ALEUTIAN CANADA GEESE BANDING AT CHAGULAK ISLAND, ALEUTIAN ISLANDS, ALASKA SUMMER 1984

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TITLE
Aleutian Canada Goose Banding at Chagulak Island
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CITATION

OBJECTIVE Capture and band twenty Aleutian Canada geese on Chagulak Island to help determine their wintering grounds and capture two additional birds for research needs (mitochondrial DNA sequencing).

METHOD OF STUDY Capture methods similar to those used on Buldir were employed at Chagulak Island on 12 and 13 August 1984 on the west and north sides respectively.

MAIN FINDINGS A total of 22 Aleutian Canada geese were captured on Chagulak. Of this tot 12 birds were captured on the first day on the west side and the remaining 10 the next day on the north side. Twenty geese were banded (4 adults, 16 goslings) using metal FWS and green plastic leg bands.

CONCLUSIONS Due to the importance of this nesting population of the endangered Aleutian Canada goose in the eastern Aleutian Islands and hazardous work conditions, no additiona attempts to study the geese at Chagulak Island are recommended unless absolutely necessary.

MANAGEMENT IMPLICATIONS The banding of Chagulak Island Aleutian Canada geese will help determine if geese nesting on Chagulak winter in the same areas as geese from Buldir Island or if the Chagulak birds winter at a different location which would require additio al habitat protection.

ADDITIONAL REMARKS

UPDATES OR SUPERSEDES I.D. NO.

PROGRAM

FOR COPIES OF PUBLICATION OR REPORT CONTACT

AI-64

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INTRODUCTION

Chagulak Island is a part of the Islands of Four Mountains Group in the eastern Aleutian Islands. It is located at 52 degrees 34 minutes N, 171 degrees 08 minutes W and is approximately 842 ha (2081 acres) in size. Chagulak is roughly circular in shape and has a maximum diameter of 3.2 km (1.99 miles). The island is extremely rugged and composed of steep rocky ridges and cliffs with numerous pinnacles. These ridges and cliffs terminate at or near the shore with little (up to about 10 meters/33 feet) or no cobblestone beach extending into the water.

A nesting population of Aleutian Canada geese (Branta canadensis leucopareia) was discovered on Chagulak Island in July 1982 (Bailey and Trapp 1984). Chagulak hosts one of only two known wild nesting populations of the endangered Aleutian goose. The other known population is located at Buldir Island in the western Aleutian Islands. To help learn more about the geese on Chagulak, two projects were initiated in 1984. An earlier project involved the May collecting of five goose eggs each from Chagulak, Buldir and Kaliktagik Islands and taking measurements of birds captured on Buldir and Chagulak. The results of this study involving mitochondrial DNA sequencing will hopefully result in a determination of subspecies status for the Kaliktagik birds. The project reported here involved an August banding effort with Chagulak geese including metal FWS bands and green plastic leg bands, to assist in determining the wintering grounds for the population. This report covers the August capture and banding efforts only.

METHODS

Work was conducted at Chagulak Island on 12 and 13 August 1984. The goal was to capture and band 20 geese and to capture an additional two birds for research purposes (genetic evaluation). Every effort was made throughout the capture and banding operation to minimize stress caused by handling and increase the chances for survival of each bird.

Chagulak basically has four good goose habitat areas. Their locations are the west, north, southeast and southwest sides of the island. The west and north areas were selected and searched for molting geese due to their accessability and larger size. Most methods used while searching for molting geese were based on information obtained during past work on Buldir. Byrd and Woolington (1978) indicated that most family groups could be found near the upper edge of the lowland tall plant association and the lower edge of the upland short plant association where tall plants offer cover and the short plants offer succulent forage. The Chagulak search efforts covered entire drainage basins in both locations. Depending upon vegetation and topography, personnel usually walked abreast 5 to 15 m apart (Early and Henry 1979). The extremely rugged (boulder strewn), steep terrain with tall dense vegetation made goose search and capture efforts very difficult and somewhat hazardous to the capture team. Most geese were encountered in and along the major rock strewn intermittant stream drainages or in sparcely vegetated boulder slide areas near cliff bases. A 1 m long by .5 m wide long handled dip net was used to catch the geese. The net was most efficient when working fairly even terrain with moderately short vegetation (Early and Henry 1979). The net helped prevent injury to birds during capture and provide stability to searchers while clambering over large boulders.

Usually, when one goose was sighted others could be located in the same area. This occurred with non-breeders as well as family groups of birds. It also became readily apparent that fresh goose droppings and clipped vegetation indicated geese were in the immediate area. If no such sign was observed, very few if any, geese were ever found. This has also been the case at Buldir Island (Early and Henry 1979).

Immediately after capture of a group of geese, the birds were all brought together and placed singly, or in pairs in the case of goslings, in burlap bags. These bags helped keep the birds calm and prevent injury to them unitl each bird could be aged, sexed, banded and released. Measurements and a blood sample were also taken from each adult bird. After being sexed and aged, metal U. S. Fish and Wildlife Service bands were placed on the right legs of females and left legs of males. Green plastic leg bands with white numerals were then placed on the opposite leg of each bird. It usually took a few minutes for the glue on the plastic leg band to dry. This required a person to hold the bird and the band during the glue drying period. Two plastic bands were broken while attempting to put them on birds. The next band

number in sequence was then used in each case. Whenever possible, birds caught in one area were all released together or at least in groups.

RESULTS AND DISCUSSION

A total of 22 Aleutian Canada geese were captured on Chagulak Island. Of this total, 12 birds were captured the first day on the west side and the remaining 10 the next day on the north side. One gosling captured each day was not banded and was retained for research purposes. A total of 20 geese were banded (schedule appended) and released near the capture site. This total was composed of two adult males, two adult females (4 adults), ten male goslings and six female goslings (16 goslings). The age of the goslings captured ranged from 14 to 50 days and the average was 29.7 days (Table 1). Fecal samples were taken from 13 of the 20 birds banded and released. This sample was dependent on a cooperative bird and a clean bag. Only one bird showed any sign of suffering from paralysis due to the stress of handling (Table 1).

Table 1 - Data of Geese Captured and Banded on Chagulak

	Capture Date	Green Band #	Estimated Age (in days)	Sex	Fecal Sample Taken	Signs of Paralysis
1	8/11/84	01	L-(46)	F	No	No
2	8/11/84	02	L-(36)	M	Yes	No
3	8/11/84	03	L-(36)	F	Yes	No
4	8/11/84	04	L-(36)	M	Yes	No
5	8/11/84	05	AHY	M	Yes	No
6	8/11/84	07	AHY	M	Yes	No
7	8/11/84	06	L-(50)	M	No	Yes, but mobile
8	8/11/84	08	L-(36)	M	Yes	No
9	8/11/84	09	L-(36)	M	No	No
10	8/11/84	10	AHY	F	No	No
11	8/11/84	12	L-(31)	F	Yes	No
12	8/12/84	13	L-(24)	M	Yes	No
13	8/12/84	15	L-(28)	F	Yes	No
14	8/12/84	16	L-(30)	M	Yes	No
15	8/12/84	17	L-(14)	F	Yes	No
16	8/12/84	18	L-(14)	M	Yes	No
17	8/12/84	19	L-(30)	M	Yes	No
18	8/12/84	20	AHY	F	No	No
19	8/12/84	21	L-(14)	F	No	No
20	8/12/84	22	L-(14)	M	No	No

Six other Aleutian Canada geese were observed, but not captured, on 11 August 1984. All of these birds were capable of flight. Five additional geese were observed, but not captured, on 12 August. Of these, one was a gosling. Only one of the birds which escaped the second day was capable of flight, the others escaped into dense vegetation in rough terrain. It was not possible to determine if any of the adult or sub-adult birds which escaped capture were banded. A list of other incidental bird and mammal observations made while on Chagulak are contained in the appendix.

It should be noted that the goal of banding 20 Aleutian Canada geese on Chagulak was barely reached at the last possible moment. This is an extremely difficult and dangerous island to work on due to its rugged, steep terrain, dense, tall vegetation, and foggy weather conditions.

RECOMMENDATIONS

1. No further attempts to band Aleutian Canada geese on Chagulak Island should be made if the wintering area of the currently banded birds is determined.

2. If the wintering area is not discovered, any additional banding attempts should be carefully evaluated due to health risks to field personnel. Any attempt should be scheduled for at least a two week period to allow search for geese at all four significant goose areas on the island utilizing search and capture techniques developed at Buldir Island.

LITERATURE CITED

Bailey, E. P. and J. L. Trapp. 1984. A Second Wild Breeding Population of the Aleutian Canada Goose, American Birds, May-June 1984. pp 284-286.

Byrd, G. V. and D. W. Woolington. 1978. Capturing and Banding Aleutian Canada Geese on Buldir Island, Alaska. Unpublished Report. U. S. Fish and Wildlife Service. 9 pp.

Early, T. J. and W. Henry. 1979. Capturing and Banding Aleutian Canada Geese on Buldir Island, Alaska. Unpublished Report. U. S. Fish and Wildlife Service. 7 pp.

Master Permit No. 20570

Banding Schedule
3-860 (Rev. 1973)

Master Permittee Aleutian Islands Unit
Alaska Maritime NWR

—Banding Locations—

A Chagulak Island

B

C

D

E

F

REPORT ONLY CONTIGUOUS BAND NUMBERS
FROM 1127-04759
THROUGH 1127-04778

BAND PREFIX 1127	COMMON NAME	AOU #	STATUS	AGE-SEX	REGION	LAT-LONG	LOC	DATE MO.—DAY—YR
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U.S. bandings to: Bird Banding Laboratory, Office of Migratory Bird Management, Laurel, Md. 20811. O.M.B. No. 42-R1435.
Canadian bandings to: Canadian Wildlife Service, Environmental Management Service, Department of the Environment, Ottawa, Ontario, Ca
K1A OE7. Approval expires May 31, 1981.

Master Permit No. 20570

BAND PREFIX: 1127		COMMON NAME	AOU #	STATUS	AGE-SEX	REGION	LAT-LONG	LOC	DATE MO.—DAY—YR
	51								
	52								
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047	59	Aleutian Canada Goose 01	172.1	301	L - F	AK-503	523-1711	A	08 - 11 -
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	61	03			F				
	62	04			M				
	63	05			AHY				
	64	07							
	65	06			L				
	66	08							
	67	09							
	68	10			AHY- F				
	69	12			L				
	70	13			M				08 - 12 -
	71	15			F				
	72	16			M				
	73	17			F				
	74	18			M				
	75	19							
	76	20			AHY- F				
	77	21			L				
047	78	Aleutian Canada Goose 22	172.1	301	L - M	AK-503	523-1711	A	08 - 12 -
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REMARKS The number designations listed on the right side of the "common name" column indicates the number of the green plastic leg band. This is authorized under permit #20570. Green leg bands were placed on the left leg of females and right leg of males. Those birds banded on 08-11-84 were captured on the west side and those on 08-12-84 were captured on the north side of Chagulak Island respectively (map attached).

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