ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
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CARIBOU
ANNUAL SURVEY AND INVENTORY
FEDERAL AID PERFORMANCE REPORT

STATE: Alaska **GRANT AND SEGMENT NR.:** W-33-1
PROJECT NR.: 3.0

WORK LOCATION: Statewide

PROJECT LOCATIONS: Game Management Regions 2, 3, and 5

PERIOD: 1 July 2002–30 June 2003

PROJECT TITLE: The Status of Alaska Caribou and Factors Influencing Their Populations.

REPORT DESCRIPTION: This statewide performance report includes the three regions involved in caribou survey and inventory activities. Statewide and regional activities are listed before specific activities by herd and game management unit.

The Status of Alaska Caribou and Factors Influencing Their Populations in Region II

Regionwide Activities

Activity 1: Prepare a draft caribou management report.

Draft caribou management reports were prepared for all Region 2 caribou herds in 2003.

Activity 2: Write an annual survey and inventory performance report.

Activity 3: Provide information to the Board of Game.

The Board of Game addressed numerous proposals regarding caribou in Region 2 during its spring 2003 meeting.

Activity 4: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Surveys were conducted of most Region 2 herds during this reporting period.

Activity 5: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Activities by Herd and Unit

Northern Alaska Peninsula Herd (Unit 9)

Activity 1: Conduct an aerial postcalving photocensus in cooperation with the FWS.

Postcalving surveys were only partially completed on 27 June 2003, approximately half of the collared animals were not located thus the count was unreliable.

Activity 2: 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 75 caribou killed. Few NAP caribou crossed the Naknek River during the 2002–03 winter and few Mulchatna were present between the Naknek and Alagnak Rivers as had occurred the previous winter.

Activity 3: Conduct periodic radiotracking surveys.

Deployed satellite collars on 6 female caribou between the King Salmon and Naknek Rivers. There were no capture mortalities.

Radio tracking flights were conducted 30 July 2002; 10–11, 13–15 and 22–24 October 2002, 26 May 2002, and 27–28 June 2003.

Other activities funded by Federal Aid on this project:

Activity: Conduct fall sex/age composition surveys.

In October 2002 we classified 2,392 caribou in Units 9C and 9E, with ratios of 49 bulls and 28 calves per 100 cows.

Southern Alaska Peninsula Herd (Unit 9)

Activity 1: Conduct an aerial postcalving photocensus of the herd.

Visual estimates from the 28 June 2002 post calving count totaled about 1,300 caribou. This number will be refined when photos are counted.

Other activities funded by Federal Aid on this project:

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

Preliminary results from the 2002–03 general hunt were 55 males 5 females and 2 unknown sex killed in Unit 9D and 38 males and 5 female on Unimak Island.

Activity: Conduct fall sex/age composition surveys.

In November 2002 932 caribou in Unit 9D were classified with ratios of 38 bulls and 16 calves per 100 cows.

Kenai Mountain Herd (Unit 7)

Activity 1: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

No surveys were completed in 2003.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Harvest reports for fall 2002: 250 permits were issued (each for 1 caribou of either gender) and 19 caribou harvested (11 males and 8 females).

Kenai Lowland Herd (Unit 15A)

Activity 1: Conduct a postcalving aerial sex and age composition survey.

On June 13, 2003 a survey was completed on the Kenai Lowland Caribou herd to determine the minimum herd size. A total of 102 caribou were counted with 17 percent calves. The caribou were in small scattered groups.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

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

Killey River Herd (Unit 15B)

Activity 1: In cooperation with FWS, conduct a postcalving aerial sex and age composition survey**.**

On December 27, 2002 an aerial survey was completed to determine the minimum number of caribou in the Killey River herd. A total of 347 caribou were counted. Calves represented 4% of the counted animals. These results compare to 710 animals found in March 2001. Survey conditions were poor and many animals were likely not counted.

Activity 2: 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 2002.

Hunt DC608: 225 permits issued (each for 1 bull and 2 cow caribou) and 17 males and 4 females were harvested. Season was August 10 to September 20.

Hunt RC610: 137 permits issued (each for three females) and 40 females taken. Season was August 10 to September 20.

Fox River Herd (Unit 15B)

Activity 1: In cooperation with FWS, conduct a postcalving aerial sex and age composition survey.

No surveys were completed in 2003.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Hunt 618: Ten permits were issued and 1 male was harvested in fall 2002. Season was August 10 to September 20.

Nelchina Herd (Unit 13)

Activity 1: Conduct a postcalving aerial survey to determine herd size.

Estimated herd size on 29 June 2003 was 31,114 caribou.

Activity 2: Conduct sex and age composition surveys in spring and fall to determine bull composition and calf productivity and survival.

Herd composition on 4 October 2003:
31 bulls/100 cows (17%)
48 calves/100 cows (27%)

Herd composition on 30 June 2003:
30.7 bulls/100 cows (18%)
39.4 calves/100 cows (23%)

Activity 3: Conduct a Tier II permit subsistence hunt with 2000 permits issued for bulls only. Monitor harvests and close the hunt if the harvest quota of 1000 bulls is met. Contact hunters to assure compliance with hunt regulations.

Preliminary Harvest:
974 successful hunters
973 bulls (99.9%) 1 cow

Preliminary Hunter Effort:
50 did not report
287 did not hunt

692 hunted unsuccessfully
974 hunted successfully

Activity 4: Conduct a Drawing permit hunt with 60 permits issued for the Western Talkeetna Mountains Unit14B.

Preliminary Hunter Effort:
4 did not report
30 did not hunt
18 hunted unsuccessfully
5 hunted successfully (bulls)
3 hunted successfully (cows)

Activity 5: Replace existing radio collars.

Twelve old collars were replaced on adult caribou. One animal died 24 hours post darting because of a penetrated peritoneum.

Productivity of radio-collared caribou in 2003 was:
42% for caribou >5 years of age
83% for caribou 4 years of age
30% for caribou 3 years of age
0% for caribou (2 years of age

Activity 6: Weigh neonatal calves to monitor condition at birth as an indicator of overall herd health.

Neonatal calf weights in 2003 were:
19.8 lbs. for male calves
17.8 lbs. for female calves

Productivity of radio collared caribou in 2002 was:
93% for caribou $\geq$5 years of age
50% for caribou 4 years of age
64% for caribou 3 years of age
0% for caribou $\leq$ 2 years of age

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

Activity 1: Monitor caribou distribution through relocation of radiocollared caribou.

Radiotracking flights conducted throughout the year to determine seasonal distribution.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Reported 2002–03 harvest 2,537 caribou

Activity 3: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Results of fall 2002 composition counts:

Cows (%)	Calves (%)	Bulls (%)	Total Sample Size
3,727 (65.0%)	1,049 (13.7%)	958 (16.7%)	5,734

Calves/100 Cows	Bulls/100 Cows
28.1 Calves/100 Cows	25.7 Bulls/100 cows

Nushagak Peninsula Herd (Units 17A, 17C)

Activity 1: In cooperation with FWS, conduct a census and radiotracking surveys

There was insufficient snow cover to conduct winter census. Assisted USFWS on monthly radiotracking flights.

Activity 2: In cooperation with FWS, conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Results of fall 2002 composition counts:

Cows (%)	Calves (%)	Bulls (%)	Total
191 (56%)	69 (20%)	82 (24%)	342

Calves/100 Cows	Bulls/100 Cows
36.1 Calves/100 Cows	42.9 Bulls/100 cows

Other activities funded by Federal Aid on this project: None.

Total Regional Segment Period Project Costs (in thousands): $161.2

Submitted by: Michael G McDonald, Assistant Management Coordinator

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

Regionwide Activities

Activity 1: Write an annual survey and inventory performance report.

Wrote an annual survey and inventory report for all herds.

Activity 2: Provide information to the Board of Game during the regulatory process.

Made presentations to the Board of Game and advisory committees as needed.

Activity 3: Prepare a draft caribou management report.

Draft or final management reports were prepared for all herds.

Activities by Herd and Unit

Chisana Herd (Unit 12)

Activity 1: Estimate status, trends, and recruitment through aerial surveys.

Conducted 2 radiotracking surveys during the winter to evaluate over winter survival and range use.

Activity 2: Determine pregnancy and parturition rates, and calf survival.

Conducted a herd pregnancy and productivity survey on 23 May 2003 and found that 71% of the radiocollared cows ≥ 3 years old (17/24) were pregnant.

Conducted monitoring flights to compare calf survival between Chisana calves that were born in captivity and released at 1-4 weeks old and Chisana calves that were born in the wild.

Activity 3: Conduct a fall sex and age composition count.

Conducted composition counts on 30 September 2002 and estimated the population at 315 caribou.

Activity 4: In cooperation with the Yukon Department of Renewable Resources and the National Park Service, continue developing a draft Chisana Caribou Management Plan.

In cooperation with the Yukon Department of Environment, completed the draft Chisana Caribou Herd Management Plan.

Activity 5: Monitor harvest and analyze harvest data.

Did not monitor harvest or analyze harvest data because there is no hunting season on the Chisana Herd.

Macomb Caribou Herd (Portions of units 12 and 20D)

Activity 1: Estimate status, trends, and productivity from fall composition surveys.

Attempted to estimate status, trends, and productivity from fall composition surveys but was unable to complete survey due to poor survey conditions.

Activity 2: Conduct a photocensus of the herd to determine population size.

Attempted to conduct a photocensus of the herd to determine population size but was unable to complete due to poor survey conditions.

Activity 3: Monitor harvest and analyze harvest data.

Monitored preliminary harvest of 24 caribou for permit hunt RC835 and analyzed harvest data.

Beaver Mountains, Big River-Farewell, Rainy Pass, Sunshine Mountain and Tonzona Caribou Herds (Units 19A, 19B, 19C, 19D, 21A and 21E)

Activity 1: Estimate status, trends and distribution of the herds from aerial surveys.

Conducted no specific surveys due to commitments on other projects. All herds likely at low historical levels.

Activity 2: Monitor harvest and analyze harvest data.

Monitored harvest and analyze harvest data. Harvest was <10 animals in the Beaver Mtns, Sunshine Mtns, and Tonzona Herds, respectively. The Big River/Farewell herd reported harvest was 31 caribou and 16 were reported harvested in the Rainy Pass Herd.

Delta Herd (including the former Yanert Herd) (Unit 20A)

Activity 1: Estimate productivity, status and trend from a summer photocensus, fall sex and age composition counts and annual mortality.

Conducted fall composition surveys in October 2002 (50 bulls:100 cows, 17 large bulls:100 cows, 25 calves:100 cows, n = 924)

Conducted a photocensus of the herd in June.

Activity 2: Monitor harvest and analyze harvest data.

Monitored effort and the timing and distribution of harvests through drawing permit reports (issued 100 permits, harvested 37 bulls).

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

Activity 1: Estimate status, trends and recruitment from aerial surveys.

Conducted a fall sex and age composition survey (calf and bull:100 cow ratios 39 and 43:100; 13% of the herd sampled).

Activity 2: Conduct a photocensus to determine herd size.

Conducted phototcensus on June 30, 2003. Minimum population estimate was 43,375 caribou.

Activity 3: Monitor harvest and analyze harvest data.

Administered 4 registration permit hunts covering Unit 20E and portions of Units 20B, 20D, and 25C with a combined quota of 950 caribou. Two of four hunts closed by emergency order. Harvest was 864 caribou, 667 bulls (77.1%), 185 cows (21.4%), and 12 that sex was not reported.

Monitored herd movements every 3-7 days during hunting seasons to aid hunt management.

Maintained a Fortymile caribou hotline informing hunters about status of registration hunts.

Activity 4: Write and distribute 1-2 issues of the Comeback Trail, a newsletter about the Fortymile Caribou Herd.

Produced 1 issue of the Comeback Trail, an information bulletin explaining the status and trend of the Fortymile herd, current management and research programs and results, and hunting and viewing opportunities.

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

Activity 1: Estimate status, trend and productivity of the herds from photocensus and aerial surveys.

In the Wolf Mtn. Herd, counted ~ 270 caribou on 6/26/03.

In the Galena Mtn. Herd, counted 12 caribou on 3/11/03 in cooperation with USFWS, 44 caribou on 6/16/03 and 55 caribou on 6/26/03.

Activity 2: Monitor harvest and analyze harvest data.

Monitored harvest and analyzed harvest data (preliminary harvest data not available).

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

Activity 1: Estimate status, trend, and productivity from aerial surveys.

Photocensus attempted, but not accomplished because herd did not aggregate and began their southward migration early.

Activity 2: Conduct calving ground surveys.

Completed calving surveys that showed 87% of the radiocollared females were parturient (n=70) and the late June calf:cow ratio was 69:100 (n=46).

Activity 3: Replace radio collars as needed to maintain adequate sample size to monitor the herd.

Twenty-one VHF and 7 satellite collars were deployed by biologists with the Yukon Department of Environment while the herd was in Canada, with no ADF&G expenditure of funds or involvement of personnel.

Activity 4: Monitor harvest and analyze harvest data.

Monitored harvest and analyzed harvest date (Preliminary reported harvest=76 caribou).

White Mountains Caribou Herd (Western half of 25C and small portions of northern 20B and eastern 20F)

Activity 1: Conduct radiotelemetry flights to monitor herd demographics.

Conducted a radiotelemetry flight in October to monitor herd demographics

Activity 2: Conduct fall sex and age composition survey.

Conducted a sex and age composition survey in October (29 calves:100 cows, 34 bulls:100 cows).

Activity 3: Replace radio collars as needed to maintain adequate sample size to monitor herd demographics.

Radiocollared three 4-month old female caribou to maintain sample size with no capture mortalities.

Activity 4: Monitor harvest and analyze harvest data.

Monitored general hunt (reported harvest = 12 male, 1 female) and registration permit hunt RC879 (reported harvest=2 males, 0 female)

Central Arctic Caribou Herd (Unit 26B)

Activity 1: Capture and radiocollar female caribou to maintain an adequate sample size for population monitoring.

Captured and radiocollared 10 short yearling female caribou with three capture mortalities.

Activity 2: Estimate status, trend and productivity from aerial surveys by radiotracking collared females in October and June.

Estimated parturition rates (approx. 91% for females ≥ 4 years old, n=54) in early June and in late June calf:cow ratios (81% for females ≥ 4 years old, n=52) of radiocollared females.

Conducted fall sex and age composition survey in October (n= 1732).

Activity 3: Conduct photocensus to determine herd size.

Conduct a photocensus in July 2002. Counted 31,857 caribou.

Activity 4: Conduct fall sex and age composition survey.

Conducted fall sex and age composition survey in October (n= 1732).

Activity 5: Conduct radiotelemetry flights to determine fall and winter herd distribution.

Conducted radiotelementry flights to determine winter herd distribution in October and March.

Activity 6: Monitor harvest and analyze harvest data.

Monitored harvest (approximately 1000 caribou were harvested, < 100 were females).

Other activities funded by federal aid on this project:

Conducted prehunt aerial distribution survey of the Macomb Caribou Herd to assist with hunt management. Determined most radiocollared caribou were within the Macomb Plateau Controlled Use Area and Delta herd caribou were not present in Unit 20D in significant numbers.

Total Regional Segment Period Project Costs (in thousands): $251.7

Submitted by: Roy A. Nowlin, Management Coordinator

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

Regionwide Activities

Activity 1: Write a draft caribou management report.

Draft management reports were prepared and submitted to headquarters during September 2003.

Activity 2: Write an annual survey and inventory performance report.

Performance reports for Kilbuck (recently assimilated by the Mulchatna caribou herd), Teshekpuk and Western Artic herds were prepared August 2003 and submitted to HQ early September 2003.

Activity 3: Provide information to the Board of Game.

Unit 18. Information regarding a Department proposal to change the caribou seasons, bag limits, and hunt areas in Unit 18 was presented to the local advisory committees. These changes will be considered by the Board of Game in November 2003.

Western Arctic Herd. No information was requested by or provided to the Board of Game. An emergency order to close caribou hunting in a portion of Unit 22D was issued in August 2002 to prevent the harvest of reindeer. A subsequent emergency order to reopen caribou hunting in this area was issued in October 2002 when caribou immigrated into the area.

Teshekpuk Lake Herd. No information was requested by or provided to the Board of Game.

Activities by Herd and Unit

Unit 18

Activity 1: Monitor herd dynamics using radiocollars deployed on caribou in Unit 18 and other units as seasonal ranges of the MCH and WACH expand into Unit 18.

We searched for caribou wearing radiocollars in the Kilbuck Mountains during fall to assist with the fall composition survey and found several MCH caribou. We were unable to conduct a spring search due to poor weather.

Herd dynamics were considered using radiotelemetry data. No appreciable numbers of calving caribou have been found in Unit 18 for several years and the explanation is that the KCH has joined the MCH and no longer exists as a separate herd.

Activity 2: Monitor caribou movements north of the Yukon River.

Caribou were monitored north of the Yukon River through informal means and no indication of caribou present in the area was detected.

Activity 3: Conduct fall aerial sex and age composition counts.

We conducted a composition survey in October 2002 and classified 1343 caribou, including 808 cows, 191 calves, 190 small bulls, 118 medium bulls, and 36 large bulls. These caribou were from the Mulchatna Herd (MCH) and the data were pooled with surveys conducted in other portions of their range.

Activity 4: Conduct spring aerial or ground based spring surveys of caribou in Unit 18 to assess recruitment and distribution.

A spring composition count was not conducted this year due to poor weather.

Activity 5: Participate in photocensuses of caribou herds that use Unit 18.

No photocensuses of the WACH was conducted during this reporting period due to weather. We assisted with the MCH photocensus by locating caribou groups in Unit 18 prior to the survey.

Activity 6: Participate in radiocollar deployments and sample collections from caribou from herds that use Unit 18.

No work was conducted by this office toward this activity in this reporting period.

Activity 7: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

Harvest information is derived from harvest reports but Unit 18 hunters use these reports infrequently and the information derived from them is misleading. To improve compliance with the reporting requirement, we continued an incentive program involving a prize drawing. Preliminary results of this program are encouraging but were confounded by a lack of snow and low hunting effort during this reporting period.

Activity 8: Continue to improve communication with the public and other agencies.

We wrote a letter to the chair of the Qavilnguut (Kilbuck) Caribou Cooperative Management Working Group suggesting that we disband this group and return the public participation functions to the advisory committees and the federal RAC's. We informed the public about changes to hunting regulations in the interest of conservation and the importance of good reporting through newspaper articles and PSA's. We attended a meeting in Anchorage of a technical working group to discuss common MCH issues.

Activity 9: Develop updated population objectives in cooperation with the public and other agencies.

Population objectives for the KCH are no longer applicable since the assimilation of this herd by the MCH.

Teshekpuk Lake Herd (Unit 26A)

Activity 1: Conduct a photocensus to estimate size of the herd.

A photocensus was completed in July 2002 yielding a population estimate of 45,166 caribou.

Activity 2: Monitor distribution and movements using satellite collar data, radiotelemetry data and aerial survey observations.

We obtained weekly location maps for caribou with satellite collars from the Nome office. In cooperation with the North Slope Borough (NSB) and BLM we worked with a consulting company to analyze satellite collar data from the past 10 years. We flew VHF radio telemetry surveys throughout the year to look at movements and distribution.

Activity 3: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

We examined data from harvest surveys from villages within the range of the TCH, and used the human population to extrapolate the total number of caribou harvested per year in each village. One natural mortality event occurred during the reporting period that was reported by hunters that was likely related to icing conditions in the fall.

Activity 4: Collect harvest information through the North Slope Borough and the ADF&G Subsistence Division.

We reviewed harvest data from the NSB Department of Wildlife Management and the Department of Fish and Game's Subsistence Division. We assisted them in trying to determine relative numbers of TCH caribou harvested in each village.

Activity 5: Develop updated population objectives in cooperation with the public and other agencies.

We discussed population objectives for the TCH at NSB Fish and Game Management Committee meetings.

Activity 6: 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 meetings with the BLM Research Monitoring Team for the National Petroleum Reserve, the Subsistence Advisory Panel, the NSB Fish and Game Management Committee, the NSB Planning Department, and with oil companies to minimize the impact of oil exploration and development on the TCH.

Activity 7: Capture bulls and cows in August to attach satellite and conventional radio collars.

We captured 14 Teshekpuk caribou south of Teshekpuk Lake from September 8-9 2002, using a Robinson R-44 helicopter with a hand-held net gun. We attached 7 PTT's and 4 VHF collars to TCH cows, and 3 PTT's to TCH males. No drugs were used; caribou were restrained using blindfolds and hobbling ropes. There were no mortalities associated with capture.

From June 25 - 27 2003, we captured 28 Teshekpuk caribou, evenly distributed around Teshekpuk Lake using a Robinson R-44 helicopter with a hand-held net gun. We attached 15 PTT's and 5 VHF collars to TCH females, and 6 PTT's to TCH males . No drugs were used; caribou were restrained using blindfolds and hobbling ropes. The radio collars will be used to aid in population, productivity and movement studies. There were no mortalities associated with capture.

Activity 8: 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, and hair samples, and assessed the body condition of all captured caribou. The samples will be analyzed to look for disease, contaminants, and parasites in the caribou.

Activity 9: Conduct sex and age composition surveys during mid-summer and/or October

We did not complete summer composition surveys in 2003 due to limited helicopter availability.

Fall composition surveys were flown on 25 October 2002. We observed 3510 caribou and classified 2787 as adults and 723 as calves (21.2% calves). Of 20 adult radio-collared cows located, 14 had calves (70 calves per 100 cows).

Activity 10: Conduct aerial surveys during April and May to assess short yearling recruitment.

Short Yearling counts were flown between 1 and 6 April 2003. We located 17 collared cows, 6 of which had short yearlings at heel (35 short yearlings:100 cows). We also classified 2141 caribou in the areas surrounding the collared animals (1705 adults and 436 short yearlings). This computes to 20% short yearlings or 25.6 short yearlings:100 adults.

Activity 11: Use telemetry and ground observations to carefully monitor summer movements of Teshekpuk Herd caribou in the insect relief area.

Aerial surveys were flown to determine summer locations and ground surveys were walked to collect fecal and plant samples on 27-28 June, 12-13 July, 24-25 August, and 5-6 September 2002.

Activity 12: conduct calving location and productivity aerial surveys in June.

Calving surveys were flown on June 2-13 2003. All 31 adult collared cows that were observed were parturient based on antler status and 22 were observed with calves. Relocation surveys were flown June 24-26 and 16 of 31 cows were seen with surviving calves.

Activity 13: 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.

We conducted VHF radiotracking surveys and examined satellite collar information to estimate what percentage of the caribou harvested in each village were from the TCH. From this information we calculated that around 2400 caribou were harvested from the TCH during the reporting period.

Activity 14: Involve students in the capture operations, work with students to track satellite collared caribou movements and lecture to school classes about caribou biology.

We worked with students from Anaktuvuk Pass and Barrow who plotted satellite radiocollared caribou locations throughout the school year. We arranged for students from Anaktuvuk Pass to participate in caribou capture at Onion Portage. We gave lectures to middle school, high school, and college classes on the population dynamics of the TCH.

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

Activity 1: conduct a photocensus to estimate herd size.

Poor weather and aggregation of caribou in July 2002 prevented a photocensus. No work was completed and the census was rescheduled for July 2003

Activity 2: Conduct periodic radiotracking flights to monitor herd distribution.

Range-wide radio telemetry surveys were conducted during spring (Jan–May) and fall (Aug–Dec). Approximately two thirds of all potentially active radiocollared caribou were located during each survey.

Activity 3: Deploy a sufficient number of radiocollars to maintain a year-end sample size of at least 100 operational radiocollars on living caribou.

Thirty conventional radio collars were deployed on caribou (19 cows and 11 bulls). Additionally, 14 satellite collars were deployed (4 bulls and 10 cows). One collared animal is considered a capture mortality because it moved a short distance and died, although since the caribou was released alive, predation by wolves is another possible source of mortality.

Activity 4: Conduct aerial surveys during April and May to assess short yearling recruitment.

Short yearling surveys were conducted during April and May. We observed 19 short yearlings:100 adults.

Activity 5: Conduct aerial surveys during June to monitor initial calf production and the distribution of calving areas.

We conducted calving surveys during June and observed 68 calves:100 cows.

Activity 6: Conduct aerial surveys during October to assess herd composition and retrieve radio collars.

Helicopter unavailability precluded fall composition surveys during 2002.

Activity 7: Collect approximately 100 blood samples annually to monitor haptoglobin levels.

Ninety four blood samples (55 bulls and 39 cows) were collected. There has been no temporal trend in haptoglobin levels since 1992.

Activity 8: Monitor hunting and other mortality factors through harvest reporting, collection of biological specimens and public contacts.

Harvests were monitored through the statewide caribou harvest ticket system, the registration permit hunt, and through community harvest assessments. Approximately 15,000 caribou were taken by hunters who reside within the range of the WAH. About 1000 caribou were taken by all other hunters.

Activity 9: 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.

Caribou management was discussed at advisory committee meetings and with the WAH Working Group.

Activity 10: Involve students in the Onion Portage collaring project to improve public relations and support wildlife education.

Eight students from Noorvik participated in the caribou collaring project at Onion Portage during 4 days. Students helped by holding caribou and attaching radio collars.

Activity 11: Update population objectives by participating in a cooperative management planning process with the Western Arctic Herd Working Group. (Note: WAH Working Group meetings and process are not funded by Federal Aid. Public review and analysis of the management plan are funded by Federal Aid).

A subgroup of the WAH Working Group revised the 1984 Strategic Management Plan. The plan has been finalized and will be submitted to the Board of Game for endorsement.

Activity 12: Analyze harvest data collected from selected communities within the range of the Western Arctic Caribou Herd. (Note: Data collection using Community-based Harvest Assessments is a cooperative effort with the ADF&G Division of Subsistence, Alaska Native organizations and other resource agencies and is not funded by Federal Aid. Analysis of harvest data is funded by Federal Aid).

People who reside within the range of the WACH harvested about 15,000 caribou.

Other activities funded by federal aid on this project: None

Total Regional Segment Period Project Costs (in thousands): $227.1

Submitted by: Peter Bente, Management Coordinator

Statewide Project Costs (in thousands):
State Share = $ 160 Federal Share = $480 Total Costs = $640