

MASTER

RC0030

Wildlife Harvest and Survey Data for the Kenai Peninsula Game Management Units 7 & 15 Fall 2015

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Moose Harvest: GMUs 7 & 15

Reg Year	General Season					Harvest Total	# Hunters	% Success	Permit Hunts				Harvest Total	# hunted	% Success	Fed Sub Harvest Total	Illegal	%Illegal of Gen harvest	Total Harvest Gen. Season + Permits
	7	15A	15B	15C	15Z				7	15A	15B	15C							
1965/66	61	365	377	263		1066			0	299		229	528					1594	
1966/67	113	362	149	278		922			0	185		72	257					1179	
1967/68	125	247	70	294		736	2326		0	0		0	0					736	
1968/69	164	269	110	409		952	2827		0	0	6	20	26					978	
1969/70	179	294	94	424		991			0	0	82	109	191					1182	
1970/71	154	279	66	326		825			14	209	97	68	388					1213	
1971/72	155	373	133	267		928			14	484	86	146	730					1658	
1972/73	154	194	74	170		592			22	145	11	114	292					884	
1973/74	114	270	151	157		692	184		47	0	116	143	306					998	
1974/75	64	152	97	233		546			0	0	0	133	133					679	
1975/76	66	101	24	94		285	1997	14	0	0	0	0	0					285	
1976/77	77	164	38	113		392	2288	17	0	0	0	0	0					392	
1977/78	76	170	25	84		355	1819	20	0	0	13	0	13					368	
1978/79	58	164	149	123		494	2451	20	0	0	20	0	20					514	
1979/80	38	123	28	130		319	1519	21	0	0	16	0	16					335	
1980/81	26	228	51	165		470	2397	20	10	0	14	0	24					494	
1981/82	48	278	48	225		599	3125	19	0	0	14	0	14					613	
1982/83	36	211	49	197		493	2947	17	0	0	23	0	23					516	
1983/84	59	368	87	245		764	3747	20	24	27	29	0	80	125	64			844	
1984/85	77	293	80	220		671	4120	16	20	23	29	0	72	128	56			743	
1985/86	60	264	56	179		564	3780	15	33	1	18	0	52	73	71			616	
1986/87	58	312	89	256		718	4069	18	7	24	23	0	54	106	51			772	
1987/88	36	151	49	127		365	2544	14	6	0	34	0	40	78	51			405	
1988/89	50	156	48	171		431	2617	16	8	0	30	0	38	81	47			469	
1989/90	58	181	41	157		438	2494	18	22	8	26	0	56	116	48			494	
1990/91	69	97	54	201		421	2728	15	32	7	31	0	70	133	53			491	
1991/92	61	186	39	294		584	3213	18	41	11	38	0	90	152	59			674	
1992/93	55	143	48	184		431	3211	13	50	6	26	3	85	172	49			516	
1993/94	82	232	46	270		613	3593	17	18	10	24	1	53	137	39			666	
1994/95	56	238	56	307		657	3670	18	12	13	21	1	47	120	39			704	
1995/96	42	117	35	192		387	2759	14	8	8	24	17	57	161	35			444	
1996/97	61	260	57	349		729	3625	20	14	0	23	23	60	123	49			789	
1997/98	70	192	67	352		683	3495	20	9	1	26	21	57	137	42			740	
1998/99	47	271	57	280		658	3510	19	12	11	19	13	55	161	34			713	
1999/00	40	91	43	171		346	2969	12	8	10	17	7	42	177	24			388	
2000/01	51	131	47	208		440	3000	15	1	4	17	0	22	86	26			462	
2001/02	55	229	50	313		648	3201	20	1	2	16	0	19	90	21			667	
2002/03	51	141	41	263		496	3131	16	3	0	12	24	39	126	31			535	
2003/04	29	176	42	312		560	3268	17	3	3	15	29	50	140	36			610	
2004/05	32	131	37	278		481	2951	16	3	3	16	24	46	126	37			527	
2005/06	38	123	47	279		492	3033	16	4	3	16	27	50	149	34			542	
2006/07	30	130	40	215		417	3087	14	1	2	9	19	31	139	22			448	
2007/08	18	111	40	210		382	3006	13	3	5	5	23	36	127	28			418	
2008/09	32	115	33	195		378	3097	12	7	0	2	24	33	89	37			411	
2009/10	27	110	38	248		424	3036	14	21	0	2	28	51	105	49			475	
2010/11	24	119	52	220		416	2749	15	15	0	3	20	38	70	54			454	

5
76m
376
900
420
666
526
600
618
576
441

26 | 117 | 41
217

X - why Hunt?

Moose Harvest: GMUs 7 & 15

Reg Year	General Season								Permit Hunts						Fed Sub Harvest Total	Illegal	%Illegal of Gen harvest	Total Harvest Gen. Season + Permits	
	7	15A	15B	15C	15Z	Harvest Total	# Hunters	% Success	7	15A	15B	15C	Harvest Total	# hunted					% Success
2011/12	9	4	7	26	0	46	985	5	9	0	3	32	44	81	54	0	3	6	90
2012/13	2	7	6	27	0	42	971	4	14	0	5	21	40	84	48	9	5	11	82
2013/14	4	35	23	90	2	154	1688	9	8	0	3	18	29	87	33	7	33	18	183
2014/15	12	41	22	133	0	208	1769	10	14	0	0	20	34	83	41	14	27	11	242
(2016/16)	15	25	15	118	0	173	?	? 10%	9	0	0	22	31	?	?	13	41	19	204
(preliminary)	8	22	14	79	0	125													
Average																			
1980-2014	42	168	48	216	2	474	2960	15	13	5	18	11	47	118	43				521
5-Year Ave.	8	22	15	79	0	125		10	12	0	3	22	37	81	46		22	13	160

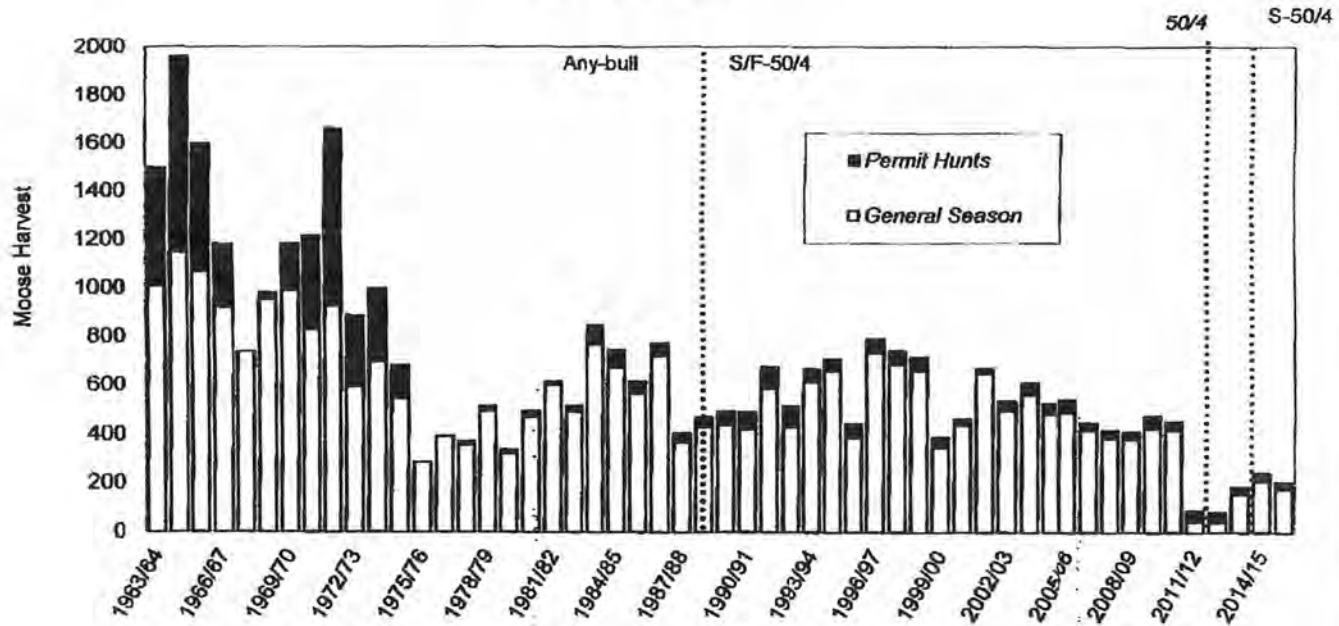
Why Hunt

1562015 TOTAL LEGAL HARVEST 163

160

2016 129

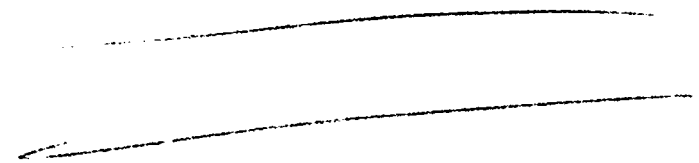
Moose Harvest in GMUs 7 & 15
1963/64 - 2015/16



Moose Composition Counts and Census Summaries

GMU 7 Reg Year	Count Areas	Total Bulls	Total Cows	Total Calves	Unk Moose	Total Moose	% Calves	Ratios		Population Estimate
								Bulls : 100 Cows	Calves : 100 Cows	
1990/01	6,7,10,11,17	86	219	48	2	355	14	39	22	
1991/92	5,11	20	74	19	2	115	17	27	28	
1992/93	5,6,7,10,11,12,15	65	185	30	0	280	11	35	16	
1993/94	No surveys conducted									
1994/95	7,8,11,15	93	274	86	0	453	19	34	31	
1995/96	No surveys conducted									
1996/97	2,6,7,11,27	53	128	17	0	198	9	41	13	
1997/98	27		1	1	0	15	7		100	
1998/99	7,11,15	67	159	19	0	245	8	42	12	
1999/00	7,27	39	87	25	0	158	18	45	29	
2000/01	7,27	34	65	8	0	107	7	52	12	
2001/02	7,11,27	43	141	19	0	203	9	30	13	
2002/03	No surveys conducted									
2003/04	7,9,11	48	201	55	0	304	18	24	27	
2004/05	No surveys conducted									
2005/06	5,6,7,8,10,11,24	79	342	38	1	460	8	23	11	
2006/07	No surveys conducted									
2007/08	No surveys conducted									
2008/09	No surveys conducted									
2009/10	No surveys conducted									
2010/11	7,11	10	60	6		76	8	17	10	
2011/12	7,11	9	73	13		95	14	12	18	
2012/13	No surveys conducted									
2013/14	7,11	13	51	8	0	72	11	25	16	
2014/15	No surveys conducted									

Why not more completed
surveys?



Moose Composition Counts and Census Summaries

Year	Count Areas	Total Bulls	Total Cows	Total Calves	Unk Moose	Total Moose	% Calves	Ratios		Population Estimate
								Bulls : 100 Cows	Calves : 100 Cows	
1990/01	Subunit wide									2917-3947 (Gasaway Method)
	1,2,3,5,6,8,9,10,13	228	1003	349	0	1580	22	23	35	
1991/92	1,2,5,6,8,9,10,13	238	1083	369	0	1690	22	22	34	
1992/93	1,2,3,8,9,10,11,13	142	877	312	0	1331	23	16	36	
1993/94										
1994/95	2,3,5,8,9,10,13	186	769	244	0	1199	20	24	32	
1995/96										
1996/97	1,2,5,8,9,10,13	231	889	347	0	1467	24	26	39	
1997/98	9,10	38	104	35	0	177	20	37	34	
1998/99	2,5,8,9,10,13	282	966	259	1	1508	17	29	27	
1999/00										
2000/01	Subunit wide						20			2041-2815 (GSPE Method)
2001/02	2,5,8,13	106	514	158	0	778	20	21	31	
2002/03										
2003/04	2,5,8,9,10,13	118	510	132	3	763	17	23	26	
2004/05										1824
2005/06	2,5,8,9,10,13	106	438	70	0	614	11	24	16	2334
2006/07	2,5	22	204	26	0	252	10	11	13	
2007/08	Subunit wide						12			1824-2334 (GSPE Method)
2008/09	2,5	17	154	33		204	16	11	21	
2009/10	13	36	43	7		86	8	84	16	
2010/11	2,5,8,9,10,13	47	241	56	1	345	16	20	23	
2011/12	2,5,8,9,10,13	106	296	85		487	17	36	29	
2012/13	2,5,8,9,10,13	72	240	60	0	372	16	30	25	
	Subunit wide									1569: 1269-1843 (GSPE Method)
2013/14	2,5,8,9,10,13	63	215	54	0	332	16	29	25	
2014/15	2	6	60	20	0	86	23	10	33	
2015/16	2,5,8,9,10,13					232	12	33	12	

Limited Hunt?



Moose Composition Counts and Census Summaries

Year	Count Areas	Total Bulls	Total Cows	Total Calves	Unk Moose	Total Moose	% Calves	Ratios		Population Estimate
								Bulls : 100 Cows	Calves : 100 Cows	
1990/01	Subunit wide						10			-800-1200 (Gasaway Method)
	14	7	72	48	0	127	38	10	67	
1991/92										
1992/93	903,905	42	84	17	0	143	12	50	20	
1993/94										
1994/95	903-4-5-6-7	151	283	75	0	489	15	57	29	
1995/96										
1996/97	15,16,17,902	43	130	51	0	224	23	33	39	
1997/98	No surveys conducted									
1998/99	No surveys conducted									
1999/00	No surveys conducted									
2000/01	No surveys conducted									
2001/02	Subunit wide			197		958	21			777-1139 (Geostat. Method)
2002/03	No surveys conducted									
2003/04	No surveys conducted									
2004/05	No surveys conducted									
2005/06	No surveys conducted									
2006/07	No surveys conducted									
2007/08	No surveys conducted									
2008/09	No surveys conducted									
2009/10	903,904,905	52	101	11		164	7	51	11	
2010/11	906,907	15	46	4		65	6	33	9	
2011/12	No surveys conducted									
2012/13	No surveys conducted									
2013/14	No surveys conducted									
2014/15	No surveys conducted									

Why Are We Even
Having A Hunt Here?



Moose Composition Counts and Census Summaries

Year	Count Areas	Total Bulls	Total Cows	Total Calves	Unk Moose	Total Moose	% Calves	Ratios		Population Estimate
								Bulls : 100 Cows	Calves : 100 Cows	
1990/01	21	68	184	41	0	293	14	37	22	
1991/92	21,26	527	1225	208	913	1738	12	43	17	
1992/93	Subunit wide						17			1424-2734 (Gasaway Method)
	21,26	145	518	171	0	834	21	28	33	
1993/94	21	32	37	8	0	77	10	86	22	2079
1994/95	18,21,24,26	203	1080	444	0	1727	26	19	41	
1995/96	26,29			3	0	154	2			
1996/97	21	77	208	58	0	343	17	37	28	
1997/98	21,26	154	495	228	0	877	26	31	46	2079
1998/99	21,26	33	347	94	0	474	20			
1999/00	21	108	398	72	0	578	12	27	18	
2000/01	26		258	73	0	329	22			
2001/02	Subunit wide						23			3491-4438 (GSPE Method)
	21,26	152	806	249	0	1207	21	19	31	
2002/03										3964
2003/04	21,26	129	497	164	0	1059	15			
2004/05										
2005/06	21,26	110	527	143	0	780	18	21	27	
2006/07										
2007/08	21	20	163	29		212	14	12	18	incomplete survey
2008/09	21	58	434	45		537	8	13	10	
2009/10	21,24	42	326	58		426	14	13	18	
	Subunit wide						17			2641-3196 (GSPE Method)
2010/11	20,21,24,30	51	566	110		735	15	9	19	2918
2011/12	20,21,24,26	109	788	200		1077	19	14	28	3204
2012/13	Subunit wide					1207	14	22	15	2554-3855 (GSPE Method)
2013/14	20,21,24,26	154	812	211		1177	18	19	26	2483-3754
2014/15	20,21,24	150	887	176		897	20	26	31	1892-2261
2015/16	20, 21, 24		571	68		488	14	46	23	1629-1556

147

477

2016
2017
2018

124 296

972
940
791 186

30% 3600

What are Fish & Game
Stability Correction numbers?

2. low side
4.7% high side

Low 2.11
High 3.19

CAGE survival
50 cows
About 25%
CAGE total

1720