

**WILDLIFE
MANAGEMENT REPORT****Alaska Department of Fish and Game
Division of Wildlife Conservation
(907) 465-4190 P.O. Box 115526
Juneau, AK 99811-5526****MOOSE MANAGEMENT REPORT**

From: 1 July 2011

To: 30 June 2013

LOCATION**GAME MANAGEMENT UNIT:** 14C (1912 mi²) and Portage and Placer River drainages in Unit 7**GEOGRAPHIC DESCRIPTION:** Anchorage area**BACKGROUND**

Moose were uncommon in the Anchorage area before the 1940s. They increased in the late 1940s as brushy secondary growth replaced mature forests that had been cut or burned during the development of Anchorage and the Fort Richardson Military Reservation. Moose numbers increased considerably during the early 1950s, and by the late 1950s and early 1960s moose were abundant. There was a reduction in numbers due to severe winters in the 1970s, but since then the moose population has remained relatively high, peaking in 2003. Since 2003, moose numbers have fluctuated, but have remained within population objectives.

Prime browse occurs in open-canopied, second-growth willow, birch, and aspen stands on burned-over military lands and on several hundred acres of military lands that have been rehabilitated during the last three decades. Parks, greenbelts, and residential areas in the Anchorage Bowl also contain browse. Quality riparian moose habitat abounds along streams and rivers, and extensive stands of subalpine willow are on south-facing slopes in most drainages. However, during the last three decades, overabundant moose have reduced the distribution and density of browse species, and overbrowsing is apparent in most of Unit 14C.

Annual harvests have fluctuated dramatically. A record harvest of nearly 500 moose (50% females) occurred in 1965, but hunters harvested only 18 moose in 1978. Diverse harvests were often due to changes in seasons and bag limits as much as changes in the moose population. Annual harvests increased steadily during the late 1980s and early 1990s but began to decline in 1992. Several new permit hunts established during the last few years have resulted in increased annual harvests.

MANAGEMENT DIRECTION

Management Objectives. In Unit 14C the department management objectives for population and harvest are the same as Intensive Management objectives adopted by the Board of Game.

- Maintain a population of 1,500–1,800 moose and an annual harvest of 90–270 moose.
- Maintain a post-hunting sex ratio of no fewer than 25 bulls:100 cows.

Submitted By Frank Neumann

TABLE 1 Unit 14C fall aerial moose composition counts and estimated population size, 2004–2013

Area	Regulatory year	Bulls: 100 cows	Yearling bulls: 100 cows	Calves: 100 cows	Calves (%)	Total moose observed	Moose /hour	Estimated population size ^a
Twentymile River Portage River Placer River	2004–05	61	34	52	24	94	30	120
	2005–06	--	--	--	--	--	--	
	2006–07	--	--	--	--	--	--	150
	2007–08 ^b	--	--	--	--	--	--	
	2008–09	30	12	25	16	192	50	192
	2009–10	19	5	28	19	138	46	138
	2010–11	30	14	68	34	160	39	160
	2011–12	21	6	29	19	178	61	178
	2012–13	--	--	--	--	--	--	
Hillside	2004–05 ^c	28	11	40	24	99 ^d	30	120
	2005–06	--	--	--	--	--	--	
	2006–07	--	--	--	--	--	--	140 ^e
	2007–08 ^b	--	--	--	--	--	--	
	2008–09	--	--	--	--	--	--	155 ^e
	2009–10	--	--	--	--	--	--	
	2010–11	--	--	--	--	--	--	129 ^e
	2011–12	--	--	--	--	--	--	133 ^e
	2012–13	--	--	--	--	--	--	
Anchorage Bowl (except Hillside)	2004–05	--	--	--	--	--	--	
	2005–06	--	--	--	--	--	--	
	2006–07	--	--	--	--	--	--	250 ^e
	2007–08 ^b	--	--	--	--	--	--	
	2008–09	--	--	--	--	--	--	280 ^e
	2009–10	--	--	--	--	--	--	
	2010–11	--	--	--	--	--	--	242 ^e
	2011–12	--	--	--	--	--	--	248 ^e

	2012-13	--	--	--	--	--	--	
JBER	2004-05 ^f	--	--	--	--	--	--	
Upper Ship Cr.	2005-06	59	16	31	17	395	38	435
	2006-07	45	14	30	17	404	26	452
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	48	11	15	9	335	25	473
	2009-10	--	--	--	--	--	--	
	2010-11	31	7	26	16	211	31	339
	2011-12	37	8	14	9	280	22	335
	2012-13	--	--	--	--	--	--	

TABLE 1 Continued

Area	Regulatory year	Bulls: 100 cows	Yearling bulls: 100 cows	Calves: 100 cows	Calves (%)	Total moose observed	Moose /hour	Estimated population size ^a
Eagle River ^b	2004-05	--	--	--	--	--	--	
	2005-06	--	--	--	--	--	--	
	2006-07	--	--	--	--	--	--	120 ^e
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	--	--	--	--	--	--	135 ^e
	2009-10	--	--	--	--	--	--	
	2010-11	--	--	--	--	--	--	122 ^e
	2011-12	--	--	--	--	--	--	125 ^e
2012-13	--	--	--	--	--	--		
Peters Creek ^h	2004-05	--	--	--	--	--	--	
	2005-06	--	--	--	--	--	--	
	2006-07	--	--	--	--	--	--	65 ^e
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	--	--	--	--	--	--	73 ^e
	2009-10	--	--	--	--	--	--	
	2010-11	--	--	--	--	--	--	48 ^e
	2011-12	33	10	27	17	48	16	48
2012-13	--	--	--	--	--	--		
Eklutna River Thunderbird Cr.	2004-05	--	--	--	--	--	--	
	2005-06	--	--	--	--	--	--	
	2006-07	--	--	--	--	--	--	45 ^e
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	58	--	37	15	48	12	58
2009-10	--	--	--	--	--	--		

	2010-11	--	--	--	--	--	--	78 ^e
	2011-12	36	16	24	15	80	17	80
	2012-13	--	--	--	--	--	--	
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Bird Creek Indian River ⁱ	2004-05	--	--	--	--	--	--	
	2005-06	--	--	--	--	--	--	
	2006-07	--	--	--	--	--	--	110 ^e
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	--	--	--	--	--	--	124 ^e
	2009-10	--	--	--	--	--	--	
	2010-11	--	--	--	--	--	--	
	2011-12	--	--	--	--	--	--	103 ^e
	2012-13	--	--	--	--	--	--	
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TABLE 1 Continued

Area	Regulatory Year	Bulls: 100 cows	Yearling bulls: 100 cows	Calves: 100 cows	Calves (%)	Total moose observed	Moose /hour	Estimated population size ^a
Hunter Creek ^h Knik River	2004-05	--	--	--	--	--	--	
	2005-06	--	--	--	--	--	--	
	2006-07	--	--	--	--	--	--	150 ^e
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	--	--	--	--	--	--	165 ^e
	2009-10	--	--	--	--	--	--	
	2010-11	--	--	--	--	--	--	148 ^e
	2011-12	--	--	--	--	--	--	152 ^e
2012-13	--	--	--	--	--	--		
205 Lake George ^j	2004-05	--	--	--	--	--	--	
	2005-06	--	--	--	--	--	--	
	2006-07	--	--	--	--	--	--	140 ^e
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	--	--	--	--	--	--	155 ^e
	2009-10	--	--	--	--	--	--	
	2010-11	--	--	--	--	--	--	129 ^e
	2011-12	--	--	--	--	--	--	129 ^e
	2012-13	--	--	--	--	--	--	
Unit 14C Total	2004-05 ^f	43	22	45	24	183	28	
	2005-06	57	16	31	17	395	38	
	2006-07	45	14	30	17	404	26	1600
	2007-08 ^b	--	--	--	--	--	--	
	2008-09	45	11	19	5	574	29	1800
	2009-10	--	--	--	--	--	--	

2010–11	31	9	37	30	371	24	1500
2011–12	32	9	20	15	586	25	1540
2012–13	--	--	--	--	--	--	--

^a Estimates based on sightability correction factors (SCF) of 1.12 (2006), 1.41 (2008), 1.49 (2010), and 1.18 (2011) calculated with MOOSPOP for the Fort Richardson/Elmendorf/Upper Ship Creek census area, except estimates in unsurveyed drainages are extrapolated based on trends on the Fort Richardson/Elmendorf/Upper Ship Creek census area; ^b Fall surveys not conducted due to lack of snow; ^c Bear Valley not surveyed due to turbulence; ^d Total includes 10 adult/yearling moose of unknown sex; ^e No recent aerial surveys completed; therefore, estimate is best guess; ^f No aerial survey of Fort Richardson/Elmendorf/Upper Ship Creek census area because of difficulty obtaining flight clearances from Range Control due to military training activities; ^g Eagle River count area last surveyed in 1998; ^h Peters Creek count area and Hunter/Knik count area last surveyed in 2001; ⁱ Bird/Indian count area last surveyed in 1988; ^j Lake George count area last surveyed in 1997.