

**FEDERAL AID  
ANNUAL PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME  
DIVISION OF WILDLIFE CONSERVATION  
PO Box 25526  
Juneau, AK 99802-5526

**CARIBOU  
ANNUAL SURVEY AND INVENTORY**

**STATE:** Alaska

**GRANT AND SEGMENT NR.:** W-33-9

**PROJECT NR.:** 3.0

**PERIOD:** 1 July 2010 – 30 June 2011

**PROJECT LOCATION:** Statewide

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

**REPORT DESCRIPTION:** This performance report describes caribou survey and inventory activities. Regionwide activities are listed before specific activities by herd.

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**Region II**

**Regionwide:**

Activity 1: Prepare biennial caribou management reports.

Caribou management report was submitted to Headquarters for publishing during the summer 2011.

Activity2: Conduct fall sex and age population composition surveys to determine status, trend, productivity and mortality of caribou.

Surveys were only completed for the Kodiak Herd. See individual unit activities below.

**Activities by Unit:**

**Units 7&15**

ACTIVITY 1: Kenai Lowland and Mountain Herd:

1. Conduct a post-calving aerial sex and age composition survey.  
No surveys were conducted due to budget constraints.
2. Capture up to 15 caribou and replace expiring radio collars.  
No captures were conducted due to budget constraints.
3. Monitor the caribou harvest through field observations, hunter harvest reports and contact with hunters.

There was not an open hunting season for Kenai Lowlands caribou herd during the reporting period. Nineteen caribou (13 males and 6 females) were taken in the Kenai Mountain Herd during the reporting period.

ACTIVITY 2: Killey River and Fox River Herds:

1. In cooperation with the USFWS, conduct a post-calving aerial sex and age composition survey.

No surveys were conducted during the reporting period on the Fox River herd or the Killey River herd due to budget constraints..

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

Five bulls were taken in the Killey River Herd during the reporting period. There was not an open hunting season for Fox River Herd during the reporting period.

### **Unit 8**

**Kodiak Herd:** Two surveys were conducted in October of 2010. We estimate the herd size to be between 250-300 caribou and the population stable.

#### **Kodiak Herd:**

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

**Kodiak Herd:** Hunters harvested 13 caribou (11 bulls, 2 cows) in 2010/11, down from the 2009/10 harvest of 18 caribou, and below the 5-year average of 18.4 caribou.

**Submitted by:** Gino Del Frate

**Date:** 2 September 2011

### **Region III**

#### **Regionwide Activities**

ACTIVITY 1: Monitor harvest and analyze harvest data.

Monitored preliminary harvest of 1964 caribou and analyzed harvest data.

ACTIVITY 2: Capture approximately 50 caribou to deploy radiocollars and maintain an adequate sample size of collared animals for surveys.

Deployed 121 radio collars in various herds to maintain adequate sample of radioed animals to conduct surveys, with 1 mortality due to collaring.

ACTIVITY 3: Provide caribou management information to State and Federal regulatory processes.

Provided information to 15 State fish and game advisory committees, State Board of Game and 3 Federal regional councils.

ACTIVITY 4: Prepare a biennial caribou management report.

Prepared biennial caribou management reports.

#### **Activities by Unit [and/or herd]**

##### **Units 12 and 20D (portions) Macomb Caribou Herd**

ACTIVITY 1: Estimate status, trends, and productivity from aerial surveys.

Conducted aerial surveys to determine herd distribution and productivity.

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

Conducted a photo census to determine herd size of 1,809.

ACTIVITY 3: Conduct a prehunt aerial distribution survey to assist with managing the hunt by EO.

Conducted a prehunt aerial distribution survey to determine most caribou were located in the Macomb Plateau Controlled Use Area.

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

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

Conducted surveys in June 2011 within the range of the Beaver and Sunshine caribou herds and found 434 caribou including 72 calves.

**Unit 20A Delta Herd**

ACTIVITY 1: Estimate productivity and bull:cow ratios from fall sex and age composition counts.

Conducted fall composition survey (61 bulls and 28 calves per100 cows).

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

Conducted photocensus summer 2011 (results pending).

**Chisana Caribou Herd**

ACTIVITY 1: Participate in Chisana management planning process.

Worked cooperatively with Yukon Department of Environment, Yukon First Nations, Tetlin Wildlife Refuge and US Park Service to draft a draft management plan for the Chisana Herd.

ACTIVITY 2: Estimate productivity and bull:cow ratios from fall sex and age composition counts.

Completed fall composition count in cooperation with NPS and Yukon Wildlife staff; observed ratios of 23 calves:100cows and 42 bulls:100 cows.

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

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

Conducted a fall sex and age composition survey (calf and bull/100 cow ratios were 32 and 43/100; 14% of the herd sampled).

ACTIVITY 2: Conduct a photocensus to determine herd size.

Photocensus was not completed because of poor census conditions.

ACTIVITY 3: Conduct aerial distribution surveys before and during the hunting seasons and conduct hunter check stations to assist with managing harvest.

Conducted aerial distribution surveys before and during the fall and winter hunts; and no hunter checkstations conducted.

ACTIVITY 4: Work with land agencies, landowners, and developers to mitigate developments detrimental to Fortymile caribou.

Worked with the BLM, through the habitat division, on proposed BLM/Doyon land conveyance and development of the BLM's new Eastern Interior Land Management Plan; and provided comments related to impacts on game populations and habitat in the area.

## **Units 20F, 21C, 21D, 24, and 25A Galena Mountain, Ray Mountains, and Wolf Mountain Caribou Herds**

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

In cooperation with USFWS, conducted aerial surveys of Galena Mtn. and Wolf Mtn. Herds and counted 69 on 06/22/10 and 368 on 06/22/10, respectively.

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

Activity 1: Conduct fall sex and age composition survey.

Conducted a sex and age composition survey in October (23 calves:100 cows, 41 bulls:100 cows).

ACTIVITY 2: Conduct radiotelemetry flights to monitor herd demographics.

Conducted radiotelemetry flights in May, June, July, and October to monitor herd demographics.

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

ACTIVITY 1: Estimate parturition rates and calf:cow ratios in June by radio-tracking collared females.

Preliminary estimated parturition rate of 86% for radiocollared cows  $\geq 4$  years of age ( $n = 41$ ), 3 week calf survival of 59% for calves observed in early June, and late June calf:cow ratio for radiocollared cows  $\geq 4$  years of age of 65 calves:100 cows.

ACTIVITY 2: Conduct a photocensus to determine herd size.

Conducted no photocensus because one complete last fiscal year.

ACTIVITY 3: Conduct household harvest surveys.

Household surveys were not conducted due to lack of staff availability with Division of Subsistence and inadequate funding.

## **Units 26B and 26C Central Arctic Caribou Herd**

ACTIVITY 1: Conduct fall sex and age composition surveys.

Conducted a fall sex and age composition survey on 13-14 October 2010, with 3,787 caribou classified resulting in a bull:cow ratio of 50 bulls per 100 cows and a calf:cow ratio of 46 calves per 100 cows.

ACTIVITY 2: Estimate parturition rates and calf:cow ratios in June by radio-tracking collared females.

Preliminary estimated parturition rate among radiocollared females of 87% for females  $\geq 3$  year old ( $n=39$ ); and late June calf:cow ratios among radiocollared females of 76% for females  $\geq 3$  years old ( $n=43$ ).

ACTIVITY 3: Work with the oil industry and other agencies to minimize disturbance to caribou from resource development.

Worked with oil industry via phone and email to minimize disturbance to caribou.

**Submitted by:** Roy A. Nowlin, Management Coordinator

**Region IV**

**PROJECT LOCATION:** Game Management Units 9-11, 13, 14A, 14B, 16, and 17

**Regionwide**

**ACTIVITY 1:** Prepare biennial caribou management reports.

Caribou management reports were drafted and submitted to the Region for editing.

**ACTIVITY 2:** Conduct fall sex and age population composition surveys to determine status, trend, productivity and mortality of caribou.

	<b>Bulls (%)</b>	<b>Cows (%)</b>	<b>Calves (%)</b>	<b>Calves/ 100 Cows</b>	<b>Bulls/ 100 Cows</b>
<i>Mulchatna</i>	23	53	24	45	42
<i>Nelchina</i>	29	46	25	55	64
<i>Northern Alaska Peninsula</i>	17	70	13	18	25
<i>Nushagak Peninsula</i>	12	73	14	20	17
<i>Southern AK Peninsula</i>	16	58	27	47	28
<i>Unimak</i>	7	86	7	8	8

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

	<b>Hunters</b>	<b>Bulls</b>	<b>Cows</b>	<b>Unknown</b>	<b>Total Harvest</b>
<i>Mulchatna</i>	694	247	213	4	464
<i>Nelchina</i>	2225	1340	561	3	1904
<i>Northern Alaska Peninsula</i>	3	0	0	0	3
<i>Nushagak Peninsula</i>	0	0	0	0	0
<i>Southern Alaska Peninsula</i>	0	0	0	0	0
<i>Unimak</i>	0	0	0	0	0

The state hunting seasons for the Northern Alaska Peninsula caribou herd, Nushigak Peninsula caribou herd, the Southern Alaska Peninsula caribou herd, and the Unimak caribou herd were not open during this reporting period.

**Project Activities by Herd**

**Mentasta Herd:**

**ACTIVITY 1:** Monitor caribou seasonal distribution through relocation of radio-collared caribou.

No monitoring of the Mentasta Herd occurred. The National Park Service monitors the distribution of this herd.

**ACTIVITY 2:** Capture up to 15 caribou and replace expiring radio collars.

No captures were conducted on the Mentasta Caribou Herd. The National Park Service captures and replaces radio collars on this herd.

**Mulchatna Herd:**

ACTIVITY 1: Monitor caribou distribution through relocation of radio-collared caribou.

Radio-tracking flights conducted throughout the year. Seasonal distribution determined.

ACTIVITY 2: Conduct an aerial post-calving photo-census to estimate population size.

No post-calving photo-census of the Mulchatna Herd was conducted during summer of 2010 due to poor weather conditions.

ACTIVITY 3: Capture up to 20 caribou and replace expiring radio collars.

A total of 27 radio-collars were deployed on adult Mulchatna caribou.

**Nelchina Herd:**

ACTIVITY 1: Conduct a post-calving census and sex and age composition survey.

On 30 June 2011, a post-calving census, and a sex and age composition survey were flown. A total of 40,915 caribou were observed during a conventional census. A total of 4,715 caribou were observed during the composition survey: 847 (18%) bulls, 2,378 (50%) cows, and 1,490 calves (32%).

ACTIVITY 2: Monitor caribou seasonal distribution through relocation of radio-collared caribou.

Caribou locations were monitored via fixed-wing flights in August 2010, December 2010, and April 2011.

ACTIVITY 3: Capture up to 15 caribou and replace expiring radio collars.

Due to herd growth and above average mortality of radio-collared animals the previous few years, the radio-collared sample of caribou was too low to adequately manage and track the herd. Additional radio collars were deployed during this reporting period. In October 2010, 20 caribou calves (4-month old) were captured and fitted with radio collars. In April 2011, an additional 20 random adults were captured; 19 were fitted with radio collars.

ACTIVITY 4: Collect a sample of up to 20 calves to monitor trends in body condition.

No calves were collected due to suspension of body condition monitoring for this season.

**Northern Alaska Peninsula Herd:**

ACTIVITY 1: Conduct an aerial post-calving photocensus to estimate population size in cooperation with the USFWS.

No photocensus was conducted in 2010-11, due to poor weather conditions.

ACTIVITY 2: Conduct periodic radio-tracking surveys to determine distribution, movement and areas of preferred use.

Radiotracking flights were conducted during October 2010 and during January, April, May, and June 2011.

**Nushagak Peninsula Herd:**

ACTIVITY 1: In cooperation with the USFWS, conduct a census and radio-tracking surveys to determine distribution, movements, and areas of preferred use.

A census conducted on February 4, 2011 estimated a minimum population of 801 caribou. Radio-tracking flights conducted by state and federal staff throughout this fiscal year to note distribution and movements.

**Southern Alaska Peninsula Herd:**

Activity 1: Conduct an aerial post-calving photocensus of the herd to estimate population size and a sex and age composition survey.

No photocensus was conducted in 2010-11 due to poor weather conditions.

Results of fall 2010 composition survey:

<b>Cows (%)</b>	<b>Calves (%)</b>	<b>Bulls (%)</b>	<b>Total</b>
305 (58)	142 (27)	85 (16)	532

<b>Calves/100 Cows</b>	<b>Bulls/100 Cows</b>
46.6	27.9

**Unimak Herd:**

ACTIVITY 1: Conduct an aerial post-calving photocensus of the herd to estimate population size and a sex and age composition survey.

No photocensus was conducted in 2010-11 due to poor weather conditions.

Results of fall 2010 composition counts:

<b>Cows (%)</b>	<b>Calves (%)</b>	<b>Bulls (%)</b>	<b>Total</b>
245 (86)	20 (7)	19 (7)	284

<b>Calves/100 Cows</b>	<b>Bulls/100 Cows</b>
8.2	7.8

**Submitted by:** Lem Butler, Region IV Management Coordinator

**Region V**

**Regionwide Activities:**

ACTIVITY 1: Prepare biennial regional caribou management reports.

A caribou management report was prepared during this reporting period.

ACTIVITY 2: Provide information to State and Federal regulatory processes on caribou management.

Area management staff reviewed State and Federal regulatory proposals, attended regulatory process meetings, and presented brown bear information to the State Board of Game, State Fish and Game Advisory Committees, Federal Subsistence Board, and Federal Subsistence Regional Advisory Councils.

**Activities by Herd or Unit**

**Unit 18:**

ACTIVITY 1: 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 radio telemetry flights in October 2010 to support Mulchatna caribou composition surveys.

ACTIVITY 2: 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, none were observed or reported in this area during this reporting period.

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

We assisted with fall sex and age composition count in October 2010 by radiotracking caribou for an R-44 helicopter from Dillingham used to classify Mulchatna herd caribou. The results from those flights are listed in the GMU 17 section.

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

Lack of a pilot/aircraft prevented us from conducting spring recruitment and distribution surveys in May 2011.

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

Poor weather prevented the Mulchatna caribou herd from being photographed in July 2010.

ACTIVITY 6: 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.)

Mulchatna caribou were collared in GMU 17 during this reporting period. The results from those deployments are listed in the GMU 17 section.

ACTIVITY 7: 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. Reported harvest from the MCH is 385 caribou.

ACTIVITY 8: Continue to improve communication with the public.

We discussed caribou issues with advisory committees, other agencies, and the public.

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

We discussed issues with other area and regional offices and agency biologists to address common needs related to the Mulchatna caribou herd, including population objectives.

**Teshkepuk Herd (Unit 26A):**

ACTIVITY 1: Monitor distribution and movements using satellite collar data, radiotelemetry data and aerial survey observations.

We looked at distribution maps throughout the year to monitor movements of satellite collared bulls and cows. Satellite collars and VHF radiotracking data revealed that a

large proportion of the herd wintered in northwestern Unit 26A with a small proportion wintering in the central Brooks Range west of the Koyukuk River drainage. Calving was distinctly different than 1990-2009, with a large number of caribou calving well outside historical calving areas, similar to 2010.

ACTIVITY 2: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

Field observations and public reports indicated that the mortality rate in the herd during the past year was normal with no significant die-offs reported. The mortality rate of collared females was 19% (n=68), substantially higher than the long term average of 14%. This mortality rate includes a higher number of yearlings than usual, and may be slightly inflated as a result.

ACTIVITY 3: Collect harvest information through the North Slope Borough and the ADF&G Subsistence Division.

No harvest data were collected during the reporting period.

ACTIVITY 4: Develop updated population objectives in cooperation with the public and other agencies.

We were unable to specifically discuss population objectives in any public forum.

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 2 meetings related to the TCH and development concerns. We continue to work cooperatively with BLM, oil companies, and consultants to address management and mitigation concerns.

ACTIVITY 6: Capture or recapture up to 45 adult caribou to attach satellite, GPS, and conventional radiocollars. Pathfinder continuous track and photographic technology may be added to some of the GPS collars.

Using an R-44 helicopter and hand-held net gun, we captured 24 TCH cows and 4 bulls. We attached 11 VHF collars, 8 PTT collars and 9 GPS collars. We replaced 14 collars (VHF and GPS) that were nearing their end of their battery life. We used blindfolds and hobbling equipment to restrain caribou. No drugs were used. There were 2 capture mortalities. The current number of radiocollared caribou is 79, including 40 PTT and GPS collars, and 39 VHF transmitters.

ACTIVITY 7: Weigh, measure and collect blood, fecal and hair samples from all captured adult 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 28 caribou that were captured (Activity 6). The blood, fecal and hair samples are being analyzed as part of cooperative projects with the North Slope Borough.

ACTIVITY 8: Capture and euthanize up to 10 adult caribou for thorough health assessment, including disease and parasite prevalence, body condition, and contaminant and trace mineral levels.

This activity was not pursued during this period due to extensive sampling (n=20) that occurred in 2008-2009.

ACTIVITY 9: Capture up to 50 calf caribou that will be weighed and measured.

We captured and weighed 70 neonates as part of a cooperative calf survival project.

Mean weight of the combined sample of males and females was 5.7 kg.

ACTIVITY 10: Determine fall composition (bulls, cows, calves) using helicopter surveys during October.

Fall composition surveys were flown on 12-14 October 2010 with fixed-wing aircraft and 21-22 October with a helicopter. A total of 5548 caribou were classified in the vicinity of radiocollared caribou with fixed wing aircraft, and we found 28 calves:100 adults. Using a helicopter a week later, we found 29 calves:100 cows and 46 bulls:100 cows; the distribution of caribou had changed dramatically in the interval between surveys.

ACTIVITY 11: Conduct aerial surveys during April and May to assess short yearling recruitment.

Short yearling surveys were flown on 11-14 April 2011. We located 48 radiocollared cows. A total of 3653 caribou were classified in the vicinity of radiocollared caribou and we found 13 short yearlings:100 adults. This is lower than the 10-year average of 17 short yearlings:100 adults.

ACTIVITY 12: Use telemetry and ground observations to carefully monitor summer movements of Teshekpuk Herd caribou.

We monitored the distribution of TCH caribou on and near their insect relief areas using a combination of satellite telemetry and radio tracking flights. Most TCH animals were south and west of Teshekpuk Lake from mid-June until late June, then used the coast between Barrow and Harrison Bay extensively during July, and were widely distributed between Wainwright and the Colville River by mid-August.

ACTIVITY 13: Conduct calving location and productivity aerial surveys in June.

Calving surveys were conducted on 3-12 June 2011. We located 47 adult cows. The parturition rate was 55%, 16 cows were seen with calves (34 %). 5 of the 47 adults cows had visible soft antlers at the time of the survey. Calving was concentrated in two areas, one well to the west of areas typically used in the past 20 years, and the other within the area most frequently used in the past, southeast of Teshekpuk Lake.

ACTIVITY 14: 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.

Satellite collar information was 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. Analyses comparing relative caribou density to spatially explicit harvest locations were performed to estimate the proportional harvest from different caribou herds. These analyses indicate that the majority of caribou taken in Atkasuk, Barrow and Nuiqsut are likely from the TCH (98%, 97% and 86%, respectively).

ACTIVITY 15: Involve students in the capture operations, work with students to track satellite collared caribou movements and lecture to school classes about caribou biology.

This activity was not scheduled due to conflicts between field activities and classroom sessions.

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

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

The July 2009 photocensus was corrected during this reporting period after discovering an error made during the counting process. The adjusted herd size is 348,000. We prepared for a 2011 photocensus by mobilizing a field camp in late June. The herd was photographed in July 2011 (after the reporting period).

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

The WAH was radiotracked throughout the reporting period by staff located in Barrow, Nome, Kotzebue and Fairbanks.

ACTIVITY 3: Deploy approximately 30 radiocollars to maintain a year-end sample size of at least 100 operational radiocollars on living caribou.

40 radio collars (15 GPS, 20 satellite, and 5 VHF) were deployed in the WAH during September 2010; 4 collars were deployed on bulls and 36 on cows.

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

We classified 12,374 caribou (11,316 adults and 1,058 calves) during spring 2011 and observed 9 calves:100 adults.

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

We visually located 74 radiocollared female caribou and observed a ratio of 77 neonates:100 cows in June 2011.

ACTIVITY 6: Conduct aerial surveys during October to assess herd composition and retrieve radiocollars.

We observed 9127 caribou during October 2010: the ratios were 49 bulls:100 cows and 35 calves:100 cows.

ACTIVITY 7: Collect blood samples from approximately 100 captured caribou to monitor the incidence of selected diseases and pathogens.

We collected a blood sample from 60 caribou during September 2010. Eight individuals had elevated haptoglobin levels. *Brucella suis* results are not available at this time.

ACTIVITY 8: Collect mandibles from up to 400 caribou annually to monitor body size, body condition and age structure.

We collected 155 mandibles during this reporting period. Jaws were measured using CARMA protocol to monitor size; a tooth was extracted to determine age; and marrow from fresh jaws was weighed to determine body condition. Analyses are not yet complete.

ACTIVITY 9: Monitor hunting and other mortality factors through harvest reporting, collection of biological specimens and public contacts.

Some mandibles were collected from hunters during the reporting period (see Activity 8 above). Caribou were unavailable to many communities in Units 22 and 23 during this reporting period because of the timing and their distribution. As a result, subsistence and recreational harvest levels were low compared to previous years. As in the past, most visiting hunters hunted in Unit 23 during the 2010-2011 regulatory year.

ACTIVITY 10: Capture and euthanize 10-20 adult caribou for thorough health assessment, including disease and parasite prevalence, body condition, and contaminant and trace mineral levels.

Eleven caribou were collected at Onion Portage during September and necropsied to assess their health. Laboratory results are not yet complete but gross characteristics suggested that WAH caribou are healthy and were in good body condition.

ACTIVITY 11: 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 hunting regulations and harvest reporting requirements.

ACTIVITY 12: 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 2011.

ACTIVITY 13: Involve students in the Onion Portage collaring project to improve public relations and support wildlife education.

Students from Shishmaref and Golovin High Schools participated in the Onion Portage collaring project during September 2010.

ACTIVITY 14: Analyze harvest data collected from selected communities within the range of the Western Arctic Caribou Herd.

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 from the late 1990s through this reporting period.

ACTIVITY 15: Collect fall total body weight for calves.

We weighed 29 calves (22 males and 7 females) during the Onion Portage collaring project in 2010. Mean weight for all calves was 94 lbs (91 lbs for females and 95 lbs for males). Mean weight for calves with cows in below average, average and above average body condition was 91 lbs, 94 lbs and 93 lbs, respectively.

**Submitted by:** Peter Bente, Survey and Inventory Coordinator, Region V