



The Comeback Trail

News of the Fortymile Caribou Herd

Division of Wildlife Conservation, Alaska Department of Fish and Game

July, 2010

Changes for the fall 2010 Fortymile Caribou Hunt (RC860)

Changes for the 2010 hunting season are in the hunting regulations book. Please review the regulations for the areas you will be hunting. During the fall 2009 season, a combination of large numbers of hunters and highly accessible caribou resulted in harvest quotas being exceeded. Although the fall 2009 hunt only lasted 3 days along the highway systems, hunters harvested 1057 caribou, which is more than the annual quota of 850 caribou for the Fortymile herd. As a result the following changes were approved by the Board of Game for the coming season. These hunt changes are intended to bring hunt management back under control and allow for similar harvest levels, but longer season lengths, than in recent years.

Season Changes

Summary: *Zone 1 & 3 opening date changed to August 29th (All Hunters)*

Beginning in fall 2010, the opening date has changed to August 29th for Fortymile Caribou hunters hunting off the Steese Highway and Chena Hotsprings Road in Zone 1 and off the Taylor Highway in Zone 3. However, hunters accessing the roadless area in Zone 2, will still have an August 10th opening date. (See zone map page 2)

Bag Limit Changes

Summary: *Bulls Only (All Zones & All Hunters)*

All hunters hunting Fortymile Caribou during the fall 2010 season will now be required to harvest bulls only. This change is in effect for all Fortymile hunters in all zones. Note the paragraph below about telling bulls from cows.

How to tell a bull Caribou from a cow Caribou

Only the white rump without a black vulva patch, or the presence of a penis sheath should be used for positive identification of a male caribou. If you see an animal urinate, note the direction. Cows urine comes out from behind the animal, bulls urinate forward. Take the time to positively identify bulls before shooting. Do not use testicles as the only way to identify a bull, because the udder on a cow can look like the testicles on a bull. There is no reliable way to distinguish young male and cow caribou by looking at their antlers. Cows may have larger antlers than young bulls. Most bulls lose their antlers by mid-winter, but most cows retain antlers through April. Some cows may not grow antlers at all and some smaller bulls will not lose their antlers until April. Also, many mature cows have grey to white neck manes. There are often young bulls in cow/calf groups during the fall and winter. **Not sure. Don't shoot.** To access a brochure on how to identify a bull caribou see the Alaska Department of Fish and Game website at: <http://www.wildlife.alaska.gov/index.cfm?adfg=caribou.main>.

Harvest Reporting Changes

There will only be minor changes to reporting requirements for 2010. Remember, timely and accurate harvest information means less guess work for managers and allows seasons to be kept open as long as possible.

Summary: *Report the Zone you hunted in (All Zones and All Hunters)*

For 2010, hunters will be required to indicate which **Zone** they hunted and harvested a caribou in. Why is it important to know which zone you're hunting in? The annual Fortymile Herd harvest quota (set according to guidelines in the herd's 2006–2012 Harvest Management Plan) is split not only between the fall and winter seasons, but between different portions of the hunt area or zones. The overall hunt area is divided into 3 zones. Zone 1 is the area primarily accessible off the Steese Highway and Chena Hotsprings Road; Zone 3 is the area accessible off the Taylor Highway; and Zone 2 is the roadless area between Zones 1 and 3.

To ensure quotas are not exceeded, hunt managers need timely and accurate harvest information from hunters. A short 3 day reporting requirement for successful hunters ensures timely harvest information. An accurate description of the harvest location allows harvest within each zone to be tracked. Without accurate harvest locations, zones may be closed early to ensure quotas are not exceeded.

To allow hunters to better assist the Fortymile hunt managers keep track of harvest in each zone, in addition to reporting the Game Management Unit and exact kill location, hunters will also be asked to report which zone they hunted in when reporting their harvest in 2010.

REPORT THE ZONE YOU HUNTED IN!

While most hunters provide adequate kill location information for managers to determine which zone the hunter was hunting in, initial harvest reports are occasionally too general in nature to narrow down kill locations to a specific zone. Again, accurate information will allow managers to keep the seasons open as long as possible.

Weapons Restriction Areas

Beginning fall 2010, weapons restrictions will be one of the tools managers may use to control heavy roadside harvest. The herd’s current harvest plan specifically recommends that:

“when large numbers of caribou are crossing major roads, such as the Taylor or Steese Highways, special hunt management provisions are needed to avoid the possibility of excessive harvest and to minimize public safety concerns” (2006–2012 Fortymile Herd Harvest Management Plan, pg. 12).

Based on guidance from the Board of Game and with support from the five Fish and Game Advisory Committees and the local Federal Advisory Council in the herd’s range, ADF&G will use archery only weapons restrictions, in areas along the road system, if caribou cross in sufficient numbers to create a situation where overharvest is likely to occur. **The size of the weapons restriction areas will be kept as small as possible to address specific road crossing events by the herd and are not expected to encompass more than 2–3 % of the entire hunt area.** Hunters should check the Fortymile hotline before departing for the field to check for any weapons restriction areas. Also, maps of weapons restriction areas will be available from ADF&G and signs will be placed on highways where weapons restriction areas begin and end. Hunters are reminded that it is their responsibility to be aware of when and where weapons restrictions occur.



2009 Census

On July 5th 2009, ADF&G successfully completed a photocensus of the Fortymile caribou herd. The 2009 census used seven aircraft to find, photograph and count 46,509 caribou while they were grouped up at the headwaters of the Salcha River. All 69 radio collared caribou in the herd were located and all large groups of caribou were photographed from Fish and Game's de Havilland Beaver aircraft equipped with a large format camera. Five spotter planes were used to search for any groups of caribou not associated with the radiocollared animals. These small groups and scattered caribou were then either visually counted from the air or photographed and counted from the photographs.

Timing and weather conditions for a successful photocensus are critical. During late June and early July hot weather and intense harassment by mosquitoes, bot flies, and warble flies generally causes the herd to bunch up on windy ridges and mountaintops, making it possible to photograph the herd. Weather conditions were good on July 5th with warm temperatures clear skies and only a thin haze of forest fire smoke. The herd was concentrated in 5 large groups in the upper Salcha River drainage. Except for about 4,000 caribou in scattered groups all caribou were either photographed or counted before 10:00 AM. The remaining groups located in the morning were all photographed or visually counted in the early afternoon. A wide search by the spotter planes found no additional caribou in the surrounding area.

The hundreds of 9x9-inch photographs were counted by 2 Fish and Game staff members to ensure reliability of the counts, and lines were drawn on overlapping photographs to ensure that no caribou were counted twice. A total of 10 distinct groups were photographed. The total number of caribou counted on photos was added to the numbers in other groups counted by spotter planes. The number of caribou counted in each group was compared to the proportion of radiocollars found in the area of each group. Based on this analysis, the census appears to have been very successful, with substantial undercounting unlikely. The total count was 46,509 caribou, a notable increase from the 38,364 caribou counted in 2007.



2010 Census

On June 25th, 2010 ADF&G completed another photo census of the Fortymile Herd in nearly the same area and with similar conditions as the 2009 photo census. This is exciting news, as a successful census 2 years in a row has not occurred since 2000. It will be some time before the film is developed and all the caribou can be counted, but survey results are expected by late fall or early winter 2010.

Fortymile caribou herd status report through spring 2010

Based on photo census surveys and population models, the Fortymile Herd increased between mid-summer 2006 and 2009, with a minimum population estimate of 46,509 caribou in July of 2009 (Figure 1). This period of increase followed 3 years of population declines from mid-summer 2003–2006.

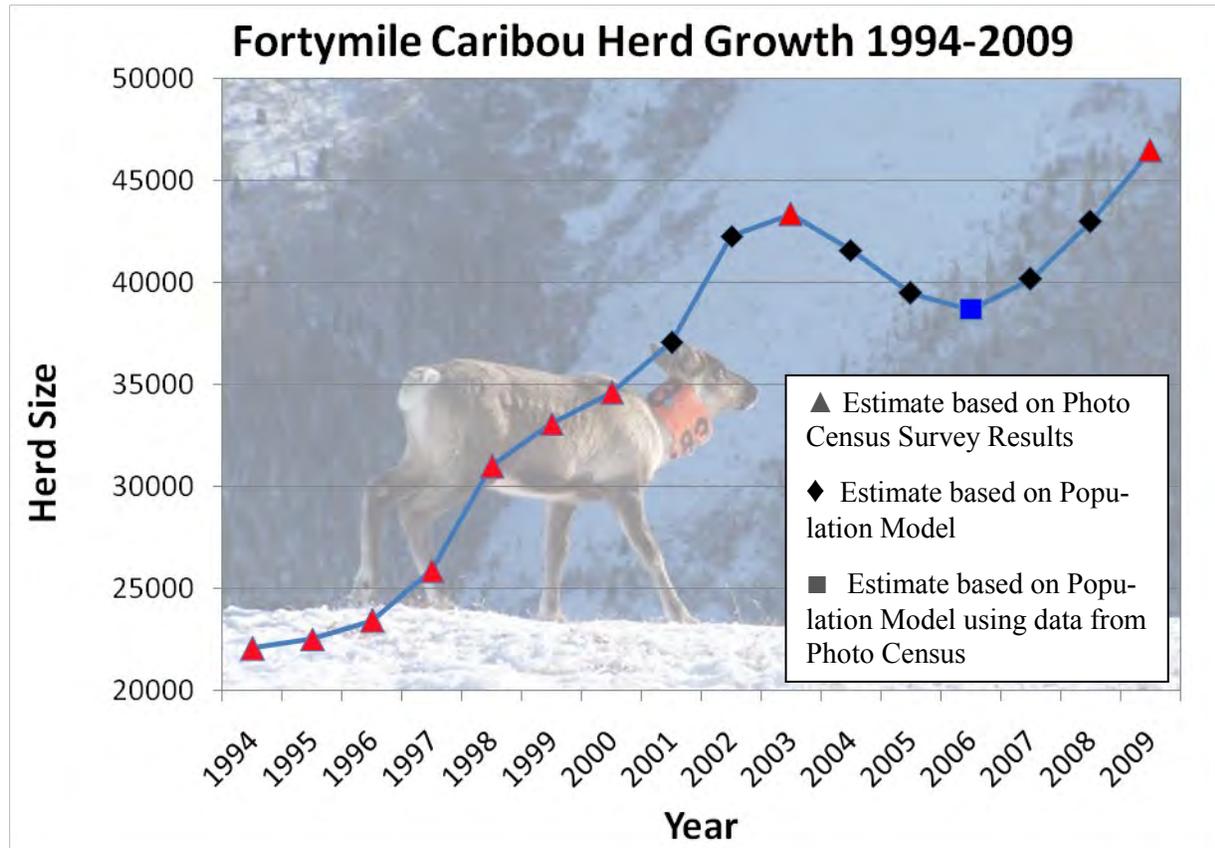


Figure 1. Fortymile Caribou Herd population estimates from 1994–2009.

Although the herd increased between 2006 and 2009, recent analysis of range use indicates the herd may be having lasting impacts on their core summer range. The herd has started leaving the traditionally higher quality portions (above treeline) of their core summer range earlier in the summer during recent years. The herd has expanded into poorer quality spruce–moss habitat below treeline, as the herd apparently searches for greener pastures. The poorer nutrition available to the herd below treeline likely contributed to the below average birthrates observed in spring of 2009 and 2010 and below average fall calf weights observed in 2008 and 2009.

The herd is expected to expand onto new summer ranges on the edges of their current range as they search for higher quality forage during the summer months. A likely expansion would be onto the upland areas of the White Mountains, north of the Steese Highway. Although expansions in any direction are possible, an expansion into the White Mountains area would be similar to what the herd did the last time they increased over 50,000 caribou during the 1950s and 1960s. This would relieve pressure on the herd's current summer range and should result in improved herd nutrition in future years.

Calf weights and mortality have been monitored continuously since fall 1990. Of the 18 five-month-old female calves fitted with radiocollars in early October 2009 the average weight was 107.9 lbs. The 2008 and 2009 calf weights were the lowest average weights observed in this herd since ADF&G started collecting fall calf weights in 1990. The average weight observed during 1990–2007 was 118.9 lbs.

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Status Report continued from page 5...

The fall 2008 and 2009 calf:cow ratios were 33 and 34 calves:100 cows. Overwinter adult and calf survival was below average during the relatively severe winter of 2008–2009. However, survival was good during the comparatively mild winter of 2009–2010.

In spring 2010, 70% of the sexually mature cows (≥ 3 years old) gave birth. This was similar to the relatively low birth-rates of 69%, 77%, and 70% seen in 2003, 2005 and 2009, which may be the result of random weather events or an early indication that the herd may be having a lasting impact on their range.

The number of large bulls (39% of total bulls) in the herd remains impressive. Under the 2006–2012 Fortymile Herd Harvest Management Plan, harvest has been limited to about 2% of the herd annually, which has allowed the number of large bulls in the herd to remain high.

With the elevated harvest during fall 2009, below average fall 2008 and 2009 calf weights and below average 2009 and 2010 birthrates, it is difficult to predict what the results of this year's successful 2010 census survey will yield. Photos should be counted by late-fall or early-winter 2010, with a new population estimate to follow.

Update on the Predator Control Program for the Fortymile Herd

Background on the Predator Control Program

During a special meeting, held during May of 2006 in Anchorage, the Board of Game (Board) voted unanimously to expand the Unit 12–20E Predator Control Program to include wolf control within most of the Fortymile Caribou Herd's range. The program was renamed the Upper Yukon/Tanana Predator Control Program (Control Program), and was in response to a recommendation in the 2006–2012 Fortymile Herd Harvest Management Plan (Harvest Plan), which was endorsed by the Board during their March, 2006 meeting. The Harvest Plan recommended that a wolf control program be implemented to reduce mortality on the herd and allow the herd to increase toward its Intensive Management Goal of 50,000–100,000 caribou.

Since the early 1990s, ADF&G research has consistently shown that wolf predation is the primary source of mortality on the Fortymile Herd. For instance, models indicated that between May of 2005 and May of 2006, prior to inclusion of the herd in the Control Program, 41% of all annual calf mortality and 62% of all adult mortality, was caused by wolf predation. The wolf reduction objective, outlined in the Control Program, is expected to reduce mortality on the herd and allow for moderate herd growth of 5–15% annually. The first winter the Fortymile Herd was included in the Control Program was during 2006–2007.

During the first 2 winters (2006–2007 and 2007–2008) poor snow conditions made tracking and retrieval of wolves very difficult for Control Permittees, which prevented overall control objectives from being achieved. However, a combination of wolves killed by control permittees and trappers in southwest Unit 20E likely resulted in reductions in wolf densities in this portion of the herd's range.

During the winters of 2008–2009 and 2009–2010, snow conditions were favorable for tracking wolves and in addition to the wolves killed by trappers and control permittees, ADF&G killed 84 and 15 wolves respectively during each of these years. These wolves were primarily killed within the Fortymile Caribou Herd's calving range.

The current Control Program is authorized for up to 5 years beginning July 1, 2009. For more information on Wolf Control in Alaska, you can visit the ADF&G website at: <http://www.wildlife.alaska.gov/index.cfm?adfg=wolf.control>

A look at the 2009 fall season

During the fall 2009 season, both the Zone 1 (Steese Highway) and Zone 3 (Taylor Highway) harvest quotas were exceeded during the short 3 day hunt. This resulted in a series of events, including an emergency meeting between state and federal hunt managers, the 5 Fish and Game Advisory Committees and the Federal Advisory Committee in the herd's range to make adjustments in the remaining 2009 harvest quota; cancellation of the 2009 state winter season; and proposals to both the state Board of Game and federal Subsistence Board recommending changes to the hunt for 2010.

Why were the quotas exceeded in 2009?

Harvest management can be difficult during early August when vegetative cover, weather condition, herd dispersal and segregation of bulls from cows (only cows are radiocollared) makes herd monitoring difficult. In areas near the road system (Zone 1, accessible from the Steese Highway and Zone 3, accessible from the Taylor Highway) it is critical to assess caribou numbers and distribution to accurately predict harvest rate to ensure quotas are not exceeded. During fall of 2009, a large proportion of the caribou accessible to hunters on August 10th were bulls and the overall number of caribou was underestimated, which resulted in a higher than expected harvest and the entire annual quota (850 caribou) being taken in less than 3 days in Zones 1 and 3.

What is being done to improve hunt management?

Two things are being done to address the hunt management issues experienced during the 2009 season. A later season opening along the road system (August 29th in Zones 1 & 3) for 2010 is expected to minimize the likelihood of major road crossings by the herd and the associated heavy roadside harvest. Second, if highway crossings do occur during the fall season, the area in the vicinity of where the crossing is taking place will have weapons restrictions (archery only) implemented to minimize the likelihood of overharvest, but still allow the season to remain open. **The size of the restricted areas will be kept as small as possible to address specific road crossing events by the herd and are not expected to encompass more than 2–3% of the entire hunt area.** Weapons restrictions will be lifted once caribou adequately disperse away from highways to ensure overharvest will not occur.

Update on the Fortymile Herd Harvest Management Plan (2006–2012)

In 2005–2006, a coalition of Fish and Game Advisory Committees (Central, Delta Junction, Eagle, Fairbanks and Upper Tanana/Fortymile ACs) worked together with members of the Federal Eastern Interior Regional Advisory Council (EIRAC), the Yukon Fish and Wildlife Management Board, Yukon Department of Environment and the T'rondeĥ Hwëchîn First Nation to develop the current Harvest Plan for the Fortymile Caribou Herd for 2006–2012. The plan was endorsed by the Alaska Board of Game (BOG) and Federal Subsistence Board during their spring 2006 meetings and has guided harvest management of the herd since the fall 2006 hunting season. With the plan due to sunset in 2012, a revision of the plan will be developed during the summer of 2011. The revised plan will be submitted to the Board of Game and the Federal Subsistence Board for consideration during their spring 2012 meetings. The plan will be available for public comment through the public review process for each of these meetings. In addition, the plan will be discussed by each of the 5 ACs in the herd's range and the EIRAC during their fall and winter 2011–2012 meetings. The public is encouraged to attend these meetings to provide comment on the plan.

Background on the Herd Recovery Efforts

Efforts to rebuild the Fortymile Herd began in 1995, with the development of the Fortymile Caribou Herd Management Plan. This plan guided harvest from 1995–2000 and provided for a conservative harvest of 150 bulls annually during 1995–2000. The primary goal of this plan was to provide conditions for herd growth. In 1999, with the herd increasing in size and the Fortymile Caribou Herd Management Plan soon to expire, several state fish and game advisory committees began a cooperative effort to develop a new Harvest Plan for the Fortymile Herd. The 2001–2006 Fortymile Herd Harvest Plan was developed to provide for additional harvest opportunity, while retaining the primary goal of herd growth. Under the 2001–2006 Harvest Plan, the Fortymile harvest quota ranged between 850 and 950 caribou annually.

2006–2012 Harvest Plan

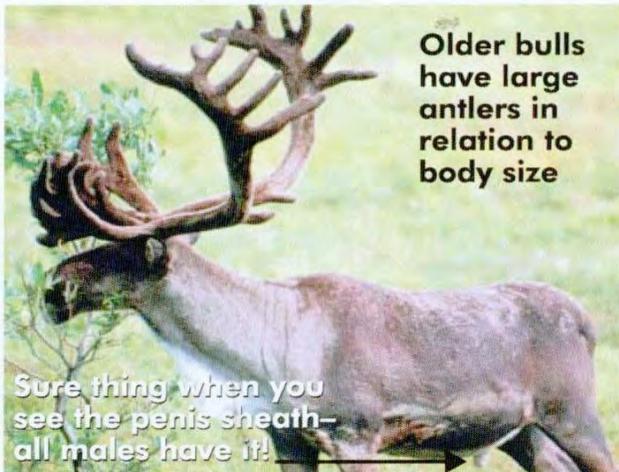
Under the current Harvest Plan, the Primary Goal of promoting continued growth of the herd was retained, to meet intensive management population and harvest objectives and restore the herd to its historic range in both Alaska and Yukon. The current Intensive Management Population and Harvest Objectives for the Fortymile Caribou Herd call for a population size of 50,000–100,000 caribou, with an annual harvest of 1,000–15,000 caribou.

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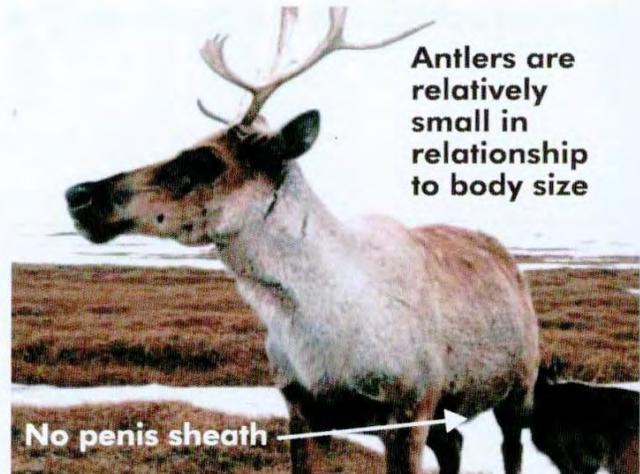


Know your target

Bulls



Cows



For updates on the RC860 Fortymile Registration Hunt call the hotline at 907-267-2310