CHAPTER 5: DEER MANAGEMENT REPORT

From: 1 July 2012 To: 30 June 2014

LOCATION

$3 (3,000 \text{ mi}^2)$ GAME MANAGEMENT UNIT:

GEOGRAPHIC DESCRIPTION: Islands of the Petersburg, Kake, and Wrangell area, including Mitkof, Wrangell, Zarembo, Etolin, Kupreanof, Kuiu and adjacent smaller islands in central Southeast Alaska

BACKGROUND

Sitka black-tailed deer inhabit most Unit 3 islands. Deer populations on these islands have historically fluctuated with high and low extremes; clearcut logging has and will continue to reduce winter carrying capacity in some areas. Population declines result from severe winter weather and may be exacerbated by reduced habitat capability as a result of logging, predation by wolves and bears, and illegal hunting.

During the late 1960s and early 1970s, deer in Unit 3 experienced a series of severe winters that resulted in a significant population decline and led to restrictive regulations and bag limits in 1973. Unit 3 was closed to deer hunting from 1975 through 1979. The area south of Sumner Strait had a limit of 1 antlered deer from 1980 to 1987. The Alaska Board of Game (board) increased this limit to 2 antlered deer in 1988. In 1991 a registration permit hunt with a 15-31 October season and a 1 antlered deer bag limit was opened on parts of Mitkof, Kupreanof, Woewodski, and Butterworth islands, where the deer season had been closed since 1975. The registration permit was replaced with a harvest ticket requirement in 1995.

Beginning with the 1993 hunt, the only part of Unit 3 closed to deer hunting was the area within the Petersburg and Kupreanof city limits. The board abolished that prohibition in fall 2000. At the fall 2002 meeting, the Board of Game extended the season length and increased the bag limit for deer on the Lindenberg Peninsula, aligning the deer regulations on all of Kupreanof Island with the majority of Unit 3. In another action, the board established the Petersburg Management Area, an archery-only hunt area within the Petersburg city limits, and extended the archery-only deer season in this area by an additional 2 weeks. At its fall 2004 meeting, the Board of Game adopted a region-wide regulation requiring that deer hunters use harvest tickets in sequential order and carry any unused tickets with them while hunting.

Most of Unit 3 is federal land managed by the U.S. Forest Service (USFS). This area has experienced a significant amount of logging activity over the years. Initial access to most hunting areas is by water. However, in many areas, once hunters arrive, extensive networks of logging roads are used for additional access to hunting areas. The communities of Petersburg, Wrangell and Kake are located in the unit and some hunters use local road systems to access hunting areas.

Seasons and bag limits for deer on Mitkof Island and Unit 3 in general are more restrictive compared to other island-dominated management units in the region. Between RY94 and RY11, the estimated Unit 3 deer harvest ranged from a low of 333 to a high of 1,119, and the number of hunters varied from 556 to 1,220. In RY05, the estimated unit wide harvest began decreasing, a trend that continued until reaching a low of 333 deer in RY08. During the past 3 seasons, the harvest has decreased somewhat, and the mean harvest during this report period of 506 deer is still about 125 deer below the previous 10 year mean (RY02–RY11) (Table 1).

MANAGEMENT DIRECTION

MANAGEMENT GOALS

As established by the board during its fall 2000 meeting in response to the intensive management of game law [AS 16.05.255 (i)(4)], the management goal is to manage the Unit 3 deer population to achieve and maintain a population of 15,000 deer while maintaining an annual harvest of 900 deer.

MANAGEMENT OBJECTIVES

- Maintain winter range (<1,500 foot elevation) that is capable of supporting 32 deer/mi² (average 1.0 pellet group/20 m² plot).
- Monitor long-term trends in deer abundance using pellet-group surveys.
- Monitor deer harvest using mandatory harvest ticket reports.

METHODS

From 1980 to 2010 (with the exception of 1981), we estimated Unit 3 harvest data using a regional questionnaire, mailed to a random sample of 33% of deer harvest ticket holders (ADF&G 2012a). Survey results for hunter effort, success, and kill location were then expanded to estimate results for all harvest ticket holders. Beginning fall 2011, the mail out questionnaire was replaced by mandatory hunt report cards issued in conjunction with deer harvest tickets. A preliminary analysis indicated these methods produce comparable results. We monitored long-term deer abundance using spring pellet-group transects in selected areas. All data listed in this report is tallied within regulatory years (RY; e.g., RY11 = 1 July 2011–30 June 2012).

RESULTS AND DISCUSSION

POPULATION STATUS AND TREND

Population Size

Snow cover in the Petersburg area was well above average during the winters of 2006–2007, 2007–2008, and 2008–2009, including record breaking snowfall in 2006–2007 (NOAA 2010). Severe winter weather, reductions in deer winter range due to logging, and predation by wolves

and black bears are believed to be the primary factors contributing to the observed decline in the Unit 3 deer population and hunter harvest. Because winter severity can influence the results of pellet-group surveys, inferences about population trends based on year-to-year variations in observed pellet-group densities must be made with caution. Nonetheless, we believe the recent declines in pellet-group densities and the decline in the estimated unit-wide harvest reflect actual declines in the unit's deer population.

Of 3 areas where pellet-group surveys were conducted in spring 2011 and 2012, 1 increased, 1 decreased, and 1 remained unchanged. Slight variations in pellet-group densities can be expected even when populations are stable because annual weather variations can affect how long pellet groups persist through a winter, and influence deer use of transects surveyed. Due to growing concern about the decline in the deer population and harvest in the vicinity of Petersburg, during the report period the department focused pellet group surveys on portions of Mitkof Island and the Lindenberg Peninsula of Kupreanof Island.

In spring 2013, pellet-group counts were conducted in 4 VCUs on 2 islands in Unit 3. Castle River pellet-group counts were 0.15 pellet-groups/plot in spring 2013, which was nearly identical to 0.12 in spring 2008. East Duncan pellet-group counts declined slightly from 0.60 pellet-groups/plot in spring 2012, to 0.56 in spring 2013. Portage Bay pellet-group counts declined from 0.63 pellet-groups/plot in spring 2012, to 0.24 in spring 2013. Woewodski (South Mitkof Island) pellet-group counts continued a decreasing trend that began in 2007, down from 0.74 pellet-groups/plot in spring 2012 to 0.64 in spring of 2013. This represents the second lowest count since pellet-group counts were initiated in that area in 1984 (Table 2).

In spring of 2014, pellet-group counts were conducted in 2 VCUs on 2 islands in Unit 3. East Duncan pellet-group counts declined slightly from 0.56 pellet-groups/plot in spring 2013, to 0.47 in spring 2014. Woewodski (South Mitkof Island) pellet-group counts increased slightly from 0.64 pellet-groups/plot in spring 2013, 0.76 in spring of 2014 (Table 2).

MORTALITY

Harvest	
Season and Bag Limit	Resident and Nonresident Hunters
Unit 3, Mitkof Island, the Petersburg Management Area	15 October–15 December 2 bucks
Unit 3, remainder of Mitkof Island, Woewodski and Butterworth islands	15 October–31 October 1 buck
Remainder of Unit 3	1 August–30 November 2 bucks
Beginning in RY2013.	
Unit 3, that portion of Kupreanof Island	Resident season
on the Lindenberg Peninsula east of	15 October–31 October 1 buck
Portage Bay-Duncan Canal portage	(Nonresidents: No open season)

<u>Board of Game Actions and Emergency Orders</u>. At the January 2013 BOG meeting, the board adopted a department proposal to reduce the resident deer hunting season by 10 weeks (October 15–October 31), reduce the bag limit from 2 bucks to 1 buck, and close the nonresident deer hunting season on that portion of Kupreanof Island on Lindenberg Peninsula east of the Portage Bay-Duncan Canal portage. This action returned the resident deer season and bag limit on Lindenberg Peninsula to those previously in place from 1993–2002, and realigned the deer season and bag limit on the Lindenberg Peninsula with those of Mitkof, Woewodski, and Butterworth islands.

In fall 2010 it was brought to the Board of Game's attention that the Unit 3 deer harvest was well below the Intensive Management (IM) objective of 900 deer per year and that although we have no way to estimate the unit-wide deer population, it also appeared to be below the IM objective of 15,000 deer. In response to the board's fall 2010 request, in early 2011 the department began investigating potential IM actions that might be undertaken to reverse the decline in the Unit 3 deer population and hunter harvest. In early 2012 the department prepared a "Feasibility Assessment for Increasing Sustainable Harvest of Sitka-Black-Tailed Deer in a Portion of Game Management Unit 3" (ADF&G 2012b) and submitted it for board consideration in November 2012. The IM feasibility analysis was received favorably by the board, which requested the department to proceed with development of an operational plan for IM action in Unit 3 and to submit a regulatory proposal for IM action for board consideration at its March 2013 meeting.

In February 2013 the department prepared an "Operational Plan for the Intensive Management of Sitka Black-tailed Deer in a Portion of Game Management Unit 3" (ADF&G 2013). The following month, the IM operational plan was submitted for board consideration, along with a regulatory proposal (179A) requesting authorization for the department to hire 1 or 2 experienced trappers to intensively trap wolves within a 1,680 km² treatment area within Unit 3. The IM Operational Plan was well received by the board, which adopted Proposal 179A authorizing the department to take actions to reduce the wolf population in the intensive management area.

During this report period the department did not implement wolf control efforts and instead focused on developing techniques to more accurately measure changes in deer and wolf abundance resulting from wolf control measures and to assess habitat condition. Coincidentally and without direct support from the department, Petersburg-based wolf trappers have targeted wolves in the IM area, taking a total of 38 wolves during this report period. We believe that harvest has significantly reduced the number of wolves in the IM area and may be largely achieving the department's wolf reduction goal.

We issued no emergency orders regarding deer hunting in Unit 3 during the report period.

<u>Hunter Harvest</u>. In RY12 the unit-wide harvest increased to 536 deer, up slightly from 514 deer in RY11 (Table 1). In RY13, the unit-wide harvest decreased to 476. Deer harvest was reported in 18 Wildlife Analysis Areas (WAAs) during the report period, with the greatest percentage of the unit-wide harvest coming from WAA 1905 (Zarembo Island), WAA 1903 (Wrangell Island), and WAA 1901 (northern Etolin Island) providing 38%, 18% and 15%, respectively, of the unit-wide harvest.

<u>Hunter Residency and Success</u>. Few nonresidents hunt deer in Unit 3, and most hunters are local residents (Table 3). Nonresidents were just 5% of all Unit 3 deer hunters in RY12 and RY13. Deer populations are greater and seasons and bag limits more liberal in other nearby units, attracting most nonlocal hunters to those areas. During the report period, the estimated number of hunters increased somewhat and was slightly higher than the preceding 10-year average (RY02 - RY11) of 781. The total number of hunters increased from 693 in RY11 to 818 in RY12. In RY13, the total number of hunters declined slightly to 808. The hunter success rate decreased from 51% in RY10 and 52% in RY11 to 45% and 42% in RY12 and RY13, respectively.

<u>Harvest Chronology</u>. Table 4 shows the historical Unit 3 deer harvest percentage by month. Since 2002, the highest percentage of the unit-wide deer harvest has typically occurred during November, followed in descending order by October, August, and September. Such was the case during the current report period. The Unit 3 deer season is closed during the months of December and January, so the reported level of harvest during those months represents either illegal harvest, misreporting on the part of hunters, or is possibly an artifact of the expansion factor used to derive monthly harvest estimates.

<u>Transport Methods</u>. In RY12, most hunters reported using boats, highway vehicles, and 3- or 4wheelers in descending order, to access their hunting areas. In RY13 hunters reported using highway vehicles, boats, and 3- or 4-wheelers in descending order, to access their hunting areas (Table 5).

Other Mortality

In addition to mortality resulting from legal hunting, other sources of deer mortality include predation by wolves and bears, poaching, deer-vehicle collisions, injury and accidents, and starvation or other natural causes. We have no estimates of nonhunting mortality during the report period.

CONCLUSIONS AND RECOMMENDATIONS

The IM harvest objective of 900 deer per year in Unit 3 was established by the board in fall 2000 based on the average annual harvest during the period RY94–RY98 plus 10 percent. That objective was last achieved in RY04 when an estimated 921 deer were taken and has only been achieved during 2 of the last 12 years. Field observations indicate that throughout Unit 3 deer currently exist at levels well below carrying capacity.

We believe declines in pellet-group densities and estimated unit-wide harvest since RY04 reflect an actual decline in the GMU 3 deer population. Several deep-snow winters including the recordsetting snowfall of winter 2006–07 were likely causes of the decline, but reasons for the slow recovery are less clear. We suspect the primary factor limiting growth of the deer population was predation by wolves and bears. We also believe hunter harvest exerted less influence because there was a one or two buck bag limit and unit-wide harvest has been relatively modest. Less clear are the effects of unfavorable long-term changes in habitat conditions resulting from decades of clearcut logging, and potential competition from recently established and expanding moose populations. Research on forage availability, abundance and food habits of predators, and effects of a sympatric moose population on deer is needed to evaluate future management direction. In addition to ongoing clearcut logging, which removes productive old growth forest that provides important winter habitat for deer, since the 1990s there have been two other changes to the unit's capacity to support deer. The amount of forage (forbs and shrubs) available to deer year round continues to decline as young clearcuts mature into closed canopy second-growth forest, and the distribution and abundance of moose has increased throughout the Unit 3 islands. The first unit-wide moose hunting season in Unit 3 opened in 1993 with a harvest of 13 bulls. Even with antler restrictions, by RY13 the harvest had grown to 55 bulls. The current IM harvest objective for deer should be re-evaluated to determine if it remains realistic under existing habitat conditions and in light of the relatively recent increases in moose distribution and abundance in the unit.

REFERENCES CITED

- ADF&G (Alaska Department of Fish and Game). 2012a. Region I deer harvest reports: Deer harvest database of hunter survey results, 1997–2010, Wildlife Information Network (WinfoNet). Division of Wildlife Conservation, Anchorage. [URL not publicly available as some information is confidential].
- ADF&G (Alaska Department of Fish and Game). 2012b. Feasibility assessment for increasing sustainable harvest of Sitka black-tailed deer in a portion of game management unit 3, October 2012. Report to Alaska Board of Game. Alaska Department of Fish and Game. Division of Wildlife Conservation. Juneau.
- ADF&G (Alaska Department of Fish and Game). 2013. Operational plan for intensive management of Sitka black-tailed deer in a portion of game management unit 3, February 2013. Report to Alaska Board of Game. Alaska Department of Fish and Game. Division of Wildlife Conservation. Juneau.
- NOAA (National Oceanic and Atmospheric Administration). 2010. National Weather Service, AK. Alaska Climate Database. <u>http://pajk.arh.noaa.gov/cliMap/climap.php</u> (Accessed January 2010)

PREPARED BY:

APPROVED BY:

Richard E. Lowell	Tom Schumacher
Wildlife Biologist III	Management Coordinator

Please cite any information taken from this section, and reference as:

Lowell, R.E. 2015. Unit 3 deer. Chapter 5, pages 5–1 through 5–16 [*In*] P. Harper and L. A. McCarthy, editors. Deer management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-3, Juneau.

While this unit report was actually published in 2016, it is part of the set of 2015 unit species management reports, so we suggest citing the report as a 2015 report to maintain its relationship to the other 2015 unit reports.

Product names used in this publication are included for completeness but do not constitute product endorsement.

The State of Alaska is an Affirmative Action/Equal Opportunity Employer. Contact the Division of Wildlife Conservation at (907) 465-4190 for alternative formats of this publication.

Regulatory		Estima	ted l	egal ha	rvest ^b			
year	М	(%)	F	(%)	Unk.	Total	Estimated illegal harvest	Total
2002 ^c	624	(100)	0	(0)	0	624	0	624
2003 ^c	888	(100)	0	(0)	0	888	13	901
2004°	921	(100)	0	(0)	0	921	0	921
2005 ^c	710	(100)	0	(0)	0	710	8	718
2006 ^c	594	(100)	0	(0)	0	594	16	610
2007^{c}	457	(100)	0	(0)	0	457	0	457
2008°	328	(100)	0	(0)	0	328	5	333 ^d
2009°	543	(100)	0	(0)	0	543	4	547
2010°	669	(100)	0	(0)	0	669	4	673
2011 ^e	504	(100)	0	(0)	0	504	10	514
2012 ^e	536	(100)	0	(0)	0	536	0	536
2013 ^e	474	(100)	0	(0)	0	474	2	476

Table 1. Unit 3 (estimated) deer harvest, regulatory years^a 2002–2013.

^a Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2012 = 1 July 2012–30 June 2013.
^b Estimates for RY02–RY10 are based on data from a mail questionnaire sent to hunters.
^c Data from deer hunter questionnaire.
^d Deer harvest reports for the 2008 hunting season were not returned from residents of Kake.
^e Data from mandatory harvest ticket report requirement.

	Regulatory	Mean pellet-	Number	
Area	year	groups/plot	of plots	95% CI
Security Bay	1984	0.02	360	0.01-0.04
(VCU 400)	1989	0.25	304	0.16-0.34
	1995	0.22	268	0.15-0.29
	2000	0.09	201	0.05-0.14
Pillar Bay	1988	0.16	337	0.10-0.22
(VCU 403)	2000	0.18	264	0.13-0.23
Malmesbury	1990	0.11	206	0.05-0.18
(VCU 408)	2000	0.06	254	0.03-0.09
Conclusion	1987	2.66	207	2.32-3.01
(VCU 417)	1989	0.95	200	0.72–1.18
	1991	0.71	200	0.53-0.88
	1996	1.45	191	1.19–1.70
	1004	2 2 0	200	
Big John Bay	1994	0.38	300	0.29–0.48
(VCU 427)	1000	0.00	2.55	0.15 0.00
431–Point Barrie	1988	0.23	357	0.17-0.29
(VCU)	1993	0.77	375	0.64–0.90
Big Level	1981	1.54	300	1 45_1 63
$(VCU 434_2)$	1083	1.54	336	1.45-1.05
(100 434a)	1985	1.50	382	1 / 1 1 00
	1080	1.00	382 227	1.41-1.90
	1001	2.16	227 456	1 00 2 11
	1771	2.10	430	1.70-2.41
Little Level	1981	2.48	114	2 02-2 94
(VCU 434b)	1983	2 34	136	
	1986	1 39	122	1 07-1 70
	1989	1.52	137	1.07 1.70
	1991	3.59	132	3.07-4.11
Castle River	1984	0.19	312	0.12-0.26
(VCU 435)	1987	0.51	305	0.37-0.65
	1989	0.40	312	0.25-0.56
	1994	0.32	310	0.20-0.40
	1997	0.36	281	0.28-0.44
	2007	0.12	275	0.07-0.17
	2013	0.15	268	0.10-0.21
			Table co	ontinues next page

Table 2. Unit 3 deer population trends as indicated by pellet-group surveys, regulatory years^a 1981–2013.

Table 2. continued.

	Regulatory	Mean pellet-	Number	
Area	year	groups/plot	of plots	95% CI
	5	6 1 1	1	
East Duncan Canal	1990	1.12	227	0.92-1.32
(VCU 437)	1992	0.78	213	0.63-0.94
× ,	1998	1.04	153	0.77-1.30
	2001	1.89	254	1.59-2.19
	2007	1.37	262	1.10-1.65
	2011	0.64	289	0.51-0.77
	2012	0.60	282	0.43-1.72
	2013	0.56	263	0.40-0.71
	2014	0.47	354	0.33-0.61
Portage Bay	1993	0.43	282	0.30-0.56
(VCU 442)	1995	0.43	277	0.63-0.94
	1998	0.39	285	0.29-0.49
	2012	0.63	230	0.50-1.72
	2013	0.24	233	0.16-0.32
Woewodski (S. Mitkof)	1984	.088	295	0.69-1.08
(VCU 448)	1985	1.00	209	0.82-1.19
	1987	1.65	195	1.85-2.61
	1988	1.33	433	1.16-1.51
	1989	1.35	417	1.24-1.73
	1990	1.46	355	1.28-1.64
	1991	1.80	316	1.52-2.07
	1992	0.79	248	0.62-0.97
	1993	1.06	230	0.85-1.27
	1994	1.14	152	0.82-1.46
	1995	1.38	157	1.08-1.67
	1996	2.25	243	1.95-2.55
	1997	1.56	282	1.27-1.84
	1998	1.10	282	0.91-1.29
	1999	1.36	196	1.11-1.60
	2000	1.27	226	1.05-1.50
	2002	1.43	220	1.17-1.68
	2003	0.50	216	0.36-0.64
	2004	1.06	250	0.87-1.25
	2005	0.82	279	0.65-0.98
	2007	1.63	180	1.26-2.00
	2008	1.06	235	0.83-1.28
	2009	0.98	162	0.74-1.22
	2010	0.81	234	0.63-0.98

Table continues next page

Table 2.	continued.
----------	------------

	Regulatory	Mean pellet-	Number	
Area	year	groups/plot	of plots	95% CI
	2		1	
Woewodski (S. Mitkof)	2011	0.74	289	0.58-0.89
(VCU 448)	2012	0.74	229	0.56-2.15
	2013	0.64	220	0.50-0.77
	2014	0.76	225	0.58-0.93
	-		-	
Woewodski Island	1991	1.86	461	1.66-2.05
(VCU 448a)	1994	1 30	510	1 15–1 46
(('e'e' ''''''))	1771	1.50	010	1.10 1.10
Frederick (N. Mitkof)	1981	0.08	945	0.06-0.11
(VCU 449)	1990	0.55	180	0 36-0 74
(100 11)	1992	0.55	227	0.42-0.65
	1772	0.01	/	0.12 0.05
Blind Slough	1992	1.04	114	0.77-1.30
(Central Mitkof)	1993	1.28	265	1.04-1.51
(VCU 452)	1997	1.61	245	1.34-1.88
(*************			2.10	1.0 1 1.00
Drv	1981	0 92	91	0 56-1 28
(VCU 454)	1993	1 44	210	1 17–1 72
	1997	1 26	188	0 88-1 39
		1.20	100	0.000 1.00
Vank Island Group	1981			
(VCU 455)	1701			
a) Sokolof		1 73	900	1 61–1 85
b) Rynda		0.25	281	0.18-0.32
c) Grevs		0.25	284	0.18-0.32
<i>c)</i> si <i>cy</i> s		0.20	201	0.10 0.52
Baht	2001	2 75	109	2 10-3 41
(VCU 456)	2001	1.80	108	1 45-2 15
(100 100)	2003	2.12	101	1 73-2 51
	2001	1 51	101	1 14-1 88
	2000	1.51	125	0.86_1.52
	2000	1.17	120	0.00-1.52
St. John	2001	1 67	220	1 38-1 93
(VCU 457)	2001	1 17	220	0.96-1.38
	2005	1 75	22)	1 44_2 03
	2004	1.75	213	1.44 2.05
	2000	0.00	211	$0.81 \ 1.05$
	2000	0.22	223	0.01-1.1/

Table continues next page

Table 2. continued.

	Regulatory	Mean pellet-	Number	
Area	year	groups/plot	of plots	95% CI
	2		±	
Snow Passage	1994	0.57	345	0.45-0.70
(VCU 458)	1997	0.98	315	0.80-1.16
×	2001	1.50	280	1.28-1.72
	2003	1.02	306	0.84-1.20
	2004	1.08	262	0.89-1.27
	2006	1.52	289	1.26-1.78
Meter	2001	0.87	180	0.64-1.10
(VCU 459)	2003	0.89	180	0.68-1.10
	2004	1.41	155	1.07-1.75
	2008	2.29	80	1.33-3.24
Woronkofski	1985	1.63	646	1.45-1.81
(VCU 461)				
(All Transects)				
(Trans. 10, 11, 12)	1985	2.01	218	1.62-2.39
	1987	2.23	201	1.85-2.61
	1989	2.52	223	2.18-2.85
	1991	1.59	203	1.32-1.85
	1993	0.22	225	0.13-0.31
	1994	0.26	224	0.18-0.34
	1999	0.11	216	0.06-0.17
	2003	0.08	227	0.03-0.13
Mosman	1993	0.07	304	0.03-0.11
(VCU 467)				
Onslow	1984	0.37	321	0 28_0 46
(VCI 473)	1985	0.59	334	0.28 0.10
(100 115)	1986	0.72	347	0.59_0.84
	1987	0.42	336	0.31-0.55
	1988	0.44	329	0.32-0.55
	1991	0.66	322	0.52 0.55
	1993	0.68	341	0.51 0.80
	1994	0.88	340	0.74-1.02
	1997	0.73	346	0 59_0 86
	2002	0.97	332	0.81-1.13
	2002	0.57	363	0.48_0.71
	2000	1 33	330	1 13_1 53
	2008	0.06	366	0.81 - 1.00
	2010	0.70	500	0.01-1.10

Table continues next page

Table 2. continued.				
Area	Regulatory year	Mean pellet- groups/plot	Number of plots	95% CI
Fool's	1994	0.54	193	0.38-0.70
(VCU 480)	2000	0.61	201	0.45-0.77
Canoe (VCU 474)	2000	0.11	228	0.06-0.17
Coronation	1983	1.20	696	1.04-1.36
(VCU 564)	1985	2.34	228	N/A
	1988	1.41	408	1.17-1.66
	1989	1.63	293	1.28-1.98
	1997	0.44	289	0.34-0.55

^a Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2012 = 1 July 2012–30 June 2013.

Successful									Unsucc	essful			
Regulatory	Local ^b	Nonlocal					Local ^b	Nonlocal					Total ^c
year	resident	resident	Nonresident	Unk	Total	(%)	resident	resident	Nonresident	Unk	Total	(%)	hunters
2002 ^d	363	51	14		428	(48)	413	22	28		463	(52)	891
2003 ^d	480	66	21		567	(58)	345	38	20		403	(42)	970
2004 ^d	500	51	9		560	(53)	410	67	21		498	(47)	1,058
2005 ^d	404	64	5		473	(52)	356	71	15		442	(48)	915
2006 ^d	298	40	32		370	(49)	320	57	9		386	(51)	756
2007 ^d	264	14	5		283	(41)	315	66	18		399	(59)	682
2008 ^d	184	25	5		214	(38)	284	31	27		342	(62)	556 ^e
2009 ^d	197	16	6		219	(38)	325	20	6		351	(62)	570
2010 ^d	286	70	13	0	369	(51)	283	45	7	16	351	(49)	720
2011^{f}	306	38	11	2	357	(52)	283	25	16	12	336	(48)	693
2012^{f}	320	31	12	4	367	(45)	361	54	30	6	451	(55)	818
2013^{f}	279	53	7	3	342	(42)	349	81	34	2	466	(58)	808

Table 3. Unit 3 deer hunter residency and success, regulatory years^a 2002–2013.

^a Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2012 = 1 July 2012–30 June 2013. ^b Residents of Units 1B, 3, Meyers Chuck, Point Baker, and Port Protection.

^c Data from registration permit report, hunter survey, and harvest ticket report included.

^d Data from deer hunter questionnaire.

^e Deer harvest survey reports for the 2008 hunting season were not returned from residents of Kake.

^f Data from mandatory harvest ticket hunt reports.

Regulatory	Harvest periods											
year	August	September	October	November	December	January	February	March	April	Unk.	deer	
2002 ^c	15	16	25	36	0	0	0	0	0	8	624	
2003 ^c	19	9	27	30	0	0	0	0	0	15	901	
2004 ^c	15	10	36	30	1	0	0	0	0	8	921	
2005 ^c	15	6	30	38	0	0	1	1	0	9	717	
2006 ^c	21	11	25	35	1	0	0	0	0	7	610	
2007 ^c	17	5	19	52	1	0	1	0	0	5	458	
2008 ^c	0	0	31	58	2	0	0	0	0	9	201 ^d	
2009 ^c	13	6	15	58	0	0	0	0	0	7	548	
2010 ^c	15	9	27	41	2	0	0	0	0	5	674	
2011 ^e	17	9	19	50	2	1	0	0	0	2	515	
2012 ^e	16	6	17	57	2	0	0	0	0	1	537	
2013 ^e	12	7	25	52	3	0	0	0	0	1	476	

Table 4. Unit 3 deer percentage of harvest by month, regulatory years^a 2002–2013.

^a Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2012 = 1 July 2012–30 June 2013.
^b May not equal harvest table due to rounding or incomplete reporting.
^c Data from deer hunter questionnaire.
^d Deer harvest reports for the 2008 hunting season were not returned from residents of Kake.
^e Data from mandatory harvest ticket report requirement.

Regulatory			3- or		Highway				Number
year	Airplane	Boat	4-wheeler	Foot	vehicle	ORV	Other	Unknown	of trips
2002^{c}	3	38	8	2	49		0		NA
2003 ^c	0	49	6	2	40		3		NA
2004 ^c	1	47	5	2	43		2		1,580
2005 ^c	1	39	5	2	52		0	1	1,263
2006 ^c	4	51	0	1	37		1	6	756
2007 ^c	1	55	5	1	35		0	3	683
2008°	3	53	0	2	43		0	0	546 ^d
2009 ^c	2	47	0	1	47		0	2	569
2010°	0	36	1	5	49	7	0	2	822
2011 ^e	1	45	9	5	26	3	0	11	744
2012 ^e	2	42	12	5	33	2	1	3	882
2013 ^e	2	38	8	3	42	3	1	2	892

Table 5. Unit 3 deer hunter percentage of effort by transport method, regulatory years^a 2002–2013.^b

2013238834231a Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2012 = 1 July 2012–30 June 2013.b The hunter mail survey reports transport as total number of hunting trips by method.c Data from deer hunter questionnaire.d Deer harvest reports for the 2008 hunting season were not returned from residents of Kake.e Data from mandatory harvest ticket report requirement.