

SPECIES
MANAGEMENT REPORT

Alaska Department of Fish and Game
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CHAPTER 2: DEER MANAGEMENT REPORT

From: 1 July 2012
To: 30 June 2014

LOCATION

GAME MANAGEMENT UNIT: 1B (3,000 mi²)

GEOGRAPHIC DESCRIPTION: Southeast Alaska mainland from Cape Fanshaw to Lemesurier Point

BACKGROUND

Except for isolated pockets, Sitka black-tailed deer inhabit the Unit 1B mainland in low densities. Deer numbers have fluctuated over time with high and low population extremes. Severe winter weather has caused most population declines, and illegal hunting and predation by wolves and bears have extended the length of the declines. Clearcut logging has and will continue to further reduce deer carrying capacity in some areas.

A substantial population decline occurred as a result of a series of severe winters in the late 1960s and early 1970s. The population declines led to restrictive regulations and bag limits in 1973. Unit 1B remained open, with a 1 antlered-deer limit from 1973 to 1980 and a 2 antlered-deer limit from 1981 to the present. However, another deep-snow winter during 2006–2007 further reduced already low populations.

Most of Unit 1B is federal land managed by the U.S. Forest Service (USFS). There are no large communities in Unit 1B, although private in-holdings and small settlements exist at Point Agassiz, Farm Island, and Meyer's Chuck. The subunit is accessible only by boat or airplane although some local logging roads exist for onsite access. Although the communities of Petersburg and Wrangell are located only a short distance west of Unit 1B, much of the hunting effort by individuals in these communities is focused on the Unit 3 islands to the west of the mainland. The deer season in most of neighboring Unit 3 closes a month earlier than Unit 1B, after which time some Petersburg residents shift their deer hunting efforts to the mainland where the season remains open until December 31. From 2002 through 2011, the estimated Unit 1B deer harvest ranged from a low of 34 to a high of 121, and the estimated number of hunters varied from 66 to 157 (Tables 1 and 2).

MANAGEMENT DIRECTION

MANAGEMENT GOALS

The management goal for Unit 1B deer is to maintain healthy, productive populations, sufficiently abundant and resilient to harsh winters to ensure good hunting opportunities and success. The population objective for deer in Unit 1B is from 6,400 to 10,200 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 harvest ticket reports.

METHODS

Prior to RY11, we estimated Unit 1B harvest data from a regional questionnaire, mailed to a random sample of 33% of deer harvest ticket holders. However, during this reporting period deer harvest data were collected from mandatory hunt report cards issued in conjunction with deer harvest tickets. Relative winter deer densities are periodically measured with spring pellet-group transects in selected areas (ADF&G 2012). All data listed in this report is tallied within regulatory years (RY) (i.e., RY11=1 July 2011–30 June 2012).

RESULTS AND DISCUSSION

POPULATION STATUS AND TREND

Population Size

Unit 1B pellet-group surveys are currently inadequate to determine deer population trends (Table 3). In spring 2002, the most recent year that pellet-group counts were conducted in the unit, one value comparison unit (VCU) at Horn Cliffs had a pellet-group density of .67 pellet-groups/plot, which was nearly identical to the .60 recorded the previous time the area was surveyed in 1998. In recent years emphasis has been placed on conducting deer pellet counts and monitoring the deer population in neighboring Unit 3 where hunting pressure is much higher and where Department and hunter observations indicate deer populations have remained stagnant at low levels since 2007. As a consequence, we did not conduct pellet-group surveys in Unit 1B during the current report period.

MORTALITY

Harvest

Season and Bag Limit

Resident and Nonresident Hunters

Unit 1B

1 August–31 December 2 bucks

Board of Game Actions and Emergency Orders. The Board of Game (BOG) took no actions and we issued no emergency orders regarding deer hunting in Unit 1B during the report period.

Hunter Harvest. The estimated Unit 1B harvest (including illegal harvest) increased slightly from 87 deer in RY12 to 92 deer in RY13. Both years of this report period remained above the preceding 10-year average (RY02–RY11) of 71 deer per year. During the report period deer harvest was reported in 5 Wildlife Analysis Areas (WAAs), including WAA 1603 (Thomas Bay), WAA 1605 (Muddy River/Patterson Glacier), WAA 1706 (Horn Cliffs/LeConte Bay), WAA 1707 (North Arm of the Stikine River Drainage), and WAA 1817 (Vixen Inlet, Union Bay). The greatest percentages of the unit-wide harvest were taken in WAA 1603 (54%), WAA 1605 (35%), and WAA 1706 (17%).

Hunter Residency and Success. Based on estimates derived from harvest ticket hunt report cards, 13 nonresidents hunted deer in Unit 1B during RY12 and 9 were successful (Table 2). In RY13, an estimated 29 nonresidents hunted deer in the unit and 8 were successful. Deer populations are higher and seasons and bag limits more liberal in Unit 2 and Unit 4. Therefore, those areas attract more nonlocal hunters. Nonetheless, some nonlocal residents, and guided nonresidents in particular, hunt deer incidentally while mountain goat hunting in Unit 1B.

During the report period, the number of hunters increased from 138 in RY12, to 159 in RY13, both well above the preceding 10 year average (RY02–RY11) of 106 hunters per year. The hunter success rate of 48% in RY12 and 38% in RY13, were slightly above and below, respectively, the preceding 10-year average (RY02–RY11) of 46%.

Harvest Chronology. Generally, most harvest in the unit takes place during November, October, and August, in descending order, and such was case during RY12. However, during RY13 most of the harvest occurred in November, but more deer were harvested during August than during October (Table 4).

Transport Methods. Most Unit 1B deer hunters generally reported traveling to their hunting areas by boat (Table 5). In RY12 83% of hunters reported using boats to access their hunt area, 9% used 3- or 4-wheelers, and 3% accessed their hunting area on foot. In RY13 84% of hunters reported using boats to access their hunting area, 6% accessed their hunting area on foot, and 4% used 3- or 4-wheelers. Logging roads provide some all-terrain vehicle (ATV) and highway vehicle access in a few isolated portions of the unit.

Other Mortality

In addition to mortality resulting from legal hunting, other sources of deer mortality include severe winter weather, predation by wolves and bears, poaching, injury and accidents, and starvation or natural causes.

CONCLUSIONS AND RECOMMENDATIONS

Unit 1B deer populations exist in isolated pockets and have patchy distribution. The unit has relatively low deer density overall (due to typically high snow accumulation) and is largely inaccessible. Unit-wide, deer densities vary from moderate in some isolated areas to extremely low in others. Overall, deer populations seem stable with localized variations.

Winter weather, predation, and removal of winter habitat through clearcut logging have the greatest effects on deer population dynamics. Clearcut logging and second-growth stands entering stem exclusion have and will continue to reduce deer carrying capacity in the unit. With recent declines in the deer population and harvest in the northern Unit 3, many residents of Petersburg have begun to shift hunting effort to the adjacent Unit 1B mainland. At this time there are no indications that hunting seasons or bag limits should be further restricted.

REFERENCES CITED

ADF&G (Alaska Department of Fish and Game). 2012. 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].

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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.

Table 1. Unit 1B deer harvest , regulatory years 2002–2013.

Regulatory year	Estimated legal harvest					Estimated illegal harvest					Total
	M	(%)	F	(%)	Unk	M	(%)	F	(%)	Unk	
2002 ^a	34	(100)									34
2003 ^a	82	(100)									82
2004 ^a	38	(100)									38
2005 ^a	58	(100)									58
2006 ^a	114	(100)									114
2007 ^a	43	(100)									43
2008 ^a	34	(100)									34
2009 ^a	105	(100)						16	(100)		121
2010 ^a	103	(100)									103
2011 ^b	83	(100)									83
2012 ^b	87	(100)									87
2013 ^b	89	(100)						3	(100)		92

^a Data from mail out survey.^b Data from mandatory harvest ticket reports.

Table 2. Unit 1B deer hunter residency and success, regulatory years 2002–2013.

Regulatory year	Successful					Unsuccessful					
	Local ^a resident	Nonlocal resident	Nonresident	Total	(%)	Local ^a resident	Nonlocal resident	Nonresident	Total	(%)	Total hunters
2002	30	0	0	30	(33)	52	0	9	61	(67)	91
2003	45	0	0	45	(42)	46	15	0	61	(58)	106
2004	34	0	0	34	(49)	26	10	0	36	(51)	70
2005	47	0	5	52	(43)	48	7	14	69	(57)	121
2006	62	10	5	77	(65)	23	5	13	41	(35)	118
2007	24	3	0	27	(41)	24	6	9	39	(59)	66
2008	19	0	0	19	(25)	57	0	0	57	(75)	76
2009	61	6	6	73	(51)	53	6	6	71	(49)	144
2010	54	7	13	74	(50)	61	0	14	75	(50)	157 ^b
2011	57	0	7	64	(56)	36	7	8	51	(44)	115
2012	56	1	9	66	(48)	58	9	4	71	(52)	138 ^c
2013	52	0	8	60	(38)	66	9	21	96	(62)	159 ^d

^a Residents of Units 1B, 3, Meyers Chuck, Point Baker, and Port Protection.

^b Categories do not equal number of hunters because the residency status for 8 hunters was unknown.

^c Categories do not equal number of hunters because residency status of 1 hunter was unknown.

^d Categories do not equal number of hunters because residency status of 3 hunters was unknown.

Table 3. Unit 1B deer population trends as indicated by pellet-group surveys, regulatory years 1991 through 2002.

Area	Regulatory year	Mean pellet-groups/plot	Number of plots	95% CI
Frosty Bay (VCU 524)	1991	.70	266	0.55–0.86
Muddy River (VCU 489)	1996	1.53	348	1.26–1.80
Horn Cliffs (VCU 490)	1998	.60	250	0.47–0.74
Madan (VCU 504)	2000	.23	244	0.14–0.31
Harding (VCU 511)	2000	.02	207	0.00–0.05
Horn Cliffs (VCU 490)	2002	.67	290	0.53–0.81

Table 4. Unit 1B deer harvest chronology by month and percent, regulatory years 2002–2013.

Regulatory year	Harvest periods								Number of deer ^a
	Aug	Sep	Oct	Nov	Dec	Jan	Mar	Unk	
2002	12	12	24	52	0	0	0	0	33
2003	20	15	27	38	0	0	0	0	82
2004	33	0	33	34	0	0	0	0	39
2005	43	16	19	22	0	0	0	0	58
2006	14	13	20	42	11	0	0	0	114
2007	56	9	0	28	0	0	0	7	43
2008	0	0	34	66	0	0	0	0	29
2009	17	3	3	64	7	0	0	7	121
2010	5	14	28	38	12	3	0	1	104
2011	19	7	20	45	6	0	0	2	83
2012	14	8	25	52	2	0	0	0	93
2013	23	3	14	43	16	1	0	0	88

^a May not equal harvest table due to rounding or incomplete reporting.

Table 5. Unit 1B deer hunter effort, percent by transport method, regulatory year's 2002–2013^a.

Regulatory year	Percent of effort							Number of trips
	Airplane	Boat	3- or 4-wheeler	Foot	ORV	Highway vehicle	Horse / Dog Team	
2002		91				4		NA
2003		84	8	9				NA
2004		95	5					74
2005		97				3		129
2006	3	93						118
2007	8	77	6	9				66
2008		100						34
2009		93				3		121
2010		83	1	3	1	10		160
2011	1	84	3	6		4	1	114
2012	1	83	9	3		2		138
2013	1	84	4	6		1		159

^aThe hunter survey reports transport as total number of hunting trips by method.