

Activities by Herd and Unit

Kenai Lowland and Mountain Herd (Units 7 and 15A)

Activity: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

No surveys were completed in 2004–05.

Activity: Conduct a post-calving aerial sex and age composition survey.

No surveys were completed in 2004–05.

Activity: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

The harvest was for the Kenai Mountain herd was 17 (10 males and 7 females).

The Kenai Lowlands caribou herd was not hunted during this period.

Activity 4: Monitor trends in calf weights to evaluate herd body condition.

No calves were handled during this period.

Killey River and Fox River herds (Unit 15B)

Activity: In cooperation with U.S. Fish and Wildlife Service (FWS), conduct a postcalving aerial sex and age composition survey.

No Killey River surveys were completed in 2004–05. For the Fox River herd, 29 caribou were counted on Aug. 4, 2004

Activity: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

There was one drawing hunt and one registration hunt for Killey River caribou during fall 2004.

In Killey River drawing hunt, 11 males were harvested.

The Fox River caribou herd was not hunted during this period.

Northern Alaska Peninsula herd (Unit 9)

Activity: Conduct an aerial postcalving photocensus to estimate population size in cooperation with the FWS. Conduct periodic radiotracking surveys to determine distribution, movement, and areas of preferred use.

The final count of caribou seen on this cooperative survey totaled 1200, with 4% calves.

Deployed satellite collars on 9 female caribou in Units 9C and 9E. No capture-related mortalities.

Radiotracking flights were conducted in October and December 2004, in May 2005, and twice in June 2005.

Activity: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Preliminary results from Tier II subsistence hunt TC505 show a total of 22 caribou killed. Few NAP caribou crossed the Naknek River during the 2004–05 winter. Several thousand Mulchatna caribou were present between the Naknek and Alagnak Rivers as had occurred the previous winter.

Activity: Collect a sample of up to 20 calves to monitor trends in body condition.

Four calves and 3 adults were collected for pathological analysis. In addition, 42 calves were radiocollared to monitor survival and to collect data on body condition. There were no capture-related mortalities. Ninety percent of the calves died during the first 2 months of life. Body condition data was collected from these natural mortalities.

Activity: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

In October 2004, 1355 caribou were classified as to age and sex in Units 9C and 9E, with ratios of 34 bulls and 7 calves per 100 cows.

SAP Herd (Unit 9)

Activity: Conduct an aerial postcalving photocensus of the herd.

Due to a shortage of funds and the lack of radiocollared caribou in this herd, no attempt was made to photocensus this herd.

Activity: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters

Preliminary results from the 2004–05 general hunt indicate that 58 males, 5 females, and 1 unknown-sex caribou were killed in Unit 9D. Fifteen males were killed on Unimak Island in Unit 10.

Activity: Conduct fall sex/age composition surveys.

In October 2004, 966 caribou in Unit 9D were classified with ratios of 36 bulls and 7 calves per 100 cows. Radio collars were deployed on 3 caribou during the survey.

Nelchina Herd (Unit 13)

Activity: Conduct a postcalving photocensus and sex and age composition survey.

No photocensus was done in 2005.

Activity: Conduct sex and age composition surveys in spring and fall to determine bull composition and calf productivity and survival.

Herd composition on Oct. 6, 2004:

31 bulls/100 cows (17%)
45 calves/100 cows (26%)

Spring composition survey was delayed until after the end of the reporting period.

Activity: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Preliminary harvest data for Tier II subsistence permit:

894 of 1823 permittees were successful (plus 334 in the federal hunt)

884 bulls (99%), 5 cows, 5 unknown 5 (248 bulls, 85 cows, 1 unknown in the federal hunt)

Preliminary hunter effort (state only):

229 did not report

192 did not hunt

554 hunted unsuccessfully

894 hunted successfully

Preliminary data for Western Talkeetna Mountains Unit 14B drawing permit hunt:

Of 60 people with permits, 40 did not hunt, 9 hunted unsuccessfully, 10 hunted successfully (bulls), and 1 hunted successfully (cows).

Activity: Replace existing radio collars.

Twenty-five 11-month old caribou were captured and weighed, no mortalities.

Ten 11-month old caribou were fitted with adult collars.

Fifteen 11-month old caribou were released.

Three old collars were replaced on adult caribou, no mortalities.

Productivity of radiocollared caribou in 2005 was:

88% for caribou ≥ 5 years of age

75% for caribou 4 years of age

38% for caribou 3 years of age

0% for caribou ≤ 2 years of age

Activity: Collect a sample of up to 20 calves to monitor trends in body condition.

No animals were collected during this reporting period

Mulchatna Herd (Units 9A, 9B, 9C, 17 and 19B)

Activity: Monitor caribou distribution through relocation of radiocollared caribou.

Radiotracking flights conducted throughout the year. Seasonal distribution determined.

Activity: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Preliminary reported 2004–2005 harvest: 1438 caribou

Activity: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Results of fall 2004 composition counts:

Cows	(%)	Calves	(%)	Bulls	(%)	Total
3,270	(71.0%)	653	(14.2%)	685	(14.9%)	4,608
Calves/100 Cows		Bulls/100 Cows				
20/100		21/100 cows				

Activity: Collect a sample of up to 20 calves to monitor trends in body condition.

No animals were collected during this reporting period.

Nushagak Peninsula Herd (Units 17A, 17C)

Activity: In cooperation with FWS, conduct a census and radio-tracking surveys to determine distribution, movements, and areas of preferred use.

Assisted FWS with strip-transect survey conducted March 11 (780 caribou counted) and monthly radio-tracking flights.

Activity: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Results of fall 2004 composition counts:

Cows	(%)	Calves	(%)	Bulls	(%)	Total
207	(56.7%)	70	(19.2%)	88	(24.1%)	365
Calves/100 Cows		Bulls/100 Cows				
33.8/100		42.5/100				

Stewardship Investment items purchased: None.

Total Regional Segment Period Project Costs (in thousands): \$240.1

Submitted by: Gino Del Frate
Regional Management Coordinator

The Status of Caribou and Factors Influencing Their Populations in Region III

Regionwide Activities

Activity: Prepare regional biennial caribou management reports.

Prepared regional biennial caribou management reports for all herds.

Activity: Provide information to advisory committees on caribou management.

Provided information to advisory committees with interest in Region III herds.

Activity: Monitor harvest and analyze harvest data.

Monitored harvest of 975 caribou and analyzed harvest data.

Activity: Deploy and maintain radio collars as needed on herds throughout the region to maintain an adequate sample size to conduct surveys.

Deployed 97 radio collars in various herds to maintain adequate sample of radiocollared animals to conduct surveys; experienced 1 mortality in the Delta Herd as a result of collaring.

Activities by Unit [and/or herd]

Unit 12 (and adjacent Yukon, Canada) Chisana Herd

Activity: Estimate status, trends, and recruitment through aerial surveys.

Due to budget constraints and other priorities, no surveys were conducted.

Activity: Determine pregnancy and parturition rates, and calf survival.

Due to budget constraints and other priorities, no surveys were conducted.

Activity: Conduct a fall sex and age composition count.

Due to budget constraints and other priorities, no surveys were conducted.

Activity: In cooperation with the Yukon Department of Renewable Resources and the National Park Service, continue developing a draft Chisana Caribou Management Plan.

Completed a draft Chisana Caribou Management Plan during FY03. (This is a 5-year (2003–2008) plan that will be updated following the completion of a 2004–2008 captive rearing project conducted by Yukon.)

Units 12 and 20D (portions) Macomb Caribou Herd

Activity: Estimate status, trends, and productivity from aerial surveys.

Conducted an aerial survey on 9 October 2004 resulting in estimates of 40 calves:100 cows and 61 bulls:100 cows.

Activity: Conduct a photocensus of the herd to determine population size.

Conducted an aerial population estimate resulting in an estimate of 600–650 caribou.

Activity: Conduct a prehunt aerial distribution survey to assist with managing the hunt by EO.

Conducted a prehunt aerial distribution survey on 6 October 2004.

Unit 20A Delta Herd

Activity: Estimate productivity, status, and trend from a summer photocensus, fall sex and age composition counts, and annual mortality.

Conducted a photocensus ($n = 2168$) and fall composition surveys (49 bulls:100 cows, 14 large bulls:100 cows, 35 calves:100 cows, $n = 1267$).

Units 20B, 20C, 20D, 20E, 25C (and adjacent Yukon, Canada) Fortymile Caribou Herd

Activity: Estimate status, trends and recruitment from aerial surveys.

Conducted a fall sex and age composition survey (calf and bull/100 cow ratios were 28 and 45/100; 10% of the herd sampled).

Activity: Conduct a photocensus to determine herd size.

Conducted pre-census flights to monitor herd distribution in June; however, extreme smoke conditions prevented the completion of a census.

Activity: Write and distribute 1–2 issues of the *Comeback Trail*, a newsletter about the Fortymile Caribou Herd.

Did not produce a 2005 issue of the *Comeback Trail* newsletter due to time constraints and the moderate priority level of this task.

Activity: Develop roadside educational signs about Fortymile caribou to be placed on the Steese and Taylor Highways.

Developed, constructed, and placed road signs on the Taylor and Steese Highways.

Units 20F, 21C, 21D and 24 Galena Mountain, Ray Mountains, and Wolf Mountain Caribou Herds

Activity: Deploy 5–10 radio collars on caribou in the Ray Mountains to maintain an adequate sample size to conduct surveys.

Deployed no new radio collars in the Ray Mountains herd.

Activity: Estimate status, trend, and productivity of the herds from aerial surveys.

In cooperation with the Bureau of Land Management (BLM), conducted aerial composition survey of Ray Mtn. Herd and counted 1403 caribou on 10/04; conducted aerial composition survey of Wolf Mtn. Herd and counted 146 caribou on 05/05; and in cooperation with FWS, conducted aerial composition survey of Galena Mtn. Herd and counted 84 caribou on 09/04 and 95 caribou on 12/04.

Units 20B, 20F and 25C White Mountains Caribou Herd

Activity: Deploy 4–5 radio collars on caribou to maintain an adequate sample size to conduct surveys.

Radiocollared one 4-month old female caribou to maintain sample size, with no mortality.

Activity: Conduct radiotelemetry flights to monitor herd demographics.

Conducted a radiotelemetry flight in October to monitor herd demographics.

Activity: Conduct fall sex and age composition survey.

Conducted a sex and age composition survey in October (23 calves:100 cows, 35 bulls:100 cows)

Units 25A, 24B, 25D, and 26C (and adjacent Yukon, Canada) Porcupine Caribou Herd

Activity: Estimate status, trend, and productivity from aerial surveys.

Canceled planned photocensus because the herd did not form the dense aggregations needed.

Activity: Conduct calving ground surveys.

Conducted calving surveys during June 4–7 and 26–28. (Seventy-three radiocollared caribou cows were observed, including 6 known-age yearlings, 1 known 2-year-old, 10 known 3-year-olds and 56 adults whose age is unknown (estimated >3 years). Parturition rate was 64% for adults, 50% for 3-year-olds, and 62% for caribou aged 3 years and older. No caribou age 1 or 2 years was parturient. The late-June calf:cow ratio was 46:100 for cows ≥ 3 years old and 48:100 for cows ≥ 4 years old.)

Activity: Replace radio collars on approximately 10 caribou to maintain adequate sample size to monitor the herd.

No caribou were captured in Alaska during this period.

Units 26B and 26C Central Arctic Caribou Herd

Activity: Conduct a photocensus to determine herd size.

A photocensus was not conducted due to weather.

Activity: Conduct fall sex and age composition survey and determine distribution.

Did not conduct fall sex and age composition surveys; distribution was determined by GPS collars in connection with an ongoing research project.

Activity: Capture and radiocollar approximately 10 female caribou to maintain an adequate sample size for population monitoring.

Deployed VHF radiocollars on 10 female CAH caribou in March 2005 with no capture-related mortalities.

Activity: Estimate parturition rates and calf:cow ratios in June by radiotracking collared females.

Estimated parturition rate for ≥ 3 year old females at 85% (N=67) and late June calf:cow ratio at 69% (N=64).

Stewardship Investment items purchased: None.

Total Regional Segment Period Project Costs (in thousands): 107.1

Submitted by: Roy A. Nowlin, Management Coordinator

The Status of Caribou and Factors Influencing Their Populations in Region V

Regionwide Activities

Activity: Prepare a regional biennial caribou management report.

A caribou management report was prepared during this reporting period.

Activities by Unit [and/or herd]

Unit 18

Activity: Monitor herd dynamics using radiocollars deployed on caribou in Unit 18 and other units as seasonal ranges of the Mulchatna and Western Arctic herds expand into Unit 18.

We conducted radiotelemetry flights during this reporting period to support the caribou composition surveys in October 2004 and in preparation for a photocensus that did not occur due to poor weather.

Activity: Monitor caribou movements north of the Yukon River.

Caribou from the Western Arctic herd occasionally use the portion of Unit 18 north of the Yukon River, however, we saw no evidence that this occurred during this reporting period.

Activity: Conduct fall aerial sex and age composition counts.

We conducted a fall sex and age composition count in October 2004 using an R-44 helicopter and classified 2803 caribou including 1941 cows, 339 calves, 335 small bulls, 148 medium bulls, and 40 large bulls.

Activity: Conduct spring aerial or ground based surveys of caribou in Unit 18 to assess recruitment and distribution.

We conducted a spring sex and age composition survey in the Kilbuck Mountains during May 2005 and classified 179 caribou, including 94 bulls, 38 cows with no antlers, 18 cows with hard antlers, 26 yearlings, 0 calves, and 23 unknowns.

Activity: Participate in radiocollar deployments and sample collections from caribou from herds that use Unit 18. (These captures are associated with Mulchatna Herd and totals are reported in Region II AWP.)

We did not participate in caribou capture activities during this reporting period.

Activity: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

We supported the use of harvest reports/tickets through the license vendors and interviewed hunters when the opportunity presented itself.

Activity: Continue to improve communication with the public.

We wrote articles for a local newspaper and discussed caribou issues with advisory committees, other agencies, and the public.

Activity: Develop updated population objectives in cooperation with the public and other agencies.

We participated in a technical meeting in Dillingham with other area and regional office and agency biologists to address common needs related to the Mulchatna caribou herd, including population objectives.

Teshkepuk Herd (Unit 26A)

Activity: Monitor distribution and movements using satellite collar data, radiotelemetry data and aerial survey observations.

We looked at distribution maps generated by the Nome office throughout the year to monitor movements of satellite collared bulls and cows. Satellite collar data enabled us to keep up to date when over half the herd wintered in Unit 26B, within the range of the Central Arctic herd, and then moved back to Teshkepuk herd range for calving season. During this movement, we were able to monitor interactions with oil field infrastructure as the herd moved eastward through the Kuparuk and Prudhoe Bay development areas. We used biweekly radiotracking data throughout June, July and August to monitor summer movements and habitat use. Winter and spring radiotracking flights were conducted to determine wintering locations for most of the collared caribou.

Activity: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

Field observations and public reports indicated that there was relatively high mortality in the herd during the past year (approximately 25%) due to icing conditions on the winter range and movements into unfamiliar territory.

Activity: Collect harvest information through the North Slope Borough (NSB) and the ADF&G Subsistence Division.

The Subsistence Division and the NSB continued to collect harvest data from North Slope villages. Results of harvest estimates based on radiocollar distribution data were used to estimate that approximately 4400 caribou were harvested from the TCH during 2002–2003.

Activity: Develop updated population objectives in cooperation with the public and other agencies.

We discussed population objectives for the Teshkepuk caribou herd (TCH) with the NSB Fish and Game Management Committee, as well as at public meetings.

Activity: Attend meetings with management agencies, oil companies, and caribou users with the intent of minimizing conflicts between the herd and major development projects.

We attended at least 10 meetings related to the TCH and spent time on the Environmental Impact Statement (EIS) process related to oil development, including meetings with BLM to address the Northeast and the Northwest Planning Units of the NPR-A and the Alpine Satellite Development Project.

Activity: Capture bulls and cows to attach satellite, GPS, and conventional radiocollars.

Using a R-44 helicopter and hand-held net gun, we captured 29 TCH cows and 6 bulls. We attached 25 PTT collars and 10 VHF collars. We removed 17 PTT and GPS collars that were nearing the end of their battery life. The PTT collars are scheduled to transmit for 1 or 2 years. We used blindfolds and hobbling equipment to restrain caribou. No drugs were used. There was 1 capture mortality. The current number of radiocollared caribou is 57, including 7 males.

Activity: Weigh, measure and collect blood, fecal and hair samples from all captured caribou to gain information about the prevalence of diseases, parasites, contaminants and condition of the animals.

We collected blood, fecal, hair, and morphometric samples from the 35 caribou that were captured. The blood, fecal and hair samples are being analyzed as part of a cooperative project with the NSB.

Activity: Conduct sex and age composition surveys during midsummer and/or October.

Fall composition surveys were flown on 28 October 2004 but were cut short due to bad weather. We located 8 radiocollared cows and 3 of them had short yearlings (38 surviving calves:100 cows). An additional 658 caribou were classified in the vicinity of radiocollared caribou, and we found 37 short yearlings for a ratio of 6 short yearlings:100 adults. This is much lower than the number of calves:100 adults we have seen in past fall surveys.

Activity: Conduct aerial surveys during April and May to assess short yearling recruitment.

Short yearling surveys were flown on 12 and 13 April 2005. We located 13 radiocollared cows and 0 of them had short yearlings (0 surviving calves:100 cows). An additional 1564 caribou were classified in the vicinity of radiocollared caribou, and we found 128 short yearlings for a ratio of 9 short yearlings:100 adults. This is much lower than the 10-year average of 17 short yearlings:100 adults.

Activity: Use telemetry and ground observations to carefully monitor summer movements of Teshekpuk herd caribou in the insect relief area.

We monitored the distribution of TCH caribou on and near their insect relief areas using a combination of satellite telemetry and biweekly radio tracking flights. Areas north of Teshekpuk Lake received consistent use from mid June through mid July by the majority of the herd

Activity: Conduct calving location and productivity aerial surveys in June.

Calving surveys were conducted on 4, 5, 6, 7, 9, 10, 11, 12, and 13 June 2005. We located 30 adult cows, and observed 15 calves at heel (50%) and a total of 22 cows that either had a calf, hard antlers or a distended udder (73% parturition rate). Although cows were widely distributed during calving this spring, a concentration was detected northeast and southeast of Teshekpuk Lake.

Activity: Use satellite collar information and conduct VHF radiocollar telemetry surveys to determine the relative abundance of North Slope caribou herds in hunting areas during the time of the year when people do most of their hunting.

VHF radiotracking surveys were flown, and satellite collar information will be examined to determine the relative numbers of caribou from the TCH, Central Arctic herd (CAH) and the Western Arctic herd (WAH) in hunting areas when people are hunting.

Activity: Involve students in the capture operations, work with students to track satellite collared caribou movements and lecture to school classes about caribou biology.

Students from Anaktuvuk Pass tracked caribou movements during the school year. Several lectures were delivered to students from North Slope schools on population dynamics, genetics, and general information on the TCH.

Western Arctic Herd (Units 22, 23 and 26A)

Activity: Conduct periodic radiotracking flights to monitor herd distribution.

The Western Arctic Herd (WAH) was radiotracked throughout the reporting period by staff located in Barrow, Nome, Kotzebue and Fairbanks. Some caribou from this herd spent the winter of 2003–2004 roughly 20–40 mi east of Chandalar Lake, the farthest east ever recorded.

Activity: Deploy approximately 35 radiocollars to maintain a year-end sample size of at least 100 operational radiocollars on living caribou.

Thirty two radio collars (23 conventional and 9 satellite) were deployed in the WAH during September 2003. A total of 82 caribou were captured during the collaring effort, and there were no capture mortalities. See 7th WAH activity below.

Activity: Conduct aerial surveys during April and May to assess short yearling recruitment.

We classified 9402 caribou (8376 adults and 1026 calves) during spring 2005 and observed 12 calves:100 adults.

Activity: Conduct aerial surveys during June to monitor initial calf production and the distribution of calving areas.

We visually located 84 radiocollared female caribou and observed a ratio of 69 neonates:100 cows in June 2005.

Activity: Conduct aerial surveys during October to assess herd composition and retrieve radiocollars.

We classified 11,157 caribou during October 2–3, 2004 and observed 48 bulls:100 cows and 35 calves:100 cows. We retrieved 22 collars during July 2004 via helicopter and 9 collars during February–April 2005 via Super Cub.

Activity: Collect blood samples from approximately 90 captured caribou to monitor the incidence of selected diseases and pathogens.

We collected a blood sample from 82 caribou during September 2004. Results of haptoglobin analyses are still pending. Six percent of the caribou tested had been exposed to *Brucella suis*.

Activity: Monitor hunting and other mortality factors through harvest reporting, collection of biological specimens and public contacts.

No biological specimens were collected from hunters during the reporting period. Harvest levels based on community-based harvest assessments and harvest reports were comparable to previous years.

Activity: Use public education programs and/or increased communication with the public to improve understanding of hunting regulations and the value of conserving caribou populations, and to obtain better harvest data through increased harvest reporting.

We spoke to hunters about the importance of harvest reporting.

Activity: Make a presentation at the annual Reindeer Herders Association meeting and work with the reindeer herders to minimize caribou/reindeer conflicts that may be detrimental to caribou.

We presented maps showing movements and distribution of caribou to the Reindeer Herders Association during their annual meeting in March 2005.

Activity: Involve students in the Onion Portage collaring project to improve public relations and support wildlife education.

No students participated in the Onion Portage collaring project in September 2004 because the Deering and Buckland schools canceled in response to school staff turnover.

Activity: Collect and analyze harvest data from selected communities within the range of the Western Arctic Caribou Herd through the Community-Based Harvest Assessments program in cooperation with the ADF&G Division of Subsistence, Alaska Native organizations and other resource agencies.

Community harvest data indicates the harvest of WAH caribou by people residing within the range of this herd has been ~14,000–15,000 caribou annually. It appears that overall “local” harvest levels have been relatively stable since the late 1990s, and we do not think this substantially changed during the 2004–2005 regulatory year. However, caribou were scarce in the upper Kobuk drainage during fall and winter of 2004–2005, and residents of Ambler,

Kobuk and Shungnak took fewer caribou than if caribou had been readily available. In contrast, caribou were abundant in the Nulato Hills during this time, and residents of Shaktoolik, Koyuk and Unalakleet had no trouble meeting their needs.

Stewardship Investment items purchased: None.

Total Regional Segment Period Project Costs (in thousands): 272.7

Submitted by: Peter Bente, Management Coordinator

Statewide Project Costs (in thousands):

State Share = \$154.98 Federal share = \$464.93 Total costs = \$619.9