	-166.082	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	OLD MAN ROCKS	53.870	-166.082	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	BABY	53.992	-166.067	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	OUTER SIGNAL	53.804	-166.049	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	OUTER SIGNAL	53.804	-166.049	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	OUTER SIGNAL	53.804	-166.049	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	EGG	53.867	-166.042	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	EGG	53.867	-166.042	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	EGG	53.867	-166.042	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
E ALEU	AKUTAN/CAPE MORGAN	54.056	-165.994	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUTAN/NORTH HEAD	54.225	-165.938	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUTAN/NORTH HEAD	54.225	-165.938	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUTAN/BATTERY POINT	54.035	-165.892	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUN/AKUN HEAD	54.297	-165.633	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUN/AKUN HEAD	54.297	-165.633	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUN/AKUN HEAD	54.297	-165.633	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUN/JACKASS POINT	54.107	-165.560	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUN/BILLINGS HEAD	54.294	-165.534	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUN/BILLINGS HEAD	54.294	-165.534	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUN/BILLINGS HEAD	54.294	-165.534	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
E ALEU	AKUN/BILLINGS HEAD	54.294	-165.534	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	ROOTOK/NORTH	54.065	-165.532	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	ROOTOK/NORTH	54.065	-165.532	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	ROOTOK/NORTH	54.065	-165.532	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	ROOTOK/EAST	54.048	-165.492	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	ROOTOK/EAST	54.048	-165.492	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	ROOTOK/EAST	54.048	-165.492	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUN/AKUN BAY	54.213	-165.405	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AKUN/AKUN BAY	54.213	-165.405	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AKUN/AKUN BAY	54.213	-165.405	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	BASALT ROCK	54.108	-165.376	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	TANGINAK	54.200	-165.323	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	TANGINAK	54.200	-165.323	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	TANGINAK	54.200	-165.323	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	TIGALDA/SOUTH SIDE	54.067	-165.083	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	TIGALDA/SOUTH SIDE	54.067	-165.083	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	TIGALDA/SOUTH SIDE	54.067	-165.083	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	TIGALDA/ROCKS NE	54.160	-164.983	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	TIGALDA/ROCKS NE	54.160	-164.983	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	TIGALDA/ROCKS NE	54.160	-164.983	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/CAPE SARICHEF	54.572	-164.947	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/CAPE SARICHEF	54.572	-164.947	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNIMAK/CAPE SARICHEF	54.572	-164.947	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/SENNETT POINT	54.483	-164.920	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/SENNETT POINT	54.483	-164.920	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

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Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
E ALEU	UNIMAK/SENNETT POINT	54.483	-164.920	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	KALIGAGAN	54.142	-164.908	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AIKTAK	54.183	-164.853	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AIKTAK	54.183	-164.853	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AIKTAK	54.183	-164.853	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UGAMAK/NORTH	54.225	-164.792	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UGAMAK/NORTH	54.225	-164.792	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UGAMAK/NORTH	54.225	-164.792	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UGAMAK/ROUND	54.201	-164.777	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UGAMAK/UGAMAK BAY	54.208	-164.777	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UGAMAK	54.208	-164.777	29-May-07	27-Jul-07	Land-based observation	NMML	Fritz	No disturbance activity
E ALEU	UGAMAK/ROUND	54.201	-164.777	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UGAMAK/UGAMAK BAY	54.208	-164.777	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UGAMAK/ROUND	54.201	-164.777	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UGAMAK/UGAMAK BAY	54.208	-164.777	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/SCOTCH CAP	54.397	-164.763	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNIMAK/CAPE LUTKE	54.473	-164.345	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/CAPE LUTKE	54.473	-164.345	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	UNIMAK/CAPE LUTKE	54.473	-164.345	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	UNIMAK/CAPE LAZAREF	54.608	-163.588	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	BIRD	54.667	-163.286	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	BIRD	54.667	-163.286	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	BIRD	54.667	-163.286	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	BIRD	54.667	-163.286	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	BIRD	54.667	-163.286	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended

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Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
E ALEU	SEA LION ROCK (AMAK)	55.464	-163.202	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E ALEU	AMAK+ROCKS	55.403	-163.160	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
E ALEU	AMAK+ROCKS	55.403	-163.160	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	UMGA	54.800	-162.725	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SOUTH ROCKS	54.302	-162.688	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SOUTH ROCKS	54.302	-162.688	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	SOUTH ROCKS	54.302	-162.688	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SANAK	54.383	-162.583	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SOZAVARIKA	54.857	-162.523	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS SOUTH	54.700	-162.446	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS	54.713	-162.445	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	CLUBBING ROCKS NORTH	54.713	-162.445	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	HAGUE ROCK	54.556	-162.401	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CHERNI	54.633	-162.367	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CATON	54.378	-162.355	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CATON	54.378	-162.355	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	CATON	54.378	-162.355	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	HUNT	54.757	-162.248	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	PINNACLE ROCK	54.768	-161.764	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	PINNACLE ROCK	54.768	-161.764	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	PINNACLE ROCK	54.768	-161.764	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	PINNACLE ROCK	54.768	-161.764	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	PINNACLE ROCK	54.768	-161.764	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	PINNACLE ROCK	54.768	-161.764	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	PINNACLE ROCK	54.768	-161.764	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
W GULF	PINNACLE ROCK	54.768	-161.764	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	PINNACLE ROCK	54.768	-161.764	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	PINNACLE ROCK	54.768	-161.764	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	PINNACLE ROCK	54.768	-161.764	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	PINNACLE ROCK	54.768	-161.764	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SUSHILNOI ROCKS	54.822	-161.712	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	SUSHILNOI ROCKS	54.822	-161.712	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	OLGA ROCKS SW	54.985	-161.515	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS SW	54.985	-161.515	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	OLGA ROCKS NE	55.008	-161.497	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	OLGA ROCKS NE	55.008	-161.497	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	WOSNESENSKI	55.183	-161.367	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	WOSNESENSKI	55.183	-161.367	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	WOSNESENSKI	55.183	-161.367	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	WOSNESENSKI	55.183	-161.367	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	WOSNESENSKI	55.183	-161.367	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	OMEGA	55.242	-161.242	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	OMEGA	55.242	-161.242	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	OMEGA	55.242	-161.242	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	JUDE	55.263	-161.105	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	JUDE	55.263	-161.105	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	JUDE	55.263	-161.105	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
W GULF	JUDE	55.263	-161.105	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	JUDE	55.263	-161.105	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	JUDE	55.263	-161.105	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	UNGA/ACHEREDIN POINT	55.121	-160.817	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	UNGA/CAPE UNGA	55.127	-160.535	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	UNGA/CAPE UNGA	55.127	-160.535	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	UNGA/CAPE UNGA	55.127	-160.535	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	SEA LION ROCKS (SHUMAGINS)	55.078	-160.517	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	EGG (SAND POINT)	55.277	-160.517	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	NAGAI/MOUNTAIN POINT	54.903	-160.257	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	THE WHALEBACK	55.280	-160.084	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	THE WHALEBACK	55.280	-160.084	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	THE WHALEBACK	55.280	-160.084	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
W GULF	THE WHALEBACK	55.280	-160.084	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	THE WHALEBACK	55.280	-160.084	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	THE WHALEBACK	55.280	-160.084	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	THE HAYSTACKS	55.268	-160.056	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	THE HAYSTACKS	55.268	-160.056	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	THE HAYSTACKS	55.268	-160.056	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	THE HAYSTACKS	55.268	-160.056	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	NAGAI/RK W OF CAPE WEDGE	55.242	-159.958	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	TWINS	54.960	-159.876	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	KUPREANOF POINT	55.563	-159.604	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	KUPREANOF POINT	55.563	-159.604	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	KUPREANOF POINT	55.563	-159.604	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	KUPREANOF POINT	55.563	-159.604	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	KUPREANOF POINT	55.563	-159.604	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	KUPREANOF POINT	55.563	-159.604	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	KUPREANOF POINT	55.563	-159.604	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	CHERNABURA	54.753	-159.550	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	CHERNABURA	54.753	-159.550	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	CHERNABURA	54.753	-159.550	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CHERNABURA	54.753	-159.550	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	CHERNABURA	54.753	-159.550	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	BIG KONIUIJI	55.250	-159.533	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CASTLE ROCK	55.274	-159.496	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	01-Mar-07	31-Mar-07	Skiff-based observation	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	CASTLE ROCK	55.274	-159.496	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	01-Jun-07	30-Jun-07	Skiff-based observation	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CASTLE ROCK	55.274	-159.496	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	CASTLE ROCK	55.274	-159.496	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	01-Sep-07	30-Sep-07	Skiff-based observation	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	CASTLE ROCK	55.274	-159.496	01-Dec-07	31-Dec-07	Skiff-based observation	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	PAUL	55.758	-159.300	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	PAUL	55.758	-159.300	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	PAUL	55.758	-159.300	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Core
W GULF	ATKINS	55.053	-159.290	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Core
W GULF	ATKINS	55.053	-159.290	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Core
W GULF	ATKINS	55.053	-159.290	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	ATKINS	55.053	-159.290	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
W GULF	ATKINS	55.053	-159.290	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Core
W GULF	ATKINS	55.053	-159.290	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Core
W GULF	SPITZ	55.777	-158.898	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	SPITZ	55.777	-158.898	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SPITZ	55.777	-158.898	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	SPITZ	55.777	-158.898	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	SPITZ	55.777	-158.898	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SPITZ	55.777	-158.898	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SPITZ	55.777	-158.898	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	SPITZ	55.777	-158.898	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	SPITZ	55.777	-158.898	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SPITZ	55.777	-158.898	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	SPITZ	55.777	-158.898	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	MITROFANIA	55.837	-158.698	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	MITROFANIA	55.837	-158.698	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	MITROFANIA	55.837	-158.698	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	MITROFANIA	55.837	-158.698	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	SEAL CAPE	55.997	-158.422	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	SEAL CAPE	55.997	-158.422	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	CHANKLIUT	56.133	-158.117	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	CHANKLIUT	56.133	-158.117	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
W GULF	KAK	56.288	-157.835	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	KAK	56.288	-157.835	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	KAK	56.288	-157.835	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	ATKULIK	56.282	-157.733	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	ATKULIK	56.282	-157.733	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Mar-07	31-Mar-07	Aerial survey	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Mar-07	31-Mar-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Jun-07	30-Jun-07	Aerial survey	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Jun-07	30-Jun-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Sep-07	30-Sep-07	Aerial survey	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Sep-07	30-Sep-07	Skiff-based observation/scat collection	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Dec-07	31-Dec-07	Aerial survey	AEB	Foy	Extended
W GULF	LIGHTHOUSE ROCKS	55.780	-157.415	01-Dec-07	31-Dec-07	Skiff-based observation/scat collection	AEB	Foy	Extended
C GULF	SUTWIK	56.518	-157.341	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	UGAIUSHAK	56.754	-156.854	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	AGHIYUK	56.157	-156.808	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CHOWIET	56.009	-156.690	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CHOWIET	56.009	-156.690	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CHOWIET	56.009	-156.690	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	AIUGNAK COLUMNS	56.880	-156.570	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	ROCK	56.879	-156.568	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
W GULF	ROCK	56.879	-156.568	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	ROCK	56.879	-156.568	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C GULF	KILOKAK ROCKS	57.156	-156.275	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KILOKAK ROCKS	57.156	-156.275	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KILOKAK ROCKS	57.156	-156.275	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	NAGAI ROCKS	55.830	-155.792	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	NAGAI ROCKS	55.830	-155.792	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	NAGAI ROCKS	55.830	-155.792	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	CHIRIKOF	55.775	-155.658	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CHIRIKOF	55.775	-155.658	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CHIRIKOF	55.775	-155.658	22-Jun-07	07-Jul-07	Pup counts/handling	NMML	Gelatt	
C GULF	CHIRIKOF	55.775	-155.658	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	PUALE BAY	57.677	-155.385	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	PUALE BAY	57.677	-155.385	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	PUALE BAY	57.677	-155.385	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/TOMBSTONE ROCKS	57.353	-154.819	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE IKOLIK	57.287	-154.792	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/CAPE IKOLIK	57.287	-154.792	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE IKOLIK	57.287	-154.792	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE IKOLIK	57.287	-154.792	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	KODIAK/CAPE IKOLIK	57.287	-154.792	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	TAKLI	58.029	-154.521	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	TAKLI	58.029	-154.521	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	TAKLI	58.029	-154.521	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE ALITAK	56.842	-154.312	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE ALITAK	56.842	-154.312	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE ALITAK	56.842	-154.312	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE KULIAK	58.133	-154.208	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE KULIAK	58.133	-154.208	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE GULL	58.192	-154.160	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE GULL	58.192	-154.160	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CAPE GULL	58.192	-154.160	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/SUNDSTROM	56.683	-154.150	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CAPE UGYAK	58.283	-154.100	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE UGYAK	58.283	-154.100	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CAPE UGYAK	58.283	-154.100	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE NUKSHAK	58.392	-153.982	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE NUKSHAK	58.392	-153.982	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C GULF	CAPE NUKSHAK	58.392	-153.982	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE KULIUK	57.808	-153.933	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE KULIUK	57.808	-153.933	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE KULIUK	57.808	-153.933	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE UGAT	57.874	-153.850	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/CAPE UGAT	57.874	-153.850	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE UGAT	57.874	-153.850	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE UGAT	57.874	-153.850	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	KODIAK/CAPE UGAT	57.874	-153.850	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE UGAT	57.874	-153.850	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	SITKINAK/CAPE SITKINAK	56.572	-153.849	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	SITKINAK/CAPE SITKINAK	56.572	-153.849	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SITKINAK/CAPE SITKINAK	56.572	-153.849	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	SHAKUN ROCKS	58.547	-153.692	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	SHAKUN ROCKS	58.547	-153.692	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SHAKUN ROCKS	58.547	-153.692	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	NOISY	57.933	-153.558	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	TWOHEADED	56.908	-153.546	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	TWOHEADED	56.908	-153.546	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	TWOHEADED	56.908	-153.546	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	TWOHEADED	56.908	-153.546	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	TWOHEADED	56.908	-153.546	15-Jun-07	31-Dec-07	Quarterly scat collection (n≤ 3)	UAF	Wynne	pending Permit 1049-1886
C GULF	TWOHEADED	56.908	-153.546	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	TWOHEADED	56.908	-153.546	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	SHAW	59.000	-153.375	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	SHAW	59.000	-153.375	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SHAW	59.000	-153.375	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/MALINA POINT	58.033	-153.367	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CAPE DOUGLAS	58.858	-153.233	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	CAPE DOUGLAS	58.858	-153.233	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	CAPE DOUGLAS	58.858	-153.233	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/STEEP CAPE	58.208	-153.192	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE PARAMANOF	58.305	-153.047	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE BARNABAS	57.170	-152.884	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/CAPE BARNABAS	57.170	-152.884	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE BARNABAS	57.170	-152.884	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C GULF	KODIAK/CAPE BARNABAS	57.170	-152.884	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	KODIAK/CAPE BARNABAS	57.170	-152.884	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE BARNABAS	57.170	-152.884	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/GULL POINT	57.358	-152.605	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/GULL POINT	57.358	-152.605	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/GULL POINT	57.358	-152.605	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/GULL POINT	57.358	-152.605	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	KODIAK/GULL POINT	57.358	-152.605	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/GULL POINT	57.358	-152.605	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	LATAK ROCKS	58.668	-152.522	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	LATAK ROCKS	58.668	-152.522	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	LATAK ROCKS	58.668	-152.522	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	LATAK ROCKS	58.668	-152.522	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	LATAK ROCKS	58.668	-152.522	15-Jun-07	31-Dec-07	Quarterly scat collection (n≤ 3)	UAF	Wynne	pending Permit 1049-1886
C GULF	LATAK ROCKS	58.668	-152.522	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	LATAK ROCKS	58.668	-152.522	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	USHAGAT/SW	58.913	-152.370	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	USHAGAT/SW	58.913	-152.370	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	USHAGAT/SW	58.913	-152.370	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	USHAGAT/ROCKS SOUTH	58.882	-152.318	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	USHAGAT/ROCKS SOUTH	58.882	-152.318	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	USHAGAT/ROCKS SOUTH	58.882	-152.318	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	USHAGAT/NW	58.967	-152.317	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	UGAK	57.393	-152.292	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	UGAK	57.393	-152.292	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	UGAK	57.393	-152.292	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	UGAK	57.393	-152.292	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	UGAK	57.393	-152.292	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	UGAK	57.393	-152.292	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	SEA OTTER	58.519	-152.222	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	SEA OTTER	58.519	-152.222	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	SEA OTTER	58.519	-152.222	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SEA OTTER	58.519	-152.222	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	SEA OTTER	58.519	-152.222	15-Jun-07	31-Dec-07	Quarterly scat collection (n≤ 3)	UAF	Wynne	pending Permit 1049-1886
C GULF	SEA OTTER	58.519	-152.222	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	SEA OTTER	58.519	-152.222	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C GULF	SEA OTTER	58.519	-152.222	15-Sep-07	31-Dec-07	Land-based observation	UAF	Wynne	pending Permit 1049-1886 (land-based observation (n=10))
C GULF	LONG ISLAND	57.780	-152.215	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	LONG ISLAND	57.780	-152.215	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	LONG ISLAND	57.780	-152.215	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	LONG ISLAND	57.780	-152.215	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	LONG ISLAND	57.780	-152.215	15-Jun-07	31-Dec-07	Quarterly scat collection (n≤ 3)	UAF	Wynne	pending Permit 1049-1886
C GULF	LONG ISLAND	57.780	-152.215	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	LONG ISLAND	57.780	-152.215	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	LONG ISLAND	57.780	-152.215	15-Sep-07	31-Dec-07	Land-based observation	UAF	Wynne	pending Permit 1049-1886 (land-based observation (n=10))
C GULF	SUD	58.900	-152.208	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	SUD	58.900	-152.208	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SUD	58.900	-152.208	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	RK NEAR SEA OTTER	58.508	-152.200	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	RK NEAR SEA OTTER	58.508	-152.200	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	RK NEAR SEA OTTER	58.508	-152.200	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	RK NEAR SEA OTTER	58.508	-152.200	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	RK NEAR SEA OTTER	58.508	-152.200	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	RK NEAR SEA OTTER	58.508	-152.200	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/CAPE CHINIAK	57.632	-152.138	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	KODIAK/CAPE CHINIAK	57.632	-152.138	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE CHINIAK	57.632	-152.138	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	KODIAK/CAPE CHINIAK	57.632	-152.138	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	KODIAK/CAPE CHINIAK	57.632	-152.138	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	KODIAK/CAPE CHINIAK	57.632	-152.138	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	SUGARLOAF	58.888	-152.040	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SUGARLOAF	58.888	-152.040	22-Jun-07	07-Jul-07	Pup handling/branding	NMML	Gelatt	Likely near 07-Jul-07
C GULF	SUGARLOAF	58.888	-152.040	15-Jul-07	30-Jul-07	Land-based observation	NMML	Fritz	3-4 day 'spike' camp from vessel
C GULF	WEST AMATULI	58.950	-152.017	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	WEST AMATULI	58.950	-152.017	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	WEST AMATULI	58.950	-152.017	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	FLAT	59.330	-151.996	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	FLAT	59.330	-151.996	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	FLAT	59.330	-151.996	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	AFOGNAK/TONKI CAPE	58.352	-151.987	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	ELIZABETH/CAPE ELIZABETH	59.156	-151.885	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	ELIZABETH/CAPE ELIZABETH	59.156	-151.885	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C GULF	ELIZABETH/CAPE ELIZABETH	59.156	-151.885	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	SEA LION ROCKS (MARMOT)	58.342	-151.814	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	SEA LION ROCKS (MARMOT)	58.342	-151.814	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	SEA LION ROCKS (MARMOT)	58.342	-151.814	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	SEA LION ROCKS (MARMOT)	58.342	-151.814	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	SEA LION ROCKS (MARMOT)	58.342	-151.814	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	SEA LION ROCKS (MARMOT)	58.342	-151.814	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	MARMOT	58.228	-151.796	08-Jan-07	30-Jan-07	Replicate aerial survey (n=8)	UAF	Wynne	pending Permit 1049-1886
C GULF	MARMOT	58.228	-151.796	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	MARMOT	58.228	-151.796	29-May-07	27-Jul-07	Land-based observation	NMML	Fritz	No disturbance activity
C GULF	MARMOT	58.228	-151.796	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	MARMOT	58.228	-151.796	15-Jun-07	15-Jun-07	Aerial survey	UAF	Wynne	under Permit 782-1768 (n=1)
C GULF	MARMOT	58.228	-151.796	22-Jun-07	07-Jul-07	Pup counts/handling/branding	NMML	Gelatt	Likely near 03-Jul-07
C GULF	MARMOT	58.228	-151.796	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	MARMOT	58.228	-151.796	01-Sep-07	31-Dec-07	Quarterly aerial survey (n=2)	UAF	Wynne	pending Permit 1049-1886
C GULF	MARMOT	58.228	-151.796	01-Sep-07	31-Dec-07	Quarterly scat collection (n≤ 2)	UAF	Wynne	pending Permit 1049-1886
C GULF	NAGAHUT ROCKS	59.100	-151.772	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	NAGAHUT ROCKS	59.100	-151.772	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	NAGAHUT ROCKS	59.100	-151.772	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	PERL ROCKS	59.090	-151.693	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	PERL ROCKS	59.090	-151.693	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	PERL ROCKS	59.090	-151.693	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	PERL	59.096	-151.663	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	PERL	59.096	-151.663	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	PERL	59.096	-151.663	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	EAST CHUGACH	59.105	-151.443	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	EAST CHUGACH	59.105	-151.443	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	EAST CHUGACH	59.105	-151.443	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	GORE POINT	59.200	-150.967	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	GORE POINT	59.200	-150.967	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	GORE POINT	59.200	-150.967	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	NUKA POINT	59.300	-150.717	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	NUKA POINT	59.300	-150.717	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
C GULF	NUKA POINT	59.300	-150.717	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
C GULF	OUTER (PYE)	59.342	-150.383	15-May-07	31-May-07	Skiff-based observation	NMML	Fritz	
C GULF	OUTER (PYE)	59.342	-150.383	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
C GULF	OUTER (PYE)	59.342	-150.383	22-Jun-07	07-Jul-07	Pup counts	NMML	Gelatt	
C GULF	OUTER (PYE)	59.342	-150.383	15-Jul-07	30-Jul-07	Skiff-based observation	NMML	Fritz	
E GULF	RABBIT	59.363	-150.380	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	STEEP POINT	59.484	-150.257	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	GRANITE CAPE	59.605	-149.760	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	SEAL ROCKS (KENAI)	59.520	-149.625	01-Jun-07	31-May-08	Video observations	ASLC	MANISCALCO	
E GULF	SEAL ROCKS (KENAI)	59.520	-149.625	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	NATOA	59.632	-149.598	01-Jun-07	31-May-08	Video observations	ASLC	MANISCALCO	
E GULF	CHISWELL ISLANDS	59.600	-149.567	01-Jun-07	31-May-08	Video observations	ASLC	MANISCALCO	
E GULF	CHISWELL ISLANDS	59.600	-149.567	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	CHISWELL ISLANDS	59.600	-149.567	01-Jul-07	01-Jul-07	Pup handling/branding	ASLC	MANISCALCO	
E GULF	AIALIK CAPE	59.705	-149.524	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	RUGGED	59.833	-149.385	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	RUGGED	59.833	-149.385	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	RUGGED	59.833	-149.385	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	RUGGED	59.833	-149.385	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	CAPE RESURRECTION	59.863	-149.282	01-Jun-07	31-May-08	Video observations	ASLC	MANISCALCO	
E GULF	CAPE RESURRECTION	59.863	-149.282	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	CAPE RESURRECTION	59.863	-149.282	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	CAPE RESURRECTION	59.863	-149.282	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	CAPE RESURRECTION	59.863	-149.282	15-Sep-07	31-Dec-07	Captures: adult females	ASLC	ANDREWS	FLOATING TRAP CAPTURE
E GULF	CAPE RESURRECTION	59.863	-149.282	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	CAPE FAIRFIELD	59.922	-148.805	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	CAPE JUNKEN	59.913	-148.643	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	CAPE PUGET	59.942	-148.450	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	PROCESSION ROCKS	60.006	-148.287	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	PROCESSION ROCKS	60.006	-148.287	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	PROCESSION ROCKS	60.006	-148.287	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	PROCESSION ROCKS	60.006	-148.287	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	POINT ELRINGTON	59.933	-148.253	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	POINT ELRINGTON	59.933	-148.253	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	POINT ELRINGTON	59.933	-148.253	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	POINT ELRINGTON	59.933	-148.253	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	DANGER	59.925	-148.083	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	POINT LaTOUCHE	59.940	-148.050	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	PERRY	60.733	-147.910	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
E GULF	PERRY	60.733	-147.910	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	PERRY	60.733	-147.910	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	PERRY	60.733	-147.910	12-Nov-07	23-Nov-07	Captures: pups	ADFG	Rea	dates are estimates due to charter availability
E GULF	THE NEEDLE	60.111	-147.603	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	THE NEEDLE	60.111	-147.603	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	THE NEEDLE	60.111	-147.603	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	THE NEEDLE	60.111	-147.603	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	WOODED (FISH)	59.882	-147.344	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	GLACIER	60.855	-147.242	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	GLACIER	60.855	-147.242	18-Jun-07	27-Jun-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	GLACIER	60.855	-147.242	03-Sep-07	12-Sep-07	Captures: juveniles	ASLC	MELLISH	DIVE CAPTURE
E GULF	GLACIER	60.855	-147.242	15-Sep-07	31-Dec-07	Captures: juveniles	ASLC	ANDREWS	DIVE CAPTURE
E GULF	GLACIER	60.855	-147.242	12-Nov-07	23-Nov-07	Captures: pups	ADFG	Rea	dates are estimates due to charter availability
E GULF	SEAL ROCKS	60.163	-146.838	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	SEAL ROCKS	60.163	-146.838	22-Jun-07	07-Jul-07	Pup handling/branding	NMML	Gelatt	Likely near 05-Jul-07
E GULF	CAPE HINCHINBROOK	60.233	-146.642	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	MIDDLETON	59.472	-146.313	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	HOOK POINT	60.333	-146.260	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
E GULF	CAPE ST. ELIAS	59.792	-144.603	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	CAPE FAIRWEATHER	58.792	-137.938	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	HARBOR POINT	58.605	-137.637	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	TARR INLET	58.955	-136.900	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	TARR INLET	58.955	-136.900	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	GRAVES ROCK	58.238	-136.757	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	3-4 days beginning on or after 1 July
SE AK	CAPE CROSS	57.912	-136.568	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	INIAN	58.272	-136.400	27-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	WHITE SISTERS	57.635	-136.257	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	WHITE SISTERS	57.635	-136.257	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	3-4 days beginning on or after 1 July
SE AK	SOUTH MARBLE	58.645	-136.047	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during month
SE AK	SOUTH MARBLE	58.645	-136.047	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	SOUTH MARBLE	58.645	-136.047	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	POINT CAROLUS	58.367	-136.033	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	POINT CAROLUS	58.367	-136.033	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	SEA LION ISLANDS	57.283	-135.883	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	SEA LION ISLANDS	57.283	-135.883	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	KAIUCHALI (BIORKA)	56.833	-135.563	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
SE AK	KAIUCHALI (BIORKA)	56.833	-135.563	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	EMMONS	57.607	-135.523	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	JACOB ROCK	56.788	-135.497	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	JACOB ROCK	56.788	-135.497	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	BIALI ROCK	56.712	-135.342	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	BIALI ROCK	56.712	-135.342	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	2-3 days beginning on or after 1 July
SE AK	GRAN (EDGE) POINT	59.133	-135.240	01-Apr-07	30-Apr-07	Skiff-based observation	ADFG	Jemison	7 days in 2-week period
SE AK	GRAN (EDGE) POINT	59.133	-135.240	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	GRAN (EDGE) POINT	59.133	-135.240	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	GRAN (EDGE) POINT	59.133	-135.240	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	MET POINT	58.933	-135.167	01-Apr-07	30-Apr-07	Skiff-based observation	ADFG	Jemison	7 days in 2-week period
SE AK	MET POINT	58.933	-135.167	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	MET POINT	58.933	-135.167	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	TENAKEE CANNERY POINT	57.775	-135.072	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	TENAKEE CANNERY POINT	57.775	-135.072	01-Dec-07	31-Dec-07	Skiff-based observation	ADFG	Jemison	6 days during month
SE AK	LITTLE ISLAND	58.540	-135.050	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	LITTLE ISLAND	58.540	-135.050	01-Aug-07	31-Aug-07	Skiff-based observation	ADFG	Jemison	Under AT permit; will go more than once if new permit in place; 1 day during 1st week, weather permitting
SE AK	BENJAMIN	58.562	-134.913	02-Jan-07	15-Jan-07	Skiff-based observation	ADFG	Jemison	6 days in 2-week period
SE AK	BENJAMIN	58.562	-134.913	14-Feb-07	28-Feb-07	Skiff-based observation	ADFG	Jemison	7 days in 2-week period
SE AK	BENJAMIN	58.562	-134.913	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	BENJAMIN	58.562	-134.913	01-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	1 day either: early June, 29 June or ~15 July
SE AK	BENJAMIN	58.562	-134.913	01-Dec-07	16-Dec-07	Skiff-based observation	ADFG	Jemison	Will not happen if do not have full permit; 7 days in 2-week period
SE AK	SEA LION ROCK (PUFFIN BAY)	56.252	-134.832	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	SEA LION ROCK (PUFFIN BAY)	56.252	-134.832	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	POINT MARSDEN	58.050	-134.808	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	POINT LULL	57.310	-134.807	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	LARCH BAY	56.210	-134.737	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	CAPE OMMANEY	56.175	-134.705	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	CAPE OMMANEY	56.175	-134.705	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	PATTERSON POINT	56.540	-134.637	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	HAZY	55.867	-134.567	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	HAZY	55.867	-134.567	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	3-4 days beginning on or after 1 July
SE AK	YASHA	56.963	-134.558	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	CORONATION	55.928	-134.283	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	CORONATION	55.928	-134.283	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	CIRCLE POINT	58.125	-134.080	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	

Appendix 3. Coordination matrix.

Region	Site	Latitude	Longitude	Start date	End date	Activity	Institution	Contact	Comment
SE AK	DOROTHY	58.237	-134.057	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	TURNABOUT	57.130	-133.972	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	ROUND ROCK	57.260	-133.935	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	THE BROTHERS	57.272	-133.873	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	MIST	57.988	-133.845	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	CAPE ADDINGTON	55.438	-133.822	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	CAPE ADDINGTON	55.438	-133.822	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	TIMBERED	55.697	-133.795	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	TIMBERED	55.697	-133.795	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	SAIL	57.352	-133.722	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	POINT LEAGUE (STEVENS PASSAGE)	57.607	-133.642	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	CAPE BARTOLOME	55.230	-133.617	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	CAPE BARTOLOME	55.230	-133.617	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	SUNSET	57.500	-133.587	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	SUNSET	57.500	-133.587	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	FORRESTER/NORTH RK	54.873	-133.562	01-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Hastings	ADFG interim permit +1 day on AT permit in Jun & 1 day in Jul; 15 days in June and 15 days in July
SE AK	FORRESTER/C HORN RK	54.847	-133.550	01-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Hastings	ADFG interim permit +1 day on AT permit in Jun & 1 day in Jul; 15 days in June and 15 days in July
SE AK	FORRESTER/LOWRIE	54.862	-133.537	01-Jun-07	31-Jul-07	Land-based observation	ADFG	Hastings	Daily surveys
SE AK	FORRESTER/SEA LION RK	54.843	-133.535	01-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Hastings	ADFG interim permit +1 day on AT permit in Jun & 1 day in Jul; 15 days in June and 15 days in July
SE AK	FORRESTER COMPLEX	54.838	-133.527	01-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Hastings	ADFG interim permit +1 day on AT permit in Jun & 1 day in Jul; 15 days in June and 15 days in July
SE AK	FORRESTER/FORRESTER ISLAND	54.838	-133.527	01-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Hastings	ADFG interim permit +1 day on AT permit in Jun & 1 day in Jul; 15 days in June and 15 days in July
SE AK	FORRESTER/EAST RK	54.850	-133.520	01-Jun-07	31-Jul-07	Skiff-based observation	ADFG	Hastings	ADFG interim permit +1 day on AT permit in Jun & 1 day in Jul; 15 days in June and 15 days in July
SE AK	WOLF ROCK	55.020	-133.487	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	WOLF ROCK	55.020	-133.487	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	SAKIE POINT	55.055	-133.237	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	HORN CLIFF	56.845	-132.787	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	POINT MARSH	54.710	-132.285	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	POINT MARSH	54.710	-132.285	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	GRINDALL	55.440	-132.108	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	GRINDALL	55.440	-132.108	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	GRINDALL	55.440	-132.108	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	EASTERLY	55.895	-132.088	01-May-07	31-May-07	Skiff-based observation	ADFG	Jemison	Under AT permit; 1 day during 1st week, weather permitting
SE AK	EASTERLY	55.895	-132.088	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	
SE AK	WEST ROCK	54.813	-131.495	08-Jun-07	30-Jun-07	Aerial survey	NMML	Fritz	
SE AK	WEST ROCK	54.813	-131.495	27-Jun-07	18-Jul-07	Skiff-based observation	ADFG	Jemison	