

## **Black Bear Management Report and Plan, Game Management Units 11 and 13:**

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

**Heidi L. Hatcher**





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Plan Period 1 July 2018–30 June 2023

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PO Box 115526  
Juneau, AK 99811-5526



Hunters are important founders of the modern wildlife conservation movement. They, along with trappers and sport shooters, provided funding for this publication through payment of federal taxes on firearms, ammunition, and archery equipment, and through state hunting license and tag fees. These taxes and fees fund the federal Wildlife Restoration Program and the State of Alaska's Fish and Game Fund, which provided funding for the work reported on in this publication.

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

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This document, published in PDF format only, should be cited as:

Hatcher, H. L. 2023. Black bear management report and plan, Game Management Units 11 and 13: Report period 1 July 2013–30 June 2018, and plan period 1 July 2018–30 June 2023. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2023-22, Juneau.

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## Purpose of this Report

This report provides a record of survey and inventory management activities for black bears (*Ursus americanus*) in Units 11 and 13 for the 5 regulatory years 2013–2017 and plans for survey and inventory management activities in the following 5 regulatory years, 2018–2022. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY21 = 1 July 2021–30 June 2022). 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 more efficiently report 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

Game Management Unit 11 (12,784 mi<sup>2</sup>) consists of that area draining into the headwaters of the Copper River south of Suslota Creek and the area drained by all tributaries into the east bank of the Copper River between the confluence of Suslota Creek with the Slana River and Miles Glacier (Fig. 1). Most of Unit 11 is included in the Wrangell-St. Elias National Park and Preserve. Hunting is allowed under state regulations in the National Preserve, but only federal subsistence hunting is allowed in the National Park. The National Park Service (NPS) sometimes implements special rules for activities such as bear baiting on NPS lands, even within the National Preserve. Unit 11 includes portions of 3 of Alaska’s 32 ecoregions: the Wrangell Mountains, Chugach-St. Elias Mountains, and Copper River Basin.

Unit 13 encompasses 23,368 mi<sup>2</sup> and includes a vast array of public lands (state and federal), as well as private and Native corporation lands that span a variety of habitats. Small rural communities are widespread in Unit 13, but the unique situation of the area on the road system with extensive public-access trails attracts consumptive and nonconsumptive users to the area from urban centers such as Fairbanks, Anchorage, and the Matanuska-Susitna Valley. Unit 13 also includes portions of 3 of Alaska’s 32 ecoregions: the Alaska Range, Chugach-St. Elias Mountains, and Copper River Basin.

Additional maps describing the current boundaries and special management areas in Units 11 and 13 can be found at: <http://www.adfg.alaska.gov/index.cfm?adfg=maps.main>.

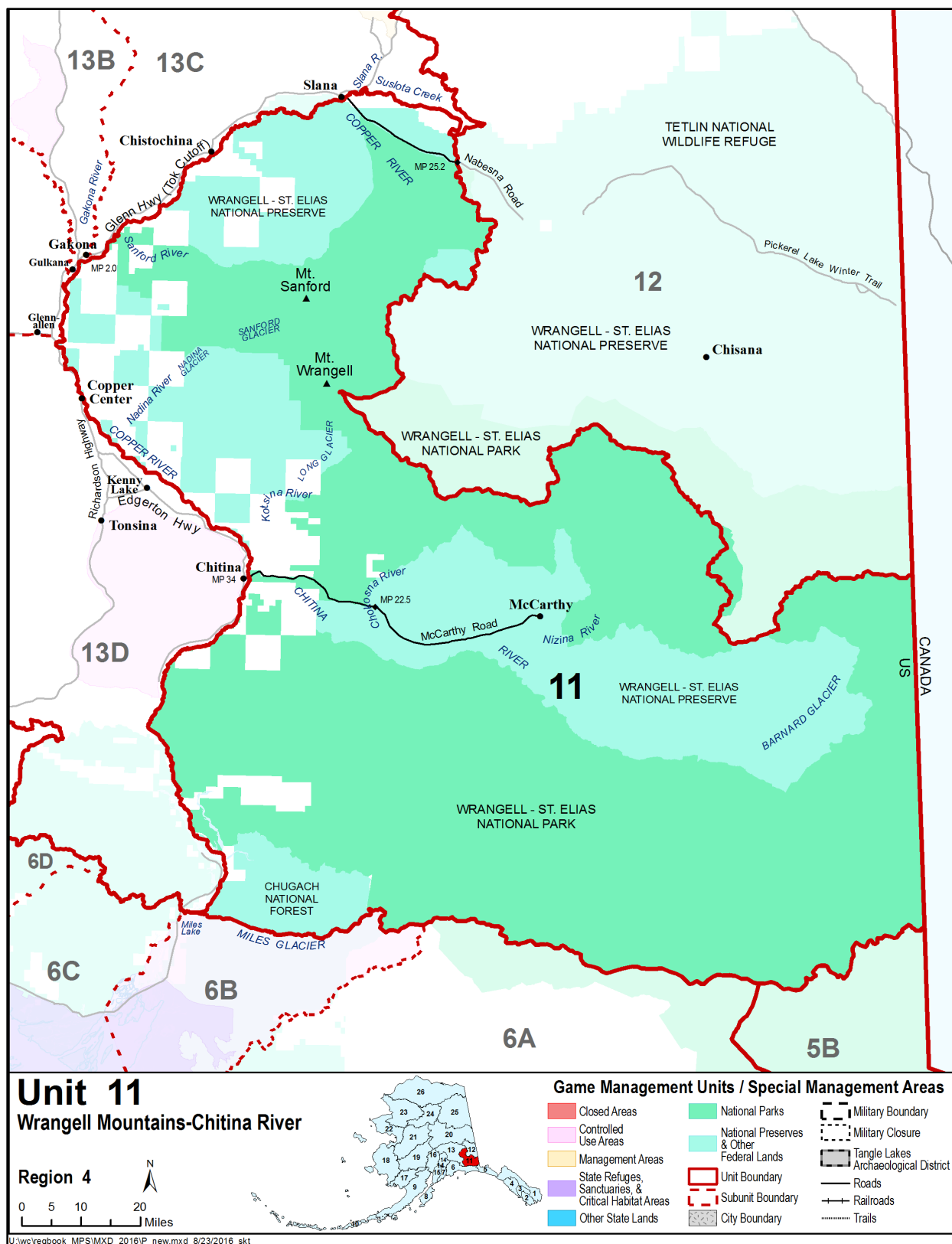
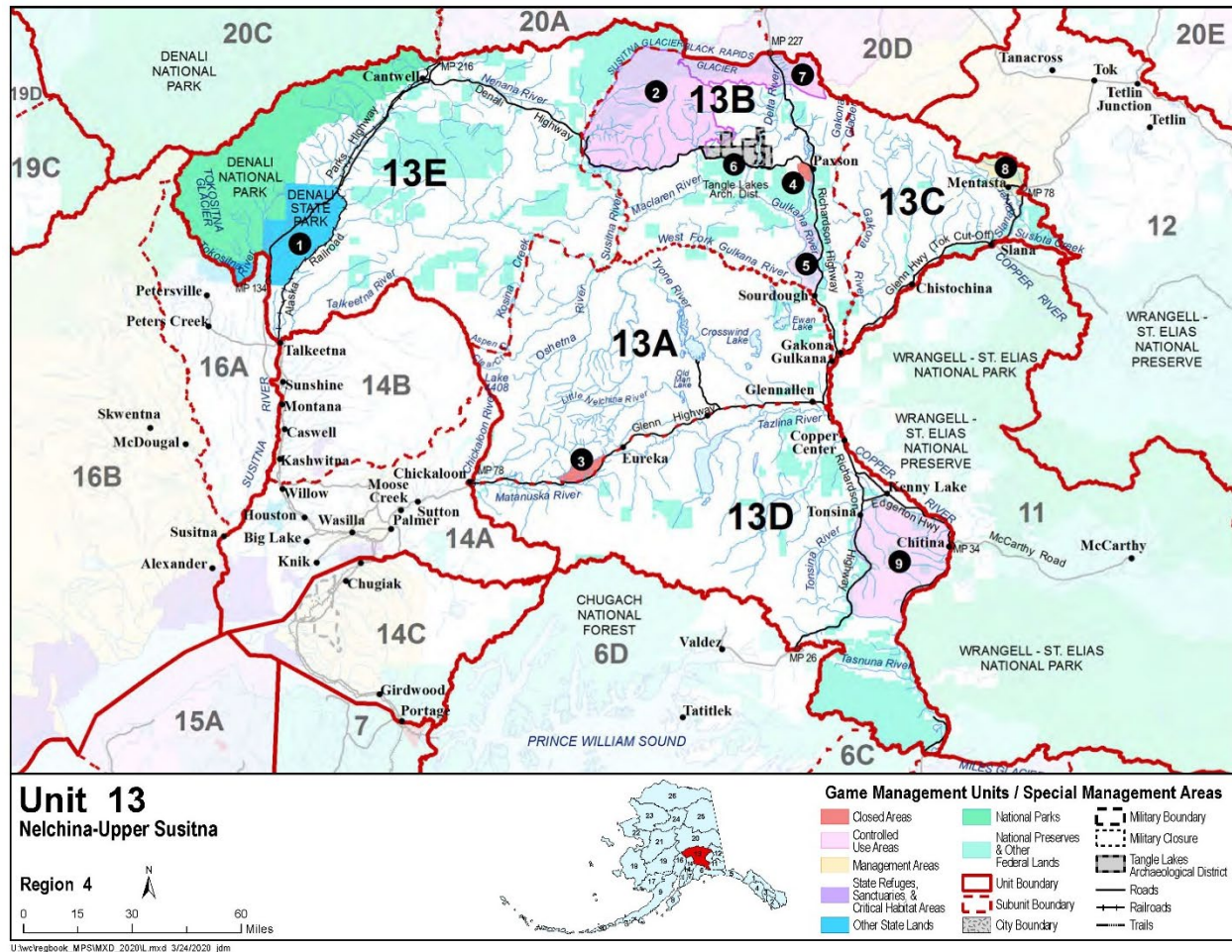


Figure 1. Unit 11 boundaries, Southcentral Alaska.





**Figure 2. Unit 13 boundaries, Southcentral Alaska, with indicators of controlled use areas (numbered circles), administrative subunits, and federal lands as found in the Alaska Hunting Regulations.**

## Summary of Status, Trend, Management Activities, and History of Black Bears in Units 11 and 13

Black bears are numerous in portions of Units 11 and 13 with suitable timbered habitat. Harvest data have been available since 1973, when the sealing of black bears became mandatory.

Black bear harvests have been increasing in both Units 11 and 13 since harvest tracking first began, with one exception. In Unit 11, black bear harvest averaged 14 bears annually from 1973 through 1979 (range 3–34), 8 bears annually during the 1980s (range 1–14), 15 bears during the 1990s (range 7–20), 17 bears during the 2000s (range 10–31), and 19 bears from 2010 through 2017 (range 8–29).

In Unit 13, black bear harvests averaged 67 bears annually from 1973 through 1979 (range 57–77), 81 bears annually in the 1980s (range 64–100), 93 bears annually in the 1990s (range 63–162), 133 bears annually in the 2000s (range 87–188), and from 2010 through RY13–RY17, the average annual black bear harvest in Unit 13 increased to 165 bears (range 118–196).

The increasing trend in black bear harvest for Units 11 and 13 coincides with a history of increasingly liberal regulations for black bear harvest in this area, as well as an increasing number of registered bait stations in both units over time. Historically, the bag limit for Units 11 and 13 has been 3 black bears a regulatory year with no closed season, and baiting has been allowed for black bears from 15 April through 15 June. The bag limit did not change before or during RY13–RY17. Beginning in RY09, the baiting season was extended to 30 June. In RY11, the black bear sealing requirement for Units 11 and 13 was removed, guides were allowed to establish up to 10 bait stations in total combined with assistant guides, and hunters who had been airborne were allowed 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 take. In RY13, the take of brown bears was allowed at black bear bait stations in Unit 13D, and this regulation was extended to all Unit 13 and Unit 11 in RY15. This brown bear regulation allowed hunters to harvest a brown bear that might otherwise keep black bears away from the bait station, often times providing additional opportunity for black bear hunting once the brown bear was removed.

Black bear surveys have not been conducted in Unit 11.

In Unit 13, a black bear population estimate was conducted in 1985 along a portion of the upper Susitna River in conjunction with the Susitna Hydroelectric Project (Miller 1987). Results indicated a density estimate of 90 black bears/1,000 km<sup>2</sup> (95% CI = 77.44–102.1 bears/1,000 km<sup>2</sup>). Females had an observed mean litter size of 2.1 (range = 1–4) cubs of the year, or 1.9 (range = 1–3) yearlings. However, Miller considered the study area to be marginal black bear habitat and not indicative of bear densities in more favorable forested habitat within the unit.

In Unit 13E, distance sampling surveys conducted in 2000, 2001, and 2003 resulted in preliminary estimates of 123 black bears/1,000 km<sup>2</sup> on average. Field observations and harvest data indicate black bears are abundant in large portions of Units 13D and 13E, and to a lesser extent in Units 13A and 13C. Black bears are less abundant in 13B.

Black bear densities in the favorable habitats within Units 11 and 13 are thought to be similar to densities in other portions of Southcentral Alaska.

## **Management Direction**

### **EXISTING WILDLIFE MANAGEMENT PLANS**

Management direction set in the black bear management plan for the Susitna-Nelchina region, including Units 11 and 13, has been modified through public comments, staff recommendations, and Alaska Board of Game actions over the years (ADF&G 1976). A record of these changes can be found in the division's previous species management reports. The plan portion of this report contains the current management plan for black bears in Units 11 and 13.

### **GOALS**

To provide the greatest opportunity to participate in hunting black bears.

## **CODIFIED OBJECTIVES**

### Amounts Reasonably Necessary for Subsistence Uses

The Board of Game made a positive finding for customary and traditional uses for black bears in Units 11 and 13 with a combined amount necessary for subsistence (ANS) of 20–50 bears.

### Intensive Management

Not applicable.

## **MANAGEMENT OBJECTIVES**

- Provide the greatest sustained opportunity to participate in hunting black bears.
- Maintain a 3-year average of less than 40% females in harvest.

## **MANAGEMENT ACTIVITIES**

### 1. Population Status and Trend

There are not currently any activities in the Units 11 and 13 black bear management program for assessing population status or trends.

### 2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor and evaluate black bear harvest through hunter harvest reports and bear sealing data.

#### *Data Needs*

Monitoring and analyzing annual harvest data is important to understand hunter effort and success in Units 11 and 13, which is critical for sustained yield management.

#### *Methods*

Hunters who obtain black bear general harvest tickets must report harvest and effort within 15 days after the end of the regulatory year. Harvest information captured on the general harvest ticket report includes number of days hunted, location and date of harvest, transportation used, and method of take. Biological data captured is limited to sex of the animal harvested.

The sealing of bears harvested in Units 11 or 13 has not been mandatory since 2011. It is required that untanned black bear hides and skulls be sealed before being transported or exported, as well as when black bear hides are intended for sale. As a result, some black bears are presented for sealing annually. Federal subsistence hunting regulations require that black bears harvested under federal subsistence regulations in Unit 11 be sealed by ADF&G. During the sealing process, additional biological data are collected, including sex verification, and skull length and width measurements. Since 2016 an incisor tooth has been extracted for aging from black bears sealed in the Glennallen office.

### *Season and Bag Limit*

Under state regulations, there is no closed season for black bears in Units 11 or 13, and the bag limit is 3 bears. From 1 January through 31 May, the meat of the bear must be salvaged. From 1 June through 31 December, the meat or hide may be salvaged. Black bears may be harvested at a registered bait station from 15 April through 30 June. Bait stations may not be registered within Denali State Park.

Under federal regulations in Units 11 and 13, federally qualified subsistence hunters may harvest up to 3 black bears with no closed season. Bears may be harvested over permitted bait stations from 15 April through 15 June. Black bears taken under federal regulations in Units 11 or 13 must be sealed. The hide and edible meat of black bears taken under federal regulations must be salvaged.

### *Results and Discussion*

#### Harvest by Hunters

Most black bear harvest in both Units 11 and 13 occurs in the spring, when black bears are attracted in high densities to heavily baited areas, especially along the corridors of the Richardson and Parks highways (Table 1). Both units combined averaged 191 black bears harvested annually during RY13–RY17.

#### *Unit 11*

Black bear harvest in Unit 11 averaged 19 bears annually during RY13–RY17 (Table 1), which is below the previous 5-year average of 22 bears (range 8–31), suggesting that Unit 11 black bear harvest numbers may be stabilizing. Females represented 23% of harvest during RY13–RY17.

Fifty-one black bear skulls were sealed from the Unit 11 harvest during RY13–RY17 (34 males, 17 females). Of those, 20 were aged via tooth cementum rings, 7.3% were reported as incidental take, and 31% were harvested over bait.

Male skulls averaged 17.2 inches (range 14.5–19.4 inches) and the average age of males from which a tooth was collected during RY13–RY17 was between 6 and 7 years (range 4–10 years,  $n = 14$ ).

Female skulls averaged 15.5 inches (range 13.4–16.9 inches) and average age of female bears from which a tooth was collected was between 8 and 9 years (range 6–11 years,  $n = 6$ ).

The average size of male skulls sealed during RY13–RY17 was higher than in any previous reporting period, but black bear sealing requirements for Unit 11 were removed in 2011, so we might expect average skull size of sealed bears to increase after that time, as larger bears are more likely to be sealed for taxidermy purposes. The average female skull size for RY13–RY17, however, is smaller than in any reporting period since 1988.

**Table 1. Black bear harvest, Units 11 and 13, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Season	Unit 11		Unit 13			Combined	
		Harvest	% Female	Harvest	% Female	Unknown	Harvest	% Female
2013	Fall 2013	7	29	58	30	2	65	29
	Spring 2014	5	0	109	30	0	114	29
	Total	12	17	168 <sup>a</sup>	30	1	180	29
2014	Fall 2014	5	60	63	27	0	68	29
	Spring 2015	14	29	122	34	2	136	33
	Total	19	37	185	32	1	204	32
2015	Fall 2015	3	33	36	31	0	39	31
	Spring 2016	13	15	137	34	0	150	32
	Total	16	19	173	33	0	189	32
2016	Fall 2016	9	22	40	35	0	49	33
	Spring 2017	20	15	137	26	0	157	25
	Total	29	17	178 <sup>a</sup>	29	0	207	27
2017	Fall 2017	2	50	49	37	0	51	37
	Spring 2018	17	24	104	31	0	121	30
	Total	20 <sup>a</sup>	25	153	33	0	174	32

<sup>a</sup> Includes harvest without date of kill reported.

### *Unit 13*

Black bear harvest in Unit 13 averaged 171 bears annually during RY13–RY17 (Table 1), which is above the previous 5-year (RY08–RY12) average of 162 bears annually (range 118–196). The 5-year average of black bears harvested in Unit 13 has increased steadily since 1988. Females represented 31% of harvest in RY13–RY17, which is standard for the history of black bear harvest in the unit since RY73.

During RY13–RY17, 343 black bear skulls were sealed from the Unit 13 harvest (235 males, 108 females), of which 80 were aged via tooth cementum rings, 6.7% were reported as incidental take, and 28% were harvested over bait.

Male skulls averaged 16.7 inches (range 13.6–20.5 inches) and the average age of harvested males from which a tooth was collected during RY13–RY17 was between 5 and 6 years (range 2–14 years,  $n = 55$ ). The average male skull size is consistent with historic averages, which has remained fairly stable through time; the long-term average was 16.7 inches.

Female skulls averaged 15.5 inches (range 11.3–17.3 inches) and the average age of harvested females from which a tooth was collected during RY13–RY17 was between 6 and 7 years (range

2–22 years,  $n = 25$ ). The average female skull size is consistent with the long-term average of 15.6 inches, which represents fairly consistent 5-year averages for Unit 13 harvested female black bears through time.

Within Unit 13, most harvest occurs in 13D and 13E, where the majority of Unit 13’s prime black bear habitat exists, and where road corridors provide easy access for bear baiting within that habitat (Table 2).

**Table 2. Percentage of harvest in each unit, Unit 13, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Percentage of harvest					Harvest
	13A	13B	13C	13D	13E	
2013	7	5	5	43	40	166
2014	6	5	2	52	34	185
2015	9	4	10	50	27	172 <sup>a</sup>
2016	9	2	8	45	37	174
2017	5	6	3	43	42	153

<sup>a</sup> Does not include 1 harvest from an unknown location in Unit 13.

#### Hunter Residency and Effort

Residents local to Units 11 and 13, nonlocal residents, and nonresidents more equally harvest black bears in Unit 11 than in Unit 13, where the majority of harvest is taken by nonlocal residents (Table 3).

Successful Unit 11 hunters during RY13–RY17 averaged 4 days in the field during the spring season and 3.5 days in the field during the fall season. Overall, successful resident hunters averaged 3.7 days in the field while successful nonresidents averaged 5.1 days in the field. The small sample sizes (58 residents and 38 nonresidents reported effort) may explain some disparity between resident and nonresident effort. The disparity may also be related to a difference in hunting strategies between the two. Nonresidents are more likely to go to Unit 11 specifically to harvest a black bear. Many residents, on the other hand, harvest black bears opportunistically while hunting for other species, in which case they typically report only 1 day hunted for that particular bear.

Successful Unit 13 hunters during RY13–RY17 averaged 5.7 days in the field during the spring season and 5.4 days in the field during the fall season. Overall, successful resident hunters averaged 6.1 days in the field, while nonresident hunters averaged only 3.9 days in the field. More than half of all successful nonresidents utilized registered guide services to hunt black bears in Unit 13, which may partially explain less effort required to harvest a bear. Additionally, nonresidents typically have limited time available in Alaska, whereas residents may have more time available to hunt black bears throughout the year, and thus may pass up some bears and hunt more days in search of larger bears or bears of particular color phases.

**Table 3. Percentage of black bear harvest by hunter residency, Units 11 and 13, regulatory years 2013–2017, Southcentral Alaska.**

Regulatory year	Unit 11				Unit 13				Combined			
	Percentage of harvest			<i>n</i> <sup>a</sup>	Percentage of harvest			<i>n</i> <sup>a</sup>	Percentage of harvest			<i>n</i> <sup>a</sup>
	Local resident	Nonlocal resident	Non- resident		Nonlocal resident	Resident	Non- resident		Nonlocal resident	Resident	Non- resident	
2013	42	33	25	12	20	64	16	168	21	62	17	180
2014	32	37	32	19	13	63	24	185	15	60	25	204
2015	13	31	56	16	18	52	29	173	18	50	32	189
2016	14	45	41	29	12	61	26	177	13	59	29	206
2017	25	40	35	20	9	69	21	152	11	66	23	172

<sup>a</sup> Only includes harvest with associated residency reported.

## Harvest Chronology

Black bear harvest in both Units 11 and 13 primarily occurs in May and June (Table 4). Most black bear harvest coincides with bear baiting season (15 April–30 June). Additionally, hunters harvesting black bears for meat often favor spring bears, as it is the first red meat available for harvest after the winter snows melt, and bear meat is often considered favorable in the spring, before salmon become available for bears to eat.

**Table 4. Percentage of black bear harvest by month, Units 11 and 13, regulatory years 2013–2017, Southcentral Alaska.**

Unit	Regulatory year	Percentage of harvest								<i>n</i> <sup>a</sup>
		Jul	Aug	Sep	Oct	Nov-Mar	Apr	May	Jun	
11	2013	0	42	17	0	0	0	25	17	12
	2014	11	11	5	0	5	0	42	26	19
	2015	6	6	6	0	0	0	25	56	16
	2016	0	10	17	3	0	3	31	34	29
	2017	0	5	5	0	0	0	42	47	19
13	2013	3	6	25	1	0	0	25	40	167
	2014	3	9	18	4	0	1	28	38	185
	2015	5	5	10	1	0	1	32	46	173
	2016	4	6	12	1	0	1	34	42	177
	2017	5	11	15	1	1	0	20	48	152

<sup>a</sup> Only includes harvest with an associated date of kill reported.

## Transport Methods

The most commonly used methods of transportation for black bear harvest in both Units 11 and 13 are boats and highway vehicles (Table 5). In Unit 13, all-terrain vehicles also play a significant role, as well as airplanes, but to a lesser extent (Table 5).

## *Other Mortality*

No defense of life or property kill, agency kill, or vehicle collision black bear mortalities were reported during RY13–RY17 in Unit 11. In Unit 13, there was 1 black bear mortality by vehicle collision reported in RY13, 2 black bears were reported killed in defense of life or property in RY16, and 1 black bear mortality by vehicle collision was reported in RY17. Additional black bears are likely killed annually in defense of life or property, and not reported. Many residents, however, obtain black bear harvest tickets in order to legally harvest the black bears they encounter; otherwise those black bears might become problem bears, or might eventually be dispatched in defense of life or property.



**Table 5. Percentage of black bear harvest by transportation, Units 11 and 13, regulatory years 2013–2017, Southcentral Alaska.**

Unit	Regulatory year	Percentage of harvest							<i>n</i> <sup>d</sup>
		Airplane	Boat	ATV <sup>a</sup>	ORV <sup>b</sup>	Highway vehicle	Foot	Other <sup>c</sup>	
11	2013	17	0	8	0	67	0	8	12
	2014	5	16	5	5	42	16	11	19
	2015	0	50	7	0	36	7	0	14
	2016	17	34	17	0	31	0	0	29
	2017	5	30	20	0	25	20	0	20
13	2013	10	15	34	4	28	10	1	167
	2014	8	21	31	1	28	7	3	181
	2015	11	18	36	4	23	2	4	168
	2016	13	23	27	4	25	4	3	178
	2017	13	28	20	5	25	3	5	151

<sup>a</sup> ATV stands for all-terrain vehicle.

<sup>b</sup> ORV stands for off-road vehicle.

<sup>c</sup> Includes horse, dog team, snowmachine, and other methods of transportation.

<sup>d</sup> Only includes harvest with associated transportation reported.

Miller (1987) observed 35% mortality among cubs of the year accompanying radiocollared females in the upper Susitna River study area. Natural mortality also occurred among radiocollared adult black bears. Miller believed that predation by brown bears was an important source of natural mortality for black bears of all age classes in Unit 13, which is likely the case in Unit 11 as well.

#### *Alaska Board of Game Actions and Emergency Orders*

The Board of Game implemented a regulation effective in RY13 that allowed the take of brown bears over registered bear bait stations in Unit 13D. This regulation may have indirectly affected black bear harvest levels in the unit, as many hunters would previously abandon bait stations once a brown bear arrived, as the brown bear was likely to keep black bears away from that point on. This new regulation allowed a hunter to harvest the brown bear, and potentially continue to have opportunities to harvest black bears at that bait station. The Board of Game expanded that regulation to include all Unit 13 and Unit 11, effective in RY15.

#### *Recommendations for Activity 2.1*

Continue.

### 3. Habitat Assessment-Enhancement

No activities for black bear habitat assessment or enhancement are included in Units 11 and 13 black bear management.

## **NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS**

### Data Recording and Archiving

State black bear sealing data are stored on an internal server (<http://winfonet.alaska.gov/>).

### Agreements

A data sharing agreement is in place to provide bear (and other species) harvest data to Wrangell-St. Elias National Park and Preserve for RY90 through RY20 (Appendix A).

### Permitting

No permits were needed to conduct black bear management activities in Units 11 and 13 during RY13–RY17.

## **Conclusions and Management Recommendations**

Black bears continue to be an important game species in Units 11 and 13, as evidenced by the high percentage of spring black bear harvest when other big game seasons are closed. Anecdotal evidence suggests that heavily baited corridors along the Richardson and Parks highways result in increased black bear densities in these areas during baiting season, and bears disperse throughout available habitat when baiting is concluded each spring. The protection of sows with cubs provides resiliency for bear populations under high harvest pressure, and harvest levels appear to be stable at this time, but population abundance and vital rate data would be necessary to confirm the long-term sustainability of the current levels of harvest. Further liberalization of black bear harvest regulations and bag limits is not recommended without further data to support the sustainability of additional harvest.

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

### **Review of Management Direction**

#### **MANAGEMENT DIRECTION**

No change from RY13–RY17.

#### **GOALS**

No change from RY13–RY17.

#### **CODIFIED OBJECTIVES**

No change from RY13–RY17.

### Amounts Reasonably Necessary for Subsistence Uses

No change from RY13–RY17.

### Intensive Management

Not applicable.

## **MANAGEMENT OBJECTIVES**

No change from RY13–RY17.

## **REVIEW OF MANAGEMENT ACTIVITIES**

### 1. Population Status and Trend

As of this writing, there are not any activities incorporated into the Units 11 and 13 black bear management program for assessing population status or trends in RY18–RY22. DWC research efforts, however, will be implemented in 2020 to develop black bear density estimates in Unit 13 based on noninvasive genetic capture–mark–recapture methods.

If further liberalization of black bear regulations is considered in RY18–RY22 with the intent of increasing black bear harvest in Unit 13, additional data on population abundance and vital rates are necessary to ensure the continued sustainability of the black bear population under additional harvest pressure. Unit 11 has substantial protected areas and limited black bear harvest, resulting in no conservation concern in that area.

### 2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor and evaluate black bear harvest through hunter harvest reports and bear sealing data.

#### *Data Needs*

No change from RY13–RY17.

#### *Methods*

No change from RY13–RY17.

### 3. Habitat Assessment-Enhancement

No activities for black bear habitat or enhancement are expected in Units 11 and 13 black bear management during RY18–RY22.

## **NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS**

### Data Recording and Archiving

No change from RY13–RY17.

### Agreements

A data sharing agreement is expected to be extended during RY18–RY22 to provide black bear (and other species) harvest data to Wrangell-St. Elias National Park and Preserve.

### Permitting

No permits are expected to be needed to conduct black bear management activities in Units 11 and 13 during RY18–RY22.

## **References Cited**

- Alaska Department of Fish and Game. 1976. Alaska wildlife management plans: A public proposal for the management of Alaska's wildlife: Southcentral Alaska. Draft proposal subsequently approved by the Alaska Board of Game. Division of Game, Federal Aid in Wildlife Restoration Project W-17-R, Juneau.
- Miller, S. D. 1987. Susitna Hydroelectric Project: Final report: Big game studies: Volume VI: Black bear and brown bear. Submitted to the Alaska Power Authority by Alaska Department of Fish and Game, Division of Game, Susitna Document No. 3497, Anchorage.

## Appendix. Data sharing agreement for wildlife data with National Park Service.

**AGREEMENT FOR USE OF WILDLIFE DATA  
BETWEEN  
ALASKA DEPARTMENT OF FISH & GAME (ADF&G)  
AND  
WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE**

This agreement covers the following two files to be transferred to Wrangell-St. Elias National Park and Preserve: 1) harvest data files for bison, black bear, brown bear, caribou, moose, mountain goat, sheep, and wolves in Game Management Units 11 and 12 by UCU, including location of kill by major and minor subdivisions, method of take, date of kill, horn, skull, or antler morphometric data, and sex for the regulatory years 1990–1991 through 2014–2015; and 2) a .shp file delineating UCU boundaries. ADF&G will provide harvest data for species listed for regulatory years 2015–2016 through 2020–2021 upon request by Wrangell St Elias National Park.

This information is released to, and may be used by, Wrangell-St. Elias National Park and Preserve under the following conditions:

1. The information will be used to monitor harvest of bison, black bear, brown bear, caribou, moose, mountain goat, sheep, and wolf populations within the Park boundaries.
2. Harvest information will not be published, publically disseminated, or presented by the NPS or its contractors at the spatial resolution of latitude and longitude of a kill site or by watershed defined as a Uniform Coding Unit (UCU) in ADF&G data.
3. The information will not be released to others except to persons in a contractual relationship with Wrangell-St. Elias National Park and Preserve who will be performing work for or on behalf of Wrangell-St. Elias National Park and Preserve, on a need-to-know basis, in which case Wrangell-St. Elias National Park and Preserve will require the contractors to agree to and abide by the conditions in this document.
4. The NPS agrees that the harvest location data is protected from disclosure under state law and will make every effort to keep it confidential under federal law, and will notify ADF&G if there is a Freedom of Information Act request for the data.

Under the above conditions, ADF&G agrees to release the attached information, and Wrangell-St. Elias National Park and Preserve agrees to receive and use it.

**Signature on File** \_\_\_\_\_

Date April 4, 2016

Maria Gladyszewski, Deputy Director, Division of Wildlife Conservation, ADF&G

**Signature on File** \_\_\_\_\_

Date 4/7/2016

Eric Veach, Acting Superintendent, Wrangell-St. Elias National Park and Preserve



