

Fortymile Caribou Herd Harvest Plan, 2001-2006

Endorsed by the Alaska Board of Game, March 2000

Developed by the Advisory Committee Coalition
(Central, Delta Junction, Eagle, Fairbanks
and Upper Tanana/Fortymile Advisory Committees)

Introduction

The Fortymile Caribou Herd Harvest Plan (Harvest Plan) guides harvest management of the Fortymile caribou herd in Alaska from 2001 through 2006. The Harvest Plan follows the Fortymile Caribou Herd Management Plan (Management Plan) which has guided herd management since 1995. The Harvest Plan has as its guiding principle the same goal that motivated the Management Plan: to provide for the continued growth of the Fortymile caribou herd as it re-establishes its former range in Alaska and Yukon and to resume a traditional hunting opportunity that had been severely reduced from 1995-2000.

The Harvest Plan is based on an average herd growth rate of 10% per year. It provides the framework for additional hunting opportunity and harvest in Alaska and recognizes that additional harvest is also expected in Yukon. The objective of this Harvest Plan is to provide the greatest level of hunting opportunity without jeopardizing the continued growth of the herd. The Alaska Department of Fish and Game (ADF&G) will manage harvest of the Fortymile caribou herd according to the Harvest Plan, and the Yukon Fish & Wildlife Management Board will prepare a similar plan for Yukon harvest.

In 1995 the Fortymile Caribou Herd Planning Team (Planning Team), a diverse group of Alaska and Yukon residents and representatives from state, federal and territorial wildlife management agencies developed recommendations for recovering the Fortymile caribou herd to its former range and population. (See Fortymile Caribou Herd Management Plan, October 1995.)

The Fortymile Caribou Herd Harvest Plan was developed by a coalition of Alaska Fish and Game Advisory Committees from Central, Delta Junction, Eagle, Fairbanks and Tok. Important contributions were added by the public, the Alaska Department of Fish and Game/Division of Wildlife Conservation, the Yukon Fish and Wildlife Management Board and the Yukon Department of Renewable Resources.

Alaska does not have regulatory authority over caribou that cross the border into Yukon. The Yukon Fish and Wildlife Management Board and the Yukon Department of Renewable Resources cooperated in this plan by reviewing input used by the Alaskan advisory committees and agreeing to follow the harvest goal recommendations in the Alaskan plan in their plan. This allows the Alaskan Harvest Plan to recognize the effects of harvest in the Yukon. The combined harvest objectives recognize and promote the goal of continued growth of the caribou population.

The Harvest Plan includes recommended actions and regulations governing harvest levels, allocation among users, and harvest management options (permits, seasons, bag limits, methods and means). These recommendations were accepted by the Alaska Board of Game at the Spring 2000 meeting in Fairbanks. The Harvest Plan also includes other information to help guide future decisions regarding harvest of Fortymile caribou such as herd history, population projections and historic harvest data. A public education program is recommended to improve the Fortymile caribou hunt and increase awareness of herd viewing opportunities.

The Fortymile Caribou Herd Harvest Plan represents a unique chapter in the history of harvest management in Alaska.

I. Issues Guiding Fortymile Caribou Harvest

A. Population

Estimates of the size of the Fortymile caribou herd in the 1920s vary from 350,000 to 568,000 animals and the herd's range encompassed some 85,000 square miles from Whitehorse to to the White Mountains north of Fairbanks. Population estimates from around 1950 put the number between 46,000 and 60,000. By the 1970's the population declined to an estimated low of 5,000 animals. Between 1974 and 1990 the herd grew slowly to about 23,000 caribou. The herd population remained at that level until 1995 due to low calf survival. Since 1973 the herd has occupied only a small portion of its previous range and has rarely crossed into Yukon.

After the Planning Team concluded that wolves were the most important predator limiting calf survival, it put together a strategy to improve calf survival by reducing predators, especially wolves. Alaskan trappers provided the first significant reduction by targeting wolves in the herd's summer and winter grounds. Results were dramatic. Survival rates improved immediately and the recovery of the herd began. ADF&G followed with a program of non-lethal predator control. Wolf packs inhabiting the herd's calving grounds were targeted. The dominant pair of each pack was sterilized and the remaining wolves were relocated to other areas in the state. The treatment, although experimental, is working. The sterile pairs are "holding" their territory(s) and have not produced pups. The combination of public trapping, wolf relocation, and fertility control has reduced the wolf population within most of the herd's summer and calving ranges by nearly 80%.

As part of the recovery effort, Yukon stopped all sport hunting of Fortymile caribou, the Tr'ondek Hwech'in First Nation voluntarily gave up their subsistence harvest and Alaskans agreed to hunt only 150 bulls per year for the duration of the plan (or until 2001). The Alaskan quota was established at the minimum subsistence harvest level. The Planning Team recognized that the Fortymile caribou herd has met subsistence needs for generations of Yukon and Alaskan residents and that once the goals of the Management Plan were reached and the herd re-inhabited its former range, increased harvest in Yukon and Alaska would be possible.

Predator control, favorable weather conditions and reduced hunting pressure have allowed an increase in the caribou population to 33,110 by the summer of 1999. Based on the current trend, the Fortymile caribou herd is expected to have a population of about 46,100 by the summer of 2001.

Estimating and monitoring the population are important to the goal of restoring the herd to its previous range and to planning for harvest within that goal. Three population projections were initially evaluated for use in developing this Harvest Plan. Using slightly different growth rates, survival rates, harvest rates, and beginning populations, the Yukon Department of Renewable Resources, ADF&G and the Fairbanks Advisory Committee each provided an estimate (see Table 1.). The population projections are for reference only. Actual composition and census data will be used to determine annual harvest quotas. The ADF&G projection was selected for use in this Harvest Plan.

Three assumptions support the accuracy of these projections. First, the fall calf/cow ratio stays at or above 40/100; second, that no extreme weather, which would cause high mortality, occurs before 2006; third, that wolves increase proportionately with the growth of the caribou herd.

Table 1. Three Population Projections for the Fortymile Caribou Herd, 2001-2006

	2001	2002	2003	2004	2005	2006
Alaska Dept. of Fish & Game Projection	46,100	51,600	57,300	63,700	70,200	77,000
Yukon Dept. of Renewable Resources Projection	45,500	51,400	58,100	65,700	74,200	83,900
Fairbanks Advisory Committee Projection	50,000	55,000	60,500	66,500	73,200	80,000+

B. Harvest

All aspects of this Harvest Plan are based on promoting an average annual herd growth rate of 10%. The Yukon Fish and Wildlife Management Board and the Advisory Committee Coalition agreed to the same herd population and harvest goals. Both the Alaskan and Yukon Harvest Plans recommend a conservative annual harvest rate of about 2-3% to be divided between Alaska and Yukon. About 65% of the annual harvest will be allocated to Alaska and 35% to Yukon.

It is unlikely that Yukon will begin to harvest a significant number of Fortymile caribou until the herd grows much larger and begins to include central Yukon in its migration pattern. Yukoners believe that the herd numbered about 60,000 when Fortymile caribou last entered Yukon in numbers high enough for hunting. Any caribou not harvested by Yukon hunters will not be re-allocated to the Alaska harvest and vice-versa. If the number of caribou

harvested does not reach the objective in a given year, the surplus will help to promote herd growth.

The specifics of Yukon harvest will be developed by the Yukon Fish and Wildlife Management Board, the Yukon Department of Renewable Resources and Yukon First Nations. Based on a 2-3% harvest, approximate Alaskan harvest objectives are detailed in Table 2.

Table 2 Approximate Harvest Objectives for Alaska, 2001-2006

	Total Harvest	Bull Harvest	Cow Harvest
2001	875	650	225
2002	1300	975	325
2003	1475	1150	325
2004	1775	1300	475
2005	2100	1625	475
2006	2600	1950	650

ADF&G will close the season(s) when the harvest objective or allocation has been met. Hunters will be notified when closures are expected.

If the growth rate of approximately 10% is not met in a particular year, the harvest objective for that hunting season will be reduced to the level of the previous year. If the population does not continue to increase at the desired growth rate, ADF&G will notify the Yukon Fish and Wildlife Management Board and the Alaska Board of Game for changes in harvest regulations. The Alaska Board of Game reviews hunting regulations on a two-year cycle. Although six years are covered by this plan, ADF&G will monitor the population and condition of the herd and recommend regulation changes to the Board if they are needed.

C. Allocation

The Fortymile caribou herd is harvested across its range and a dependable quota by area is important for many people. The harvest will be allocated to three general areas based on historical take and herd migration. For the first two years of the fall harvest, the Steese Highway-Central area will be assigned 35% of the harvest objective; the Salcha-Goodpasture area will be assigned 15%; and the Tok-Taylor Highway area will be assigned 50%. These allocations do not restrict who can hunt in each area.

Many Alaska residents rely on the herd during the winter and have little access to the caribou in the fall. The harvest of Fortymile caribou will be divided between a fall and a winter season. Approximately 25% of the harvest objective will be allocated to the winter hunt. The winter season has traditionally been a resident subsistence hunt. When non-resident hunting of Fortymile caribou was legal, few nonresidents participated in the winter hunt. Based on this hunt history, non-residents will not be allowed to participate in the Fortymile caribou winter hunt.

However, with the opportunity for harvest increasing, non-resident hunters will be allowed to participate in all of the fall Fortymile caribou hunts. Traditionally, non-resident hunters primarily participated in the fall hunt and had a bag limit of one bull. This plan recommended continuing that season and bag limit for non-residents.

If the caribou are not present and are not expected to be present in a region during the fall season, ADF&G may re-allocate an area's quota to another region or to the winter season.

D. Type of Hunt

ADF&G will manage the fall and winter Fortymile caribou hunts using a registration permit. A registration hunt provides important data necessary for managing hunts with a quota. In addition, concerns about increased hunting pressure on the moose population, particularly in Unit 20E, inspired the recommendation of a unique caribou/moose combination registration hunt.

When the Fortymile hunt is liberalized in 2001, the participation rate is expected to increase dramatically. Incidental harvest of moose is also expected to increase especially along the Taylor Highway and around trails and popular landing strips in Unit 20E. The stable but low moose population in Unit 20E will not be able to sustain a sudden increase in harvest. Two ways to reduce incidental take of moose were considered: separate moose and caribou hunters either by season or by permit. Closing the caribou hunt during the fall moose season would needlessly reduce hunting opportunity for Fortymile caribou which is not supported by hunters, not biologically necessary and in conflict with the Management Plan.

A unique combination permit to be used in Unit 20E will reduce incidental take of moose and maximize hunting opportunity for both moose and Fortymile caribou. The registration permit requires the hunter to choose either caribou or moose to hunt. This will not affect most subsistence hunters because traditionally moose and caribou are hunted in different areas and at different times in Unit 20E. Hunters will be allowed to hunt one species, complete that hunt, turn that permit in and register to hunt the other species.

The Fortymile hunt in Units 25C, 20D and 20B will be a regular caribou registration hunt. Both types of registration permits will be available at more locations; during the past five years permits were only available in Tok, Eagle, Central, Delta and Fairbanks. Wider availability of permits will allow hunters greater access to the Fortymile hunt and will ease the administrative burden on ADF&G.

E. Season and Bag Limit

The hunting season for the Fortymile caribou herd is split between a fall hunt and a winter hunt. The split season facilitates hunting during the traditional fall season and allows some communities to take advantage of the proximity of the caribou during the winter. This plan recommended hunting from August 10 to September 30 (fall season) and from December 1 to February 28 (winter season). After 2002 ADF&G should evaluate extending the winter season until March 31. At the present time, the federal subsistence winter season opens November 15, two weeks earlier than the state winter season.

The bag limit will be one caribou. When hunters are allowed to choose between bulls and cows, experience has shown that 60% to 80% select bulls. That percentage will not result in a disproportionate harvest by sex. During the period from September 21 to September 30, because of the on-coming rutting season, hunters will be encouraged to harvest cow caribou.

The intention of the one caribou bag limit is to reduce illegal take and to allow hunters to select for cows when the meat quality of bulls is poor. To protect against the overharvest of cows, the cow harvest will be limited to 25% of the entire harvest. A portion of the cow quota will be reserved for the winter season.

F. Methods and Means

Access to the Fortymile herd in off-road areas is important to hunters and non-hunters alike. The herd will be monitored throughout the year, and information will be available to the public regarding herd distribution and movements so that conflicts between hunters and non-consumptive users will be minimized.

Some road travelers are upset when hunters leave animal parts and viscera either on the roadside ditch or in plain view of the road. Hunters will be required under conditions of the registration permit to move viscera out of view of maintained roads.

After much discussion with protection officers, biologists and hunters, the Advisory Committee Coalition decided the best method to manage road crossings and the possibility of excessive harvest would be for ADF&G to enact temporary road closures in areas where significant numbers of caribou are crossing. Hunters who are disabled and qualify for special licensing will be exempt from closures along the Taylor and Steese Highways.

G. Monitoring Population, Health and Harvest

The need to monitor the health, population and harvest of the Fortymile herd is important to the successful implementation of the Harvest Plan. Calf mortality studies, critically important to Management Plan activities, are expected to decrease in frequency after 2001. Monitoring pregnancy rates, calf weights and effects of predation should continue. The existing Fortymile Caribou Herd Research Plan for non-lethal predator control closes in 2001 and should be evaluated and perhaps extended for the life of the Harvest Plan. Annual fall composition surveys and a photo census at least every two years are required to monitor herd growth rates which drive the population projections for the Harvest Plan.

H. Public Information

ADF&G will provide information to the public regarding this Harvest Plan. Hunter information specific to the Fortymile caribou herd harvest will be included on the registration permit. This information might include descriptions of cow and bull caribou, examples of removing viscera from view, harvest reporting requirements, signs or markers used to delineate the hunting area or closures, access routes and access restrictions. Harvest reports will suffice to accurately monitor allocation by region and season.

I. Non-Consumptive Use

The recovery of the Fortymile caribou herd is expected to provide excellent opportunities for wildlife viewing. Currently, however, the only common transportation corridor crossed by the normal migration of the herd is the Taylor Highway. A much larger Fortymile caribou herd is expected to be visible from the Steese and the Top of the World Highways as well.

Historical movement patterns suggest that the herd might be within sight of the Steese Highway, especially above timberline from Twelve Mile Summit to Eagle Summit. Viewing during the summer was not in conflict with hunting seasons in the 1960s and should not be after 2001. The herd commonly moved out of the Steese Highway corridor before the fall hunting season(s).

A larger herd should be in the Top of the World Highway corridor (from the Alaska border to Dawson City) during the late fall and winter. Although the highway is not kept open in winter, it is used for organized snowmachine tours. Annual events such as the Yukon Quest sled dog race pass through the winter range. Participants in such events could encounter caribou in the remote areas between Central and Dawson.

Backcountry trips for both non-hunting and hunting will increase summer and fall viewing. The herd should be expected to be seen along river corridors such as the Yukon, Charley, Seventymile, and Fortymile. Flightseeing is another viewing activity that is likely to increase as the herd grows in population. Viewers will learn they can fly over a large caribou herd with a minimal investment in time. Flightseeing is most likely to be offered from Tok, Delta Junction and Fairbanks.

Educational material and hunting season information will be available for the public, tour operators and service providers. Travelers who consider hunting activities offensive will be able to avoid them.

II. Harvest Regulations as Adopted by the Alaska Board of Game, March 2000

- A. Annual quota increased (see Table 2 for approximate harvest objectives by year)
- B. Quota divided between a fall and a winter season (75% fall, 25% winter)
- C. Fortymile herd's range subdivided into three hunt areas each with its own quota
- D. Resident bag limit set at one caribou; non-resident bag limit set at one bull
- E. Cow harvest limited to up to 25% of the annual quota
- F. Resident fall season set at August 20-September 30; resident winter season set at December 1-February 28; non-resident season set August 10-September 20
- G. Registration permit maintained with a combined caribou/moose permit in Unit 20E which requires hunters to designate if they are hunting moose or caribou.