Black Bear Management Report and Plan, Game Management Unit 1B:

Report Period 1 July 2013–30 June 2018, and

Plan Period 1 July 2018–30 June 2023

W. Frank Robbins
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.
Species management reports and plans provide information about species that are hunted or trapped and management actions, goals, recommendations for those species, and plans for data collection. Detailed information is prepared for each species every 5 years by the area management biologist for game management units in their areas, who also develops a plan for data collection and species management for the next 5 years. This type of report is not produced for species that are not managed for hunting or trapping or for areas where there is no current or anticipated activity. Unit reports are reviewed and approved for publication by regional management coordinators and are available to the public via the Alaska Department of Fish and Game’s public website.

This species management report and plan was reviewed and approved for publication by Richard Nelson, Management Coordinator 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 (*Ursus americanus*) in Unit 1B 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., RY14 = 1 July 2014–30 June 2015). 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 were previously produced every 2 years.

I. RY13–RY17 Management Report

Management Area

Game Management Unit 1B is on the central Southeast Alaska mainland, extending from Cape Fanshaw south to Lemesurier Point and northeast of those points to the Canadian Border (approximately 7,800 km², 3,011 mi²). Most land area in Unit 1B is within the Tongass National Forest and under federal ownership with smaller parcels under Tribal, state, and private ownership. There are no large communities in Unit 1B, although private inholdings and small settlements exist at Point Agassiz, Farm Island, and Meyer’s Chuck. The unit is accessible only by boat or airplane although some local logging roads provide for onsite access.

The Stikine River is the largest source of fresh water in Unit 1B and is a transboundary mainland river system that originates in Spatsizi Plateau of British Columbia and transects the Coast Range before flowing into Sumner Strait near Wrangell, Alaska. About 48 km (30 mi) of the river lie within the boundaries of Alaska and flow through a steep valley 2–3 km (3.2–4.8 mi) wide. The Stikine Delta is the largest intertidal wetland in Southeast Alaska and consists of 200 km² (77 mi²) of marsh and tidal flats. The Stikine River is considered an important corridor for wildlife distribution.

Elevation within Unit 1B ranges from sea level to 2,767 meters (9,078 ft). Predominant vegetative communities occurring at low to moderate elevations (<1,500 feet) include Sitka spruce (*Picea sitchensis*) western hemlock (*Tsuga heterophylla*) coniferous forest, mixed-conifer muskeg, and deciduous riparian forests. Mountain hemlock (*Tsuga mertensiana*) dominated forest comprises a subalpine, timberline band occupying elevations between 457–762 meters (1,500–2,500 ft). In addition to deer (*Odocoileus hemionus sitkensis*), big game species present and widely distributed throughout Unit 1B include moose (*Alces alces andersoni*), mountain goat (*Oreamnos americanus*), wolf (*Canis lupus ligoni*), black bear (*Ursus americanus*), and brown bear (*Ursus arctos*).
Figure 1. Map of Game Management Unit 1B, Southeast Alaska.
Summary of Status, Trend, Management Activities, and History of Black Bear in Unit 1B

Most high quality black bear habitat in Unit 1B is confined to a relatively narrow band of forested landscape between the saltwater and coastal mountains which has been subject to logging. A large portion of the unit encompasses high elevation peaks and ice fields. Black bears are thought to be evenly distributed throughout the forested habitats in Unit 1B. Unlike black bears on most Southeast Alaska islands, Unit 1B black bears share mainland habitat with brown bears. ADF&G estimated that of the 7,800 km² in Unit 1B, only about 2,200 km² are forested black bear habitat. Salmon and other anadromous fish are supported in the Farragut, Stikine, Bradfield, Harding, and Eagle river valleys, and also in Thomas Bay and the Anan Creek drainage. Additionally, over 16,000 acres of forested habitat in Unit 1B were logged and there are now clearcuts in various seral habitats. Black bears exploit the increases in forage that occur in early-successional plant communities immediately after logging, and may temporarily benefit from clearcutting, but this food source is lost approximately 20–25 years post logging with canopy closure, and second-growth forests provide little habitat for bears. Precommercial thinning and pruning of second-growth stands can extend short-term benefits to bears, but the long-term effects of logging are detrimental to black bears.

Black bears are indigenous to Unit 1B and are traditionally valued for their meat, skulls, and hides. Information about black bears in the unit is limited to sealing records, anecdotal public reports, and observations by Alaska Department of Fish and Game (ADF&G) staff. Although ADF&G lacks quantitative demographic information on black bears in the unit, area management staff consider the population to be stable.

Because of difficult access to most areas and a low human population, the annual harvest in the unit has remained relatively stable at low levels. Proximity to and accessibility from the communities of Petersburg and Wrangell probably influence harvest locations. Most harvest occur in river drainages that support anadromous fish runs. Roads associated with logging at Thomas Bay and the Bradfield River valley provide easy access to hunters previously restricted to airplanes or boats. Black bears with cinnamon-colored pelage occur primarily in a few isolated pockets in Unit 1B. A relatively small proportion of bears taken by hunters from the Farragut Bay, Stikine River, and Eastern Passage areas have cinnamon pelage. There have been a few unverified reports of glacier bear sightings in the unit; no glacier bears have been noted in the harvest. No Kermode bears (those with white pelage) have been reported in the unit.

Anan Creek, on the upper Cleveland Peninsula, has long been a popular black bear viewing area. Since statehood, the Anan Creek drainage has been closed to black bear hunting. In October 1996, the Board of Game changed the boundaries of the Anan Creek Closed Area. Effective 1 July 1997, the Anan Creek drainage within 1 mile of Anan Creek, downstream from the mouth of Anan Lake, including the area within a 1-mile radius from the mouth of Anan Creek Lagoon, was closed to taking black and brown bear. The rationale for this regulatory change was a desire to protect bears that had become vulnerable to harvest due to human habituation as a result of bear viewing at Anan Creek.
Black bear density estimates for Unit 1B are based on studies that were conducted in similar habitats in western Washington State in the 1960s (Poelker and Hartwell 1973). ADF&G area management biologists consider the minimum black bear density on mainland Southeast Alaska to be slightly higher than the 1.4 bears per square mile that were found in the Washington study (Poelker and Hartwell 1973). Assuming a density of approximately 1.5 bears per square mile of forested habitat, ADF&G area management biologists estimated the population in 1990 to be about 1,230 black bears in Unit 1B. Black bear density in Unit 1B is similar to other Southeast Alaska mainland areas.

**Management Direction**

**EXISTING WILDLIFE MANAGEMENT PLANS**


**GOALS**

- To provide for a sustainable harvest of black bear in Unit 1B.
- To provide the greatest opportunity to participate in hunting of black bear in Unit 1B.

**CODIFIED OBJECTIVES**

**Amounts Reasonably Necessary for Subsistence Harvest**

The Alaska Board of Game has made a positive customary and traditional use determination for black bears in Unit 1B with the amount reasonably necessary for subsistence set at 2–5 bears.

**Intensive Management**

The Alaska Board of Game has not identified Unit 1B deer or moose populations as important for providing high levels of harvest for human consumptive uses. Therefore, no intensive management population or harvest objectives have been established for deer or moose in the unit, and a black bear predation control program has not been developed.

**MANAGEMENT OBJECTIVES**

- Maintain an average spring skull size and an average annual male skull size of at least 17.5 inches.
- Maintain a male-to-female harvest ratio of 3:1.
MANAGEMENT ACTIVITIES

1. Population Status and Trend

The Alaska Department of Fish and Game is not assessing population status or trend for black bear in Unit 1B. Harvest information obtained from sealing records provide the best indication of black bear population trends (see Activity 2.1.). Estimates of population size or density are difficult to obtain as the species generally inhabits forested areas, and aerial surveys are impossible. The vast, remote areas in the unit also make studies difficult and expensive to undertake.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor the Unit 1B black bear harvest through sealing records.

Data Needs

Since 1972, all black bears legally harvested in Unit 1B have been sealed. Data from sealing records are used by DWC biologists to monitor the health of the black bear population.

Methods

Hunters are required to submit both the skull and hide for sealing within 30 days of kill. During sealing, biological data such as skull size, age, and sex are collected by either an authorized ADF&G staff member or a state-appointed sealer (e.g., Department of Public Safety authorized sealer) within 30 days of kill. Biological and hunt information collected included pelage color, sex, skull size (length and width), date and location of kill, number of days hunted, transportation method, and hunter use of commercial services, including guide use. A premolar was collected from harvested bears and sent to Matson’s Laboratory (Milltown, Montana) for age determination. Bears killed under defense of life or property (DLP) provisions, road-killed bears, and bears that were confiscated due to illegal harvest were also sealed. Harvest and age data were entered into ADF&G’s Wildlife Information Network database (WinfoNet). Harvest data are summarized by regulatory year (RY), which begins 1 July and ends June 30 (e.g., RY19 = 1 July 2019–30 June 2020).
### Season and Bag Limit

<table>
<thead>
<tr>
<th>Season</th>
<th>Bag Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 September–30 June</td>
<td>Resident hunters: 2 bears, not more than 1 of which may be a blue or glacier bear</td>
</tr>
<tr>
<td>1 September–30 June</td>
<td>Nonresident hunters using a guide: 1 bear</td>
</tr>
<tr>
<td>1 September–30 June</td>
<td>Nonresident hunters without a guide: 1 bear by drawing permit only (DL017)</td>
</tr>
</tbody>
</table>

### Results and Discussion

ADF&G staff began using skull size as a management objective in the late 1980s because year-to-year trends in average skull size indicate changes in population size and composition which provide a measure of harvest-level sustainability. A decreasing average skull size may indicate a decline in that segment of the population composed of large, older bears, or an overall population decline. An increasing average skull size could also indicate a reduction in the proportion of younger bears in the population. Skull size data can be used as an indication of either a change in the population or in hunter effort, which is probably the most appropriate use for these data.

Age, genetics, and environmental factors such as habitat and forage quality all influence black bear skull size. Sealing records and anecdotal evidence indicate that mature mainland black bears generally have smaller skull sizes compared to those found on Southeast Alaska islands. The management objective that specifies a skull size of 17.5 inches was established after analysis showed this to be the long-term average. A reduction in mean skull size is an indication of a possible change in the population’s age structure, and therefore black bears in Unit 1B are managed to maintain a skull size in the harvest at the long-term average.

ADF&G lacks quantitative information to estimate the sex and age composition of the Unit 1B black bear population. The male-to-female ratio in the harvest may provide a better indication of harvest sustainability and population status than average skull size. Considering their high reproductive potential, survival of breeding females is critical to sustained yield management. Prolonged overharvest of females is likely to result in population declines. A decreasing trend in the male-to-female harvest ratio could signal a decline in that segment of the population composed of older, larger males. ADF&G Region I staff established the 3:1 male-to-female guideline in the late 1980s, based on studies conducted on black bears elsewhere.

### Harvest by Hunters

The Unit 1B black bear harvest has remained relatively stable at low levels since about 1980. The average level of harvest during this reporting period decreased somewhat (19%) from the preceding 5-year period. Hunter harvest in Unit 1B ranged from 9–17 bears annually during this report period and was above the preceding 10-year average harvest of 14 bears for 2 years (Table 1). There were no nonhunting kills (e.g., Defense of Life and Property, vehicular collisions) during this reporting period.
Table 1. Black bear mortality by season for regulatory years 2013–2017, Unit 1B, Southeast Alaska.

<table>
<thead>
<tr>
<th>Regulatory year</th>
<th>Male</th>
<th>Female</th>
<th>% Female</th>
<th>Unknown</th>
<th>Total</th>
<th>Over bait</th>
<th>Nonhunting kill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2013</td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>0</td>
<td>2</td>
<td>–</td>
<td>0</td>
</tr>
<tr>
<td>Spring 2014</td>
<td>11</td>
<td>1</td>
<td>8</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>2</td>
<td>14</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 2014</td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>0</td>
<td>2</td>
<td>–</td>
<td>0</td>
</tr>
<tr>
<td>Spring 2015</td>
<td>11</td>
<td>3</td>
<td>21</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>4</td>
<td>25</td>
<td>0</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>0</td>
<td>1</td>
<td>100</td>
<td>0</td>
<td>1</td>
<td>–</td>
<td>0</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>7</td>
<td>1</td>
<td>13</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>2</td>
<td>22</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>0</td>
<td>2</td>
<td>–</td>
<td>0</td>
</tr>
<tr>
<td>Spring 2017</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>1</td>
<td>11</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>0</td>
<td>2</td>
<td>–</td>
<td>0</td>
</tr>
<tr>
<td>Spring 2018</td>
<td>13</td>
<td>2</td>
<td>13</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>3</td>
<td>18</td>
<td>0</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: En dash indicates that there was no fall black bear season.

Males constituted 86%, 75%, 78%, 89%, and 82% of the kill in regulatory years 2013, 2014, 2015, 2016, and 2017, respectively. During this report period the average male skull size ranged from 17.8–18.8 inches, which was above the management objective of 17.5 inches during all 5 years (Table 2). During this report period 53 male and 12 female black bears were harvested, which was well above the management objective to maintain a 3:1 male-to-female harvest ratio. During this report period, the average age of harvested black bears was 9.8-years old and 12.7-years old for males and females, respectively (Table 2).

Table 2. Average skull size (length plus width) and age of harvested black bears for regulatory years 2013–2017, Unit 1B, Southeast Alaska.

<table>
<thead>
<tr>
<th>Regulatory year</th>
<th>Average skull size</th>
<th>Average age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>2013</td>
<td>18.1</td>
<td>16.2</td>
</tr>
<tr>
<td>2014</td>
<td>18.0</td>
<td>16.2</td>
</tr>
<tr>
<td>2015</td>
<td>17.8</td>
<td>16.0</td>
</tr>
<tr>
<td>2016</td>
<td>18.8</td>
<td>16.1</td>
</tr>
<tr>
<td>2017</td>
<td>18.5</td>
<td>16.2</td>
</tr>
</tbody>
</table>
Permit Hunts

Beginning in RY12, nonresident black bear hunters without a registered big game guide were required to possess a drawing permit (DL017) to hunt black bears in the unit. During this reporting period an average of 20 draw permits were issued annually, ranging from 11–24 permits each year. For those that hunted, harvest ranged from 2 to 8 bears (25% to 50% success rate). During this report period DL017 hunters harvested an average of 6 bears annually with males making up 82% of the harvest (Table 3).

Table 3. Black bear harvest data for nonresident drawing permit hunt DL017 for regulatory years 2013–2017, Unit 1B, Southeast Alaska.

<table>
<thead>
<tr>
<th>Regulatory year</th>
<th>Number of permits</th>
<th>Percent did not hunt</th>
<th>Percent successful hunters</th>
<th>Percent unsuccessful hunters</th>
<th>Males</th>
<th>% M</th>
<th>Females</th>
<th>% F</th>
<th>Total harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>24</td>
<td>42</td>
<td>50</td>
<td>50</td>
<td>6</td>
<td>86</td>
<td>1</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>2014</td>
<td>19</td>
<td>16</td>
<td>50</td>
<td>50</td>
<td>5</td>
<td>63</td>
<td>3</td>
<td>37</td>
<td>8</td>
</tr>
<tr>
<td>2015</td>
<td>24</td>
<td>37</td>
<td>40</td>
<td>60</td>
<td>5</td>
<td>83</td>
<td>1</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>2016</td>
<td>20</td>
<td>20</td>
<td>31</td>
<td>69</td>
<td>5</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2017</td>
<td>11</td>
<td>27</td>
<td>25</td>
<td>75</td>
<td>2</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Hunter Residency and Success

Although the ratio varies annually, during this report period nonresident hunters took approximately 70% of the total harvest, local residents took about 18%, and nonlocal Alaska hunters took 12% of the black bears harvested in the unit (Table 4). The percentage of the overall harvest taken by local and nonlocal residents increased during this report period, while that of nonresidents decreased.

Table 4. Black bear harvest by residency for regulatory years 2013–2017, Unit 1B, Southeast Alaska.

<table>
<thead>
<tr>
<th>Regulatory year</th>
<th>Local resident a</th>
<th>Nonlocal resident</th>
<th>Nonresident</th>
<th>Total successful hunters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3</td>
<td>0</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>2015</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2017</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>17</td>
</tr>
</tbody>
</table>

aLocal residents are hunters that reside in Petersburg, Wrangell, or Kake.

Harvest Chronology

Most black bear harvest in Unit 1B occurs in the spring (Table 5). The Unit 1B fall harvest averages 1–2 black bears annually. Black bear hunters typically concentrate their efforts in the spring when bears are actively foraging in areas that make them easier to detect and access.
Table 5. Black bear harvest (percent) chronology for regulatory years 2013–2017, Unit 1B, Southeast Alaska.

<table>
<thead>
<tr>
<th>Regulatory year</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>50</td>
<td>36</td>
<td>14</td>
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<tr>
<td>2014</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>13</td>
<td>75</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>66</td>
<td>11</td>
<td>9</td>
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<tr>
<td>2016</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>56</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>2017</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>12</td>
<td>70</td>
<td>6</td>
<td>17</td>
</tr>
</tbody>
</table>

Transport Methods

During the report period, all but 4 successful hunters reported using a boat to access their hunting areas. The 4 exceptions accessed their hunting areas by airplane (Table 6). There are no communities in Unit 1B, and apart from Thomas Bay and Bradfield Canal, there are very few roads.

Table 6. Black bear harvest (percent) transportation methods for regulatory years 2013–2017, Unit 1B, Southeast Alaska.

<table>
<thead>
<tr>
<th>Regulatory year</th>
<th>Airplane</th>
<th>Boat</th>
<th>Highway vehicle</th>
<th>Foot</th>
<th>Unknown</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>2016</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>2017</td>
<td>12</td>
<td>88</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

Other Mortality

There were no reports of nonhunting mortality in Unit 1B during the report period (Table 1); no DLPs or illegal harvests were reported. Nonetheless, ADF&G continues to receive unconfirmed reports of bears being shot and left in the field by individuals believing that bears are detrimental to deer and moose populations. While possibly significant, no information is currently available on the amount of wounding loss that occurs in the unit.

Alaska Board of Game Actions and Emergency Orders

The Alaska Board of Game took no actions concerning Unit 1B black bear during the report period. No Emergency Orders were issued for the Unit 1B black bear season during the report period.

Recommendations for Activity 2.1

Continue.
3. Habitat Assessment-Enhancement

ACTIVITY 3.1. Monitor timber harvest in Unit 1B.

Data Needs
The loss of habitat resulting from timber harvest continues to pose the most serious threat to black bear in the unit. Roads associated with logging increase hunter access and can make bears increasingly vulnerable to harvest.

Methods
Department staff routinely review and comment on proposed timber sales in attempt to minimize the effects of logging on black bear habitat.

Results and Discussion
There are no projects to specifically enhance black bear habitat in Unit 1B. Although primarily intended as a silvicultural practice, habitat manipulation in the form of precommercial thinning and pruning has been performed in some young second-growth stands in the Thomas Bay area. This effort provided a secondary benefit to wildlife by reducing canopy cover, permitting sunlight to reach the forest floor, and increasing the production and availability of understory forage plants and berries. These benefits are relatively short-lived, approximately 20–25 years, after which canopy closure again results in loss of understory vegetation. In the absence of additional thinning the long-term effects of clearcut logging are detrimental to black bear populations.

Recommendations for Activity 3.1.
Continue to monitor timber sales.

Nonregulatory Management Problems or Needs

Data Recording and Archiving
Sealing data are archived in WinforNet going back to 1973, including scans of the original data sheets back to 2000. Hard copies from earlier dates are on file in the Petersburg ADF&G office.

Agreements
There are no agreements currently.

Permitting
There are no permits currently.

Conclusions and Management Recommendations
The Unit 1B black bear harvest has remained relatively stable at lower levels. Although the harvest level during this report period decreased 19% from the preceding 5-year period, hunter
harvest ranged from 9 to 17 bears annually, and during 3 of the 5 years was equal to or exceeded the preceding 10-year average of 14 bears annually.

The percentage of males in the harvest and average male skull size were well above the management objectives during this 5-year period and indicate that black bear populations are stable in Unit 1B. No management or regulatory changes are recommended at this time.

Timber harvest continues to pose the most serious threat to black bear habitat in the unit. Roads associated with logging increase human access and can make bears increasingly vulnerable to harvest. Long-term effects of clearcut logging in old growth forest are detrimental to black bears.

II. Project Review and RY18–RY22 Plan

Review of Management Direction

Existing goals and objectives are appropriate for the management of black bears in Unit 1B. The management direction for Unit 1B ensures that black bears will persist as part of the natural ecosystem and ensures continued hunting and viewing opportunities. Therefore, there are no changes to goals and objectives.

MANAGEMENT DIRECTION

GOALS

- To provide for a sustainable harvest of black bear in Unit 1B.
- To provide the greatest opportunity to participate in hunting of black bear in Unit 1B.

CODIFIED OBJECTIVES

Amount Reasonably Necessary for Subsistence Uses

The Alaska Board of Game has made a positive customary and traditional use determination for black bear in Unit 1B with the amount reasonably necessary for subsistence (ANS) set at 2–5 bears.

Intensive Management

The Alaska Board of Game has not identified Unit 1B deer or moose populations as important for providing high levels of harvest for human consumptive uses. Therefore, no intensive management population or harvest objectives have been established for deer or moose in the unit, and a black bear predation control program has not been developed.
MANAGEMENT OBJECTIVES

- Maintain an average spring skull size and an average annual male skull size of at least 17.5 inches.

- Maintain a male-to-female ratio of 3:1 in the harvest.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Monitor the Unit 1B population of black bears.

The Alaska Department of Fish and Game is not monitoring population status or trend of black bears in Unit 1B.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor the Unit 1B black bear harvest through sealing records.

Data Needs

Since 1972, all black bears legally harvested in Unit 1B have been sealed. During sealing, data on skull size, age, and harvested sex ratio are collected as the biological data used to monitor the health of the bear population. ADF&G will continue to monitor harvest through sealing records to understand the potential impact of harvest on the Unit 1B black bear population.

Methods

Hunters are required to submit bear skulls and hides for sealing within 30 days of kill. Authorized ADF&G staff or state-appointed sealers (e.g., Department of Public Safety authorized sealer) will seal black bear hides and skulls. Biological and hunt information to be collected include pelage color, sex, skull size (length and width), date and location of kill, number of days hunted, transportation method, and hunter use of commercial services, including guide use. A premolar will be collected from harvested bears and sent to Matson’s Laboratory (Milltown, Montana) for age determination. Bears that are killed under defense of life or property provisions (DLP), by vehicles (roadkill), and illegally harvested will also be sealed. Data are entered into ADF&G’s Wildlife Information Network database (WinfoNet). Harvest data are summarized by regulatory year (RY), which begins 1 July and ends June 30 (e.g., RY19 = 1 July 2019–30 June 2020).
3. Habitat Assessment-Enhancement

ACTIVITY 3.1. Monitor timber harvest in Unit 1B.

Data Needs

The loss of habitat resulting from timber harvest continues to pose the most serious threat to black bears in the unit. Roads associated with logging increase hunter access and can make bears increasingly vulnerable to harvest.

Methods

Department staff should continue to review and comment on proposed timber sales to minimize the effects of logging on black bear habitat.

There are no projects to specifically enhance black bear habitat in Unit 1B.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

Sealing data are archived on WinInfoNet back to 1973, including scans of the original data sheets back to 2000. Hard copies from earlier dates are on file in the Petersburg ADF&G office.

Agreements

There are no agreements currently.

Permitting

There are no permits currently.

References Cited

