

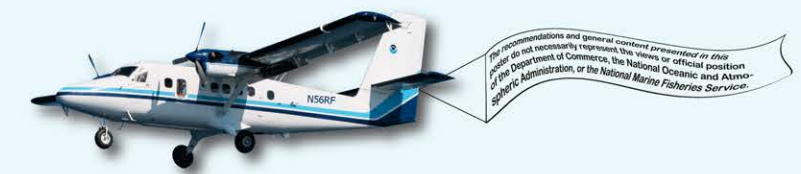
Freshwater Harbor Seals of Lake Iliamna, Alaska

Updated counts and research coordination for 2010



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Lake Iliamna is home to a small colony of harbor seals (*Phoca vitulina*). These seals are known to live in the lake year round and although the lake is connected to Bristol Bay via the Kvichak River (120 km in length), there are no known accounts of immigration or emigration. Concerns over the conservation status of these seals, their atypical freshwater habitat, and their continued availability for a small Alaska Native subsistence harvest remain high, because of potential impacts from development of the Pebble gold and copper mines (24 km from the lake).

In 2009, we flew 5 surveys during the spring and summer months, at different times of day and in various weather conditions, to determine the current abundance and distribution of these seals and evaluate daily and seasonal variation.

In May, the lake surface was still frozen and no seals were seen, though we did not survey all of the leads or cracks in the ice. In June, the peak time for pupping elsewhere in the state, no pups were seen in the lake.

Non-pup counts were lower than expected with only 27 seals sighted. Local Alaska Native observers have remarked that "everything here happens a month late", suggesting that future surveys for Iliamna harbor seal pups should be in July.

Unadjusted (raw) counts in August were typical (~180-230 seals), and small seals, possibly young of the year, were observed.

In 2010, in cooperation with our partners the Bristol Bay Native Association (BBNA), University of Alaska Anchorage (UAA), and the Newhalen Tribe, we intend to fly surveys in April (to obtain counts when the lake is frozen over), July (to assess pupping), August (to supplement annual molting counts) and September/October (to obtain post-molting counts). The BBNA also plans a Local Traditional Knowledge (LTK) study in the area, asking elders and hunters a variety of questions to help document the movements and importance of this unique group of freshwater seals.



Lake Iliamna



Recent Counts of Harbor Seals in Lake Iliamna, Alaska

Date	7/24/2008	7/25/2008	8/2/2008	8/3/2008	8/15/2008	8/20/2008	5/9/2009	6/14/2009	6/14/2009	8/15/2009	8/20/2009	8/20/2009	8/22/2009
Observer	Withrow/Yano	Withrow/Yano	Withrow/Yano/London	London	Withrow/Yano	Withrow/Yano	Withrow	Withrow	Withrow	Withrow/Yano	Withrow/Yano	Withrow/Yano	Withrow/Yano
Affiliation	NMML	NMML	NMML	NMML	NMML	NMML	NMML	NMML	NMML	NMML	NMML	NMML	NMML
Waypoint & Count	14:07	14:47	14:23	16:15	10:14	11:44	iced over	14:25	15:16	16:51	14:34	16:38	13:59
Previous WPT													
New WPT (NMML)													
LI01	JF15A	3	1	0	0	0	0	0	0	0	0	0	0
LI_dew_008	JF15B							0	0	0	0	0	0
LI_dew_010	JF15C							21	227	0	0	0	0
LI_DEW51	JF16H	120	57	122	17	0	0	0	0	0	0	0	0
LI14_ABR; JF16new; DEW_006	JF16I							0	0	0	0	0	1
LI17_ABR	JF16J							0	0	0	0	0	0
LI18_ABR	JF16K							0	0	0	0	0	0
LI19_ABR	JF16L							0	0	31	0	0	0
LI02; S1 Seal Is.	JF16C	0	3	2	0	17	0	0	0	0	0	0	0
LI03; S2	JF16D	6	0	17	6	0	0	0	0	0	0	0	0
LI05	JF16E&F	2	2	31	1	154	174	0	0	63	61	100	147
LI06	JF16G	0	0	0	0	0	0	0	0	0	0	0	0
LI_DEW03	JF16B	0	0	0	0	0	0	0	0	0	0	0	0
LI_DEW02	JF16A	0	0	0	0	0	0	0	0	0	0	0	0
LI07; Th1	JF19B	18	19	63	0	54	39	0	0	34	33	58	66
LI05; Th2	JF19D	2	0	0	0	7	3	0	0	3	21	22	14
LI_DEW04	JF19A	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		151	82	235	24	232	216	21	27	131	115	180	228

