

Household Harvests of Moose, Caribou, Bears, and Wolves in 8 Central Kuskokwim Region Communities, Alaska, 2003–2006

by

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Alaska Department of Fish and Game

Division of Subsistence



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Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft ³ /s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols

alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of) pH	
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

all commonly-accepted abbreviations
e.g., Mr., Mrs., AM, PM, etc.
all commonly-accepted professional
titles e.g., Dr., Ph.D., R.N., etc.

Alaska Administrative Code	AAC
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	\$, ¢
months (tables and figures):	first three letters (Jan,...,Dec)
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Measures (fisheries)

fork length	FL
mid-eye-to-fork	MEF
mid-eye-to-tail-fork	METF
standard length	SL
total length	TL

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations

alternate hypothesis	H _A
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2 , etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	log ₂ , etc.
minute (angular)	'
not significant	NS
null hypothesis	H ₀
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

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**HOUSEHOLD HARVESTS OF MOOSE, CARIBOU, BEARS, AND
WOLVES IN CENTRAL KUSKOKWIM REGION COMMUNITIES,
ALASKA, 2003–2006**

by

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ABSTRACT

This report summarizes the harvest and uses of moose *Alces alces*, caribou *Rangifer tarandus*, black bears *Ursus americanus*, brown bears *Ursus arctos*, and gray wolves *Canis lupus* over the 3-year period from April 2003 to March 2006 in 8 Central Kuskokwim River region communities. The major driving forces behind the implementation of harvest surveys in the Central Kuskokwim region were area residents' concerns over the diminishing abundance of moose and, consequently, the diminishing ability to harvest amounts of moose meat reasonably necessary for subsistence uses. This research directly supports the formal planning process for moose management initiated by the Alaska Department of Fish and Game (ADF&G) in coordination with the U. S. Fish and Wildlife Service (USFWS), local communities and hunters, and other users in the Central Kuskokwim region. The research was funded by the USFWS through an ANILCA 809 agreement and performed by the ADF&G Division of Subsistence. Data were collected through annual in-person household surveys administered by research assistants hired in each community.

Between 2003 and 2006, hunters from the communities of Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, Crooked Creek, Red Devil, Sleetmute, and Stony River harvested an estimated range of 69 to 107 moose, depending on the study year. The data set also includes information about hunters per community, average hunter days per harvested moose, and seasonality of harvest. Hunters also reported harvesting estimated ranges of 29 to 225 caribou, 28 to 40 black bears, 1 to 3 brown bears, and 45 to 83 gray wolves between 2003 and 2006. The report also compares data from the 2003–2006 survey years with data from earlier baseline and survey efforts in the central Kuskokwim area and discusses them within the regulatory context.

Key words: moose, caribou, black bear, brown bear, gray wolf, Kuskokwim River, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, Crooked Creek, Sleetmute, Red Devil, Stony River, subsistence hunting, harvest monitoring

1. INTRODUCTION

PROJECT BACKGROUND

Accurate harvest estimates are an essential component of state and federal management of sustainable fish and wildlife populations in Alaska. Harvest and use data contribute to the assessment of harvest activities as well as to the provision of customary and traditional use opportunities provided by state and federal laws (AS 16.05.094 and ANILCA Title VIII). This report addresses the need for accurate harvest and use data by presenting, analyzing, and discussing the results of 3 consecutive big game harvest surveys conducted in 8 Central Kuskokwim region communities for the following 12-month periods: April 2003 to March 2004 (Year 1); April 2004 to March 2005 (Year 2); and April 2005 to March 2006 (Year 3). Participant communities are, from downriver to upriver, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, Crooked Creek, Red Devil, Sleetmute, and Stony River (Figure 1).

Harvest tickets and the attached harvest reports are required in regulatory hunts for moose *Alces alces* and for caribou *Rangifer tarandus* in all areas south of the Yukon River. Harvest tickets are available free of charge from license vendors and the offices of the Alaska Department of Fish and Game (ADF&G). Harvest tickets must be carried in the field and validated as soon as an animal is harvested. Hunters are required to report their harvests, which are compiled in a statewide database maintained by the ADF&G Division of Wildlife Conservation.¹ Although the harvest ticket database is a primary source of harvest information, an earlier study demonstrated that it may substantially underestimate the harvests of hunters residing in Alaska's rural communities (Andersen and Alexander 1992). According to Andersen and Alexander's research, the harvest database captures an average of approximately 28% of the harvest documented in ADF&G Division of Subsistence household surveys. Harvest tickets do not usually measure the same harvest levels as the household surveys for a variety of reasons. Rural hunters expressed concerns that the harvest ticket system is not compatible with local patterns of hunting effort and meat sharing characteristic of subsistence economies. For example, some individuals reported that they hunted and harvested wildlife without possessing a hunting license or a harvest ticket (Andersen and Alexander 1992). Such hunting was typically organized around groups of related households, with harvests distributed to many households in the community through the hunting efforts of one individual who was often responsible for the provision of moose meat to the households. Also, for households that are heavily reliant on wild foods as a source of protein, it is probably necessary to harvest more than 1 moose. It is unlikely that hunters report the illegal harvest of second or subsequent animals (Andersen and Alexander 1992). For these and other reasons, hunters may fail to return harvest tickets, or harvest tickets may reflect only a portion of the actual harvest.

Previous and continuing Division of Subsistence research demonstrated that in many small communities, a subset of "super-households" harvest most of the community's supply of wild resources (Wolfe 1987). This pattern is sometimes referred to as the "30–70 rule," based on quantitative analyses of community harvest patterns, in which about 30% of the households often produced 70% or more of the total community harvest of wild foods in pounds edible weight (Magdanz et al. 2005; Wolfe 1987; Wolfe et al. 2010). Face-to-face, in person household surveys are designed to account for these patterns and more accurately estimate harvests by community, thus providing more reliable data for management purposes.

Managing Moose in the Central Kuskokwim Region

Central Kuskokwim region residents have long expressed concerns over the diminishing abundance of moose and, consequently, the diminishing ability to harvest amounts of moose meat reasonably necessary for subsistence (5 AAC 99.025 (8)). Community residents were particularly concerned that the influx of nonlocal hunters to the area, especially in ADF&G Game Management Unit (GMU) 19A, might adversely affect an already depressed moose population.

1. Winfonet is the ADF&G Division of Wildlife Conservation's intranet website. The site provides a wide variety of tools to allow users to access, update, and download different kinds of data, including big game harvest data.

In October 2002, ADF&G hosted the Aniak Regional Moose Summit in order to address concerns about moose populations in the Kuskokwim and Lower Yukon regions, including in GMU 19A. ADF&G initiated a formal planning process with support from the U. S. Fish and Wildlife Service (USFWS). The planning process resulted in the establishment of the Central Kuskokwim Moose Management Planning Committee (CKMC). The CKMC brought together a diverse group of individuals representing resident subsistence hunters; area state fish and game advisory committees; state, federal, and tribal agencies; big game guides and transporters; and conservation organizations. The primary objectives of the CKMC were 1) to review the biological and harvest information about moose in order to restore and maintain area moose populations that would ensure reasonable subsistence opportunities and provide for high levels of human consumptive uses, and 2) to address concerns about predation and the overall health of the ecosystem (Alaska Board of Game 2004).

The CKMC met 7 times throughout 2003 and 2004 to develop a consensus plan for moose management in units 19A and 19B. This project emerged from the planning committee's recommendation to provide an accurate estimate of the number of moose harvested and used by residents of the study communities. This information could then be compared to earlier baseline subsistence harvest estimates to reveal general trends in harvest patterns over time. Additionally, these data can be compared to harvest estimates of nonlocal hunters (i.e., hunters with resident hunting licenses or identification cards whose permanent residence is outside the project communities, such as residents of GMU 18 or urban areas, and who reported a successful hunt) and nonresident hunters (i.e., hunters who purchased nonresident hunting licenses and who reported a successful hunt). Nonlocal and nonresident harvest data are derived from the Division of Wildlife harvest database in order to broaden the scale of estimated moose harvests in GMU 19A.

REGULATORY HISTORY

A brief introduction to the recent management of moose in the Central Kuskokwim area, specifically changes in GMU 19A resulting from the CKMC findings, provides an important context for this report. In 2003, the Alaska Board of Game (BOG) instituted a 5-year moratorium on moose hunting in the lower Kuskokwim River portion of GMU 18 that compounded competition concerns between local and nonlocal users of GMU 19A moose resources. The structure of the moratorium was similar to a moose hunting moratorium implemented in the lower Yukon River portion of GMU 18. The BOG decision was based on the demonstrated low moose density compared to relative habitat availability in GMU 18. ADF&G, the Lower Kuskokwim Fish and Game Advisory Committee (LKAC), the USFWS Yukon Delta National Wildlife Refuge, the USFWS Office of Subsistence Management, the Association of Village Council Presidents (AVCP), and nearly every community in the lower Kuskokwim River region supported this decision (ADF&G 2003; AVCP 2003; Perry 2006; USFWS 2003).

Residents from the communities of Grayling, Anvik, Shageluk, and Holy Cross were also concerned about declining moose abundance in GMU 19A (Brown et al. 2004a). They believed that this circumstance would increase competition for moose on their traditional hunting grounds in GMU 21E, even though there had been no reports of harvests in GMU 21 from the ADF&G household surveys for that year.

ADF&G implemented the moose-hunting moratorium in the lower Kuskokwim River portion of GMU 18 during the following regulatory year, fall 2004. Residents of the communities in GMU 19A attended meetings of both the state-sponsored Central Kuskokwim Fish and Game Advisory Committee (CKAC) and the CKMC. They expressed their concerns about the effects of the moratorium, including a potential increase in the number of lower Kuskokwim (GMU 18) residents hunting in GMU 19A.

Despite failing to obtain consensus, the CKAC reached a majority opinion to 1) prohibit nonresident hunting in GMU 19A, 2) create a state registration permit hunt² in GMU 19A open only to residents of the state,

2. A registration hunt must take place under a registration permit, which, according to 5 AAC 92.990 (33), is a hunting permit issued to a person who agrees to the conditions specified for each hunt. Permits are issued in the order applications are received, beginning on a date announced by ADF&G and continuing throughout the open season, or until the season is closed by emergency order when a harvest quota is reached, or until a predetermined number of permits have been issued.

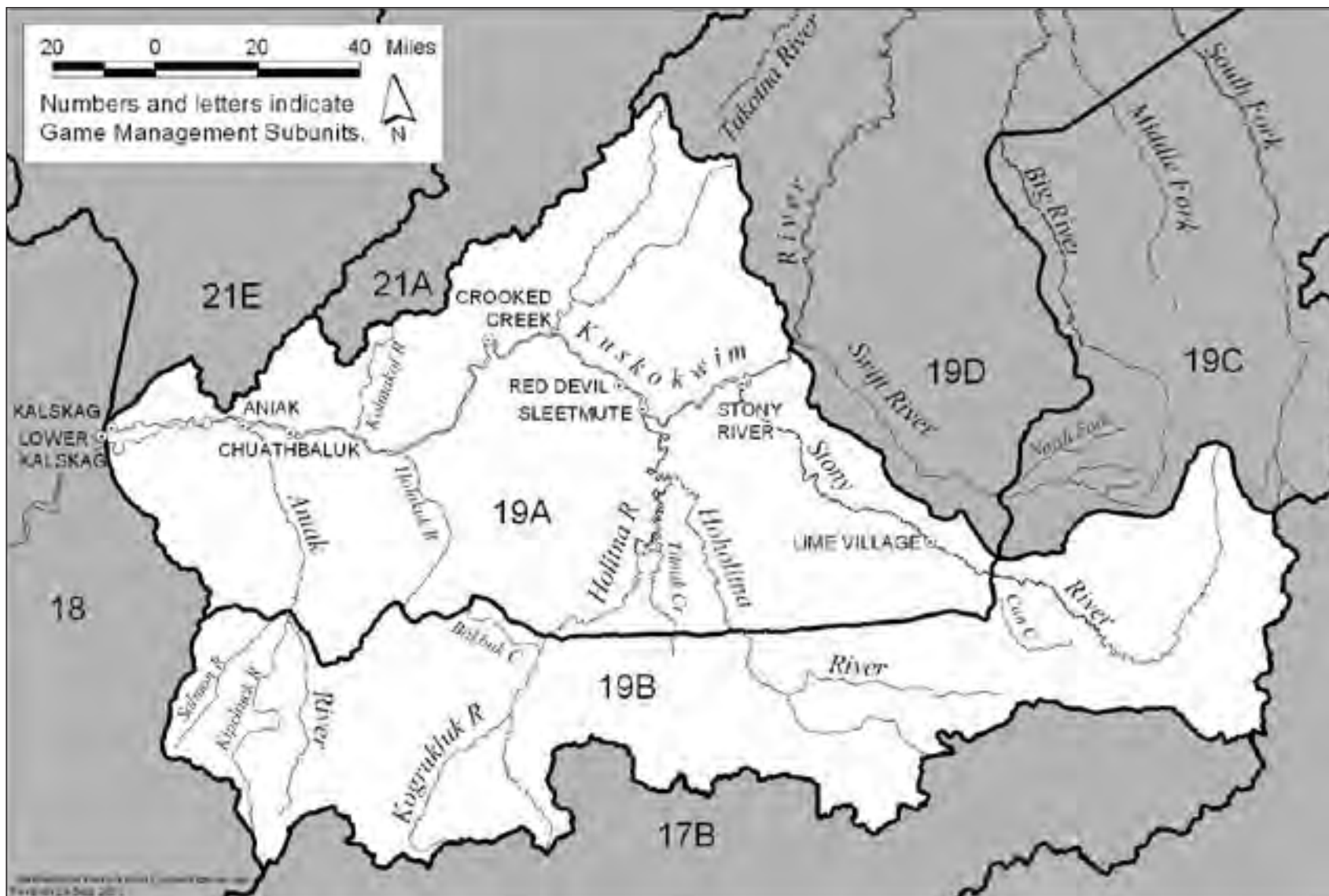


Figure 1.—Map of the Central Kuskokwim River region.

3) eliminate the winter moose season in GMU 19A, and 4) shorten the nonresident season in GMU 19B from 25 days to 20 days. The CKAC also reached a majority opinion to recommend predator management programs in GMU 19A and GMU 19B.

The majority opinion was submitted to the BOG for consideration at their February–March 2004 meeting. In response to the concerns voiced by residents attending the CKAC and CKMC meetings, and upon recommendation of the CKMC, the BOG adopted most of the recommendations into permanent regulation. However, the recommendation to prohibit nonresident hunting in GMU 19A was adopted for only 1 year, to be reconsidered at the March 2005 BOG meeting, when more data would be available. The BOG instituted a moose registration hunt (RM640) in GMU 19A, which was later implemented during the fall 2004 moose season.

The CKMC continued to meet following the 2004 BOG meeting, resulting in the submission of recommendations for the March 2005 BOG meeting that were nearly identical to those submitted for the 2004 meeting. BOG members again voted to adopt the committee’s recommendations for 1 year and resolved to reconsider the situation once more in 2006. BOG members based their decisions, in part, on the first year of harvest data from the household surveys (presented later in this report) as well as GMU 19A moose population estimates generated by the ADF&G Division of Wildlife Conservation. Based on ADF&G surveys in 1998 and 2001, the GMU 19A total moose population was estimated to number between 6,800 and 11,300 moose (Alaska Board of Game 2004:4).

At its March 2006 meeting, the BOG again took up the issue of GMU 19A moose and considered a proposal to retain the nonresident prohibition, close resident hunting, and implement a Tier II hunt³ in portions of GMU 19A. This proposal was based on a GMU 19A moose population estimate revised by ADF&G in February 2005 to 2,700 to 4,250 moose as a result of using geospatial population estimation techniques. Observations by the Division of Wildlife Conservation of low cow to calf and bull to cow ratios and Division of Subsistence household survey data also supported the proposal (Alaska Board of Game 2006).

Residents of Sleetmute, Stony River, and Red Devil testified against the establishment of a Tier II hunt, favoring instead a complete closure or moratorium on moose hunting in the area in order to give the moose population every opportunity to rebound (Alaska Board of Game 2006). Rather than a Tier II hunt, residents of Aniak, Crooked Creek, Chuathbaluk, and Bethel favored the continuation of the registration permit program with mandatory 48-hour reporting and a unitwide harvest limit of 50 bulls. All users agreed upon the need for actions restricting the harvest. After discussion, the BOG closed the eastern portion of GMU 19A, around Sleetmute, Stony River, and Red Devil, to all hunting, and it found compelling biological evidence to establish a Tier II hunt in the downriver portion of the unit.

In May 2006, the BOG published its findings regarding hunting in GMU 19A, noting that the size of the moose population, then estimated to be 2,700 to 4,250 animals, was considerably smaller than the objective of 7,600 to 9,300 moose, and that the objective had not been achieved in 5 years. The BOG noted that their concerns about moose abundance had resulted in a considerable reduction in the number allowed for harvest. The BOG also noted the increasingly restrictive regulations on harvests, seasons, and bag limits implemented since 2002. The BOG concluded that the abundance of this moose population would continue to decline in the absence of prudent predator control and regulatory restrictions, and it adopted a combination of these 2 strategies in an attempt to allow the moose population to recover.

OBJECTIVES

In order to collect data that would produce accurate harvest estimates by community in support of the moose planning effort in the Central Kuskokwim region, the Division of Subsistence designed the harvest survey to achieve 2 primary objectives.

3. State Tier II hunts are held when there is not enough of a game population with customary and traditional uses to provide a reasonable opportunity for subsistence uses. Hunters must answer questions on an application concerning their dependence on the game for their livelihood and availability of alternative resources. Applications are scored based on responses to the questionnaire, and permits are issued to those with the highest scores.

1. Document the harvest and uses of moose, caribou, black bears (*Ursus americanus*), brown bears (*Ursus arctos*), and gray wolves (*Canis lupus*) by residents of 8 Central Kuskokwim communities through in-person interviews using a systematic survey. Elements of the survey include:
 - a. Documentation of actual harvests by household, including sex of the animal and location and seasonality of harvest;
 - b. Documentation of use patterns (e.g., sharing) between households;
 - c. Information about hunter effort in moose hunting based on:
 - i. The proportion of the total population that hunted,
 - ii. The success rates of hunters,
 - iii. The time required to achieve a successful harvest, and
 - iv. The average number of moose harvested per household.
2. Facilitate local capacity building and involvement of local communities in moose management by hiring and training local research assistants to conduct data collection; assist with data cleaning, coding, and verification; assist with the analysis of data; and review the written report detailing research findings.

The project met both objectives.

2. METHODS

DATA COLLECTION

ADF&G divisions of Subsistence and Wildlife Conservation conducted the projects in partnership with the Kuskokwim Native Association (KNA), area secondary schools (in 2003–2004), traditional councils in the communities, and local research assistants. The USFWS funded the research through an ANILCA Section 809 agreement. The respective tribal governments approved the research prior to the start of each project.

Although the projects focused on the harvests and uses of moose, the household survey instrument (Appendix A) included other big game, thus expanding the big game harvest database for the area. Surveyors collected data on the harvests and uses of moose, caribou, black bears, brown bears, and gray wolves over a 3-year period by residents in the communities of Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, Crooked Creek, Sleetmute, Red Devil, and Stony River. Figure 1 shows locations of these communities. The survey measured harvest and uses of big game through the collection of data about the proportion of households in the total population that harvested, attempted to harvest, and used big game; the number of animals harvested; and the locations of the harvests. The survey also asked residents how their harvests of moose and caribou during the study years compared to previous years' harvests (i.e., last 4 to 5 years and last 9 to 10 years) and how well their harvests met their subsistence needs.

The results reported here represent 3 years of systematic collection of big game data in the Central Kuskokwim River area. In Year 1 and Year 2, surveys were administered during April and May (of 2004 and 2005, respectively). In Year 3, because of scheduling conflicts, surveys were not conducted until September, October, and November (2006); therefore, Year 3 data may not be strictly comparable with data collected in Year 1 and Year 2. The methods employed in each project year were based on prior division research projects in Grayling, Anvik, Shageluk, Holy Cross, Alatna, Allakaket, Bettles, Evansville, Galena, Huslia, Kaltag, Nulato, Ruby, and Tanana (Andersen et al. 1998, 2000, 2001, 2004; Brown et al. 2004a; Brown et al. 2004b). The survey form was reviewed by the CKAC and participating communities prior to finalization. Community household lists, originally compiled during Division of Subsistence salmon harvest surveys in fall 2003 (Simon et al. 2007), were updated to reflect current households in each community by school teachers, tribal council members, and other community members immediately prior to the survey effort.

In Year 1 (2003–2004), in response to a suggestion from the CKMC, the project was designed to include teaching outreach education to students in the communities of GMU 19A. Approval for the project was obtained from the village or tribal council in each community prior to beginning training and research efforts. Following community approval, ADF&G wildlife education specialists sent a curriculum developed specifically for the project to participating teachers. After completing the curriculum, which contained lessons on moose biology, wildlife management, and the state regulatory process, Division of Subsistence staff trained students to conduct household surveys in their community. This approach provided students with a context for the project questions and contributed to their knowledge of the regulatory system as well as important issues related to hunting big game prior to their delivery of the household survey. Students conducted the household surveys under direct supervision of their teachers. They worked in teams of 2, and their teachers determined which households each team would survey in order to avoid duplication of effort. Although the curriculum focused on moose, students also discussed other big game, and their surveys included questions about caribou, black bears, brown bears, and gray wolves.

In Year 2 (2004–2005), with the exception of Aniak, division researchers worked directly with individual tribal councils to identify complete household lists for survey administration and to select and train local research assistants to administer the household surveys. In Aniak, ADF&G worked with the KNA to select a local research assistant who would administer the surveys. Division researchers conducted the household surveys in Red Devil and Chuathbaluk, because no residents were interested in administering the survey.

Following the identification and hiring of local research assistants, division researchers traveled to each community to train assistants in the administration of face-to-face household surveys. During training,

and with the help of tribal council members and other community members, research assistants edited and updated the previous year's household lists for their community.

In Year 3 (2005–2006), with the exception of Aniak, local research assistants conducted the house-to-house surveys. In Aniak, the division again worked with the KNA to administer the survey with local research assistants trained by the division.

DATA ANALYSIS

In all project years, there were several levels of review of completed forms: on the community level by student surveyors and teachers in Year 1, and by local research assistants and project coordinators in years 2 and 3. Division of Subsistence staff then reviewed survey instruments for errors of logic or omission and resolved problems directly with the surveyors.

Because the population size of most of the communities was small, researchers used a census approach in each community. In Year 1, a total of 424 households were identified in the 8 communities (Table 1). Surveys were completed in 252 households, more than one-half (59%) of all households. Although surveyors attempted to contact unsurveyed households a minimum of 3 separate times, they were unable to establish contact with a number of households. The lowest contact rate occurred in Lower Kalskag, where 34 of the estimated 72 (47%) households were contacted and surveyed. The highest contact rate occurred in Stony River, where 17 of the 18 (94%) households were contacted and surveyed. With the exception of Lower Kalskag, at least one-half of all households in each community participated in the Year 1 survey.

In Year 2, a total of 398 households were identified in the 8 project communities (Table 2). Surveys were completed with 277 households, representing almost three-quarters (70%) of all households. The lowest contact rate occurred in Stony River, where 5 of the estimated 15 (33%) households were contacted and surveyed, which was in sharp contrast to Year 1, when 94% of households participated in the survey. The highest contact rate occurred in Upper Kalskag, where 50 of the 51 (98%) households were surveyed. With the exception of Stony River, more than one-half of all households in each community participated in the Year 2 project.

In Year 3, a total of 465 households were identified in the project communities, and surveys were completed in 258, over one-half (56%) of total households (Table 3). Similarly to Year 2, the lowest contact rate was in Stony River, where 3 of the estimated 17 households were contacted and interviewed, representing 18% of community households. The highest survey rates were in Red Devil (77%) and Aniak (74%). With the exception of Stony River, Lower Kalskag, and Sleetmute, at least one-half of all households were surveyed in Year 3.

Between Year 1 and Year 2, the total estimated human population and total number of households declined slightly, from 1,508 people in Year 1 to 1,329 in Year 2, a 12% decline, and from 424 households in Year 1 to 398 in Year 2, a decline of 6% (tables 1 and 2). The average total estimated human population for the 3 project years was 1,477 residents, with surveyed households representing an average 903 residents (tables 1, 2, and 3). However, the sample of 252 households in Year 1 was expanded in Year 2 to include an additional 25 surveyed households for a total of 277 households, a 10% increase (tables 1 and 2). In Year 2, this sample represented an increase from 883 to 947 individuals, a 7% increase. The Year 3 sample of 258 households was more similar to that of Year 1, with an estimated surveyed population of 878 people (tables 1 and 3). The number of surveyed households in Year 1 and Year 3 was nearly identical (252 and 258 households, respectively).

The range in community population size was considerable during the 3 project years. For all years, the combined population of 3 communities, Aniak, Lower Kalskag, and Upper Kalskag, represented about 70% of the total estimated population in all study communities: 70% (1,055 individuals) in Year 1; 72% (956 individuals) in Year 2; and 72% (1,146 individuals) in Year 3 (tables 1, 2, and 3). Other communities with total estimated populations over 100 people included Crooked Creek and Chuathbaluk in Year 1 and Year

Table 1.—Survey design and sample sizes, Central Kuskokwim communities, 2003–2004 harvest survey.

Community	Type of design	Households						Population	
		Total number	Sample goal	Number surveyed	Percentage sampled	Unable to contact	Declined survey	Sampled household population	Estimated community population
Aniak	Census	163	163	82	50.3%	58	22	256	509.0
Chuathbaluk	Census	30	30	17	56.7%	13	0	71	125.3
Crooked Creek	Census	36	36	27	75.0%	9	0	117	156.0
Lower Kalskag	Census	72	72	34	47.2%	32	0	143	303.0
Red Devil	Census	14	14	12	85.7%	1	0	30	35.0
Sleetmute	Census	32	32	29	90.6%	1	1	78	86.1
Stony River	Census	18	18	17	94.4%	1	0	48	50.8
Upper Kalskag	Census	59	59	34	57.6%	25	0	140	242.9
All communities		424	424	252	59.4%	140	23	883	1508.2

Source ADF&G Division of Subsistence household surveys, 2004.

Table 2.—Survey design and sample sizes, Central Kuskokwim communities, 2004–2005 harvest survey.

Community	Type of design	Households						Population	
		Total number	Sample goal	Number surveyed	Percentage sampled	Unable to contact	Declined survey	Sampled household population	Estimated community population
Aniak	Census	155	155	92	59.4%	63	0	292	492.0
Chuathbaluk	Census	23	23	17	73.9%	5	1	59	79.8
Crooked Creek	Census	39	39	29	74.4%	10	0	103	138.5
Lower Kalskag	Census	73	73	59	80.8%	14	0	216	267.3
Red Devil	Census	12	12	8	66.7%	4	0	25	37.5
Sleetmute	Census	29	29	17	58.6%	12	0	55	93.8
Stony River	Census	15	15	5	33.3%	10	0	8	24.0
Upper Kalskag	Census	51	51	50	98.0%	0	1	189	196.6
All communities		398	398	277	69.6%	118	2	947	1329.4

Source ADF&G Division of Subsistence household surveys, 2005.

Table 3.—Survey design and sample sizes, Central Kuskokwim communities, 2005–2006 harvest survey.

Community	Type of design	Households						Population	
		Total number	Sample goal	Number surveyed	Percentage sampled	Unable to contact	Declined survey	Sampled household population	Estimated community population
Aniak	Census	168	168	124	73.8%	2	5	402	544.6
Chuathbaluk	Census	42	42	21	50.0%	21	0	62	123.6
Crooked Creek	Census	32	32	17	53.1%	15	0	82	154.4
Lower Kalskag	Census	84	84	30	35.7%	54	0	120	336.0
Red Devil	Census	13	13	10	76.9%	3	0	31	40.3
Sleetmute	Census	41	41	19	46.3%	0	0	41	88.5
Stony River	Census	17	17	3	17.6%	14	0	7	39.7
Upper Kalskag	Census	68	68	34	50.0%	34	0	133	265.6
All communities		465	465	258	55.5%	143	5	878	1592.6

Source ADF&G Division of Subsistence household surveys, 2006.

3 and Crooked Creek in Year 2. All other communities in all years had fewer than 100 people. In summary, community size during the 3 project years ranged from an average estimated 515 residents in Aniak to an average estimated 38 in Red Devil.

All surveys were entered into Microsoft SQL¹ server databases using a double data-entry method, in which surveys are entered twice, by 2 different people, and the differences resolved. Results from surveyed households were expanded to unsurveyed households following the method below, in order to generate total harvest estimates for each community. Fractions of animals are a result of extrapolation. The estimates of harvests and use practices were calculated based upon the application of weighted means, which is a standard method for expanding sampled data (Cochran 1977). In community-based surveys, each community is a separate stratum for the purpose of generating estimates. In some cases, the community is subdivided into separate strata in order to adjust for potential bias. For this project, the sample mean of the harvests was applied to households that were not contacted or who refused to participate. The formula for standard expansion is:

$$X_c = \frac{N}{n} \sum_{i=1}^n x_i$$

where:

x = household harvest,

i = i th household in the community,

n = number of sampled households in the community,

N = total number of households in the community, and

X_c = total estimated community harvest

A calculation for the relative precision of the mean, or likelihood that an unknown value falls within a certain distance from the mean, is also produced. This value is shown as a confidence interval (CI) expressed as a percent. A standard of 95% CI is used for all calculations. The first step in calculating the confidence interval is the calculation of the standard error of the mean, which includes the finite population correction factor:

$$s_x^- = \frac{s}{\sqrt{n}} \times \sqrt{1 - \frac{n}{N}}$$

where:

$$CI \% (\pm) = \frac{t_{\alpha/2} \times s_x^-}{\bar{x}}$$

$t_{\alpha/2}$ = Student's t statistic for given alpha level (α) with $n-1$ degrees of freedom (95%) (CI with $n-1$ degrees of freedom),

s = the standard deviation of household harvest,

\bar{x} = sample mean of household harvest,

n = number of households in the community, or sample size, and

N = total households in the community.

1. Product names are given because they are established standards for the State of Alaska or for scientific completeness; they do not constitute product endorsement.

Small CL percentages indicate that an estimate is likely to be very close to the actual mean of the sample. Larger percentages mean that estimates could be further from the mean of the sample.

The corrected final data from the household survey will be added to the Division of Subsistence Community Subsistence Information System (CSIS)². This publicly-accessible database includes community-level study findings.

2. Alaska Department of Fish and Game (ADF&G) Division of Subsistence, Juneau. "Community Subsistence Information System: CSIS." <https://www.adfg.alaska.gov/sb/CSIS>

3. SURVEY RESULTS

Three annual big game surveys in the 8 Central Kuskokwim communities of Aniak, Chuathbaluk, Crooked Creek, Lower Kalskag, Red Devil, Sleetmute, Stony River, and Upper Kalskag provided baseline estimates of the numbers of moose, caribou, black bears, brown bears, and gray wolves harvested, numbers of households that attempted to harvest, and the uses and sharing of the harvested species. These baseline estimates were an important component of the Central Kuskokwim Moose Planning effort between 2002 and 2007.

MOOSE

In all years, moose was the most widely used and hunted animal surveyed in the studied communities. During Year 1 of the survey in all communities combined, there were an estimated 426 moose hunters, representing approximately 28% of the region's local population (Table 4). Of these 426 hunters, an estimated 96 hunters (23%) successfully harvested approximately 107 moose in 2003–2004.

In Year 1, 76% of households in the Central Kuskokwim area reported using moose, 57% attempted to harvest moose, and 22% of all households successfully harvested 1 or more moose. At the community level, the percentage of households using moose ranged from 29% in Chuathbaluk to 100% in Crooked Creek; attempts to harvest ranged from 33% in Red Devil to 67% in Crooked Creek. Harvests ranged from 2 moose in Red Devil to 30 moose in Lower Kalskag. Accounting for community population differences, per capita harvest rates for moose in Year 1 ranged from 0.04 to 0.13, with an average for all communities of 0.07 moose per capita. The survey also asked about use patterns of moose in each community. In Year 1 (2003–2004), most households in each community reported using moose meat and fat (67 to 96% of households and 50 to 78% of households, respectively) (Table B1). Additionally, an average of 61% of households in the area reported using bone/marrow and 57% reported using organs. Finally, approximately 37% and 30% of responding area households reported using the head and hooves, respectively, of the moose they harvested.

In Year 2, percentages of households using and harvesting moose were somewhat lower. Overall, 68% of households in the Central Kuskokwim area reported using moose while 61% attempted to harvest and only 16% actually harvested a moose (Table 5). At the community level, the percentage of households using moose ranged from 36% in Lower Kalskag to 86% in Crooked Creek; attempts to harvest ranged from 25% in Red Devil to 76% in Upper Kalskag. Harvests ranged from 0 moose in Red Devil and Stony River to 39 in Aniak; per capita rates ranged from 0 moose in Red Devil and Stony River to 0.08 in Aniak, with a regional average of 0.05 moose per person in 2004–2005. Table B2 describes the patterns of use by area residents. In 2004–2005, while there was little reported use of moose antlers and hides, most households reported using the meat (81%) and fat (71%). Lesser but measureable percentages of households reported using bone/marrow (52%), organs (36%), and heads (15%), similar levels as Year 1.

In Year 3 of the survey project, covering 2005–2006, 61% of households in the Central Kuskokwim area reported using moose, while 48% reported attempting to harvest moose, and 19% of households harvested 1 or more moose (Table 6). At the community level, the percentage of households using moose ranged from 20% in Red Devil to 80% in Aniak; attempts to harvest ranged from 0% in Red Devil to 67% in Stony River. Harvests ranged from 0 moose in Red Devil and Sleetmute to 46 moose in Aniak. The harvest in 2005–2006 reflects regulatory changes that eliminated the winter subsistence hunt as well as the shift to a registration hunt for state residents. Per capita harvests ranged from 0 moose in Red Devil and Sleetmute (where there was no harvest) to 0.29 in Stony River, with a regional average of 0.05 moose per person. The percentages of households reporting the use of various moose parts was lower in Year 3 than in the previous 2 years (Table B3). Averages of 66% and 40% of area residents reported using moose meat and fat respectively.

Table 4.—Estimated participation in the use and harvest of moose, Central Kuskokwim communities, April 2003–March 2004.

Community	Percentage of households					Estimated number of moose harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters		Successful hunters ^b		
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	85.4%	62.2%	14.6%	74.4%	15.9%	23.9	0.1	0.05	53.4%	12.0	36.6	206.8	40.6%	0.1	23.9	1.0
Chuathbaluk	29.4%	35.3%	17.6%	23.5%	17.6%	5.3	0.2	0.04	103.2%	3.0	10.8	14.1	11.3%	0.4	5.3	1.0
Crooked Creek	100.0%	66.7%	25.9%	85.2%	33.3%	9.3	0.3	0.06	40.1%	7.0	13.1	49.3	31.6%	0.2	9.3	1.0
Lower Kalskag	73.5%	61.8%	23.5%	61.8%	23.5%	29.6	0.4	0.10	74.6%	14.0	51.8	53.4	17.6%	0.6	21.2	1.4
Red Devil	91.7%	33.3%	16.7%	75.0%	16.7%	2.3	0.2	0.07	63.3%	2.0	3.8	6.2	17.8%	0.4	2.3	1.0
Sleetmute	58.6%	44.8%	31.0%	48.3%	24.1%	11.0	0.3	0.13	20.0%	10.0	13.2	25.1	29.2%	0.4	11.0	1.0
Stony River	70.6%	64.7%	23.5%	52.9%	23.5%	4.2	0.2	0.08	23.9%	4.0	5.2	13.8	27.1%	0.3	4.2	1.0
Upper Kalskag	73.5%	58.8%	29.4%	58.8%	26.5%	20.8	0.4	0.09	51.4%	12.0	31.5	57.3	23.6%	0.4	19.1	1.1
All communities	76.2%	57.1%	21.8%	63.9%	21.8%	106.6	0.3	0.07	21.0%	84.2	128.9	426.0	28.2%	0.3	96.3	1.1

Source ADF&G Division of Subsistence household surveys, 2004.

a. Low estimates are based on the actual reported take of moose.

b. Maximum of 1 successful hunter counted per moose harvested.

Table 5.—Estimated participation in the use and harvest of moose, Central Kuksokwim communities, April 2004–March 2005.

Community	Percentage of households					Estimated number of moose harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters ^b	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	80.4%	70.7%	22.8%	65.2%	23.9%	38.8	0.3	0.08	33.3%	25.8	51.7	185.3	37.7%	0.2	38.8	1.0
Chuathbaluk	58.8%	35.3%	5.9%	52.9%	11.8%	1.4	0.1	0.02	0.0%	0.0	0.0	9.5	11.9%	0.1	1.4	1.0
Crooked Creek	86.2%	69.0%	10.3%	82.8%	13.8%	4.0	0.1	0.03	68.1%	3.0	6.8	51.1	36.9%	0.1	4.0	1.0
Lower Kalskag	35.6%	40.7%	16.9%	23.7%	8.5%	12.4	0.2	0.05	28.6%	10.0	15.9	59.4	22.2%	0.2	12.4	1.0
Red Devil	75.0%	25.0%	0.0%	75.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	4.5	12.0%	0.0	0.0	0.0
Sleetmute	82.4%	70.6%	11.8%	76.5%	23.5%	3.4	0.1	0.04	125.7%	2.0	7.7	29.0	30.9%	0.1	3.4	1.0
Stony River	60.0%	60.0%	0.0%	60.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	15.0	62.5%	0.0	0.0	0.0
Upper Kalskag	72.0%	76.0%	16.0%	64.0%	14.0%	9.4	0.2	0.05	14.0%	9.0	10.7	56.2	28.6%	0.2	9.4	1.0
All communities	68.2%	61.4%	16.2%	58.1%	15.9%	69.3	0.2	0.05	18.4%	56.5	82.0	409.9	30.8%	0.2	69.3	1.0

Source ADF&G Division of Subsistence household surveys, 2005.

a. Low estimates are based on the actual reported take of moose.

b. Maximum of 1 successful hunter counted per moose harvested.

Table 6.—Estimated participation in the use and harvest of moose, Central Kuskokwim communities, April 2005–March 2006.

Community	Percentage of households					Estimated number of moose harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit			All hunters		Successful hunters ^b		
									of total harvest							
									Percentage	Low ^a	High					
												Number	percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	79.8%	62.1%	25.0%	60.5%	21.8%	46.1	0.3	0.08	19.4%	37.1	55.0	199.2	36.6%	0.2	46.1	1.0
Chuathbaluk	28.6%	28.6%	9.5%	23.8%	0.0%	4.0	0.1	0.03	147.3%	2.0	9.9	16.0	12.9%	0.3	4.0	1.0
Crooked Creek	64.7%	52.9%	35.3%	41.2%	29.4%	11.3	0.4	0.07	69.5%	6.0	19.1	31.8	20.6%	0.4	11.3	1.0
Lower Kalskag	40.0%	30.0%	3.3%	36.7%	3.3%	2.8	< 0.1	0.01	279.1%	1.0	10.6	35.3	10.5%	0.1	2.8	1.0
Red Devil	20.0%	0.0%	0.0%	20.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Sleetmute	31.6%	15.8%	0.0%	31.6%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	8.6	9.8%	0.0	0.0	0.0
Stony River	66.7%	66.7%	66.7%	33.3%	33.3%	11.3	0.7	0.29	569.2%	2.0	75.8	28.3	71.4%	0.4	11.3	1.0
Upper Kalskag	58.8%	50.0%	17.6%	44.1%	14.7%	12.0	0.2	0.05	77.7%	6.0	21.3	52.3	19.7%	0.2	12.0	1.0
All communities	61.2%	47.7%	18.6%	47.3%	15.1%	87.5	0.2	0.05	23.8%	66.7	108.3	371.5	23.3%	0.2	87.5	1.0

Source ADF&G Division of Subsistence household surveys, 2005.

a. Low estimates are based on the actual reported take of moose.

b. Maximum of 1 successful hunter counted per moose harvested.

By virtue of their larger human populations, the 3 larger communities, Aniak, Lower Kalskag, and Upper Kalskag, had more hunters and harvested more moose. Together, hunters in these 3 communities harvested 75 moose, or 70% of the total local moose harvest in Year 1; 60 moose, or 87% of the total, in Year 2; and 61 moose, or 70% of the total, in Year 3 (tables 4, 5, and 6). Given the variance in estimated population sizes for the 8 surveyed communities, proportionate totals (e.g., the proportion of households attempting to harvest and the proportion of successful harvests) were a better index of hunting activity and success on a community level than a simple comparison of harvest totals, which are closely related to the size of the hunting population.

The results for the 3 study years spanning from April 2003 to March 2006 results documented residents' high value of moose as a source of protein. In all years, most households used moose: Year 1, 76%; Year 2, 68%; and Year 3, 61%. Many households attempted to harvest moose (57%, 61%, and 48%), but few were successful (22%, 16%, and 19%) (tables 4, 5, and 6).

Comparisons to earlier harvest years often provide context for single year harvest estimates. This is especially important in areas such as the Central Kuskokwim, where community residents have long expressed concerns about declining moose populations and hunting success. In addition to collecting quantitative harvest data, surveyors asked residents to compare their harvests of moose in the study year with their harvests 4 to 5 years ago and 9 to 10 years ago. The majority of responding households indicated that they harvested fewer moose in all study years than in the previous 5 or 10 years. The exceptions were Crooked Creek and Lower Kalskag in Year 2. In Year 3, the exceptions were Sleetmute, Stony River, and Crooked Creek. A poor sample may explain the inclusion of Sleetmute, which harvested 0 moose in Year 3. Only 26% of responding households answered the question comparing harvests to the prior 4 to 5 years (tables B4, B5, and B6).

Many factors contributed to the duration and success of individual and household moose hunting efforts. As noted above, in all years, the majority of surveyed households reported that their harvest in these survey years was considerably less than their harvests 4 or 5 years ago (tables B4, B5, and B6). Moose hunting effort in this survey was measured by asking households to estimate the number of days each hunter in that household spent hunting for moose. These data are presented in tables B7, B8, and B9.

In Year 1, an estimated 426 individuals, or 28% of the estimated area population, spent a total of 4,591 hunter-days in pursuit of moose, an indication of the importance of moose as a subsistence resource in the Central Kuskokwim region (tables 1 and B7). Of the 426 individuals who hunted, only a little more than one-fifth (96 hunters, or 23%) successfully harvested a moose (Table B7). Successful households spent an average of 15 days hunting for each moose harvested; successful and unsuccessful households, combined, spent an average of 11 days hunting.

In Year 2, an estimated 410 individuals, or 31% of the area population, spent a total of 4,819 hunter-days in pursuit of moose (tables 2 and B8). Of the 410 hunters, less than one-fifth (69 hunters, or 17%) successfully harvested a moose. Households in the region that harvested a moose (successful households) spent an average of 18 days hunting for each moose harvested; together, successful and unsuccessful households spent an average of 12 days hunting.

In Year 3, an estimated 372 hunters, 23% of the area population, spent a total of 4,442 hunter-days hunting moose (tables 3 and B9). Only one-fourth of these hunters (88 individuals, or 24%) harvested a moose. Successful hunters spent an average of 21 days hunting for each moose harvested. Together, successful and unsuccessful households spent an average of 12 days hunting, approximately the same estimated total as Year 2. In all 3 years, Chuathbaluk and Lower Kalskag reported the lowest time investment per moose; however, hunters in those communities required more time in subsequent years compared to the first year of the survey (Year 1: 3 and 4 days, respectively; Year 2: 14 and 10 days; Year 3: 4 and 5 days).

In all years, the majority of moose harvests occurred in September (tables B10, B11, and B12). In Year 1, moose harvests occurred in the months of August, September, October, December, and February, with 74% occurring in September. In the last 2 survey years, moose harvests occurred in 3 months only: in Year 2, moose were harvested in September (97%), December, and February, and in Year 3, moose were harvested

in August, September (94%) and January (with 2 harvested in an unknown month). September is also the only month with reported cow harvests in any of the survey years.

Bulls constituted the largest portion of the total moose harvested in all project communities, in all years. In Year 1, the sex composition of the total moose harvested consisted of 72 bulls (68% of the total harvest), 8 cows (8% of the total), and 26 moose of unknown sex (Table B10). In Year 2, bulls constituted 93% of the total harvest (65 of 69 total moose), with 5 moose of unknown sex and no reported cow harvest (Table B11). In Year 3, bulls constituted 98% of the total harvest (86 of 88 moose), with 2 moose of unknown sex and no reported cow harvest (Table B12).

The locations of Year 1 harvests are summarized by GMU and Uniform Coding Unit (UCU)¹ in Table B13 (see also Figure 2). Of the estimated 107 moose harvested by the 8 survey communities in Year 1, most (64, or 60%) were taken in 14 UCUs of GMU 19A, while 14 moose (14%) were taken in 2 UCUs of GMU 18 (Table B13). Together these areas represented 74% of the total harvest. Three moose (3%) were taken in GMU 19B, 2 moose (2%) in GMU 19D, and the remainder (21%) in unreported locations. Moose harvests were unevenly split between state and federal land in 2003–2004; 41% of the harvest occurred on state land, while 20% occurred on federal land (the land status for 43% of the harvest was unknown) (Table B14). Table B14 shows the breakdown of harvest by land status and by community in 2003–2004.

All communities harvested moose from at least 2 UCUs in Year 1 (Table B13). Aniak, Lower Kalskag, and Upper Kalskag hunters utilized at least 5 UCUs for hunting moose during Year 1. All communities harvested moose within GMU 19A. Likely because of geographical proximity, only residents of Lower Kalskag and Upper Kalskag harvested moose in GMU 18, and only Aniak and Red Devil hunters harvested moose in GMU 19B. Additionally, Stony River was the only community that reported harvesting moose in GMU 19D.

The hunters of Aniak, the largest community, harvested 3 times the number of moose than many other communities in Year 1 (2003–2004) and used 6 UCUs. The extensive travel for harvests likely reflected less abundant local moose populations, among other factors, and most GMU 19A residents emphasized that more travel was required to harvest moose than in the past. The exception to this was hunters from Lower Kalskag and Chuathbaluk, who invested fewer hunting days per harvested moose (Table B7).

In Year 2, with the exception of Red Devil and Stony River, all communities harvested at least 1 moose (Table B15). All successful communities harvested at least 1 moose in GMU 19A. Of the estimated 69 moose harvested by the 8 survey communities, 51 (74%) were taken in 11 UCUs in GMU 19A. Harvests in other areas included 5 moose (8%) in GMU 21E, 4 moose (6%) in GMU 18, 3 moose (5%) in GMU 21A, and 2 moose (24%) in GMU 19D; the remaining 3 moose (5%) were harvested in unreported locations. Table B16 shows the harvest on state and federal land by community for 2004–2005. Of the 69 moose harvested, 59% (41 moose) were harvested on state land, and the land status for 41% of the harvest (28 moose) was reported as unknown.

The locations of moose harvests in Year 3 are summarized by community in Table B17. Of the 88 harvested moose, 62 (71%) were taken in GMU 19A, and 13 moose (15%) were harvested in GMU 21A and GMU 21E. Additionally, 6 moose (7%) were harvested from GMU 19D, and another 6 moose (7%) were taken from unreported locations. Every community that harvested moose hunted in GMU 19A, and 3 communities harvested only from this area (Chuathbaluk, Crooked Creek, and Lower Kalskag). Aniak hunters hunted in 4 GMU subunits to harvest an estimated 46 moose, the largest harvest of the surveyed communities in Year 3 (2005–2006). For the 2005–2006 regulatory year, residents reported the land status of the harvest locations for nearly the entire moose harvest (86 of 88 moose, or 99% of the harvest) as unknown. In Year 3, more than twice as many moose were harvested in unknown locations than in Year 1 or Year 2. Table B18 shows moose harvests on state and federal land in Year 3.

1. The ADF&G Division of Wildlife Conservation subdivides each GMU into UCUs for more precision when generating harvest and effort statistics.

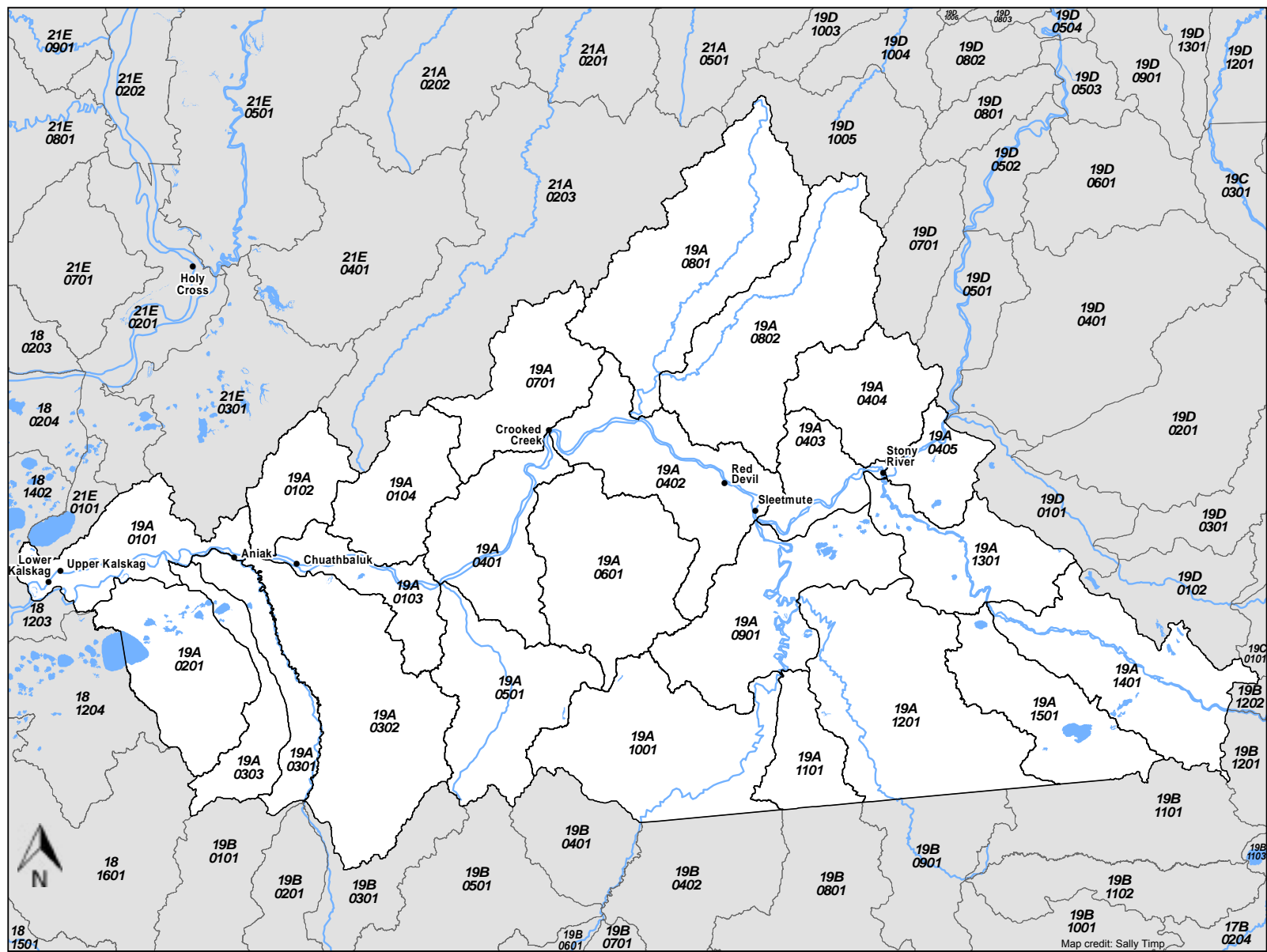


Figure 2.—Map of Central Kuskokwim region Uniform Coding Units (UCUs).

CARIBOU

The Year 1 survey resulted in an estimated total harvest of 225 caribou (Table 7), more than twice the number of moose harvested in the same period. However, fewer households in the region reported using or attempting to harvest caribou than moose (tables 4 and 7). In Chuathbaluk, however, the estimated use of caribou was greater than that of moose. Overall, 48% of all households in the Central Kuskokwim region used caribou; 35% of households attempted to harvest caribou; and 25% of households successfully harvested 1 or more caribou (Table 7).

Likely due to the variability of annual caribou migration routes, the Year 2 survey resulted in an estimated total harvest of 29 caribou (Table 8), an 87% reduction compared to the harvest of the previous year. The proportion of all households in the Central Kuskokwim region using caribou (24%) was one-half that of the previous year (48%) (tables 7 and 8). Fewer households attempted to harvest caribou in Year 2 than in Year 1, and only 4% of households successfully harvested 1 or more caribou, compared to 25% of households the previous year. Although all communities had households that hunted, only 5 communities harvested caribou, with a narrow range of success: from 8 caribou by Aniak residents to 3 caribou by Red Devil residents.

Central Kuskokwim hunters harvested more caribou in Year 3 (63 animals) than in Year 2, but still considerably fewer than were harvested in Year 1 (tables 7, 8, and 9). The proportion of households in the area that used (24%) and attempted to harvest (24%) caribou was the same or nearly the same as Year 2, and the proportion of harvesting households, although still a small number, was twice that of Year 2 (9% compared to 4%) (tables 8 and 9). Of the 5 communities attempting to harvest, only 3 harvested caribou; the majority of animals (68%) were taken by Aniak; Upper Kalskag captured 25% of the harvest and Chuathbaluk took the rest (Table 9).

The total harvest of 225 caribou in Year 1 included 84 bulls, 43 cows, and 98 caribou of unknown sex (Table B19). Lower Kalskag, Upper Kalskag, and Aniak harvested the greatest number of caribou, accounting for 78% (176 caribou) of the total taken by Central Kuskokwim communities. Harvests occurred in August and October through March. Sixty-one percent of the harvests was taken in December, January, and February. The total harvest of 29 caribou in year 2 comprised 20 bulls, 6 cows, and 3 caribou of unknown sex (Table B20). Lower Kalskag, Aniak, and Stony River harvested the greatest number of caribou, accounting for 75% (22 caribou) of the total harvest. In Year 2, caribou were harvested in fewer months than the previous year: hunting occurred in December, February, and March; and the majority of the harvests (71%) were accomplished in December and March. Unlike the 2 preceding years, the total harvest of 63 caribou in Year 3 was composed of an almost equal number of bulls (24) and cows (21), along with 19 animals of unknown sex (Table B21). Harvests occurred in every month except May, June, July, and October; the largest harvests were taken in December and January.

In Year 1, households throughout GMU 19A reported poor accessibility to or availability of caribou during the project year even though harvests were considerable and a large percentage of hunters were successful. Although GMU 19A is included in the northern reaches of the migratory range of the Mulchatna caribou herd, residents said that caribou were often inaccessible or it required significant travel to hunt them. In all years, hunters from communities in the upper reaches of the Central Kuskokwim region, such as Stony River, Red Devil, and Sleetmute, reported that they did not have accessibility and availability of caribou. However, in all 3 years, the majority of harvests came from GMU 19A (tables B22, B23, and B24).

In Year 1, every community harvested at least 1 caribou in GMU 19A; 68% of the total was harvested in 19A. Aniak, the top harvesting community, hunted and harvested in 5 UCUs of 19A. Lower Kalskag was the only community to harvest from GMU 18. Tables B25, B26, and B27 describe the percentages of caribou harvested on state and federal land in all study years.

Table B23 summarizes the locations of caribou harvests for each project community by GMU and UCU during Year 2. Ninety-five percent of caribou were harvested in GMU 19A; 55% of those harvested in GMU 19A came from UCU 19A 0201, which is located south of Aniak, between the Aniak and Kuskokwim rivers.

Table 7.—Estimated participation in the use and harvest of caribou, Central Kuskokwim communities, April 2003–March 2004.

Community	Percentage of households					Estimated number of caribou harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters ^b	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	61.0%	42.7%	25.6%	40.2%	23.2%	87.5	0.5	0.17	44.7%	48.4	126.5	103.4	20.3%	0.8	49.7	1.8
Chuathbaluk	58.8%	35.3%	35.3%	52.9%	29.4%	17.6	0.6	0.14	74.0%	10.0	30.7	19.4	15.5%	0.9	14.1	1.3
Crooked Creek	25.9%	14.8%	7.4%	22.2%	7.4%	4.0	0.1	0.03	88.7%	3.0	7.5	13.3	8.5%	0.3	2.7	1.5
Lower Kalskag	35.3%	38.2%	29.4%	17.6%	20.6%	46.6	0.6	0.15	66.6%	22.0	77.6	41.3	13.6%	1.1	31.8	1.5
Red Devil	66.7%	33.3%	25.0%	50.0%	16.7%	5.8	0.4	0.17	51.6%	5.0	8.8	4.7	13.3%	1.3	3.5	1.7
Sleetmute	24.1%	10.3%	10.3%	24.1%	13.8%	7.7	0.2	0.09	40.6%	7.0	10.9	4.4	5.1%	1.8	4.4	1.8
Stony River	52.9%	47.1%	29.4%	35.3%	23.5%	13.8	0.8	0.27	21.9%	13.0	16.8	10.6	20.8%	1.3	6.4	2.2
Upper Kalskag	52.9%	47.1%	35.3%	29.4%	29.4%	41.6	0.7	0.17	49.1%	24.0	62.1	43.4	17.9%	1.0	26.0	1.6
All communities	48.0%	35.3%	24.6%	32.9%	21.0%	224.7	0.5	0.15	20.7%	178.2	271.2	240.5	15.9%	0.9	138.5	1.6

Source ADF&G Division of Subsistence household surveys, 2004.

a. Low estimates are based on the actual reported take of caribou.

b. Maximum of 1 successful hunter counted per caribou harvested.

Table 8.—Estimated participation in the use and harvest of caribou, Central Kuskokwim communities, April 2004–March 2005.

Community	Percentage of households					Estimated number of caribou harvested						Estimated hunter information ^b				
	Using	Attemptin g harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	23.9%	29.3%	2.2%	22.8%	0.0%	8.4	0.1	0.02	118.6%	5.0	18.4	-	-	-	-	-
Chuathbaluk	41.2%	5.9%	0.0%	41.2%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Crooked Creek	17.2%	31.0%	0.0%	17.2%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Lower Kalskag	10.2%	6.8%	5.1%	5.1%	1.7%	7.4	0.1	0.03	60.5%	6.0	11.9	-	-	-	-	-
Red Devil	50.0%	25.0%	25.0%	25.0%	12.5%	3.0	0.3	0.08	117.0%	2.0	6.5	-	-	-	-	-
Sleetmute	17.6%	29.4%	0.0%	17.6%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Stony River	60.0%	60.0%	20.0%	40.0%	0.0%	6.0	0.4	0.25	439.0%	2.0	32.3	-	-	-	-	-
Upper Kalskag	30.0%	44.0%	6.0%	24.0%	6.0%	4.2	0.1	0.02	24.4%	4.0	5.2	-	-	-	-	-
All communities	23.5%	26.4%	4.0%	19.9%	1.8%	29.0	0.1	0.02	42.2%	19.0	41.2	-	-	-	-	-

Source ADF&G Division of Subsistence household surveys, 2005.

a. Low estimates are based on the actual reported take of caribou.

b. Hunter information was not collected for caribou.

Table 9.—Estimated participation in the use and harvest of caribou, Central Kuskokwim communities, April 2005–March 2006.

Community	Percentage of households					Estimated number of caribou harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters ^b	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	29.0%	36.3%	12.1%	20.2%	8.1%	43.4	0.3	0.08	31.5%	32.0	57.0	96.2	17.7%	0.5	29.8	1.5
Chuathbaluk	23.8%	14.3%	9.5%	14.3%	0.0%	4.0	0.1	0.03	147.3%	2.0	9.9	8.0	6.5%	0.5	4.0	1.0
Crooked Creek	17.6%	5.9%	0.0%	17.6%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	7.5	4.9%	0.0	0.0	0.0
Lower Kalskag	13.3%	6.7%	0.0%	13.3%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Red Devil	0.0%	10.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	2.6	6.5%	0.0	0.0	0.0
Sleetmute	15.8%	0.0%	0.0%	15.8%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Stony River	33.3%	0.0%	0.0%	33.3%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Upper Kalskag	26.5%	32.4%	14.7%	14.7%	8.8%	16.0	0.2	0.06	98.5%	8.0	31.8	26.0	9.8%	0.6	10.0	1.6
All communities	23.6%	24.4%	8.5%	17.1%	5.0%	63.4	0.1	0.04	40.3%	42.0	88.9	140.3	8.8%	0.4	43.8	1.4

Source ADF&G Division of Subsistence household surveys, 2005.

a. Low estimates are based on the actual reported take of caribou.

b. Maximum of 1 successful hunter counted per caribou harvested.

In Year 3, 95% of the harvest was from GMU 19: primarily GMU 19A, where 88% were harvested (Table B24). Six percent of the harvest was from GMU 19B. Households from Aniak reported harvests from a number of locations. In contrast, Upper Kalskag, the next most successful community, harvested from only 1 location.

Residents reported that access to caribou varies annually, depending on the movements and proximity of the caribou herds such as the Mulchatna, Farewell-Big River, and Beaver Mountains herds. Caribou were often inaccessible to residents, or residents had to travel long distances in order to reach them, especially hunters from communities in the upper reaches of the Central Kuskokwim region, such as Stony River, Red Devil, and Sleetmute. However, in Year 1, households in Aniak, the community with the highest harvest of caribou (88 animals) and Chuathbaluk, which had a harvest of 18 caribou, overwhelmingly reported fair to good accessibility and availability of caribou (tables 7 and B28). Most households in Crooked Creek, Red Devil and Sleetmute reported availability to be poor (Table B28). In Year 2 of the survey (2004–2005), most households in the entire region reported the availability of caribou as poor, consistent with the much lower harvest in Year 2 than in Year 1 (Table B29). Finally, in Year 3, 3 of the 5 communities that responded to this question overwhelmingly reported poor caribou availability (Table B30). The other 2 communities—Aniak and Upper Kalskag—reported more variable availability of caribou from poor to fair. Aniak and Upper Kalskag were 2 of the only 3 communities that harvested caribou in Year 3 (2005–2006).

Responses to the question of caribou availability 4 to 5 years ago and 9 to 10 years ago varied greatly, again, likely reflecting the fluctuations in sizes of caribou populations in addition to changing migration routes (Table B28) (Alaska Board of Game 2011). In Year 1, the greatest percentage of households in Aniak, Crooked Creek, and Stony River reported that caribou availability and accessibility 9 to 10 years prior was fair to good, though a measurable percentage of households still reported poor availability of caribou. The residents of Chuathbaluk, Lower Kalskag, and Upper Kalskag reported availability to have been poor to fair. An equal number of respondents (44%) in Red Devil reported availability to have been either poor or good, with 11% stating that it was fair. In Year 2, the majority of reporting households in all of the communities stated that caribou availability 9 to 10 years ago was fair to good, however, 40% of households in Sleetmute also described caribou availability as poor (Table B29). In Year 3, of those communities that provided responses (Aniak, Chuathbaluk, Crooked Creek, Red Devil, and Upper Kalskag), all said that caribou availability and accessibility 9 to 10 years prior was fair to good (Table B30).

BLACK BEARS

In Year 1, hunters from 7 of the 8 survey communities harvested an estimated total of 28 black bears (Table 10). Community harvests ranged from 1 bear to 11 bears, with the exception of Aniak, which had no reported harvest; residents there also reported the lowest uses (1% of households) and fewest households attempting to harvest (2%) black bears. Crooked Creek reported a much larger black bear harvest than any other community: an estimated 11 black bears (39% of total harvest). Hunters from Chuathbaluk, Sleetmute, and Stony River were the most successful; each household that hunted was successful in harvesting at least 1 bear. Table B1 shows the percentage of households using various parts of the resource for 2003–2004. Relatively small percentages of households in each community used black bear, but of those that did, most used the meat and fat.

Black bear harvests in Year 1 included 18 males (64%), 1 female (5%), and 9 bears (31%) of unknown sex (Table B31). Harvests occurred primarily during the summer, over the months of June, July, August, and September, with the exception of 2 bears (7%) taken in April. Over one-third of the total was harvested during August (10 bears, or 36%).

In Year 2, an estimated total of 40 black bears was harvested by hunters from the 8 survey communities (Table 11). Every project community reported harvesting at least 1 black bear. Hunters from Lower Kalskag and Red Devil had high success rates: households that reported hunting also reported harvesting. Red Devil reported the largest harvest: 9 black bears (22% of the regional total). The highest percentage of households using black bears occurred in Crooked Creek (41%), while the lowest occurred in Aniak (4%). Black bear harvests consisted of 21 males (53%), 3 females (7%), and 16 bears (41%) of unreported sex (Table

Table 10.—Estimated participation in the use and harvest of black bear, Central Kuskokwim communities, April 2003–March 2004.

Community	Percentage of households					Estimated number of black bears harvested						Estimated Hunter Information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters ^b	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	1.2%	2.4%	0.0%	1.2%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	6.0	1.2%	0.0	0.0	0.0
Chuathbaluk	29.4%	11.8%	11.8%	17.6%	5.9%	3.5	0.1	0.03	130.8%	2.0	8.1	3.5	2.8%	1.0	3.5	1.0
Crooked Creek	18.5%	22.2%	18.5%	0.0%	11.1%	10.7	0.3	0.07	52.5%	8.0	16.3	8.0	5.1%	1.3	6.7	1.6
Lower Kalskag	8.8%	8.8%	2.9%	5.9%	2.9%	2.1	0.0	0.01	0.0%	0.0	0.0	6.4	2.1%	0.3	2.1	1.0
Red Devil	16.7%	16.7%	8.3%	8.3%	0.0%	1.2	0.1	0.03	0.0%	0.0	0.0	2.3	6.7%	0.5	1.2	1.0
Sleetmute	3.4%	3.4%	3.4%	0.0%	0.0%	2.2	0.1	0.03	67.0%	2.0	3.7	1.1	1.3%	2.0	1.1	2.0
Stony River	11.8%	11.8%	11.8%	5.9%	11.8%	3.2	0.2	0.06	38.5%	3.0	4.4	2.1	4.2%	1.5	2.1	1.5
Upper Kalskag	14.7%	23.5%	8.8%	5.9%	8.8%	5.2	0.1	0.02	99.1%	3.0	10.4	15.6	6.4%	0.3	5.2	1.0
All communities	9.5%	10.3%	6.0%	4.0%	4.0%	28.1	0.1	0.02	43.5%	20.0	40.3	45.0	3.0%	0.7	21.9	1.3

Source ADF&G Division of Subsistence household surveys, 2004.

a. Low estimates are based on the actual reported take of black bear.

b. Maximum of 1 successful hunter counted per black bear harvested.

Table 11.—Estimated participation in the use and harvest of black bear, Central Kuskokwim communities, April 2004–March 2005.

Community	Percentage of households					Estimated number of black bears harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters ^b	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	4.3%	9.8%	4.3%	1.1%	3.3%	6.7	0.0	0.01	81.3%	4.0	12.2	22.7	4.6%	0.3	6.7	1.0
Chuathbaluk	11.8%	11.8%	5.9%	5.9%	5.9%	4.1	0.2	0.05	129.8%	3.0	9.3	4.1	5.1%	1.0	2.7	1.5
Crooked Creek	41.4%	51.7%	17.2%	24.1%	6.9%	8.1	0.2	0.06	54.0%	6.0	12.4	33.6	24.3%	0.2	8.1	1.0
Lower Kalskag	8.5%	5.1%	5.1%	5.1%	0.0%	3.7	0.1	0.01	55.8%	3.0	5.8	4.9	1.9%	0.8	3.7	1.0
Red Devil	12.5%	12.5%	12.5%	0.0%	12.5%	9.0	0.8	0.24	178.7%	6.0	25.1	1.5	4.0%	6.0	1.5	6.0
Sleetmute	17.6%	11.8%	5.9%	11.8%	0.0%	1.7	0.1	0.02	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Stony River	40.0%	40.0%	20.0%	20.0%	20.0%	3.0	0.2	0.13	0.0%	0.0	0.0	6.0	25.0%	0.5	3.0	1.0
Upper Kalskag	6.0%	16.0%	6.0%	0.0%	6.0%	4.2	0.1	0.02	24.4%	4.0	5.2	9.4	4.8%	0.4	3.1	1.3
All communities	11.6%	15.2%	6.9%	5.4%	4.0%	40.4	0.1	0.03	37.6%	28.0	55.7	82.2	6.2%	0.5	28.8	1.4

Source ADF&G Division of Subsistence household surveys, 2005.

a. Low estimates are based on the actual reported take of black bear.

b. Maximum of 1 successful hunter counted per black bear harvested.

Table 12.—Estimated participation in the use and harvest of black bear, Central Kuskokwim communities, April 2005–March 2006.

Community	Percentage of households					Estimated number of black bears harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters			Successful hunters ^b	
									Percentage	Low ^a	High	Number	Percentage of population	Harvest per hunter	Harvest	
															Number	per hunter
Aniak	11.3%	14.5%	4.0%	7.3%	3.2%	6.8	0.0	0.01	52.1%	5.0	10.3	38.1	7.0%	0.2	6.8	1.0
Chuathbaluk	14.3%	9.5%	9.5%	4.8%	9.5%	6.0	0.1	0.05	156.1%	3.0	15.4	6.0	4.9%	1.0	6.0	1.0
Crooked Creek	35.3%	17.6%	11.8%	23.5%	5.9%	5.6	0.2	0.04	149.1%	3.0	14.1	5.6	3.7%	1.0	3.8	1.5
Lower Kalskag	16.7%	6.7%	3.3%	13.3%	3.3%	2.8	0.0	0.01	279.1%	1.0	10.6	5.6	1.7%	0.5	2.8	1.0
Red Devil	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Sleetmute	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Stony River	33.3%	0.0%	0.0%	33.3%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Upper Kalskag	11.8%	17.6%	5.9%	5.9%	2.9%	8.0	0.1	0.03	161.8%	4.0	20.9	18.0	6.8%	0.4	4.0	2.0
All communities	12.8%	12.0%	4.7%	8.1%	3.5%	29.2	0.1	0.02	55.3%	16.0	45.4	73.4	4.6%	0.4	23.3	1.2

Source ADF&G Division of Subsistence household surveys, 2005.

a. Low estimates are based on the actual reported take of black bears.

b. Maximum of 1 successful hunter counted per black bear harvested.

B32). Of the few households that used black bear, most used the meat and fat (Table B2). There was also measureable use of the black bear hides.

Year 2 harvests occurred primarily during the months of April, May, and September, in contrast to the Year 1 harvests, which occurred primarily during June through September. Thirteen bears were harvested in September, likely in conjunction with moose hunting. At least 2 bears each month were taken during June, July, August, and March.

In Year 3, estimated harvest of black bears was 29 animals, which was similar to the Year 1 harvest (Table 12). Communities that hunted black bears harvested a range of 3 bears at Lower Kalskag to 8 bears in Upper Kalskag. Three communities did not attempt to harvest black bears (Red Devil, Sleetmute, and Stony River). Nearly all harvested bears were male (23 bears, or 79%) (Table B33). Four females and 2 bears of unknown sex composed the rest of the harvest. Black bears were harvested from April through October; the majority (57%) were taken in September. As with moose, fewer households reported using black bear in 2005–2006 (Table B3). Of the households that used black bear, between 20% and 100% reported using the meat, and 17% to 100% of households reported using the fat.

The locations of black bear harvests for each community are summarized by GMU and UCU in tables B34, B35, and B36. In Year 1, the majority of black bears were harvested in GMU 18 and GMU 19A (Table B34). Lower Kalskag hunters harvested bears only in GMU 18, while Chuathbaluk, Crooked Creek, Red Devil, Sleetmute, and Stony River residents harvested bears exclusively in GMU 19A. Upper Kalskag residents harvested bears in both units, and they took 2 bears from unreported locations. With the exception of Upper Kalskag, where at least 3 hunting locations were reported, communities whose residents hunted black bears did so in only the 1 or 2 UCUs closest to their communities. Tables B37, B38, B39 describe the percentages of black bears harvested on state and federal land in each study year.

In Year 2, harvests occurred in 2 more identified units than were reported in Year 1, which may have been a factor in the relatively large harvest in 2004–2005 (tables B34 and B35). Black bears were harvested in GMU 18, GMU 19A, GMU 19D, and GMU 21A (Table B35). However, households in Aniak, Chuathbaluk, Crooked Creek, Sleetmute, and Stony River harvested bears in GMU 19A only. Red Devil hunters harvested bears exclusively in GMU 21A. Upper Kalskag residents reported harvesting bears in both GMU 18 and GMU 19, and they also harvested 2 bears from unknown locations. With the exception of Lower Kalskag, Crooked Creek, and Aniak, whose households hunted in at least 3 locations, communities that reported hunting black bears used only 1 or 2 locations.

In Year 3, harvests occurred in 3 GMUs: 18, 19A, and 21E (Table B36). The majority (82%) of black bear harvests occurred in GMU 19A. Three communities harvested exclusively in this unit (Chuathbaluk, Crooked Creek, Lower Kalskag).

In all 3 years, most communities harvested black bears from only 1 or 2 UCUs (tables B34, B35, B36). However, Crooked Creek residents during Year 2 and Year 3 reported harvesting from 3 UCUs, as did Lower Kalskag residents in Year 2 and Upper Kalskag residents in Year 3. Aniak residents harvested from 4 UCUs in both Year 2 and Year 3.

BROWN BEARS

The reported harvest of brown bears in the Central Kuskokwim area remained small throughout the study years. Aniak households harvested an estimated 2 brown bears in Year 1 (Table 13). Both were male, both were taken in May, and both came from GMU 19A, UCU 0103 (tables B40 and B41). Tables B42, B43, and B44 describe the percentages of brown bears harvested on state and federal land in each study year. Only 1% of households in Aniak reported use of brown bears, and no other communities reported uses or attempted harvest. Only 1 brown bear was taken in Year 2, reported by a household in Lower Kalskag (Table 14). The harvested bear was male and was taken in an unknown month from GMU 19A, UCU 0101 (tables B45 and B46).

In Year 3, Aniak residents harvested an estimated total of 3 bears in GMU 21E and other, unknown locations; months of harvest are unknown (tables 15, B47, and B48).

Table 13.—Estimated participation in the use and harvest of brown bear, Central Kuskokwim communities, April 2003–March 2004.

Community	Percentage of households					Estimated number of brown bears harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest ^a			All hunters		Successful hunters ^b		
									Percentage	Low	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	1.2%	2.4%	1.2%	0.0%	0.0%	2.0	0.0	0.00	0.0%	1.0	2.0	8.0	1.6%	0.3	2.0	1.0
Chuathbaluk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Crooked Creek	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Lower Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Red Devil	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Sleetmute	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Stony River	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Upper Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
All communities	0.4%	0.8%	0.4%	0.0%	0.0%	2.0	0.0	0.00	0.0%	1.0	2.0	8.0	0.5%	0.3	2.0	1.0

Source ADF&G Division of Subsistence household surveys, 2004.

a. Only 1 brown bear harvest was reported, so no confidence interval could be calculated. Low and high estimates are based on reported and expanded numbers.

b. Maximum of 1 successful hunter counted per brown bear harvested.

Table 14.—Estimated participation in the use and harvest of brown bear, Central Kuskokwim communities, April 2004–March 2005.

Community	Percentage of households					Estimated number of brown bears harvested						Estimated hunter information ^b				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest ^a			All hunters		Successful hunters		
									Percentage	Low	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	0.0%	2.2%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	1.0	0.0	-	-	-	-	-
Chuathbaluk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Crooked Creek	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Lower Kalskag	3.4%	1.7%	1.7%	3.4%	0.0%	1.2	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Red Devil	12.5%	0.0%	0.0%	12.5%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Sleetmute	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Stony River	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
Upper Kalskag	0.0%	2.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	-	-	-	-	-
All communities	1.1%	1.4%	0.4%	1.1%	0.0%	1.2	0.0	0.00	0.0%	1.0	1.2	-	-	-	-	-

Source ADF&G Division of Subsistence household surveys, 2005.

a. Only 1 brown bear harvest was reported, so no confidence interval could be calculated. Low and high estimates are based on reported and expanded numbers.

b. Hunter information was not collected for brown bear.

Table 15.—Estimated participation in the use and harvest of brown bear, Central Kuskokwim communities, April 2003–March 2004.

Community	Percentage of households					Estimated number of brown bears harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total harvest for community	Per household	Per capita	95% confidence limit of total harvest ^a			All hunters			Successful hunters ^b	
									Percentage	Low	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	2.4%	7.3%	1.6%	0.8%	0.0%	2.7	0.0	0.00	83.4%	1.0	2.7	2.7	0.5%	1.0	2.7	1.0
Chuathbaluk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Crooked Creek	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Lower Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Red Devil	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Sleetmute	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Stony River	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Upper Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
All communities	1.2%	3.5%	0.8%	0.4%	0.0%	2.7	0.0	0.00	124.7%	1.0	2.7	2.7	0.2%	1.0	2.7	1.0

Source ADF&G Division of Subsistence household surveys, 2005.

a. Only 1 brown bear harvest was reported, so no confidence interval could be calculated. Low and high estimates are based on reported and expanded numbers.

b. Maximum of 1 successful hunter counted per brown bear harvested.

GRAY WOLVES

An estimated total of 72 gray wolves were harvested in the area in Year 1; 45 in Year 2; and 83 in Year 3 (tables 16, 17, and 18). In all 3 years, all households that attempted to harvest wolves were successful. Wolf hunting appears to be a specialized household pursuit: although few households in Aniak reported any use of wolves or attempts to harvest them, hunters from this community overwhelmingly took most of the harvests in all years, especially in Years 2 and 3. Aniak hunters took more than one-half (38 wolves, or 53%) of the total harvest in Year 1; 30 wolves, or 68% in Year 2; and 52 wolves, or 62% in Year 3, largely due to the efforts of a few Aniak trappers.

Upper Kalskag obtained the second largest harvests in Year 1 and Year 3, (19 and 20 wolves, respectively). Other communities exhibited a fair amount of variation in participation over the 3 years.

In all years, the majority of gray wolves were taken in the fall and winter months of October through March (tables B49, B50, B51). A large proportion (31%) of the harvest in Year 1 was taken in unknown months, compared with years 2 and 3. Year 2 had 2 wolf harvests and Year 3 had 3 wolf harvests in unknown months.

In all years, more male gray wolves than females were harvested: 15 males (20%) in Year 1, 19 males (43%) in Year 2, and 27 males (33%) in Year 3. Of the total harvested in Year 1, 52 wolves (72%) were of an unknown sex; in Year 2, 9 wolves (20%) were unknown; and in Year 3, almost one-half (39 wolves, or 46%) were of unknown sex.

Gray wolves were taken primarily from GMU 19A in all years: 61% in Year 1, 80% in Year 2, and 79% in Year 3 (tables B52, B53, and B54). In Year 1, the rest of the harvest was from GMU 19B and at least 2 unknown UCUs (the site of one of the harvests from an “unknown location” was in GMU 19A, but the specific UCU was not reported). Tables B55, B56, and B57 describe the percentages of gray wolves harvested on state and federal land. In Year 2, gray wolves were harvested from GMU 21E as well as GMU 19A. In contrast, in Year 3, in addition to GMU 19A, hunters used 3 units, including GMU 18, GMU 19B, and GMU 21E. Residents used a total of 8 UCUs the first year, though, in general, each community used only 2 or 3 UCU locations. In the second year, residents used a total of 7 UCUs, though most communities generally used 1 or 2 UCUs. Many more UCUs were hunted in Year 3, totaling 14 UCUs and at least 2 unknown UCUs.

Table 16.—Estimated participation in the use and harvest of gray wolf, Central Kuskokwim communities, April 2003–March 2004.

Community	Percentage of households ^a					Estimated number of gray wolves harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters		Successful hunters ^c		
									Percentage	Low ^b	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	4.9%	4.9%	4.9%	0.0%	2.4%	37.8	0.2	0.07	125.8%	19.0	85.3	8.0	1.6%	4.8	8.0	4.8
Chuathbaluk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Crooked Creek	18.5%	18.5%	18.5%	0.0%	3.7%	9.3	0.3	0.06	53.4%	7.0	14.3	6.7	4.3%	1.4	6.7	1.4
Lower Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Red Devil	25.0%	25.0%	25.0%	0.0%	0.0%	3.5	0.3	0.10	49.0%	3.0	5.2	3.5	10.0%	1.0	3.5	1.0
Sleetmute	6.9%	6.9%	6.9%	0.0%	0.0%	2.2	0.1	0.03	46.6%	2.0	3.2	2.2	2.6%	1.0	2.2	1.0
Stony River	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Upper Kalskag	11.8%	11.8%	11.8%	0.0%	2.9%	19.1	0.3	0.08	85.6%	11.0	35.4	10.4	4.3%	1.8	10.4	1.8
All communities	7.1%	7.1%	7.1%	0.0%	1.6%	71.9	0.2	0.05	53.2%	42.0	110.1	30.7	2.0%	2.1	30.7	2.1

Source ADF&G Division of Subsistence household surveys, 2004.

a. Percentages of households harvesting and attempting harvest are based on households reporting successful harvest.

b. Low estimates are based on the actual reported take of gray wolves.

c. Maximum of 1 successful hunter counted per gray wolf harvested.

Table 17.—Estimated participation in the use and harvest of gray wolf, Central Kuskokwim communities, April 2004–March 2005.

Community	Percentage of households ^a					Estimated number of gray wolves harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total for community	Per household	Per capita	95% confidence limit of total harvest			All hunters		Successful hunters ^c		
									Percentage	Low ^b	High	Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	6.5%	6.5%	6.5%	0.0%	0.0%	30.3	0.2	0.06	97.9%	18.0	60.0	11.8	2.4%	2.6	10.1	3.0
Chuathbaluk	5.9%	5.9%	5.9%	0.0%	0.0%	1.4	0.1	0.02	0.0%	0.0	0.0	1.4	1.7%	1.0	1.4	1.0
Crooked Creek	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Lower Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	1.2	0.5%	0.0	0.0	0.0
Red Devil	12.5%	12.5%	12.5%	0.0%	12.5%	6.0	0.5	0.16	178.7%	4.0	16.7	1.5	4.0%	4.0	1.5	4.0
Sleetmute	5.9%	5.9%	5.9%	0.0%	0.0%	1.7	0.1	0.02	0.0%	0.0	0.0	3.4	3.6%	0.5	1.7	1.0
Stony River	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	3.0	12.5%	0.0	0.0	0.0
Upper Kalskag	4.0%	4.0%	4.0%	0.0%	2.0%	5.2	0.1	0.03	29.0%	5.0	6.7	3.1	1.6%	1.7	2.1	2.5
All communities	4.0%	4.0%	4.0%	0.0%	0.7%	44.6	0.1	0.03	54.0%	29.0	68.7	25.4	1.9%	1.8	16.7	2.6

Source ADF&G Division of Subsistence household surveys, 2005.

a. Percentages of households harvesting and attempting harvest are based on households reporting successful harvest.

b. Low estimates are based on the actual reported take of gray wolves.

Table 18.—Estimated participation in the use and harvest of gray wolf, Central Kuskokwim communities, April 2005–March 2006.

Community	Percentage of households ^a					Estimated number of gray wolves harvested						Estimated hunter information				
	Using	Attempting harvest	Harvesting	Receiving	Giving away	Total harvest for community	Per household	Per capita	95% confidence limit of total harvest			All hunters		Successful hunters ^c		
									Percentage	Low ^b	High					
												Number	Percentage of population	Harvest per hunter	Number	Harvest per hunter
Aniak	8.9%	5.6%	5.6%	4.0%	3.2%	51.5	0.3	0.09	52.7%	38.0	78.6	12.2	2.2%	4.2	12.2	4.2
Chuathbaluk	4.8%	4.8%	4.8%	0.0%	0.0%	4.0	0.1	0.03	213.7%	2.0	12.5	4.0	3.2%	1.0	4.0	1.0
Crooked Creek	5.9%	5.9%	5.9%	0.0%	0.0%	1.9	0.1	0.01	205.3%	1.0	5.7	1.9	1.2%	1.0	1.9	1.0
Lower Kalskag	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Red Devil	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Sleetmute	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.00	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0	0.0
Stony River	33.3%	33.3%	33.3%	0.0%	0.0%	5.7	0.3	0.14	1138.4%	1.0	70.2	5.7	14.3%	1.0	5.7	1.0
Upper Kalskag	14.7%	11.8%	11.8%	2.9%	0.0%	20.0	0.3	0.08	116.8%	10.0	43.4	8.0	3.0%	2.5	8.0	2.5
All communities	7.4%	5.4%	5.4%	2.3%	1.6%	83.0	0.2	0.05	61.4%	52.0	134.0	31.7	2.0%	3.1	31.7	3.1

Source ADF&G Division of Subsistence household surveys, 2005.

a. Percentages of households harvesting and attempting to harvest are based on households reporting successful harvest.

b. Low estimates are based on the actual reported take of gray wolves

c. Maximum of 1 successful hunter counted per gray wolf harvested.

4. DISCUSSION AND CONCLUSIONS

SAMPLE SIZES AND RESULTS

The accuracy of household surveys is dependent on the in-person collection of data and the sampling method. The results of this project were significant because they were obtained from substantial samples, in terms of the proportions of total households surveyed (at least one-half of total households areawide). The sampled total population of 903 people represented 61% of the total estimated population (tables 1, 2, and 3). The survey also used a method which has become standard in these types of projects (Andersen et al. 1998, 2000, 2001, 2004; Brown and Koster 2005; Brown et al. 2004a).

Year 1 and Year 3 were very similar in terms of estimated human population sizes, number of surveyed households, and number of household members surveyed, while the sample in Year 2 represented a slight increase in surveyed households and household members. In all 3 years, there was a high degree of community involvement, so that surveys were completed in over one-half (59% and 56%) of total households in Year 1 and Year 3 and nearly three-quarters (70%) of total households in Year 2.

COMPARISONS TO EARLIER RESEARCH

In general, the Central Kuskokwim region has not been the subject of significant qualitative or quantitative research attention to subsistence practices and concerns. Prior to this big game research, 2 projects collected big game harvest data in this area. The first was conducted by Division of Subsistence researchers in Chuathbaluk and Sleetmute from June 1982 through May 1983 (Charnley 1984). Data were obtained from key respondent interviews, geospatial mapping of harvest use areas, participant observation, and household surveys of all moose hunters that included questions about harvest, sharing, hunt location, seasonality, and hunter effort. In 1982–1983, Chuathbaluk had an estimated human population of 132 individuals in 29 households, and Sleetmute’s population was approximately 101 people in 28 households, similar to the contemporary community sizes estimated in the current project. A baseline project was conducted from October 1983 to April 1984 in Stony River (Kari 1985). Kari’s methods included participant observation, geospatial mapping of harvest use areas, and key respondent interviews. However, Kari’s work did not include the collection of quantitative data that assessed household or community harvests of subsistence resources.

Additionally, in 1979 and again in 1981, the Division of Subsistence conducted food surveys in the Central Kuskokwim communities (Stony River, Sleetmute, Red Devil, Georgetown, Chuathbaluk, Upper Kalskag, and Lower Kalskag) (Charnley 1984; Jonrowe 1980; Stickney 1981). These surveys were designed to collect information about the subsistence resources used by Central Kuskokwim communities, along with general seasonal resource utilization patterns. As a result, these surveys contribute limited comparable quantitative information on moose harvests and uses. The 1979 survey focuses specifically on moose and provides community harvest estimates based on data from 48% of area households (Jonrowe 1980). The project was very limited in scope, however, and a detailed review revealed a number of methodological problems (Stickney 1981). Where relevant, data from Jonrowe’s (1980) report will be introduced in the following discussion.

Moose

Comparison of the results from this project with results from earlier projects suggested continuity in customary harvests and uses of moose, although data from the 1980s were incomplete and not directly comparable with the household data in this project. In all Central Kuskokwim communities, moose was the largest or second largest protein source, behind fish, especially Pacific salmon *Oncorhynchus* spp and whitefishes *Coregonus*, *Prosopium*, and *Stenodus* spp.

In the 1970s and early 1980s, most area households attempted to harvest moose (Charnley 1984; Jonrowe 1980; Stickney 1981). In Stony River, hunters noted the importance of moose, which, they said, was a large animal that yielded more meat than caribou. Stony River residents also commented that moose meat had a better flavor and higher nutritional value than caribou. Although only active hunters were interviewed in Chuathbaluk and Sleetmute, results from both communities indicated that most households attempted to harvest 2 moose annually. Although many (65%) Stony River households hunted for moose, success was rare: 24% of households harvested 4 moose, a success rate comparable to that in this project (Kari 1985; tables 4, 5, and 6).

Kari (1985) and Charnley (1983) reported that moose was shared widely among households in Stony River, Sleetmute, and Chuathbaluk, a finding consistent with data in this project for Year 1 and Year 3 (tables 4, 5, and 6). In Year 2, Stony River residents did not report harvesting any moose; however, they did report using and receiving moose, perhaps from another community, or perhaps from unsurveyed households. Similarly, Charnley (1983) describes case studies of meat distribution and sharing by Chuathbaluk and Sleetmute hunters in 1982–1983. Although Stony River residents indicated that they often hunted moose year-round, in 1983–1984, they reported hunting moose only during the fall and winter established seasons (September, November, December, and February); the majority of the harvest occurred in September (Kari 1985). The harvest patterns for this project were therefore consistent with data from early projects: most moose were taken in September in all 3 years (tables B10, B11, and B12).

Stony River residents appear to be beginning to use a different area for harvesting moose than they used previously, although firm conclusions are difficult to draw with a small number of years to compare. For example, in the early 1980s, Stony River residents reported hunting primarily on the Kuskokwim, Stony, and Swift rivers, as well as the Tatlawiksuk, Big, and Holitna rivers. Most moose were taken within one-half mile of the rivers (Kari 1985). Between 2003 and 2006, the use area around Stony River changed considerably from that described in 1983; in 2003–2004, Stony River residents used largely the same area, and in 2005–2006, they were reporting harvests in other areas (tables B13, B15, and B17). This change was likely the result of a decreased local moose population that forced hunters into nearby areas to harvest.

Another clearly continued trend has been residents' concerns about low abundance of moose and the related difficulties of harvesting them. One way to quantify these concerns is through success rates and measurements of hunter effort. Looking specifically at Chuathbaluk and Sleetmute in the 1982–1983 September season only (when the majority of harvest takes place), 72% of Chuathbaluk households and 57% of Sleetmute households attempted to harvest moose (Charnley 1983). In contrast, averages of 33% of Chuathbaluk households and 44% of Sleetmute households hunted between 2003 and 2006, a notable decline in both communities (tables 4, 5, and 6). According to Charnley (1983), 7 Chuathbaluk households (24%) successfully harvested a moose, compared to a 3-year average of 11% between 2003 and 2006 (tables 4, 5, and 6). Similarly, 12 Sleetmute households, or 43% of the community, successfully harvested a moose in 1982–83, but between 2003–2006, only 14% of Sleetmute households were able to harvest a moose (Charnley 1983; tables 4, 5, and 6). Both communities have experienced significant declines in both the number of hunting households and their success rates between 1982–1983 and 2003–2006, attesting to residents' concerns over declining moose populations, increased difficulties of successfully harvesting a moose, and resulting regulatory restrictions on moose harvesting.

Success rates are also reflected in the per household moose harvest for a community. With some exceptions, average household moose harvest rates declined, both compared to earlier projects and during the three years of this project. Success rates in 1982–1983 resulted in averages of 0.6 moose harvested per household in Chuathbaluk and 0.7 moose per household in Sleetmute (Charnley 1983; Table 19). Between 2003 and 2006, the average harvest level of moose was 0.1 moose per household in both Chuathbaluk and Sleetmute (Table 19). Within the 2003–2006 survey years, average moose harvested per household regionwide did not change much, from 0.3 in Year 1, to 0.2 in both Year 2 and Year 3. There was more variation at the community level: per household harvest levels in Aniak increased in Year 2 and Year 3 compared to Year 1, and both Crooked Creek and Stony River per household harvest levels declined in Year 2, but increased considerably in Year 3. The percentage of successful households areawide over the 3 years clustered around

Table 19.—Moose harvests per household, Central Kuskokwim communities, 1982–1983 and 2003–2006.

Community	Per household moose harvest			
	1982–1983	2003–2004	2004–2005	2005–2006
Aniak	<i>No data available</i>	0.1	0.3	0.3
Chuathbaluk	0.6	0.2	0.1	0.1
Crooked Creek	<i>No data available</i>	0.3	0.1	0.4
Lower Kalskag	<i>No data available</i>	0.4	0.2	< 0.1
Red Devil	<i>No data available</i>	0.2	0	0
Sleetmute	0.7	0.3	0.1	0
Stony River	<i>No data available</i>	0.2	0	0.7
Upper Kalskag	<i>No data available</i>	0.4	0.2	0.2
All communities	<i>No data available</i>	0.3	0.2	0.2

Source Charnley 1984; ADF&G Division of Subsistence household surveys, 2004, 2005, and 2006.

20%, but uses of moose by households over the 3 years ranged from 61% to 76% for all communities (tables 4, 5, and 6). As noted in the Introduction, previous research has demonstrated that in many small communities a small subset of “super-households” harvest most of the communities’ wild resources (Wolfe 1987; Wolfe et al. 2010).

A second way to quantify local concerns about low moose densities and increased hunting competition is through an analysis of hunter effort, or the amount of time it takes a hunter to harvest a moose. Hunter effort has been analyzed elsewhere as one indicator of the health of a particular moose population (Andersen et al. 2004; Brown et al. 2004a; Brown et al. 2004b). Increasing hunter effort may indicate that moose are less available, thus necessitating more time in the field for successful hunters. Charnley asked hunters to document how many days they spent in pursuit of moose in 1982–1983 (Charnley 1983). Considering the September hunts only, all Chuathbaluk hunters reported an average of 69 hunter-days per moose harvested in 1982–1983, and Sleetmute hunters reported an average of 10 hunter-days per moose harvested. Considering the total number of days spent by all Chuathbaluk hunters in the field in pursuit of moose, Chuathbaluk hunters spent an average of 61 hunter-days per moose harvested between 2003 and 2006. Sleetmute hunters reported an average of 61 hunter-days spent in pursuit of moose. This appears to be an increase in the amount of time spent hunting moose in Sleetmute and roughly the same amount of time invested by Chuathbaluk hunters over time, which is also consistent with the concerns expressed by local residents about increasing difficulty in harvesting moose. Additionally, moose population surveys during this time documented significant declines in the area moose populations (Seavoy 2006). It is likely that the declines in total harvests were related to declining abundance rather than reduced hunting effort, because the number of days spent hunting by successfully harvesting households increased.

In summary, this project documented the importance of moose as a staple in the Central Kuskokwim area. It also highlighted the increasing amount of time needed to harvest a moose, the potentially greater travel necessary for a significant harvest or the utilization of different use areas, and a low success rate, in terms of proportions of successful hunters, in all 3 years.

Caribou

Central Kuskokwim households considered caribou to be an important food source; they used it to supplement moose harvests in all 8 project communities. Central Kuskokwim communities harvested 225 caribou in Year 1, 29 in Year 2, and 63 in Year 3 (tables 7, 8, and 9). According to Charnley (1984:221), Chuathbaluk and Sleetmute residents rarely went caribou hunting because the long distances required to reach the caribou and the animals’ wide distribution in small, scattered groups meant a significant investment of time, effort, and money that was not worth the 2 animal bag limit in 1982–1983. However, the Year 1 data from Chuathbaluk suggest that the situation has changed since the mid-1980s; in 2003–2004, Chuathbaluk households reported good access and good harvests. Regulations in 2003–2004 allowed for the harvest

of up to 5 caribou (Woolington 2005). More than one-third of households at Chuathbaluk attempted to hunt and successfully harvested 18 caribou in Year 1 (Table 7). In Year 2, however, very few households (6%) attempted to harvest caribou, and none were successful, perhaps reflecting residents' knowledge that the caribou were not easily accessible in 2004–2005 (Table 8). In Year 3, there was a greater attempt to harvest compared to the previous year: 14% of households attempted to harvest caribou in Year 3 (Table 9). However, Chuathbaluk was 1 of only 3 communities that successfully harvested caribou in Year 3. The variation in the sizes of the caribou harvests, as well as in the level of community interest in hunting caribou, reflected the uncertain accessibility of caribou from the location of these communities at the northern edge of the Mulchatna herd's range.

In contrast with Chuathbaluk and Sleetmute in the 1980s, most households in Stony River in 1983–1984 hunted caribou every year to supplement moose meat and to provide a welcome change of diet (Kari 1985). Stony River households reported a tendency to focus greater effort on hunting caribou during years when moose meat was insufficient. In Year 1 and Year 2 of this project, a significant percentage of households in Stony River hunted caribou (47% and 60%, respectively) and were successful (29% and 20%), in spite of the overall low harvest in Year 2, a harvest and use pattern consistent with that reported for the 1980s (tables 7 and 8). However, in Year 3, no households in Stony River reported attempting to harvest caribou (Table 9). Kari (1985) documented that Stony River hunters used the flats between the Cheneetnuk and Tatlawiksuk rivers, between the Swift and Stony rivers, and between the Stony and Holitna rivers for caribou hunting; Stony River hunters used generally the same areas between 2003 and 2006.

Not surprisingly, communities reported satisfaction with caribou hunting in Year 1, when 58% of hunters reported success (Table 7). In spite of the significant decline in Year 2 harvests compared with those in Year 1, approximately the same proportion of households that hunted in Year 2 also hunted in Year 3 (tables 7, 8, and 9). The variation in annual harvest numbers in the 3 years of this project reflected the variable migratory routes of Mulchatna caribou in spite of the fact that GMU 19A, which provided most of the harvests each year, included the northern reaches of the migratory range of the Mulchatna caribou herd. In summary, the results of this project suggested that caribou played an important role in the diet of Central Kuskokwim residents, second only to moose, but there was considerable variation in success from year to year, depending on the migration routes of the caribou.

Black Bears

In this project, only a small fraction of the area's households attempted to harvest black bears, ranging from 10% to 15% (tables 10, 11, and 12). Hunters from each community except Aniak made a combined harvest of 28 black bears; Crooked Creek hunters took the largest number (11 bears, 38% of the total harvest) (Table 10). Year 2 harvests were nearly 50% more (40) than those of Year 1, and every community harvested at least 1 bear (Table 11). In Year 3, the estimated harvest of black bears was 29, 28% lower than the previous year, but nearly identical with the Year 1 harvest (tables 10, 11, and 12). Hunting for bears occurred in 1 UCU that was used almost exclusively for black bear hunting by the community in the unit.

In earlier projects, Charnley (1984) and Kari (1985) reported data on black bear hunting. Charnley (1984) estimated that Chuathbaluk residents harvested a total of 6 black bears in the 1982–1983 season, levels which closely match harvest estimates between 2003 and 2006 (tables 10, 11, and 12). Additionally, Charnley (1984) reported that Chuathbaluk hunters took more bears than Sleetmute hunters, which residents attributed to the higher number of fish camps located near berry patches, both of which attracted bears. This pattern persisted in this project: Sleetmute harvests were one-half of those taken by Chuathbaluk hunters in Year 1 and Year 2, and Sleetmute residents did not hunt or harvest black bears in Year 3.

The early ethnographic sources also provided a way to compare the seasonality and locations of harvests. Chuathbaluk and Sleetmute residents hunted black bears in the fall and summer, while at fish camp and while berry picking (Charnley 1984). In contrast, Stony River residents harvested black bears in spring, when sources of fresh meat were scarce (Kari 1985). Between 2003 and 2006, these 3 communities reported harvests in fall months only, except for 2 bears by Sleetmute hunters in May of 2004–2005 (tables B31,

B32, and B33). As with moose, Stony River residents hunted black bear along the Swift and Stony rivers between 2003 and 2006. Kari's (1985) description of the location of Stony River residents' black bear harvests was also corroborated during this project.

In summary, few households in the area attempt to harvest black bears. The project documented considerable variation in community interest in harvesting black bears and in the total annual harvests over time.

Brown Bears

The minimal harvest of brown bears by Central Kuskokwim hunters between 2003 and 2006 is consistent with earlier quantitative and ethnographic accounts of brown bear hunting in the area. According to Charnley (1984), adult brown bears were generally only taken for their hides, because residents considered the meat of mature brown bears tough and ill-tasting, although the meat from brown bear cubs was considered desirable. No brown bears were harvested during the 1982–1983 project period by Chuathbaluk nor Sleetmute residents. Charnley (1984) noted that most of the brown bears killed in years prior to that project were nuisance animals or were considered to be threats to human safety. Kari (1985) reported that Stony River residents no longer harvested brown bears for food. She suggested that residents stopped hunting brown bears in the 1940s. Results from this project suggested that the pattern of harvesting brown bears only in defense of life or property has continued.

Gray Wolves

A small proportion of households in all 3 years in this project attempted to harvest and actually harvested gray wolves (tables 16, 17, and 18). Three communities reported no participation in wolf harvesting (Chuathbaluk, Lower Kalskag, and Stony River). Charnley (1984) reported that Chuathbaluk and Sleetmute trappers considered gray wolves uncommon in the Central Kuskokwim area. Most trappers took only a few, if any, wolves in a season. Data from the 2003–2006 surveys confirmed the minimal use or hunting of wolves by Chuathbaluk and Sleetmute residents (tables 16, 17, and 18). However, these data also documented more substantial harvests of wolves in other communities, such as Aniak (38 wolves) and Upper Kalskag (19 wolves). This increase may have reflected community efforts to control wolf predation on moose; many residents perceived that wolves were too numerous in the region and were negatively affecting Central Kuskokwim moose populations.

THE ROLE OF HOUSEHOLD HARVEST DATA IN REGULATORY ISSUES

Survey data from this project suggested that moose availability in the Central Kuskokwim region for customary and traditional uses declined over the 3 survey years. These long-standing local concerns about declining moose populations were later corroborated by the updated Division of Wildlife Conservation moose population estimates (Seavoy 2006).

During its March and May 2006 meetings, the BOG implemented regulatory restrictions to subsistence. With very few exceptions, data reviewed for all 3 project years, including the numbers of animals harvested, hunter success rates, the investment of hunter time needed for success, and per household moose harvest, reflected the increasing difficulties Central Kuskokwim River community residents faced when attempting to harvest moose for customary and traditional uses. Comparisons with data from earlier projects, although very limited, also supported the view that both the moose population and hunting success levels have declined. These data, along with updated moose population data, were critical to the BOG's decisions regarding subsistence hunting restrictions and establishment of an intensive management program.

This project highlighted the vulnerability of moose populations in the Central Kuskokwim area. One recommendation stemming from this project is to establish regular mechanisms that would more closely assess moose abundance, both through projects led by Division of Wildlife biologists as well as household or community survey projects led by Division of Subsistence resource specialists. We also recommend that hunters who live in the communities be more systematically involved when providing their input and assessments. The Central Kuskokwim Fish and Game Advisory Committee and the Central Kuskokwim

Moose Management Planning Committee should be encouraged and supported in their efforts to explore approaches and possible solutions to declining moose populations in the area. Finally, a project examining in more detail the sharing of moose meat between communities would better estimate the impact of a reduction of a major resource. Sharing between communities may be as important, or more important, than sharing within a community when coping with a declining moose population.

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APPENDIX A.– SURVEY INSTRUMENT

2003 - 2004 CENTRAL KUSKOKWIM BIG GAME SURVEY

HOW MANY PEOPLE LIVED IN THE HOUSEHOLD THIS PAST YEAR? _____

ARE ANY MEMBERS OF THIS HOUSEHOLD ALASKA NATIVE? YES NO

COMMUNITY _____
HOUSEHOLD ID NUMBER _____
INTERVIEWER'S INITIALS _____
DATE _____

MOOSE

1 DID MEMBERS OF YOUR HOUSEHOLD USE OR HUNT MOOSE THIS PAST YEAR (BETWEEN APRIL 2003 AND MARCH 2004)? YES NO
IF YES, PLEASE COMPLETE THE FOLLOWING SECTIONS.

2 DURING THIS PAST YEAR, DID MEMBERS OF YOUR HOUSEHOLD:

USE Moose? YES NO HUNT Moose? YES NO HARVEST Moose? YES NO RECEIVE** Moose? YES NO GIVE Moose? YES NO
** (Including moose from guiding operations)

2a-2b (FOR HOUSEHOLDS WHO RECEIVED MEAT FROM GUIDING OPERATIONS)

2a WHAT TYPE OF MEAT WERE YOU GIVEN? (EXAMPLE: HIND QUARTER, NECK, ETC.) _____

2b HOW MUCH DID THIS SOURCE OF MEAT CONTRIBUTE TO FULFILLING YOUR HOUSEHOLD NEEDS?
0-25% _____ 25-50% _____ 50-75% _____ 75-100% _____

3 HOW MANY MEMBERS OF THIS HOUSEHOLD HUNTED MOOSE IN THE LAST 12 MONTHS? _____

4 HOW MANY DAYS DID EACH HUNTER SPEND HUNTING MOOSE IN THE LAST 12 MONTHS? (please add below the amount of days each hunter spent hunting any moose
HUNTER #1: _____ days HUNTER #2: _____ days HUNTER #3: _____ days HUNTER #4: _____ days HUNTER #5: _____ days over the last year)

5 HOW MANY MOOSE WERE HARVESTED LAST YEAR BY MEMBERS OF THIS HOUSEHOLD? _____ (include any potlatch moose taken by this household)

MOOSE			2003										2004		
M	LOCATION (UCU)	S or F	M or F	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1															
2															
3															
4															
5															

6 DID THE AMOUNT OF MOOSE YOU HARVESTED OR RECEIVED LAST YEAR MEET THE NEEDS OF YOUR HOUSEHOLD? YES NO
IF NO, PLEASE COMPLETE THE FOLLOWING SECTIONS.

6a HOW MUCH MORE WOULD YOU HAVE NEEDED? _____

6b HOW LONG HAS IT BEEN SINCE YOU LAST MET THE NEEDS OF YOUR HOUSEHOLD, IN REGARDS TO MOOSE HARVESTED OR RECEIVED?

MOOSE (Continued)

7a IF YOU HARVESTED OR USED MOOSE LAST YEAR, HOW DID YOUR HARVEST OR USE OF MOOSE IN 2003 COMPARE TO THE:
LAST 4 OR 5 YEARS?

WE HARVESTED OR USED **MORE** MOOSE THAN THE LAST 4-5 YEARS

WE HARVESTED OR USED **LESS** MOOSE THAN THE LAST 4-5 YEARS

OUR HARVEST OR USE OF MOOSE WAS ABOUT THE
SAME AS THE LAST 4-5 YEARS

	(MORE)
	(LESS)
	(SAME)

7b IF YOU HARVESTED OR USED MOOSE LAST YEAR, HOW DID YOUR HARVEST OR USE OF MOOSE IN 2003 COMPARE TO:
9-10 YEARS AGO

WE HARVESTED OR USED **MORE** MOOSE THAN 9-10 YEARS AGO

WE HARVESTED OR USED **LESS** MOOSE THAN 9-10 YEARS AGO

OUR HARVEST OR USE OF MOOSE WAS ABOUT THE
SAME AS 9-10 YEARS AGO

	(MORE)
	(LESS)
	(SAME)

8 WHAT PARTS OF THE MOOSE DID YOU USE? Antlers _____ Hide _____ Meat _____ Fat _____ Bone/Marrow _____

Organs _____ Head _____ Feet/Hooves _____ Other (Please Describe) _____

WOLVES

1 DID MEMBERS OF YOUR HOUSEHOLD SHOOT OR TRAP WOLVES THIS PAST YEAR (BETWEEN APRIL 2003 AND MARCH 2004?)

YES NO

IF YES, PLEASE COMPLETE THE FOLLOWING SECTIONS.

2 DURING THIS PAST YEAR, DID MEMBERS OF YOUR HOUSEHOLD: USE Wolves? **YES NO** GIVE Wolves? **YES NO** RECEIVE Wolves? **YES NO**

3 HOW MANY MEMBERS OF THIS HOUSEHOLD TRAPPED OR SHOT WOLVES IN THE LAST 12 MONTHS? _____

4 HOW MANY WOLVES WERE HARVESTED LAST YEAR BY MEMBERS OF THIS HOUSEHOLD? _____

WOLVES

W	LOCATION (UCU)	S or F	M or F	Month	Shoot?	Trap?
1						
2						
3						
4						
5						
6						

WOLVES

W	LOCATION (UCU)	S or F	M or F	Month	Shoot?	Trap?
7						
8						
9						
10						
11						
12						

CARIBOU

1 DID MEMBERS OF YOUR HOUSEHOLD USE OR HUNT CARIBOU THIS PAST YEAR (BETWEEN APRIL 2003 AND MARCH 2004?)

YES NO*IF YES, PLEASE COMPLETE THE FOLLOWING SECTIONS.*

2 DURING THIS PAST YEAR, DID MEMBERS OF YOUR HOUSEHOLD:

USE Caribou? **YES NO** HUNT Caribou? **YES NO** HARVEST Caribou? **YES NO** RECEIVE Caribou? **YES NO** GIVE Caribou? **YES NO**

3 HOW MANY CARIBOU WERE HARVESTED LAST YEAR BY MEMBERS OF THIS HOUSEHOLD? _____

CARIBOU			M or F	2003									2004			UNKN
C	LOCATION (UCU)	S or F		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
1																
2																
3																
4																

4 HOW WOULD YOU DESCRIBE THE AVAILABILITY OF CARIBOU IN YOUR AREA FOR SUBSISTENCE HUNTING THIS SEASON:

NOT AVAILABLE (POOR)

☐

(POOR)

SOMEWHAT AVAILABLE (FAIR)

☐

(FAIR)

READILY AVAILABLE (GOOD)

☐

(GOOD)

5 HOW WOULD YOU DESCRIBE THE AVAILABILITY OF CARIBOU IN YOUR AREA FOR SUBSISTENCE HUNTING 4-5 YEARS AGO:

NOT AVAILABLE (POOR)

☐

(POOR)

SOMEWHAT AVAILABLE (FAIR)

☐

(FAIR)

READILY AVAILABLE (GOOD)

☐

(GOOD)

6 HOW WOULD YOU DESCRIBE THE AVAILABILITY OF CARIBOU IN YOUR AREA FOR SUBSISTENCE HUNTING 9-10 YEARS AGO:

NOT AVAILABLE (POOR)

☐

(POOR)

SOMEWHAT AVAILABLE (FAIR)

☐

(FAIR)

READILY AVAILABLE (GOOD)

☐

(GOOD)

BLACK BEAR

1 DID MEMBERS OF YOUR HOUSEHOLD USE OR HUNT BLACK BEAR THIS PAST YEAR (BETWEEN APRIL 2003 AND MARCH 2004)? **YES NO**
IF YES, PLEASE COMPLETE THE FOLLOWING SECTIONS.

2 DURING THIS PAST YEAR, DID MEMBERS OF YOUR HOUSEHOLD:

USE Black Bear? **YES NO** HUNT Black Bear? **YES NO** HARVEST Black Bear? **YES NO** RECEIVE Black Bear? **YES NO** GIVE Black Bear? **YES NO**

3 HOW MANY MEMBERS OF THIS HOUSEHOLD HUNTED BLACK BEAR IN THE LAST 12 MONTHS? _____

4 HOW MANY BLACK BEAR WERE HARVESTED LAST YEAR BY MEMBERS OF THIS HOUSEHOLD? _____

5 WHAT PARTS OF THE BEAR DID YOU USE? Hide _____ Meat _____ Fat _____

BLACK BEAR				2003									2004			UNK
BL	LOCATION (UCU)	S or F		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
1																
2																

BROWN BEAR

1 DID MEMBERS OF YOUR HOUSEHOLD USE OR HUNT BROWN BEAR THIS PAST YEAR (BETWEEN APRIL 2003 AND MARCH 2004)? **YES NO**
IF YES, PLEASE COMPLETE THE FOLLOWING SECTIONS.

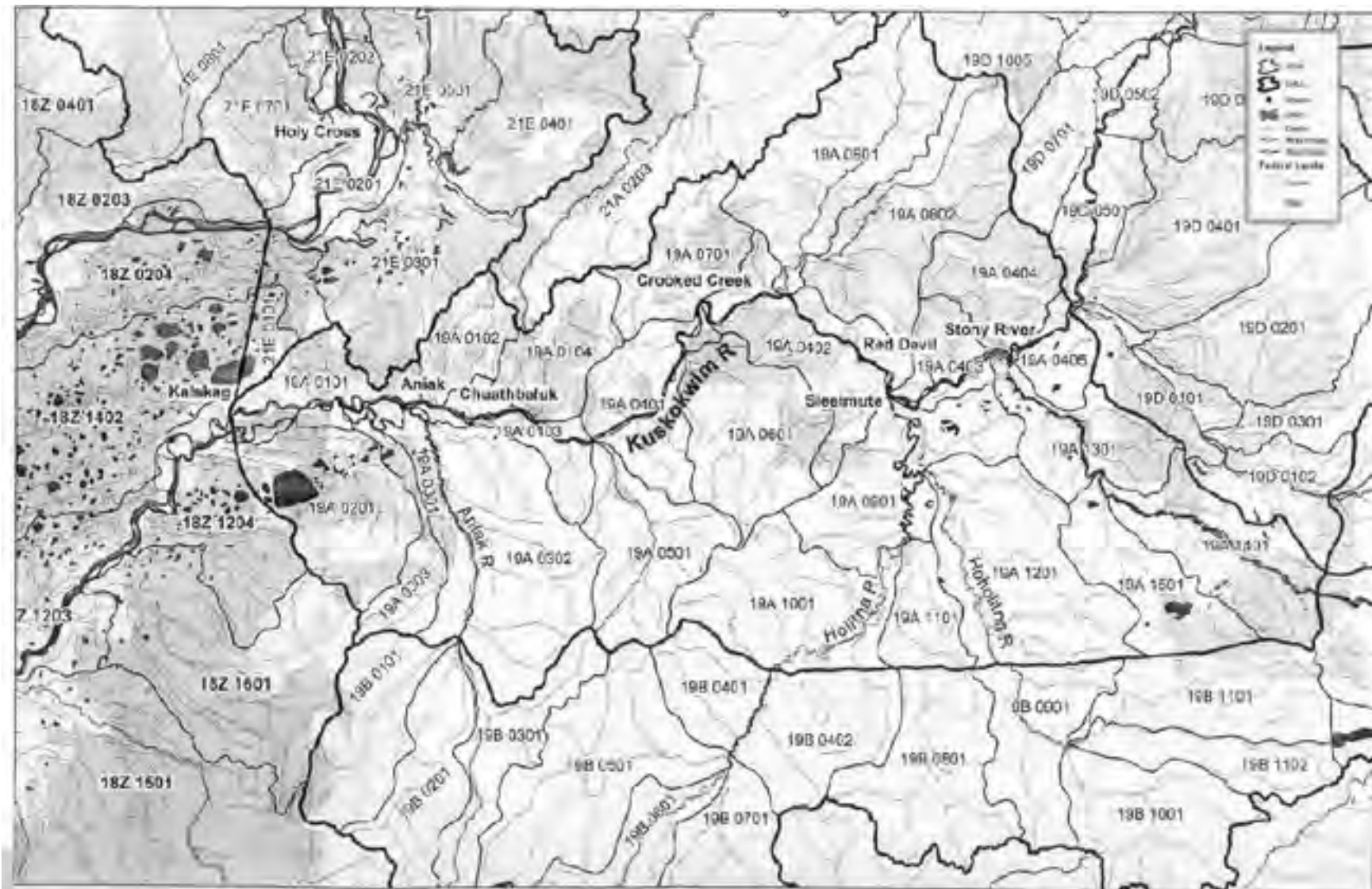
2 DURING THIS PAST YEAR, DID MEMBERS OF YOUR HOUSEHOLD:

USE Brown Bear? **YES NO** HUNT Brown Bear? **YES NO** HARVEST Brown Bear? **YES NO** RECEIVE Brown Bear? **YES NO** GIVE Brown Bear? **YES NO**

3 HOW MANY BROWN BEAR WERE HARVESTED LAST YEAR BY MEMBERS OF THIS HOUSEHOLD? _____

4 WHAT, IF ANY, PARTS OF THE BEAR DID YOU USE? Hide _____ Meat _____ Fat _____

BROWN BEAR				2003									2004			UNK
BR	LOCATION (UCU)	S or F		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
1																
2																



APPENDIX B.— ADDITIONAL TABLES

Table B1.—Parts of resource used, Central Kuskokwim communities, April 2003–March 2004.

Community	Households			Parts of resource used ^b																			
	Estimated total number	Using		Antlers ^c		Hide		Meat		Fat		Bone/Marrow ^c		Organs ^c		Head ^c		Feet/Hooves ^c		Other ^c		Unspecified	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Aniak																							
Black Bear	163	2.0	1.2%	n/a		0.0	0.0%	2.0	100.0%	2.0	100.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown Bear	163	2.0	1.2%	n/a		2.0	100.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Caribou	163	99.4	61.0%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		99.4	100.0%
Moose	163	139.1	85.4%	25.8	18.6%	17.9	12.9%	117.3	84.3%	81.5	58.6%	65.6	47.1%	59.6	42.9%	33.8	24.3%	8.0	5.7%	2.0	1.4%	21.9	15.7%
Wolf	163	8.0	4.9%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		0.0	0.0%	8.0	100.0%
Chuathbaluk																							
Black Bear	30	8.8	29.4%	n/a		0.0	0.0%	5.3	60.0%	7.1	80.0%	n/a		n/a		n/a		n/a		n/a		1.8	20.0%
Caribou	30	17.6	58.8%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		17.6	100.0%
Moose	30	10.6	35.3%	0.0	0.0%	0.0	0.0%	7.1	66.7%	5.3	50.0%	5.3	50.0%	7.0	66.1%	2.3	22.0%	3.5	33.1%	0.0	0.0%	3.5	33.3%
Crooked Creek																							
Black Bear	36	6.7	18.5%	n/a		5.3	80.0%	5.3	80.0%	5.3	80.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Caribou	36	9.3	25.9%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		9.3	100.0%
Moose	36	36.0	100.0%	6.7	18.5%	13.3	37.0%	32.0	88.9%	28.0	77.8%	25.3	70.4%	25.3	70.4%	18.7	51.9%	13.3	37.0%	5.3	14.8%	4.0	11.1%
Wolf	36	5.3	14.8%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		5.3	100.0%
Lower Kalskag																							
Black Bear	72	6.4	8.8%	n/a		4.2	66.7%	6.4	100.0%	2.1	33.3%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Caribou	72	25.4	35.3%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		25.4	100.0%
Moose	72	52.9	73.5%	0.0	0.0%	14.8	28.0%	50.8	96.0%	40.2	76.0%	36.0	68.0%	25.4	48.0%	19.1	36.0%	21.2	40.0%	0.0	0.0%	2.1	4.0%
Red Devil																							
Black Bear	14	2.3	16.7%	n/a		2.3	100.0%	2.3	100.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Caribou	14	9.3	66.7%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		9.3	100.0%
Moose	14	12.8	91.7%	1.2	9.1%	2.3	18.2%	10.5	81.8%	9.3	72.7%	8.2	63.6%	7.0	54.5%	2.3	18.2%	3.5	27.3%	0.0	0.0%	2.3	18.2%
Wolf	14	3.5	25.0%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		3.5	100.0%
Sleetmute																							
Black Bear	32	1.1	3.4%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		1.1	100.0%
Caribou	32	7.7	24.1%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		7.7	100.0%
Moose	32	18.8	58.6%	5.5	29.4%	4.4	23.5%	16.6	88.2%	14.3	76.5%	12.1	64.7%	12.1	64.7%	11.0	58.8%	5.5	29.4%	1.1	5.9%	2.2	11.8%
Wolf	32	1.1	3.4%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		1.1	100.0%
Stony River																							
Black Bear	18	2.1	11.8%	n/a		2.1	100.0%	2.1	100.0%	2.1	100.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Caribou	18	9.5	52.9%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		9.5	100.0%
Moose	18	12.7	70.6%	1.1	8.3%	3.2	25.0%	11.6	91.7%	7.4	58.3%	7.4	58.3%	7.4	58.3%	6.4	50.0%	4.2	33.3%	0.0	0.0%	1.1	8.3%
Upper Kalskag																							
Black Bear	59	8.7	14.7%	n/a		0.0	0.0%	5.2	60.0%	1.7	20.0%	n/a		n/a		n/a		n/a		n/a		3.5	40.0%
Caribou	59	31.2	52.9%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		31.2	100.0%
Moose	59	43.4	73.5%	3.5	8.0%	3.5	8.0%	31.2	72.0%	29.5	68.0%	27.8	64.0%	20.8	48.0%	13.9	32.0%	13.9	32.0%	6.9	16.0%	6.9	16.0%
Wolf	59	5.2	8.8%	n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		5.2	100.0%

Source ADF&G Division of Subsistence household surveys, 2004.

a. Respondents were not asked about parts used for caribou and wolf.

b. Percentages based on households responding that they used a resource. Percentages may not add to 100% because multiple responses were permitted.

c. Respondents were not asked about this part for black bear and brown bear.

Table B2.—Parts of resource used, Central Kuskokwim communities, April 2004–March 2005.

Community Resource ^a	Households			Parts of resource used ^b																			
	Estimated total number	Using		Antlers ^c		Hide		Meat		Fat		Bone/Marrow ^c		Organs ^c		Head ^c		Feet/Hooves ^c		Other ^c		Unspecified	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Aniak																							
Black bear	155	6.7	4.3%	n/a		5.1	75.0%	5.1	75.0%	5.1	75.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	155	0.0	0.0%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Moose	155	124.7	80.4%	6.7	5.4%	6.7	5.4%	124.7	100.0%	119.6	95.9%	111.2	89.2%	91.0	73.0%	87.6	70.3%	1.7	1.4%	0.0	0.0%	0.0	0.0%
Chuathbaluk																							
Black bear	23	2.7	11.8%	n/a		2.7	100.0%	2.7	100.0%	2.7	100.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	23	0.0	0.0%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Moose	23	13.5	58.8%	4.1	30.0%	4.1	30.0%	6.8	50.0%	6.8	50.0%	6.8	50.0%	6.8	50.0%	5.4	40.0%	4.1	30.0%	1.4	10.0%	6.8	50.0%
Crooked Creek																							
Black bear	39	16.1	41.4%	n/a		4.0	25.0%	16.1	100.0%	16.1	100.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	39	0.0	0.0%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Moose	39	33.6	86.2%	0.0	0.0%	0.0	0.0%	32.3	96.0%	29.6	88.0%	29.6	88.0%	26.9	80.0%	1.3	4.0%	1.3	4.0%	24.2	72.0%	1.3	4.0%
Lower Kalskag																							
Black bear	73	6.2	8.5%	n/a		2.5	40.0%	4.9	80.0%	4.9	80.0%	n/a		n/a		n/a		n/a		n/a		1.2	20.0%
Brown bear	73	2.5	3.4%	n/a		1.2	50.0%	1.2	50.0%	1.2	50.0%	n/a		n/a		n/a		n/a		n/a		1.2	50.0%
Moose	73	26.0	35.6%	4.9	19.0%	6.2	23.8%	16.1	61.9%	14.8	57.1%	14.8	57.1%	11.1	42.9%	9.9	38.1%	13.6	52.4%	9.9	38.1%	8.7	33.3%
Red Devil																							
Black bear	12	1.5	12.5%	n/a		1.5	100.0%	1.5	100.0%	1.5	100.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	12	1.5	12.5%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		1.5	100.0%
Moose	12	9.0	75.0%	3.0	33.3%	3.0	33.3%	4.5	50.0%	3.0	33.3%	3.0	33.3%	3.0	33.3%	3.0	33.3%	1.5	16.7%	0.0	0.0%	4.5	50.0%
Sleetmute																							
Black bear	29	5.1	17.6%	n/a		3.4	66.7%	5.1	100.0%	3.4	66.7%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	29	0.0	0.0%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Moose	29	23.9	82.4%	6.8	28.6%	5.1	21.4%	22.2	92.9%	20.5	85.7%	20.5	85.7%	18.8	78.6%	20.5	85.7%	17.1	71.4%	0.0	0.0%	0.0	0.0%
Stony River																							
Black bear	15	6.0	40.0%	n/a		0.0	0.0%	6.0	100.0%	6.0	100.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	15	0.0	0.0%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Moose	15	9.0	60.0%	0.0	0.0%	0.0	0.0%	9.0	100.0%	6.0	66.7%	6.0	66.7%	0.0	0.0%	0.0	0.0%	3.0	33.3%	0.0	0.0%	0.0	0.0%
Upper Kalskag																							
Black bear	52	3.1	5.9%	n/a		2.0	66.7%	2.0	66.7%	2.0	66.7%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Brown bear	52	0.0	0.0%	n/a		0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a		n/a		n/a		n/a		n/a		0.0	0.0%
Moose	52	36.7	70.6%	2.0	5.6%	0.0	0.0%	34.7	94.4%	34.7	94.4%	30.6	83.3%	20.4	55.6%	6.1	16.7%	6.1	16.7%	1.0	2.8%	2.0	5.6%

Source ADF&G Division of Subsistence household surveys, 2005.

a. Respondents were not asked about parts used for caribou and wolf.

b. Percentages based on households responding that they used a resource. Percentages may not add to 100% because multiple responses were permitted.

c. Respondents were not asked about this part for black bear and brown bear.

Table B3.—Parts of resource used, Central Kuskokwim communities, April 2005–March 2006.

Community Resource ^a	Households				Parts of resource used ^b																			
	Estimated		Using		Antlers ^c		Hide		Meat		Fat		Bone/Marrow ^c		Organs ^c		Head ^c		Feet/Hooves ^c		Other ^c		Unspecified	
	total number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	
Aniak																								
Black bear	168	18.0	10.7%	n/a		2.6	14.3%	14.1	78.6%	9.0	50.0%	n/a		n/a		n/a		n/a		n/a		2.6	14.3%	
Brown bear	168	3.8	2.3%	n/a		3.8	100%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	168	127.0	75.6%	32.1	25.3%	6.4	5.1%	125.7	99.0%	55.1	43.4%	70.5	55.6%	60.3	47.5%	29.5	23.2%	6.4	5.1%	7.7	6.1%	1.3	1.0%	
Chuathbaluk																								
Black bear	42	6.0	14.3%	n/a		2.0	33.3%	4.0	66.7%	4.0	66.7%	n/a		n/a		n/a		n/a		n/a		2.0	33.3%	
Brown bear	42	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	42	12.0	28.6%	0	0%	0	0%	2.0	16.7%	2.0	16.7%	2.0	16.7%	2.0	16.7%	0	0%	0	0%	0.0	0%	10.0	83.3%	
Crooked Creek																								
Black bear	32	11.3	35.3%	n/a		3.8	33.3%	5.6	50.0%	1.9	16.7%	n/a		n/a		n/a		n/a		n/a		3.8	33.3%	
Brown bear	32	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	32	20.7	64.7%	3.8	18.2%	1.9	9.1%	16.9	81.8%	15.1	72.7%	11.3	54.5%	11.3	54.5%	5.6	27.3%	7.5	36.4%	0	0%	3.8	18.2%	
Lower Kalskag																								
Black bear	84	14.0	16.7%	n/a		2.8	20.0%	2.8	20.0%	2.8	20.0%	n/a		n/a		n/a		n/a		n/a		11.2	80.0%	
Brown bear	84	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	84	33.6	40.0%	2.8	8.3%	5.6	16.7%	5.6	16.7%	2.8	8.3%	2.8	8.3%	2.8	8.3%	2.8	8.3%	2.8	8.3%	0	0%	25.2	75.0%	
Red Devil																								
Black Bear	13	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Brown bear	13	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	13	2.6	20.0%	0	0%	0	0%	2.6	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Sleetmute																								
Black Bear	41	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Brown bear	41	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	41	12.9	31.6%	4.3	33.3%	2.2	16.7%	10.8	83.3%	6.5	50.0%	6.5	50.0%	4.3	33.3%	4.3	33.3%	4.3	33.3%	2.2	16.7%	2.2	16.7%	
Stony River																								
Black bear	17	5.7	33.3%	n/a		0	0%	5.7	100%	5.7	100%	n/a		n/a		n/a		n/a		n/a		0	0%	
Brown bear	17	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	17	11.3	66.7%	11.3	100%	11.3	100%	11.3	100%	11.3	100%	11.3	100%	11.3	100%	5.7	50.0%	0	0%	0	0%	0	0%	
Upper Kalskag																								
Black bear	68	8.0	11.8%	n/a		2.0	25.0%	2.0	25.0%	2.0	25.0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Brown bear	68	0	0%	n/a		0	0%	0	0%	0	0%	n/a		n/a		n/a		n/a		n/a		0	0%	
Moose	68	40.0	58.8%	6.0	15.0%	2.0	5.0%	12.0	30.0%	12.0	30.0%	12.0	30.0%	10.0	25.0%	12.0	30.0%	8.0	20.0%	0	0%	28.0	70.0%	

Source ADF&G Division of Subsistence household surveys, 2006.

a. Respondents were not asked about parts used for caribou and gray wolf.

b. Percentages based on households responding that they used a resource. Percentages may not add to 100% because multiple responses were permitted.

c. Respondents were not asked about this part for black bear and brown bear.

Table B4.—Comparison of moose harvests and uses in the 2003–2004 season to prior years, Central Kuskokwim communities.

Community	Households			Comparisons					
	Estimated total number	Responding ^a		Less		Same		More	
		Number	Percentage	Number	Percentage ^b	Number	Percentage ^b	Number	Percentage ^b
Compared to the last 4 or 5 years									
Aniak	163	121.3	74.4%	81.5	67.2%	0.0	0.0%	0.0	0.0%
Chuathbaluk	30	7.1	23.5%	3.5	50.0%	0.0	0.0%	0.0	0.0%
Crooked Creek	36	29.3	81.5%	21.3	72.7%	1.3	4.5%	1.3	4.5%
Lower Kalskag	72	48.7	67.6%	27.5	56.5%	6.4	13.0%	6.4	13.0%
Red Devil	14	10.5	75.0%	8.2	77.8%	0.0	0.0%	0.0	0.0%
Sleetmute	32	19.9	62.1%	16.6	83.3%	0.0	0.0%	0.0	0.0%
Stony River	18	11.6	64.7%	9.5	81.8%	0.0	0.0%	0.0	0.0%
Upper Kalskag	59	39.9	67.6%	17.4	43.5%	6.9	17.4%	6.9	17.4%
Compared to the last 9 or 10 years									
Aniak	163	113.3	69.5%	77.5	68.4%	19.9	17.5%	15.9	14.0%
Chuathbaluk	30	7.1	23.5%	3.5	50.0%	1.8	25.0%	1.8	25.0%
Crooked Creek	36	26.7	74.1%	14.7	55.0%	4.0	15.0%	8.0	30.0%
Lower Kalskag	72	48.7	67.6%	21.2	43.5%	16.9	34.8%	10.6	21.7%
Red Devil	14	10.5	75.0%	8.2	77.8%	1.2	11.1%	1.2	11.1%
Sleetmute	32	19.9	62.1%	16.6	83.3%	1.1	5.6%	2.2	11.1%
Stony River	18	11.6	64.7%	7.4	63.6%	1.1	9.1%	3.2	27.3%
Upper Kalskag	59	39.9	67.6%	24.3	60.9%	10.4	26.1%	5.2	13.0%

Source ADF&G Division of Subsistence household surveys, 2004.

a. Includes only households that reported harvesting or using moose during the study year.

b. Percentages based on households that harvested or used moose during the study year and responded to the questions.

Table B5.—Comparison of moose harvests and uses in the 2004–2005 season to prior years, Central Kuskokwim communities.

Community	Households			Comparisons					
	Estimated total number	Responding ^a		Less		Same		More	
		Number	Percentage	Number	Percentage ^b	Number	Percentage ^b	Number	Percentage ^b
Compared to the last 4 or 5 years									
Aniak	155	124.7	80.4%	65.7	52.7%	25.3	20.3%	25.3	20.3%
Chuathbaluk	23	8.1	35.3%	6.8	83.3%	0.0	0.0%	0.0	0.0%
Crooked Creek	39	33.6	86.2%	32.3	96.0%	0.0	0.0%	0.0	0.0%
Lower Kalskag	73	24.7	33.9%	16.1	65.0%	6.2	25.0%	6.2	25.0%
Red Devil	12	6.0	50.0%	4.5	75.0%	1.5	25.0%	1.5	25.0%
Sleetmute	29	23.9	82.4%	22.2	92.9%	0.0	0.0%	0.0	0.0%
Stony River	15	9.0	60.0%	9.0	100.0%	0.0	0.0%	0.0	0.0%
Upper Kalskag	52	37.4	72.0%	27.0	72.2%	4.2	11.1%	4.2	11.1%
Compared to the last 9 or 10 years									
Aniak	155	117.9	76.1%	53.9	45.7%	27.0	22.9%	37.1	31.4%
Chuathbaluk	23	6.8	29.4%	6.8	100.0%	0.0	0.0%	0.0	0.0%
Crooked Creek	39	32.3	82.8%	8.1	25.0%	0.0	0.0%	24.2	75.0%
Lower Kalskag	73	24.7	33.9%	9.9	40.0%	1.2	5.0%	13.6	55.0%
Red Devil	12	4.5	37.5%	4.5	100.0%	0.0	0.0%	0.0	0.0%
Sleetmute	29	23.9	82.4%	11.9	50.0%	1.7	7.1%	10.2	42.9%
Stony River	15	9.0	60.0%	9.0	100.0%	0.0	0.0%	0.0	0.0%
Upper Kalskag	52	37.4	72.0%	22.9	61.1%	4.2	11.1%	10.4	27.8%

Source ADF&G Division of Subsistence household surveys, 2005.

a. Includes only households that reported harvesting or using moose during the study year.

b. Percentages based on households that harvested or used moose during the study year and responded to the questions.

Table B6.—Comparison of moose harvests and uses in the 2005–2006 season to prior years, Central Kuskokwim communities.

Community	Households			Comparisons					
	Estimated total number	Responding ^a		Less		Same		More	
		Number	Percentage	Number	Percentage ^b	Number	Percentage ^b	Number	Percentage ^b
Compared to the last 4 or 5 years									
Aniak	168	119.2	71.0%	73.2	61.4%	5.4	4.5%	5.4	4.5%
Chuathbaluk	42	8.0	19.0%	6.0	75.0%	0.0	0.0%	0.0	0.0%
Crooked Creek	32	16.9	52.9%	9.4	55.6%	5.6	33.3%	5.6	33.3%
Lower Kalskag	84	16.8	20.0%	8.4	50.0%	0.0	0.0%	0.0	0.0%
Red Devil	13	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Sleetmute	41	10.8	26.3%	2.2	20.0%	6.5	60.0%	6.5	60.0%
Stony River	17	11.3	66.7%	0.0	0.0%	5.7	50.0%	5.7	50.0%
Upper Kalskag	68	22.0	32.4%	14.0	63.6%	2.0	9.1%	2.0	9.1%
Compared to the last 9 or 10 years									
Aniak	168	101.6	60.5%	71.8	70.7%	25.7	25.3%	4.1	4.0%
Chuathbaluk	42	8.0	19.0%	8.0	100.0%	0.0	0.0%	0.0	0.0%
Crooked Creek	32	16.9	52.9%	5.6	33.3%	1.9	11.1%	9.4	55.6%
Lower Kalskag	84	14.0	16.7%	8.4	60.0%	5.6	40.0%	0.0	0.0%
Red Devil	13	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Sleetmute	41	12.9	31.6%	6.5	50.0%	0.0	0.0%	6.5	50.0%
Stony River	17	11.3	66.7%	0.0	0.0%	5.7	50.0%	5.7	50.0%
Upper Kalskag	68	22.0	32.4%	10.0	45.5%	4.0	18.2%	8.0	36.4%

Source ADF&G Division of Subsistence household surveys, 2006.

a. Includes only households that reported harvesting or using moose during the study year.

b. Percentages based on households that harvested or used moose during the study year and responded to the questions.

Table B7.—Estimated moose hunting effort, Central Kuskokwim communities, April 2003–March 2004.

Community	Estimated total harvest	All hunters			Successful hunters			Hunting days per moose harvested
		Number of hunters	Days hunted	Hunting days per hunter	Number of hunters	Days hunted	Hunting days per hunter ^a	
Aniak	23.9	206.8	2837.3	13.7	23.9	755.4	31.7	31.7
Chuathbaluk	5.3	14.1	142.3	10.1	5.3	15.9	3.0	3.0
Crooked Creek	9.3	49.3	525.3	10.6	9.3	176.0	18.9	18.9
Lower Kalskag	29.6	53.4	230.7	4.3	21.2	120.7	5.7	4.1
Red Devil	2.3	6.2	41.7	6.7	2.3	29.5	12.6	12.6
Sleetmute	11.0	25.1	223.6	8.9	11.0	181.0	16.4	16.4
Stony River	4.2	13.8	151.4	11.0	4.2	51.9	12.3	12.3
Upper Kalskag	20.8	57.3	438.4	7.7	19.1	237.7	12.5	11.4
All communities	106.6	426.0	4590.7	10.8	96.3	1568.0	16.3	14.7

Source ADF&G Division of Subsistence household surveys, 2004.

a. Maximum of 1 successful hunter is counted per moose harvested.

Table B8.—Estimated moose hunting effort, Central Kuskokwim communities, April 2004–March 2005.

Community	Estimated total harvest	All hunters			Successful hunters			Hunting days per moose harvested
		Number of hunters	Days hunted	Hunting days per hunter	Number of hunters	Days hunted	Hunting days per hunter ^a	
Aniak	38.8	185.3	2443.9	13.2	38.8	692.4	17.9	17.9
Chuathbaluk	1.4	9.5	144.8	15.3	1.4	18.9	14.0	14.0
Crooked Creek	4.0	51.1	594.1	11.6	4.0	123.7	30.7	30.7
Lower Kalskag	12.4	59.4	350.4	5.9	12.4	122.3	9.9	9.9
Red Devil	0.0	4.5	60.0	13.3	0.0	0.0	0.0	0.0
Sleetmute	3.4	29.0	399.2	13.8	3.4	109.2	32.0	32.0
Stony River	0.0	15.0	165.0	11.0	0.0	0.0	0.0	0.0
Upper Kalskag	9.4	56.2	661.4	11.8	9.4	209.0	22.3	22.3
All communities	69.3	409.9	4818.8	11.8	69.3	1275.6	18.4	18.4

Source ADF&G Department of Subsistence household surveys, 2005.

a. Maximum of 1 successful hunter is counted per moose harvested.

Table B9.—Estimated moose hunting effort, Central Kuskokwim communities, April 2005–March 2006.

Community	Estimated total harvest	All hunters			Successful hunters			Hunting days per moose harvested
		Number of hunters	Days hunted	Hunting days per hunter	Number of hunters	Days hunted	Hunting days per hunter ^a	
Aniak	46.1	199.2	2694.7	13.5	46.1	1075.7	23.4	23.4
Chuathbaluk	4.0	16.0	216.0	13.5	4.0	14.0	3.5	3.5
Crooked Creek	11.3	31.8	426.5	13.4	11.3	352.0	31.2	31.2
Lower Kalskag	2.8	35.3	246.9	7.0	2.8	14.0	5.0	5.0
Red Devil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	0.0	8.6	45.9	5.3	0.0	0.0	0.0	0.0
Stony River	11.3	28.3	266.3	9.4	11.3	266.3	23.5	23.5
Upper Kalskag	12.0	52.3	546.0	10.4	12.0	144.0	12.0	12.0
All communities	87.5	371.5	4442.4	12.0	87.5	1866.1	21.3	21.3

Source ADF&G Division of Subsistence household surveys, 2006.

a. Maximum of 1 successful hunter is counted per moose harvested.

Table B10.—Estimated moose harvests by sex and month, Central Kuskokwim communities, April 2003–March 2004.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Male	0.0	0.0	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0	2.0	0.0	0.0	19.9
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
	All	0.0	0.0	0.0	0.0	0.0	19.9	0.0	0.0	0.0	0.0	2.0	0.0	2.0	23.9
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	1.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	1.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	6.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	8.0
	Unknown	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	All	0.0	0.0	0.0	0.0	0.0	8.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	9.3
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
	Male	0.0	0.0	0.0	0.0	4.2	8.5	0.0	0.0	0.0	0.0	2.1	0.0	0.0	14.8
	Unknown	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	4.2	0.0	0.0	0.0	0.0	8.5
	All	0.0	0.0	0.0	0.0	4.2	19.1	0.0	0.0	4.2	0.0	2.1	0.0	0.0	29.6
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
	Unknown	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	4.4	5.5
	All	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	4.4	11.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	1.7	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1
	Unknown	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	3.5	8.7
	All	0.0	0.0	0.0	0.0	1.7	15.6	0.0	0.0	0.0	0.0	0.0	0.0	3.5	20.8
All communities	Female	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
	Male	0.0	0.0	0.0	0.0	7.7	59.1	1.3	0.0	0.0	0.0	4.1	0.0	0.0	72.2
	Unknown	0.0	0.0	0.0	0.0	0.0	11.9	0.0	0.0	4.2	0.0	0.0	0.0	9.9	26.0
	All	0.0	0.0	0.0	0.0	7.7	79.3	1.3	0.0	4.2	0.0	4.1	0.0	9.9	106.6

Source ADF&G Division of Subsistence household surveys, 2004.

Table B11.—Estimated moose harvests by sex and month, Central Kuskokwim communities, April 2004–March 2005.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	38.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.8
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	38.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.8
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0	1.2	0.0	0.0	11.1
	Unknown	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	All	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	1.2	0.0	0.0	12.4
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
	All	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	1.0	0.0	0.0	0.0	0.0	9.4
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	1.0	0.0	0.0	0.0	0.0	9.4
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	62.4	0.0	0.0	1.0	0.0	1.2	0.0	0.0	64.6
	Unknown	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
	All	0.0	0.0	0.0	0.0	0.0	67.0	0.0	0.0	1.0	0.0	1.2	0.0	0.0	69.3

Source ADF&G Division of Subsistence household surveys, 2005.

Table B12.—Estimated moose harvests by sex and month, Central Kuskokwim communities, April 2005–March 2006.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	44.7	0.0	0.0	0.0	1.4	0.0	0.0	0.0	46.1
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	44.7	0.0	0.0	0.0	1.4	0.0	0.0	0.0	46.1
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
	All	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	2.0	82.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0	85.5
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
	All	0.0	0.0	0.0	0.0	2.0	82.1	0.0	0.0	0.0	1.4	0.0	0.0	2.0	87.5

Source ADF&G Division of Subsistence household surveys, 2006.

Table B13.—Estimated moose harvests by Game Management Unit (GMU) and Uniform Coding Unit (UCU), Central Kuskokwim communities, April 2003–March 2004.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
18Z 0204	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	6.4	6.0%
18Z 1402	0.0	0.0	0.0	6.4	0.0	0.0	0.0	1.7	8.1	7.6%
Subtotal GMU 18Z	0.0	0.0	0.0	12.7	0.0	0.0	0.0	1.7	14.4	13.6%
Total GMU 18	0.0	0.0	0.0	12.7	0.0	0.0	0.0	1.7	14.4	13.6%
19A 0101	0.0	1.8	0.0	4.2	0.0	0.0	0.0	5.2	11.2	10.5%
19A 0102	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.7	3.5%
19A 0104	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.3%
19A 0201	2.0	0.0	0.0	4.2	0.0	0.0	0.0	1.7	8.0	7.5%
19A 0301	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.7	5.4%
19A 0401	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.7%
19A 0403	0.0	0.0	2.7	0.0	1.2	0.0	0.0	0.0	3.8	3.6%
19A 0404	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.9%
19A 0405	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	2.2	2.0%
19A 0601	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.7	2.5%
19A 0901	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.3	3.1%
19A 1001	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.3	3.1%
19A 1201	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.2	2.1%
19A 1301	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	1.0%
19A Unknown UCU	0.0	0.0	1.3	6.4	0.0	0.0	0.0	0.0	7.7	7.2%
Subtotal GMU 19A	13.9	5.3	6.7	14.8	1.2	9.9	2.1	10.4	64.3	60.4%
19B 0101	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.9%
19B 0402	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	1.1%
Subtotal GMU 19B	2.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	3.2	3.0%
19D 0101	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	1.0%
19D 0401	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	1.0%
Subtotal GMU 19D	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	2.1	2.0%
Total GMU 19	15.9	5.3	6.7	14.8	2.3	9.9	4.2	10.4	69.6	65.3%
Unknown location	8.0	0.0	2.7	2.1	0.0	1.1	0.0	8.7	22.5	21.1%
All polygons	23.9	5.3	9.3	29.6	2.3	11.0	4.2	20.8	106.6	100.0%

Source ADF&G Division of Subsistence household surveys, 2004.

Table B14.—Estimated moose harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2003–March 2004.

Community	Moose harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	15.9	66.7%	0.0	0.0%	8.0	33.3%	23.9	15.9	66.7%	0.0	0.0%	8.0	33.3%	23.9
Chuathbaluk	3.5	66.7%	1.8	33.3%	0.0	0.0%	5.3	3.5	66.7%	1.8	33.3%	0.0	0.0%	5.3
Crooked Creek	4.0	42.9%	1.3	14.3%	4.0	42.9%	9.3	4.0	42.9%	1.3	14.3%	4.0	42.9%	9.3
Lower Kalskag	4.2	14.3%	10.6	35.7%	14.8	50.0%	29.6	2.1	11.1%	4.2	22.2%	12.7	66.7%	19.1
Red Devil	2.3	100.0%	0.0	0.0%	0.0	0.0%	2.3	2.3	100.0%	0.0	0.0%	0.0	0.0%	2.3
Sleetmute	3.3	30.0%	1.1	10.0%	6.6	60.0%	11.0	3.3	30.0%	1.1	10.0%	6.6	60.0%	11.0
Stony River	2.1	50.0%	2.1	50.0%	0.0	0.0%	4.2	2.1	50.0%	2.1	50.0%	0.0	0.0%	4.2
Upper Kalskag	5.2	25.0%	3.5	16.7%	12.1	58.3%	20.8	5.2	27.3%	3.5	18.2%	10.4	54.5%	19.1
All communities	40.6	38.1%	20.4	19.1%	45.5	42.7%	106.6	38.5	40.9%	14.0	14.9%	41.7	44.2%	94.2

Source ADF&G Division of Subsistence household surveys, 2004.

Table B15.—Estimated moose harvests by GMU and UCU, Central Kuskokwim communities, April 2004–March 2005.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
18Z 1402	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.8%
Subtotal GMU 18Z	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.8%
18 Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	4.5%
Subtotal GMU 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	4.5%
Total GMU 18	0.0	0.0	0.0	1.2	0.0	0.0	0.0	3.1	4.4	6.3%
19A 0101	1.7	0.0	0.0	6.2	0.0	0.0	0.0	0.0	7.9	11.4%
19A 0102	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4%
19A 0103	1.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	3.0	4.4%
19A 0201	1.7	0.0	0.0	4.9	0.0	0.0	0.0	0.0	6.6	9.6%
19A 0301	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	14.6%
19A 0302	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	9.7%
19A 0401	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	4.9%
19A 0402	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4%
19A 0403	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	1.9%
19A 0801	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.7	3.9%
19A 0901	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7	2.5%
19A Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2	6.0%
Subtotal GMU 19A	28.6	1.4	4.0	11.1	0.0	1.7	0.0	4.2	51.0	73.7%
19D 0101	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4%
Subtotal GMU 19D	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4%
Total GMU 19	30.3	1.4	4.0	11.1	0.0	1.7	0.0	4.2	52.7	76.1%
21A 0203	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	4.9%
Subtotal GMU 21A	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	4.9%
21E 0401	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4%
21E 0501	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.4%
21E Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	3.0%
Subtotal GMU 21E	3.4	0.0	0.0	0.0	0.0	0.0	0.0	2.1	5.4	7.9%
Total GMU 21	6.7	0.0	0.0	0.0	0.0	0.0	0.0	2.1	8.8	12.7%
Unknown Location	1.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0	3.4	4.9%
All polygons	38.8	1.4	4.0	12.4	0.0	3.4	0.0	9.4	69.3	100.0%

Source ADF&G Division of Subsistence household surveys, 2005.

Table B16.—Estimated moose harvests and households harvesting on state and federal lands, Centrak Kuskokwim communities, April 2004–March 2005.

Community	Moose harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	37.1	95.7%	0.0	0.0%	1.7	4.3%	38.8	33.7	95.2%	0.0	0.0%	1.7	4.8%	35.4
Chuathbaluk	0.0	0.0%	0.0	0.0%	1.4	100.0%	1.4	0.0	0.0%	0.0	0.0%	1.4	100.0%	1.4
Crooked Creek	4.0	100.0%	0.0	0.0%	0.0	0.0%	4.0	4.0	100.0%	0.0	0.0%	0.0	0.0%	4.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	12.4	100.0%	12.4	0.0	0.0%	0.0	0.0%	12.4	100.0%	12.4
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	3.4	100.0%	3.4	0.0	0.0%	0.0	0.0%	3.4	100.0%	3.4
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	9.4	100.0%	9.4	0.0	0.0%	0.0	0.0%	8.3	100.0%	8.3
All communities	41.1	59.3%	0.0	0.0%	28.2	40.7%	69.3	37.7	58.2%	0.0	0.0%	27.1	41.8%	64.9

Source ADF&G Division of Subsistence household surveys, 2005.

Table B17.—Estimated moose harvests by GMU and UCU, Central Kuskokwim communities, April 2005–March 2006.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
19A 0101	5.4	0.0	0.0	0.0	0.0	0.0	0.0	2.0	7.4	8.5%
19A 0102	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.1%
19A 0103	1.4	2.0	0.0	2.8	0.0	0.0	0.0	0.0	6.2	7.0%
19A 0104	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5%
19A 0201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.6%
19A 0301	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.6%
19A 0302	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	15.5%
19A 0401	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.1%
19A 0402	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	2.2%
19A 0403	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5%
19A 0701	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	2.2%
19A 0801	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	3.8	4.3%
19A 0802	0.0	0.0	1.9	0.0	0.0	0.0	0.0	2.0	3.9	4.4%
19A 0901	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.7	6.5%
19A Unknown UCU	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5%
Subtotal GMU 19A	33.9	2.0	9.4	2.8	0.0	0.0	5.7	8.0	61.7	70.6%
19B 0101	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5%
Subtotal GMU 19B	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5%
19D 0502	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.7	6.5%
Subtotal GMU 19D	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.7	6.5%
Total GMU 19	35.2	2.0	9.4	2.8	0.0	0.0	11.3	8.0	68.8	78.6%
21 Unknown UCU	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	9.3%
Subtotal GMU 21	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	9.3%
21E 0201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.3%
21E 0501	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.1%
Subtotal GMU 21E	2.7	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.7	5.4%
Total GMU 21	10.8	0.0	0.0	0.0	0.0	0.0	0.0	2.0	12.8	14.7%
Unknown Location	0.0	2.0	1.9	0.0	0.0	0.0	0.0	2.0	5.9	6.7%
All polygons	46.1	4.0	11.3	2.8	0.0	0.0	11.3	12.0	87.5	100.0%

Source ADF&G Division of Subsistence household surveys, 2006.

Table B18.—Estimated moose harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2005–March 2006.

Community	Moose harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	1.4	2.9%	44.7	97.1%	46.1	0.0	0.0%	1.0	3.0%	32.0	97.0%	33.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	4.0	100.0%	4.0	0.0	0.0%	0.0	0.0%	2.0	100.0%	2.0
Crooked Creek	0.0	0.0%	0.0	0.0%	11.3	100.0%	11.3	0.0	0.0%	0.0	0.0%	6.0	100.0%	6.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	2.8	100.0%	2.8	0.0	0.0%	0.0	0.0%	1.0	100.0%	1.0
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	11.3	100.0%	11.3	0.0	0.0%	0.0	0.0%	2.0	100.0%	2.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	12.0	100.0%	12.0	0.0	0.0%	0.0	0.0%	6.0	100.0%	6.0
All communities	0.0	0.0%	1.4	1.5%	86.1	98.5%	87.5	0.0	0.0%	1.0	2.0%	49.0	98.0%	50.0

Source ADF&G Division of Subsistence household surveys, 2006.

Table B19.—Estimated caribou harvests by sex and month, Central Kuskokwim communities, April 2003–March 2004.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0	15.9	0.0	0.0	21.9
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	13.9	19.9	0.0	0.0	37.8
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0	2.0	19.9	27.8
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	19.9	39.8	2.0	19.9	87.5
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	7.1	0.0	0.0	8.8
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	1.8	3.5	8.8
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	10.6	1.8	3.5	17.6
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	4.2	0.0	0.0	0.0	10.6
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	2.1	6.4
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	4.2	12.7	10.6	29.6
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	6.4	8.5	4.2	12.7	12.7	46.6
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2
	Male	0.0	0.0	0.0	0.0	2.3	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0	4.7
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	2.3	0.0	0.0	2.3	0.0	1.2	0.0	0.0	0.0	5.8
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1
	Unknown	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	6.6
	All	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	3.3	7.7
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0	4.2
	Male	0.0	0.0	0.0	0.0	0.0	0.0	4.2	1.1	4.2	0.0	0.0	0.0	0.0	9.5
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	4.2	3.2	6.4	0.0	0.0	0.0	0.0	13.8
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7	1.7	0.0	5.2
	Male	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	5.2	0.0	6.9	0.0	1.7	15.6
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	1.7	6.9	1.7	3.5	20.8
	All	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	13.9	1.7	15.6	3.5	5.2	41.6
All communities	All	0.0	0.0	0.0	0.0	7.4	0.0	4.2	7.6	35.4	31.3	70.2	19.9	48.6	224.7
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	12.2	8.2	17.6	1.7	0.0	43.1
	Male	0.0	0.0	0.0	0.0	4.1	0.0	4.2	2.2	16.3	19.3	33.9	0.0	3.9	83.9
	Unknown	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2.1	6.9	3.7	18.7	18.2	44.8	97.7

Source ADF&G Division of Subsistence household surveys, 2004.

Table B20.—Estimated caribou harvests by sex and month, Central Kuskokwim communities, April 2004–March 2005.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	3.4	0.0	0.0	5.1
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	3.4
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	3.4	0.0	0.0	8.4
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	2.5	0.0	6.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	3.7	0.0	7.4
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	3.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	3.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	6.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	6.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0	4.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0	4.2
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	3.4	1.2	0.0	6.3
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	2.1	10.6	0.0	19.7
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	3.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	0.0	6.9	11.8	1.5	29.0

Source ADF&G Division of Subsistence household surveys, 2005.

Table B21.—Estimated caribou harvests by sex and month, Central Kuskokwim communities, April 2005–March 2006.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	8.1	6.8	0.0	1.4	0.0	19.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	5.4	4.1	1.4	0.0	13.5
	Unknown	4.1	0.0	0.0	0.0	0.0	4.1	0.0	1.4	0.0	0.0	0.0	0.0	1.4	10.8
	All	4.1	0.0	0.0	0.0	0.0	4.1	0.0	5.4	9.5	12.2	4.1	2.7	1.4	43.4
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	4.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	4.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	6.0	0.0	0.0	0.0	10.0
	Unknown	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	4.0
	All	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	4.0	10.0	0.0	0.0	0.0	16.0
All Communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	8.1	8.8	0.0	1.4	0.0	21.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.4	11.4	4.1	1.4	0.0	23.5
	Unknown	4.1	0.0	0.0	0.0	2.0	4.1	0.0	1.4	0.0	2.0	2.0	0.0	3.4	18.8
	All	4.1	0.0	0.0	0.0	2.0	4.1	0.0	5.4	13.5	22.2	6.1	2.7	3.4	63.4

Source ADF&G Division of Subsistence household surveys, 2006.

Table B22.—Estimated caribou harvests by GMU and UCU, Central Kuskokwim communities, April 2003–March 2004.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
18Z 1204	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	4.2	1.9%
18Z 1402	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	10.6	4.7%
Subtotal GMU 18Z	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0	14.8	6.6%
Total GMU 18	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0	14.8	6.6%
19A 0103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5	1.5%
19A 0201	35.8	0.0	2.7	14.8	0.0	0.0	0.0	15.6	68.9	30.7%
19A 0301	11.9	5.3	0.0	0.0	0.0	0.0	2.1	0.0	19.3	8.6%
19A 0302	9.9	12.4	0.0	0.0	0.0	0.0	0.0	0.0	22.3	9.9%
19A 0303	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	2.7%
19A 0403	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	1.1	0.5%
19A 0404	0.0	0.0	0.0	0.0	1.2	0.0	3.2	0.0	4.3	1.9%
19A 0405	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	2.1	0.9%
19A 0501	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.2	2.3%
19A 1001	0.0	0.0	0.0	0.0	2.3	3.3	0.0	0.0	5.6	2.5%
19A 1201	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	3.2	1.4%
19A 1301	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	3.2	1.4%
19A 3020	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.9%
19A Unknown UCU	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	6.4	2.8%
Subtotal GMU 19A	65.6	17.6	2.7	21.2	3.5	4.4	13.8	24.3	153.1	68.1%
19B 0402	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	2.3	1.0%
Subtotal GMU 19B	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	2.3	1.0%
Total GMU 19	65.6	17.6	2.7	21.2	5.8	4.4	13.8	24.3	155.4	69.2%
Unknown location	21.9	0.0	1.3	10.6	0.0	3.3	0.0	17.4	54.5	24.2%
All polygons	87.5	17.6	4.0	46.6	5.8	7.7	13.8	41.6	224.7	100.0%

Source ADF&G Division of Subsistence household surveys, 2004.

Table B23.—Estimated caribou harvests by GMU and UCU, Central Kuskokwim communities, April 2004–March 2005.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
19A 0103	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	7.2%
19A 0201	8.4	0.0	0.0	7.4	0.0	0.0	0.0	0.0	15.8	54.6%
19A 0403	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	6.0	20.7%
19A 0901	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.5	5.2%
19A Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	7.2%
Subtotal GMU 19A	8.4	0.0	0.0	7.4	1.5	0.0	6.0	4.2	27.5	94.8%
Total GMU 19	8.4	0.0	0.0	7.4	1.5	0.0	6.0	4.2	27.5	94.8%
Unknown Location	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.5	5.2%
All polygons	8.4	0.0	0.0	7.4	3.0	0.0	6.0	4.2	29.0	100.0%

Source ADF&G Division of Subsistence household surveys, 2005.

Table B24.—Estimated caribou harvests by GMU and UCU, Central Kuskokwim communities, April 2005–March 2006.

Polygon	Community									Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag			
09B Unknown UCU	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.1%
Subtotal GMU 09B	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.1%
Total GMU 09	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.1%
19A 0103	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.2%
19A 0201	16.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	32.3	50.9%
19A 0301	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	10.7%
19A 0302	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.1%
19A 0303	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	15.0%
19A Unknown UCU	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	6.4%
Subtotal GMU 19A	37.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	55.9	88.3%
19B 0101	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	6.4%
Subtotal GMU 19B	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	6.4%
Total GMU 19	42.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	60.0	94.7%
Unknown Location	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	3.2%
All polygons	43.4	4.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	63.4	100.0%

Source ADF&G Division of Subsistence household surveys, 2006.

Table B25.—Estimated caribou harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2003–March 2004.

Community	Caribou harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	39.8	45.5%	19.9	22.7%	27.8	31.8%	87.5	23.9	48.0%	11.9	24.0%	13.9	28.0%	49.7
Chuathbaluk	17.6	100.0%	0.0	0.0%	0.0	0.0%	17.6	10.6	100.0%	0.0	0.0%	0.0	0.0%	10.6
Crooked Creek	0.0	0.0%	2.7	66.7%	1.3	33.3%	4.0	0.0	0.0%	1.3	50.0%	1.3	50.0%	2.7
Lower Kalskag	0.0	0.0%	14.8	31.8%	31.8	68.2%	46.6	0.0	0.0%	4.2	18.2%	19.1	81.8%	23.3
Red Devil	4.7	80.0%	1.2	20.0%	0.0	0.0%	5.8	2.3	66.7%	1.2	33.3%	0.0	0.0%	3.5
Sleetmute	0.0	0.0%	3.3	42.9%	4.4	57.1%	7.7	0.0	0.0%	1.1	33.3%	2.2	66.7%	3.3
Stony River	10.6	76.9%	3.2	23.1%	0.0	0.0%	13.8	6.4	85.7%	1.1	14.3%	0.0	0.0%	7.4
Upper Kalskag	8.7	20.8%	6.9	16.7%	26.0	62.5%	41.6	3.5	16.7%	3.5	16.7%	13.9	66.7%	20.8
All communities	81.3	36.2%	52.0	23.1%	91.4	40.7%	224.7	46.6	38.4%	24.3	20.0%	50.4	41.6%	121.3

Source ADF&G Division of Subsistence household surveys, 2004.

Table B26.—Estimated caribou harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2004–March 2005.

Community	Caribou harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	8.4	100.0%	0.0	0.0%	8.4	0.0	0.0%	3.4	100.0%	0.0	0.0%	3.4
Chuathbaluk	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Crooked Creek	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	3.7	100.0%	3.7
Lower Kalskag	0.0	0.0%	0.0	0.0%	7.4	100.0%	7.4	0.0	0.0%	0.0	0.0%	3.0	100.0%	3.0
Red Devil	0.0	0.0%	0.0	0.0%	3.0	100.0%	3.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	6.0	100.0%	0.0	0.0%	0.0	0.0%	6.0	3.0	49.0%	0.0	0.0%	3.1	51.0%	6.1
Upper Kalskag	0.0	0.0%	0.0	0.0%	4.2	100.0%	4.2	0.0	0.0%	0.0	0.0%	1.7	100.0%	1.7
All communities	6.0	20.7%	8.4	29.0%	14.6	50.3%	29.0	3.0	16.8%	3.4	18.8%	11.5	64.4%	17.9

Source ADF&G Division of Subsistence household surveys, 2005

Table B27.—Estimated caribou harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2005–March 2006.

Community	Caribou harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	1.4	3.1%	42.0	96.9%	43.4	0.0	0.0%	1.0	33.3%	2.0	66.7%	3.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	4.0	100.0%	4.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Crooked Creek	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	5.0	100.0%	5.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	16.0	100.0%	16.0	0.0	0.0%	0.0	0.0%	32.0	100.0%	32.0
All communities	0.0	0.0%	1.4	2.1%	62.0	97.9%	63.4	0.0	0.0%	1.0	2.5%	39.0	97.5%	40.0

Source ADF&G Division of Subsistence household surveys, 2006.

Table B28.—Reported availability of caribou for subsistence hunting, Central Kuskokwim communities, 2003–2004 and prior years.

Community	Households			Availability					
	Estimated total number	Responding		Poor		Fair		Good	
		Number	Percentage	Number	Percentage ^a	Number	Percentage ^a	Number	Percentage ^a
Availability this season									
Aniak	163	95.4	58.5%	6.0	6.3%	19.9	20.8%	69.6	72.9%
Chuathbaluk	30	19.4	64.7%	0.0	0.0%	5.3	27.3%	14.1	72.7%
Crooked Creek	36	13.3	37.0%	8.0	60.0%	5.3	40.0%	0.0	0.0%
Lower Kalskag	72	25.4	35.3%	4.2	16.7%	14.8	58.3%	6.4	25.0%
Red Devil	14	11.7	83.3%	9.3	80.0%	2.3	20.0%	0.0	0.0%
Sleetmute	32	7.7	24.1%	5.5	71.4%	0.0	0.0%	2.2	28.6%
Stony River	18	9.5	52.9%	1.1	11.1%	5.3	55.6%	3.2	33.3%
Upper Kalskag	59	31.2	52.9%	3.5	11.1%	15.6	50.0%	12.1	38.9%
Availability 4–5 years ago									
Aniak	163	79.5	48.8%	2.0	2.5%	27.8	35.0%	49.7	62.5%
Chuathbaluk	30	17.6	58.8%	3.5	20.0%	5.3	30.0%	8.8	50.0%
Crooked Creek	36	13.3	37.0%	2.7	20.0%	6.7	50.0%	4.0	30.0%
Lower Kalskag	72	25.4	35.3%	0.0	0.0%	12.7	50.0%	12.7	50.0%
Red Devil	14	11.7	83.3%	5.8	50.0%	2.3	20.0%	3.5	30.0%
Sleetmute	32	7.7	24.1%	2.2	28.6%	1.1	14.3%	4.4	57.1%
Stony River	18	9.5	52.9%	1.1	11.1%	4.2	44.4%	4.2	44.4%
Upper Kalskag	59	31.2	52.9%	5.2	16.7%	19.1	61.1%	6.9	22.2%
Availability 9–10 years ago									
Aniak	163	67.6	41.5%	15.9	23.5%	13.9	20.6%	37.8	55.9%
Chuathbaluk	30	17.6	58.8%	5.3	30.0%	8.8	50.0%	3.5	20.0%
Crooked Creek	36	13.3	37.0%	4.0	30.0%	2.7	20.0%	6.7	50.0%
Lower Kalskag	72	25.4	35.3%	8.5	33.3%	12.7	50.0%	4.2	16.7%
Red Devil	14	10.5	75.0%	4.7	44.4%	1.2	11.1%	4.7	44.4%
Sleetmute	32	6.6	20.7%	1.1	16.7%	3.3	50.0%	2.2	33.3%
Stony River	18	9.5	52.9%	1.1	11.1%	3.2	33.3%	5.3	55.6%
Upper Kalskag	59	31.2	52.9%	12.1	38.9%	13.9	44.4%	5.2	16.7%

Source ADF&G Division of Subsistence household surveys, 2004.

a. Percentages based on households that gave a valid response for these questions.

Table B29.—Reported availability of caribou for subsistence hunting, Central Kuskokwim communities, 2004–2005 and prior years.

Community	Households			Availability					
	Estimated total number	Responding		Poor		Fair		Good	
		Number	Percentage	Number	Percentage ^a	Number	Percentage ^a	Number	Percentage ^a
Availability this season									
Aniak	155	45.5	29.3%	42.1	92.6%	3.4	7.4%	0.0	0.0%
Chuathbaluk	23	1.4	5.9%	1.4	100.0%	0.0	0.0%	0.0	0.0%
Crooked Creek	39	12.1	31.0%	12.1	100.0%	0.0	0.0%	0.0	0.0%
Lower Kalskag	73	4.9	6.8%	2.5	50.0%	2.5	50.0%	0.0	0.0%
Red Devil	12	3.0	25.0%	1.5	50.0%	1.5	50.0%	0.0	0.0%
Sleetmute	29	8.5	29.4%	8.5	100.0%	0.0	0.0%	0.0	0.0%
Stony River	15	9.0	60.0%	9.0	100.0%	0.0	0.0%	0.0	0.0%
Upper Kalskag	52	22.9	44.0%	17.7	77.3%	1.0	4.5%	4.2	18.2%
Availability 4–5 years ago									
Aniak	155	43.8	28.3%	0.0	0.0%	8.4	19.2%	35.4	80.8%
Chuathbaluk	23	1.4	5.9%	0.0	0.0%	0.0	0.0%	1.4	100.0%
Crooked Creek	39	12.1	31.0%	2.7	22.2%	5.4	44.4%	4.0	33.3%
Lower Kalskag	73	4.9	6.8%	1.2	25.0%	1.2	25.0%	2.5	50.0%
Red Devil	12	1.5	12.5%	0.0	0.0%	0.0	0.0%	1.5	100.0%
Sleetmute	29	8.5	29.4%	3.4	40.0%	3.4	40.0%	1.7	20.0%
Stony River	15	9.0	60.0%	3.0	33.3%	3.0	33.3%	3.0	33.3%
Upper Kalskag	52	22.9	44.0%	0.0	0.0%	12.5	54.5%	10.4	45.5%
Availability 9–10 years ago									
Aniak	155	38.8	25.0%	6.7	17.4%	15.2	39.1%	16.8	43.5%
Chuathbaluk	23	1.4	5.9%	0.0	0.0%	0.0	0.0%	1.4	100.0%
Crooked Creek	39	12.1	31.0%	0.0	0.0%	2.7	22.2%	9.4	77.8%
Lower Kalskag	73	4.9	6.8%	1.2	25.0%	0.0	0.0%	3.7	75.0%
Red Devil	12	1.5	12.5%	0.0	0.0%	0.0	0.0%	1.5	100.0%
Sleetmute	29	8.5	29.4%	3.4	40.0%	1.7	20.0%	3.4	40.0%
Stony River	15	9.0	60.0%	0.0	0.0%	3.0	33.3%	6.0	66.7%
Upper Kalskag	52	22.9	44.0%	4.2	18.2%	2.1	9.1%	16.6	72.7%

Source ADF&G Division of Subsistence household surveys, 2005.

a. Percentages based on households that gave a valid response for these questions.

Table B30.—Reported availability of caribou for subsistence hunting, Central Kuskokwim communities, 2005–2006 and prior years.

Community	Households			Availability					
	Estimated total number	Responding		Poor		Fair		Good	
		Number	Percentage	Number	Percentage ^a	Number	Percentage ^a	Number	Percentage ^a
Availability this season									
Aniak	168	61.0	36.3%	27.1	44.4%	31.2	51.1%	2.7	4.4%
Chuathbaluk	42	4.0	9.5%	4.0	100.0%	0.0	0.0%	0.0	0.0%
Crooked Creek	32	1.9	5.9%	1.9	100.0%	0.0	0.0%	0.0	0.0%
Lower Kalskag	84	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Red Devil	13	1.3	10.0%	1.3	100.0%	0.0	0.0%	0.0	0.0%
Sleetmute	41	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Stony River	17	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Upper Kalskag	68	16.0	23.5%	12.0	75.0%	4.0	25.0%	0.0	0.0%
Availability 4–5 years ago									
Aniak	168	58.3	34.7%	0.0	0.0%	21.7	37.2%	36.6	62.8%
Chuathbaluk	42	4.0	9.5%	0.0	0.0%	0.0	0.0%	4.0	100.0%
Crooked Creek	32	1.9	5.9%	1.9	100.0%	0.0	0.0%	0.0	0.0%
Lower Kalskag	84	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Red Devil	13	1.3	10.0%	1.3	100.0%	0.0	0.0%	0.0	0.0%
Sleetmute	41	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Stony River	17	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Upper Kalskag	68	16.0	23.5%	2.0	12.5%	4.0	25.0%	10.0	62.5%
Availability 9–10 years ago									
Aniak	168	50.1	29.8%	6.8	13.5%	10.8	21.6%	32.5	64.9%
Chuathbaluk	42	2.0	4.8%	0.0	0.0%	2.0	100.0%	0.0	0.0%
Crooked Creek	32	1.9	5.9%	0.0	0.0%	0.0	0.0%	1.9	100.0%
Lower Kalskag	84	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Red Devil	13	1.3	10.0%	0.0	0.0%	1.3	100.0%	0.0	0.0%
Sleetmute	41	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Stony River	17	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Upper Kalskag	68	14.0	20.6%	4.0	28.6%	4.0	28.6%	6.0	42.9%

Source ADF&G Division of Subsistence household surveys, 2006.

a. Percentages based on households that gave a valid response for these questions.

Table B31.—Estimated black bear harvests by sex and month, Central Kuskokwim communities, April 2003–March 2004.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
	Unknown	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
	All	0.0	0.0	0.0	0.0	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Crooked Creek	Female	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	Male	0.0	0.0	0.0	2.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Unknown	0.0	0.0	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.3
	All	0.0	0.0	1.3	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	10.7
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
	Unknown	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
	All	0.0	0.0	0.0	0.0	3.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
All communities	Female	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	Male	2.1	0.0	1.2	4.9	8.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.9
	Unknown	0.0	0.0	1.3	1.3	1.3	3.5	0.0	0.0	0.0	0.0	0.0	0.0	1.3	8.8
	All	2.1	0.0	2.5	7.5	10.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	1.3	28.1

Source ADF&G Division of Subsistence household surveys, 2004.

Table B32.—Estimated black bear harvests by sex and month, Central Kuskokwim communities, April 2004–March 2005.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
	Male	0.0	0.0	1.7	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	1.7	0.0	1.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
	Unknown	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
	All	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	4.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	1.3	8.1
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	4.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	1.3	8.1
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2	3.7
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2	3.7
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
	All	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
	All	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
	All	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
	Male	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	3.1
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	4.2
All communities	Female	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.7
	Male	0.0	4.0	2.9	2.1	0.0	7.3	0.0	0.0	0.0	1.0	0.0	1.3	2.6	21.3
	Unknown	9.0	1.7	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.4
	All	9.0	5.7	2.9	2.1	1.7	13.0	0.0	0.0	0.0	1.0	0.0	2.4	2.6	40.4

Source ADF&G Division of Subsistence household surveys, 2005.

Table B33.—Estimated black bear harvests by sex and month, Central Kuskokwim communities, April 2005–March 2006.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	1.4	0.0	1.4	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	6.8
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	1.4	0.0	1.4	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	6.8
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Male	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Unknown	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	All	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
All communities	Female	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Male	3.8	1.9	1.4	2.8	1.4	10.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	23.2
	Unknown	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	All	3.8	1.9	1.4	2.8	1.4	16.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	29.2

Source ADF&G Division of Subsistence household surveys, 2006.

Table B34.—Estimated black bear harvests by GMU and UCU, Central Kuskokwim communities, April 2003–March 2004.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
18Z 1402	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.7	3.9	13.7%
Subtotal GMU 18Z	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.7	3.9	13.7%
Total GMU 18	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.7	3.9	13.7%
19A 0101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	6.2%
19A 0103	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.8	6.3%
19A 0104	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.8	6.3%
19A 0401	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	4.8%
19A 0402	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	4.2%
19A 0405	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	2.1	7.5%
19A 0701	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	4.0	14.3%
19A 0901	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.2	7.9%
19A 1301	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	3.8%
19A Unknown UCU	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	5.3	19.0%
Subtotal GMU 19A	0.0	3.5	10.7	0.0	1.2	2.2	3.2	1.7	22.5	80.1%
Total GMU 19	0.0	3.5	10.7	0.0	1.2	2.2	3.2	1.7	22.5	80.1%
Unknown location	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	6.2%
All polygons	0.0	3.5	10.7	2.1	1.2	2.2	3.2	5.2	28.1	100.0%

Source ADF&G Division of Subsistence household surveys, 2004.

Table B35.—Estimated black bear harvests by GMU and UCU, Central Kuskokwim communities, April 2004–March 2005.

Polygon	Community									Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag			
18 Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.6%	
Subtotal GMU 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.6%	
Total GMU 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.6%	
19A 0101	1.7	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.9	7.2%	
19A 0104	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1	10.0%	
19A 0201	1.7	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.9	7.2%	
19A 0302	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	4.2%	
19A 0401	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	3.3%	
19A 0601	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0	7.4%	
19A 0701	1.7	0.0	5.4	0.0	0.0	0.0	0.0	0.0	7.1	17.5%	
19A 0801	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	3.3%	
19A 0901	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7	4.2%	
19A Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	7.7%	
Subtotal GMU 19A	6.7	4.1	8.1	2.5	0.0	1.7	3.0	3.1	29.2	72.1%	
19D 0401	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	3.1%	
Subtotal GMU 19D	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	3.1%	
Total GMU 19	6.7	4.1	8.1	3.7	0.0	1.7	3.0	3.1	30.4	75.2%	
21A 0203	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	9.0	22.3%	
Subtotal GMU 21A	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	9.0	22.3%	
Total GMU 21	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	9.0	22.3%	
All polygons	6.7	4.1	8.1	3.7	9.0	1.7	3.0	4.2	40.4	100.0%	

Source ADF&G Division of Subsistence household surveys, 2005.

Table B36.—Estimated black bear harvests by GMU and UCU, Central Kuskokwim communities, April 2005–March 2006.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
18Z 0204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	13.7%
Subtotal GMU 18Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	13.7%
Total GMU 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	13.7%
19A 0101	0.0	0.0	0.0	2.8	0.0	0.0	0.0	2.0	4.8	16.4%
19A 0102	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	13.7%
19A 0103	1.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	11.5%
19A 0201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	6.8%
19A 0401	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.3%
19A 0402	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	6.4%
19A 0403	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.6%
19A 0701	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	6.4%
19A 0801	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	6.4%
Subtotal GMU 19A	5.4	6.0	5.6	2.8	0.0	0.0	0.0	4.0	23.9	81.7%
Total GMU 19	5.4	6.0	5.6	2.8	0.0	0.0	0.0	4.0	23.9	81.7%
21E 0301	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.6%
Subtotal GMU 21E	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.6%
Total GMU 21	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.6%
All polygons	6.8	6.0	5.6	2.8	0.0	0.0	0.0	8.0	29.2	100.0%

Source ADF&G Division of Subsistence household surveys, 2006.

Table B37.—Estimated black bear harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2003–March 2004.

Community	Black bear harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Chuathbaluk	1.8	50.0%	1.8	50.0%	0.0	0.0%	3.5	1.8	50.0%	1.8	50.0%	0.0	0.0%	3.5
Crooked Creek	4.0	37.5%	1.3	12.5%	5.3	50.0%	10.7	2.7	40.0%	1.3	20.0%	2.7	40.0%	6.7
Lower Kalskag	0.0	0.0%	2.1	100.0%	0.0	0.0%	2.1	0.0	0.0%	2.1	100.0%	0.0	0.0%	2.1
Red Devil	0.0	0.0%	1.2	100.0%	0.0	0.0%	1.2	0.0	0.0%	1.2	100.0%	0.0	0.0%	1.2
Sleetmute	2.2	100.0%	0.0	0.0%	0.0	0.0%	2.2	1.1	100.0%	0.0	0.0%	0.0	0.0%	1.1
Stony River	3.2	100.0%	0.0	0.0%	0.0	0.0%	3.2	2.1	100.0%	0.0	0.0%	0.0	0.0%	2.1
Upper Kalskag	3.5	66.7%	0.0	0.0%	1.7	33.3%	5.2	3.5	66.7%	0.0	0.0%	1.7	33.3%	5.2
All communities	14.6	52.1%	6.4	22.7%	7.1	25.2%	28.1	11.1	50.8%	6.4	29.1%	4.4	20.1%	21.9

Source ADF&G Division of Subsistence household surveys, 2004

Table B38.—Estimated black bear harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2004–March 2005.

Community	Black bear harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	6.7	100.0%	0.0	0.0%	0.0	0.0%	6.7	6.7	100.0%	0.0	0.0%	0.0	0.0%	6.7
Chuathbaluk	0.0	0.0%	0.0	0.0%	4.1	100.0%	4.1	0.0	0.0%	0.0	0.0%	1.4	100.0%	1.4
Crooked Creek	8.1	100.0%	0.0	0.0%	0.0	0.0%	8.1	6.7	100.0%	0.0	0.0%	0.0	0.0%	6.7
Lower Kalskag	0.0	0.0%	0.0	0.0%	3.7	100.0%	3.7	0.0	0.0%	0.0	0.0%	3.7	100.0%	3.7
Red Devil	0.0	0.0%	0.0	0.0%	9.0	100.0%	9.0	0.0	0.0%	0.0	0.0%	1.5	100.0%	1.5
Sleetmute	0.0	0.0%	0.0	0.0%	1.7	100.0%	1.7	0.0	0.0%	0.0	0.0%	1.7	100.0%	1.7
Stony River	3.0	100.0%	0.0	0.0%	0.0	0.0%	3.0	3.0	100.0%	0.0	0.0%	0.0	0.0%	3.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	4.2	100.0%	4.2	0.0	0.0%	0.0	0.0%	3.1	100.0%	3.1
All Communities	17.8	44.0%	0.0	0.0%	22.6	56.0%	40.4	16.5	59.1%	0.0	0.0%	11.4	40.9%	27.9

Source ADF&G Division of Subsistence household surveys, 2005.

Table B39.—Estimated black bear harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2005–March 2006.

Community	Black bear harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	1.4	19.9%	5.4	80.1%	6.8	0.0	0.0%	1.0	20.0%	4.0	80.0%	5.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	6.0	100.0%	6.0	0.0	0.0%	0.0	0.0%	2.0	100.0%	2.0
Crooked Creek	0.0	0.0%	0.0	0.0%	5.7	100.0%	5.7	0.0	0.0%	0.0	0.0%	3.0	100.0%	3.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	2.8	100.0%	2.8	0.0	0.0%	0.0	0.0%	1.0	100.0%	1.0
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	8.0	100.0%	8.0	0.0	0.0%	0.0	0.0%	3.0	100.0%	3.0
All communities	0.0	0.0%	1.4	4.6%	27.9	95.4%	29.2	0.0	0.0%	1.0	7.1%	13.0	92.9%	14.0

Source ADF&G Division of Subsistence household surveys, 2006.

Table B40.—Estimated brown bear harvests by sex and month, Central Kuskokwim communities, April 2003–March 2004.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0

Source ADF&G Division of Subsistence household surveys, 2004.

Table B41.—Estimated brown bear harvests by GMU and UCU, Central Kuskokwim communities, April 2003–March 2004.

Polygon	Community										Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag				
19A 0103	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	100.0%
Subtotal GMU 19A	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	100.0%
Total GMU 19	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	100.0%
All polygons	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	100.0%

Source ADF&G Division of Subsistence household surveys, 2004.

Table B42.—Estimated brown bear harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2003–March 2004.

Community	Brown bear harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	2.0	100.0%	0.0	0.0%	0.0	0.0%	2.0	2.0	100.0%	0.0	0.0%	0.0	0.0%	2.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Crooked Creek	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
All communities	2.0	100.0%	0.0	0.0%	0.0	0.0%	2.0	2.0	100.0%	0.0	0.0%	0.0	0.0%	2.0

Source ADF&G Division of Subsistence household surveys, 2004.

Table B43.—Estimated brown bear harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2004–March 2005.

Community	Brown bear harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Crooked Creek	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	1.2	100.0%	1.2	0.0	0.0%	0.0	0.0%	1.2	100.0%	1.2
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
All communities	0.0	0.0%	0.0	0.0%	1.2	100.0%	1.2	0.0	0.0%	0.0	0.0%	1.2	100.0%	1.2

Source ADF&G Division of Subsistence household surveys, 2005.

Table B44.—Estimated brown bear harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2005–March 2006.

Community	Brown bear harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	0.0	0.0%	0.0	0.0%	2.7	100.0%	2.7	0.0	0.0%	0.0	0.0%	2.0	100.0%	2.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Crooked Creek	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
All communities	0.0	0.0%	0.0	0.0%	2.7	100.0%	2.7	0.0	0.0%	0.0	0.0%	2.0	100.0%	2.0

Source ADF&G Division of Subsistence household surveys, 2006.

Table B45.—Estimated brown bear harvests by sex and month, Central Kuskokwim communities, April 2004–March 2005.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2

Source ADF&G Division of Subsistence household surveys, 2005.

Table B46.—Estimated brown bear harvests by GMU and UCU, Central Kuskokwim communities, April 2004–March 2005.

Polygon	Community										Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag				
19A 0101	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0			1.2	100.0%
Subtotal GMU 19A	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0			1.2	100.0%
Total GMU 19	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0			1.2	100.0%
All polygons	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0			1.2	100.0%

Source ADF&G Division of Subsistence household surveys, 2005.

Table B47.—Estimated brown bear harvests by sex and month, Central Kuskokwim communities, April 2005–March 2006.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7

Source ADF&G Division of Subsistence household surveys, 2006.

Table B48.—Estimated brown bear harvests by GMU and UCU, Central Kuskokwim communities, April 2005–March 2006.

Polygon	Community									Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag			
21E 0501	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.4	50.0%
Subtotal GMU 21E	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.4	50.0%
Total GMU 21	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.4	50.0%
Unknown Location	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.4	50.0%
All polygons	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.7	100.0%

Source ADF&G Division of Subsistence household surveys, 2006.

Table B49.—Estimated gray wolf harvests by sex and month, Central Kuskokwim communities, April 2003–March 2004.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0	8.0	15.9	33.8
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	4.0	8.0	15.9	37.8
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.3	0.0	2.7
	Male	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3	1.3	1.3	0.0	0.0	5.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.3
	All	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	2.7	1.3	2.7	1.3	0.0	9.3
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	2.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	1.1	2.2
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	1.7	3.5	5.2	15.6
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.2	3.5	5.2	19.1
All Communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.3	0.0	1.7	1.3	0.0	5.6
	Male	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.3	1.3	2.4	7.0	0.0	0.0	14.5
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	5.2	3.1	11.4	22.2	51.8
	All	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.5	12.6	7.6	11.8	12.8	22.2	71.9

Source ADF&G Division of Subsistence household surveys, 2004.

Table B50.—Estimated gray wolf harvests by sex and month, Central Kuskokwim communities, April 2004–March 2005.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	5.1	5.1	0.0	1.7	0.0	15.2
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	10.1	3.4	0.0	15.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	5.1	6.7	10.1	5.1	0.0	30.3
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	1.0	0.0	0.0	0.0	4.2
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.1	0.0	0.0	0.0	5.2
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	5.1	6.1	0.0	1.7	0.0	16.2
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.7	10.1	3.4	0.0	19.3
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	1.4	0.0	1.7	9.1
	All	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.4	8.2	8.8	11.5	5.1	1.7	44.6

Source ADF&G Division of Subsistence household surveys, 2005.

Table B51.—Estimated gray wolf harvests by sex and month, Central Kuskokwim communities, April 2005–March 2006.

Community	Sex	Month													Total
		April	May	June	July	August	September	October	November	December	January	February	March	Unknown	
Aniak	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	1.4	8.1	1.4	13.5
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	5.4	1.4	9.5
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	6.8	14.9	1.4	0.0	28.5
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	10.8	17.6	14.9	2.7	51.5
Chuathbaluk	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	4.0
Crooked Creek	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9
Lower Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Devil	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sleetmute	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stony River	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.7
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.7
Upper Kalskag	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	0.0	0.0	8.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.0	0.0	0.0	10.0
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	12.0	0.0	0.0	20.0
All communities	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.7	3.4	8.1	1.4	17.5
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	3.4	7.4	11.1	1.4	27.0
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	12.8	18.9	1.4	0.0	38.5
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	7.4	18.8	29.6	20.6	2.7	83.0

Source ADF&G Division of Subsistence household surveys, 2006.

Table B52.—Estimated gray wolf harvests by GMU and UCU, Central Kuskokwim communities, April 2003–March 2004.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
19A 0201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	8.7	12.1%
19A 0302	17.9	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20.6	28.6%
19A 0402	0.0	0.0	2.7	0.0	1.2	2.2	0.0	0.0	6.0	8.4%
19A 0601	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	1.9%
19A 0901	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	1.6%
19A 1001	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	1.6%
19A Unknown UCU	2.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	4.7	6.5%
Subtotal GMU 19A	19.9	0.0	9.3	0.0	3.5	2.2	0.0	8.7	43.6	60.6%
19B 0101	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9	22.1%
19B 0201	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.8%
Subtotal GMU 19B	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.9	24.9%
Total GMU 19	37.8	0.0	9.3	0.0	3.5	2.2	0.0	8.7	61.5	85.5%
Unknown location	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	10.4	14.5%
All polygons	37.8	0.0	9.3	0.0	3.5	2.2	0.0	19.1	71.9	100.0%

Source ADF&G Division of Subsistence household surveys, 2004.

Table B53.—Estimated gray wolf harvests by GMU and UCU, Central Kuskokwim communities, April 2004–March 2005.

Polygon	Community								Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag		
19A 0102	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.8%
19A 0201	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	11.3%
19A 0301	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8	37.8%
19A 0302	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.0%
19A 0403	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7	3.8%
19A 0801	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	6.0	13.5%
19A Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	7.0%
Subtotal GMU 19A	23.6	1.4	0.0	0.0	6.0	1.7	0.0	3.1	35.8	80.2%
Total GMU 19	23.6	1.4	0.0	0.0	6.0	1.7	0.0	3.1	35.8	80.2%
21E 0301	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	15.1%
21E Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	4.7%
Subtotal GMU 21E	6.7	0.0	0.0	0.0	0.0	0.0	0.0	2.1	8.8	19.8%
Total GMU 21	6.7	0.0	0.0	0.0	0.0	0.0	0.0	2.1	8.8	19.8%
All polygons	30.3	1.4	0.0	0.0	6.0	1.7	0.0	5.2	44.6	100.0%

Source ADF&G Division of Subsistence household surveys, 2005.

Table B54.—Estimated gray wolf harvests by GMU and UCU, Central Kuskokwim communities, April 2005–March 2006.

Polygon	Community									Total	Percentage
	Aniak	Chuathbaluk	Crooked Creek	Lower Kalskag	Red Devil	Sleetmute	Stony River	Upper Kalskag			
18Z 1204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.8%	
18Z 1402	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.4%	
Subtotal GMU 18Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	7.2%	
Total GMU 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	7.2%	
19A 0102	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.3%	
19A 0104	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.8%	
19A 0201	6.8	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.8	15.4%	
19A 0301	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9	17.9%	
19A 0302	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	6.5%	
19A 0303	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.4%	
19A 0402	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	2.3%	
19A 0405	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.7	6.8%	
19A Unknown UCU	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	19.6%	
Subtotal GMU 19A	46.1	4.0	1.9	0.0	0.0	0.0	5.7	8.0	65.6	79.0%	
19B 0101	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	6.5%	
Subtotal GMU 19B	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	6.5%	
Total GMU 19	51.5	4.0	1.9	0.0	0.0	0.0	5.7	8.0	71.0	85.5%	
21E 0301	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.8%	
21E Unknown UCU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.4%	
Subtotal GMU 21E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	7.2%	
Total GMU 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	7.2%	
All polygons	51.5	4.0	1.9	0.0	0.0	0.0	5.7	20.0	83.0	100.0%	

Source ADF&G Division of Subsistence household surveys, 2006.

Table B55.—Estimated gray wolf harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2003–March 2004.

Community	Gray wolf harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	35.8	94.7%	2.0	5.3%	0.0	0.0%	37.8	6.0	75.0%	2.0	25.0%	0.0	0.0%	8.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Crooked Creek	6.7	71.4%	0.0	0.0%	2.7	28.6%	9.3	5.3	80.0%	0.0	0.0%	1.3	20.0%	6.7
Lower Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Red Devil	2.3	66.7%	1.2	33.3%	0.0	0.0%	3.5	2.3	66.7%	1.2	33.3%	0.0	0.0%	3.5
Sleetmute	0.0	0.0%	1.1	50.0%	1.1	50.0%	2.2	0.0	0.0%	1.1	50.0%	1.1	50.0%	2.2
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	3.5	18.2%	15.6	81.8%	19.1	0.0	0.0%	1.7	25.0%	5.2	75.0%	6.9
All communities	44.8	62.3%	7.7	10.7%	19.4	27.0%	71.9	13.6	50.0%	6.0	22.0%	7.6	28.0%	27.3

Source ADF&G Division of Subsistence household surveys, 2004.

Table B56.—Estimated gray wolf harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2004–March 2005.

Community	Gray wolf harvest							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	23.6	77.8%	6.7	22.2%	0.0	0.0%	30.3	5.1	50.0%	5.1	50.0%	0.0	0.0%	10.1
Chuathbaluk	0.0	0.0%	0.0	0.0%	1.4	100.0%	1.4	0.0	0.0%	0.0	0.0%	1.4	100.0%	1.4
Crooked Creek	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Red Devil	0.0	0.0%	0.0	0.0%	6.0	100.0%	6.0	0.0	0.0%	0.0	0.0%	1.5	100.0%	1.5
Sleetmute	0.0	0.0%	0.0	0.0%	1.7	100.0%	1.7	0.0	0.0%	0.0	0.0%	1.7	100.0%	1.7
Stony River	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	5.2	100.0%	5.2	0.0	0.0%	0.0	0.0%	3.1	100.0%	3.1
All communities	23.6	52.9%	6.7	15.1%	14.3	32.0%	44.6	5.1	28.4%	5.1	28.4%	7.7	43.2%	17.8

Source ADF&G Division of Subsistence household surveys, 2005.

Table B57.—Estimated gray wolf harvests and households harvesting on state and federal lands, Central Kuskokwim communities, April 2005–March 2006.

Community	Gray wolf harvests							Households harvesting						
	State		Federal		Unknown		Total	State		Federal		Unknown		Total
	Number	Percentage	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage	Number	Percentage	
Aniak	2.7	5.3%	0.0	0.0%	48.8	94.7%	51.5	1.0	12.5%	0.0	0.0%	7.0	87.5%	8.0
Chuathbaluk	0.0	0.0%	0.0	0.0%	4.0	100.0%	4.0	0.0	0.0%	0.0	0.0%	1.0	100.0%	1.0
Crooked Creek	0.0	0.0%	0.0	0.0%	1.9	100.0%	1.9	0.0	0.0%	0.0	0.0%	1.0	100.0%	1.0
Lower Kalskag	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Red Devil	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Sleetmute	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Stony River	0.0	0.0%	0.0	0.0%	5.7	100.0%	5.7	0.0	0.0%	0.0	0.0%	1.0	100.0%	1.0
Upper Kalskag	0.0	0.0%	0.0	0.0%	20.0	100.0%	20.0	0.0	0.0%	0.0	0.0%	7.0	100.0%	7.0
All communities	2.7	3.3%	0.0	0.0%	80.3	96.7%	83.0	1.0	5.6%	0.0	0.0%	17.0	94.4%	18.0

Source ADF&G Division of Subsistence household surveys, 2006.