Interim Annual Report to the Alaska Board of Game on Intensive Management for Moose with Wolf Predation Control in Unit 19A

Prepared by the Division of Wildlife Conservation
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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) Prey data

Date(s) and method of most recent abundance assessment for moose: March 2011 Goespatial moose population estimate (GSPE) in the Central Kuskokwim Villages Moose Management Area (MMA)- 3,853 mi^2.

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 (Y/N) and in the last year N/A (Y/N)?

Table 1. Moose abundance, age and sex composition in Central Kuskokwim Villages Moose Management Area (MMA) since program implementation in year 1, through the first reauthorization review in year 5, and into the second reauthorization up to year 7. Each year is presented as a regulatory year, which begins 1 July and ends 30 June (e.g, regulatory year 2010–2011 [RY10] is 1 July 2010 to 30 June 2011.

			Composition (number per 100 females)[2]		
Period	Regulatory Year	Abundance (variation)[1]	Calves	Males	Total *n*
Year 1	2004–2005	1085 moose (± 17%; 90% CI)			
Year 2	2005–2006	--	24	8	307
Year 3	2006–2007	--	--	--	--
Year 4	2007–2008	1703 moose (± 28%; 90% CI)	45	35	200
Year 5	2008–2009	--	27	34	124
Year 6	2009–2010	--	36	51	129
Year 7	2010–2011	1666 moose (± 36%; 90% CI)[3]	19	48	212

[1]RY04 and RY07 February–March GSPE surveys (observed moose, not corrected for sightability).
[2]November line transect surveys; 2005 composition survey conducted in a larger geographic area that other years.
[3]Preliminary data

Describe trend in abundance or composition: No detectable trend in moose abundance within the MMA.

2) Predator data

Date(s) and method of most recent spring abundance assessment [*census, survey, modeling, pilot interviews, etc.*] for wolves (if statistical variation available, describe method here and list in Table 3): February 2011 aerial reconnaissance survey and public control permittee interviews.

Table 3. Wolf abundance and removal in Central Kuskokwim Villages Moose Management Area (MMA): Removal objectives are to reduce wolf numbers as low as possible in the MMA and to maintain 30–36 in all of Unit 19A to ensure wolves persist in the Unit.

Period	Regulatory Year	Fall abundance[a]	Harvest removal		Dept. control removal	Public control removal	Total removal	Spring abundance
			Trap	Hunt				
Year 1	2004–2005	--	3	0	0	40	43	--
Year 2	2005–2006	44-46	2	0	0	36	38	5-7
Year 3	2006–2007	--	0	0	0	7	7	--
Year 4	2007–2008	27	0	3	0	12	15	12
Year 5	2008–2009	--	1	0	0	19	0	--
Year 6	2009–2010	--	0	0	0	2	2	--
Year 7	2010–2011	30	1	0	0	10	11	19

[a]Calculated by subtracting total removal from following spring abundance in each RY when spring abundance surveys were conducted.

3) 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 Unit 19A. 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 7	2011	0.4	3.5	5.2	47.2	50.7	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)