

ACR 14 – Open a resident, registration hunt for antlerless moose in a portion of Unit 21D.

SUBMITTED BY: Alaska Department of Fish and Game

CITE THE REGULATION THAT WILL BE CHANGED IF THIS ACR IS HEARD.
5 AAC 85.045. Hunting seasons and bag limits for moose.

WHAT IS THE PROBLEM YOU WOULD LIKE THE BOARD TO ADDRESS? STATE IN DETAIL THE NATURE OF THE CURRENT PROBLEM. Opportunity exists for a limited antlerless harvest in a portion of Unit 21D south of the Yukon River. The moose population has been growing in that portion of Unit 21D due to wildfires that occurred in 2005 and changed habitats that benefit moose. Cow moose numbers have increased during the last five years, and in addition to the harvest opportunities it is determined to be a prudent management action to slow the rate of increase of the population.

WHAT SOLUTION DO YOU PREFER? We propose a limited 15-day antlerless season during March with a harvest quota to be determined by the Department before the season. We propose a registration hunt with a 2-day reporting requirement, a bag limit of one moose excluding cows accompanied by calves.

Unit 21D – That portion south of the south bank of the Yukon River, downstream of the up-river entrance of Kala Slough and west of Kala Creek.

Residents Only

Aug 22–31

Sept 5–25

One bull, (trophy must be destroyed)

State Registration permit RM834

Residents and Nonresidents

Sept 5–25

One bull, (State Drawing Permit)

Residents Only

March 1–31,

One moose; a person may not take a cow accompanied by a calf,

15-day season; to be announced,

State Registration Permit (RMxxx)

*2019 hunt conditions....25 moose quota (20 cows), 2-day reporting requirement

STATE IN DETAIL HOW THIS ACR MEETS THE FOLLOWING CRITERIA:

- 1) **To correct an error in regulation.** N/A
- 2) **To correct an effect of a regulation that was unforeseen when a regulation was adopted.** N/A

3) **Does the request identify a biological concern for the population or a threat to meeting objectives for the population?** This ACR meets the conservation criteria because the population is increasing rapidly and the number of cows in the population is increasing rapidly. Rather than allow the population to exceed carrying capacity and go through dramatic rates of expansion and contraction, we believe it is prudent to dampen the accelerating rate of increase so that we can assess the density-dependent indicators of the potential this area has to support the current population. This ACR would also meet this criterion by providing a harvest opportunity of cow moose that has only recently emerged. There is currently no harvest opportunity for cow moose in this area.

Analysis of three Trend Count Areas (Squirrel Creek, Pilot Mtn., and Kaiyuh Slough TCAs) within the Kaiyuh Sub-Area of Unit 21D showed a significant increase in the numbers of moose among all age classes, and a 57% increase of adult moose in 2017 from an average count of 725 adult moose in 2001 (Figure 1).

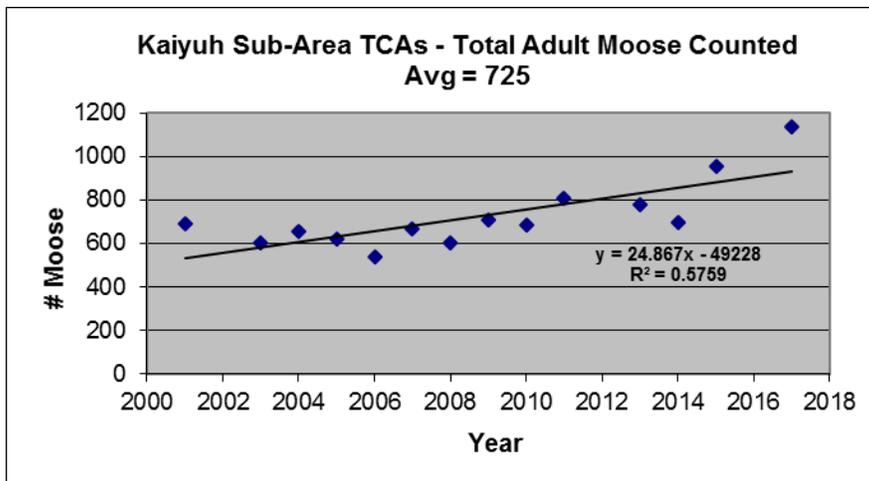


Figure 1. Kaiyuh Trend Count Areas combined count of adult moose, 2001-2017, Unit 21D.

Analysis of the Geospatial Population Estimate (GSPE) data provides also showed a significant increase (Table 1).

Table 1. Kaiyuh Sub-Area GSPE aerial moose population estimates, regulatory years 1987–2017, Unit 21D.

Area/Regulatory Year	Area mi ²	Bulls:100 Cows	Calves:100 Cows	Yrlg bulls:100 Cows	Percent calves	Adults	Population Estimate (90% C.I.)	Density
<i>21D–Kaiyuh Flats</i>								
1987–1988 ^a	1582	60.6	46.4	15.0	22.4	1389	1790±18%	1.13
1997–1998 ^b	1582	42.3	28.4	13.0	16.6	1113	1335±17%	0.84
2001–2002 ^c	1843	44.5	22.1	8.8	13.4	1558	1800±32%	0.98
2004–2005 ^c	1843	35.1	43.3	12.2	24.7	1119	1487±10%	0.81
2011–2012 ^c	1843	30.5	38.6	10.4	22.9	1463	1897±11%	1.03
2017–2018 ^c	1894	32.2	50.3	11.8	27.5	3009	4116±10%	2.17

^a Gasaway survey, MOOSEPOP analysis estimate, with sightability correction factor.

^b Gasaway survey, Regression analysis estimate, with sightability correction factor.

^c Geospatial population estimation survey, without sightability correction factor.

Analysis of the moose twinning data for the area showed high but stable twinning rates since 2004 (Table 2). A 265,916-acre wildfire in the Kaiyuh Flats area in 2004 likely explains the increased productivity for the area, and ultimately the increase of the moose population.

Table 2. Unit 21D moose aerial twinning surveys in the Pilot Mtn. Slough to Kaiyuh Slough trend count areas, regulatory years 2003–2004 through 2016–2017 (USFWS)

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2003–2004	52	32	18	36	28	24, 25
2004–2005	63	26	31	54	12	24–26
2005–2006	86	32	20	38	29	25, 26
2006–2007	69	29	18	38	35	22–26
2007–2008 ^b	76	30	22	42 ^c	7	23, 24, 29
2008–2009	69	27	20	43	14	26–28
2009–2010	60	34	19	36	18	28, 29
2010–2011	50	39	17	30	13	27
2011–2012	94	30	21	41	13	24–26, 29
2012–2013	93	33	23	41	55	24, 25
2013–2014	59	29	24	45	13	26–28
2014–2015	39	42	19	31	32	25–26
2015–2016	73	37	21	36	45	23–25
2016–2017	61	34	29	46	25	23–24

^a Percent of cows with calves that had twins.

^b Radiocollared cows in sample

^c Including 1 cow w/3 calves.

- 4) **Does the request identify an unforeseen, unexpected event or effect that would otherwise restrict or reduce a reasonable opportunity for customary and traditional wildlife uses, as defined in AS 16.05.258(f)?** N/A
- 5) **Does the request identify an unforeseen, unexpected resource situation where a biologically allowable resource harvest would be precluded by delayed regulatory action and such delay would be significantly burdensome because the resource would be unavailable in the future?** Implementing this regulation change by March 2019 would best utilize the available opportunity that exists now and would immediately initiate the management action of slowing the growth rate of the population. It is not desirable to allow the population to exceed carrying capacity and potentially reduce long-term habitat productivity.

WHAT WILL HAPPEN IF THIS PROBLEM IS NOT SOLVED PRIOR TO THE REGULAR CYCLE? The population growth could rapidly exceed the carrying capacity for this area and reduce the long-term productivity of the area. A harvest opportunity will not be utilized for an existing resource.

STATE WHY YOUR ACR IS NOT PREDOMINANTLY ALLOCATIVE. The proposed registration hunt would be open to all Alaska residents. Nonresident are not typically interested in antlerless hunts so providing for that opportunity was not a consideration.

IF THIS REQUEST IS ALLOCATIVE, STATE THE NEW INFORMATION THAT COMPELS THE BOARD TO CONSIDER AN ALLOCATIVE PROPOSAL OUTSIDE OF THE REGULAR CYCLE. It is not allocative.

STATE YOUR INVOLVEMENT IN THE ISSUE THAT IS THE SUBJECT OF THIS ACR. The Department is the hunt manager and is interested in expanding opportunity the regulations for hunters.

STATE WHETHER THIS ACR HAS BEEN CONSIDERED BEFORE, EITHER AS A PROPOSAL OR AS AN ACR, AND IF SO, DURING WHICH BOARD OF GAME MEETING. There have been no recent proposals of this nature for this area.