

QAUILGNUUT (KILBUCK) CARIBOU HERD

COOPERATIVE MANAGEMENT PLAN
(Final version as presented to Participants)

15 March 1993

Preface

This final draft of a Quailgnuut (Kilbuck) Caribou Herd (QCH) Management Plan has been prepared by subsistence users, the Native villages with customary use of the QCH. Alaska Department of Fish and Game (ADFG), and the United States Fish and Wildlife Service (USFWS). It is a compilation of verbal and written comments presented during public QCH management planning meetings held in Bethel on December 17, 1990; April 24, July 30, August 23, October 3, 1991; March 9, 1992, October 2, 1992, November 9 - 10, 1992; and March 15, 1993. After the meetings were completed the participants prepared working documents or draft plans to be used in future discussions. Cooperative Management Planning is a continuous evolving process. This plan is still under development. However, participants in this cooperative management planning process are working to forge a fundamental agreement which will form the basis for wise management of the QCH. It is anticipated that this agreement will be completed in the near future.

The management planning process was begun for the QCH as a joint effort between the subsistence users, the Villages, the ADFG and the USFWS in order to enhance responsible management of the QCH in Game Management Unit 18 (GMU 18). This document represents the combined results of that effort. The participants will provide the research, monitoring, regulatory proposals (seasons, bag limits, etc.), and cooperation necessary for implementation of the Plan.

Introduction

The QCH Management Plan is the document upon which a management program for the herd will be based. The QCH is a small resident herd that is found most of the year in GMU 18, south and east of the Kuskokwim River (Figure 1). However, single or groups of caribou cross into the southwestern portion of GMU 19B and the western portion of GMU 17B. The caribou are usually found within the Yukon Delta National Wildlife Refuge, but recently some groups have been seen in or near the western edge of the Togiak National Wildlife Refuge. The present core range of the QCH is approximately 6,400 square miles. The range is expected to expand as the herd increases in size. The QCH is not only found within different land management jurisdictions, but also occurs in areas that are traditionally hunted by local residents from both the Kuskokwim and the Togiak regions. Users and agencies have a joint responsibility to help manage and conserve this resident caribou resource.

In the past, management of the QCH by the ADFG and USFWS has been through use of informal objectives and goals. Involvement of subsistence users and the Villages and their decision making and management process was minimal. Village management of the herd on their historic hunting grounds has been largely without involvement by ADFG and USFWS. However, there have been some discussion between ADFG, USFWS, and the Villages at advisory committee and regional Village government meetings about management, research, and regulatory proposals regarding the herd.

Cooperative Management planning between the USFWS, the ADFG, and the Villages has

resulted in better herd management including a cooperative research project to capture, radio-collar, and relocate caribou. This research has improved the ability to enumerate caribou, monitor calving, and map the seasonal distribution of the herd.

The success of this Cooperative Management Plan will require, among other things, continued monitoring of the size and distribution of the herd. This will include: 1) Conducting an annual census in summer and/or fall; 2) Conducting composition counts in the fall, after the annual census to determine the sex and age structure of the herd; 3) Conducting calving ground surveys to determine the peak calving period, calving areas, calving success, pregnancy rate, presence of predators, and problems associated with calf production; 4) Using survey and census methods which have the least disturbance to the herd and subsistence activities; 5) Tracking population changes using an appropriate computer simulation model; and involving the Villages and local subsistence users in all of the above activities. Success will also depend upon management and regulation of seasons, bag limits, methods and means, etc., in a manner consistent with the subsistence needs, customs and traditions of subsistence users.

The success of the Plan will depend upon the cooperation and participation of Village representatives, the AVCP, the USFWS, and the ADFG, consistent with applicable laws and regulations. The Plan will be dynamic. Implementation of some components will be immediate, others may take years, and some will be ongoing. However, commitments, short and long-term objectives, and overall goals of the Plan will be retained and pursued by all parties.

Goals

- 1) Ensure the health and continued viability of the QCH while providing for a harvest in a manner consistent with applicable laws, the goals and objectives of this Cooperative Management Plan, and the needs, customs and traditions of subsistence users.
- 2) Encourage cooperation among the Village Participants, USFWS, and ADFG in developing and carrying out management and research programs.
- 3) Encourage communication among the Village Participants, ADFG, and USFWS by exchanging ideas and knowledge about the QCH.
- 4) Protect and maintain the habitat and other components of the ecosystem upon which the caribou depend.

Management Objectives

Management objectives included here are designed to move the Plan towards the Goals stated above. Specific management objectives may be linked to the Goals as follows:

Goal 1: Ensure the health and continued viability of the QCH while providing for a harvest in a manner consistent with applicable laws, the goals and objectives of this Cooperative Management Plan, and the needs, customs and traditions of subsistence users.

Management Objectives for Goal 1:

- A) There shall be no harvest when there are fewer than 1,000 animals in the herd.
- B) When the Quailgnuut (Kilbuck) caribou population is larger than 1,000 animals annual harvest will be restricted to a number of bull caribou equaling 5% of the entire herd. For the purpose of determining the harvest, herd size will be based upon a fall or early winter census. When the population reaches 3,000 caribou the harvest strategy will be reevaluated and a greater percentage of the herd, including both bull and cow harvest, may be provided for subsistence use. If no current census information is

available, harvest will be based upon the most current information available.

- C) The ADFG, the USFWS, and Participants will recommend to the Alaska Board of Game, the Federal Subsistence Board, the Regional Council, and Village governments, regulations and management consistent with the management plan and customary and traditional subsistence taking of the QCH.
- D) It is intended that the ADFG, the USFWS, and Participants will provide the Alaska Board of Game and the Federal Subsistence Board with information on the population status, harvests, and customary and traditional uses of the QCH, and recommend harvests consistent with this management plan.

Goal 2: Encourage cooperation among the Villages Participants, USFWS, and ADFG in developing and carrying out management and research programs.

Management Objectives for Goal 2:

The ADFG, the USFWS, and the Participants will:

- A) Work to ensure that this is truly a cooperative management plan and that each of the involved entities plays a real and meaningful role in the ongoing development of this plan.
- B) Meet annually or as needed to modify the Plan and discuss issues involving the QCH.
- C) Cooperate in formulating and reviewing management and research programs including but not limited to annual census, composition count surveys, calving ground surveys, observations of predators and predation, locating radio collared caribou, and harvest monitoring and reporting.
- D) Cooperate to develop, review, and recommend proposals affecting the allocation and hunting of the Quailgnuut (Kilbuck) caribou to the Alaska Board of Game, the Federal Subsistence Board, the Regional Council and the Village governments which are consistent with applicable law, the continued viability of the herd, and subsistence needs and customs. To the extent possible the entities involved in this cooperative management plan will achieve consensus before altering this management plan, or making recommendations or regulation proposals.

Goal 3: Encourage communication among the Village Participants, ADFG, and USFWS by exchanging ideas and knowledge about the QCH.

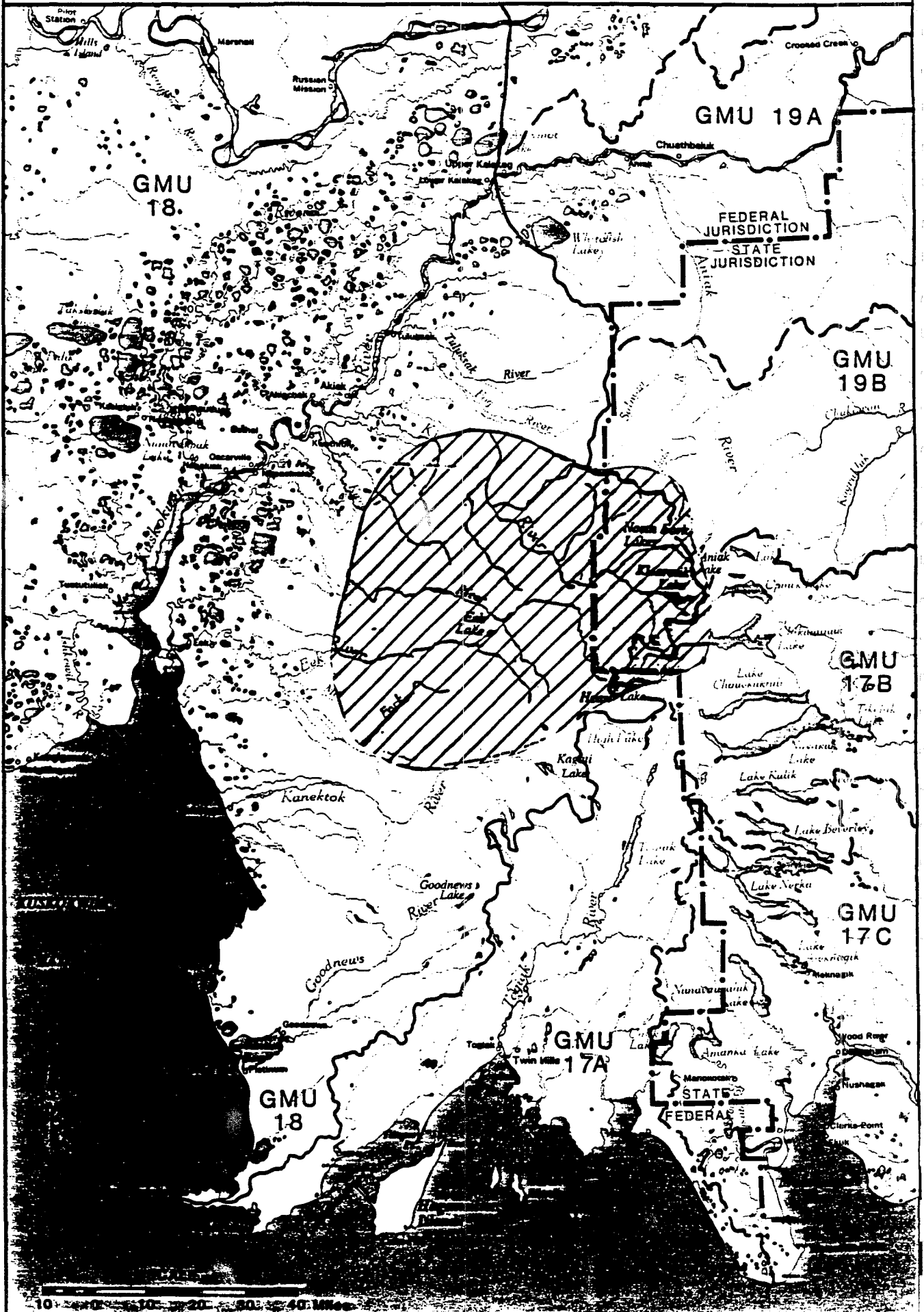
Management Objectives for Goal 3:

- A) The ADFG, the USFWS, and the Participants will work together, as much as possible, to keep each other informed. It is the responsibility of Village representatives who participate in planning meetings to keep their communities informed. The ADFG and the USFWS will provide information to people within the management area and will work closely with users to ensure that there are opportunities to discuss management activities and concerns people may have.
- B) The ADFG, the USFWS, and Participants will meet annually, or as needed, to discuss the Plan before changes are made.
- C) Each of the entities will listen to and attempt to respect and understand the particular responsibilities, restraints, authority and areas of expertise of the others.
- D) The ADFG, the USFWS, and the Participants will provide information and educational materials concerning caribou ecology, subsistence use, traditional knowledge, and the QCH Management Plan to appropriate media services.

Goal 4: Protect and maintain the habitat and other components of the ecosystem upon which the caribou depend.

Management Objectives for Goal 4:

- A) Identify important caribou habitats that may need special protection.
- B) Document caribou movement patterns and changes in range and habitat use areas using radiotelemetry and other observations.
- C) Work with landowners and land managers to minimize impacts to habitat.
- D) Participate in and encourage other agencies to undertake qualitative and quantitative habitat assessment programs.



Appendix 1.

PRINCIPLES

Effective management of the QCH is possible only if management programs are supported by the management agencies and by people who use the caribou. The following principles are agreed upon by all parties:

- a. The Participants, the ADFG, and the USFWS want the QCH to increase in size.
- b. The QCH is an important customary and traditional subsistence resource.
- c. Cooperation between users, the ADFG, and the USFWS is essential to achieve goals of the Plan and to maintain the QCH at levels that provide for adequate hunting opportunity throughout the herd's range.
- d. The affected public must be involved in managing, reviewing and interpreting data, and have an opportunity to be involved in management programs on the QCH.
- e. Users need to be involved with the ADFG, the USFWS, the Alaska Board of Game, and the Federal Subsistence Board in discussing harvest allocation, seasons, bag limits, and methods and means of harvesting QCH animals.
- f. The Management Plan process should be ongoing. Updating and improving the Plan will improve its effectiveness.
- g. The QCH Management Plan should be considered with the development of other management programs.
- h. Regulations to protect the QCH must be understood and supported by the Participants.

Appendix 2.

BACKGROUND INFORMATION

Historical records indicate caribou were abundant in the Yukon-Kuskokwim Delta region during the 1880's, and undoubtedly were present in the thousands. At the turn of the century, anecdotal information indicates that overharvest, introduction of reindeer, wildfire, and possible shift in migration patterns may have caused caribou numbers to decline dramatically. Caribou subsequently disappeared from the area except for a small remnant herd found in the Kilbuck Mountains.

Although occasional survey work was conducted in the Kilbuck Mountains during the 1960's and 1970's by ADFG staff from McGrath and Bethel, collecting regular survey and inventory data for the QCH did not begin until 1984. In that year, herd size was estimated at 300 caribou, and in May 1985 the herd was estimated to contain only 75 caribou. Later information indicated those initial surveys were probably inadequate and the actual herd size may have been larger.

At the recommendation of the ADFG in spring 1985, the Alaska Board of Game closed the caribou hunting season in that portion of GMU 18 south of the Yukon River which includes most of the range of the QCH. Given the low number of caribou observed during the surveys, the ADFG believed that harvests needed to be curtailed if herd size was to increase. Although the reported harvest of the QCH was very low prior to 1985, most of the harvest appeared to be unreported. In the early 1980's harvests may have exceeded the sustained yield of the herd, and seemed to be preventing the herd from

increasing in size. The USFWS and the AVCP agreed that the closure was necessary and supported conservation measures that would allow the QCH to increase in size. The Bethel management staff participated in several local public meetings to discuss the caribou issue during late winter 1985.

A cooperative survey-inventory project between the ADFG and the USFWS was initiated in 1986. The main objective of the project was to assess total population size and herd distribution. The study also attempted to verify that the QCH was a distinct herd requiring separate management from the Mulchatna herd. The study included the use of repetitive aerial surveys and radio-collared animals, and has resulted in a better understanding of the herd's biological status. Although occasional range overlap has occurred between the QCH and the Mulchatna herd, the herds do not mix during calving and are rarely in close proximity during the remainder of the year. After the study was implemented, it was found that either the QCH had more caribou than previously believed or that some immigration of animals from other areas was occurring. Data indicated that the herd was growing at a faster rate than could be explained through natural recruitment by the minimum of 75 animals known to exist in 1985.

During fall 1989, survey data indicated that herd size exceeded 1,000 animals. Local residents also felt that the herd had increased in size. This kindled a desire among many local hunters to reopen the hunting season in the Kilbuck Mountains. In addition, a sizeable group of Mulchatna herd animals had just made a temporary movement into the eastern portion of the GMU 18 near the village of Kalskag. In 1987 an initial population

goal of 1,000 caribou was suggested by ADFG staff as a threshold beyond which hunting could occur. Although the ADFG later stated that a higher population goal was desirable before hunting was allowed, many local hunters wanted the 1,000 caribou goal to remain in place. During the winter of 1989, ADFG staff from Nome and the local area management biologist met with USFWS and AVCP staff, as well as the former State legislative representative. We agreed that a herd size of 1,000 caribou was too small to satisfy demand by local users for caribou. All parties concluded that a management plan, much like the Y-K Delta Goose Management Plan which had undergone thorough public review, was needed.

From 1985 through 1990, the caribou season in the QCH range remained closed. Meanwhile, local residents familiar with the QCH continued to encounter caribou during their usual subsistence activities. Local interest in hunting the QCH continued. On 2 March 1990 the Kwethluk IRA Council petitioned the Board of Game to open the caribou season in the Kilbuck Mountains for Kwethluk residents. The petition stated that an emergency existed and red meat was needed by the village. The Board subsequently found that an emergency existed, but did not provide for a hunt. On 29 March the IRA Council filed suit in Federal District Court, and on 4 April ADFG was ordered by the Court to make available to Kwethluk residents registration permits allowing the harvest of 50 antlerless caribou from the QCH. Thirty-nine caribou were harvested during 5-15 April 1990 season. During the summer of 1990, the ADFG began the management planning process by contacting the appropriate community and agency representatives. In August a technical meeting was held in Bethel between ADFG and USFWS staff. A population

census was attempted on 14 November 1990 with the help of two users, one from Kwethluk and the other from Akiachak. Three USFWS aircraft were used to conduct the census. After completing only about 1/3 of the survey area, the census was aborted because of poor weather. A minimum number of 1,220 caribou were counted at that time, and plans for conducting another census in February or March 1991 were made. Due to poor snow conditions, the spring 1991 census was not completed.

In December (1990) the first public meeting to develop a management plan took place in Bethel. Village, AVCP, USFWS, and ADFG representatives participated. As a result of that first meeting, the ADFG was asked to prepare a "working draft" that would serve as the basis for discussion at future meetings. The draft plan was subsequently completed and distributed on 19 March 1991.

A second and third meeting took place on 24 April 1991 and 30 July 1991 to review the "working draft" management plan. Village, AVCP, USFWS, and ADFG representatives met again to review goals and objectives of the Plan. Results of the meeting have been incorporated into the present management plan.

A fourth meeting took place on August 23, 1991 to review the Plan and to discuss options for hunting and the allocation of Quailgnuut (Kilbuck) caribou. At this meeting much of the wording had been changed and agreed upon and the participants asked that the Plan be rewritten to incorporate changes. It was also agreed that the Department should make copies of this interim Plan available to all participating user villages, agencies, local advisory committee members, and the Board of Game members.

A fifth meeting took place on October 2, 1991 to discuss hunting regulation proposals for the 1992 spring season and the 1993 fall season. The consensus of this meeting was that the harvest quota would be 72 animals, available by permit to 18 villages, during the season of February 23-March 7, 1992. It was also proposed that a fall season take place sometime in the fall.

The State Board of Game during their Fall meeting opened a spring season for up to 100 Tier II permits to hunt "Kilbuck" (antlerless) caribou between the dates of February 23-March 7, 1992. Soon after the State Board's decision the Federal Subsistence Board opened a season for "Kilbuck" caribou concurrent with the State's season on Federal Land for 72 caribou, during their December meeting. The Federal hunt would be by drawing permit, distributed equally amongst 18 villages, for one antlerless bull caribou. After the Federal action to allow a hunt on Federal Lands, the State's Tier II hunt was closed by Emergency Order in order to allow the Federal hunt to take place without having another set of regulations, a different type of hunt, and possible overharvest.

On November 16, 17, and 18, 1991 a "Kilbuck" caribou census was completed and 2,584 animals were observed. Three Federal aircraft were used (2 from the Yukon Delta Refuge office and 1 from the Togiak Refuge office), observers from USFWS, ADFG, and Kwethluk helped conduct the survey. Following the census a composition count was completed on November 19, 1991 via helicopter.

A sixth meeting took place on March 9, 1992 to discuss the recent Federal "Kilbuck"

caribou hunt, results of the 1991 "Kilbuck" caribou herd census and composition count, pursuing the idea of opening a fall hunt for "Kilbuck" caribou under State and Federal regulations, and to approve the 1992-93 harvest quota of 130 bull caribou. At this meeting the participants asked the ADFG to update the wording of the management plan to take into account recent changes. A seventh meeting was conducted on 30 April 1992 to discuss results of the State Board and Federal Board decisions concerning "Kilbuck" caribou, as well as, results of the Federal Caribou Permit hunt and the 1992-93 "Kilbuck" caribou seasons.

During the 1992 Alaska Board of Game's Spring meeting, the Board approved a fall hunt of "Kilbuck" caribou by Open Registration. This State hunt took place from September 1 through September 15, 1992, the (1992-93) bag limit was 1 bull caribou per hunter, and the area open to hunting was GMU 18, south of the Kuskokwim River. Two-hundred and thirty registration permits were issued to 230 hunters, prior too and during the State hunt. As of December 20, 1992, 24 bull caribou had been taken by hunters. This harvest was based on 200 hunter harvest report cards that were turned in. Harvest reporting was 86.9% overall. At the Federal Subsistence Board's April 1992 meeting, the Federal Board recognized the State's fall hunt and also approved a winter hunt on Federal Land during the seasons of December 15, 1992 through January 9, 1993 and February 23 through March 15, 1993. The (1992-93) Federal hunt bag limit will be 1 bull caribou by Federal Permit. Both the State Board of Game and the Federal Subsistence Board approved continuing the cooperative efforts with regards to the QCH Management Plan and recognize the 5% harvest quota for caribou.

On March 15, 1993 a meeting was held in Bethel among Village participants, the USFWS, and ADFG to work on the "final" draft Plan. It was agreed at this meeting that the Participants would support the current QCH Plan (as it is written) in concept until all Village Participants, AVCP, the USFWS, and ADFG had a chance to review this final version. The Participants at the March 15, 1993 meeting urged support of this final version by AVCP, the USFWS, ADFG, and those Village participants that were not present. The Participants asked ADFG to rewrite the February 25th draft and send it out to all of the participating villages and agencies involved. This is the most recent version of the QCH Cooperative Management Plan.

CARIBOU SEASONS AND BAG LIMITS: GMU 18 SOUTH OF KUSKOKWIM RIVER

April 13, 1992, 2:51 PM, C:\G:\C:\G:\C:\G:\C:\G\18RIVER.DOC

Regulatory Year	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total days	Bag Limit
1963-64	10	10	10	10	10	10	10	10	10	10			235	3 caribou
1964-65	10	10	10	10	10	10	10	10	10	10			234	4 caribou
1965-66	10	10	10	10	10	10	10	10	10	10			234	3 caribou
1966-67	10	10	10	10	10	10	10	10	10	10			234	3 caribou
1967-68	10	10	10	10	10	10	10	10	10	10			235	3 caribou
1968-69	10	10	10	10	10	10	10	10	10	10			234	3 caribou
1969-70	10	10	10	10	10	10	10	10	10	10			234	3 caribou
1970-71	10	10	10	10	10	10	10	10	10	10			234	5 caribou
1971-72	10	10	10	10	10	10	10	10	10	10			235	5 caribou
1972-73	10	10	10	10	10	10	10	10	10	10			234	5 caribou
1973-74	10	10	10	10	10	10	10	10	10	10			234	5 caribou
1974-75	10	10	10	10	10	10	10	10	10	10			234	3 caribou
1975-76	10	10	10	10	10	10	10	10	10	10			235	3 caribou
1976-77	10	10	10	10	10	10	10	10	10	10			234	3 caribou
1977-78	10	10	10	10	10	10	10	10	10	10			52	1 caribou
1978-79	10	10	10	10	10	10	10	10	10	10			59	1 caribou
1979-80	10	10	10	10	10	10	10	10	10	10			60	1 caribou
1980-81	10	10	10	10	10	10	10	10	10	10			28	1 caribou
1981-82	10	10	10	10	10	10	10	10	10	10			28	1 caribou
1982-83	10	10	10	10	10	10	10	10	10	10			28	1 caribou
1983-84	10	10	10	10	10	10	10	10	10	10			29	1 caribou
1984-85	10	10	10	10	10	10	10	10	10	10			28	1 caribou
1985-86	<					CLOSED						>	0	
1986-87	<					CLOSED						>	0	
1987-88	<					CLOSED						>	0	
1988-89	<					CLOSED						>	0	
1989-90	<					CLOSED						>	11	1 caribou
1990-91	<					CLOSED						>	0	
1991-92	<					CLOSED						>	14	1 caribou
1992-93	<					CLOSED						>	62	1 caribou

Federal Court ordered hunt for Kweethuk residents, 50 special registration permits issued.

Federal Subsistence hunt for 18 communities, 72 permits issued.

15 permits issued
23 permits issued
23 permits issued

5 permits issued

1 permit issued

15 permits issued

23 permits issued
23 permits issued

**Appendix 4. Estimated Size of Qauilgnuut (Kilbuck) Caribou Herd
From 1977 to 1992**

Regulatory year	Estimates derived from ADFG reports	Aerial Survey counts
1977-78	less than 1000	a
1978-79	less than 200	a
1979-80	-----	a
1980-81	50 minimum	17 caribou
1981-82	50 minimum	32 caribou
1982-83	less than 200	a
1983-84	less than 300	66 caribou
1984-85	75 minimum	a
1985-86	less than 200	83 caribou
1986-87	less than 300	188 caribou
1987-88	less than 900	685 caribou
1988-89	less than 1000	1,587 caribou ^b
1989-90	1,384 minimum	1,384 caribou ^c
1990-91	1,220 minimum	1,220 caribou ^d
1991-92	2,584 minimum	2,584 caribou *

^a Aerial surveys not done

^b Evidence of one radio-collared Mulchatna herd animal (a female) during this November 1988 count and a possible influx of other Mulchatna animals

^c Aerial survey completed November 1, 1989

^d Aerial survey only partially completed on November 14, 1990. Number is a partial count.

* Census was completed on November 16, 1991