Alaska Department of Fish and Game
Division of Wildlife Conservation

Federal Aid in Wildlife Restoration
Annual Performance Report
Survey-Inventory Activities
1 July 1996- 30 June 1997

BLACK BEAR

Mary V Hicks, Editor

Pat Costello

Grant W-24-5
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STATE OF ALASKA
Tony Knowles, Governor

DEPARTMENT OF FISH AND GAME
Frank Rue, Commissioner

DIVISION OF WILDLIFE CONSERVATION
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Project Title: **Southeast Black Bear Population Management**

Project Location: Unit 1A (5,000 mi^2)
Ketchikan area including mainland areas draining into Behm and Portland Canals

Unit 2 (3,900 mi^2)
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 and annual male skull size of at least 17.5 inches in Unit 1A, and in Unit 2 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.

Work Accomplished During the Project Segment Period: Hunters reported harvesting 44 and 198 black bears from Subunit 1A and Unit 2, respectively, during this report period. Males composed 84% of the Subunit 1A harvest and 73% of the Unit 2 harvest. 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 (1995-96) showed an average of 8.3 years for males harvested from Subunit 1A (n = 51) and 8.8 years for females harvested from Unit 1A (n = 14). The average age of males harvested from Unit 2 during 1995-96 was 7.1 years (n = 184), and the average age of harvested females was 8.1 years (n = 61).

The Ketchikan landfill closed in fall 1994. Black bears habituated to feeding at the landfill found alternate food sources in residents' garbage cans. Although things have quieted down considerably from the 1995 level when we assisted local city and borough governments by capturing and relocating 41 bears off Revillagigedo Island, we continue to receive public complaints about bears in yards and garbage containers. We assisted the City of Ketchikan by capturing or killing 20 bears during this report period. We continue to educate the public about proper storage of garbage; ADF&G and the Ketchikan police department have a cooperative public safety agreement.

Progress Meeting Project Objectives: Our Unit 1A skull size objective was again met. Skulls from 37 males averaged 17.8 inches, down 0.2 inches from last season. Average skull size for the 6 female bears harvested from Unit 1A was 17.8 inches, up 2 inches from last season.

At 18.7 inches, the 1996-97 seasonal skull average for males was 0.4 inches below our management objective; however, the 19.5 inch average for the 89 spring-killed males was 0.2 inches above the second part of our objective. The average skull size for 52 of the females

harvested from Unit 2 during 1996-97 was 16.7 inches, down 0.2 inches from last season. We believe bears in Unit 1A and Unit 2 remained stable during this report period.

Project Location: Unit 1B (3,000 mi^2)
Southeast mainland from Cape Fanshaw to Lemesurier Point

Unit 3 (3,000 mi^2)
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 17.5 inches in Unit 1B.
- 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: Twenty-one bears (20 males and 1 female) from Unit 1B were sealed. The department sealed 227 bears from Unit 3; one was a non-sport kill. Skulls were measured, sex determined, and a tooth extracted for aging in the sealing procedure. We sent letters to successful hunters of the previous (1995-96) season informing them of their bears' ages.

Progress Meeting Project Objectives: In Unit 1B, 95% (n = 20) of the bears killed were males and the average male skull size was 18.5 inches, meeting both of our project objectives. In Unit 3 80% (n = 182) of harvested bears were males, which met our project objective. However, the average male skull size of 18.4 inches did not meet our objective.

Fourteen of the successful Unit 1B hunters and 147 of the Unit 3 hunters were nonresidents. Thirteen hunters in Unit 1B and 58 hunters in Unit 3 employed guides to hunt black bears during this report period.

Although age data are not yet available for this report period, the average age for black bears harvested during the 1994-95 season from Unit 1B was 9.2 years (n = 29) and 7.7 years (n = 224) in Unit 3. The oldest bear harvested was a 29-year-old female taken on Kupreanof Island.

Project Location: Unit 1C (7,600 mi^2)
The Southeast Alaska 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:

- Maintain a mean spring and annual total skull size of at least 17.5 inches for males.

- Maintain a male to 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: 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. At the time of sealing, we collected data on biological characteristics (e.g., skull measurements, sex) and harvest-related information (e.g., date and location of kill, transportation method). 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: Hunters harvested 89 black bears in Unit 1C during the regulatory year. An additional 16 animals were killed in nonhunting circumstances. Management objectives for black bears in Unit 1C were not met. Total skull sizes for males averaged 17.2 inches for the spring hunt and 17.4 inches for the entire season, compared to the management objective of 17.5 inches. Males composed 93% of the hunter harvest, meeting our harvest sex ratio objective. The fall harvest (25 males and no females) was followed by a larger spring harvest (58 males and 6 females). A nonhunter kill of 16 black bears occurred during this regulatory year. Ten bears (5 each in Gustavus and Juneau) were taken under claims of defense of life or property (DLP), 3 were struck by vehicles on Juneau's road system, 1 was an illegal kill, 1 garbage bear was destroyed by our staff, and an orphaned cub died while undergoing an examination by a local Juneau veterinarian. Garbage bear activity within Juneau urban areas was at moderate levels during the summer and fall of 1996. Much of this activity was attributable to several young bears which repeatedly sought garbage and other foods in neighborhoods near Dredge Lake. Nuisance bear activity in Juneau during the spring of 1997 was low. Making refuse unavailable to bears must be a continuing effort. Unfortunately, the litter enforcement program of the Juneau Police Department has suffered substantial cutbacks due to staff attrition.

Project Location: Unit 1D (2,700 mi^2)
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:

- Maintain a mean spring and annual 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) and aspects of the hunt (e.g., date and location of kill, transportation method) were collected at the time of sealing. We also gathered anecdotal information from hunters and other observers.

Progress Meeting Project Objectives: Black bear harvests from this subunit met management objectives, although the size of the harvest was relatively small. The population could probably support a larger harvest if hunter effort were to increase. Thirty-nine bears (36 males and 3 females) were reported taken, an increase from 1994 when only 20 bears were taken. Thirty-five bears (32 males and 3 females) were harvested in the spring, with the remaining 4 taken during the fall. Males continued to compose most of the harvest (92%), far above our harvest sex ratio objective. The spring mean skull size for males was 16.1 inches, while the annual average for male skulls was 16.2 inches. Both of these averages are below our skull size objectives. One additional female black bear was killed as a DLP in Skagway in mid-July.

Project Location: Unit 5 (5,800 mi^2)
Cape Fairweather to Icy Bay, eastern Gulf of Alaska coast

Project Objectives And Activities:

- Maintain a mean male skull size of 17.0 inches.
- Maintain a 3:1 male to female ratio in the harvest.

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. Black bears were sealed in Yakutat, Juneau, and Anchorage. Harvest-related data, including biological characteristics of bears (e.g., skull measurements, sex) and aspects of the hunt (e.g., date and location of kill, transportation method) were collected at the time of sealing. Hunters and other observers shared anecdotal hunt information.

Progress Meeting Project Objectives: The average male skull size for both the spring and annual harvests was 16.5 inches, falling short of our 17.0 inch management objective. Nine males and 1 female were taken by hunters, meeting our 3:1 sex ratio objective. All black bears were harvested during the spring season. Despite the low harvest, the population could probably support a larger harvest. One blue ("glacier") bear was reported harvested during this report period.

Segment Period Project Costs:

	Personnel	Operating	Total
Planned	41.1	12.0	53.1
Actual	41.1	12.0	53.1
Difference	00.0	00.0	00.0

Submitted by:

Doug Larsen
Acting Management Coordinator

Project Title: **Southcentral Black Bear Population Management**

Project Location: Unit 6 (10,150 mi^2)
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 comprised of at least 75% males and a minimum average male skull size of 17 inches.

Work Accomplished During the Project Segment Period: Hunters harvested 61 black bears (41 males, 18 females and 2 unknown sex) during fall 1996. During spring 1997, 147 bears (122 males, 23 females and 2 unknown sex) were taken.

Progress Meeting Project Objectives: The harvest (208) was higher than the average harvest for the previous 3 years (180). The percentage of males in the take (78%) was consistent with the percentage for the previous 3 years (80%). The population can sustain the current harvest.

Project Location: Units 7 and 15 (8,400 mi^2)
Kenai Peninsula

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

Work Accomplished During the Project Segment Period: Black bear hunting is increasing in popularity as an alternate big game species. Preliminary harvest reports indicated harvest was stable within management objectives. Final harvest data will be available during the fall of 1997.

The 1996 fall harvest was within normal ranges. We sealed 98 bears and certificates showed 38% were females. One bear was struck by a vehicle. Numbers of bears sealed in Peninsula offices indicated that less than 50% of fall bears were harvested during the general moose hunting season.

The spring bear harvest was within normal ranges. Hunters reported harvesting at least 110 bears and approximately 23% were females. In Unit 7, 20 (47%) of the bears were harvested over bait. In Unit 15A, 12 (63%) of the bears were harvested over bait. One and 4 bears were harvested over bait in Units 15B and 15C, respectively. Thirty-four percent of all bears taken in the spring were taken over bait.

Progress Meeting Project Objectives: During the January 1996 Board of Game meeting, the Board required that hunters must complete a black bear baiting clinic in order to register a bait station in Unit 15. During the March 1996 BOG meeting, the Board required that hunters that harvest a bear in the spring (Jan. 1-May 31) must salvage the edible meat of the four legs and

backstraps in addition to the hide and skull for all units where sealing is required. Both regulations became effective in 1997.

In March 1997 the Board passed regulations that made Unit 7 similar to Unit 15 for black bear hunting. Hunters will be required to attend a bear bait clinic before they can register a bait station. In addition, bowhunters that intend to hunt black bears over bait in Unit 7 must complete a bowhunter education course. Both regulations will be effective with the spring 1998 season.

Logging associated with bark beetle infestations will be the major factor affecting black bear habitat on the Kenai Peninsula. Over 33,000 acres of new timber sales will be offered during regulatory year 1997-98. Additional federal, state, borough, and private forested lands are being planned for salvage logging in the future.

Project Location: Unit 11 (12,800 mi^2)
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 7 black bears in Unit 11 during the 1996-97 season, and all were taken during the spring. The current hunter harvest is above last year's take of 3 bears but below the 5-year (1991-95) average of 13 bears. Harvest data for the 1996-97 season are preliminary; we are still processing sealing certificates for spring 1997. The harvest included 4 (57%) males and 3 (43%) females. Nonlocal Alaska residents killed all 7 animals.

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 indicated bears were abundant. The low harvest reflected a lack of hunting pressure, rather than low bear numbers. The proportion of males in the harvest exceeded that of females. A harvest comprised of 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 mi^2)
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 1996-97 hunting season indicated hunters took 57 black bears. Harvest data for the entire 1996-97 season were preliminary because hunting season is open year-round and sealing certificates were still being processed. There were 49 bears (65% males) taken during the fall of 1996 and 8 (50% males) taken to date in spring 1997. Males composed 63% of the overall harvest. Unit residents took 15 bears (26%), other Alaska residents killed 24 (42%), and nonresidents 18 (32%) bears. During fall, aircraft were the most popular transport, followed by highway vehicles and boats, while spring hunters most frequently used highway vehicles, airplanes, and 4-wheelers.

Skull size and age data were not available for this report. Units 13D and 13E remained the most important black bear hunting locations, accounting for 47% and 39% of the unitwide take, respectively. Guided hunting remained relatively high this year with 12 bears taken on guided hunts, compared with only 2 during 1994-95.

Progress Meeting Project Objectives: The preliminary harvest of 57 black bears was 8% above the previous year's take of 53 but 28% below the 5-year (1991-95) average of 79. The reason for the decline in the black bear harvest is not known but may reflect a decline in hunting pressure or vulnerability of black bears. There is no indication of a decline in black bear numbers in Unit 13; sightings are frequent as are problem bear calls. Overall, the black bear harvest in Unit 13 is within sustainable levels, as black bears are considered relatively abundant in forested areas. Units 13D and 13E have the highest black bear numbers because of the extensive areas of forest habitat. Preliminary composition data for the 1996-97 season indicated the proportion of males in the harvest was above the 60% management guideline for Unit 13. We propose no changes in season dates and bag limits because current guidelines are being met.

Project Location: Unit 14 (6,600 mi^2)
Upper Cook Inlet

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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 108 black bears for all of Unit 14. Hunters killed 89 bears; 44 in Unit 14A, 21 in 14B, and 24 in 14C. Of the hunter-killed bears, 76% were males. One male was killed illegally in Unit 14A and 1 male was killed by a highway vehicle in Unit 14C. Eighteen bears (4 in 14A and 14 in 14C)

were killed in defense of life or property (DLP); 10 were females. Females composed 29% of the total harvest. A minimum of 29 bears, including 24 males (83%), were reported killed over bait.

Progress Meeting Project Objectives: Black bear hunters and total harvest increased from last year. The 3-year average harvest (89 bears) in Unit 14 has exceeded the harvest objective (less than 80 bears). The number of DLP killings has raised the total harvest above the objective level. The number of females in the average total harvest was 28%, a safe level. Only 5 of 21 female bears taken by hunters in Unit 14 were taken over bait.

We estimate the black bear population is stable or 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 less than 10% of a mid-range estimate (1050).

Project Location: Unit 16 (12,300 mi^2)
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 111 black bears for Unit 16. This included 53 bears taken in Unit 16A and 58 taken in Unit 16B. Sex was identified for all bears; 73% were males. Two bears were reported killed in defense of life or property. Fifty-six percent of the hunter harvest and 35% of female harvest occurred over bait. This included 51 male and 10 female bears.

Progress Meeting Project Objectives: The density of the bear population in Unit 16 was moderate to high. Harvest increased from 1996-97, but the unitwide harvest was below the sustainable level. The female harvest reached 16 bears in Unit 16A which exceeds the projected sustainable level. We will continue to monitor trends in female harvest. The 3-year average harvest was 12 female bears in Unit 16A. All other human-use objectives were met.

The percentage of female bears killed over bait declined significantly from 1994-95, dropping to 17% females. The decline is believed to reflect the required bait hunter education. While the total harvest was within objective levels, there may have been significant unreported harvest.

Project Location: Unit 17 (18,800 mi^2)
Northern Bristol Bay

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

Work Accomplished During the Project Segment Period: Preliminary data indicate a reported harvest of 26 black bears, including 19 males (73%) and 6 females (23%) during 1996/97. Average total skull size was 16.4" for males and 15.9" for females. Nonresident hunters reported killing 22 bears (85%), nonlocal residents killed 4 bears (15%), and unit residents killed no bears. All successful hunters used either aircraft (81%) or boats (19%) for access. Successful hunters spent an average of 4.8 days afield. One hunter killed more than 1 bear.

All 26 black bears were killed during the fall 1996 season in Unit 17B. Harvest was equally distributed throughout the subunit. Eleven bears (8 males, 2 females, 1 unknown) were killed in August, and 15 (11 males, 4 females) in September. At least some meat was salvaged from 6 bears (23%).

Progress Meeting Project Objectives: No objective data are available on the population density of black bears in the unit. Incidental observations during moose and caribou surveys and anecdotal reports by local residents indicate the black bear population along upper Nushagak River drainages has stabilized. Nothing 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 FY97 reported harvest was over twice as large as the previous 2-year average (12.0 bears/year).

Segment Period Project Costs:

	Personnel	Operating	Total
Planned	63.6	1.9	65.5
Actual	63.6	2.0	65.5
Difference	0	0.0	0.0

Submitted by:

Michael G. McDonald
Assistant Management Coordinator

Project Title: **Interior Black Bear Population Management**

Project Location: Unit 12 (9978 mi^2)
Upper Tanana and White River

Project Objectives and Activities:

1. Manage for a black bear harvest that maintains 55% or more males in the combined harvests of the most recent 3 years.
2. Seal bears; analyze harvest data.

Work Accomplished During the Project Segment Period: As of 24 June 1997, the reported black bear harvest was 35 black bears (29 males and 6 females), approximating the 5-year average of 33 bears. Males composed 83% of the 1996-1997 harvest and 81% of the harvest during the past 3 years. Thirty one percent (11) of the bears were harvested during spring, and 36% (4) of these were taken at bait stations. The 1996-97 spring harvest was the lowest during the last 8 years. On average, 77% of the total annual harvest is taken during the spring. The lower harvest was probably for 2 reasons: 1) bears did not frequent traditional areas during most of the season probably due to unfavorable weather and were less accessible to hunters and 2) some local hunters did not hunt because they thought they needed to attend a black bear baiting clinic. Through articles in the local paper and talks to the advisory committees, most hunters now understand the regulations, and I expect spring harvest levels to increase next year.

Progress Meeting Project Objectives: The project objectives are currently being met. Based on general observations and population estimates from other areas of the state with comparable habitat, we estimate the Unit 12 black bear population is between 700 and 1000. An average annual harvest of 32 bears is well below sustainable harvest and will not limit the unit's black bear population.

Project Location: Unit 19 (36,486 mi^2)
McGrath

Project Objectives and Activities:

1. Provide complimentary sealing of bears that are destined for export to foreign countries.
2. Continue to provide abundance and distribution information to hunters to increase harvest of black bears in areas where high rates of calf mortality are limiting moose populations.
3. Maintain a database of incidental black bear observations to monitor age-class fluctuations.

Work Accomplished During the Project Segment Period: Sealing of black bear hides and skulls is not required in Unit 19. However, alien hunters wishing to export their trophies often request sealing of black bears, and we have maintained this service. No data are available concerning the actual take of black bears in the unit because of no sealing requirement.

Incidental sightings of black bears are recorded during aerial surveys designed to count moose calves, bison herd composition, etc. Although not statistically rigorous, these data provide an indication of age class fluctuations in the black bear population. During the period 1992 and 1994-1996, percent young black bears observed (those still accompanying their sows) fluctuated within relatively tight bounds (between 25 and 37%). During 1997, however, percent young observed with sows was less than 5%, signaling a major loss of one or two cohorts. With the failure of the 1996 berry crop in the Kuskokwim region, I suspect that black bears entered winter dens in poor physical shape, resulting in high cub and yearling mortality.

Progress Meeting Project Objectives: The project objectives are currently being met.

Project Location: Units 20A, 20B, 20C, and 20F (34,0790 mi^2)
Fairbanks-Central Tanana (Tanana River and Middle Yukon River drainages)

Project Objectives and Activities:

1. Seal bear hides and skull, collect and age teeth, and analyze data.
2. Manage for a sustained harvest of black bears
   a. *Unit 20A*–Manage for a harvest of black bears that maintains 55% or more males in the combined harvests of the most recent 3 years.
   b. *Unit 20B*–Manage for a sustained annual harvest of ≤150 black bears, of which at least 55% are males.
   c. *Units 20C and 20F*–Manage for a harvest of black bears that maintains 50% or more males in the combined harvests from both units from the most recent 3 years.
3. Investigate techniques to determine black bear densities in Unit 20B to estimate sustainable harvests by 1998.
4. Use registration permits to monitor hunting and harvest of black bears at bait stations.
5. Minimize human-bear conflicts by providing information and assistance to the public and to agencies.

Work Accomplished During the Project Segment Period: Preliminary counts of sealing certificates indicate that in fall 1996 and spring 1997 we sealed 298 black bears harvested in Units 20A (55), 20B (176), 20C (36), and 20F (31). Preliminary harvest data indicate the fall 1996 bear harvest was 2.5 times higher (93) than the previous 3-year average of 36. The spring 1997 harvest has decreased slightly for the second year in a row to 205 bears from the previous 3-year average of 229 bears harvested during the spring.

In Unit 20A, 66% (98/149) of known-sex black bears harvested during the last 3 years have been males. In Unit 20B, 63% (110/176) of the bears harvested in 1996-97 were males. In Units 20C and 20F combined, 66% (120/180) of known-sex bears harvested during the last 3 years have been males.

We issued 857 bait station permits to 565 hunters during spring 1997. Comparing 1996 information, we found the total number of hunters was similar (561), while the total number of bait stations decreased by 124 from 981 in 1996. The proportion of military hunters using bait stations decreased from 59% (332/561) to 45% (252/565). These decreases are attributed to the mandatory baiting clinic requirement.

Bear premolars were sent to Matson's Laboratory for age determination.

Progress Meeting Project Objectives: In Unit 20A the 1994-95 through 1996-97 harvest of 149 known-sex bears included 66% (98) males. Therefore, we met our objective to maintain at least 55% males in the 3-year harvest.

In Unit 20B the 1996-97 harvest included 176 bears; 63% (110) were males. We did not meet our objective of an annual harvest ≤150, but we did meet our percent males harvest objective.

In Unit 20C and 20F combined, 66% (120/180) of the known-sex bears harvested during the last 3 years were males, which meets our objective to maintain at least 50% males in the 3-year harvest.

We are not meeting our objective of investigating densitiy estimation techniques. Funding for the existing Tanana Flats project is now eliminated and future funding through the Army and or the department is unlikely.

We are meeting our objective of monitoring the hunting and harvest of black bears at bait stations. All hunters in Unit 20B were required this spring to attend a Bear Baiting Clinic before registering a bait station. The mandatory requirement of the clinic was not well recieved by all bear hunters; however, hunters' comments after attending the courses were generally positive. We also gave hunters who registered bait stations leaflets 1) encouraging them to hunt males rather than females, 2) summarizing baiting regulations, and 3) listing commonly asked questions with their answers.

We met our objective to provide information and assistance to the public to minimize human-bear conflicts by responding to complaints and working with the public and agencies to properly dispose of garbage.

We intend to recommend the following change to the Project Objectives and Activities: Delete "3. Investigate techniques to determine black bear densities in Unit 20B to estimate sustainable harvests by 1998."

Project Location: Unit 20D (5637 mi^2)
That portion bounded on the east by the Robertson River and on the west by the Delta River, and drainages into the north bank of the Tanana from its confluence with the Robertson River downstream to, and including, the Banner Creek drainage

Project Objectives and Activities:

1. Manage for a harvest not to exceed 15 black bears south of the Tanana River and 15 black bears north of the Tanana River. Reevaluate harvest goals when estimates of black bear density are available.
    - Seal bears and analyze harvest data.

Work Accomplished During the Project Segment Period: The preliminary reported harvest was 12 black bears during the 1996-97 regulatory year and 1 nuisance bear. Seven bears and the nuisance bear (7 males and 1 female) were taken south of the Tanana River. Five bears (3 males and 2 females) were taken north of the Tanana River.

Progress Meeting Project Objectives: Management objectives were met during this reporting period. Harvested bears were sealed and harvest data analyzed.

Project Location: Unit 20E (10680 mi^2)
Drainages into the south bank of the Yukon River upstream from and including the Charley and Ladue River drainages

Project Objectives and Activities:

1. Manage for a black bear harvest that maintains 55% or more males in the combined harvests of the most recent 3 years.
2. Seal bears and analyze harvest data.

Work Accomplished During the Project Segment Period: As of 24 June 1997, the Unit 20E reported black bear harvest during 1996-97 was 18 black bears (10 males and 8 females), equaling the 5-year average harvest. Three (17%) were taken during the spring, 1 of which was taken at a bait station. Males represented 56% of the 1996-97 harvest. During the past 3 years, 70% of the black bears harvested in Unit 20E were males.

Progress Meeting Project Objectives: Black bear hunting pressure in Unit 20E is normally light but is an important subsistence resource for several local families. Low annual harvests are more indicative of hunting pressure than the trend of the unit's black bear population. Based on the number of incidental sightings of black bears in the unit and the average percentage of males in the harvest, the black bear population in Unit 20E is healthy, and harvest is not limiting population growth.

Segment Period Project Costs:

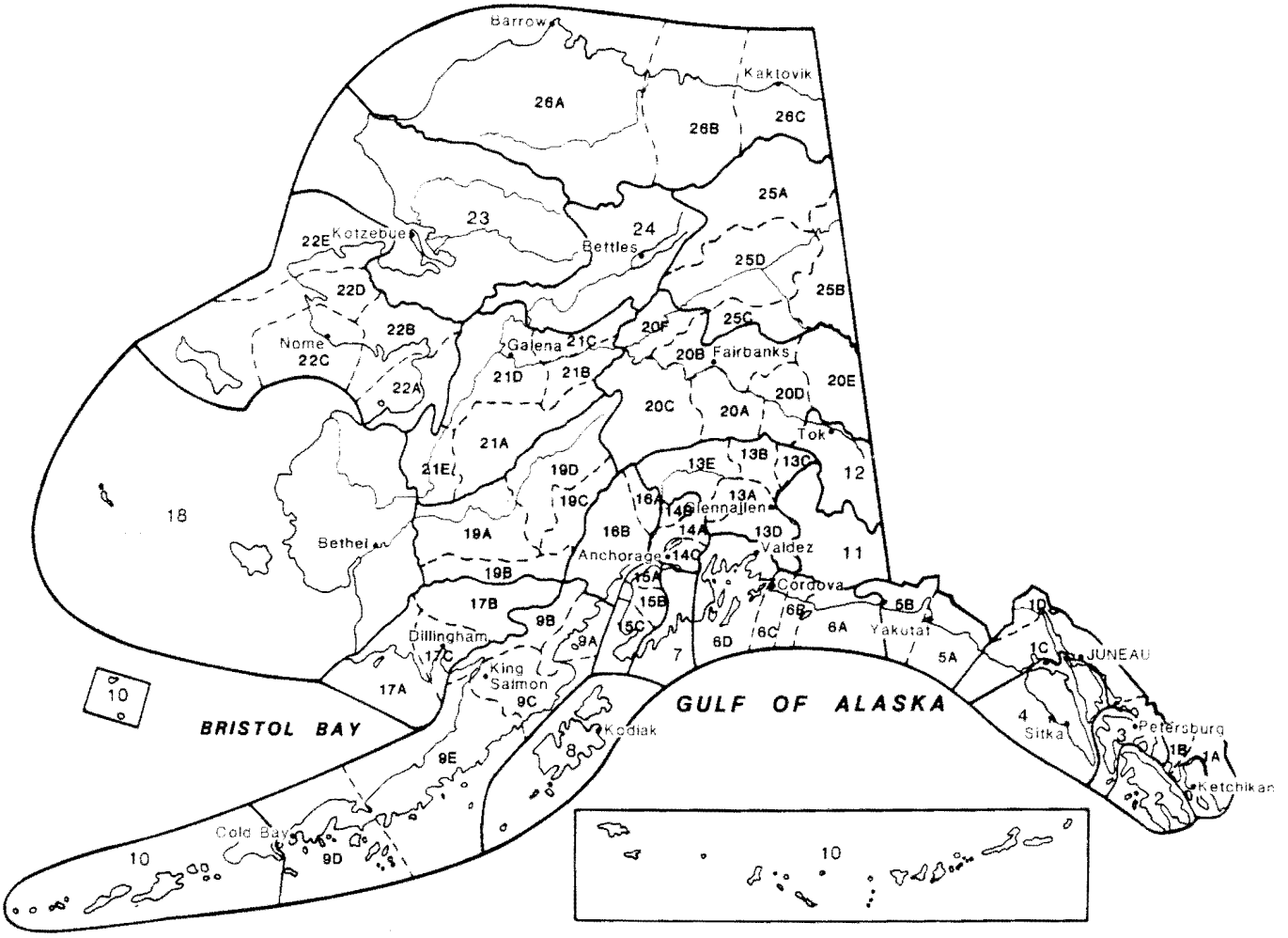
	Personnel	Operating	Total
Planned	62.9	5.2	68.1
Actual	27.4	5.3	32.7
Difference	35.5	-0.1	35.4

Explanation: Personnel costs were lower than expected because of staff vacancies and several months of technician and wildlife biologist salary were charged to public information (nonfederal aid) bear-baiting clinics instead of black bear S&I.

Submitted by:

David James
Management Coordinator

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.

Pat Costello