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-27-5
PROJECT NR.: 3.0

WORK LOCATION: Statewide

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

PERIOD: 1 July 2001–30 June 2002

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 2001.

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

Activity 3: Provide information to the Board of Game.

Prepared data and provided information to the Board of Game as it deliberated numerous proposals regarding caribou in Region 2 during the spring 2001 meeting.

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

Surveys were conducted on all 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 post-calving photocensus in cooperation with the FWS.

The final count of caribou seen on this cooperative survey totaled 6,579, with 13% calves.

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 94 caribou killed. Few NAP caribou crossed the Naknek River during the 2001/02 winter, but approximately 10,000 Mulchatna caribou spent several months between the Naknek and Alagnak Rivers. Most of the caribou reported taken by residents of Naknek and King Salmon were probably Mulchatna caribou.

Activity 3: Conduct periodic radiotracking surveys.

Radio tracking flights were conducted 21-24 October 2001, 2-4 March 2002, 28 May 2002, and 27–28 June 2002.

Other activities funded by federal aid on this project:

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 post-calving 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:

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

Preliminary results from the 2001/02 general hunt were 43 males and 4 female caribou killed in Unit 9D and 22 males and 1 female caribou killed on Unimak Island.

Conduct fall sex/age composition surveys.

In October 2001, a total of 1,313 caribou in Unit 9D were classified with ratios of 57 bulls and 38 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.

On March 31, 2001 a survey was completed to determine minimum herd size in the Kenai Mountains Caribou herd. A total of 378 caribou was found in seven groups, ranging from 2 to 120. These results compare to 290 animals found in March 2000. No surveys were completed in 2002.

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

Harvest reports for fall 2001: 250 permits were issued (each permit for 1 caribou of either gender) and 19 caribou harvested (13 males and 6 females).

Kenai Lowland Herd (Unit 15A)

Activity 1: Conduct a post-calving aerial sex and age composition survey.

On June 19, 2001 a survey was completed on the Kenai Lowland Caribou herd to determine the minimum herd size. The herd of 128 caribou was 23 percent calves, numbering 29. Eighteen of the 99 adults were classified as mature bulls by their antler development. A warm and relatively dry spring probably caused this herd to form its post-calving aggregation earlier compared to past years, resulting in a high number of groups located and a lower than expected total number. Three cow-calf groups were found compared to one in past surveys. These results compare to 290 animals found in March 2000. No surveys were completed in 2002.

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 post-calving aerial sex and age composition survey.

On October 19, 2001 an aerial survey was completed to determine the minimum number of caribou in the Killey River/Twin Lakes herd. A total of 710 caribou were counted. These results compare to 290 animals found in March 2000. No surveys were completed in 2002.

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/Twin Lakes Caribou during fall 2001.

Hunt DC608: Hunters obtained 76 permits (each permit for 1 bull and 2 cow caribou) with 10 males and 4 females harvested. Season was August 10 to September 20.
Hunt RC610: Hunters obtained 158 permits (each permit for three females) with 40 females taken. Season was August 10 to September 20.

The Killey River and Twin Lakes herds will be considered one herd from now on and will be identified as the Killey River Herd.

Preliminary results indicate that an avalanche killed at least 150 Killey River caribou during the winter of 2001–02.

Fox River Herd (Unit 15B)

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

On October 19, 2001 an aerial survey was completed to determine the minimum number of caribou in the Fox River herd. A total of 66 caribou were counted.

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

Hunt 618: Hunters obtained ten permits with 1 male harvested in fall 2001.

Twin Lakes Herd (Unit 15B)

The Killey River and Twin Lakes herds will be considered one herd from now on and will be identified as the Killey River Herd.

Nelchina Herd (Unit 13)

Activity 1: Conduct a post-calving photocensus to determine herd size.

Estimated herd size on 8 July 2002 was 34,040 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 2001:
37 bulls/100 cows (21%)
40 calves/100 cows (22%)

Herd composition on 9 July 2002:
34 bulls/100 cows (18%)
52 calves/100 cows (28%)

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 keep them informed.

Preliminary Harvest:
982 successful hunters
978 bulls (99%) 4 cows

Preliminary Hunter Effort:
90 did not report
309 did not hunt
614 hunted unsuccessfully
982 hunted successfully

Activity 4: Replace existing radio collars.

Ten old collars were replaced on adult caribou.

Activity 5: Collar a sample of calves-of-the-year to monitor trends in body condition and productivity.

15 collars were placed on 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

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

Neonatal calf weights in 2002 were:
17.0 lbs. for male calves
16.1 lbs. for female calves

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

Activity 1: Monitor caribou distribution through relocation of radio collared caribou. Radiotracking flights conducted throughout the year. Seasonal distribution determined.

Activity 2: Conduct an aerial post-calving photocensus to estimate population of herd.

The photocensus was conducted on June 30, 2002.

Activity 3: Monitor the caribou harvest through field observations, hunter harvest reports and contact with hunters.

Reported harvest – 4,569

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

Results:

Cows (%)	Calves (%)	Bulls (%)	Total
3,947 (68.9%)	786 (13.7%)	995 (17.7%)	5,728

Calves/100 Cows	Bulls/100 Cows
19.9 Calves/100 Cows	25.2 Bulls/100 cows

Nushagak Peninsula Herd (Units 17A, 17C)

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

Conducted winter census. Results:1,000 caribou counted.

Activity 2: Develop a draft interagency management plan.

The Nushagak Peninsula Caribou Management Plan was finalized in 1994 and we are currently working under the guidance of the plan. Because the management plan is complete and is being implemented, this activity will be eliminated in future reports.

Activity 3: In cooperation with FWS, conduct fall sex and age population composition surveys to determine status, trend, productivity and mortality of caribou.

Results:

Cows (%)	Calves (%)	Bulls (%)	Total
333 (55%)	116 (19%)	153 (25%)	602

Calves/100 Cows	Bulls/100 Cows
34.8 Calves/100 Cows	45.9 Bulls/100 cows

Other activities funded by federal aid on this project: None.

Total Regional Segment Period Project Costs (in thousands): $159.1

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.

Activities by Herd and Unit

Chisana Herd (Unit 12)

Activity 1: Revise population objectives.

Implemented planning process to revise population objectives.

Activity 2: Estimate status, trends, and recruitment through aerial surveys.

Completed a herd census on 23 June 2002 finding 305 caribou of which, 11% were calves. Based on pregnancy and birth rate estimates, 85% of the calves died between May 20-June 23.

Conducted 5 radiotracking surveys, (October, February, March, May, and March) monitoring seasonal movements and range use, and mortality. Annual mortality for cows ≥ 2 was 15%.

Activity 3: Determine pregnancy rate, peak of calving, parturition and calf survival.

During March 2002, in cooperation with Yukon Department of Renewable Resources captured 24 Chisana cows to monitor herd condition and estimate pregnancy rate. Using a serum progesterone assay testing technique, the herd's pregnancy rate was estimated to be 95%. We deployed radio collars on 11 of these cows to assist with herd monitoring.

Conducted a herd pregnancy and productivity survey on 1 June 2002 and found 100% pregnancy for cows ≥ 3 years old. None of the 2-year olds observed were pregnant.

Activity 4: Conduct a fall sex and age composition count.

Completed a fall sex and age composition survey on 1 October 2001 finding 4 calves/100 cows and 23 bulls/100 cows. The composition sample was 375 caribou, representing about 95% of the herd.

Activity 5: In cooperation with the Yukon Department of Renewable Resources and the National Park Service, continue developing a draft Chisana Caribou Management Plan.

On June 24, 2002, met with biologists from Yukon Department of Renewable Resources and National Park Service, representatives of the White River and Kluane First Nation, several Yukon and Alaskan guides and residents of the Chisana area in Tok to discuss management strategies to help the Chisana herd recover. All participants agreed that steps to halt the herd's decline had to be implemented as soon as possible. We also agreed to develop a draft Chisana caribou management plan by August 2002.

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

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

Flew fall composition survey and sampled 467 caribou with a composition of 39 bulls:100 cows and 11 calves:100 cows.

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

Conducted an aerial census of the Macomb herd and estimated 500–550 caribou.

Activity 3: Monitor harvest and analyze harvest data.

Monitored harvest of 43 caribou from registration permit hunt RC 835 and analyzed 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.

Purchased 8 radio collars to deploy on Rainy Pass and Big River/Farewell Herd animals during FY 03.

Activity 2: Monitor harvest and analyze harvest data.

Monitored harvest and analyzed data that indicated 3 Sunshine Herd, 11 Tonzona, 41 Big River/Farewell and 24 Rainy pass caribou were taken.

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 2001 (39 bulls:100 cows, 9 large bulls:100 cows, 13 calves:100 cows, n = 1378).

Conducted a photocensus of the Delta Caribou Herd in June (Preliminary 2002 minimum herd size < 3000).

Activity 2: Monitor harvest and analyze harvest data

Monitored effort and the timing and distribution of harvests through drawing permit reports (RY 2001 100 permits, harvest = 32 bulls).

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

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

Completed a herd pregnancy rate (95% for cows ≥ 3 years old) survey, estimated annual adult (> 93%) and calf (49%) survival using radiotelemetry, and conducted a fall sex and age composition survey (calf and bull:100 cow ratios were 38 and 49/100; 17% of the herd sampled)

Coauthored "Reducing Mortality on the Fortymile Caribou Herd" research report.

Monitored and evaluated the continuing effects of nonlethal wolf control on herd growth.

Activity 2: Conduct a photocensus to determine herd size.

Completed a post-calving photocensus (photos not yet counted)

Activity 3: Administer and monitor joint state and federal fall and winter Fortymile caribou registration permit hunts

Administered 4 registration permit hunts covering Unit 20E and portions of Units 20B, 20D, and 25C with the combined quota of 850 caribou (212 cows). The winter hunt in Units 20E and eastern 25C was closed early by emergency order. Annual harvest was 690 caribou of which 195 were cows.

Activity 4: Monitor harvest and analyze harvest data.

Monitored harvest and analyzed harvest data.

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

Maintained a Fortymile caribou information recording informing hunters about the status of the different registration hunts.

Maintained a Fortymile caribou/moose website that explained management direction, population trends, and hunting regulations.

Activity 5: 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 informational newsletter, explaining the status, and trend of the Fortymile herd, current management and research programs and results, and hunting and viewing opportunities. Over 5,000 were sent to Alaska and Yukon residents, schools, agencies, special interest groups and boards and legislators. Also gave talks about Fortymile

caribou at the University of Alaska, Fairbanks, Tok Visitor Center, and via teleconference to Houghton University in New York.

Activity 6: Develop roadside educational signs about Fortymile caribou to be placed on the Steese and Taylor Highways.

Sign construction will be completed in 2003.

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 cooperation with BLM, conducted aerial photocensus of Ray Mountain. Herd and counted 1,695 caribou on 9/23/01;counted 489 caribou in the Wolf Mountain herd on 6/27/01; counted 105 caribou in the Galena Mountain herd on 6/20/01.

Activity 2: Monitor harvest and analyze harvest data.

Monitored harvest and analyzed harvest data.

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

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

Collaborated with biologists from USFWS and Yukon Department of Environment to determine age/sex composition of the herd during March 2002.

Captured 11 caribou cows to deploy 10 new VHF collars and replace 1 existing satellite collar during March 2002.

Activity 2: Conduct calving ground surveys.

Conducted radiotracking flights during 1-7 and 25-26 June 2002 to determine parturition rates and survival of calves during June.

Activity 3: Conduct a photocensus to determine population size.

Completed a photocensus and counted 100,307 yearling or adult caribou, 18,303 calves, and 4,442 that were not classified by age, for a total count of 123,052 (Objective 1).

Activity 4: Replace radio collars as needed to maintain adequate sample size to monitor the herd.

Activity 5: Monitor harvest and analyze harvest data.

Monitored harvest. Preliminary data from harvest tickets indicate that 92 caribou were harvested, with anecdotal reports local residents harvested an additional 300 to 500 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 (26 calves:100 cows, 57 bulls:100 cows).

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

Radiocollared 9 four-month old female caribou to maintain sample size.

Activity 4: Monitor harvest and analyze harvest data.

Monitored general hunt (reported harvest = 20 male, 6 female, 1 unk.) and registration permit hunt RC879 (reported harvest=14 males, 1 female)

Central Arctic Caribou Herd (Unit 26B)

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

Captured and radiocollared 21 female caribou.

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

Completed a fall composition count (n=4092) in October and estimated parturition rates (87% for females ≥ 4 years old; n=54) and late June calf:cow ratios (79% for females ≥ 4 years old; n=52) of radio-collared females.

Activity 3: Monitor harvest and analyze harvest data.

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

Other activities funded by federal aid on this project: None

Total Regional Segment Period Project Costs (in thousands): $232.6

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 an annual survey and inventory performance report.

Performance report for Kilbuck, Teshekpuk and Western Artic herds were prepared August 2002 and submitted to HQ early September 2002

Activity 2: Provide information to the Board of Game.

Unit 18. Unit 18. Information regarding caribou was presented to the Board of Game for their deliberation of proposals to establish a nonresident caribou season south of the Yukon River of September 1 through October 1 and to establish a resident caribou season of August 1 through March 31 in Unit 18.

Western Arctic Herd. We prepared data and provided information regarding the population status of the Western Arctic Caribou Herd to the BOG during November 2001. Additionally, recommendations regarding population and harvest objectives were presented at this meeting. As a result of recent westward expansion of the winter range in Unit 22 on the Seward Peninsula, the Board established permanent hunting seasons in the portion of Unit 22E east of the Sanaguich River drainage and in the portion of Unit 22D, including the Kuzitrin and Agiapuk drainages. The season will be identical to that in other parts of the Western Arctic Caribou Herd range. Additionally, same-day-airborne hunting is now allowed for caribou in Unit 22, from Jan. 1-April 15. The hunter must be at least 300 feet from the plane.

Teshekpuk Lake Herd. We presented information regarding the population status of the Teshekpuk Caribou Herd to the BOG during November 2001. Additionally, recommendations regarding population and harvest objectives were also presented at this meeting.

Activities by Herd and Unit

Unit 18

Activity 1: Conduct fall aerial sex and age composition counts.

We conducted a composition survey in October 2001. During the survey we classified 2051 caribou, including 1299 cows, 286 calves, 223 small bulls, 153 medium bulls, and 90 large bulls. The caribou classified were from the Mulchatna Herd (MCH); these data were pooled with other MCH data.

Activity 2: Conduct spring aerial surveys of the Kilbuck Caribou population (KCH) to assess recruitment and distribution.

We classified 1131 caribou during a spring composition count in the Kilbuck Mountains. This included 1095 bulls, 27 cows, 4 calves, and 5 unknowns during 18 hours of flying. The high proportion of bulls suggests that caribou in the Kilbuck Mountains are MCH caribou.

Activity 3: Monitor the distribution of radiocollared caribou in the Kilbuck Caribou population.

We searched for caribou wearing radio collars in the Kilbuck Mountains during fall to assist with the fall composition survey. We found several caribou from the MCH. We searched again during the spring and found no radiocollared caribou during 18 hours of flying.

Activity 4: Determine the extent of movement and distribution of the Kilbuck Caribou herd and range overlap with the nearby Mulchatna caribou herd.

No radio collars deployed on caribou in Unit 18 were found in Unit 18 during the calving period this year, same as the past several years. Nearly all radio collars were found in Unit 17 among calving MCH caribou. Over 90% of the caribou classified during spring composition counts in the Kilbuck Mountains were bulls with very few calves found. Since the arrival and annual departure of MCH caribou, extensive trailing has developed leading out of Unit 18 through the KCH's traditional calving areas. We have seen the number of caribou calving in Unit 18 dwindle to a few scattered individuals. The consistent explanation for these data is that the KCH has joined the MCH.

Activity 5: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

Harvest information is derived from harvest reports. Unit 18 hunters use these reports so infrequently that the information derived from them is misleading. To improve compliance with the reporting requirement, we initiated an incentive program involving a prize drawing. Preliminary results are encouraging.

Activity 6: Continue to improve communication with the public.

We reported the results of our caribou surveys to the chair of the Qavilnguut (Kilbuck) Caribou Cooperative Management Working Group. 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.

Activity 7: Develop updated population objectives in cooperation with the public and other agencies.

We discussed the consolidation of the KCH and the MCH with the public, the Qavilnguut (Kilbuck) Caribou Cooperative Management Working Group, and the USFWS in Bethel, and we discussed how this affects the population objectives and harvest objectives in Unit 18.

Teshekpuk Lake Herd (Unit 26A)

Activity 1: 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 2: 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. We did not detect any large natural mortality events during the reporting period

Activity 3: 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 4: 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 5: 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 6: Conduct calving location and productivity aerial surveys in June.

Calving surveys were flown on 2, 5, 7, 10, 11, and 12 June 2002. We located 31 collared cows and 22 of these had calves at heel, 1 had soft antlers (nonparturient), and 8 apparently had calves but lost them (no antlers and no calf) for 71% calving success. Most of the calves were born before 2 June, which was earlier than normal. Early snow melt appeared to result in early calving. Most of the calves were born east and northeast of the lake.

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

We captured 13 Teshekpuk Caribou, primarily west of Teshekpuk Lake, from July 25 - 27 2001, using a Robinson R-44 helicopter with a hand-held net gun. We attached 6 PTT's and 3 VHF radio collars to TCH males and 4 PTT's to TH females. We also attached 10 PTT's to CAH females that were located between Teshekpuk Lake and the Colville River. No drugs were used - caribou were restrained using blindfolds and hobble ropes. The radio collars were used to aid in population, productivity and movement studies.

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, and measured and weighed the female caribou. The samples were analyzed to look for disease, contaminants, and parasites in the caribou.

Activity 9: Use satellite collar information and conduct VHF radio collar 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 10: Conduct sex and age composition surveys during mid-summer to determine relative numbers of bulls, cows and calves.

We did not complete summer composition surveys in 2001 due to unacceptable weather conditions when the helicopter was available.

Activity 11: Involve students in the capture operations, work with students to track satellite collared caribou movements and lecture to high school and college 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 periodic radiotracking flights to monitor herd distribution in relation to reindeer herds and development projects.

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 2: Replace radio collars to maintain a year-end sample size of at least 100 operational radio collars on living caribou.

Twenty one conventional radio collars were deployed on caribou (15 cows and 6 bulls). Additionally, 15 satellite collars were deployed on cows.

Activity 3: Conduct aerial surveys during April and May to assess short yearling recruitment.

Short yearling surveys were conducted during April and May. We observed 15 short yearlings:100 adults.

Activity 4: Conduct aerial surveys during June to monitor initial calf production and the distribution of calving areas.

We conducted calving surveys during June and observed 78 calves:100 cows.

Activity 5: Conduct aerial surveys during October to assess herd composition and retrieve radio collars.

We conducted fall composition surveys during November and observed 37 calves:100 cows and 38 bulls:100 cows. No radio collars were retrieved at this time.

Activity 6: Collect approximately 100 blood samples to monitor the incidence of selected diseases and pathogens.

Ninety blood samples (40 bulls and 50 cows) were collected. These sera have not been analyzed to date.

Activity 7: 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 15,000-20,000 caribou were taken by all hunters.

Activity 8: Improve compliance with regulations and reporting requirements by regularly communicating changes and requirements to the public.

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

Activity 9: As part of our method of improving relations with the public, involve students in the Onion Portage collaring activity.

Sixteen students from Point Hope and Ambler participated in the caribou collaring project at Onion Portage during 4 days. Students helped by holding caribou and attaching radio collars.

Activity 10: Develop updated population objectives in cooperation with the public and other agencies.

A subgroup of the WAH Working Group revised the 1984 Strategic Management Plan. The draft plan has been distributed to the public for review. Additionally, the department provided recommendations to the BOG on population and harvest objectives during November 2001.

Activity 11: Collect harvest data from selected communities within the range of the Western Arctic Caribou Herd using community harvest assessment techniques in coordination with the Division of Subsistence, Alaska Native organizations and other resource agencies.

No federal-aid funded work was completed under this activity.

Other activities funded by federal aid on this project:

Teshekpuk Lake Herd (Unit 26A)

Activity 1: Capture caribou without the use of drugs and attach radio collars to maintain approximately 40 operational radio collars.

We captured caribou with net guns and restrained them using blindfolds and hobble ropes. No drugs were used. Radio collars were attached to maintain 40 operational radio collars in the herd.

Activity 2: Conduct short yearling recruitment aerial surveys during April and May .

Short Yearling counts were flown on 4 April 2002. We located 22 collared cows, 2 of which had short yearlings at heel (9 short yearlings:100 cows). We also classified 2270 caribou in the areas surrounding the collared animals (2070 adults and 200 short yearlings). This computes to 8.8% short yearlings or 9.6 short yearlings:100 adults. This is the lowest percentage of short yearlings we have ever recorded for the TCH.

Activity 3: Conduct aerial surveys during October to assess herd composition.
Fall composition surveys were flown on 27 October 2001. We observed 1458 caribou and classified 1295 as adults and 163 as calves (11.2% calves). This is the lowest percentage of calves we have ever recorded during a fall survey.

Total Regional Segment Period Project Costs (in thousands): $272.3

Submitted by: Peter Bente, Wildlife Biologist III

Statewide Project Costs (in thousands):
State Share = $ 166 Federal Share = $498 Total Costs = $664