Interim Annual Report to the Alaska Board of Game on Intensive Management for Caribou and Moose with Wolf Predation Control in Upper Yukon/Tanana Predator Control Area

Prepared by the Division of Wildlife Conservation 15 August 2011



Interim annual updates are limited to sections where data have been collected between the prior annual report in February and end of the regulatory year on 30 June. For complete information, see the prior annual report.

1) Predator data

Date(s) and method of most recent spring abundance assessment for wolves: <u>May 2011-</u> <u>combination of predator control permittee and trapper interviews (winter 2010–2011), anecdotal</u> <u>observations by Department staff (Oct. 2010–May 2011), and trapper/hunter harvest records.</u>

Table 3. Wolf abundance and removal in Wolf Control Area (WCA). Removal objective is $\underline{60}$ –<u>80%</u> of pre-control fall abundance in year 1 of wolf predation control program, so estimated or confirmed number remaining by <u>1 May</u> each regulatory year in the WCA must be at least <u>88</u>. Regulatory year is 1 July to 30 June (e.g, RY10 is 1 July 2010 to 30 June 2011).

		Fall	Harvest removal		Dept.	Public		Spring
Period	Regulatory Year	abundance (range)	Trap	Hunt	control removal	control removal	Total removal	abundance (range) ^a
Year 1	2004-2005	380 ^{bc}	52	23	N/A	60	135	245
		(350–410)						(215–275)
Year 2	2005-2006	335 ^c	58	10	N/A	17	85	250
		(300–370)						(215–285)
Year 3	2006-2007	362 ^c	73	7	N/A	23	103	259
		(300–425)						(197–322)
Year 4	2007-2008	382 ^c	57	14	N/A	27	98	284
		(366–398)						(268–300)
Year 5	2008-2009	372 ^d	82	11	84	49	226	146
Year 6	2009-2010	235 ^e	31	4	15	10	60	175
Year 7	2010-2011	274 ^c	26	11	0	25	62	212
		(262–285)						(200–223)

^aFall estimate minus all know wolf kills.

^bPre-control population estimate.

^cFall modeled estimate.

^dRevised fall modeled estimate using results from a March 2009 reconnaissance survey and RY08 removal data. The original fall modeled estimate was 393–431.

^eRevised fall modeled estimate using results from a March 2010 reconnaissance survey and RY09 removal data. The original fall modeled estimate was 262–299.

2) Habitat data and nutritional condition of prey species

Period	Regulatory Year	Spring Birthrates (% of cows ≥36 months that gave birth)
Year 1	2004-2005	
Year 2	2005-2006	80
Year 3	2006-2007	89
Year 4	2007-2008	90
Year 5	2008-2009	70
Year 6	2009-2010	70
Year 7	2010-2011	86

Table 5a. Nutritional indicators for Fortymile Caribou in in FCH_hunt area since the herd was added to the control program in year 3. A regulatory year is 1 July to 30 June (e.g, RY10 is 1 July 2010 to 30 June 2011).

Table 5b. Nutritional indicators for moose in Unit 20E West and 20E Central moose survey areas in southern Unit 20E since program implementation in year 1 to year 7. A regulatory year is 1 July to 30 June (e.g, RY10 is 1 July 2010 to 30 June 2011).

		Twinning Rates (% of			
	Regulatory	cows observed with			
Period	Year	calf that had twins)			
Year 1	2004-2005	24			
Year 2	2005-2006	47			
Year 3	2006-2007	27			
Year 4	2007-2008	17			
Year 5	2008-2009	41			
Year 6	2009-2010	22			
Year 7	2010-2011	21			

Costs specific to implementing Intensive Management

Table 5. Proportional time of field level staff and cost (\$1000 = 1.0) of ADF&G personnel salary plus operations for predation control and for other intensive management activities (e.g., habitat enhancement, wildlife survey efforts beyond normal Survey and Inventory work) in the Upper Yukon/Tanana Predator Control 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).

		Predation control ^a		Other IM	activities	Total IM	Research
Period	FY	Time ^b	Cost ^c	Time	Cost	cost	$cost^{d}$
Year 7	2011	0.4	3.5	12.7	166.4	169.9	67.1

^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).