AERIAL RECONAISSANCE OF EMPEROR GEESE AND ASSOCIATED WATERBIRDS ON THE BRISTOL BAY COASTAL FRINGE, NORTHERN ALASKA PENINSULA, BETWEEN KVICHAK BAY AND PORT MOLLER 25 APRIL 1986

by

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INTRODUCTION

A aerial reconaissance was conducted along the Bristol Bay coast of the northern Alaska Peninsula, between Kvichak Bay and Port Moller (Fig. 1) on 25 April 1986, prior to the sixth annual emperor goose survey. The purpose of the reconaissance was to assess ice conditions and locate geese and to report these data to the primary survey team (R. J. King, Migratory Bird Management Project, Fairbanks; and C. P. Dau, Izembek NWR, Cold Bay), thus enabling them to assess, in part, the best possible time for conducting the 1986 survey in southwestern Alaska. This reconaissance fulfilled the requirements of AWPA WR-68 H. 1.

Coastal marine and estuarine habitats were virtually devoid of ice, except in upper Kvichak Bay, which is not surveyed during the annual counts. Perhaps 90% of the tundra ponds we flew over enroute to and from the survey (on the northern peninsula and Bristol Bay lowlands) were ice-covered or were marginally opened, however there was no snow cover in terrestrial environs. We counted 39,148 emperors during the reconaissance.

METHODS

The survey was accomplished by the authors in a PA-32 Cherokee 6 (4602F) piloted by F. Anderson (King Flying Service, Naknek, Alaska). Hood observed from the right front seat, Wilk observed from the left rear seat. The use of a Cherokee 6 is generally not encouraged for aerial survey work because of the low wing-position. However, at survey time this aircraft type was the only one available. We believe emperor goose visibility bias was minimal. For smaller species, bias was much greater, evidenced by our tallies of unidentified species (Table 1).

Survey altitude was generally maintained at 90m AGL, and air speed was generally 160-170 kph. The coastline, estuaries, bays and lagoons along the survey route were inventoried and wildlife observations were recorded with emphasis on emperor geese. Ice conditions were also noted.

RESULTS

Virtually the entire survey route was devoid of ice. Ice chunks covered the tidal flats of upper Kvichak Bay, margins of Egegik, Ugashik and Meshik estuaries had scattered ice but coverage was generally insignificant. Naknek River break-up occurred in early April this year. Survey weather conditions were good. We encountered intermittent low ceilings in Kvichak Bay and along segments 4 and 12.

Table 1 lists the results of our wildlife observations with segments keyed to Figure 1.

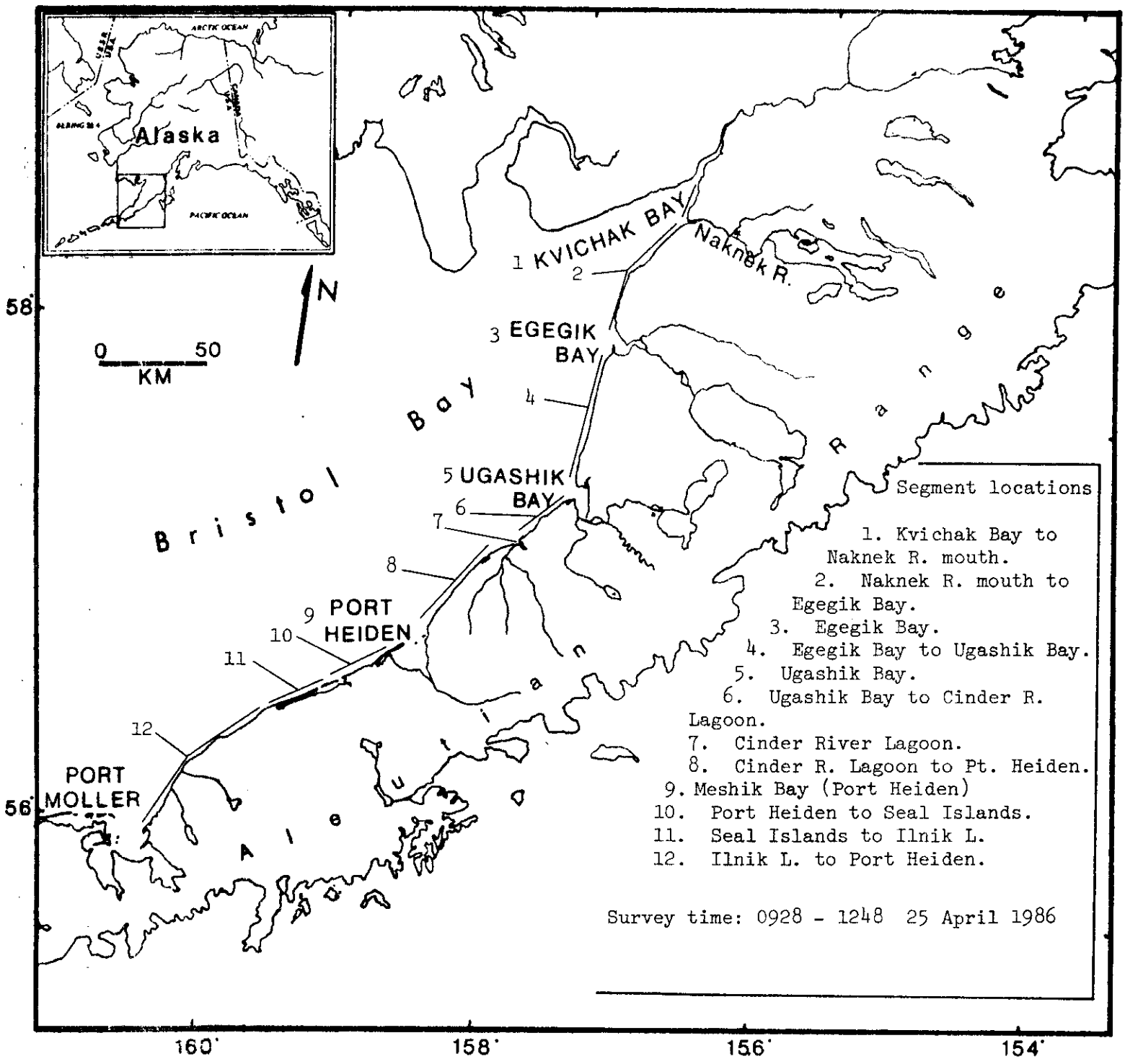


Fig. 1. Survey segments and place names from reconaissance conducted between Kvichak Bay and Port Moller, northern Alaska Peninsula.

Table 1. Wildlife species composition from preliminary aerial survey conducted along the Bristol Bay coast between Kvichak Bay and Port Moller, 25 April 1986.

	Survey segment[a]												
	1	2	3	4	5	6	7	8	9	10	11	12	Totals
Emperor goose				5	2280		10,845		24,658	5	1350		39,148
Canada goose			42	4	20								66
Greater white-fronted goose	75												75
Unid. goose (dk.)	15	40	15		30								100
Steller's eider				25	111	57	225	153	315[b]	656			1542
Common eider												3	3
Unid. eider						6				3200	3		3209
Unid. seaducks[c]											70	50[d]	120
Northern pintail				40	2600		6155		224			1	9020
Black scoter		15		526	6	8	15	24	80	20	25	25	744
White-winged scoter				187				1		5	155	4	352
Surf scoter								2	20				22
Unid. scoter				42		20	800		218	e		90	1170
Common merganser			12		17								29
Scaup spp.				15	155				35				205

Table 1. Continued.

	1	2	3	4	5	6	7	8	9	10	11	12	Totals
Goldeneye spp.				2							2		4
Old squaw							200		2[f]				202
Harlequin								g				3	3
Unid. ducks				50	65		300						415
Unid. loon						1							1
Glaucous-winged gull	6	23	3	1									33
Mew gull			1	1									2
Unid. gull		2545[h]	550	124	93[h]	17	60[h]		30			h	3419
Unid. shorebird				70	1000		80	1500					2650
Common raven	3												3
Bald eagle				2		8	1			2	7	7	27
Sea otter				1				1					2
Walrus[i]										25			25
Unid. whale				1[j]				5					6
Unid. seal[k]													

[a]Segments keyed to map Fig. 1.
[b]Up to 500-700 more were observed but numbers were uncertain.
[c]Scoters, eiders and related species.
[d]Additional birds present but numbers unknown.
[e]Additional birds present but not tallied.
[f]Possibly up to 300 more birds present but exact numbers unknown.
[g]Some birds observed in low numbers.
[h]Ubiquitous, more birds present than those tallied.
[i]Photo taken at Cape Seniavin haulout. Six beheaded walrus carcasses were counted.
[j]Seven other whales were observed between segments 1-8, but locations were unknown.
[k]Observed in low numbers along coastal tributaries, but numbers unavailable.