Interim Report to the Alaska Board of Game on Intensive Management for Caribou with Wolf Predation Control in Game Management Units 9C and 9E, the Northern Alaska Peninsula Caribou Herd.

Prepared by the Division of Wildlife Conservation
August 2013

Interim annual updates are limited to sections that have changed substantially since the prior annual report in February. For complete information, see the prior annual report.

1) Description of IM Program[1] and Department recommendation for reporting period

A) This report is an annual evaluation for a predation control program authorized by the Alaska Board of Game (Board) under 5 AAC 92.111[2]

B) Month this report was submitted by the Department to the Board:

February ___ (annual report) August _X_ (interim annual update[3]) Year_2013_

2) Prey data

Date(s) and method of most recent fall **abundance assessment for the Northern Alaska Peninsula Caribou Herd (NAP):**

October 24 and 26, 2011; Population size is extrapolated from the number of caribou observed during the October composition survey.

Compared to IM area, was a similar trend and magnitude of difference in abundance observed in nearby non-treatment area(s) since program inception N/A **and in the last year** N/A**? Describe comparison if necessary:**

Not Applicable: This program was implemented in January, 2012 (RY11). It is too early to determine trends in abundance that may have resulted from these activities.

Dates of most recent age and sex composition survey (if statistical variation available, describe method here and show result in Table 1): October 7, 9, and 10, 2012.

Compared to IM area, was a similar composition trend and magnitude of difference in composition observed in nearby non-treatment area(s) since program inception and in the last year?

Not Applicable: This program was not implemented until January, 2012 (RY11), and it is too early to determine trends or make comparisons.

Table 1. Caribou abundance, age and sex composition in assessment area (L) since program implementation in year 1 (not exclusively limited to inception of predation control) to reauthorization review in year 10 (2020) **in** the Northern Alaska Peninsula Predation Management Area. **Regulatory year is 1 July to 30 June (e.g. RY 2010 is 1 July 2010 to 30 June 2011).**

		Composition (number per 100 females)

[1] For purpose and context of this report format, see *Intensive Management Protocol, section on Tools for Program Implementation and Assessment*

[2] [*Regulatory numbers for existing IM programs formerly under 5AAC92.125 were divided into groups and given new numbers in October 2012 (see IM Plan template--Version 3, January 2013)*]

[3] The interim annual update may be limited only to sections that changed substantially since prior annual report [*e.g., only Tables 3 and 6 in areas with a fall ungulate survey and only wolf control*]

Period	RY	Abundance (variation)	Calves	Males	Total *n*
Year 0	2010	-	18	25	1,795
Year 1	2011	2,500 – 3,000	20	26	2,395
Year 2	2012	-	22	28	1,352

Describe trend in abundance or composition:

The fall bull:100 cow and calf:100 cow ratios have both increased slightly from the low ratios observed in the mid-2000s. However, active wolf removal was not initiated until January, 2012 (RY11), so the increasing trend is not associated with wolf control activities.

Table 2. Caribou harvest in assessment area (M). Methods for estimating unreported harvest are described in Survey and Inventory reports.

Period	RY	Reported		Estimated		Total harvest	Other mortality[a]	Total
		Male	Female	Unreported	Illegal			
Year 1	2009	0	0	0	15	15	0	15
Year 2	2010	0	0	0	15	15	3	18
Year 3	2011	0	0	0	15	15	3	18
Year 4	2012	0	0	0	15	15	2	17

[a] Mortuary, Ceremonial, and Cultural-Educational Harvest Permits.

Describe trend in harvest:

Caribou hunting has remained closed since RY 2005.

Describe any other harvest related trend if appropriate: Not Applicable.

3) Predator data

Date(s) and method of most recent spring abundance assessment for wolves (if statistical variation available, describe method here and list in Table 2):

The wolf population is being evaluated through a cooperative wolf collaring study with USFWS.

Date(s) and method of most recent fall abundance assessment for wolves (if statistical variation available, describe method here and list in Table 2):

The wolf population is being evaluated through a cooperative wolf collaring study with USFWS.

Other research or evidence of trend or abundance status in wolves:

Wolf sightings remain common on the Alaska Peninsula.

Table 3. Wolf abundance objectives and removal in wolf assessment area (N) of the Northern Alaska Peninsula Predation Management Area. Removal objective is to annually remove 100 % **of the wolves in the wolf predation control area (O), so estimated or confirmed number remaining in the control area (O) by the May calving season each regulatory year is** 0.

Period	RY	Harvest removal		Dept. control removal	Public control removal	Total removal[a]	Spring abundance (variation)
		Trap	Hunt				
Year 1	2009	20	19	0	0	39	-
Year 2	2010	29	3	0	0	32	-
Year 3	2011	16	80	0	10	106	-
Year 4	2012	8	6	0	5	19	-

[a]Additional removal may be Defense of Life and Property, vehicle kill, etc.

4) Habitat data and nutritional condition of prey species

Where active habitat enhancement is occurring or was recommended in the Operational Plan, describe progress toward objectives:

Objective(s):

Not Applicable: There are no demonstrated methods to improve caribou habitat, and no reason to believe that habitat is limiting the caribou population.

Area treated and method: Not Applicable

Observation on treatment response: Not Applicable

Evidence of progress toward objective(s) (choose one: Apparent Statistical):

Not Applicable

Similar trend in nearby non-treatment areas? Not Applicable

Describe any substantial change in habitat not caused by active program: Not Applicable

Table 4. **Nutritional indicators for caribou in assessment area (L) of the Northern Alaska Peninsula Predation Management Area.**

Period	RY	Pregnancy Rate (Females ≥ 2 yrs old)	Male Calf Weights (kg)	Female Calf Weights (kg)
Year 1	2009	84%	-	-
Year 2	2010	88%	-	-
Year 3	2011	77%	8.4	8.1

Year 4	2012	81%	-	-

Where objectives on nutritional condition were listed in the Operational Plan, describe trend in condition indices since inception of (a) habitat enhancement or (b) enhanced harvest: Not Applicable

Evidence of trend (choose one: Apparent Statistical): Not Applicable

Similar trend in nearby non-treatment areas? Not Applicable

5) Costs specific to implementing Intensive Management

Table 5. Cost ($1000 = 1.0) of agency salary based on estimate of proportional time of field level staff and cost of operations for intensive management activities (e.g., predator control or habitat enhancement beyond normal Survey and Inventory work) performed by personnel in the Department or work by other state agencies (e.g., Division of Forestry) or contractors in the Northern Alaska Peninsula Predation Management Area. Fiscal year (FY) is also 1 July to 30 June but the year is one greater than the comparable RY (e.g, FY 2010 is 1 July 2009 to 30 June 2010).

Period	FY	Predation control[a]		Other IM activities		Total IM cost	Research cost[d]
		Time[b]	Cost[c]	Time	Cost		
Year 1	2012	0.0	0.0	0.4	22.0	22.0	0.0
Year 2	2013	0.0	0.0	0.5	6.0	6.0	0.0

[a]State or private funds only.
[b]Person-months (22 days per month)
[c]Salary plus operations
[d]Separate from implementing IM program but beneficial for understanding of ecological or human response to management treatment (scientific approach that is not unique to IM).