Interim Annual Report to the Alaska Board of Game on Intensive Management for Caribou with Wolf Predation Control in the Southern Alaska Peninsula Caribou Herd, Subunit 9D

Prepared by the Division of Wildlife Conservation
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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) Prey data

Date(s) and method of most recent abundance assessment for caribou (if statistical variation available, describe method here and show result in Table 1):

- July 6 – 9, 2009; Post-calving population count
- Post-calving population counts attempted in 2010 and 2011 were aborted due to poor weather

Compared to IM area, was a similar trend and magnitude of difference in abundance observed in nearby non-treatment area(s) since program inception(Y/N)? No and in the last year(Y/N)? No

Describe comparison if necessary:

The adjacent Unimak caribou herd (UCH) showed a decline in abundance since program inception and in the last year abundance was estimated (2009). This is in contrast to the SAPCH, which showed an increase in abundance since the program began and in the last year abundance was estimated.

Table 1. Caribou abundance, age and sex composition in assessment area since program implementation in year 1 (not exclusively limited to inception of predation control) to reauthorization review in year 5 (2011) in the Southern Alaska Peninsula Predation Management Area, Subunit 9D. 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)			
Period	RY	Abundance (variation)*	Young	Yearlings	Males	Total *n*
Year 1	2007	600	0.5		14.7	431
Year 2	2008	700	39.2		9.7	570
Year 3	2009	800	43.4		21.4	679
Year 4	2010	-	46.6		27.9	532
Year 5	2011	-				

*Post-calving population counts were scheduled in 2010 and 2011, but weather conditions prevented the surveys from being conducted

Describe trend in abundance or composition:

Caribou abundance, the fall bull ratio, and the fall calf ratio have all increased since program implementation. In particular, the calf ratio increased dramatically in the first year of wolf removals and has increased each year since.

2) Predator data

Date(s) N/A and method of most recent spring abundance assessment for wolves (if statistical variation available, describe method here and list in Table 3):

The objective of the program is to remove wolves from the control area (calving grounds of the SAP) during the period when calves are most vulnerable to predation (first 2 weeks of a calf's life) to improve caribou calf survival and recruitment when the program is

active.

Date(s) N/A and method of most recent fall abundance assessment for wolves (if statistical variation available, describe method here and list in Table 3):

The objective of the program is to remove all wolves from the control area (calving grounds of the SAP) during the calving period in years when the program is active.

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

Biologist observations of wolves and wolf tracks from the air in SUBUNIT 9D indicate wolves have persisted in the area since program implementation. Data from satellite collared wolves indicate dispersal into the area is occurring from wolf packs on the Alaska Peninsula that occupy territories to the north of the control area.

Table 2. Wolf abundance objectives and removal in the predation control area of the Southern Alaska Peninsula Predation Management Area, Subunit 9D. Removal objective is N/A % of the wolves in the control area, so the estimated or confirmed number remaining post-removal (25 June) each RY in the predation control area must be at least N/A.

The program is designed to remove the fewest number of wolves possible during the period of time in which calves are most vulnerable to predation to increase calf survival and recruitment. The program does not have a removal objective (% of the wolf population) and does not require a reduction in the wolf population.

Period	RY	Fall abundance (variation)	Harvest removal		Dept. control removal	Public control removal	Total removal[a]	Spring abundance (variation)
			Trap	Hunt				
Year 1	2007		1	8	28	0	37	
Year 2	2008		0	3	8	0	11	
Year 3	2009		0	9	2	0	11	
Year 4	2010		0	2	0	0	2	
Year 5	2011							

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

3) Habitat data and nutritional condition of prey species

Table 3. Nutritional indicators for caribou in assessment area of the Southern Alaska Peninsula Predation Management Area, Subunit 9D.

Period	RY	Pregnancy (Females 2+ yrs of age)	Male Calf Weights (kg)	Female Calf Weights (kg)
Year 1	2007	86%	7.6	7.5
Year 2	2008	90%	7.4	6.4
Year 3	2009	91%	7.1	6.1
Year 4	2010	85%	-	-
Year 5[*]	2011			

[*]Data pending the completion of the surveys

4) Costs specific to implementing Intensive Management

Table 4. 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., predation 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 Southern Alaska Peninsula Predation Management Area, Subunit 9D. 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).

			Operations and contracting			Total cost
Period	FY	Salary[a]	Federal Aid[b]	Public Funds[c]	Other[d]	
Year 1	2008	13	-	106	-	119.0
Year 2	2009	16.4	-	99.7	-	116.1
Year 3	2010	10.0	-	95.5	-	105.5
Year 4[e]	2011	1.1	-	4.8	-	5.9

[a]State Fish and Game fund matched 1:3 with Federal Aid (see footnote b) except for activities directly involving predation control (state funding only).
[b]Federal Aid in Wildlife Restoration (excise tax on firearms and ammunition)
[c]Capital Improvement Project or General Fund revenue from Alaska Legislature
[d]Grants, donations from private organizations, etc.
[e]Program suspended in year 4 (FY2011) due to the improved status of the population and to allow an evaluation of the progress toward the objectives.