

GMU 24**I. GMU 24– Huslia River Flats Trend Count Area aerial moose composition counts - GSPE sample units**

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	125.86	38.27	8.93	15.56	0	10.0	603	150	392	60	4.79	6.90
2003-2004	136.79	36.44	10.11	29.26	3.77	17.7	623	137	376	110	4.55	6.35
2004-2005	142.25	38.3	16.0	32.7	7.35	19.1	768	172	449	147	5.40	5.45
2005-2006	142.25	30.68	13.70	23.11	3.67	15.0	752	150	489	113	5.29	5.32
2006-2007 ^a	142.25	40.2	12.0	36.9	11.33	20.8	811	184	458	169	5.70	7.44
2007-2008	142.25	38.1	12.5	33.3	4.72	19.4	684	152	399	133	4.81	6.36
2008-2009	142.25	35.0	10.6	28.6	7.23	14.5	509	109	311	89	3.58	6.13
2009-2010	142.25	34.0	13.3	19.0	6.25	12.4	693	154	453	86	4.87	6.95
2010-2011	142.25	32.6	8.2	29.5	3.64	18.2	632	127	390	115	4.44	5.91
2011-2012	125.86	42.2	15.1	24.3	2.60	14.6	541	137	325	79	4.30	6.13
2013-2014 ^a	125.86	30.8	5.6	20.6	1.72	13.6	433	88	286	59	3.44	6.61
2014-2015 ^a	142.25	38.7	9.3	16.7	6.38	10.7	466	116	300	50	3.28	7.06
2015-2016	142.25	29.2	7.8	38.0	10.71	22.7	555	97	332	126	3.90	7.59
2017-2018	142.25	40.4	14.1	30.6	11.32	17.9	665	157	389	119	4.67	7.55
2018-2019	142.25	38.6	11.7	23.1	6.74	14.3	666	159	412	95	4.68	7.70
2019-2020	142.25	35.8	7.3	19.0	16.9	12.3	618	143	399	76	4.34	7.8
2020-2021	142.25	37.6	5.4	25.3	7.69	15.5	632	146	388	98	4.44	6.44
2021-2022	142.25	41.9	7.2	33.1	4.07	18.9	677	162	387	128	4.76	5.97

^aLow snow year**II. GMU 24– Treat Island Trend Count Area aerial moose composition counts – GSPE sample units**

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	163.27	22.76	3.50	9.41	2.38	7.1	604	104	457	43	3.70	4.70
2003-2004	174.12	26.8	9.13	21.17	3.77	14.3	762	138	515	109	4.38	6.03
2004-2005	168.69	28.78	6.94	29.96	9.49	18.9	800	145	504	151	4.74	5.48
2005-2006	168.69	25.1	8.9	14.3	9.4	10.2	566	102	406	58	3.36	4.60
2006-2007 ^a	168.69	35.04	8.48	30.13	5.47	18.2	740	157	448	135	4.39	6.75
2007-2008	163.27	29.30	10.62	21.66	9.78	14.35	711	138	471	102	4.35	5.95
2008-2009	163.27	29.16	12.73	19.51	4.40	13.12	724	142	487	95	4.43	6.68
2009-2010	163.27	34.18	10.97	11.18	10.97	7.69	689	162	474	53	4.22	7.28
2010-2011	163.27	39.33	6.95	20.86	4.82	12.65	688	164	417	87	4.21	6.31
2011-2012	163.27	35.55	7.16	18.16	2.94	11.81	601	139	391	71	3.68	5.67
2013-2014 ^a	163.27	29.43	4.50	20.12	3.08	13.51	496	98	333	67	3.04	7.01
2014-2015 ^a	163.27	39.52	7.66	18.15	2.27	11.51	391	98	248	45	2.39	7.88

2015-2016	163.27	37.16	10.38	33.88	13.89	19.81	626	136	366	124	3.83	7.52
2017-2018	163.27	24.15	8.92	32.81	10.71	20.87	599	92	381	125	3.67	7.61
2018-2019	163.27	34.85	7.77	20.38	10.14	13.13	579	130	373	76	3.55	7.70
2019-2020	163.27	37.22	7.10	11.93	5.00	8.00	525	131	352	42	3.22	6.96
2020-2021	163.27	40.12	5.86	15.12	6.52	9.74	503	130	324	49	3.08	7.07
2021-2022	163.27	38.77	3.96	32.16	2.82	18.81	388	88	227	73	2.38	6.85

^aLow snow year

III. GMU 24 – Middle Fork Trend Count Area aerial moose composition counts.

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Moose/mi ²
1987-1988	78.1	49	5	21	0	13	104	1.33
2000-2001	77	13	0	43	10	27	62	0.81
2001-2002	77	36	9	18	0	12	34	0.44
2002-2003	77	0	0	33	0	25	24	0.31
2003-2004	113	23	9	24	0	16	104	0.92
2004-2005	113	37.68	5.80	21.74	0	13.64	110	0.97
2005-2006	113	33	5	14	0	11	86	0.76
2007-2008	113	41	4.92	24.6	15.4	14.9	101	0.89
2008-2009	113	40	13	18	0	11.1	99	0.87
2011-2012	113	21	4.9	29.5	5.9	19.6	92	0.81
2015-2016	113.6	58	4.0	18.0	2.0	10.23	88	0.77
2017-2018	113.6	49	10.5	26.3	7.1	15.0	100	0.88

IV. GMU 24 – Upper Koyukuk River Drainage population estimation surveys.

Regulatory year	Survey area (mi ²)	Bulls: 100 cows	Yearling bulls:100 cows	Calves:100 cows	Twins:100 cows with calves	Percent calves	Moose (90% C.I.)	Moose/mi ²
1989–1990 ^a Kanuti NWR	2615	64	4.1	16.5	n/a	9.2	1171±24.7%	0.45
1993–1994 ^a Kanuti NWR	2644	61	8.0	33.0	n/a	17.0	1759±18.4%	0.67
1999–2000 Kanuti NWR	2714	59	4.4	30.2	5.4	16.0	1003±20.7%	0.37
2004–2005 Kanuti NWR	2710	62	8.6	46.4	n/a	20.7	842±28.6%	0.31
2005–2006 Kanuti NWR	2710	70	20.1	42.9	30.1	19.7	1026±43.3%	0.38

2007–2008 Kanuti NWR	2715	60	12.8	52.6	22.3	24.7	588±21.4%	0.22
2008–2009 Kanuti NWR	2715	46	14.1	57.7	9.0	28.5	872±23.2%	0.32
2010–2011 Kanuti NWR	2715	51	7.5	32.9	6.8	17.5	1068±11.5%	0.39
2011–2012 Kanuti NWR	2715	69	9.5	40.9	18.5	19.9	797±19.3%	0.29
2013–2014 Kanuti NWR	2715	65	11.1	35.8	10.7	19.6	551±25.7%	0.20
2015–2016 Kanuti NWR	2715	62	9.5	50.4	17.7	24.7	1158±18.3%	0.43
2017–2018 Kanuti NWR	2715	75	15.1	39.5	13.4	17.7	1311±19.2%	0.48
2021–2022 Kanuti NWR	2715	56	2.8	21.8	12.2	12.1	952±17.8%	0.35
2004-2005 Bettles block	6388	65	10.0	43.1	n/a	21.4	1596±32.9%	0.25
2004-2005 GAAR block	5106	71	7.8	23.4	n/a	13.3	1072±23.9%	0.21
2010–2011 Allakaket Area	1340	52	7.6	34.3	10.7	18.3	405±23.7%	0.30
2011–2012 Allakaket Area	1340	103	7.9	49.4	6.4	18.8	324±29.0%	0.24
2013–2014 Allakaket Area	1340	67	11.4	37.0	10.3	17.4	300±31.4%	0.22
2015–2016 Allakaket Area	1340	78	13.0	54.0	14.9	23.1	509±26.9%	0.38
2017–2018 Allakaket Area	1340	84	17.7	48.7	26.2	20.9	631±22.8%	0.47
2021–2022 Allakaket Area	1340	84	2.9	18.6	5.4	9.6	454±22.7%	0.34
1999-2000 Total block	8390	65	4.9	27.3	5.5	14.7	2662±24.4%	0.32
2004-2005 Total block	11494	65	8.6	34.8	n/a	17.8	2810±22.4%	0.24
2010–2011 Total Block	3736	53	7.5	33.3	7.2	17.7	1331±12.5%	0.35
2011–2012 Total Block	3736	78	9.8	42.9	15.7	19.5	1022±18.9%	0.27

2013–2014 Total Block	3736	67	11.3	35.4	10.3	18.7	768±23.3%	0.21
2015–2016 Total Block	3736	62	9.5	51.8	17.2	24.4	1518±18.3%	0.41
2017–2018 Total Block	3736	78	15.9	41.8	17.8	18.3	1795±19.0%	0.48
2021–2022 Total Block	3736	65	3.0	20.9	10.9	11.3	1297±17.9%	0.35

^a Martin and Zirkle 1996.

V. GMU 24C/D – Middle Koyukuk River Drainage population estimation surveys.

Regulatory year	Survey area (mi ²)	Bulls: 100 cows	Yearling bulls:100 cows	Calves:100 cows	Twins/100 cows with calves	Percent calves	Moose	Moose/mi ²
2007–2008 Eastern Koyukuk NWR	1623	77.5	13.7	41.7	9.7	18.7	983 (890-1076)	0.61
2007–2008 Hog River	2672	69.6	15.6	45.3	16.5	20.7	562 (433-691)	0.21
2007–2008 Total Block	4295	74.6	14.4	43.0	12.3	19.4	1545 (1382-1708)	0.36

XII. GMU 24 – Moose Harvest 1988-2021.

Regulatory year	Harvest By Hunters				Estimated Unreported Harvest ^a	Total
	Bulls	Cows	Unknown	Total		
1988-1989	132	5	0	137	131	268
1989-1990	119	8	1	128	132	260
1990-1991	141	2	1	144	129	273
1991-1992	87	1	0	88	129	217
1992-1993	118	5	0	123	124	247
1993-1994	139	12	0	151	116	267
1994-1995	134	8	0	142	135	277
1995-1996	161	8	0	169	129	299
1996-1997	160	14	0	174	117	291
1997-1998	168	10	2	178	100	280
1998-1999	213	17	0	230	100	330
1999-2000	228	10	2	240	100	340
2000-2001	211	7	1	219	100	319
2001-2002	183	5	1	189	100	289
2002-2003	186	4	0	190	100	290

2003-2004	149	5	1	155	100	255
2004-2005	127	1	0	128	100	228
2005-2006	162	0	0	162	100	262
2006-2007	141	0	0	141	145	286
2007-2008	199	3	0	202	145	347
2008-2009	168	1	0	169	145	314
2009-2010	183	3	3	189	145	334
2010-2011	179	0	2	181	145	326
2011-2012	158	0	1	159	145	304
2012-2013	190	0	4	194	145	339
2013-2014	158	0	0	158	145	303
2014-2015	185	0	0	185	145	330
2015-2016	178	0	0	178	145	323
2016-2017	169	0	0	169	145	314
2017-2018	177	0	0	177	145	322
2018-2019	154	0	0	154	145	299
2019-2020	160	0	0	160	145	305
2020-2021	141	0	0	141	145	286
2021-2022 ^b	143	0	0	143	145	288

^a Unreported harvest based on Subsistence Division's door-to-door survey and other sources.

^b Data preliminary

GMU 21D

I. GMU 21D - Three Day Slough Trend Count Area aerial moose composition counts -- GSPE sample units

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	177.0	19.6	12.9	12.9	2.3	9.7	906	134	684	88	5.12	4.79
2003-2004	160.4	17.4	7.0	21.3	7.9	15.4	846	106	610	130	5.27	5.19
2004-2005	193.6	21.6	8.5	23.4	7.9	16.0	935	139	645	151	4.83	6.02
2005-2006	193.6	20.8	4.9	20.7	5.9	14.6	863	127	610	126	4.46	5.90
2006-2007 ^a	193.6	24.9	6.6	39.5	12.4	24.0	1177	178	716	283	6.08	6.47
2007-2008	193.6	30.0	9.5	33.9	7.0	20.7	967	177	590	200	4.99	6.02
2008-2009	193.6	27.7	7.7	18.7	5.2	12.8	1270	240	868	162	6.56	7.70
2009-2010	193.6	25.8	7.6	12.9	1.9	9.3	1151	214	829	107	5.94	6.92
2010-2011	193.6	30.7	4.1	25.7	3.28	16.5	1148	225	734	189	5.93	8.19
2011-2012 ^a	193.6	30.7	11.2	22.8	4.58	14.9	921	184	600	137	4.76	5.39
2013-2014 ^a	193.6	21.1	3.6	16.5	3.26	12.0	794	122	577	95	4.10	6.02
2014-2015 ^a	193.6	21.0	7.8	17.3	4.44	12.5	758	115	548	95	3.91	6.10
2015-2016	193.6	20.1	7.8	36.2	8.14	23.2	801	103	512	186	4.14	5.60
2017-2018	193.6	18.1	8.0	27.8	7.10	19.1	950	118	651	181	4.91	6.49

2018-2019	193.6	19.6	7.6	15.4	5.15	11.4	894	130	662	102	4.62	5.83
2019-2020	193.6	20.7	4.2	21.0	2.38	14.8	870	127	614	129	4.49	6.52
2020-2021	193.6	25.9	6.9	20.8	4.55	14.2	973	172	663	138	5.03	6.40
2021-2022	193.6	28.6	9.5	29.1	8.75	18.5	948	172	601	175	4.90	6.28

^aLow snow year

II. GMU 21D – Dulbi River Mouth Trend Count Area aerial moose composition counts - GSPE sample units

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	122.27	21.12	5.58	15.54	2.63	11.4	342	53	251	39	2.80	6.49
2003-2004	116.72	16.67	6.46	23.13	4.62	16.5	411	49	294	68	3.52	4.78
2004-2005	122.00	21.03	5.56	40.08	7.5	24.9	406	53	252	101	3.33	4.92
2005-2006	122.00	17.7	8.0	22.8	3.8	16.2	333	42	237	54	2.72	4.78
2006-2007 ^a	116.7	24.0	6.2	32.2	7.8	20.6	403	62	258	83	3.45	5.93
2007-2008	116.7	36.3	12.5	46.8	10.5	25.6	454	90	248	116	3.89	6.00
2008-2009	116.7	32.5	12.3	31.5	5.4	19.2	505	100	308	97	4.33	6.31
2009-2010	116.7	36.3	10.6	16.3	5.6	10.7	534	127	350	57	4.57	6.28
2010-2011	116.7	24.0	1.7	32.2	8.3	18.8	414	58	242	78	3.55	5.40
2011-2012	111.1	23.5	6.9	28.9	3.3	19.0	506	78	332	96	4.35	6.62
2013-2014 ^a	111.1	25.0	7.2	13.3	0.0	9.6	365	66	264	35	3.28	6.61
2014-2015 ^a	111.1	39.2	10.4	29.6	2.9	17.5	211	49	125	37	1.90	7.96
2015-2016	111.1	20.5	5.6	47.4	14.2	28.2	450	55	268	127	4.05	8.32
2017-2018	111.1	35.0	13.1	30.8	2.82	18.6	393	83	237	73	3.54	6.29
2018-2019	116.7	23.7	10.4	26.1	3.77	17.4	316	50	211	55	2.71	5.68
2019-2020	105.6	25.6	3.4	21.2	7.5	14.4	298	52	203	43	2.82	6.36
2020-2021	105.6	27.2	6.1	21.8	7.69	14.7	389	71	261	57	3.68	6.76
2021-2022	105.6	25.3	4.3	29.6	7.84	19.1	288	47	186	55	2.73	5.77

^aLow snow year

III. GMU 21D – Koyukuk River Mouth Trend Count Area aerial moose composition counts - GSPE sample units

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	118.76	39.64	8.36	16.36	0	10.5	429	109	275	45	3.61	6.28
2003-2004	118.76	25.15	10.74	34.66	5.61	21.7	521	82	326	113	4.39	5.91
2004-2005	118.76	32.68	15.36	47.39	11.54	23.6	551	100	306	145	4.64	4.96
2005-2006	118.76	23.7	9.9	38.0	7.3	23.5	443	65	274	104	3.73	5.61
2006-2007 ^a	118.76	21.0	7.33	24.5	8.45	16.8	457	66	314	77	3.85	5.94
2007-2008	118.76	22.7	7.35	46.0	9.09	27.27	528	71	313	144	4.45	6.13
2008-2009	118.76	31.9	15.54	38.2	6.67	22.48	427	80	251	96	3.60	6.32
2009-2010	118.76	31.5	14.24	13.3	0	9.21	478	104	330	44	4.03	6.53

2010-2011	118.76	23.2	2.74	27.1	10.0	18.1	493	76	328	89	4.15	6.26
2011-2012	118.76	20.0	5.14	23.7	1.22	16.5	503	70	350	83	4.24	6.29
2013-2014 ^a	118.76	22.6	8.93	11.3	0.0	8.4	450	76	336	38	3.79	6.49
2014-2015 ^a	118.76	23.0	6.32	33.1	11.3	21.2	420	62	269	89	3.54	8.16
2015-2016	118.76	22.9	12.13	40.7	14.4	24.9	607	85	371	151	5.11	8.22
2017-2018	118.76	21.1	9.62	39.9	14.9	24.8	686	90	426	170	5.78	7.69
2018-2019	118.76	19.2	8.33	29.7	10.3	20.0	536	69	360	107	4.51	5.79
2019-2020	118.76	26.6	9.14	33.2	4.35	20.8	577	96	361	120	4.86	7.97
2020-2021	118.76	20.5	6.99	26.9	4.00	18.3	569	79	386	104	4.79	8.11
2021-2022	118.76	23.5	4.04	21.9	1.11	15.0	612	99	421	92	5.15	7.34

^aLow snow year

IV. GMU 21D – Squirrel Creek Trend Count Area aerial moose composition counts - GSPE sample units

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	102.26	43.78	4.98	24.38	2.08	14.76	332	88	201	49	3.25	6.25
2003-2004	96.57	32.47	8.44	24.68	22.58	15.70	242	50	154	38	2.51	4.64
2004-2005	102.26	44.27	14.50	45.04	9.26	23.79	248	58	131	59	2.42	4.97
2005-2006	90.88	32.10	7.41	23.46	8.57	15.08	252	52	162	38	2.77	4.73
2006-2007 ^a	90.88	35.42	4.17	35.42	3.03	20.73	164	34	96	34	1.80	5.78
2007-2008	96.57	44.75	16.78	28.67	10.81	16.53	248	64	143	41	2.57	5.83
2008-2009	96.57	45.39	14.47	20.39	6.90	12.30	252	69	152	31	2.61	6.46
2009-2010	90.89	33.70	10.32	17.39	0	11.51	278	62	184	32	2.88	5.71
2010-2011	90.89	24.9	5.2	42.2	17.7	25.3	289	43	173	73	3.18	5.59
2011-2012	96.57	23.5	7.3	37.4	11.7	23.3	288	42	179	67	2.98	5.85
2013-2014 ^a	96.57	38.5	10.66	29.5	2.86	17.6	205	47	122	36	2.12	7.48
2014-2015 ^a	90.89	37.9	13.6	59.8	21.5	30.5	259	50	132	79	2.85	8.41
2015-2016	90.89	47.4	21.4	51.6	15.3	26.0	382	91	192	99	4.20	7.33
2017-2018	90.89	26.8	11.4	53.9	15.3	29.8	506	75	280	151	5.57	7.90
2018-2019	90.89	25.7	12.1	43.8	17.0	25.8	461	70	272	119	5.07	7.96
2019-2020	90.89	34.1	8.8	46.4	12.0	25.7	470	89	261	121	5.17	7.42
2020-2021	90.89	26.7	4.9	25.8	1.8	16.9	343	60	225	58	3.77	7.48
2021-2022	90.89	34.1	5.2	23.7	2.0	15.0	333	72	211	50	3.66	6.51

^aLow snow year

V. GMU 21D – Pilot Mountain Slough Trend Count Area aerial moose composition counts - GSPE sample units

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	91.01	17.67	8.37	21.40	4.55	15.39	299	38	215	46	3.29	6.40
2003-2004	91.01	12.68	9.86	47.89	10.87	29.83	342	27	213	102	3.76	6.26

2004-2005	91.01	10.44	3.21	40.56	12.22	26.79	377	26	249	101	4.14	7.44
2005-2006	102.37	18.96	7.11	50.03	10.68	31.23	365	40	211	114	3.57	5.40
2006-2007 ^a	91.01	15.77	7.66	31.08	15.00	21.17	326	35	222	69	3.58	5.87
2007-2008	91.01	14.77	7.20	40.15	9.38	25.92	409	39	264	106	4.49	6.59
2008-2009	91.01	15.29	6.61	30.99	7.14	21.19	354	37	242	75	3.89	6.14
2009-2010	91.01	11.92	3.08	20.77	5.88	15.65	345	31	260	54	3.79	5.88
2010-2011	91.01	16.96	2.12	47.70	5.47	28.97	466	48	283	135	5.12	6.16
2011-2012	91.01	18.16	8.66	30.11	9.38	24.87	563	65	358	140	6.19	6.38
2013-2014 ^a	91.01	22.91	8.05	23.22	11.94	15.89	472	74	323	75	5.19	8.07
2014-2015 ^a	91.01	17.67	5.0	46.0	12.20	28.11	491	53	300	138	5.40	9.56
2015-2016	91.01	14.56	8.36	62.26	15.50	35.21	656	54	371	231	7.21	8.52
2017-2018	91.01	9.66	3.92	55.87	12.63	33.59	637	37	383	214	7.00	7.87
2018-2019	91.01	10.86	6.57	44.29	7.69	28.55	543	38	350	155	5.97	8.57
2019-2020	91.01	15.0	7.52	44.20	6.06	27.76	508	48	319	141	5.58	8.37
2020-2021	91.01	12.03	5.35	33.42	5.04	22.98	544	45	374	125	5.98	8.90
2021-2022	91.01	18.24	7.29	36.78	6.14	23.73	510	60	329	121	5.60	7.60

VI. GMU 21D – Kaiyuh Slough Trend Count Area aerial moose composition counts - GSPE sample units

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2001-2002	229.81	69.66	5.62	8.99	0	5.03	159	62	89	8	0.69	4.11
2003-2004	178.00	54.72	18.87	37.74	14.29	19.61	204	58	106	40	1.15	4.30
2004-2005	229.81	52.85	17.89	52.03	25.49	25.40	252	65	123	64	1.10	4.29
2005-2006	229.81	66.30	18.48	29.35	0	15.00	180	61	92	27	0.78	3.71
2006-2007 ^a	126.29	41.9	4.76	20.95	4.76	12.87	171	44	105	22	1.35	4.70
2007-2008	126.29	45.45	7.27	27.27	7.14	15.79	190	50	110	30	1.50	5.05
2008-2009	126.29	59.09	7.58	46.97	19.23	22.79	136	39	66	31	1.08	4.53
2009-2010	126.29	49.56	12.39	9.73	0	6.11	180	56	113	11	1.43	5.6
2010-2011	126.29	44.32	11.34	51.54	9.30	26.31	190	43	97	50	1.50	6.31
2011-2012	126.29	44.62	19.23	56.15	20.0	27.97	261	58	130	73	2.07	4.92
2013-2014 ^a	126.29	51.06	19.14	43.26	15.38	22.26	274	72	141	61	2.17	6.22
2014-2015 ^a	126.29	60.40	14.85	69.30	16.67	30.17	232	61	101	70	1.83	7.48
2015-2016	126.29	41.48	17.6	60.23	17.1	29.86	355	73	176	106	2.81	5.38
2017-2018	126.29	40.70	14.73	44.96	22.34	24.22	479	105	258	116	3.79	6.94
2018-2019	126.29	37.45	9.96	30.68	8.45	18.25	422	94	251	77	3.34	7.95
2019-2020	126.29	48.57	8.21	27.5	11.59	15.62	493	136	280	77	3.90	6.56
2020-2021	126.29	45.59	4.90	35.29	2.86	19.51	369	93	204	72	2.92	7.30
2021-2022	126.29	40.00	6.91	26.91	4.29	16.12	459	110	275	74	3.63	6.52

^aLow snow year

VII. GMU – 21D aerial moose population estimates, regulatory years 1987–2018

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
<i>21D–Western Galena</i>								
1987–1988 ^a	1508	36.7	38.2	12.4	21.8	3220	4118±14%	2.73
1997–1998 ^b	1508	31.3	32.1	8.0	19.6	2612	3250±12%	2.15
2001–2002 ^c	1734	26.6	17.1	6.4	12.0	2995	3403±19%	1.96
2004–2005 ^c	1841	26.2	36.2	10.5	22.3	2564	3299±5%	1.79
2011–2012 ^c	1841	29.0	25.0	8.8	16.3	2811	3360±7%	1.83
2018–2019 ^c	1903	25.9	22.7	9.0	15.4	3139	3703±9%	1.95
<i>21D–Yuki River/Bear Cr</i>								
2010–2011 ^c	3516	64.3	27.4	9.9	14.5	1477	1727±14%	0.49
<i>24D–Upper Koyukuk</i>								
2001–2002 ^c	1949	35.0	17.6	6.1	11.4	3228	3642±16%	1.87
2004–2005 ^c	1843	32.7	33.9	12.6	20.4	2531	3181±5%	1.73
2011–2012 ^c	1843	38.4	23.4	9.2	14.4	2249	2627±8%	1.43
<i>24D–Upper Huslia/KNWR</i>								
2010–2011 ^c	1842	79.0	27.8	7.0	13.6	774	882±23%	0.48
<i>Total Area</i>								
1987–1988 ^a	3090	43.1	40.4	13.1	6.7	4609	5908±15%	1.91
1997–1998 ^b	3090	34.4	31.1	9.4	17.8	3725	4585±14%	1.48
2001–2002 ^c	5526	33.4	18.3	6.7	12.0	7849	8924±13%	1.62
2004–2005 ^c	5527	30.4	36.5	11.6	18.2	6514	7967±4%	1.44
2011–2012 ^c	5527	32.4	27.6	9.3	17.3	6524	7885±5%	1.43

^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.

VIII. GMU 21D – Moose Harvest 1988-2021.

Regulatory year	Harvest by hunters				Unreported harvest ^a	Potlatch/ Stickdance ^c	Total
	Bull	Cow	Unk	Total			
1995–1996	329	21	1	351	40	4	395
1996–1997	315	110	1	426	150	4	580
1997–1998	343	70	1	414	150	4	568
1998–1999	340	80	3	423	150	1	574
1999–2000	336	127	3	466	150	3	619
2000–2001	320	35	0	355	150	10	515
2001–2002	247	49	2	298	150	14	462
2002–2003	316	10	0	326	150	13	489
2003–2004	310	9	1	320	150	14	484
2004–2005	227	0	0	227	150	12	389
2005–2006	218	0	0	218	150	13	381
2006–2007	211	0	0	211	150	17	378
2007–2008	204	1	0	205	150	25	380
2008–2009	263	0	0	263	150	9	422
2009–2010	244	0	0	244	150	17	411
2010–2011	286	0	0	286	113	12	411
2011–2012	285	0	2	287	110	15	412
2012–2013	267	0	0	267	111	14	392
2013–2014	273	0	2	275	107	18	400
2014–2015	258	0	0	258	112	13	383
2015–2016	317	1	1	317	115	14	442
2016–2017	278	0	0	278	125	6	403
2017–2018	318	0	0	318	125	9	443
2018–2019	287	6	0	293	113	12	418
2019–2020	238	11	0	249	115	10	374
2020–2021	255	7	0	262	123	2	387
2021–2022 ^b	241	0	0	241	122	3	366

^a Unreported harvest based on ADF&G–Subsistence Division’s door-to-door survey and other sources.

^b Preliminary data.

^c Includes all Potlatch, Stickdance, Ceremonial and Cultural permit harvest.

GMU 21B

I. GMU 21B – Lower Nowitna River moose population estimates.

Area	Survey Area (mi ²)	Estimated # of Moose	90% CI ^a	Bulls:100 Cows	Calves:100 Cows	Yrlg Bulls:100 Cows	Moose/mi ²
1980 – Lower Novi	1338	883	26	53	35	25	0.66
1986 – Lower Novi	1338	629	14	37	39	12	0.47
1990 – Lower Novi	1338	1151	20	33	35	14	0.86
1995 – Lower Novi	1338	856	20	34	35	15	0.64
2001 – Lower Novi	1531	1358	28.3	29.7	18.6	7.4	0.89
2001 – Old 21B	4754	3201	44.6	39.0	18.2	9.2	0.67
2008 – Lower Novi	1531	816	8.8	35.3	35.7	9.3	0.53
2008 – Old 21B	4754	1438	14.7	44.6	42.7	11.6	0.30
2008 – New 21B	8565	2317	18.1	49.9	48.9	12.1	0.27

^a Confidence interval (% ±).**II. GMU 21B – Nowitna/Sulatna Trend Count Area aerial moose composition counts - GSPE sample units**

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2000-2001	149	25	7	11	0	8	202	37	149	16	1.36	
2001-2002	120	18	6	18	0	12	200	27	150	23	1.67	
2003-2004	143	15	10	28	3	20	172	18	120	34	1.20	
2004-2005	149	23	12	41	15	25	188	26	115	47	1.26	
2005-2006	149	29	10	37	12	22	167	29	101	37	1.12	
2006-2007 ^a	149	25	7	25	3	16	207	35	138	34	1.39	4.80
2007-2008	149	31	9	42	19	24	177	32	102	43	1.19	5.86
2008-2009	149	29	10	24	17	16	170	32	111	27	1.14	5.69
2009-2010	149	23	7	8	0	6	173	30	133	10	1.16	4.93
2010-2011	149	32	3	42	5	24	185	34	106	45	1.24	5.18
2011-2012	149	28	14	39	8	23	224	38	134	52	1.51	4.71
2013-2014 ^a	149	28	5	18	0	12	140	27	96	17	0.94	5.43
2014-2015 ^a	149	43	4	26	0	12	115	29	68	18	0.77	7.45
2015-2016	149	33	8	55	3	28	141	25	75	41	0.95	5.94
2017-2018	149	35	5	33	1.8	27.6	209	44	124	41	1.41	5.76
2018-2019	143	30	10	19	0.9	12.6	134	27	90	17	0.94	6.42
2019-2020	143	37	9	40	1.7	21.7	138	29	78	31	0.97	5.60
2020-2021	143	17	2	13	0	8.4	124	16	96	12	0.87	5.32
2021-2022	143	44	6	38	3.0	18.2	126	30	68	26	0.88	5.61

^aLow snow year**III. GMU 21B - Nowitna mouth Trend Count Area aerial moose composition counts - GSPE sample units**

Regulatory year	Survey Area (mi ²)	Bulls:100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	Twins:100 cows w/calves	Percent Calves (%)	Moose counted	Bulls counted	Cows counted	Calves counted	Moose/ mi ²	Time (min./mi ²)
2000-2001	102	21	6	7	0	5	206	34	161	11	2.01	
2001-2002	102	15	7	15	6	18	191	20	137	34	1.87	
2003-2004	102	10	5	42	10	28	206	14	135	57	2.01	
2004-2005	102	19	14	40	7	26	187	22	118	47	1.83	4.75
2005-2006	102	20	9	24		16	195	27	136	32	1.91	5.3
2006-2007 ^a	102	19	8	37	17	24	208	25	134	49	2.04	5.7
2007-2008	102	22	5	32		21	196	28	127	41	1.92	6.1
2008-2009	102	29	7	24	9	16	150	28	98	24	1.47	5.31
2009-2010	102	21	8	6	0	5	166	27	131	8	1.62	5.09
2010-2011	102	23	1	29	0	19	167	25	110	32	1.63	6.02
2011-2012	102	31	12	14	0	10	203	44	139	20	1.98	4.81
2013-2014 ^a	102	22.3	7.8	13.6	0	10	140	23	103	14	1.37	6.27
2014-2015 ^a	102	34	4	39	2	26	121	24	70	27	1.18	7.30
2015-2016	102	23	7	46	6	41	154	21	91	42	1.51	7.31
2017-2018	96.6	28	8	18	0.9	17.6	136	26	93	17	1.41	5.77
2018-2019	96.6	16	2	15	0	16.6	138	17	105	16	1.43	6.79
2019-2020	96.6	25	4	23	1.7	21.7	136	23	92	21	1.41	6.21
2020-2021	96.6	22	5	13	0	11.4	115	19	85	11	1.19	5.82
2021-2022	96.6	17	1	32	4.2	23.8	106	12	71	23	1.10	6.12

^aLow snow year**IV. GMU 21B Moose harvest 1996-2021**

Regulatory year	Harvest by hunters				Unreported Total	
	Bull	Cow	Unk	Total		
1996-1997	78	0	0	78	15	93
1997-1998	67	1	0	68	15	83
1998-1999	74	2	0	76	15	91
1999-2000	81	0	0	81	20	101
2000-2001	65	1	7	73	20	93
2001-2002	75	0	4	79	20	99
2002-2003	77	0	0	77	20	97
2003-2004	75	0	0	75	25	100
2004-2005	63	1	0	64	25	89
2005-2006	77	0	0	77	25	102
2006-2007	70	0	0	70	25	95
2007-2008	84	0	0	84	25	109
2008-2009	86	0	0	86	25	111

2009–2010	66	0	1	67	25	92
2010–2011	81	0	0	81	25	106
2011–2012	73	0	0	73	25	98
2012–2013	69	0	0	69	25	94
2013–2014	66	0	0	66	25	91
2014–2015	75	0	0	75	25	100
2015–2016	96	0	0	96	25	121
2016–2017	83	0	0	83	25	108
2017–2018	84	0	0	84	25	109
2018–2019	68	0	0	68	25	93
2019–2020	76	0	0	76	25	101
2020–2021	68	0	0	68	25	93
2021–2022 ^b	56	0	0	56	25	81

^a Including the Nowitna River drainage above the Little Mud River.

^b Preliminary data.

Twinning Data

Unit 21D moose aerial twinning surveys in the Three Day Slough trend count area, regulatory years 1989–1990 through 2020–2021

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
1989–1990		24	21	47		21–25
1991–1992		22	23	51		22–23
1992–1993	296	23	19	44	100	23–25
1993–1994	110	39	11	22	55	23–24
1994–1995	78	37	18	33	38	22
1995–1996	200	39	13	26 ^b	51	22,24
1996–1997	180	30	9	23	58	23–24
1997–1998	70	29	4	12	11	20–30
1998–1999	28	37	3	8	14	4–7 ^c
1999–2000	101	53	8	13	47	27–29
2000–2001		38	6	14		28–30
2001–2002	30	13	3	19	2	29–6/1
2002–2003	18	37	14	27	21	27,28
2003–2004	44	35	25	42	31	26,27
2004–2005 ^{d,e}	77	27	16	37 ^b	25	24–27
2005–2006	118	26	24	48	62	25–27
2006–2007	65	33	12	27	33	25–27
2007–2008	49	40	23	37 ^b	43	25–27
2008–2009	119	39	10	20	29	26–28
2009–2010 ^e	69	32	19	37	26	26–28,30
2010–2011	59	33	17	34	34	25–27

2011–2012	74	39	19	33	28	26–28
2013–2014 ^f	63	38	7	16	34	27–31
2014–2015	62	29	22	43	22	23,24
2015–2016 ^e	58	34	17	33	29	24,25
2016–2017 ^e	63	37	15	29	18	24,25
2017–2018	105	39	11	22	44	25,26
2018–2019	69	44	19	30	14	24,25
2019–2020 ^{de}	60	30	21	41	18	25–27
2020–2021 ^e	102	37	13	26	35	24–26

^a Percent of cows with calves that had twins.

^b Including 1 cow w/3 calves.

^c The 1999 survey was delayed to 4–7 June due to weather.

^d Extensive flooding.

^e Early leaf-out.

^f Includes 5 cows w/1 calf observed by USFWS.

Unit 21D moose aerial twinning surveys in the Pilot Mtn. Slough to Kaiyuh Slough trend count areas, regulatory years 2003–2004 through 2020–2021 (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
2017–2018	100	50	19	28	32	24–25
2018–2019	80	57	30	34	35	24,25,28
2019–2020	84	73	16	18	15	23–25
2020–2021	100	53	14	21	27	24–26

^a Percent of cows with calves that had twins.

^b Radio-collared cows in sample

^c Including 1 cow w/3 calves.

Unit 21D moose aerial twinning surveys in the Natlaratlen River/Bear Creek area, regulatory years 2006–2007 through 2020–2021 (USFWS)

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2006–2007	15	12	6	33	5	24,25
2007–2008	17	9	2	18	5	30
2008–2009	74	35	11	24	18	27–29
2009–2010	65	45	8	15	7	27,29
2010–2011	91	34	19	36	19	26,27
2011–2012	124	41	18	31	14	24–26,29
2012–2013	124	40	17	30	48	24–26
2013–2014	70	32	20	38	15	26–28
2014–2015	55	39	17	30	27	25–27
2015–2016	103	34	19	36	35	24,26
2016–2017	71	44	23	34	25	23–25
2017–2018	83	39	14	26	27	24–27
2018–2019	92	45	18	29	30	24–26
2019–2020	42	40	14	26	19	25–27
2020–2021	108	42	9	18	16	25–26

^a Percent of cows with calves that had twins.

Unit 21B moose aerial twinning surveys in the Nowitna trend count areas, regulatory years 2003–2004 (USFWS)

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2003–2004	10	6	2	25	2	26

^a Percent of cows with calves that had twins.

Unit 24C moose aerial twinning surveys in the Hogatza River, regulatory year 2006–2007

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2006–2007	7	1	2	n/a	1	5/30,6/1

^a Percent of cows with calves that had twins.

Unit 24A/B moose aerial twinning surveys in the Kanuti NWR/M. Fork Koyukuk Rivers, regulatory years 2006–2007 through 2013–2014

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2006–2007	4	3	1	n/a	0	30,31
2007–2008 ^b	n/a	32	17	35	n/a	27–31

2008–2009 ^b	n/a	19	28	60	n/a	29–31
2009–2010 ^{bc}	n/a	15	21	58	n/a	28–30
2010–2011 ^{bd}	n/a	34	20	37	n/a	31, 6/1–2
2011–2012 ^b	n/a	25	27	52	n/a	31, 6/1–2
2012–2013 ^b	27	28	21	43	n/a	30,31, 6/1
2013–2014 ^b	n/a	26	19	42	n/a	29–31, 6/1–2

^a Percent of cows with calves that had twins.

^b Radio-collared cows in sample

^c Early leaf-out.

^d Including 1 cow w/3 calves.

Unit 24D moose aerial twinning surveys in the Dulbi Slough trend count areas, regulatory year 2005–2006

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2005–2006	16	18	16	47	10	29

^a Percent of cows with calves that had twins.

Unit 24D moose aerial twinning surveys in the in the combined areas of Huslia Flats and Treat Island trend count areas, regulatory years 2001–2002 through 2020–2021

Regulatory year	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
2001–2002	--	17	2	11	3	29–6/1
2002–2003	144	53	22	29	41	28–30
2003–2004	58	55	23	29	34	29,30
2004–2005 ^b	30	21	12	36	13	27
2005–2006	36	40	27	40	32	28,29
2006–2007	31	40	8	17	21	28,29
2007–2008	47	38	18	32	22	28,29
2008–2009	97	37	13	26	29	28–30
2009–2010 ^c	51	41	10	20	12	29,30
2010–2011	34	38	15	28	24	28,29
2011–2012	74	47	13	22	14	29,30
2013–2014 ^d	46	57	12	17	18	30,31
2014–2015	55	27	24	47	14	25,26
2015–2016 ^c	32	34	17	33	25	26
2016–2017 ^e	46	25	27	52	18	26
2017–2018	72	36	16	31	36	27
2018–2019	69	41	26	39	19	26
2019–2020 ^{bf}	36	29	21	42	12	27
2020–2021	39	33	18	35	17	26

^a Percent of cows with calves that had twins.

^b Extensive flooding and early leaf-out, so survey flight path was "high-graded" to maximize observations.

^c Early leaf-out.

^d Includes 16 cows w/1 calf and 3 cows w/ 2 calves observed by USFWS.

^e Includes

^f Count was entirely in Dulbi Slough flats

Moose aerial twinning surveys totals for regulatory year 2020–2021

Count Area	Cows w/o calves	Cows w/1 calf	Cows w/twins	Twinning % ^a	Yearlings	Dates in May
(21D) 3-Day Slough	102	37	13	26	35	24–26
(21D) Pilot Mtn./Kaiyuh	100	53	14	21	27	24–26
(21D) Natlaratlen River	108	42	9	18	16	25–26
(24D) Huslia Flats/ Treat Island/Dulbi Slough Flats	39	33	18	35	17	26

^a Percent of cows with calves that had twins.

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SHEEP

Table 1. Total Sheep observed and sheep composition in eastern Unit 24A and western Unit 25A, regulatory years 2002–2021.

Year	Total Adult Sheep	Total Sheep	^a “ewe-likes”	Lambs	Sublegal Rams	Legal Rams	Unknown Rams	^a Lamb:100 ewe-likes	^b % legal rams	Survey Time (hr:min)
2002	1,318	1,539	884	221	380	50	4	25	3.8	14:05
2003	875	989	621	114	207	34	13	18	3.9	11:32
2004	1,280	1,460	908	180	320	43	9	20	3.4	16:41
2005	885	1,099	636	214	203	42	4	34	4.8	15:10
2006	1,293	1,517	857	224	313	46	77	26	3.8	17:30
2007	978	1,310	779	332	152	47	0	43	4.8	18:07
2008										
2009	1,240	1,535	911	295	298	31	0	32	2.5	21:38
2010										
2011										
2012	1,526	1,738	1153	212	343	30	0	18	2	20:54

2013										
2014	814	827	541	13	233	40	0	2	4.9	20:35
2015	992	1,172	656	180	303	32	1	27	3.2	18:56
2016	1,221	1,396	815	175	338	66	2	24	5.4	15:35
2017										
2018	560	688	391	142	133	34	2	36	6.1	19:36
2019										
2020										
2021	401	469	306	67	83	12	0	22	3	16:56
Avg.^c	1,082	1,273	763	192	269	41	9	25	4	17:32

^a ewe-likes include adult female sheep, yearlings of both sexes, and some 2-year-old rams.

^b % legal rams is the proportion of legal rams compared to total adult population

^c Means are for years 2002–2018

Table 2. Reported number of hunters and harvest in the central and eastern Brooks Range for Units 23^a, 24B, 26A (combined), 25A, 26B, and 26C, Interior Alaska, regulatory years^b 2002–2021.

Regulatory year	Unit												
	23, 24B, 26A (combined)		24A		25A		26B		26C		Totals		
	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	% Success
2002	22	11	30	11	91	40	102	29	82	28	327	119	0.36
2003	21	6	43	17	102	53	115	33	81	39	362	148	0.41
2004	24	11	42	17	83	45	130	41	71	49	350	163	0.47
2005	14	6	43	18	108	66	165	47	73	40	403	177	0.44
2006	28	17	60	17	111	74	151	30	85	41	435	179	0.41
2007	22	13	48	14	121	77	168	55	120	70	479	229	0.48
2008	17	8	60	27	145	74	205	57	112	67	539	233	0.43
2009	23	13	53	17	142	84	147	47	117	76	482	237	0.49
2010	26	9	51	23	158	77	186	63	117	66	538	238	0.44
2011	26	11	58	16	155	89	183	55	151	87	573	258	0.45
2012	26	9	48	17	132	62	192	64	145	72	543	224	0.41
2013	23	2	52	17	139	67	176	35	156	78	546	199	0.36
2014	22	4	56	16	118	44	140	31	138	65	474	160	0.34

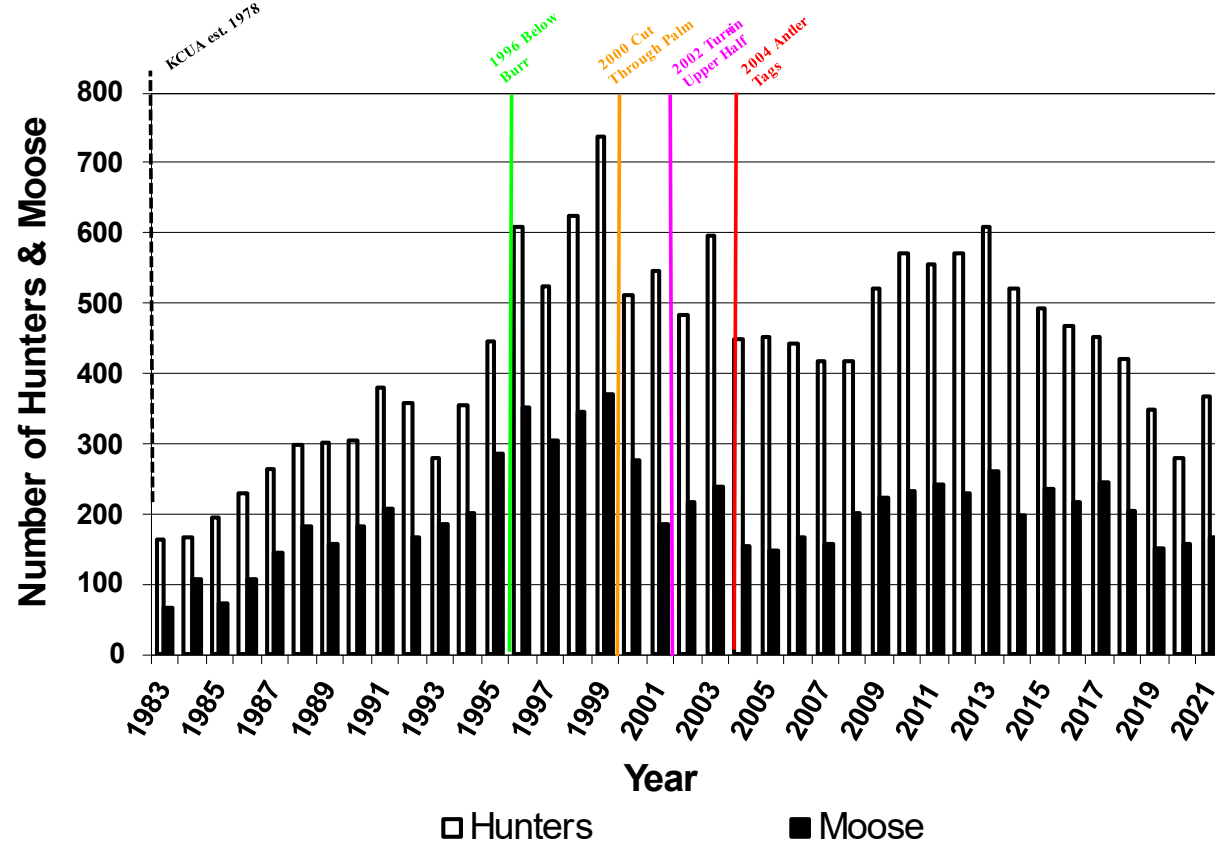
2015	12	3	47	10	101	40	84	16	92	45	336	114	0.34
2016	11	4	50	15	97	44	86	26	82	33	326	122	0.37
2017	17	6	47	14	102	47	57	12	70	34	293	113	0.39
2018	11	3	63	19	90	47	64	19	54	35	282	123	0.44
2019	10	3	80	19	119	65	65	20	74	42	348	149	0.43
2020	8	1	65	17	142	63	61	15	89	49	365	145	0.40
2021 ^c	11	1	50	11	91	38	60	18	70	37	282	105	0.37
Avg.	18.7	7.05	52.3	16.6	117.35	59.8	126.85	35.65	98.95	52.65	414.15	171.75	0.41

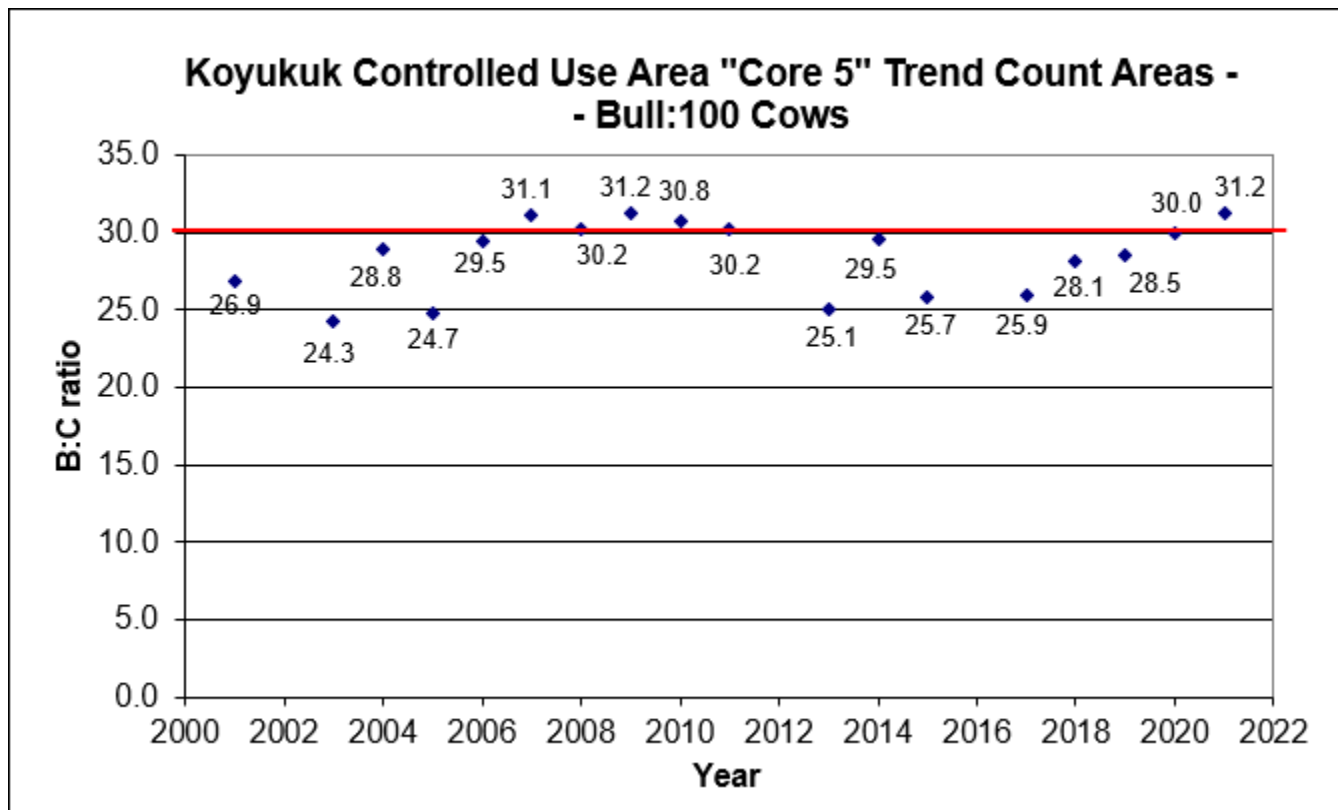
^a Includes only the Gates of the Arctic National Park and Preserve portions of Unit 23.

^b Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2011 = 1 July 2011–30 June 2012.

^c 2021 data is preliminary.

KCUA Check Station 1983-2021





Koyukuk River Controlled Use Area – Preliminary Season Summary

2021 RESULTS (6 reports are outstanding):

- 249 hunters registered at Koyukuk Checkstation.
- 104 hunters registered in Huslia.
- 15 hunters registered in Hughes.
- 368 registered total.
- 168 moose harvested, (168 bulls, 0 cows).
- 0 moose harvested for Potlatches in the Fall (Aug/Sep/Oct).

RM832 Subsistence Permits (AK residents Only)

Began issuing on Sunday Aug. 30th.

RM832 permits issued: (218 at Koyukuk Checkstation, 97 in Huslia, 15 in Hughes)

Local: 183 (Galena (18), Huslia (90), Kaltag (2), Koyukuk (29), Nulato (29), Hughes (14), Ruby (0), Allakaket (1), Tanana (0))

Unk: 0

AK Res: 153

Total: 336

Moose Harvested: 157 total (157 bulls, 0 cows)

	# moose harvested	% success	# returned reports
Local:	76	50%	153
AK Res:	81	58%	140
<i>Total</i>	<i>157</i>	<i>54%</i>	<i>293</i>

DM823, 825 (SM825), 827, 828, 829, 830 General Drawing Permits (AK residents & Nonresidents)

Permit Allocation:		Issued	Hunted	Did not Hunt	# Moose	
<u>Local:</u>	2	DM823	1	1	0	1
AK Res:	18	DM825	1	1	0	0
<u>Non Res:</u>	5	SM823	1	1	0	1
<i>Total:</i>	25	DM827	1	0	1	0
		DM828	10	6	4	3
		DM829	1	1	0	1
		DM830	10	7	3	5
		<i>Total</i>	25	17	8	11

Moose Harvested: 11 total (11 bulls, 0 cows)

	# moose harvested	% success	# hunted
Local	0	0%	2
AK Res:	8	73%	11
Non Res:	3	75%	4
<i>Total</i>	<i>11</i>	<i>65%</i>	<i>17</i>