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ANNUAL SURVEY AND INVENTORY

STATE: Alaska **GRANT AND SEGMENT NO.** W-33-12
PROJECT NO. 3.0

PERIOD: July 1, 2013 – June 30, 2014

PROJECT LOCATION: Statewide

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

REPORT DESCRIPTION: This performance report describes caribou survey and inventory activities. Activities are listed by herd or game management unit.

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

Regionwide:

Activity 1: Prepare biennial caribou management reports.

Caribou management report was last drafted during the summer 2013 and is currently in the review stage. Staff continue to work on data collection for future reports.

Activity 2: Provide information to state and federal regulatory processes on caribou management.

Staff routinely work with Federal biologists to coordinate information needs. In March 2014 the Board of Game will consider proposals affecting caribou in region II.

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

Surveys were completed for all herds except the Kenai Mountain Herd. See individual unit activities below.

Activity 4: Monitor the caribou harvest through field observations, hunter harvest reports and contact with hunters.

These are standard activities accomplished in each office. See Area specific activities.

Activities by Unit:

Unit 15 Kenai Lowland and Kenai Mountain Herds:

Activity : Conduct a post-calving aerial sex and age composition survey. A survey was conducted on 23 June 2014 for the Kenai Lowland Caribou Herd. A total of 97 animals were counted consisting of 12 bulls, 18 cows, 48 unknown adults, 3 yearlings, and 16 calves. There was a slight decrease in total animals counted compared to the June 2013 survey, but a slight increase was noted in percent calves (12% to 16%).

Surveys were conducted on 24 October 2013 and 5 February 2014 for the Kenai Mountain herd. A total of 130 and 120 animals were counted respectively. These surveys showed a decrease from the last survey conducted in October of 2011 (200 animals).

Activity : Capture up to 15 caribou and replace expiring radio collars. Captures were conducted in October 2013 for the Kenai Lowland and Mountain Herds. Six cows were collared in each herd.

Activity : Monitor the caribou harvest through field observations, hunter harvest reports and contact with hunters. There was no open hunting season for Kenai Lowlands caribou herd during the reporting period. Nineteen caribou (13 male and 6 female) were taken in the Kenai Mountain Herd during the reporting period.

Unit 15 Killey River and Fox River Herds:

Activity. In cooperation with the USFWS, conduct a post-calving aerial sex and age composition survey. A minimum count survey was conducted on 20 March 2014 for the Fox River Herd. A total of 90 caribou were counted, which is a slight decrease from the high of 105 counted in October 2012.

A minimum count survey was also conducted on 20 March 2014 for the Killey River Herd. A total of 374 caribou were counted, which is a slight increase from the previous survey.

Activity. Capture up to 15 caribou and replace expiring radio collars. Caribou captures were conducted for both the Killey River and Fox River herds in October of 2013. A total of 6 and 2 cows were collared in each herd, respectively.

Activity. Monitor the caribou harvest through field observations, hunter harvest reports and contact with hunters. Six bulls were taken in the Killey River Herd during the reporting period. One bull was harvested from the Fox River Herd during the reporting period.

Unit 8 Kodiak Herd:

Activity. Conduct fall sex and age population composition surveys to determine status, trend, productivity and mortality of caribou. No structured caribou surveys were conducted during this report period. However, in cooperation with the Alaska Wildlife Troopers caribou counts were opportunistically conducted during law enforcement flights. Three caribou counts were obtained this period with the first count on 16 October 2013 identifying 314 individuals. The second count, occurring on 18 May 2014, identified 199 adults and an unidentified number of calves. The third count, occurring on 12 June 2014, identified 150 adults and over 20 calves. All counts were obtained between the Ayakulik River and Grants Lagoon on the southwest portion of Kodiak Island. Based on these counts, we estimate the population to be stable to slightly increasing at approximately 325-350 animals.

Activity. Monitor the caribou harvest through field observations, hunter harvest reports and contact with hunters. Hunters reported harvesting 15 caribou (14 males, 1 female) during this reporting period, a 34% decrease from the 2012–13 reported harvest of 23 (13 males, 10 females) but similar to the previous 5-year average of 15.8.

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

Regionwide Activities

ACTIVITY 1: Monitor harvest and analyze harvest data.

Monitored preliminary harvest of 2,389 caribou and analyzed harvest data.

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

Deployed >132 radiocollars and monitored radiocollared caribou in 8 herds.

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, 3 Federal regional councils, and the Federal Subsistence Board.

ACTIVITY 4: Prepare biennial caribou management reports.

Collect preliminary data to prepare reports.

Activities by Unit [and/or herd]

Units 12 and 20D (portions) Macomb Caribou Herd

ACTIVITY 1: Conduct aerial surveys to assess population trends, distribution, and productivity.

Aerial surveys were conducted to assess trends, distribution, and productivity of the Macomb caribou herd. Distribution information was used to guide harvest management.

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

An aerial census of the Macomb caribou herd resulted in 1,503 caribou count.

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

Conducted a prehunt distribution survey to assess potential harvest during the motorized access portion of the hunt.

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 a reconnaissance survey within the range of the Tonzona herd in June 2014 and found 11 caribou including 3 calves.

Unit 20A Delta Herd

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

Conducted fall composition survey (38 bulls: 11 large bulls: and 10 calves:100 cows).

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

No photocensus conducted because the caribou did not aggregate.

ACTIVITY 3: Conduct radiotelemetry flights to monitor herd.

Flew distribution surveys in Jul, Sep, Feb, Mar, Apr, and May.

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 implement the management plan, including conducting a composition survey in October.

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

Conducted a fall sex and composition survey in October: calf and bull/100 cow ratios were 16 and 49/100 respectively (631 total caribou were observed as part of the survey).

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 28 and 38:100; 7-8% of the herd sampled).

ACTIVITY 2: Conduct a photocensus to determine herd size.

Photocensus 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: Conduct aerial mortality flights directly after collaring and during spring parturition surveys.

Conducted aerial mortality flights during spring parturition surveys.

ACTIVITY 5: Determine herd distribution in spring to make military airspace recommendations.

Determined herd distribution via aerial telemetry flights and locations of GPS collared caribou during spring calving and post-calving period and made military airspace recommendations.

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.

Conducted aerial survey of Ray Mtn. herd and counted 841 caribou.
Conducted aerial survey of Hodzana Hills herd on 05/21/14 and counted 26 caribou.
Conducted aerial surveys of Galena Mtn. herd on 06/04/14 and counted 87 caribou.
Conducted aerial surveys of Wolf Mtn. herd on 06/24/14 and counted 76 caribou.
In cooperation with FWS and BLM, conducted a total of 21 aerial radio-tracking flights.

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 (27 bulls: and 20 calves:100 cows).

ACTIVITY 2: Conduct radiotelemetry flights to monitor herd demographics.

Conducted radiotelemetry flights in Oct, Feb, and May to monitor herd demographics and distribution.

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 radiotracking collared females.

Radiotracking flights were conducted to estimate parturition rate and the calf:cow ratio in June 2014. Poor weather prohibited aerial observation of radiocollared cows and estimates were not obtainable for the parturition rate. Preliminary data for June 24, 2014 calf:cow ratios =47% (n=43).

ACTIVITY 2: Conduct a photocensus to determine herd size.

Photocensus conducted on 13 July 2013. Final 2013 photocensus results: 197,228 caribou (SE = 13,772, 95% CI = 168,667-225,789 caribou).

ACTIVITY 3: Conduct household harvest surveys.

Household surveys not conducted because funding reallocated to photocensus and captures.

Units 26B and 26C Central Arctic Caribou Herd

ACTIVITY 1: Conduct fall sex and age composition surveys.

No rut count conducted in fall 2013 because CAH caribou were mixed with PCH and TCH caribou.

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

Preliminary results for June 2-3, 2014 Parturition rate: 74%, n= 35. Preliminary data for June 24, 2014 calf:cow ratios: 57% (n= 42).

ACTIVITY 3: Conduct a photocensus to estimate herd size.

Photocensus conducted on 4-5 July 2013. Final 2013 photocensus results: 50,753 (SE = 4,345, 95% CI = 40,924–60,582 caribou).

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

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

Regionwide

ACTIVITY 1: Prepare biennial caribou management reports.

The biennial caribou management reports were not due during this period.

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

	Bulls (%)	**Cows (%)**	**Calves** (%)	**Calves/ 100 Cows**	**Bulls/ 100 Cows**
Mulchatna	19	68	13	19	27
Nelchina	20	67	13	19	30
Northern Alaska Peninsula	20	66	14	21	31
Nushagak Peninsula	26	50	25	50	52
Southern AK Peninsula	26	53	21	40	50
Unimak	8	78	15	19	10

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

	Hunters	Bulls	Cows	Unknown	Total Harvest
Mulchatna	105	69	35	1	105
Nelchina	14,177	2330	310	0	2640
Northern Alaska Peninsula	0	0	0	0	0
Nushagak Peninsula	0	0	0	0	0
Southern Alaska Peninsula	0	17	1	0	18
Unimak	0	0	0	0	0

The state hunting seasons for the Northern Alaska Peninsula, Nushigak Peninsula, and Unimak caribou herds 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.

Photo-census counts have been only marginally successful since 2008 due to a combination of poor weather conditions and lack of post calving aggregations. A modified photo census was conducted in early July 2013 using the Rivest Method to provide an estimate of caribou numbers. Although this method is still being tested for efficacy in this area, the result of the photo census yielded an estimate of 18,308 caribou, with a range of 15,015-21,602 at the 95% CI.

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

A total of 30 radio-collars were deployed on Mulchatna caribou during April 2014.

Nelchina Herd:

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

No post-calving census was conducted due to poor census conditions. A total of 5,743 caribou were observed during the composition survey: 1,304 (23%) bulls, 2,901 (50%) cows, and 1538 calves (27%).

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

Caribou locations were monitored via fixed-wing flights conducted throughout the year and using satellite collars.

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

In October 2013, 15 caribou calves (4-month old) were captured, weighed and measured, and fitted with radio collars. An additional 6 calves were captured, weighed and measured, though were not fitted with radio collars.

Northern Alaska Peninsula Herd:

ACTIVITY 1: Conduct parturition survey to estimate pregnancy rates.

A parturition survey conducted in May estimated an 66% pregnancy rate for cows that were 2 years of age or older (n = 259).

ACTIVITY 2: Conduct an aerial post-calving photocensus to estimate population size in cooperation with the USFWS.

No photocensus was conducted in 2013-14 due to a lack of post-calving aggregations.

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.

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 parturition survey to estimate pregnancy rates.

A parturition survey conducted in June estimated 84% pregnancy rate for cows that were 2 years of age or older (n = 122).

ACTIVITY 2: 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 2013-14 because of volcanic activity.

Unimak Herd:

ACTIVITY 1: Conduct parturition survey to estimate pregnancy rates.

A parturition survey conducted in June estimated a 66% pregnancy rate for cows that were 2 years of age or older (n = 56).

ACTIVITY 2: 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 2013-14 due to a lack of post-calving aggregations.

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

Regionwide:

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 caribou 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

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 and December 2013 as well as in March and June 2014.

Monitor caribou movements north of the Yukon River.

No flights were made to monitor caribou north of the Yukon during this reporting period.

Conduct fall aerial sex and age composition counts.

We conducted radio telemetry flights in October 2013 to assist the Unit 17 staff in composition flights. The results from the composition work will be reported in the Unit 17 section.

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

No recruitment work was completed on this activity during this reporting period due to sparse distribution of caribou and difficult logistics.

Participate in photocensuses of caribou herds that use Unit 18.

We flew two days during July 2014 to assist with the photocensus of the Mulchatna caribou herd (MCH). The results from the photocensus will be reported in the Unit 17 report.

Participate in radiocollar deployments and sample collections from caribou from herds that use Unit 18. (All animal capture activities will follow the protocols established in the ADF&G Division of Wildlife Conservation "Animal Welfare Policy" and its wildlife capture and restraint manual.)

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

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. Hunting by registration permit RC503 was initiated in RY13 and reported harvest of the MCH (by permit) was 38 caribou in Unit 18.

Continue to improve communication with the public.

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

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 MCH, including population objectives.

Teshekpuk Herd (Unit 26A):

Conduct a photocensus to estimate population size of the herd on a projected schedule: a minimum of 3 photocensuses every 5 years.

We conducted a photocensus on July 16. Conditions were relatively poor. A minimum estimate of 32,000 was derived.

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

We prepared 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 similar proportion wintering in the central Brooks Range. A much smaller proportion wintered with the Western Arctic Herd in the Noatak, Buckland, and Wulik drainages. After 4 years of calving in new areas relative to the 1990-2009 period, calving was primarily concentrated in areas near Teshekpuk Lake once again.

Monitor mortality (causes and rates) through field observations of collared individuals and investigation of large-scale die-off events.

> Through funding from BLM, we attempted to visit mortalities in a timely manner. We visited 60 mortality sites from mortalities of collared individuals that occurred in 2013-2014.

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

> We discussed population objectives in advisory committee meetings, but did not develop alternative objectives. We began the process of discussing alternative harvest strategies, given the likelihood that herd decline will reduce harvestable surplus in the near future.

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

> We continue to work cooperatively with BLM, oil companies, and consultants to address management and mitigation concerns. We worked on a manuscript evaluating caribou movement patterns in relation to an industrial road.

Capture bulls and cows to attach satellite, GPS, and conventional radiocollars. Attempt to maintain a minimum sample of 70 known-aged females. (All animal capture activities will follow the protocols established in the ADF&G Division of Wildlife Conservation "Animal Welfare Policy" and its wildlife capture and restraint manual.)

> Using an R-44 helicopter and hand-held net gun, we captured 27 TCH cows and 13 bulls. We attached 15 VHF collars, 7 PTT collars and 11 GPS collars. We replaced 13 collars (VHF, PTT 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 no capture mortalities. The current number of radiocollared caribou is 71, including 40 PTT and GPS collars, and 31VHF transmitters.

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

> We collected blood, fecal, hair, and morphometric samples from the caribou that were captured. The blood, fecal and hair samples are being analyzed as part of cooperative projects with the North Slope Borough.

Conduct sex and age composition surveys during mid-summer and/or October.

> Fall composition surveys were flown on 19-20 October 2013 with a helicopter. A total of 2,449 caribou were classified in the vicinity of radiocollared caribou, and we found 34 calves:100 cows and 39 bulls:100cows.

Conduct aerial surveys during April and May to assess short yearling recruitment and range-wide distribution.

> Short yearling surveys were flown on 7-10 April 2014. We located 28 radiocollared caribou. Using a fixed-wing aircraft, a total of 2,614 caribou were classified in the vicinity of radiocollared caribou. We observed15 short yearlings:100 adults.

Conduct calving location and productivity aerial surveys in June.

Calving surveys were conducted on 6-12 June 2013. We located 32 adult cows. The parturition rate was 28%, 5 cows were seen with calves (16 %). Sixteen of the 32 adult cows had visible soft antlers at the time of the survey (50%). Calving was concentrated in an area south of Teshekpuk Lake.

Use satellite collar information to assess relative abundance of caribou from differing herds in hunt areas in order to better estimate herd-specific harvest rates.

We updated this data to include more areas than have been previously evaluated using 2002-2008 data, but the lack of recent harvest data limit our ability to evaluate overall harvest patterns.

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

Conduct a photocensus to estimate herd size on a projected schedule of once every two years (2013, 2015, etc). Censuses may be conducted more frequently if necessary.

The WAH was photographed on 7 July and again on 8 July, 2014, to estimate population size. Population size from the 7 July photographs was estimated to be 325,000 caribou, a decrease of 27% since the 2011 population estimate. The 95% c.i.'s for the July 7 and 8 census photographs overlapped.

Monitor distribution and movements using radiotelemetry data and aerial survey observations.

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

Deploy a sufficient number of radiocollars to maintain a year-end sample size of at least 100 operational radiocollars on living caribou. Capture activities will follow protocols in the division's Wildlife Capture and Chemical Restraint Manual.

28 satellite radio collars (25 GPS and 3 PTT) were deployed in the WAH during September 2013; 2 collars were deployed on bulls and 26 on cows. There were no capture mortalities during this activity.

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

We classified 11,848 caribou (10,423 adults and 1,425 calves) during spring 2014 and observed 14 short yearlings:100 adults.

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

We visually located 67 radiocollared female caribou and observed a ratio of 70 neonates:100 cows in June 2014.

Conduct helicopter surveys on a scheduled basis during October to assess fall composition and retrieve dropped radiocollars. (All animal capture activities will follow the protocols established in the ADF&G Division of Wildlife Conservation "Animal Welfare Policy" and its wildlife capture and restraint manual.)

No fall composition surveys were flown during 2013 due to conflicts with other projects.

Collect up to 20 caribou for necropsies and health assessments to determine overall health and condition of the herd. This collection will have a negligible impact on the herd as it will be

much less than 1 % of the calves produced that year. (All animal capture activities will follow the protocols established in the ADF&G Division of Wildlife Conservation "Animal Welfare Policy" and its wildlife capture and restraint manual.)

A health assessment was not conducted during this reporting period.

Collect blood samples from approximately 50 - 100 captured caribou (annually) to monitor the incidence of selected diseases and pathogens. (All animal capture activities will follow the protocols established in the ADF&G Division of Wildlife Conservation "Animal Welfare Policy" and its wildlife capture and restraint manual.)

We collected a blood samples from 31 caribou during September 2013. 31% of these individuals exhibited an elevated haptoglobin level. No results are available at this time to assess exposure to *Brucella suis*.

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

Caribou mandibles were collected from hunters during the reporting period. Caribou were generally available to most communities in Units 22, 23 and 26A during this reporting period, and subsistence and recreational harvest levels were within the range reported for previous years.

Collect caribou jaws to monitor the age structure for the herd, and assess herd health through morphometric indices of jaw growth. Jaw samples will be collected from harvested caribou as well as natural mortalities.

We collected 229 mandibles during this reporting period. Jaws were measured using CARMA protocol to monitor size and a tooth was extracted to determine age. Analyses are not yet complete.

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.

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 meeting in November 2013.

Involve students in the Onion Portage collaring project to improve public relations and support wildlife education. (All animal capture activities will follow the protocols established in the ADF&G Division of Wildlife Conservation "Animal Welfare Policy" and its wildlife capture and restraint manual.)

No students participated in the Onion Portage collaring project during September 2013. Late migration of caribou required delaying the collaring project dates which conflicted with scheduled school activities. Continued student involvement is planned on an annual basis.

Collect and analyze harvest data from selected communities within the range of the Western Arctic Caribou Herd through the Community-based Harvest Assessments program in

cooperation with the ADF&G Division of Subsistence, Alaska Native organizations and other resource agencies.

Community harvest data indicates the harvest of WAH caribou by people residing within the range of this herd has been 9,000-15,000 caribou annually. It appears that harvest levels by people who live within the range of this herd have been relatively stable from the late 1990s through this reporting period.

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

We presented overviews regarding the population status of this herd to the WACH Working Group, the Board of Game, and to the community of Kotzebue.

Participate with resource management agencies and the Western Arctic Caribou Herd Working Group to maintain a Cooperative Management Plan for the herd.

The Cooperative Management Plan was not modified during this period.

Participate with State interests, resource management agencies, and the Western Arctic Caribou Herd Working Group to evaluate and recommend critical habitat designations for the herd.

Kernel analyses delineating seasonal ranges and line density depictions of WAH movement areas were updated to include data collected during this reporting period.