

LI-850

UNITED STATES GOVERNMENT

## memorandum

U. S. FISH AND WILDLIFE SERVICE

TO: Glenn Elison, Refuge Manager  
Alaska Peninsula NWR

FROM: Jack Hodges, Eagle Management Specialist  
Raptor Management Studies, Juneau

SUBJECT: Alaska Peninsula Bald Eagle Survey

DATE: May 10, 1983

Our random plot survey of Alaska Peninsula and Kodiak Archipelago was a success. Several breaks in the weather allowed us to finish ahead of schedule. I am glad we were weathered in together with Vern and John at Cold Bay. It gave us a good opportunity to get acquainted and compare notes.

Enclosed are xerox copies of the plots we surveyed between Cape Douglas and Unimak Pass. Of the 206 plots with saltwater shoreline, we surveyed 40. Only the saltwater shoreline was flown. Single lines indicate perched adults, a pair is indicated by a wedge, an active nest is indicated by a circled "N", an immature is indicated by "Im", and a flying bird has the word "fly."

The enclosed tables show the results for each plot. Total estimated adults for the Alaska Peninsula, south side, is  $1442 \pm 21\%$ . Immatures are estimated at  $418 \pm 38\%$ . I would guess that we were seeing at least 90% of the adults present on the shoreline of the plots.

The best eagle habitat seems to be offshore islands and mainland headlands. The Shumigan Islands, Semidi Islands, and Sanak Island probably have the highest eagle nesting densities. I would guess they probably have the greatest number of wintering eagles as well. We also noticed a significant number of eagles along the sandy beaches at the heads of bays and coves. This was especially true in the northern 2/3 of the peninsula. I wonder what they were feeding on, possibly sandlances? Immatures were present in greater numbers in these areas, such as Kujulik Bay, Wide Bay, and Dry Creek in Chignik Bay.

We saw four peregrine falcons, one on the south tip of Kupreanof Peninsula, one on Nagai Island, and two on Sanak Island. We likely saw only a small portion of the peregrines present.

The estimated adult population for the Kodiak Archipelago is  $1082 \pm 23\%$ . Adults averaged 8.52 per plot on Kodiak compared to 7.0 on the peninsula.

Hopefully this information will be of use to you. Surveying these plots periodically, every five years for example, would provide good population trend data. The expanded population estimate has good confidence limits as well.

Thank you again for your support.

*Jack Hodges*

1983 Bald Eagle Plot Survey - Alaska Peninsula

Plot No.	Adults Perched	Ad. on Nest	Adults Flying	Total Adults	Imm. Perched	Imm. Flying	Total Immature
-143-19	4			4			0
-145-23	5	3		8	2		2
-140-19	1		3	4		1	1
-139-20	4	2		6			0
-139-21	1	1	3	5	1		1
-151-24	2			2			0
-141-23	8	2		10	5		5
-143-24	3	1		4			0
-143-25	7	9	3	19			0
-142-25	3	5		8	2	3	5
-143-26	3	3		6			0
-102 +1	14	1		15	10		10
-103 +1	2	1	1	4	4	2	6
-105 -2	7	1		8			0
-120-12	1	1		2			0
-127-17	4	1	1	6	2	1	3
-128-19	13	8	3	24	6	2	8
-125-13	2	2		4			0
-124-15	3	3	2	8	1	1	2
-126-14	2	4	1	7	1	1	2
-133-15	5	0	2	7	1	2	3
-133-16	2			2			0
-135-18	7	2		9		1	1
-131-15				0			0
-130-15	2			2	3	1	4
-129-15	3		1	4			0
-128-15	7	2		9	3		3
-129-16	1			1	1		1
-131-19	7	4		11			0
-115 -7	2	3		5	6		6
-113 -6	6	2		8	4		4
-112 -7	5	1		6			0
-111 -7	1	1		2			0
-116 -9	2	2		4			0
-116-10	2	4	1	7		1	1
-117-11	4	3	1	8			0
-108 -4	6	2	1	9	8		8
-94 +6	6	2		8			0
-93 +6	7	7	1	15	4	1	5
-91 +9	7	2		9			0
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Mean	4.28	2.13	.60	7.00	1.60	.43	2.03
SD				4.79			2.71
$\hat{T}$ = Estimated Total*				1442			418
$\sqrt{\text{Var}(\hat{T})} = \sqrt{N(N-n)SD^2/n}$				140			79
95% Confidence Limits				± 21%			± 38%

\* n = 40    N = 206