## Trip Report:

# Capture and Marking of White-fronted Geese Near Hook Lagoon, Alaska Peninsula, 4 July 1988

by

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#### ABSTRACT

Molting Pacific white-fronted geese (<u>Anser albifrons</u>) were captured near Hook Lagoon, Alaska Peninsula on 4 July 1988. Seventeen geese were banded, 15 of these with radio transmitters, and 14 of these with alpha numeric neck collars. Estimates of molting geese on 2 lakes where geese were captured included 1,500-2,000 whitefronts and 500 Canada geese (<u>Branta canadensis</u>).

## INTRODUCTION

The Alaska Peninsula National Wildlife Refuge assisted the Alaska Fish and Wildlife Research Center (the Center) in a study of subpopulations of Pacific white-fronted geese by capturing geese on the Alaska Peninsula. This effort was opportunistic, and occurred during an annual duck production survey.

#### CAPTURE AREA AND METHOD

Based on past observations of whitefronts in the Ugashik drainage of the Alaska Peninsula in recent years (R. Wilk and R. Gill, pers. obs.), we determined that several lakes south and east of Hook Lagoon (Fig. 1) would be the focus of incidental searches for molting geese (for capture) during late spring and early summer.

On 21 June, R. Wilk and pilot J. Payne estimated that between 1,400 and 1,500 whitefronts along with 400-500 Canada (probably mostly subspecies <u>minima</u> occurred on 2 large lakes in the vicinity of Hook Lagoon (see Fig. 1) during a brief overflight in a Cessna 206. No other large flocks were seen in the area. These geese were in smaller flocks of 200-500 birds in each which collectively comprised the larger totals. After 2 or 3 low passes in the aircraft, only perhaps 5-10% of the birds flushed. The remainder did not flush, nor did they appear intimidated by the aircraft. At least some of the birds may have been molting, although direct evidence was lacking.

On 3 July, R. and K. Wilk set up a corral on the south shore of Lake A to possibly drive molting geese with a helicopter if the opportunity occurred. The next day, we attempted to "herd" several flocks of geese toward the corral with a Bell 206 B III Jet Ranger helicopter (piloted by K. G. Butters, Trans-Alaska Helicopters), but efforts were unsuccessful. We then decided to run down the geese on foot by pushing them into <u>Elymus</u> stands along the lake shores. Geese were sexed by cloacal examination, measured with vernier calipers and a spring scale (to nearest 25 grams), banded, neck collared and fit with transmitter packs provided by the Center.

### **RESULTS AND DISCUSSION**

Fourteen females and 3 males were measured and marked. Of these, 3 females were judged to be yearlings, based on the absence of speckling on their bellies and relatively lighter weights. Twelve geese were taken from Lake A and 5 from Lake B (Fig. 1). Table 1 lists relevant information.

All whitefronts captured were molting although a small percentage of the flock took flight when pursued by foot. In contrast, we estimated at least 80% of the Canada geese flushed from flocks. In the same general location on 21 July 1987, R. Wilk and J. Payne recorded 437 Canadas and 240 whitefronts along Hook Lagoon. At that time, most whitefronts were flying but most of the Canadas were flightless (unpubl. data). These observations suggested that the 2 species had staggered molts with whitefronts molting earlier than Canada geese.

Because this capture effort was conducted under a time constraint, each of us processed geese. Thus, any potential biases in the data may be explained by individual variation in our abilities to sex and measure geese.





Table 1. Identification and measurements on molting white-fronted geese captured near Hook Lagoon, Alaska Peninsula, 4 July 1988.

Ninth primary	74 139 120 120 133 95 95 90 85 85 85 85 85 85 85 85 85 85 85 85 85	111 93 133
Wing chord <sup>a</sup>	205 247 247 285 258 258 256 253 253 253 253 253 255 253 255 255 255	262 271 268
Diag. tarsus	71.3 76.0 76.0 75.1 68.1 73.2 73.2 80.8 81.9 81.9 73.5 73.5 70.6	75.8
Total tarsus	88.1 93.3 93.3 92.1 91.3 91.3 91.3 91.3 91.3 92.9 88.7 88.7 88.7 88.7 88.7 88.7 88.7 88	91.5 86.0
Bfll width at nares	21.9 21.5 21.5 22.4 20.5 21.3 21.8 21.8 21.8 21.8 21.8 21.8 21.8 21.8	22.3 20.4
Bill depth at nares	21.7 23.6 23.6 22.4 20.8 21.3 22.3 21.0 21.0 21.0 21.0 21.0 21.1 21.1	22.3 20.9
Culmen	54.0 54.0 55.5 56.6 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9	47.3 49.0
Head length	111.2 110.3 102.4 102.4 111.3 99.6 106.0 114.7 106.0 106.0 98.7 98.7 98.7	111.2
Weight (g)	2,250 1,800 1,800 1,900 1,950 1,950 1,850 2,350 1,850 1,850 1,850 1,850 1,850 1,850 1,850	2,150
Age/ sex	ASY F ASY F SY F ASY F ASY F ASY M ASY F ASY F ASY F ASY F ASY F ASY F	ASY F ASY F
Transmit freq. 166.	225 274 255 195 195 165 204 264 264 285 285 285 285 214	
Band number 5037-	01516 01517 01518 01519 01520 01522 01525 01526 01528 01528 01528 01529	-34501 -34502
Collar number	K71 K72 K72 K74 K75 K75 K77 K77 K79 K81 K81 K82 K83 K82	1367- 1367-

<sup>a</sup>No primaries fully developed in any bird. <sup>b</sup>Had none or very few speckles on belly. <sup>c</sup>Measurement to primary coverts, as no primaries emerged.