



Pre-Permitting Environmental / Socio-Economic Data Report Series

Report Series N- Terrestrial Wildlife and Habitats

Report N-11 Iliamna Lake Harbor Seal Tables 2004-2007

Submitted to the Alaska Department of Natural Resources January 2010

Preliminary data. Do not cite or quote.

The Pebble Partnership is providing environmental and socio-economic baseline data collected to inform the development of the Pebble Project to state and federal agencies, project stakeholders and the general public prior to project permitting as part of its commitment to full and open disclosure.

A comprehensive Environmental Baseline Document (EBD) will subsequently be prepared and appended to future project permit applications. The EBD will also be made publicly available when complete.

Collected for the Pebble Partnership by:



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TABLE N-11.1
Characteristics of Harbor Seal Haulout Sites Reported in Iliamna Lake

Site No.	Description	Latitude (degrees North) ^a	Longitude (degrees West) ^a	Remarks
LI-01 ^b	Rocky islet	59.71973	154.21309	
LI-02 ^b	Island; sandy shore, west side	59.71027	154.38779	Site S2 of Mathisen & Kline (1992)?
LI-03 ^b	Island; sandy shore	59.72405	154.42167	
LI-04 ^b	Seal Island; sandy shore	59.75050	154.44252	Site S1a of Mathisen & Kline (1992); combined with site LI-05 for Pebble surveys
LI-05 ^b	Seal Island; sand & gravel shore	59.74927	154.44170	Site S1b of Mathisen & Kline (1992)?
LI-06 ^b	Island; sand & gravel shore	59.72747	154.49326	
LI-07 ^b	Island; sand & gravel shore	59.55775	154.85690	Probably Site Th1 of Mathisen & Kline (1992)
LI-08 ^b	Site not found; location uncertain	59.55099	154.87385	Site Th1 of Mathisen & Kline (1992); same as site LI-07?
LI-09 ^b	Thompson Island; sandy shore	59.54569	154.92510	Site Th2 of Mathisen & Kline (1992)
LI-10	Not seen; west of survey area	59.56667	155.63331	Reported by Small (but no seals seen) ^c
LI-11	Not seen; west of survey area	59.50833	155.23831	Reported by Small (but no seals seen) ^c
LI-12	Island; rock ledges	59.68835	154.69404	Located May 10, 2005; also reported by Small ^c
LI-13	Island; not surveyed in 2005	59.52807	154.85173	Reported by Withrow (but no seals seen) ^d
LI-14	Island; sand & gravel shore	59.71116	154.34314	Located June 28, 2005
LI-15	Rocky islet	59.72632	154.23073	Located June 29, 2005
LI-16	Triangle Island; gravel beach	59.72020	154.44637	Located June 29, 2005
LI-17	Island; gravel spit	59.72541	154.36240	Located July 27, 2007

Notes:

- a. Coordinates given in decimal degrees, using map datum NAD 83.
- b. Sites LI-01 through LI-09 from Small (2001), who based his survey on sites reported by Mathisen and Kline (1992).
- c. From survey on August 6, 2003 (Small, pers. comm., 2006).
- d. From survey on August 10, 2005 (Withrow, pers. comm., 2006).

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TABLE N-11.2

Total Number of Harbor Seals Counted and Weather Conditions during Aerial Surveys, Iliamna Lake, March-December 2005

Date	Local Time	Number of Seals Counted			Weather Conditions			
		Hauled Out	In Water	Total	Air Temp. (°C)	Wind Direction	Wind Speed (kilometers/hour)	Sky Condition
March 30	12:00	0	0	0	-16	WSW	15	Partly cloudy
April 25	12:00	0	1	1	11	ESE	11	Clear
May 4	15:00	101	0	101	9	E	28	Overcast
May 10	14:00	4	1	5	13	ESE	17	Scattered clouds
May 11	13:00	1	0	1	15	ESE	19	Mostly cloudy
May 25	19:00	0	0	0	12	ESE	22	Clear
May 26	13:00	0	0	0	9	E	17	Mostly cloudy
May 31	10:30	0	0	0	9	E	24	Light rain
June 28	16:00	105	0	105	22	SSW	17	Clear
June 29	09:30	96	2	98	14	S	9	Clear
July 21	12:00	30	0	30	14	SE	7	Overcast
July 22	12:00	107	0	107	17	E	30	Clear
July 26	16:00	125	0	125	14	ESE	17	Light rain
August 11	16:00	194	0	194	22	SSE	11	Clear
August 17	10:00	276	0	276	13	N	15	Light rain
August 21	11:00	211	0	211	15	WNW	17	Mostly cloudy
August 29	13:00	199	0	199	12	WSW	17	Mostly cloudy
September 8	15:00	64	0	64	12	E	11	Clear
October 10	14:00	2	0	2	3	NNE	13	Mostly cloudy
December 13	12:00	0	0	0	0	E	37	Overcast
TOTAL		1,515	4	1,519				
Mean		75.8	0.2	76.0				

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TABLE N-11.3

Total Number of Harbor Seals Counted and Weather Conditions during Aerial Surveys, Iliamna Lake, May-October 2007

Date	Local Time	Number of Seals Counted			Air Temp (°C)	Wind Direction	Wind Speed (kilometers/hour)	Sky Condition
		Hauled Out	In Water	Total				
May 21	16:00	0	0	0	0	ESE	13	Partly cloudy
June 20	11:30	51	0	51	9	Variable	7	Clear
July 16	15:00	238	0	238	10	SW	19	Overcast
July 27	10:30	40	0	40	16	Calm	–	Clear
August 14	13:00	311	0	311	9	SW	15	Light rain
August 15	14:30	313	0	313	9	N	13	Overcast
August 29	13:00	85	1	86	19	NNW	11	Partly cloudy
September 12	10:30	79	0	79	11	WSW	9	Overcast
October 11	11:00	0	0	0	5	E	22	Overcast
TOTAL		1,117	1	1,118				
Mean		124.1	0.1	124.2				

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TABLE N-11.4

Counts of Harbor Seals by Date at 11 Haulout Sites (by general island group), Iliamna Lake, March-December 2005

Date	Porcupine Island Group		Flat / Seal Islands Group						Thompson Island Group		Rabbit Islands Group	TOTAL
	LI-01	LI-15	LI-02	LI-03	LI-05	LI-06	LI-14	LI-16	LI-07	LI-09	LI-12	
March 30	0	0	0	0	0	0	0	0	0	0	ns	0
April 25	0	0	0	0	0	0	0	0	0	0	ns	0
May 4	0	0	0	0	0	0	0	0	101	0	ns	101
May 10	0	0	0	0	0	0	0	0	1	0	3	4
May 11	0	0	1	0	0	0	0	0	0	0	ns	1
May 25	0	0	0	0	0	0	0	0	0	0	0	0
May 26	0	0	0	0	0	0	0	0	0	0	0	0
May 31	0	0	0	0	0	0	0	0	0	0	0	0
June 28	0	0	24	2	0	0	76	0	3	0	ns	105
June 29	0	7	10	0	0	0	61	18	0	0	ns	96
July 21	0	3	0	0	1	0	3	0	2	0	21	30
July 22	0	0	14	0	0	1	49	0	31	0	12	107
July 26	0	0	0	0	35	0	35	0	34	0	21	125
August 11	0	3	38	0	30	0	0	48	68	7	0	194
August 17	0	0	108	0	81	0	0	0	86	1	0	276
August 21	0	0	39	0	51	0	0	0	121	0	0	211
August 29	0	0	0	0	39	0	62	0	87	11	0	199
September 8	0	0	0	0	7	0	0	0	57	0	0	64
October 10	1	0	0	0	0	1	0	0	0	0	0	2
December 13	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	13	234	2	244	2	286	66	591	19	57	1,515

Notes:

Refer to Figure N-5.1 and Table N-11.1 for locations and descriptions of haulout sites.

ns = not surveyed.

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TABLE N-11.5

Counts of Harbor Seals by Date at 12 Haulout Sites (by general island group), Iliamna Lake, May-October 2007

Date	Porcupine Island Group		Flat / Seal Islands Group							Thompson Island Group		Rabbit Islands Group	TOTAL
	LI-01	LI-15	LI-02	LI-03	LI-05	LI-06	LI-14	LI-16	LI-17	LI-07	LI-09	LI-12	
May 21	0	0	0	0	0	0	0	0	3	0	0	0	0
June 20	0	2	0	0	2	0	0	0	0	36	0	8	51
July 16	0	0	9	0	0	0	152	0	1	35	0	42	238
July 27	0	0	0	1	0	0	15	0	0	3	2	18	40
August 14	0	0	44	0	181	0	0	0	0	84	2	0	311
August 15	0	1	20	0	190	0	0	0	0	97	5	0	313
August 29	0	20	0	0	0	9	0	0	0	50	6	0	85
September 12	0	0	0	0	42	0	0	0	0	37	0	0	79
October 11	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	23	73	1	415	9	167	0	4	342	15	68	1,117

Notes:

Refer to Figure N-5.2 and Table N-11.1 for locations and descriptions of haulout sites.

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