# **SPECIES** MANAGEMENT REPORT

## Alaska Department of Fish and Game **Division of Wildlife Conservation**

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#### CHAPTER 10: BLACK BEAR MANAGEMENT REPORT

From: 1 July 2010 To: 30 June 2013

#### LOCATION

GAME MANAGEMENT UNIT: 11 (12,785 mi<sup>2</sup>)

GEOGRAPHIC DESCRIPTION: Wrangell Mountains

### **BACKGROUND**

Much of Game Management Unit 11 is under federal ownership by the National Park Service. Hunting occurs on preserve lands and some of the remaining state and private ownership lands. In addition much of the unit is rugged, remote, and difficult to access. Black bears are numerous in those portions of Unit 11 having favorable forested habitat. Black bears have been gaining status as desirable big game animals, as evidenced by the increase in average harvest from 8 (range = 1-14) black bears per year during the 1980s to an average harvest of 17 (range = 10-31)during the 2000s.

#### MANAGEMENT DIRECTION

#### MANAGEMENT OBJECTIVE

Provide the greatest sustained opportunity to participate in hunting black bears.

#### **METHODS**

We monitored the black bear harvest by interviewing successful hunters when black bears are presented for sealing. We measured skulls of sealed bears, and determined sex of bears.

### RESULTS AND DISCUSSION

#### POPULATION STATUS AND TREND

Population Size

Black bear surveys or censuses have not been conducted in Unit 11. However, field observations and harvest data indicate black bears are abundant in suitable habitat throughout the unit. The lower Chitina River Valley is especially favorable bear habitat with salmon available in a number of streams.

National Park Service biologists estimated 100–200 black bears/1,000 km<sup>2</sup> in the McCarthy area during 2001 (Judy Putera, Wrangell St. Elias National Park biologist, personal communication, 2013). This figure approaches densities observed elsewhere in Southcentral Alaska.

#### **MORTALITY**

Harvest

Season and Bag Limit. There was no closed season for black bears in Unit 11, and the bag limit was 3 bears.

Alaska Board of Game Actions and Emergency Orders. In March 2011 the Alaska Board of Game passed regulations allowing guides to establish up to 10 bait stations in total combined with assistant guides, and allowing hunters that have been airborne to take black bears at a bait station the same day, as long as they are at least 300 feet from the airplane at the time of taking in Units 11 and 13. These regulations went into effect in spring 2012. Also in March 2011, the board passed regulations eliminating the black bear sealing requirement in Units 11 and 13, becoming effective 1 July 2011.

Harvest by Hunters. Hunters reported taking 8 black bears during the 2012–2013 season, a 68% decrease over the prior 4 years average take of 25 (range = 20–23) (Table 1). This decline in harvest can likely be attributed to a late spring in 2013. A late spring can contribute to a delay in emergence of new vegetation, which can impact the distribution of bears, and hunter success. Also, remaining snow likely made the installation of bait stations more difficult. The number of registered bait stations declined from 16 in 2011 to 6 in 2012, possibly because of the late spring, combined with a decline in the number of guides registering baits that year. Males composed 74% of the harvest during this 3-year reporting period, compared to 69% during the previous reporting period. Of the black bears sealed since 1973, males have composed 72% (range = 25– 100%) of the Unit 11 bear harvest. The mean skull size for males taken in 2012 was 17.4 inches, above the 40-year mean of 16.7 inches.

Hunter Residency and Success. Nonresident hunters have taken 26% (range = 13–32%) of the Unit 11 black bear harvest (mean = 6 bears/year) during the last 5 years (Table 2). Between 1973 and 2012, the nonresident harvest averaged 4 bears per year (range = 0–18), or 26% of the harvest. Most nonresidents reported using a guide and usually harvested a bear during the fall while hunting other big game species, such as Dall sheep. The percent of black bears in the harvest taken by local residents has varied between years but averaged 19% (4 bears) a year during the last 5 years. Successful bear hunters spent an average of 3 days hunting during the 2012–2013 season, similar to the previous 5-year average of 3.6 days.

Since 2011 there has been no mandatory sealing requirement for black bears in Unit 11. In 2010, the last year of black bear sealing, 88% of successful hunters reported hunting specifically for black bears. The remainder reported taking a bear incidentally to other hunting activities. Past black bear sealing data suggests that bear-baiting activity fluctuates considerably between years. From 2000 to 2009 an annual average of 6 black bears (range = 0–14) were reported harvested over bait in Unit 11. Records indicate that 4 black bears were harvested over bait in regulatory year (RY) 2010 (regulatory year begins 1 July and ends 30 June, e.g., RY10 = 1 July 2010– 30 June 2011) and 3 harvested over bait in RY11 (Table 1).

Data from bear sealing certificates indicates 90% of successful hunters were specifically hunting black bears during this reporting period. The remainder reported taking a bear incidentally to other hunting activities.

Harvest Chronology. May, June, and August are important months for harvesting black bears in Unit 11 (Table 3). Since 1973, 54% of the black bear harvest has occurred during the fall season. More recent harvest chronology data shows that between 1993 and 2010 spring harvests exceeded fall harvests due to the increased interest in spring bear baiting. During the last 5 years on average, 9 (41%) bears have been taken in the fall and 13 (59%) bears have been taken in the spring. The spring black bear harvest equaled or exceeded the fall harvest each year during this reporting period, with the exception of 2012.

Transportation Methods. Boats, highway vehicles, aircraft, and walking were the methods of transportation most often reported by successful black bear hunters (Table 4). Aircraft use was primarily by nonresidents on mixed-bag hunts during the fall, and walking was common with locals.

# Other Mortality

No bears were reported taken by nonhunting methods. Hunters taking a bear under defense of life or property (DLP) conditions are required to turn over the hide and skull to the Alaska Department of Fish and Game. No bears were taken under the DLP regulation in Unit 11 during this reporting period. Some DLP bears are claimed under the general season take because of the liberal bag limit and 12-month season.

#### CONCLUSIONS AND RECOMMENDATIONS

After increasing in the early 1990s, the Unit 11 black bear harvest has been relatively stable overall, although yearly fluctuations are observed. Much of the observed harvest increase since 1993 can be attributed to increased popularity of spring bear baiting. Considering access is so limited in Unit 11, the increase in baiting activities is not likely to affect the population. It may actually keep problem bears away from communities and keep DLP kills down. Males continue to predominate in the harvest. Even with the increased take in recent years, the harvest of black bears remains quite low for the amount of available habitat. Black bear numbers in Unit 11 are thought to be similar to other timbered areas in Southcentral Alaska, and current low harvest has little impact on unitwide bear numbers.

Because most of Unit 11 is included in Wrangell-St. Elias Park and Preserve, the black bear population will always receive relatively light hunting pressure. Federal National Park Service regulations prohibit hunting by nonlocal residents in portions of the unit designated as park. Subsistence hunting by local rural residents continues in these areas; however, aircraft cannot be used to access park areas, although they can be used in the preserve. This effectively closes most of the park to all hunting. As a result, most of the harvest is along the road system. No changes in season length or bag limits are recommended.

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Table 1. Unit 11 black bear harvest, Southcentral Alaska, regulatory years 2008–2012.

Regulatory			Re	ported h	unter k	ill		Nonl	nuntin	g kill <sup>b</sup>		Total kill			
year	M	(%)	F	(%)	Unk	Total	Over bait <sup>c</sup>	M	F	Unk	M	F	Unk	Total	
2008															
Fall 2008	5	(71)	2	(29)	0	7		1	0	0	6	2	0	8	
Spring 2009	12	(80)	3	(20)	0	15		0	0	0	12	3	0	15	
Total	17	(77)	5	(23)	0	22	11	1	0	0	18	5	0	23	
2009															
Fall 2009	5	(38)	8	(62)	0	13		0	0	0	5	8	0	13	
Spring 2010	14	(78)	4	(20)	0	18		0	0	0	14	4	0	18	
Total	19	(61)	12	(39)	0	31	12	0	0	0	19	12	0	31	
2010															
Fall 2010	7	(78)	2	(22)	0	9		0	0	0	7	2	0	9	
Spring 2011	14	(78)	4	(22)	0	18		0	0	0	14	4	0	18	
Total	21	(78)	6	(22)	0	27	4	0	0	0	21	6	0	27	
2011															
Fall 2011	8	(67)	4	(33)	0	12		0	0	0	8	4	0	12	
Spring 2012	4	(57)	3	(43)	1	8		0	0	0	4	3	1	8	
Total	12	(63)	7	(37)	1	20	3	0	0	0	12	7	1	20	
2012															
Fall 2012	4	(100)	0	(0)	0	4		0	0	0	4	0	0	4	
Spring 2013	3	(75)	1	(25)	0	4		0	0	0	3	1	0	4	
Total	7	(88)	1	(12)	0	8		0	0	0	7	1	0	8	

<sup>&</sup>lt;sup>a</sup> Regulatory year (RY) begins 1 July and ends 30 June, e.g., RY08 = 1 July 2008–30 June 2009.
<sup>b</sup> Includes defense of life or property kills, research mortalities, and other known human-caused accidental mortality.
<sup>c</sup> Beginning RY11, sealing not required in Unit 11 and Unit 13, bears taken over bait not recorded on harvest tickets.

Table 2. Unit 11 black bear successful hunter residency, Southcentral Alaska, regulatory years 2008–2012b.

Regulatory	Local		Nonlocal				Successful
year	resident	(%)	resident	(%)	Nonresident	(%)	hunters
2008	7	(32)	10	(45)	5	(23)	22
2009	6	(19)	15	(48)	10	(32)	31
2010	4	(15)	17	(63)	6	(22)	27
2011	0	(0)	14	(70)	6	(30)	20
2012	4	(50)	3	(38)	1	(13)	8

Table 3. Unit 11 black bear harvest chronology by month, Southcentral Alaska, regulatory years 2008–2012.

Regulatory						Harv	est p	eriods	(%)						
year	Jı	ıl	A	ug	Ş	Sep	O	ct	A	pr	M	lay	J	un	n
2008	0	(0)	4	(18)	3	(14)	0	(0)	0	(0)	8	(36)	7	(32)	22
2009	0	(0)	11	(35)	2	(6)	0	(0)	0	(0)	9	(29)	9	(29)	31
2010	1	(4)	4	(15)	3	(11)	1	(4)	0	(0)	14	(52)	4	(15)	27
2011	1	(5)	10	(50)	1	(5)	0	(0)	0	(0)	1	(5)	7	(35)	20
2012	0	(0)	2	(25)	2	(25)	0	(0)	0	(0)	2	(25)	2	(25)	8

<sup>&</sup>lt;sup>a</sup> Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2008 = 1 July 2008–30 June 2009.

<sup>&</sup>lt;sup>a</sup> Regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2008 = 1 July 2008–30 June 2009.

<sup>b</sup> Adjusted for multiple harvests by individual hunters.

<sup>c</sup> Resident of Unit 11 or National Park Service subsistence community for Wrangell-St. Elias National Park and Preserve.

Table 4. Unit 11 black bear harvest by transport method, Southcentral Alaska, regulatory years 2008–2012.

year         Airplane         Horse         Boat         ATV <sup>b</sup> Snowmachine         vehicle         Walk           2008         2 (9)         0 (0)         9 (41)         4 (18)         0 (0)         3 (14)         4 (18)	Unk	n
2008 2 (9) 0 (0) 9 (41) 4 (18) 0 (0) 3 (14) 4 (18)		11
	0 (0)	22
2009 3 (10) 1 (3) 6 (19) 3 (10) 0 (0) 8 (26) 7 (23)	3 (10)	31
2010 4 (15) 0 (0) 10 (37) 3 (11) 0 (0) 6 (22) 4 (15)	0 (0)	27
2011 2 (10) 1 (5) 3 (15) 0 (0) 0 (0) 2 (10) 11 (55)	1 (5)	20
2012 0 (0) 1 (13) 1 (13) 0 (0) 3 (38) 2 (25)	0 (0)	8