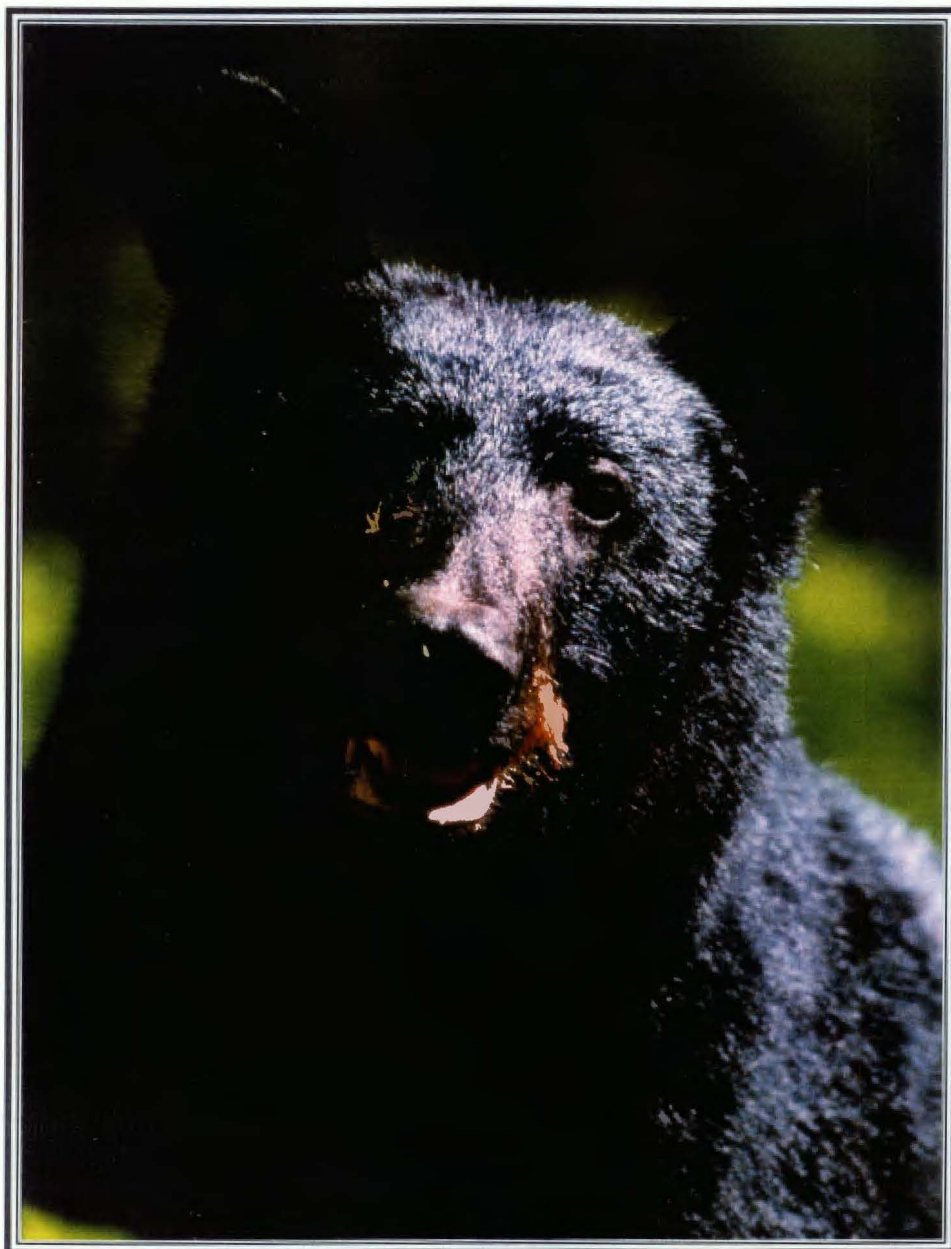


Alaska Department of Fish and Game
Division of Wildlife Conservation

Federal Aid in Wildlife Restoration
Annual Performance Report
Survey-Inventory Activities
1 July 1998- 30 June 1999

BLACK BEAR

Mary V Hicks, Editor



Hyde

Grant W-27-2
Study 17.0
October 1999

STATE OF ALASKA
Tony Knowles, Governor

DEPARTMENT OF FISH AND GAME
Frank Rue, Commissioner

DIVISION OF WILDLIFE CONSERVATION
Wayne L. Regelin, Director

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Project Title: Southeast Black Bear Population Management

Project Location: Unit 1A (5,000 mi²)
Ketchikan area including mainland draining into Behm and Portland Canals

Project Objectives and Activities:

- Maintain an average spring and annual male skull size of at least 17.5 inches in Unit 1A. Maintain an average spring male skull size of 19.3 inches or an annual average of 19.1 inches.
- Monitor the harvest and seal all black bears presented by hunters.
- Collect tissue samples for DNA analysis

Work Accomplished During the Project Segment Period: Eighty-three black bears were reported harvested from Unit 1A. Males and females comprised 78% and 22% of the Unit 1A harvest, respectively. We measured skulls, determined sex, and pulled a tooth from most of the bears presented for sealing. We sent teeth from harvested bears to Matson's Montana lab for aging, and we will send letters to successful hunters informing them of their bears' ages once the data are available. Age data from last season (1997/98) showed an average of 9.0 years for Unit 1A males ($n = 53$) and 10.0 years for females ($n = 10$). We collected skeletal muscle from hunter harvested bears during the sealing process for DNA analysis.

Progress Meeting Project Objectives: Our Unit 1A skull size objective was again met. Skulls from 53 males averaged 17.7 inches, identical to last season. Average skull size for 15 females was 16.2 inches. Average male spring skull size (18.0 inches) was well above our management objective. We believe bear numbers in Unit 1A remained stable during this report period.

Project Location: Unit 1B (3,000 mi²)
Southeast mainland from Cape Fanshaw to Lemesurier Point

Project Objectives and Activities:

- Maintain an average spring and annual male skull size of at least 17.5 inches in Unit 1B.
- Maintain a male to female ratio of at least 3:1 in the harvest.
- Monitor the harvest and seal all black bears presented for sealing.

Work Accomplished During the Project Segment Period: Twenty-one black bears (all males) from Unit 1B were sealed. Skulls were measured, sex determined, and a tooth extracted for aging in the sealing procedure. Letters were sent to successful hunters of the previous (1997/98) season informing them of their bears' age.

Progress Meeting Project Objectives: In Unit 1B, 100% ($n = 21$) of the bears killed were males which met the project objective. The average male skull size was 18.4 ($n = 20$) inches, which also met the project objective.

Thirteen of the successful Unit 1B hunters were nonresidents. Six successful hunters in Unit 1B used guides.

The average age for Unit 1B harvested black bears in the previous (1997–98) season was 7.5 years ($n = 11$).

Project Location: Unit 1C (7,600 mi²)

Southeast mainland and the islands of Lynn Canal and Stephens Passage lying between Cape Fanshaw and the latitude of Eldred Rock, including Sullivan Island and the drainages of Berners Bay

Project Objectives and Activities:

- Maintain a mean spring and annual total skull size of at least 17.5 inches for males.
- Maintain a male: female harvest ratio of 3:1.
- Reduce by 50% the number of nuisance bear problems resulting from improper refuse handling and disposal.

Work Accomplished During the Project Segment Period: Harvest data were collected through the mandatory sealing process. All successful hunters were required to present hides and skulls for sealing within 30 days of take. Data on biological characteristics (e.g., skull measurements, sex, etc.) and harvest-related aspects of the hunt (e.g., date and location of kill, transportation used, etc.) were collected at the time of sealing. We solicited additional anecdotal information from hunters and other observers.

We continued educational and enforcement efforts to reduce garbage availability and subsequent habituation of black bears to human foods. This was a cooperative effort between the Department and the City and Borough of Juneau (CBJ). Response to nuisance bear problems and capture and disposal activities were coordinated with the Juneau Police Department and CBJ.

Progress Meeting Project Objectives: Both management objectives for hunter-harvested black bears in Unit 1C were met, but nuisance bears continue to be a problem in the Juneau area. Hunters harvested 147 seven black bears during the 1998 regulatory year, compared to the 1997 harvest of 89 bears. The previous high harvest was 111 bears in 1996. The fall harvest (13 males and 1 female) was followed by a larger spring harvest (133 males and 5 females). Total skull sizes for males averaged 17.6 inches for the spring hunt and 17.7 inches for the entire year, which surpasses the management objective of 17.5 inches. Males composed 96% of the hunter harvest, easily meeting the harvest sex ratio objective of 3 males to 1 female. Five black bears were killed in nonsport incidents during this regulatory year: 3 were garbage bears that had to be destroyed, 1 was an illegal DLP, and 1 was hit by a vehicle. There were 2 glacier bears killed, 1 by a hunter

and 1 by a vehicle. Bear activity associated with Juneau urban areas was at moderate levels during the summer and fall of 1998 but was high during the spring and summer of 1999. One previously captured bear (nr 85) was responsible for many of the complaints in May and was destroyed by the Juneau Police. Most of the nuisance calls were regarding bears seen in neighborhoods but not necessarily causing problems. We should continue efforts to educate the public about bear behavior and to dispose of refuse appropriately, making it unavailable to bears. Budget constraints and limited personnel continue to hamper the Juneau Police Department's litter enforcement program.

Project Location: Unit 1D (2,700 mi²)

That portion of the Southeast Alaska mainland lying north of the latitude of Eldred Rock, excluding Sullivan Island and the drainages of Berners Bay

Project Objectives and Activities:

- Maintain a mean spring and annual total skull size of at least 17.0 inches for males.
- Maintain a male to female harvest ratio of 3:1.

Work Accomplished During the Project Segment.Period: Harvest data were collected through the mandatory sealing process. All successful hunters were required to present hides and skulls for sealing within 30 days of take. Bears were sealed in Haines, Skagway, and Juneau. Harvest-related data including biological characteristics of the bear (e.g., skull measurements, sex, etc.) and aspects of the hunt (e.g. date and location of kill, transportation used, etc.) were collected at the time of sealing. Anecdotal information was gathered from hunters and other observers.

Progress Meeting Project Objectives: Only 1 of the 2 management objectives for hunter harvest was met. The average total skull size for male bears was only 16.8 inches, not the objective of 17.0 inches, but males continued to make up most of the harvest (76%), meeting the sex ratio objective of 3 males to 1 female. A total of 37 bears (28 males and 9 females) were reported taken by hunters. Thirty-two bears (24 males, 8 females) were harvested in the spring, with the remaining 5 (4 males, 1 female) taken in the fall. The Haines Fish and Wildlife Protection Trooper found 1 other bear dumped at the end of Porcupine Road. The population could probably support a larger harvest if hunter effort was increased.

Project Location: Unit 2 (3,900 mi²)

Prince of Wales Island and adjacent islands south of Sumner Strait and west of Kashevarof Passage and Clarence Strait

Project Objectives and Activities:

- Maintain an average spring male skull size of 19.3 inches or an annual average of 19.1 inches.
- Monitor the harvest and seal all black bears presented by hunters.

- Collect tissue samples for DNA analysis.

Work Accomplished During the Project Segment Period: A total of 318 black bears were reported harvested from Unit 2. Males and females comprised 71% and 29% of the Unit 2 harvest, respectively. We measured skulls, determined sex, and pulled a tooth from most of the bears presented for sealing. We sent teeth from harvested bears to Matson's Montana lab for aging, and we will send letters to successful hunters informing them of their bears' ages once data are available. Unit 2 age data from last season (1997/98) showed an average of 7.0 years ($n = 186$) for males harvested, and 8.0 years ($n = 83$) for females harvested. We collected skeletal muscle from hunter harvested bears during the sealing process for DNA analysis.

Progress Meeting Project Objectives: Our Unit 2 skull size objective was not met. Skulls from 186 males averaged 18.7 inches, which is similar to last season's male skulls but below our management objective of 19.3. Average skull size for 86 females was 16.8 inches, similar to last season's female skull size.

At 18.7 inches, the 1997/98 seasonal skull average for Unit 2 males was 0.4 inches below our management objective for the second consecutive season, and the 19.1 inch average for the 134 spring-killed males was 0.2 inches below the second part of our objective. The average skull size for 64 of the females harvested from Unit 2 during 1997/98 was 16.8 inches, the same as observed the previous season. We believe bear numbers in Unit 2 remained stable during this report period.

Project Location: Unit 3 (3,000 mi²)

All islands west of Unit 1B, north of Unit 2, south of the centerline of Frederick Sound, and east of the centerline of Chatham Strait

Project Objectives and Activities:

- Maintain an average spring and annual male skull size of at least 18.5 inches for Unit 3.
- Maintain a male to female ratio of at least 3:1 in the harvest.
- Monitor the harvest and seal all black bears presented for sealing.

Work Accomplished During the Project Segment Period: The department sealed 287 bears (238 males, 48 females, and 1 unknown) harvested from Unit 3. The Petersburg Police Department killed 12 additional black bears (6 males and 6 females) under the Public Safety Permit provisions. Another additional male bear was killed when struck by a vehicle within Petersburg city limits. Skulls were measured, sex determined, and a tooth extracted for aging in the sealing procedure. Letters were sent to successful hunters of the previous (1997/98) season informing them of their bears' age.

Progress Meeting Project Objectives: In Unit 3, 83% ($n = 286$) of the harvested bears were males, which met the project objective. The average male skull size was 18.6 ($n = 232$) inches,

which exceeded the project objective. Kuiu Island had a harvest of 155 bears, and Kupreanof Island had a harvest of 109 bears.

Two hundred three successful Unit 3 hunters were nonresidents. Eighty-eight Unit 3 hunters used guides.

The average age for harvested black bears in the previous (1997/98) season was 7.2 years ($n = 232$) in Unit 3. The oldest bear harvested was a 19-year-old male from Wrangell Island.

Project Location: Unit 5 (5,800 mi²)

Cape Fairweather to Icy Bay, eastern Gulf Coast

Project Objectives and Activities:

- Maintain a mean spring and annual total skull size of at least 17.0 inches for males.
- Maintain a male to female harvest ratio of 3:1.

Work Accomplished During the Project Segment Period: We collected harvest data through the mandatory sealing process. All successful hunters were required to present hides and skulls for sealing within 30 days of take. Black bears were sealed in Yakutat, Juneau, and Anchorage. Harvest-related data including biological characteristics of the bear (e.g. skull measurements, sex, etc.) and aspects of the hunt (e.g. date and location of kill, transportation used, etc.) were collected at the time of sealing. We also collected anecdotal information during sealing.

Progress Meeting Project Objectives: Both management objectives were met during this reporting period. Twenty-two black bears were harvested by hunters, with an average male skull size of 17.1 inches, meeting the 17.0 inch management objective. All but one of the bears was a male, exceeding the desired sex ratio objective. No glacier bears were taken. The population is probably capable of supporting a larger harvest.

Segment Period Project Costs:

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	45.4	12.0	57.4
Actual	50.1	30.5	80.6
Difference	-4.7	18.5	-23.2

Overexpenditure resulted from more time spent in urban bear management in Ketchikan (exacerbated by the vacant area biologist position) and from the purchase of a new skiff for the Douglas area office.

Submitted by:

Bruce Dinneford
Management Coordinator

Project Title: Southcentral Black Bear Population Management

Project Location: Unit 6 (10,150 mi²)
Prince William Sound and north Gulf Coast

Project Objectives: Maintain a black bear population that will sustain a 3-year average annual harvest of 200 bears comprising at least 75% males and a minimum average male skull size of 17 inches.

Work Accomplished During the Project Segment Period: Fifty-eight black bears (43 males and 15 females) were harvested during fall 1998. Two hundred eleven bears (178 males, 30 females, and 2 unknown sex) were taken during spring 1999.

Progress Meeting Project Objectives: The harvest (269 bears) was higher than the average harvest for the previous 3 years (222). The percentage of males in the take (83%) was consistent with the percentage for the previous 3 years (81%). The population can sustain the current harvest.

Project Location: Units 7 and 15 (8,400 mi²)
Kenai Peninsula

Project Objectives: Maintain a black bear population that will sustain a 3-year average annual harvest of 250 bears comprising no more than 40% females.

Work Accomplished During the Project Segment Period: Black bear hunting continues to increase in popularity as an alternate big game species to moose, mountain goat, and caribou. Black bears rank second to moose in number of animals harvested, and although effort data is not collected, it is suspected that bear hunter numbers are similarly ranked. Preliminary harvest reports indicated harvest increased substantially during this regulatory year and exceeded management objectives. Final harvest data will be available during the fall of 1998.

The 1998 fall harvest was higher than normal ranges. We sealed 190 bears and certificates showed 43% were females. A vehicle struck 1 bear. Numbers of bears sealed in Peninsula offices indicated that greater than 50% of fall bears were harvested during the general moose hunting season.

The spring bear harvest was also higher than normal. Hunters reported harvesting at least 165 bears and approximately 22% were females. In Unit 7, 24 (49%) of the bears were harvested over bait. In Unit 15A, 22 (45%) of the bears were harvested over bait. No bears were harvested over bait in 15B and only 3 males in 15C. Thirty percent of all bears taken in the spring were taken over bait.

Progress Meeting Project Objectives: The fall harvest was the second highest since mandatory sealing began in 1973. Although no specific information was collected that would explain this

level of harvest, anecdotal reports from hunters suggest that black bears were more vulnerable. Holdermann (1986) reported a similar occurrence for the fall 1985 black bear harvest and suggested that a devil's club (*Oplopanax horridus*) failure combined with abundant crops of blue berries (*Vaccinium sp.*) and crow berries (*Empetrum nigrum*) were responsible for increased bear sighting and thus vulnerability of black bears. There may have been similar conditions during the fall of 1998. The only major difference between the 1985 season and 1998 was that spruce bark beetles killed much of the lowland forest in Unit 15 and a large portion of Unit 15C was logged. These factors may have altered bear movements or increased their vulnerability to hunters, increasing harvest.

The spring harvest was also higher than normal. Late persistent snow cover may have delayed den emergence by a few days. More importantly, the late spring conditions delayed greenup and bears were concentrated into a narrow band of vegetation for a couple of weeks. This timing coincided with the peak in hunter activity, and hunters reported large numbers of bears and excellent success rates.

Logging associated with bark beetle infestations will continue to be the major factor affecting black bear habitat on the Kenai Peninsula. Reduction of old-growth forests may be detrimental to black bears by removing protective cover, reducing food plants associated with old-growth forests, and increasing human disturbance by providing access into previously secure areas. Additional federal, state, borough, and private forested lands are being planned for salvage logging in the future.

Management objectives were exceeded during this reporting period. We suspect that conditions were similar to those in 1985 when the last peak in harvest occurred. If this was the case then bear harvests should return to normal levels next year. However, we should pay close attention to future harvests and recommend changes, if necessary, to stay within management objectives.

Project Location: Unit 11 (12,800 mi²)
Wrangell Mountains

Project Objectives: Maintain a black bear population that is largely unaffected by human harvest and fluctuates as dictated by available habitat, climate conditions, and natural mortality factors.

Work Accomplished During the Project Segment Period: We monitored the black bear harvest by sealing the hides and skulls of all bears killed. At the time of sealing, we interviewed hunters to determine hunting methods, means, and effort.

Hunters took 12 black bears in Unit 11 during the 1998–99 season, 7 in the fall and 5 in the spring. The current hunter harvest is well above last year's take of 2 bears but similar to the 5-year (1992–96) average of 13 bears. Harvest data for the 1998–99 season are preliminary; we are still processing sealing certificates for spring 1999. Sex ratio of the harvest included 7 males and 5 females. Five bears each were taken by nonresidents and nonlocal Alaska residents, while local rural residents took 2.

Progress Meeting Project Objectives: The black bear harvest in Unit 11 has been relatively low for a number of years. Unit 11 has some good black bear habitat, and frequent sightings indicate bears are abundant. The low harvest reflects a lack of hunting pressure rather than low bear numbers. The proportion of males in the harvest exceeded that of females, but harvest comprising more males than females has less effect on overall bear numbers. Because guidelines are being met, we propose no change in season dates and bag limits.

Project Location: Unit 13 (23,400 mi²)
Nelchina Basin

Project Objectives: Maintain a black bear population largely unaffected by human harvest; annual harvest should average less than 125 bears.

Work Accomplished During the Project Segment Period: We monitored the black bear harvest by sealing the hides and skulls of all bears killed. We interviewed hunters at the time of sealing to determine hunting methods, means, success, and effort.

Preliminary harvest data for the 1998–99 hunting season indicated hunters took 141 black bears. Harvest data for the entire 1998–99 season were preliminary because hunting season is open year-round and sealing certificates were still being processed. There were 102 bears (65% males) taken during the fall of 1998 and 39 (72% males) taken to date in spring 1999. Males composed 67% of the overall harvest. Unit residents took 22 bears (16%), other Alaska residents killed 74 (53%), and nonresidents took 43 (31%) bears. During fall highway vehicles and aircraft were the most popular method of transport for successful hunters, while 4-wheelers were the most important transportation for successful spring hunters.

Skull size and age data were not available for this report. Subunits 13E and 13D remained the most important black bear hunting locations, accounting for 50% and 29% of the unitwide take, respectively. Guided hunting remained relatively high for the second year. This year 25 bears (18%) were harvested on guided hunts (10 during 1997–98), compared with only 2 during 1994–95.

Progress Meeting Project Objectives: The preliminary harvest of 141 black bears is a record reported harvest for Unit 13. This preliminary harvest estimate is up 40% from last year's take of 101 and 64% higher than the 5-year (1993–97) average of 86. The reason for the increase in the black bear harvest the last 2 years is not known but may reflect an increase in hunting effort for black bears. Black bears are considered abundant, and current harvest rates are sustainable. Subunits 13D and 13E have the highest black bear numbers because of the extensive areas of forest habitat; consequently, these subunits support the highest harvest rates every year. Preliminary composition data for the 1998–99 season indicated the proportion of males in the harvest was above the 60% management guideline for Unit 13. Because current guidelines are being met, we proposed no changes in season dates and bag limits.

Project Location: Unit 14 (6,600 mi²)
Upper Cook Inlet

Project Objectives: The population objective is to maintain a black bear population of a size largely unaffected by human harvest. The human-use objective is to provide liberal opportunities to hunt black bears with annual average harvests of less than 80 bears.

Work Accomplished During the Project Segment Period: During this reporting period, we sealed 134 black bears for all of Unit 14. Hunters killed 116 bears; 43 in Unit 14A, 46 in 14B, and 27 in 14C. Of the hunter-killed bears, 72% were males. One male was killed illegally in 14A and 3 bears were killed by a highway vehicle, 2 in 14C and 1 in 14B. Fifteen bears (6 in 14A, 2 in 14B and 7 in 14C) were killed in defense of life or property (DLP); 10 were males. Females composed 25% of the total harvest. Twenty bears, including 14 males (70%), were reported killed over bait.

Progress Meeting Project Objectives: Black bear hunter and total harvest continued an increasing trend through 1998–99. The 3-year average harvest (107 bears) in Unit 14 has far exceeded the harvest objective (less than 80 bears). The number of DLP killings has raised the total harvest, but increasing bear abundance also appears to have influenced harvest above the objective level. The number of females in the average total harvest was 27%, a safe level. Only 6 of 13 females taken by hunters during spring in Unit 14 were taken over bait.

We estimate the black bear population is growing. The number of bears killed in DLP has increased in recent years. Most DLP bears are subadults, indicating the density of black bears in Unit 14 is high and young animals are seeking unoccupied habitat. We estimate Unit 14 contains 750–1350 black bears; therefore, the 3-year average harvest was 10% of a mid-range estimate (1050).

Project Location: Unit 16 (12,300 mi²)
West Side of Cook Inlet

Project Objectives: Maintain a black bear population largely unaffected by human harvest. The human-use objective is to provide liberal opportunities to hunt black bears with an average annual harvest of less than 160 bears, including fewer than 12 females from Unit 16A and fewer than 50 females from Unit 16B.

Work Accomplished During the Project Segment Period: During this period, we sealed 215 black bears for Unit 16. This included 65 bears (20 females) taken by hunters in Unit 16A and 148 (41 females) taken in Unit 16B. Sex was identified for all but one bear; 71% were males. Two bears were reported killed in defense of life or property. Fourteen percent of the hunter harvest and 15% of female harvest occurred over bait. This included 21 males and 9 females.

Progress Meeting Project Objectives: The density of the bear population in Unit 16 was moderate to high. Harvest was the second highest on record, primarily due to an extremely high fall harvest of 161 bears. The female harvest reached 20 bears in 16A, which exceeded the

projected sustainable level for the second year in a row. The 3-year average harvest was 19 female bears in 16A. All other human-use objectives were met.

The percent composition of female bears killed over bait was 30%, which was comparable to the 29% female harvest by all other hunters.

Project Location: Unit 17 (18,800 mi²)
Northern Bristol Bay

Project Objectives: Maintain existing populations of black bears with a sex and age structure that will sustain a harvest comprising at least 60% males.

Work Accomplished During the Project Segment: Preliminary data indicate a reported harvest of 29 black bears, including 17 males (59%) and 12 females (41%) during FY99. Average total skull size was 16.97" for males and 16.19" for females. Nonresident hunters reported killing 26 bears (90%), nonlocal residents killed 3 bears (10%), and no unit resident reported taking a bear. Twenty-one (72%) successful hunters reported using aircraft for access; 8 hunters (28%) reported using boats. Successful hunters spent an average of 5.96 days afield.

All successful hunters reported taking black bears during the fall 1998 season, 28 in Subunit 17B and 1 in Subunit 17C. Three bears (10%) were killed in August, and 26 (90%) were taken in September. Meat was reported salvaged from 7 bears (24%).

Progress Meeting Project Objectives: No objective data are available on the population density of black bears in Unit 17. Incidental observations during moose and caribou surveys and anecdotal reports by local residents indicate that the black bear population along upper Nushagak River drainages has declined. Little is known about black bear populations in other portions of the unit. We have little historic data on harvests because there were no reporting or sealing requirements for black bears harvested before FY95. The FY99 reported harvest was greater than the reported harvest from any other year since sealing black bears was first required in 1994.

Segment Period Project Costs:

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	50.6	1.1	51.7
Actual	50.6	1.1	51.7
Difference	0.0	0.0	0.0

Submitted by:

Michael G. McDonald
Assistant Management Coordinator

Project Title: Interior Black Bear Population and Habitat Management

Project Location: Unit 12 (9978 mi²)

Upper Tanana and White River drainages, including the northern Alaska Range east of the Robertson River and the Mentasta, Nutzotin, and northern Wrangell Mountains

Objective: Manage for a harvest of black bears that maintains 55% or more males in the combined harvests during the most recent 3 years.

Activities Planned:

1. Review and revise population management objectives.
2. Seal bears and analyze harvest data.
3. Administer and monitor black bear bait station permit distribution.
4. Write regulatory years 1995–1996 through 1997–1998 black bear management report.

Activities Accomplished:

1. Reviewed population management objective using harvest statistics, hunter surveys, and departmental sightings and found no revisions to the current objective necessary.
2. Analyzed harvest data collected during the sealing process and included results in the regulatory years 1995–1996 through 1997–1998 black bear management report.
3. Administered black bear bait station permits, asked each hunter to precisely map the location of bait sites during the permitting process, visited almost all of the bait sites during the season and all of the sites following the season in cooperation with Division of Wildlife Protection to ensure regulatory compliance, and reported harvest information from bait sites in the regulatory years 1995–1996 through 1997–1998 management report.
4. Completed regulatory years 1995–1996 through 1997–1998 management report.

Project Location: Units 20A, 20B, 20C, and 20F (34,079 mi²)

Central–Lower Tanana and Middle Yukon River drainages

Objectives:

1. Maintain a black bear population that sustains a harvest of at least 55% males in the combined harvests for the most recent 3 years in all units.
2. Minimize human–bear conflicts by providing information and assistance to the public and to agencies.

Activities Planned:

1. Review and revise population management objectives.
2. Seal bears and analyze harvest data (objective 1).
3. Administer and monitor black bear bait station permit distribution (objective 1).
4. Write regulatory years 1995–1996 through 1997–1998 black bear management report (objectives 1 and 2).
5. Submit teeth from bears harvested in Units 20A and 20B for age analysis (objective 1).

Activities Accomplished:

1. Reviewed and revised management objectives (objective 1).
2. Sealed bears and analyzed harvest data (objective 1).
3. Administered black bear bait station permits (objective 1).
4. Wrote management report for regulatory years 1995–1996 through 1997–1998 (objectives 1 and 2).
5. Submitted teeth from bears harvested in Units 20A, 20B, 20C, and 20F for age analysis (objectives 1 and 2).

Project Location: Unit 20D (5,637 mi²)
Central Tanana Valley near Delta Junction

Objective: Manage for a sustained yield of black bears with harvest not to exceed 15 black bears south of the Tanana River and 35 black bears north of the Tanana River.

Activities Planned:

1. Review and revise population management objectives.
2. Seal bears and analyze harvest data.
3. Administer and monitor black bear bait station permit distribution.
4. Write regulatory years 1995–1996 through 1997–1998 black bear management report.

Activities Accomplished:

1. Reviewed the population objective. No revisions were required.

2. Sealed black bears and evaluated harvest patterns. Preliminary data indicated that 15 black bears were harvested.
3. Issued black bear baiting permits to 17 hunters and monitored bait station distribution.
4. Wrote black bear management report for regulatory years 1995–1996 through 1997–1998.

Project Location: Unit 20E (10,681 mi²)

Fortymile, Charley, and Ladue River drainages, including the Tanana Uplands and all drainages into the south bank of the Yukon River upstream from and including the Charley River drainage

Objective: Manage for a harvest of black bears that maintains 55% or more males in the combined harvests of the most recent 3 years.

Activities Planned:

1. Review and revise population management objectives.
2. Seal bears and analyze harvest data.
3. Administer and monitor black bear bait station permit distribution.
4. Write regulatory years 1995–1996 through 1997–1998 black bear management report.

Activities Accomplished:

1. Reviewed population management objective using harvest statistics, hunter surveys, and departmental sightings; no revisions to the current objective were necessary.
2. Analyzed harvest data collected during the sealing process and included results in the regulatory years 1995–1996 through 1997–1998 management report.
3. Administered black bear bait station permits, asked each hunter to precisely map the location of bait sites during the permitting process, visited almost all of the bait sites during the season and all of the sites following the season in cooperation with Division of Wildlife Protection to ensure regulatory compliance, and reported harvest information from bait sites in the regulatory years 1995–1996 through 1997–1998 management report.
4. Completed regulatory years 1995–1996 through 1997–1998 management report.

Segment Period Project Costs:

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	48.7	1.7	50.4
Actual	21.1	1.8	22.9
Difference	27.6	-0.1	27.5

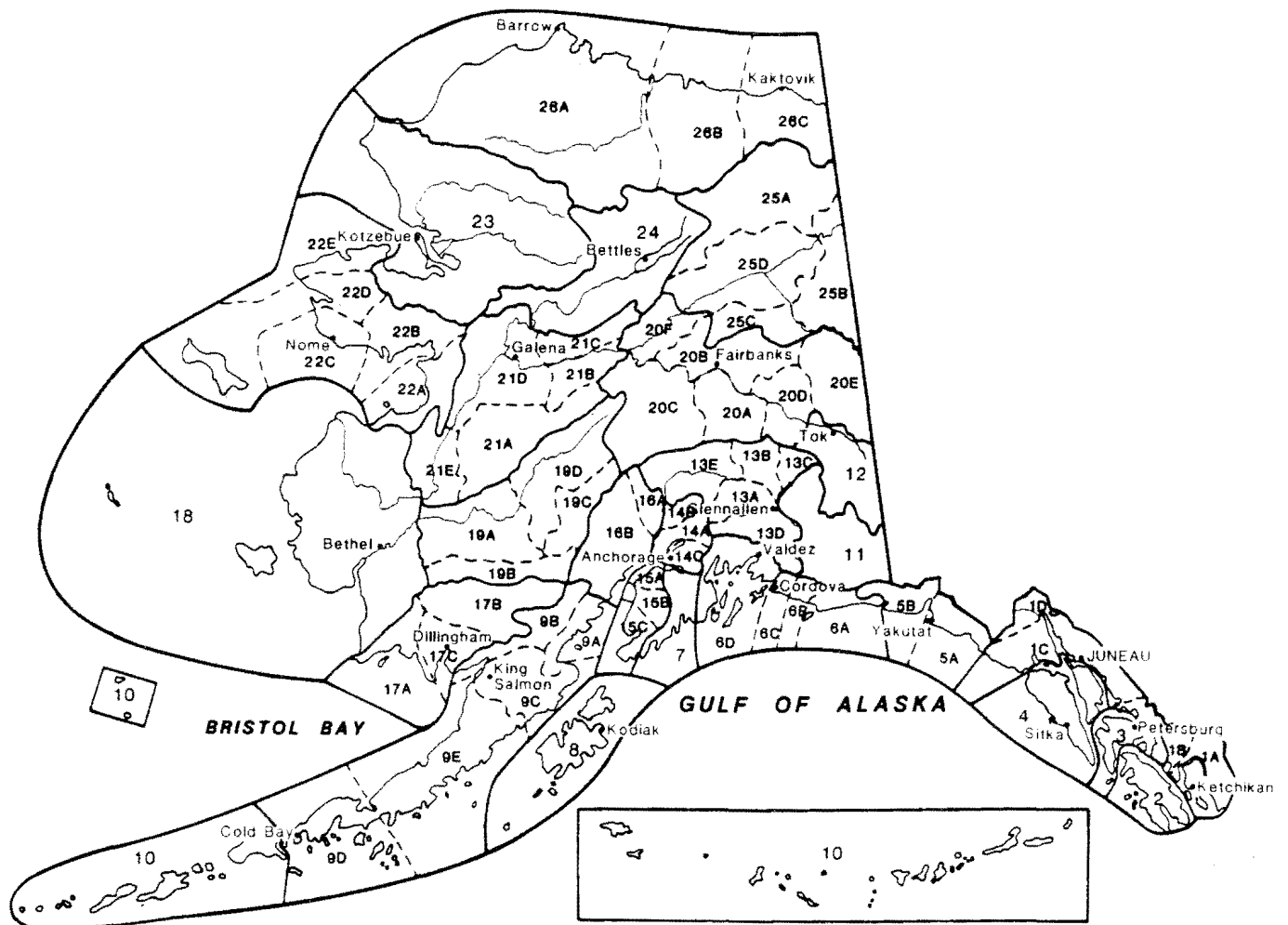
Explanation: Operating: Additional teeth from black bears harvested in Units 20A and B were sent to a commercial laboratory. ***Personnel:*** There were no major changes to planned work activities. The underexpenditure of planned personnel funds is an accurate indicator of personnel expenditures for future federal aid work plans.

Submitted by:

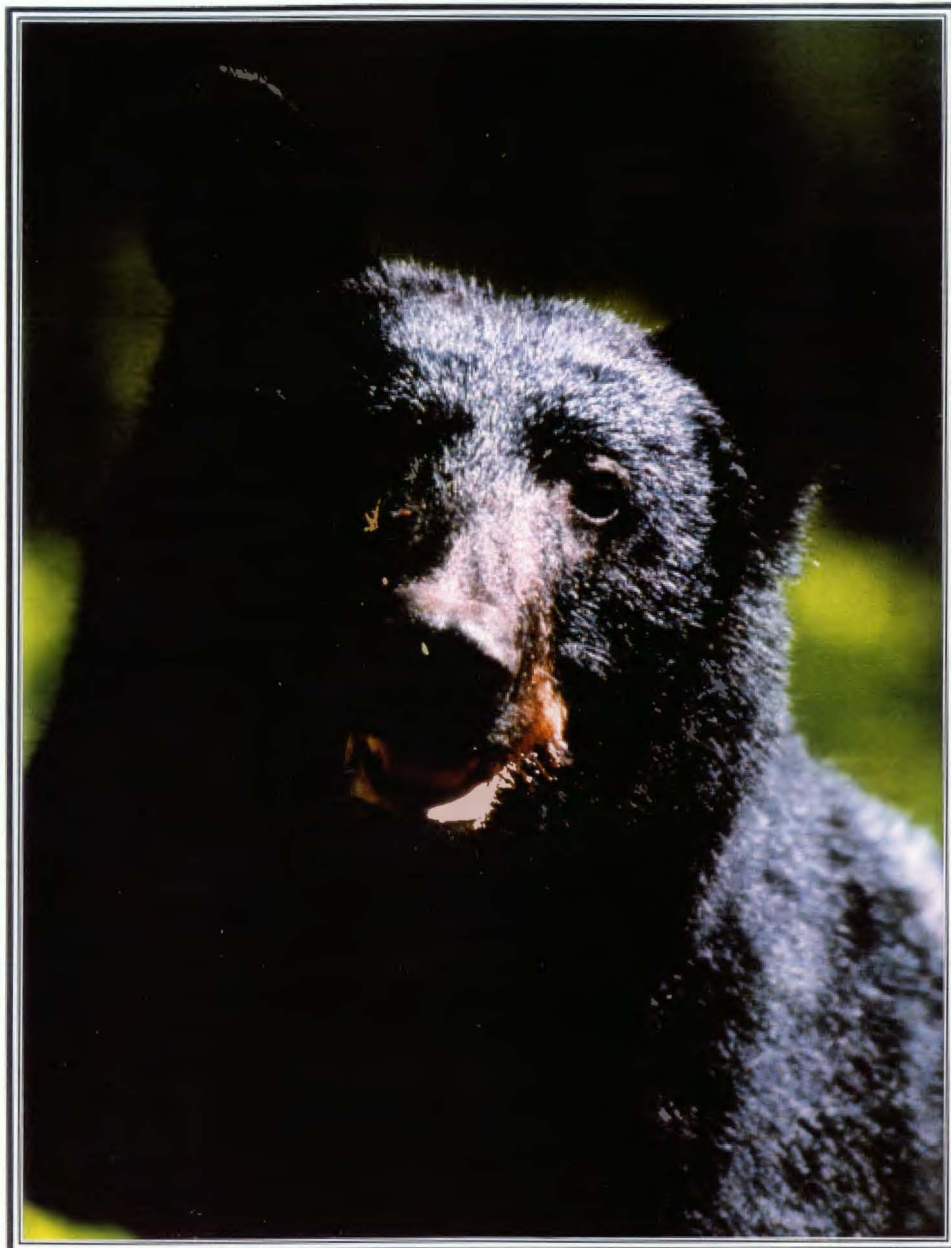
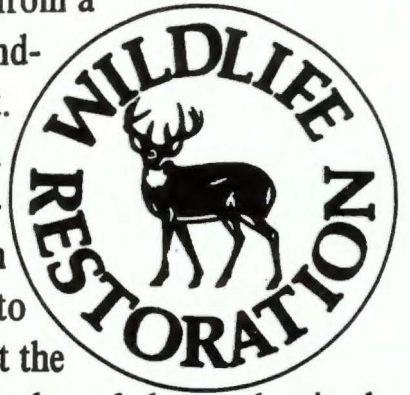
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Regional Management Assistant

David James
Regional Management Assistant

Alaska's Game Management Units



The Federal Aid in Wildlife Restoration Program consists of funds from a 10% to 11% manufacturer's excise tax collected from the sales of handguns, sporting rifles, shotguns, ammunition, and archery equipment. The Federal Aid program allots funds back to states through a formula based on each state's geographic area and number of paid hunting license holders. Alaska receives a maximum 5% of revenues collected each year. The Alaska Department of Fish and Game uses federal aid funds to help restore, conserve, and manage wild birds and mammals to benefit the public. These funds are also used to educate hunters to develop the skills, knowledge, and attitudes for responsible hunting. Seventy-five percent of the funds for this report are from Federal Aid.



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