

MIDDLE KUSKOKWIM FOOD SURVEY
DECEMBER 1979

by
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Alaska Department of Fish and Game
Division of Subsistence
Bethel, Alaska

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INTRODUCTION

In December 1979, the Alaska Department of Fish and Game's Subsistence Section undertook a household food resource survey in seven villages located on the Middle Kuskokwim River. This information will provide background information to be used in game management; particularly moose management in upper Game Management Unit 18, and 19A. The study area included the villages of Stony River, Sleetmute, Red Devil, Georgetown, Chuathbaluk, Upper Kalskag, and Lower Kalskag. Objectives of this investigation were to determine the relative size of each village, determine the specific fish and game utilized by each village, determine their general moose harvest, and to begin to understand what factors the villagers feel affect their moose hunting success in these areas.

METHODS

Household members were interviewed using a personal questionnaire (attachment 1) to find out their knowledge of the moose hunting activities in the area. Questions were asked pertaining to: household size and number of hunters in the family; when, where, and how long they hunted for moose; what meat was available for their winter use; difficulty of hunting during the past season and why; and other pertinent observations made while hunting.

The interviewer attempted to visit each household in the sample villages. Special attention was paid to the areas utilized by each village. This information was then mapped on 1:250,000 scale maps.

RESULTS

A total of 176 households were documented in seven villages along the middle Kuskokwim River. Eighty-five or 48%, of these households were surveyed. Findings from these interviews indicated that 26% of the households felt at survey time that they had enough meat to last through the winter. From Georgetown to Stony River moose meat composed the majority of their protein source. Alternate sources in order of importance included; fish, both salmon and whitefish (whitefish were being heavily utilized in Stony River at survey time) store bought meats, bear, caribou, beaver, and small game including hare and spruce grouse.

Chuathbaluk and the two Kalskags relied primarily on fish as their major protein source, particularly salmon. Store bought meats provided the second most important source, followed by moose meat, bear, and small game. Several people commented that they planned to supplement their diet with beaver soon, as beaver trapping season would be open in a couple of weeks.

Hunters appeared most successful during the September season with 73% of the total moose harvest by local hunters being taken in September. 21% of the harvest was taken in November, 7% in October, and 9% in August. A total of 52 moose were reported taken by 74 households in 1979 fall and winter season. Several families reported that they lost a portion of their moose meat taken in September because of the unseasonably warm temperatures. Stony River, Sleetmute, Red Devil, Georgetown, and Chuathbaluk residents said they hang their meat to dry as freezers are not prevalent in these villages.

Kalskag residents have electricity more readily available and tended to freeze a larger portion of their meat. Most of the residents in all seven villages felt moose were hard to get this season for a variety of reasons. Many felt that it was a function of the number of hunters in the area including pressure from downriver boats that tended to drive the moose away from the main drainages. Some felt the season dates hampered them, others just did not see any bulls (only cows).

Villages gave numerous definitions of who they perceived as "outside hunters." There did not appear to be any consensus of opinion on this in the upper four villages, (refer to individual village summaries, attachment 2). Chuathbaluk and the two Kalskag villages tended to feel that an "outside hunter" was anyone who hunts for sport and only takes the head and antlers. Most felt these hunters come from other states and countries and felt these people were based in the Aniak area.

The villages appeared to conform in what sections of the moose they salvaged for their own use. Generally all of the animal except the guts, (defined as the intestines, and some organs) were taken home. In some cases the skin, hooves, or head minus the tongue and nose were also left in the field.

When questioned about their preferences for future moose seasons 52% of the local residents preferred a September opening, 8% October, 10% November, 5% December, 4% February and 22% preferred March. 71% wanted to see a limited cow moose season opened in Game Management Unit 19A, 18% were opposed, and 11% were undecided. The interviewer did not feel a number of people understood the last question on the questionnaire asking whether they personally felt the moose population in their area was healthy enough to sustain a cow moose hunting season. She felt a significant number answered instead the question, "Would you like a cow season to be opened?"

DISCUSSION

The personal questionnaires and household interviews proved to be a very useful tool in obtaining general background information about local meat needs and food sources during this winter season. Information on personal hunting patterns proved especially helpful when evaluating future hunting seasons and timing.

In the upper five villages a pattern of many short hunting trips appeared, i.e. (one or two days) with the whole family participating. The Kalskag villages showed longer trips with more primary hunters from several households in the party, rather than immediate family units. These hunting parties still tended to be composed of relatives.

The average household size of the surveyed families was 4.3 members per household with a trend toward larger families in the two Kalskag villages. This appears to be consistent with information shown in the Subsistence Fishery Survey conducted on the entire river earlier in the year.

When visiting the families the interviewer observed a heavy dependency on meat and protein at each meal. Often two or three different protein dishes would be served with pilot bread and butter of Crisco as the only other food on the table. Local villagers appear to be eating large quantities of meat and fish at this time of year. Significant stores are present only in Sleetmute and the two Kalskag villages. Another observation the interviewer noted was the tendency of villagers to eat whatever meat they had available with little effort to ration the supply in order to make it last over the entire winter. Sharing the take was a common practice in these villages. An example of this practice is when a gussock (whiteman) takes a moose for his family he often considers this to be his only meat and rations it to last him the whole winter. The moose is then prepared by drying, canning, or freezing to last through the year. A villager would retrieve their moose to the village and then pass out portions to their other relatives. A moose used this way often lasts a month or so. Generally, they hang their meat to dry or, if taken in the winter, they keep their meat frozen. Little canning is done to preserve the meat. This practice makes it more desirable to harvest a few moose throughout the winter rather than alot of moose at one time.

The majority of the villagers hunted by boat. A few people traveled to the Piamute Slough area on the Yukon by snowmachine during late November from Kalskag.

Most of the local people reported some activity by "outside hunters," however few people seemed to have had personal contact with these hunters. It appears that local villagers do not often travel out of a specific area for their moose. Traffic on the main drainages by downriver boats tend to drive the moose back in the brush and makes hunting more difficult

for all hunters. Local hunters generally did not seem to feel that "outside hunters" were more successful than they were. In fact I imagine from the reported harvest that local residents as a whole are a great deal more successful than downriver people. The early September season in Game Management Unit 19A contributes a great deal to this trend, as moose are not moving in early September and the vegetation along the drainges is much thicker at that time.

It should be noted that the moose-take reported in this survey reflects local use only and NOT the total harvest for upper Game Management Units 18 and 19A. For many villagers, moose hunting is not a recreational activity but provides, next to fish, the majority of their diet during the winter.

It is recommended that this survey be repeated in 1980 incorporating a few changes. Crooked Creek and Aniak should be added to the sample villages and Georgetown can be eliminated. The Holitna River homesteaders should be included in order to compare two very different cultural uses of the resources in this area.

Additional information on alternate resouces including the winter fishery and trapping activities should be included. A general inventory of the local stores and a brief report on the jobs available to each village during the season would also be useful. (See attachment 3 for outline of future project).

Table 1

SUMMARY OF MIDDLE KUSKOKWIM FOOD SURVEY

Village	Have enough meat for winter?		Households surveyed	not surveyed	average size hunted moose	Moose Taken Sept.	Moose Taken Oct. 1	Moose Taken Aug. 1
	No	Yes						
Stony River	10	3	13	7	3.6	9	1	Oct. 1
Sleetmute	17	7	24	11	4.1	11	6	Oct. 1 Aug. 1
Red Devil	2	3	5	6	3.4	4		
Georgetown	0	1	1	1	4.0	1		
Chuathbaluk	12	1	13	13	4.2	3	1	
Upper Kalskag	11	1	12	17	5.0	4	1	
Lower Kalskag	11	6	17	36	5.5	6	2	
Total	63	22	85	91	4.3	38	11	3

Table 2

PREFERENCES EXPRESSED BY MIDDLE KUSKOKWIM REGARDING MOOSE
SEASONS AND BAG LIMITS

Village	Cow Moose Season		Open Hunting seasons							
	Yes	No	Undec.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Stony River	12	1		7						6
Sleetmute	16	5	3	13	4	3			1	3
Red Devil	1	4		4		1				
Georgetown		1		(Aug. 1)						
Chuathbaluk	9	2	1	3	1	1			2	5
Upper Kalakag	8	1	3	9	1	1				1
Lower Kalskag	14	1	2	7	1	2	4			3
TOTAL	60	15	9	43	7	8	4		3	18

Attachment 2

KUSKOKWIM MOOSE SURVEY
(1979)
General Observations

Some people seemed to find the questions about number of people in their household and kinds of meat they are eating "nosy". These questions required some explanation as to why they were being asked.

The question concerning outside hunters was confusing to almost all questioned and required quite a bit of explanation. This was apparant at the first village surveyed (Stony River), and after that, I always read the question, then before they answered added that Fish and Game had heard complaints about outside hunters and that "outside hunters" were the words used, that Fish and Game didn't always know who people meant and wanted their definition. Sometimes I had to make clearer that what was being asked for was their own personal definition. I might add that Chuathbaluk and Upper and Lower Kalskag were the only villages that showed any common definition.

The last question, " Do you feel the moose in your area are in good enough shape to open a cow season in your area?' needs to be qualified. I feel a signigicant number of people were not answeing this question but rather "Would you like a cow season to be opened?" I think several people were considering the health of the moose population before answering but a large number were saying whether they would like to hunt cows or not.

Carrie Longpre'

KUSKOKWIM AND YUKON MOOSE SURVEY

1. Did you hunt this year?
When did you hunt?
2. Counting yourself, how many hunters are in your family?
3. How many moose did your family get this year?
4. How many people were in your hunting party?
5. When did you get your moose?
6. Where (generally) did you get it ?
7. How many people besides your family live with you this year?
8. How many people in your family live at home this winter?
9. What kind of transportation did you use to hunt moose this year?
10. How many days did you spend hunting this year?
11. Does your family have enough meat for the winter?
12. What kind of meat (or other protein source) are you eating this winter? (moose, black bear, caribou, beaver, dry fish, other)
13. Were moose hard for you to get this year?

If yes, why do you think they were hard to get?
(bad weather, not as many moose this year, hunted in the wrong location, not enough time, too many hunters in the area)

If it was because there were too many hunters, do you think they did better than you did?

If yes, why do you think they did better? (better equipment, use of aircraft, they hunted illegally, other....)

14. Who do you think are outside hunters in your area?

Do you think there were outside hunters in your area during moose season this year?

How do you know about these outside hunters (did you see them? did your friend see them? did you hear stories of them? other reasons?)

- (
15. When you butcher a moose, what parts, if any, do you leave behind? (head, nose, tonque, intestines, guts, organ meats, other)
 16. When would you most like to hunt for moose? Sept____Nov__March____
 17. Which would be your second choice? Sept____Nov____March____
 18. Do you feel the moose in your area are in good enough shape to open a cow season in your area?
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PROJECT: MIDDLE KUSKOKWIM WINTER FOOD SURVEY

Problem: What are the foods used by the Middle Kuskokwim villages during a winter season.

1. What is the villages meat and protein needs?
2. What foods, including local fish and game compose this group?
3. What options are available to the villages to fulfill their food needs?

Objectives:

1. Determine the population size and number of households in each village.
2. Determine the specific fish and game utilized by each village in order of importance.
3. Determine the general harvest of their major fish and game sources in each village.
 - a. Begin to understand what factors the villages feel affect their success when taking game, particularly moose.
 - b. Determine what portions of the moose are used by the villagers.
 - c. Determine what drainages and areas the villages are utilizing for moose hunting, and what mode of transportation is preferred in each village.

Personnel:

1. Supervision by DeeDee Jonrowe, Resource Specialist Bethel.
2. Survey conducted from Stony River to Chuathbaluk by one technician II from Dec. 1 thru 31.
3. Survey in the two Kalskags and Aniak conducted by the permanent technician III stationed in the Bethel office.
Dec. 1 thru 20.
4. Report compiled and written by DeeDee Jonrowe and permanent technician with assistance from the upriver tech. II
January 15 - 20.

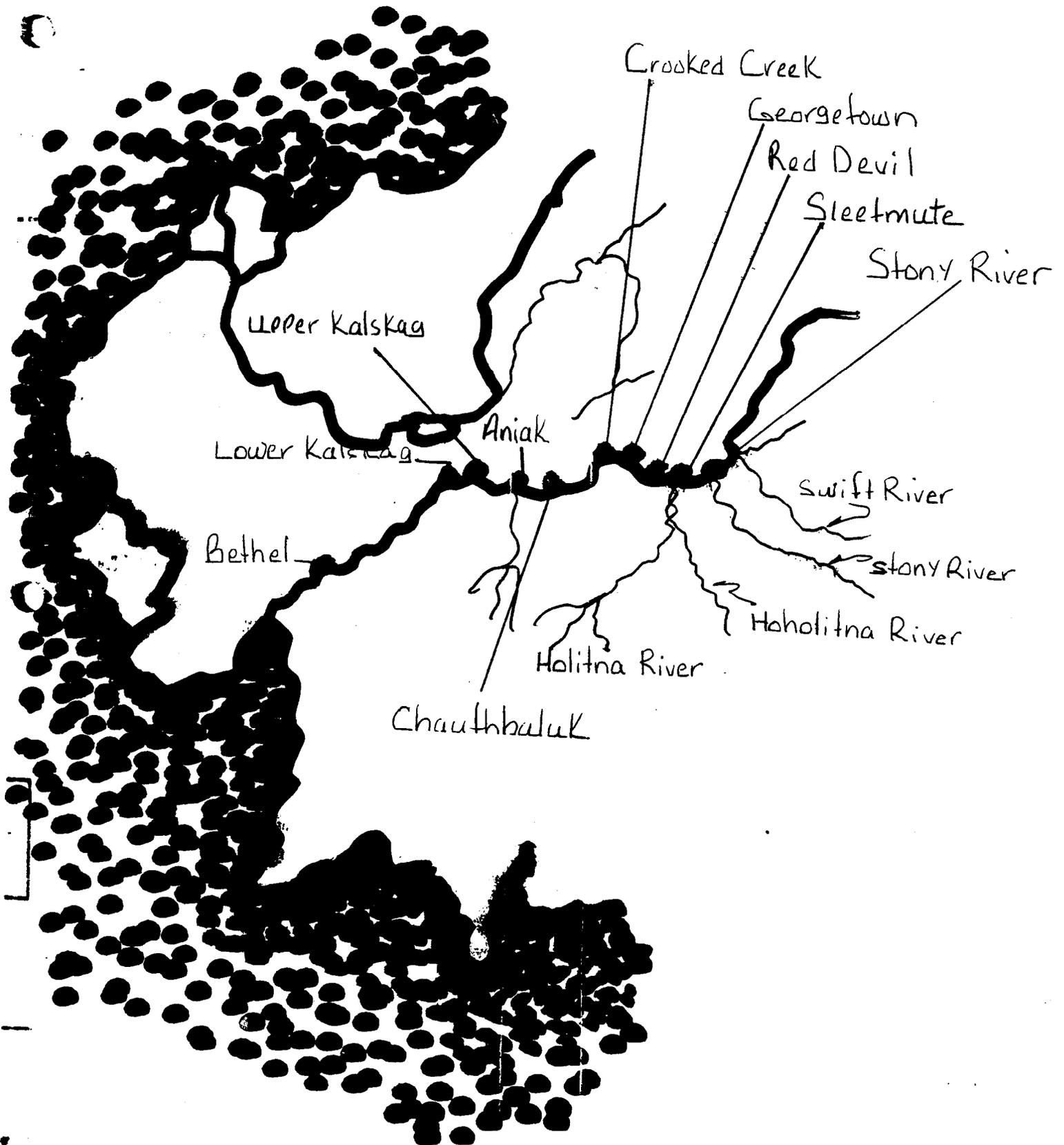
Methods and Procedures:

1. Obtain the 1980 census data for each village.
2. Conduct household surveys in the following villages:
 - a. Stony River
 - b. Sleetmute
 - c. Holitna River residents
 - d. Red Devil
 - c. Crooked Creek
 - e. Chuathbaluk
 - f. Aniak
 - g. Upper Kalskag
 - h. Lower Kalskag
3. Overlays will be used on maps 1:250,000, of the area. The moose hunting locations will be mapped for each village.
4. Interview forms will be filled in for each household and summary of each village will be completed after village survey.
5. Moose harvest tickets, and subsistence fishing calendars will be collected in each village.
6. Incidental information to be collected:
 - a. Travel, weather, and river conditions for the past season.
 - b. Food groups available in the village store, if there is a store.
 - c. Jobs available to the village during each season.

Special Procedures:

1. In order to receive the best cooperation possible from each village:
 - a. The results of each year's surveys will be made available to them.
 - b. Our travel schedule will be announced in advance on Tundra Drums and Bush Pipeline.
 - c. The survey will be discussed with the Middle Kuskokwim Fish and Game Advisory Committee at their November meeting.

2. The technician conducting the survey in the upper six villages will be based on the Holitna River and will travel from there. This technician will travel to Bethel the first week of January to complete the summaries and to explain their findings to DeeDee Jonrowe.
3. The permanent fish and game technician III stationed in the Bethel office will conduct the survey in the lower three villages. Additional time will be spent with the local native organizations to enhance cooperation particularly in the two Kalskag villages.
4. The report summary will be completed by January 30th.



Middle Kuskokwim River Villages

MIDDLE KUSKOKWIM WINTER FOOD SURVEY

Proposed Budget: FY 80-81

100

Tecn. II Dec. 1 -31 1,030.00

200

211 mail plane, Bethel to Aniak
3 trips @ \$66/trip 198.00

222 lodging in villages \$15/day, 2days/village
9 villages 270.00

300

312 telephone service charge in villages 10.00

314 postage 10.00

361 snowmachine travel provided by villagers
roundtrip from Sleetmute to Red Devil 70.00

365 air charter 8 hrs @ \$140/hr 1,120.00

400

421 food in the field 1.5 man mon. @ \$ 200/ mon. 300.00

489 maps 7 @ \$2/map 14.00

400 incidental expenses 100.00

Summary of Costs

100	1,030.00
200	468.00
300	1210.00
400	414.00

TOTAL 3,122.00

EQUIPMENT LIST

Maps 1:250,000

1 McGrath
2 Sleetmute
1 Taylor Mountain
2 Russian Mission
1 Lime Hills

Hunting and Trapping Regulation Booklets and Units Maps
20/village

Interview forms 40/village

Loose leaf notebooks 2

Yellow pads of paper 2

Pencils 6

Pens 4

Paper clips 2 boxes

large envelopes 4

TR books 2

List by village, of households surveyed winter 1979

Results of 1979 survey 1 copy/village