



US FISH & WILDLIFE SERVICE--ALASKA

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FALL 1979 MOOSE SURVEYS--SHEENJEK, OLD WOMAN,
COLEEN DRAINAGES

by
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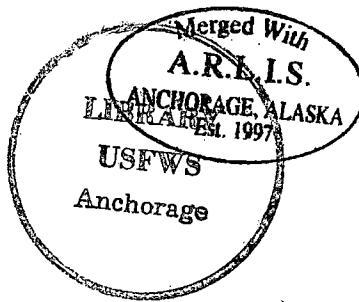


Table 1. Summary of fall moose population statistics for the upper Sheenjek River drainage (including all tributaries upstream of Lobo Lake) and of Old Woman Creek. William O. Douglas Arctic Wildlife Range.

Statistic	Sheenjek			Old Woman Ck	
	1977	1978	1979 *		1979
Large Bulls	11	18	24 + 6		1
Medium Bulls	22	16	16 0		2
Small Bulls	4	18	9 - 9		2
Total Bulls	37	52	49 - 3		5
Cows w/o calf	31	30	38 + 8		6
Cows w/1 calf	15	21	24 + 3		3
Cows w/2 calves	2	0	5 + 5		0
Total Cows	48	51	67 + 16		9
Total Calves	19	21	35 + 14		3
Unident. Adult	--	1	-- --		-
Total Adults	85	104	116 + 12		14
Total Moose	104	125	151 + 26		17
Total Bulls/100 cows	77	102	73 - 29		-
Small Bulls/100 cows	8	35	13 - 22		-
Calves/100 cows	40	41	52 + 11		-
Small Bulls % in herd	4	14	6 - 8		-
Calves % in herd	18	17	23 + 6		-
Moose/hour	10.2	27.8	29.6		16.8
Total survey time	10.2	4.5	5.1		1.1
Dates of survey	10/10-12	11/1-2	11/7, 11/11		11/11

Sources: 1977 - Haggstrom
 1978 and 1979 - Spindler and Ross

* Column below asterisk indicates net change from 1978 to 1979.

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Old Woman Creek

We surveyed Old Woman Creek to determine if regular moose movements between there and the Sheenjek River could be a source of sampling variability in the Sheenjek data (we also wanted to do the same for the upper Kongakut, but weather prevented this). A total of 17 moose--9 cows, 3 calves, and 5 bulls were observed. There did not appear to be many tracks crossing between the two drainages. This, and the number of moose present in Old Woman Creek, coupled with the higher number of moose seen in the Sheenjek in 1979 suggests that frequent inter-drainage movements from Old Woman Creek to the Sheenjek probably do not account for much annual variation in survey results. It may be that movements between adjacent drainages with large moose populations, the Coleen and Kongakut, may significantly affect results.

East Fork Sheenjek River

We did a casual survey along the E. Fork as far south as Kaultui Mountain, and saw 5 bulls, 3 cows, 3 calves, and 2 unidentified.

Coleen River

An increase in total moose numbers between 1977 and 1979 was evident, with 219, and 245 seen respectively (Table 2). Because there was a large proportion (22%) of unidentified animals in 1977, it is difficult to determine which age or sex group changed. It is noteworthy that of the animals which could be easily classified, large bulls and calves, large bulls increased by 14 and calves increased by six. We can be reasonably sure that the bull/cow, small bull/cow, and calf/cow ratios remained essentially stable. As with the Sheenjek, the calf numbers going into the winter were very high.

Other observations

Five wolves were seen in the Coleen drainage, three were solitary, and one pair was seen in the upper basin. Two caribou were seen in a pass between the upper Firth River and the Coleen River. Also of interest was that a young Eskimo man was subsisting off moose in the Sheenjek on Double Mountain tributary. He had killed two moose as of November, and planned on heading north to the Hulahula soon. He has not been seen or heard from since we talked to him on 8 November. On 27 April 1980, we observed a bear den at 4,000 feet elevation on the N. side of Brushman Mountain.

Recommendations

It is recommended that the Sheenjek be surveyed annually in late-October/early-November with the same intensity and flight routes as in 1978 and 1979. Every three years the Sheenjek, Old Woman Creek, E. Fork Sheenjek, Coleen, Firth-Mancha, and Kongakut drainages should be surveyed as one unit in late-October/early-November. These should be performed by the same crew and aircraft, if possible, and done in consecutive flights.

Table 2. Summary of fall moose population statistics for the upper Coleen River drainage north of Bear Mountain, William O. Douglas Arctic Wildlife Range.

<u>Statistic</u>	<u>1977</u>	<u>1979 *</u>
Large Bulls	26	40 + 14
Medium Bulls	26	15 - 11
Small Bulls	8	17 + 9
Total Bulls	60	72 + 12
Cows w/o calf	6	52 + 46
Cows w/1 calf	38	50 + 12
Cows w/2 calves	10	7 - 3
Total Cows	54	109 + 35
Total Calves	58	64 + 6
Unident. Adult	47	-
Total Adults	114	181 + 67
Total Moose	219	245 + 26
Total Bulls/100 cows	59	66 + 7
Small Bulls/100 cows	15	16 + 1
Calves/100 cows	57	59 + 2
Small Bulls % in herd	4	7 + 3
Calves % in herd	27	26 + 1
Moose/hour	24.3	32.9 + 8.6
Total Survey Time	9.0	7.5
Dates of Survey	9/27-10/1	11/11-13

Sources: 1977 - Benvenuti and Lentsch
 1979 - Spindler and Ross

* Column below asterisk indicates net change from 1978 to 1979.

Sincerely,

Vickie Sherburne

AREA: Sheenjek River drainage N of Lobo Lake DATE: Nov. 7-11, 1979

SNOW CONDITIONS: Snow 30 cm deep, freshly fallen, lighting mostly diffuse

WEATHER: Clear → partly cloudy → high overcast, calm, Temp 15°F

PAGE NO.: 1 of 3 TYPE OF PLANE: Helio 295 PILOT & OBSERVER: Ross/SPINDLER

OBS. NO.	BULLS			COWS:			LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START (✓)	TIME COUNT STARTED OR ENDED/REMARKS
	W/0 yrl	W/1 med	W/2 age	w/o calf	w/1 calf	w/2 calf					
1				1/1				L (S)	H LS TS D (S) L		START 0950 0952
2				2				L (S)	H LS TS D (S) L		1009
3				1				L (S)	H LS TS D (S) L		1011
4	1		2					(L) (S)	H LS (TS) D S L		1036
5				1/1				(L) S	H (LS) TS D S L		1047
6				1/1				(L) (S)	H (LS) TS D S L		1050
7				1/1				L (S)	H LS (TS) D (S) L		1102
8				2				L S	H LS TS D S L		1115
9				1/1				L S	H LS TS D S L		1152
10				1/1				L S	H LS TS D S L		1153 1200-1222 break
11	1	1	3	3				(L) (S)	H (LS) TS D S L		1230
12	1	2	1	1/1				L S	H LS TS D S L		1231
13					1/2			L S	H LS TS D S L		1231
14					1/2			L (S)	H LS (TS) D S L		1243
15			1	2/2				(L) S	H LS (TS) D S L		1255
16	1		1					(L) (S)	H LS (TS) D S L		1256
17	1			1/1				L (S)	H LS (TS) D S L		1319

AREA: Sheenjek, cont'd

DATE: 11/7, 11/11 /79

SNOW CONDITIONS:

WEATHER: 11/11: high overcast & 10,000ft, Temp 5°F, winds w 3, 20

PAGE NO.: 2 of 3 TYPE OF PLANE:

PILOT & OBSERVER:

OBS. NO.	BULLS			COWS:			LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START POINT(V)	TIME COUNT STARTED OR ENDED/REMARKS
	yr	med	lge	w/o	w/l	w/2					
22			2					L (S)	H LS TS D S L		
23			1					L (S)	H LS TS D S L		1330
24	3	1	1					L (S)	H (LS) TS D S L		1332
25			2					(L)	S H LS TS D S L		1336
26			1	1/1				L S	H LS TS D S L		
27			1	1/1				L S	H LS TS D S L		
28			1					L S	H LS TS D S L		
29		1	1	1/1				L (S)	H LS TS D S L		1340
30		1	1	1/1				(L)	S H LS TS D S L		1342
31	1		1/1					L S	H LS TS D S L		
32			5					L (S)	H LS TS D S L		1344
33	1	2	2	4/4				L (S)	H LS TS D S L		1345
34			2	1/1				(L)	S H LS TS D S L		1347
35				1/1				L (S)	H LS TS D S L grave/		1349
36	1		1	1/1				L S	H LS TS D S L		
											end at 1356
11/11-1	1		3					L (S)	H LS TS D S L		START 0930 0931
			2					L (S)	H LS TS D S L		0937

AREA: Sheenjek, cont'd

DATE: 11/11/79

SNOW CONDITIONS:

WEATHER:

PAGE NO.: 3 of 3 TYPE OF PLANE: PILOT & OBSERVER:

OBS. NO.	BULLS			COWS:			LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START(✓) POINT	TIME COUNT STARTED OR ENDED/REMARKS
	yrl	med	lge	w/o	w/l	w/2					
7		1	.			1/3		L S	H LS TS D S L		1021
8		2						L S	H LS TS D S L		1028
9		1						L S	H LS TS D S L		1053
10		1				1/2		L S	H LS TS D S L		1055 END

AREA: Old Woman Creek

DATE: 11/8, 11/11/79

SNOW CONDITIONS: Same as Sheenjek

WEATHER: 11/8 O'cast at 6000 ft, some turbulence 11/11 high o'cast

PAGE NO.: 1 of 1 TYPE OF PLANE: H 295 PILOT & OBSERVER: Ross/SPINOLAR

OBS. NO.	BULLS			COWS:			LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START(✓) POINT	TIME COUNT STARTED OR ENDED/REMARKS
	yrl	med	lge	w/o	w/l	w/2					
11/8 1	1	1	2					L S	H LS TS D S L		START 1314 1314
2			2					L S	H LS TS D S L		
3				1/1				L S	H LS TS D S L		1330
4				1/1				L S	H LS TS D S L		
5	1	1	1	1				L S	H LS TS D S L		1340

Mtn.

AREA: Coleen River & all tributaries N of Bear DATE: 11-11-79 to 11-13-79

SNOW CONDITIONS: Snow 30 cm deep, freshly fallen, lighting Mostly diffuse and good

WEATHER: Pt. Cloudy, Winds w@25, Temp 15°F, some Turbulence

PAGE NO.: 1 of 4 TYPE OF PLANE: Helio H-295 PILOT & OBSERVER: Ross/SPINOLER

OBS. NO.	BULLS W/O yr med lge				COWS: W/1 calf		LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT (START POINT END POINT)	TIME COUNT STARTED OR ENDED/REMARKS
			W/2 calf								
1					1/1			L S	H LS TS D S L		13:45
2					1/1			L S	H LS TS D S L		14:00
3	2	2						L S	H LS TS D S L		14:12
4					1/1			L (S)	H LS TS D S L		14:15
5		1						L (S)	H LS TS D S L		14:17
6		1	1/1					L (S)	H LS TS D S L		14:36
7	2	1	1/1					L S	H LS TS D S L		14:47
8	2	1						L (S)	H LS TS D S L		14:50
9	3	1/1						L S	H LS TS D S L		14:58
10	1	2						L S	H LS TS D S L		
11			1/1					L S	H LS TS D S L		
12	1	1						L S	H LS TS D S L		15:15
13			1/1					L (S)	H LS TS D S L		08:56
14				1/2				L S	H LS TS D S L		09:13
15			1/1					L S	H LS TS D S L		09:15
16		2	3/3					L S	H LS TS D S L		
17			1/1					L (S)	H LS TS D S L		

AREA: Coleen, continued

DATE: 11-12-80

SNOW CONDITIONS:

WEATHER: Clear calm, -10°F, excellent observing conditions

PAGE NO.: 2 of 4 TYPE OF PLANE: PILOT & OBSERVER:

OBS. NO.	BULLS				COWS:		LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START(✓) POINT	TIME COUNT STARTED OR ENDED/REMARKS
	w/r	med	lge	w/o calf	w/1 calf	w/2 calf					
22	1			1	1/1			L (S)	H LS TS D S L		09:35
23					1/1			L (S)	H LS TS D S L		
24		1	1	1/1				L S	H LS TS D S L		
25					1/1			L S	H LS TS D S L		
26	2	2	3					L S	H LS TS D S L		
27	1	1	2					L (S)	H LS TS D S L		
28			3					L S	H LS TS D S L		09:55
29				1/1				L S	H LS TS D S L		
30			1					L (S)	H LS TS D S L		10:00
31				1/1	1/2			L S	H LS TS D S L		10:06
32		1	3					L S	H LS TS D S L		
33			1					L S	H LS TS D S L		
34	1	2	3	4/4	1/2			L S	H LS TS D S L		
35	1		2					L S	H LS TS D S L		10:14
36					1/2			L (S)	H LS TS D S L		10:17
37			1					L (S)	H LS TS D S L		
38		2						L S	H LS TS D S L		1056

AREA: Coleen, cont'd

DATE: 11/13/80

SNOW CONDITIONS:

WEATHER: overcast, @ 3500', white-out. observability fair-to-good

PAGE NO.: 4 of 4 TYPE OF PLANE:

PILOT & OBSERVER:

OBS. NO.	BULLS			COWS			LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START(✓) POINT	TIME COUNT STARTED OR ENDED/REMARKS
	W/D yrl	med	lge	W/D calf	W/I calf	W/2 calf					
64	1		1					L S	H LS TS D S L		
65	1	1	1	1/1				L (S)	H LS TS D S L		10:16
66	1	4	1					(L) S	H LS TS D S L		10:17
67	1	1	1	1				(L) S	H LS TS D S L		
68			2					L S	H LS TS D S L		
69			2					L S	H LS TS D S L		
70			1	1/1				(L) S	H LS TS D S L		10:24
71			1	1/1				(L) S	H LS TS D S L		10:47
72			1	1/1				(L) S	H LS TS D S L		10:56
73			1					L (S)	H LS TS D S L		11:37
74	1							L (S)	H LS TS D S L		
75				1/2				(L) S	H LS TS D S L		1148
76	1							L S	H LS TS D S L		
77			2					L (S)	H LS TS D S L		
78				1/1				(L) S	H LS TS D S L		1207
79			1					L S	H LS TS D S L		1215
								L S	H LS TS D S L		1235 END

AREA: Coleen, cont'd

DATE: 11/12-13/80

SNOW CONDITIONS:

WEATHER: Starting at obs. #50, on 11/13, overcast & 3500', white-out

PAGE NO.: 3 of 4 TYPE OF PLANE:

PILOT & OBSERVER:

OBS. NO.	BULLS			COWS			LONE CALVES	INITIAL ACTIVITY	HABITAT	TRANSECT START POINT	TIME COUNT STARTED OR ENDED/REMARKS
	vrl	med	lge	w/0	w/1	w/2					
43	1			1				L (S)	H LS TS D S L		
44				1/1				L S	H LS TS D S L		11:29
45				1/1				L (S)	H LS TS D S L		11:40
46				1/1				L S	H LS TS D S L		
47		1		2/2				L S	H LS TS D S L		
48		2	1/1					L S	H LS TS D S L		12:04
49		2						L (S)	H LS (TS) D S L		
50				1/1				L (S)	H LS (TS) D S L		12:14
51				1/1				L S	H LS TS D S L		12:35
52				1/2				L S	H LS TS D S L		
53				1/1				L S	H LS TS D S L		
54				1/1				L S	H LS TS D S L		
55				1/2				L S	H LS TS D S L		
56		1						L S	H LS TS D S L		13:05
57				1/1				L S	H LS TS D S L		
58				1/1				L S	H LS TS D S L		13:09
59								L S	H LS TS D S L		Skipped



