

# **Black Bear Management Report and Plan, Game Management Unit 16:**

Report Period 1 July 2013–30 June 2018, and  
Plan Period 1 July 2018–30 June 2023

**Chris J. Brockman**





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Plan Period 1 July 2018–30 June 2023

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This species management report and plan was reviewed and approved for publication by Todd A. Rinaldi, Management Coordinator for Region IV for the Division of Wildlife Conservation.

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## Purpose of this Report

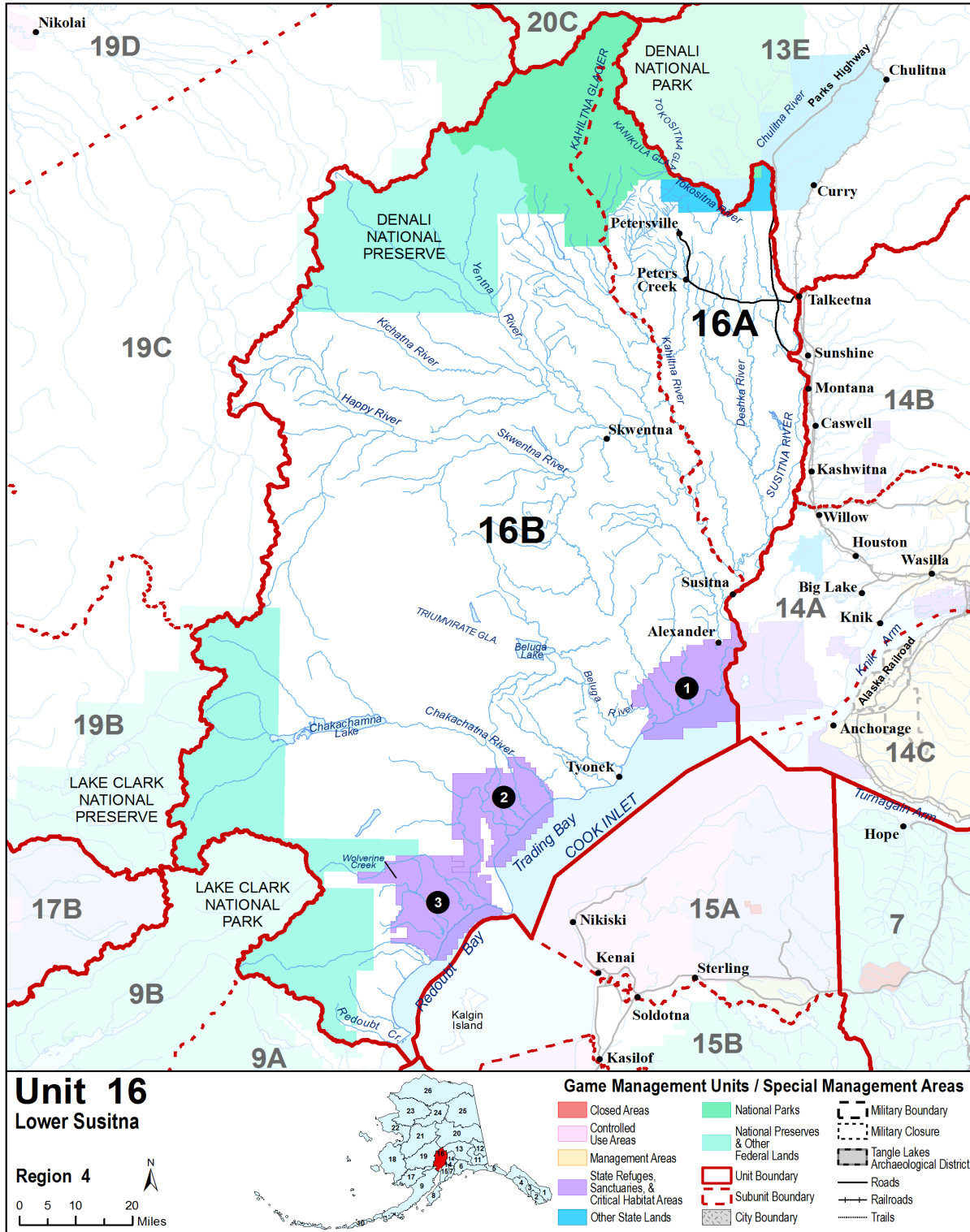
This report provides a record of survey and inventory management activities for black bear in Game Management Unit 16 for the 5 regulatory years 2013–2017 and plans for survey and inventory management activities in the next 5 regulatory years, 2018–2022. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY18 = 1 July 2018–30 June 2019). This report is produced primarily to provide agency staff with data and analysis to help guide and record agency efforts but is also provided to the public to inform it of wildlife management activities. In 2016 the Alaska Department of Fish and Game’s (ADF&G, the department) Division of Wildlife Conservation (DWC) launched this 5-year report to report more efficiently on trends and to describe potential changes in data collection activities over the next 5 years. It replaces the black bear management report of survey and inventory activities that was previously produced every 3 years.

## I. RY13–RY17 Management Report

### Management Area

Unit 16 is located in Southcentral Alaska, west of Anchorage. Unit 16 consists of the drainages into western Cook Inlet from Redoubt Creek and the Susitna River, including the drainages of Redoubt Creek and the drainages on the west side of the Susitna River upstream from its junction with the Chulitna River and the drainages into the west side of the Chulitna River upstream of the Tokositna River, including the river and drainages on the south side of the river up to the Tokositna Glacier. It is subdivided into Unit 16A, which is east of the east bank of the Yentna River from its mouth upstream to the Kahiltna River, east of the east bank of the Kahiltna River, and east of the Kahiltna Glacier, and Unit 16B, which covers all portions south and west of Unit 16A (Fig. 1). Unit 16A is 1,850 mi<sup>2</sup>. Unit 16B is approximately 5.5 times larger at 10,405 mi<sup>2</sup>.

The topography of the area is composed of high alpine habitat in the west (Alaska Range) with peak elevations exceeding 20,310 ft (Denali), and lower elevation mixed boreal forest in the east. The southern half of the unit is bounded by Cook Inlet (sea level) on the east. Drainage is south and east into Susitna River or Cook Inlet. The lower elevation forest has many lakes and small ponds. The southern half of the unit has several wildlife refuges along Cook Inlet where the topography is low elevation, relatively level, coastal wetland habitat. Plant communities along the rivers and streams are dominated by riverine willows (*Salix* spp.). The forest is dominated by white spruce (*Picea glauca*) and black spruce (*P. mariana*). The subalpine areas are comprised of alder (*Alnus crispa*), dwarf birch (*Betula nana*) and dwarf heath (*Cassiope* spp., *Empetrum* spp., *Ledum* spp., *Vaccinium* spp., and *Arctostaphylos* spp.). Other common vegetation types scattered throughout the study area are willow (*Salix* spp.), and sedges (*Cyperaceae*).



**Figure 1. Game Management Unit 16 in Southcentral Alaska, as shown in the 2023–2024 Alaska Hunting Regulations. The numbered black circles represent state restricted areas: the (1) Susitna Flats Game Refuge, (2) Trading Bay State Game Refuge, and (3) Redoubt Bay Critical Habitat Area.**



## Summary of Status, Trend, Management Activities, and History of Black Bears in Unit 16

Harvest levels in Unit 16B were flat and averaged less than 100 bears between 1974 and 2004. Harvest in Unit 16A was 40 bears annually during the same 30-year period; however, there was a steady increase in the harvest, from 13 bears in 1974 to 74 bears in 2004. This was likely the result of improved access and increased use of all-terrain vehicles. Black bear harvests fluctuate with fall berry crops (Faro 1990), the length of the moose season, and travel conditions (i.e., snow cover and consistency) during late spring (Harkness 1993). Since the 1990s, the chronology of the black bear harvest has shifted from a predominantly fall harvest to a spring harvest due to new baiting opportunity and increased interest in hunting black bears.

A black bear population estimation is problematic due to the large expanse of the unit and heavy vegetation that make sighting bears difficult. Preliminary information from line transect surveys (Quang and Becker 1999) conducted during the spring of 2000 and 2001 in the northern section of Unit 16 produced an estimate of 29.3 black bears/100 mi<sup>2</sup>. Applying that density unitwide resulted in an estimate of about 2,700 bears (McDonough 2002). Previous estimates based on 25–50 black bears/100 mi<sup>2</sup> (Griese 1996) produced a similar midpoint estimate as the line transect survey results of 2,700 bears for Unit 16. The previous range estimate of 1,825–3,650 black bears (Griese 1996, 1999) covers the potential variation in habitat quality throughout the unit. However, previous reports (Griese 1996, 1999) did not account for the Unit 16A contribution, thereby underestimating the Unit 16 black bear population at 2,100. Becker (Earl F. Becker, DWC biometrician, ADF&G, Anchorage, personal communication) conducted a line transect survey of Unit 16B in May 2007; the results identified 1,888 black bears. This is based on a density of 126.7 bears per 1,000 km<sup>2</sup> (328 bears/1,000 mi<sup>2</sup>) and a total area of 14,895 km<sup>2</sup> (5,750 mi<sup>2</sup>) of available habitat below 3,500 ft in elevation.

Poor moose calf recruitment during the 2000s prevented Unit 16B from reaching management objectives for the moose population (Peltier and Rinaldi 2014). Black bears are a major predator on spring moose calves; and the moose population experienced a substantial decline in the 1990s after several deep snow winters (i.e., 1999–2000 and 2000–2001). A study initiated in 2005 confirmed that poor calf recruitment was preventing recovery of the moose population and that survival of calves to 5 months of age (1 November) was low, despite high levels of calf production and relatively good calf body weights (Lou C. Bender, DWC biologist, ADF&G, Palmer, unpublished data). Predation on moose calves was the primary cause of low calf survival, and black bear predation was thought to account for a significant portion of the calf mortality. A predation control program was initiated in spring 2008 on nonfederal land in the unit to reduce the number of predators in Unit 16, including black bears, thereby increasing moose calf survival. Black bear seasons, bag limits, and prohibitions on bear baiting were liberalized in 2007 to increase bear harvests. By 2009 black bears could also be taken through snaring. The program was officially suspended in November 2016 due to meeting the population objective for the moose population. The bear control program has not resumed.

# Management Direction

## EXISTING WILDLIFE MANAGEMENT PLANS

- Alaska Wildlife Management Plans: Susitna-Nelchina Black Bear Management Plan (1976)
- ADF&G Division of Wildlife Conservation Strategic Plan (2002)

## GOALS

The management goal in Unit 16 is to provide the greatest opportunity to participate in hunting black bears. For most of the RY13–RY17 report period, the goal was also to reduce the black bear population to increase moose calf survival under an intensive management program.

## CODIFIED OBJECTIVES

### Amounts Reasonably Necessary for Subsistence Uses

There is a positive finding for black bears in Unit 16B with an amount necessary for subsistence (ANS) of 15–40 black bears.

### Intensive Management

The Intensive Management goal for black bear under 5AAC 92.122 was to reduce the population to 700 black bears in the mainland portion of Unit 16B. The black bear control program was suspended in November 2016 and the Intensive Management Plan for Unit 16 expires 1 July 2021.

## MANAGEMENT OBJECTIVES

From the spring of 2006 when black bears were included in the predation control program to its fall 2016 suspension, the management objective was to reduce the population to 700 black bears and maintain the population at a level that would be largely unaffected by human harvest.

After the intensive management program for bears was suspended, the population objective was to maintain a population size that appeared largely unaffected by human harvest. The human-use objective was a 3-year average harvest of greater than 270 black bears (45 in 16A, >225 in 16B) with >30% being female.

## MANAGEMENT ACTIVITIES

### 1. Population Status and Trend

ACTIVITY 1.1. Determine population status and trend.

#### *Data Needs*

Simple, repeatable, and accurate surveys have not been developed to assess the Unit 16 black bear population density. Previous density estimates of the black bear population from line

transect surveys were similar to the results of modeling available habitat and harvest trends by Griese in 1999 and updated by McDonough in 2002.

### *Methods*

No density estimates were conducted during RY13–RY17.

### *Results and Discussion*

There are no results of population or density estimates to report.

Anecdotal reports indicate the black bear population along the major rivers had declined as bear baiters were seeing fewer black bears at bait stations in the later years of the RY13–RY17 report period.

### *Recommendations for Activity 1.1.*

Discontinue.

## 2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest through sealing and harvest records.

### *Data Needs*

Harvest must be assessed to understand the potential impact of harvest and guide management of black bears.

### *Methods*

Department staff monitored black bear take by collecting harvest information through the sealing of skulls and hides of bears taken by hunters or killed for other reasons. During sealing, skull measurements, sex identification, hunting effort, location, and date of kill were recorded. Black bears taken over bait, incidental harvest, and meat salvage were noted on the sealing reports. To hunt black bears over bait, hunters were required to have a bait permit from the department with no more than 2 bait stations allowed per permit. Harvest reports were required for black bears harvested in both Units 16A and 16B. Under the predation control program, which ran concurrently with the general harvest hunt, a predation control permit was required. For resident hunters under a predation control permit, black bears could be taken over bait or by other methods on the same day the permittees flew (same-day-airborne), provided that the hunters were over 300 ft from the airplane. There was no limit to the number of black bears that could be taken; cubs, and sows accompanied by cubs, could also be taken. Predation control permittees were allowed to have up to 4 registered black bear bait stations simultaneously, and had the option to sell black bear tanned or untanned hides, and skulls. The Board of Game decided in its spring 2009 meeting to allow participants in the predation control program to use snares to take black bears if they had a separate snaring permit and had taken an orientation class. Due to multiple reporting options (harvest ticket, predation control, and snaring permit), staff compiled and reconciled all data sources, but used only the sealing database to report the harvest.

### *Season and Bag Limits*

During RY13–RY17, there was no closed season for black bear hunting in Unit 16. The bag limit was 3 bears, excluding cubs, and sows accompanied by cubs. In Unit 16A, baiting was allowed with a registered baiting permit from 15 April to 15 June outside Denali State Park. In Unit 16B, the baiting season was from 15 April to 15 October. Unitwide during RY13–RY17, predation control program permittees were allowed to take cubs, and sows with cubs, and an unlimited number of black bears. The permittees had been allowed to snare black bears with a separate snaring permit beginning in RY09.

### *Results and Discussion*

#### Harvest by Hunters

Black bear harvest during RY13–RY17 decreased in both Units 16A and 16B from RY08–RY12 (Tables 1 and 2). For all Unit 16, the harvest decreased to an average of 263 bears annually during RY13–RY17 from an average of 448 bears annually during RY08–RY12. The average annual percent of females in the harvest increased in Unit 16A from 39% (RY08–RY12) to 47% (RY13–RY17) and decreased in Unit 16B from 35% (RY08–RY12) to 33% (RY13–RY17).

Bear baiting participation increased during the RY13–RY17 report period (Table 3). The number of participants in both Units 16A and 16B remained stable between RY08–RY12 and RY13–RY17. There was an average of 246 participants in RY08–RY12 and an average of 243 participants during RY13–RY17. The total number of bait stations increased from an average of 399 stations in RY08–RY12 to an average of 625 stations in RY13–RY17.

With the opportunity created from the implementation of predation control, there was a commensurate increase in the total harvest. However, there was no increase in percent females in the harvest to the degree that would indicate a widespread population decline, and predation control may have resulted in higher cub survival, thus offsetting any decrease in the population expected from higher harvest. There were no appreciable changes in habitat that may have led to population changes, although the moose population increased during RY13–RY17, possibly providing an additional prey source.

**Table 1. Harvest, Unit 16A black bear, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Season	Reported hunter harvest <sup>a</sup>						Reported nonhunting mortality <sup>b</sup>			Estimated unreported mortality <sup>d</sup>	Total harvest				
		M	F	(%F)	Unk	Total	Baited <sup>c</sup>	M	F	Unk		M	F	(%F)	Unk	Total
2013																
	Fall	39	21	(35)	0	60	4	0	0	0	6	39	21	(35)	0	66
	Spring	25	27	(52)	0	52	42	0	0	2	5	25	27	(52)	5	62
	Total	64	48	(42)	3	115	46	0	0	2	11	64	48	(42)	5	128
2014																
	Fall	15	11	(42)	0	26	6	0	0	1	3	15	11	(42)	1	30
	Spring	24	29	(55)	0	53	40	0	0	0	5	24	29	(55)	0	58
	Total	38	40	(51)	0	79	46	0	0	1	8	38	40	(51)	1	87
2015																
	Fall	4	4	(50)	0	8	3	0	0	0	1	4	4	(50)	0	9
	Spring	17	14	(45)	0	31	22	0	0	0	3	17	14	(45)	0	34
	Total	21	18	(46)	0	39	25	0	0	0	4	21	18	(46)	0	43
2016																
	Fall	9	11	(55)	0	20	5	0	0	0	2	9	11	(55)	0	22
	Spring	20	19	(49)	0	39	33	0	0	0	4	20	19	(49)	0	43
	Total	29	30	(51)	0	59	38	0	0	0	6	29	30	(51)	0	65
2017																
	Fall	13	9	(41)	0	22	10	0	0	0	2	13	9	(41)	0	24
	Spring	12	11	(48)	0	23	17	0	0	0	2	12	11	(48)	0	25
	Total	25	20	(44)	0	45	27	0	0	0	4	25	20	(44)	0	49

<sup>a</sup> Includes take under predation control permits.

<sup>b</sup> Includes defense of life or property kills, illegal kills, and other known human-caused accidental mortality.

<sup>c</sup> Bears reported taken over legally established bait stations.

<sup>d</sup> Assumes approximately 10% of reported harvest.

**Table 2. Harvest, Unit 16B black bear, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Season	Reported hunter harvest <sup>a</sup>						Reported nonhunting mortality <sup>b</sup>			Estimated unreported mortality <sup>d</sup>	Total harvest				
		M	F	(%F)	Unk	Total	Baited <sup>c</sup>	M	F	Unk		M	F	(%F)	Unk	Total
2013																
	Fall	34	28	(45)	0	62	12	0	1	0	6	34	29	(46)	0	68
	Spring	84	32	(28)	0	116	86	2	0	0	12	86	32	(27)	0	128
	Total	118	60	(34)	0	178	98	2	1	0	18	120	61	(34)	0	196
2014																
	Fall	53	51	(47)	5	109	10	1	0	0	11	54	51	(49)	5	120
	Spring	95	65	(38)	12	172	119	0	0	0	17	95	65	(41)	12	189
	Total	148	116	(41)	17	281	129	1	0	0	28	149	116	(44)	17	309
2015																
	Fall	25	12	(30)	3	40	13	0	0	0	4	25	12	(32)	3	44
	Spring	99	48	(33)	0	147	94	0	1	0	15	99	49	(33)	0	162
	Total	124	60	(32)	3	187	107	0	1	0	19	124	61	(33)	3	206
2016																
	Fall	28	12	(29)	1	41	5	0	1	0	4	28	13	(32)	1	45
	Spring	96	43	(30)	3	142	117	0	0	0	14	96	43	(31)	3	156
	Total	124	56	(31)	4	183	122	0	1	0	18	124	57	(31)	4	201
2017																
	Fall	25	15	(38)	0	40	9	3	0	0	4	28	15	(35)	0	44
	Spring	84	23	(21)	0	107	80	0	0	0	11	84	23	(21)	0	118
	Total	109	38	(26)	0	147	89	3	0	0	15	112	38	(25)	0	162

<sup>a</sup> Includes take under predation control program permits.

<sup>b</sup> Includes defense of life or property kills, illegal kills, and other known human-caused accidental mortality.

<sup>c</sup> Bears reported taken over legally established bait stations.

<sup>d</sup> Assumes approximately 10% of reported harvest.

**Table 3. Hunter baiting participation, Unit 16 black bear, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Number of permittees	Number of stations registered	
		Unit 16A	Unit 16B
2013	219	330	307
2014	243	315	428
2015	224	267	378
2016	268	263	349
2017	264	248	239

Hunter Residency and Success

Residents on average took 65% of the harvest during RY13–RY17. Nonresident hunters reported an average annual harvest of 91 black bears, an increase from an average annual harvest of 85 reported for RY08–RY12 (Table 4). Because both units have a multi-bear bag limit, success rates reflect the residency status of the hunter sealing each bear, and not the overall residency of all successful hunters (hunters may have harvested more than one black bear in a regulatory year).

**Table 4. The residency of the group of hunters responsible for the most harvest, Unit 16 black bear, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Local <sup>a</sup> resident	Percent	Nonlocal resident	Percent	Non-resident	Percent	Successful hunters <sup>b</sup>
2013	2	1	194	65	102	34	298
2014	2	1	258	71	102	28	362
2015	1	0	141	62	85	38	227
2016	1	0	152	63	90	37	243
2017	3	2	116	59	76	39	195

<sup>a</sup> Unit 16 residents.

<sup>b</sup> The total number of successful hunters may include hunters who are counted more than once because some hunters may have taken more than one black bear in a regulatory year.

Harvest Chronology

Most black bears harvested in Units 16A and 16B are taken in the last 2 weeks of May and in the month of June (Table 5). The percent of black bears taken during the month of September increased during RY13–RY17 compared to RY08–RY12 (15% versus 11%). Black bear harvest in September is believed to be associated with moose hunters who take bears opportunistically as well as those specifically targeting black bears (Peltier 2014).

**Table 5. Reported hunter harvest chronology percent by month, Unit 16 black bear, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Percent of harvest									<i>n</i>
	Jul–Aug	Sep 1–15	Sep 16–30	Oct	Nov–Mar	Apr	May 1–15	May 16–31	Jun	
2013	18	12	11	1	0	0	2	11	45	292
2014	17	12	7	2	1	0	6	17	8	361
2015	13	2	5	1	0	1	15	26	7	225
2016	10	7	7	0	0	0	2	21	53	243
2017	19	7	7	0	0	1	1	22	43	195

Transport Methods

Most black bear hunters used airplanes as their primary mode of transportation (Table 6). Slightly more hunters used boats during RY13–RY17 compared to RY08–RY12 (19% versus 17%).

**Table 6. Harvest percent by reported transport method, Unit 16 black bear, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Percent of harvest								<i>n</i>
	Airplane	Horse	Boat	ORV/ATV <sup>a</sup>	Snow-machine	Highway vehicle	Foot	Other/unknown	
2013	44	1	17	25	0	10	2	1	298
2014	62	1	14	14	0	6	3	0	362
2015	61	0	19	11	0	6	3	0	227
2016	48	2	23	14	0	9	3	1	243
2017	45	1	24	12	0	13	3	2	194

<sup>a</sup> ORV stands for off-road vehicle, and ATV stands for all-terrain vehicle.

*Other Mortality*

In Unit 16A, a total of 3 black bears were sealed as nonhunting kills during RY13–RY17 compared with 1 for RY08–RY12. In Unit 16B, a total of 9 black bears were sealed as nonhunting kills during RY13–RY17 compared with 5 for RY08–RY12. Nonhunting kills include defense of life or property (DLP), agency take, natural mortality, and bears killed in vehicle accidents. Given that there is no closed season in either unit, there may have been other DLP kills that were reported as harvested bears.

Intensive Management

The 5-year average of reported harvest prior to the start of the predation control program (RY01–RY05) was 205 black bears. During the first 5 regulatory years (RY06–RY10) of the predation control program when participation was high, the average reported annual harvest increased to 485 black bears. By RY13—the beginning of the RY13–RY17 report period—the participation



in the predation control program had declined, and the average annual harvest for RY13–RY17 was 263 black bears. By RY17—the last year of the report period—when the predation control program was not active, the black bear harvest was 194, which is similar to the harvest of 205 black bears that occurred before the predation control program was implemented. Percent female in the harvest was higher while the predation control program was active than before the program was implemented.

#### *Recommendations for Activity 2.1.*

Continue.

### 3. Habitat Assessment-Enhancement

No activities for black bear habitat assessment or enhancement are included in Unit 16 black bear management.

## **NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS**

### Data Recording and Archiving

- Harvest data and copies of sealing forms are stored on an internal database housed on a server (<http://winfonet.alaska.gov/index.cfm>).
- Field data sheets are scanned and housed on the network server in the Palmer Area Biologist office (O:\WC\Palmer Area Office Folder\Species\Furbearer\Scanned Archive Files) and stored in file folders located in the Palmer Assistant Area Biologist's office.

### Agreements

Currently there are no agreements with other agencies pertaining to black bear management.

### Permitting

No permits were needed to conduct black bear management activities in Unit 16 during RY13–RY17.

## **Conclusions and Management Recommendations**

Black bears in Unit 16 continue to be managed on a sustainable basis. Under general harvest regulations, black bear hunters continue to have ample harvest opportunities throughout Unit 16. The human use objective is a 3-year average harvest of greater than 270 black bears (45 in Unit 16A, 225 in Unit 16B) with >30% being females. During RY13–RY17, the harvest objective was not met but the average of 263 bears annually was close. The percent female did exceed 30%.

The predation control program for Unit 16 started in spring 2007 but some liberalizations began in 2006. The program was officially suspended in November 2016 (Chris Brockman, DWC area biologist, ADF&G, Palmer, Summary of bear control in Game Management Unit 16, 2007–2016, memorandum, 2017). The period when the control program was active is reflected in the sealing data by increased levels of harvest especially in the first portion of the program. The predation control harvest is included in this report as hunter kill.

As the current regulations allow for liberal opportunity, it is unlikely that there are management actions department staff can take to reach harvest objectives through regulatory changes. We recommend removing the harvest objective of 270 bears but retaining the objective of maintaining greater than 30% females in the harvest.

## **II. Project Review and RY18–RY22 Plan**

### **Review of Management Direction**

#### **MANAGEMENT DIRECTION**

The existing management direction and goals appropriately direct management of black bears in Units 16A and 16B. The management direction for the units ensures that black bears will persist as part of the natural ecosystem and ensures continued hunting and viewing opportunities. There is no indication that the long-term sustainability of the black bear populations or that statewide goals (ADF&G 1976) for human uses cannot be met; therefore, the Units 16A and 16B management direction should continue to be that black bears will be managed in a manner that complements the statewide black bear management goals. There are no area-specific issues in the units that require a departure from statewide goals for black bear management.

#### **GOALS**

The management goal in Units 16A and 16B is to provide the greatest opportunity possible to participate in hunting black bears.

#### **CODIFIED OBJECTIVES**

##### Amounts Reasonably Necessary for Subsistence Uses

There is a positive finding for black bears in Unit 16B with an amount necessary for subsistence of 15–40 black bears.

##### Intensive Management

The Intensive Management goal for black bear is to reduce the population to 700 black bears in the mainland portion of Unit 16B. The black bear control program was suspended in November 2016 and the Intensive Management Plan for Unit 16 expires 1 July 2021.

#### **MANAGEMENT OBJECTIVES**

The management objective is to maintain a population largely unaffected by human harvest. The human-use objective to provide liberal opportunities to hunt black bears while ensuring that the percentage of females in the harvest exceeds 30% in any 3-year period.

## **REVIEW OF MANAGEMENT ACTIVITIES**

### 1. Population Status and Trend

ACTIVITY 1.1. Monitor harvest.

#### *Data Needs*

Harvest must be monitored to determine trends that can indicate decreased black bear population density and to ensure that objectives are being met.

#### *Methods*

Examine harvest data for changes in total harvest and the percent of females in the harvest.

### 2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor harvest through sealing and harvest records.

#### *Data Needs*

Harvest must be assessed to understand the potential impact and guide management of black bears.

#### *Methods*

We will collect harvest data through harvest records and/or sealing records of black bears taken by hunters. We will record location and data of harvest, method of take, transportation mode, sex and skull measurements of sealed animals. These data will be stored in WinfoNet.

### 3. Habitat Assessment-Enhancement

No activities for black bear assessment or enhancement are expected in Unit 16 black bear management.

## **NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS**

### Data Recording and Archiving

- Harvest data and copies of sealing forms will be stored on DWC's WinfoNet internal database housed on a server (<http://winfonet.alaska.gov/index.cfm>).
- Field data sheets, appropriate defense of life and property reports, other potential black bear data will be scanned and housed on the network server in the Palmer Area Biologist office (O:\WC\Palmer Area Office Folder\Species\Black bear\Scanned Archive Files) and stored in file folders located in the Palmer Assistant Area Biologist's office.

### Agreements

Currently there are no agreements with other agencies pertaining to black bear management.

## Permitting

No permits are expected in this period.

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