

SPECIES
MANAGEMENT REPORT

Alaska Department of Fish and Game
Division of Wildlife Conservation
(907) 465-4190 P.O. BOX 115526
JUNEAU, AK 99811-5526

CHAPTER 2: BLACK BEAR MANAGEMENT REPORT

From: 1 July 2010

To: 30 June 2013

LOCATION

GAME MANAGEMENT UNIT: Unit 1B (3,000 mi²)

GEOGRAPHIC DESCRIPTION: Southeast Alaska mainland, Cape Fanshaw to Lemesurier Point.

BACKGROUND

HABITAT DESCRIPTION

Most high quality black bear habitat in Unit 1B is confined to a relatively narrow band of forested landscape between saltwater and the coastal mountains. A large portion of the unit encompasses high elevation peaks and ice fields. The Alaska Department of Fish and Game (ADF&G) has estimated that of the 3,000 square miles in Unit 1B, only about 850 square miles are forested habitat. A few large river valleys, such as the Farragut, Stikine, Bradfield, Harding, Eagle, and Thomas Bay drainages, support salmon and other anadromous fish. The Anan Creek drainage also supports large, accessible salmon runs and attracts many bears, as well as humans who view them. Portions of the unit have been logged and have clearcuts in various stages of seral habitats and some logging roads.

Small openings and disturbed areas, such as wetlands, avalanche chutes, clearcuts, and subalpine meadows, are important black bear foraging areas. Black bear diets may range from mostly vegetarian to mostly carnivorous, and the species may subsist by scavenging or by predation on large and small mammals or fish. In Unit 1B, black bears primarily eat vegetation during early spring. Major foods include grasses and sedges, *Equisetum* spp., and berries that have persisted through the winter. Later in spring, black bears may be efficient predators of moose calves and/or Sitka black-tailed deer fawns. During summer and fall, when bears accumulate fat reserves for winter hibernation, those bears with access to salmon streams eat large quantities of fish. Berries are also important during the summer and fall months. Poor fish runs or berry crops are thought to result in low cub production and survival the following spring. In most areas of the mainland, black bears share habitats with brown bears.

Over 16,000 acres of forested habitat in Unit 1B have been logged to date. As a result, timber harvest poses the most serious threat to black bear habitat in the unit over the long term. Black bears appear able to exploit increases in forage in early-successional plant communities immediately after logging and may temporarily benefit from clearcutting. However, this food source is lost approximately 20–25 years post logging with canopy closure, and second-growth forests provide little habitat for bears. Pre-commercial thinning and pruning of second-growth

stands can extend the short-term benefits to bears, but the long-term effects of logging will be detrimental.

HUMAN USE HISTORY

Black bears are indigenous to Unit 1B and have traditionally been hunted for food and trophies. Information about black bears in the unit is limited to sealing records, anecdotal public reports, and observations by our staff. Although we lack quantitative demographic information on black bears in the unit, we believe the population is stable.

Regulatory history

Statewide sealing of black bears began in 1973. Prior to 2009, hunters were not required to obtain a hunt registration permit or harvest ticket for black bear; thus, effort data for unsuccessful hunters had previously been unavailable and information on hunt effort was available only for successful hunters. At its Region I meeting in November 2008 the Board of Game passed a regulation requiring black bear hunters in Units 1–7, 11–17, 19D and 20 to obtain a black bear harvest ticket prior to hunting.

For most years since statehood the black bear hunting season extended from 1 September through 30 June with a resident bag limit of 2 bears annually, only 1 of which could be a blue or glacier bear. From 1980 through 1983 the season closed on 15 June and the bag limit for residents and nonresidents was only 1 bear. In 1984, the limit increased to 2 bears. In 1990, the nonresident bag limit was reduced from 2 bears to 1 per year.

In 1982 it became legal to use bait to hunt black bears year-round. In 1988 the Board of Game limited baiting in Southeast Alaska to the spring period 15 April–15 June.

The use of dogs for hunting black bears has been allowed since 1966. Hunting with dogs requires a permit issued by ADF&G. No one has requested a permit to hunt bears with dogs in the unit.

Since 1996, hunters have been required to salvage the edible meat of all black bears killed in Southeast Alaska during the period 1 January–31 May.

Because it was concerned about wounding loss, the Board of Game at its Region I meeting in November 2004 passed a regulation requiring a wounded black or brown bear to count against the bag limit of the hunter for the regulatory year.

Historical harvest patterns

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, averaging 8 bears per year from 1973 to 1979, 15 bears per year in the 1980s, 17 bears per year in the 1990s and 17 bears per year from 2000 to 2009. The 30 bears killed during the 2001–2002 regulatory year represent the highest recorded annual harvest. Although there is no clear explanation for this harvest spike, there was a relatively high take by guided nonresident hunters (57%) and local resident hunters (16%) that year, but we do not know if total hunter effort was higher than normal. Approximately 70–100% of the annual harvest occurs during the spring season. Since 1973, males have outnumbered females in the harvest by about 7 to 1. Beginning in 1993, the nonresident harvest began to exceed the resident harvest, with nonresidents accounting for 69% of the harvest since 1995.

Most nonresidents hunt with a guide in the unit. Nonresident hunters must purchase a tag to affix to each bear harvested. The cost of these tags (\$225 for nonresidents and \$300 for nonresident aliens) may limit the number of nonresident hunters who pursue black bears. Nonresidents willing to purchase a tag are more likely to hunt the adjacent Unit 3 islands, which are better known for producing trophy-sized bears.

Historical harvest locations

From 1973 to 2009 black bear harvest was documented in 15 Wildlife Analysis Areas (WAAs) in Unit 1B. These include WAAs in the Cape Fanshaw, Farragut Bay, Thomas Bay, LeConte Bay, Stikine River, Eastern Passage, Bradfield Canal, Frosty Bay, and Cleveland Peninsula areas. WAA 1603, the Dry Bay/Thomas Bay area, accounted for a disproportionately high percentage (20%) of the total harvest. Proximity to and accessibility from the communities of Petersburg and Wrangell probably influence harvest areas. Most harvest areas are associated with river drainages that support anadromous fish runs. Roads associated with logging at Thomas Bay and the Bradfield River valley provide easy access for hunters previously restricted to airplanes or boats.

Anan Creek management

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 July 1, 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.

MANAGEMENT DIRECTION

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.

We have been using skull size as a management objective since the late 1980s because we believe that year-to-year trends in average skull size may indicate changes in population size and composition and provide some measure of the sustainability of harvest levels. A decreasing average skull size may indicate a decline in that segment of the population composed of large, older bears and could indicate an overall population decline. However, an increasing average skull size could also indicate a reduction in the proportion of younger bears in the population. Probably the most appropriate use of skull size data at this time is as an indicator of some change in the population or in hunter effort. We do not have a technique to tell us precisely what such a change might indicate, but we use it in conjunction with other data to make our best assessment of the current population.

Age, genetics, and environmental factors such as habitat and forage quality all combine to 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 skull size management objective of 17.5 inches was established after analysis of previous years' data showed this to be the long-term average. We wanted to maintain skull size in the harvest at the long-term high, and we have looked at any reduction in this mean as a possible indication of changes in the population's age structure.

METHODS

Staff of the Alaska departments of Fish and Game and Public Safety and state-appointed sealing agents sealed hides and skulls of black bears. Hunters are required to submit bear skulls and hides for sealing within 30 days of the 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, guide use, and hunter use of commercial services. A premolar was collected from most bears and sent to Matson's Laboratory (Milltown, Montana) for age determination. We also seal any bear that is killed under defense of life or property (DLP) provisions, as a road kill, an illegal kill, or during research efforts. Comparison of current and historical data indicates harvest trends and may offer indirect evidence of population trends.

RESULTS AND DISCUSSION

POPULATION STATUS AND TREND

Population estimates are not currently available for black bears in this unit. Information obtained during sealing cannot be used to measure population trends. Although harvest information gained from sealing records, such as average skull sizes, average ages, and sex ratios, may provide some indication of black bear population trends, in the absence of accompanying demographic data, correlations between these measures and harvest sustainability will continue to elude us. Research is needed to identify population parameters so we might better assess population trends and harvest sustainability.

Population Size

No black bear population studies have been conducted in Unit 1B. 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. Black bear density estimates for Unit 1B are based on studies in similar habitats in western Washington State in the 1960s. We believe minimum densities in mainland Southeast Alaska are slightly higher than the 1.4 bears per square mile 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 estimated 1,230 black bears in Unit 1B in 1990. Densities of black bears are probably similar in Unit 1B to other Southeast Alaska mainland areas.

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. Although 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.

Population Composition

We lack quantitative information with which 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 indicator of harvest sustainability and population status than does 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. Region I staff established the 3:1 male-to-female guideline in the late 1980s, based on studies conducted on black bears elsewhere.

Distribution and Movements

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. Quantitative information about home ranges and movement patterns of Unit 1B black bears is not available.

The only quantitative information on black bear movement patterns in Southeast Alaska comes from a single denning study conducted on Mitkof Island in Unit 3 during 1980–1981 (Erickson et al. 1982). Black bear movement patterns are influenced to a large degree by seasonal changes and annual differences in the occurrence, abundance, and quality of preferred food items. Reproductive activities also influence bear movement patterns, particularly for males. As a result, males typically have larger home ranges than do females.

Black bears typically emerge from winter dens in March and April. Following emergence from dens, bears typically occupy low elevation habitats, where they feed on greening vegetation. As spring proceeds into summer, bears typically disperse throughout forested and alpine habitats, where they continue to feed on grasses, sedges, forbs, and berry-producing shrubs. In the late summer and early fall bears typically congregate near anadromous fish streams, where they feed on spawning salmon. As fish runs decline in the late summer and fall, bears disperse from salmon streams and feed primarily on berries and alpine vegetation before denning again in October and November.

MORTALITY

Harvest

RY 2011

Season

1 September–30 June

Bag Limit

Resident hunters: 2 bears, not more than 1 of which may be a blue or glacier bear

1 September–30 June

Bag Limit

Nonresident hunters: 1 bear

RY 2012

Season

Bag Limit

1 September–30 June	Resident hunters: 2 bears, not more than 1 of which may be a blue or glacier bear
1 September–30 June	<u>Bag Limit</u> Nonresident hunters with guide: 1 bear
1 September–30 June	<u>Bag Limit</u> Nonresident hunters without guide: 1 bear by drawing permit only (DL017)

Board of Game Action and Emergency Orders. Recent declines in harvests, following a long-term trend of increasing harvests, raised department concerns about whether black bear harvests were being managed at sustainable levels in Southeast Alaska. This, along with concerns expressed by agency biologists, big game guides, hunters, and members of the general public about what appeared to be fewer bears in parts of the region, prompted the department and others to seek regulatory action at the Alaska Board of Game meeting in November 2010 on black bear harvests. At the meeting, the board adopted a proposal submitted by the Alaska Professional Hunters Association (APHA) requiring non-resident black bear hunters who do not enlist the services of a registered hunting guide to obtain a drawing permit before hunting black bears in Units 1–3. APHA’s contention was that whereas the guides were held to a limited number of hunts by the United States Forest Service, no such limit on hunter effort existed for independent unguided nonresident hunters and those enlisting the services of transporters or outfitters.

During testimony on APHA’s proposal, the board asked the department to provide estimates of bear numbers and densities for specific geographical areas that were believed to constitute discrete black bear management areas. In response, the department identified 10 discrete management areas in Units 1–3, and provided estimates of bear numbers and densities within each bear management area.

After reviewing population and density data, the board asked the department to use regulatory years 2007–2009 as base years for analyzing black bear harvest data. Using the mean annual black bear harvests by residents, and guided and unguided nonresident hunters during regulatory years 2007–2009, the department allocated harvests between guided and unguided nonresident hunters and established the numbers of unguided nonresident draw permits to be made available within each of the 10 established geographic bear management areas. Of the 10 established bear management areas, 6 are located in Unit 1, and 1 encompasses subunit 1B.

As a result of the board’s action, starting in RY12 non-resident black bear hunters who do not employ the services of a registered guide are required to possess a drawing permit prior to hunting black bears in Units 1–3. By adjusting the numbers of drawing permits issued, the department now has the ability to control the numbers of bears taken by unguided nonresident hunters. At the same time, registered guides are expected to limit their harvests of black bears, to the mean annual harvests they experienced during regulatory years 2007–2009. In addition, guides are also expected to limit their harvests geographically, based on the distribution of their previous harvests within the 10 individual black bear management areas during the regulatory 2007–2009 base years.

Implementation of the new regulation was delayed until the start of RY 2012, in order to afford hunters and guides with preexisting hunt arrangements enough time to adjust to and comply with the new regulation.

We issued no emergency orders during this report period.

Hunter Harvest. The Unit 1B black bear harvest has remained relatively stable at low levels since about 1980. The level of harvest during the most recent 5-year period (RY05–RY09) decreased slightly (7%) from the preceding 5-year period (RY00–RY04). Hunter harvest in Unit 1B ranged from 12 to 16 bears annually during this report period and during all 3 years was below the preceding 10-year (RY00–RY09) average harvest of 17 bears annually (Table 1).

Beginning in RY12, non-resident black bear hunters who did not employ the services of a registered big game guide were required to possess a drawing permit (DL017) prior to hunting black bears in the unit. In 2012, a total of 27 permits were issued, 19 people hunted and 4 bears were killed for a success rate of 21 percent (Table 2).

Males made up 75%, 88%, and 73% of the kill in regulatory years 2010, 2011, and 2012, respectively. During the report period the average male skull size was 18.0, ranging from 17.2 in 2010 to 18.2 each in 2011 and 2012. While the average male skull size was slightly below the management objective of 17.5 in 2010, it was well above the objective in 2011 and 2012 (Table 3). The average age of harvested males during the report period was 9.5 years, which was below the preceding 5 year average (RY05–09) of 11.4 years (Table 4). The male-to-female harvest ratio during this report period was nearly 4:1, slightly above the management goal of 3:1.

Hunter Residency and Success. Although the ratio varies annually, during this report period nonresident hunters took approximately 65% of the total harvest, local residents took about 28%, and nonlocal Alaska hunters took 7% of the bears harvested in the unit (Table 5). The percentage of the overall harvest taken by local residents increased slightly during this report period while that of nonresidents and nonlocal residents decreased slightly.

Harvest Chronology. During this report period, 67–80% of the overall harvest occurred during the spring season, with 42–53% of all bears killed in May (Table 6).

Harvest in Particular Areas (WAAs). During this report period black bear harvest occurred in 12 WAAs in Unit 1B. These include WAAs in the Cape Fanshaw, Farragut Bay, Dry Bay, Thomas Bay, Brown Cove and Muddy River, LeConte Bay, Stikine River, Eastern Passage, Blake Channel, Bradfield Canal, and 1 WAA on Cleveland Peninsula. WAAs in the Farragut Bay, Bradfield Canal, Dry Bay and Thomas Bay areas produce 59% of the unitwide harvest. WAA 1603, the Dry Bay/Thomas Bay area, once again accounted for a disproportionately high percentage (26%) of the unitwide harvest.

Bait Stations. We issued no permits to operate bait stations in the unit during 2010 or 2011. In 2012, 3 nonresidents were issued permits to operate up to 2 bait stations each, and 1 bear was taken over bait.

Hunting with Dogs. No one requested a permit to hunt bears with dogs in the unit.

Guided Hunter Harvest. Over the last 10 years (RY00–RY09), the percentage of the unitwide harvest taken by guided nonresidents averaged 42%. During the most recent 5-year period (RY05–RY09), guided hunters accounted for 32% of the unit wide harvest, compared to 51% during the preceding 5-year period (RY00–RY04). During this report period 33% of the successful nonresident hunters used a guide, while 16% used other commercial services, such as boat rental, for transportation to and from the field.

Transport Methods. During the report period, all successful hunters reported using a boat to access black bear hunting areas (Table 7). There are no communities in Unit 1B, and with the exception of Thomas Bay and Bradfield Canal, there are very few roads.

Other Mortality

There were no reports of non-hunting mortality in Unit 1B during the report period (Table 1). No DLPs or illegal harvests were reported. Nonetheless, we continue 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. Although the amount of wounding loss is possibly significant, we have no information on how much occurs in the unit.

HABITAT

Assessment

Timber harvest continues to pose the most serious threat to black bear habitat in the unit. Post logging increases in berry production, primarily *Vaccinium* sp., may contribute to short-term bear population growth. This forage source will be lost as the canopy closes, as will habitat diversity associated with old-growth forests, accompanied by a loss of denning trees. The long-term effects of logging will be detrimental to black bears. Roads associated with logging increase human access and can make bears increasingly vulnerable to harvest.

Enhancement

No habitat enhancement projects specifically intended to benefit black bears have been attempted in the unit. Although primarily intended as a silvicultural practice, habitat manipulation in the form of pre-commercial thinning and pruning has been performed in some young second-growth stands in the Thomas Bay area. This effort provides 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 will be detrimental to black bear populations.

NONREGULATORY MANAGEMENT PROBLEMS AND NEEDS

Nuisance Bear Problems. Although small settlements exist on the Point Agassiz Peninsula and on Farm Island, there are no established communities on the Unit 1B mainland. We have, however, received occasional reports of bears breaking into cabins and campers in the Thomas Bay area.

CONCLUSIONS AND RECOMMENDATIONS

In recent years, declining black bear harvests across much of the region have led to concerns about potential overharvest. The Unit 1B black bear harvest, however, has remained relatively stable at low levels. The average annually harvest of 14 bears per year during the report period, was only slightly below the average annual harvest of 16 bears per year during the preceding 5-year period (RY05–RY09). While the average male skull size was slightly below the 17.5 inch management objective in 2010, at 18.2 inches it was well above the objective in both 2011 and 2012. The male-to-female harvest ratio during the report period was nearly 4:1, slightly above the management goal of 3:1.

One effort to address declining harvest trends in some units is the new requirement that non-resident black bear hunters who do not employ the services of a registered guide possess a drawing permit prior to hunting black bears in Units 1–3. By adjusting the numbers of drawing permits issued, the department now has the ability to control the number and distribution of bears taken by unguided nonresident hunters. At the same time, registered guides will be expected to limit their harvests of black bears both numerically and geographically, to the mean annual harvests they experienced during regulatory years 2007–2009.

To ensure that black bears are managed on a sustained yield basis, research is needed to estimate the black bear population in the unit. Research is also needed to: 1) identify possible correlations between sealing data and population trends; and 2) provide a better understanding of the short- and long-term impacts of clearcut logging on black bear populations. Roads associated with logging increase human access and can make bears increasingly vulnerable to harvest. The long-term effects of logging will be detrimental to black bears.

No management or regulatory changes are recommended at this time.

REFERENCES CITED

- Erickson, A.W., B.M. Hanson, and J.J. Brueggeman. 1982. Black bear denning study, Mitkof Island, Alaska. University of Washington School of Fisheries. Seattle.
- Poelker R.J. and H.D. Hartwell. 1973. Black bear of Washington. Biological Bulletin Nr 14. Federal Aid Project W-71-R. Olympia.

PREPARED BY:

Richard E. Lowell
Wildlife Biologist III

APPROVED BY:

Neil Barten
Regional Management Coordinator

Please cite any information taken from this section, and reference as:

Lowell, R.E. 2014. Unit 1B black bear management report. Chapter 2, pages 2-1 through 2-14 [In] P. Harper and L. A. McCarthy, editors. Black bear management report of survey and inventory activities 1 July 2010–30 June 2013. Alaska Department of Fish and Game Species Management Report ADF&G/DWC/SMR-2014-5, Juneau.

The State of Alaska is an Affirmative Action/Equal Opportunity Employer. Contact the Division of Wildlife Conservation at (907) 465-4190 for alternative formats of this publication.

Table 1. Unit 1B black bear harvest, 1999–2012.

Regulatory Year	Hunter kill						Nonhunting kill ^a			Total estimated kill					
	M	F	(%)	Unk.	Total	Over bait	M	F	Unk.	M	(%)	F	(%)	Unk.	Total
Fall 99	4	0	0	0	4	NA	0	0	0	4	100	0	0	0	4
Spring 00	8	1	11	0	9	0	0	0	0	8	89	1	11	0	9
Total	12	1	8	0	13	0	0	0	0	12	92	1	8	0	13
Fall 00	4	1	20	0	5	NA	0	0	0	4	80	1	20	0	5
Spring 01	16	1	6	0	17	0	0	0	0	16	94	1	6	0	17
Total	20	2	10	0	22	0	0	0	0	20	91	2	9	0	22
Fall 01	5	2	29	0	7	NA	0	0	0	5	71	2	29	0	7
Spring 02	19	4	17	0	23	0	0	0	0	19	83	4	17	0	23
Total	24	6	20	0	30	0	0	0	0	24	80	6	20	0	30
Fall 02	2	1	33	0	3	NA	0	0	0	2	67	1	33	0	3
Spring 03	13	2	13	0	15	0	0	0	0	13	87	2	13	0	15
Total	15	3	17	0	18	0	0	0	0	15	83	3	17	0	18
Fall 03	1	0	0	0	1	NA	0	0	0	1	100	0	0	0	1
Spring 04	6	0	0	0	6	0	0	0	0	6	100	0	0	0	6
Total	7	0	0	0	7	0	0	0	0	7	100	0	0	0	7
Fall 04	1	1	50	0	2	NA	0	0	0	1	50	1	50	0	2
Spring 05	8	1	11	0	9	0	0	0	0	8	89	1	11	0	9
Total	9	2	18	0	11	0	0	0	0	9	82	2	18	0	11
Fall 05	0	0	0	0	0	NA	0	0	0	0	0	0	0	0	0
Spring 06	7	1	13	0	8	0	0	0	0	7	88	1	13	0	8
Total	7	1	13	0	8	0	0	0	0	7	88	1	13	0	8
Fall 06	1	0	0	0	1	NA	0	0	0	1	100	0	0	0	1
Spring 07	17	0	0	0	17	0	0	0	0	17	100	0	0	0	17
Total	18	0	0	0	18	0	0	0	0	18	100	0	0	0	18
Fall 07	0	0	0	0	0	NA	0	0	0	0	0	0	0	0	0
Spring 08	19	0	0	0	19	0	0	0	0	19	100	0	0	0	19
Total	19	0	0	0	19	0	0	0	0	19	100	0	0	0	19

Fall 08	0	0	0	0	0	NA	0	0	0	0	0	0	0	0	0	0
Spring 09	18	4	18	0	22	1	0	0	0	18	82	4	18	0	22	22
Total	18	4	18	0	22	1	0	0	0	18	82	4	18	0	22	22
Fall 09	0	0	0	0	0	NA	0	0	0	0	0	0	0	0	0	0
Spring 10	13	2	13	0	15	0	0	0	0	13	87	2	13	0	15	15
Total	13	2	13	0	15	0	0	0	0	13	87	2	13	0	15	15
Fall 10	3	1	25	0	4	NA	0	0	0	3	75	1	25	0	4	4
Spring 11	6	2	25	0	8	0	0	0	0	6	75	2	25	0	8	8
Total	9	3	25	0	12	0	0	0	0	9	75	3	25	0	12	12
Fall 11	3	1	25	0	4	NA	0	0	0	3	75	1	25	0	4	4
Spring 12	11	1	8	0	12	0	0	0	0	11	92	1	8	0	12	12
Total	14	2	13	0	16	0	0	0	0	14	88	2	13	0	16	16
Fall 12	2	1	33	0	3	NA	0	0	0	2	67	1	33	0	3	3
Spring 13	9	3	25	0	12	1	0	0	0	9	75	3	25	0	12	12
Total	11	4	36	0	15	1	0	0	0	11	73	4	27	0	15	15

^a Includes DLP kills, research mortalities, and other known human-caused accidental mortality.

Table 2. Unit 1B black bear harvest data for nonresident drawing permit hunt DL017, 2012.

Hunt Nr	Regulatory Year	Permits issued	Percent did not hunt	Percent successful hunters	Percent unsuccessful hunters	Males	(%)	Females	(%)	Unk	Total harvest
DL017	2012	27	27	21	79	4	(100)	0	(0)	0	4

Table 3. Unit 1B black bear mean skull size^a, 1995–2012.

Regulatory year	Males	<i>n</i>	Females	<i>n</i>
1995–1996	18.1	28	17.2	1
1996–1997	18.6	19	18.7	1
1997–1998	17.4	9	16.0	1
1998–1999	17.7	23	N/A	0
1999–2000	18.7	12	N/A	0
2000–2001	18.5	19	15.7	2
2001–2002	18.1	24	16.2	6
2002–2003	18.4	15	16.1	3
2003–2004	18.1	7	N/A	0
2004–2005	18.4	9	16.3	2
2005–2006	18.5	7	17.4	1
2006–2007	18.5	18	NA	0
2007–2008	18.2	19	NA	0
2008–2009	18.7	18	16.0	4
2009–2010	18.3	12	16.7	2
2010–2011	17.2	8	16.5	4
2011–2012	18.2	14	16.3	2
2012–2013	18.2	11	17.2	4

^a Skull size = total length + zygomatic width in inches.

Table 4. Unit 1B harvested black bear mean age, 1999–2012.

Regulatory year	Males	<i>n</i>	Females	<i>N</i>
1999–2000	8.75	8	7	1
2000–2001	10.2	20	10.5	2
2001–2002	9.6	22	8.8	6
2002–2003	10.7	15	13.0	3
2003–2004	7.3	7	NA	0
2004–2005	9.9	9	8.0	2
2005–2006	11.6	7	28	1
2006–2007	13.1	18	NA	0
2007–2008	10.5	17	NA	0
2008–2009	10.4	18	7.5	4
2009–2010	11.2	13	16.5	2
2010–2011	8.1	7	4.5	2
2011–2012	11.3	14	19.5	2
2012–2013	9.2	11	10.3	4

Table 5. Unit 1B successful black bear hunter residency, 1995–2012.

Regulatory Year	Local resident ^a	(%)	Nonlocal resident	(%)	Nonresident	(%)	Total successful hunters
1995–1996	8	28	1	3	20	69	29
1996–1997	7	32	0	0	15	68	22
1997–1998	3	27	1	9	7	64	11
1998–1999	8	33	1	4	15	62	24
1999–2000	2	15	1	8	10	77	13
2000–2001	7	32	1	4	14	64	22
2001–2002	4	16	1	1	25	83	30
2002–2003	4	22	0	0	14	78	18
2003–2004	3	43	1	14	3	43	7
2004–2005	5	45	0	0	6	55	11
2005–2006	1	13	0	0	7	88	8
2006–2007	5	28	1	6	12	67	18
2007–2008	7	37	1	5	11	58	19
2008–2009	6	27	2	9	14	64	22
2009–2010	1	7	2	13	12	80	15
2010–2011	2	17	1	8	9	75	12
2011–2012	3	19	2	13	11	69	16
2012–2013	7	47	0	0	8	53	15

^a Local residents are those that reside in Petersburg, Wrangell, or Kake.

Table 6. Unit 1B black bear harvest chronology by percent, 1995–2012.

Regulatory Year	Month						<i>n</i>
	September	October	November	April	May	June	
1995–1996	17	0	0	3	76	4	29
1996–1997	18	9	4	0	55	14	22
1997–1998	0	0	0	27	55	18	11
1998–1999	4	0	0	13	70	13	24
1999–2000	31	0	0	7	46	16	13
2000–2001	22	0	0	14	50	14	22
2001–2002	23	0	0	10	54	13	30
2002–2003	11	0	6	6	71	6	18
2003–2004	14	0	0	29	57	0	7
2004–2005	9	9	0	18	55	9	11
2005–2006	0	0	0	0	100	0	8
2006–2007	6	0	0	6	89	0	18
2007–2008	0	0	0	11	84	5	19
2008–2009	0	0	0	0	82	18	22
2009–2010	0	0	0	7	87	7	15
2010–2011	25	8	0	0	42	25	12
2011–2012	25	0	0	6	50	19	16
2012–2013	13	7	0	7	53	20	15

Table 7. Unit 1B black bear harvest in percent by transport method, 1995–2012.

Regulatory year	Highway					<i>n</i>
	Airplane	Boat	vehicle	Foot	Unknown	
1995–1996	7	93	0	0	0	29
1996–1997	14	82	0	4	0	22
1997–1998	0	100	0	0	0	11
1998–1999	0	100	0	0	0	24
1999–2000	0	100	0	0	0	13
2000–2001	0	100	0	0	0	22
2001–2002	0	100	0	0	0	30
2002–2003	0	100	0	0	0	18
2003–2004	0	86	0	14	0	7
2004–2005	0	100	0	0	0	11
2005–2006	0	100	0	0	0	8
2006–2007	0	100	0	0	0	18
2007–2008	0	95	0	5	0	19
2008–2009	0	100	0	0	0	22
2009–2010	0	100	0	0	0	15
2010–2011	0	100	0	0	0	12
2011–2012	0	100	0	0	0	16
2012–2013	0	100	0	0	0	15