Alaska Department of Fish and Game
Division of Wildlife Conservation

Federal Aid in Wildlife Restoration
Annual Performance Report of
Survey-Inventory Activities
1 July 1995- 30 June 1996

BLACK BEAR

Mary V Hicks, Editor

PAT COSTELLO

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Study 17.0
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STATE OF ALASKA
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DEPARTMENT OF FISH AND GAME
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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:

Unit 1A – Maintain an average spring and annual male skull size of at least 17.5 inches,
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: Sixty-eight and 239 black bears were reported harvested from Units 1A and 2, respectively. Males comprised 78% and 75% of the Unit 1A and Unit 2 harvests, 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 when data is available. Age data from last season (1994/95) showed an average of 9.6 years for males harvested from Unit 1A (n = 36) and 11 years for females harvested from the subunit (n = 11). The average age of males harvested from Unit 2 during 1994/95 was 7 years (n = 177) and the average age of harvested females was 8.5 years (n = 54).

The Ketchikan landfill closed in fall 1994. Black bears that had long been habituated to feeding at the landfill began using residents' garbage as alternate food sources. We assisted local city and borough governments by capturing and relocating 41 bears off Revillagigedo Island during this report period. We educated the public about proper storage of garbage and local governments about the need for garbage-storage ordinances.

Progress Meeting Project Objectives: Our Unit 1A skull size objective was again met. Skulls from 53 males averaged 18.0 inches, up 0.2 inches from last season and the highest average among the past 4 seasons. Average skull size for 14 of the 15 females harvested from Unit 1A was 15.8 inches, up 0.3 inches from last season.

At 18.9 inches, the 1995/96 seasonal skull average for males was 0.2 inches below our management objective, and the 19.1 inch average for spring-killed males was 0.2 inches below the second part of our objective. The average skull size for 59 of the 60 females harvested from Unit 2 during 1995/96 was 16.9 inches, down 0.1 inches from the previous 2 seasons. We believe bear numbers in Units 1A and 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:

Subunit 1B – Maintain an average spring and annual male skull size of at least 17.5 inches.
Unit 3 – Maintain an average spring and annual male skull size of at least 18.5 inches.

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-seven bears from Subunit 1B were sealed. A total of 225 bears were sealed from Unit 3; one was a nonsport kill. Skulls were measured, sex determined, and a tooth extracted for aging in the sealing procedure. Letters were sent to successful hunters of the previous (1994/95) season informing them of their bear's age.

Thirty three black bears were transported from the Petersburg landfill to the south end of Kuiu Island. Because the city of Petersburg was installing a garbage bailing facility and closing the landfill, there were concerns that bears that formerly fed at the landfill would come to residential neighborhoods in search of food. The city of Petersburg funded the costs of transporting bears.

One 27-year-old female black bear was dispatched in Petersburg.

Progress Meeting Project Objectives: In Unit 1B 96% (n = 27) of the bears killed were males and average male skull size was 18.2 inches; both project objectives were met. In Unit 3 79% (n = 224) of the harvested bears were males which met our objective. The average male skull size was 18.4 inches, which did not meet the project objective.

Twenty of the successful Unit 1B hunters and 145 of those in Unit 3 were nonresidents. Eleven hunters in Unit 1B and 71 hunters in Unit 3 used guides.

The average age for harvested black bears in the previous (1994/95) season was 12 years (n = 12) in Unit 1B and 8 years (n = 219) in Unit 3.

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: 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 for reducing 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: All management objectives for black bears in Unit 1C were met. All male skulls averaged 18.0 inches for both the spring hunt and the entire season. Males composed 90% of the hunter harvest, above our harvest sex ratio objective. A low fall harvest (10 males and 3 females) was followed by a larger spring harvest (66 males and 5 females). Garbage bear activity within Juneau urban areas was moderately high during the summer and fall of 1995. Much of this activity was attributable to 2 male bears, captured and moved, that had returned to urban areas to forage for garbage and pet food. After weeks of intensive effort, these bears were captured a second time and destroyed. A smaller young male was also captured and destroyed due to injuries and general poor condition. Nuisance bear calls were numerous in the spring and early summer of 1996, although most calls did not require a response. Because the local berry crop was poor, garbage bear activity may increase as fall approaches. We should continue efforts to reduce refuse for bears.

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 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. We gathered anecdotal information from hunters and other observers.

Progress Meeting Project Objectives: Black bear harvest in this subunit met management objectives, although the size of the harvest was relatively small. There is no indication the population could not support a larger harvest if hunter effort was sufficient. A total of 33 bears (26 males, 6 females, and 1 unspecified) were reported taken, an increase over 1994 when only 20 bears were taken. One of these bears (a lactating female) was illegally harvested. All but 1 bear was harvested in the spring. Males continued to compose most of the harvest (79%), exceeding the harvest sex ratio objective. Both spring and annual mean skull sizes for males were 17.1 inches, slightly greater than the newly established skull size objective. Illegal hunting activity may have caused some harvest not yet showing in our records. Recent enforcement actions in the subunit may lead to more extensive recordkeeping.

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 total 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 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: The average male total skull size for both the spring and annual harvests was 17.3 inches, surpassing the 17.0 inch management objective. Since all bears harvested during this regulatory year were males, the 3:1 sex ratio objective was also exceeded. All bears were harvested in the spring of 1996. Although there is no indication the population is not capable of supporting a larger harvest, only 9 bears were killed. One blue ("glacier") bear was reported taken.

Segment Period Project Costs:

	Personnel	Operating	Total
Planned	41.3	8.6	49.9
Actual	69.1	17.4	86.5
Difference	27.8	8.8	36.6

Due to changes at the Petersburg and Ketchikan landfills, local staff spent additional time and money dealing with black bear issues.

Submitted by:

Bruce Dinneford
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: Eighteen black bears (8 males and 10 females) were harvested during fall 1995. Preliminary harvest data indicated 92 (78 males and 14 females) were taken during spring 1996. Final harvest numbers for spring will be available during fall 1996.

Progress Meeting Project Objectives: The preliminary harvest (110) was much less than the average harvest for the previous 3 years (192). The percentage of males in the take (78%) was consistent with the percentage for the previous 3 years (79%). 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: Preliminary harvest reports indicated harvest was within management objectives. Final harvest data will be available during the fall of 1996. The 1995 fall harvest was within normal ranges. We sealed 110 bears and certificates showed 33% were females. Four bears were taken in defense of life or property (DLP) and 1 bear by vehicle collision. Numbers of bears sealed in Peninsula offices indicated less than 50% of fall bears were harvested during the general moose hunting season. Black bear hunting is increasing in popularity as an alternate big game species.

The spring bear harvest was below normal ranges. Hunters harvested at least 70 bears; approximately 29% were females. In Unit 7, 5 (23%) of the bears were harvested over bait. In Unit 15A, 11 (65%) of the bears were harvested over bait. No bears were reported taken in either 15B or 15C. Warm dry spring conditions may have been a factor in the lower than average harvest.

Progress Meeting Project Objectives: During the spring 1994 Board of Game meeting, the board reduced the bag limit to 2 bears (not more than 1 bear may be taken during the period 1 January to 30 June, and 1 bear may be taken between 1 July and 31 December).

Logging associated with bark beetle infestations will be the major factor affecting black bear habitat on the Kenai Peninsula. Over 40,000 acres were scheduled to be logged during 1996. Additional forested lands are being proposed for salvage logging.

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 3 black bears in Unit 11 during the 1995-96 season, and all were taken during the fall. The current hunter harvest is well below both last year's take of 18 bears and the 5-year (1990-94) average of 15 bears. Harvest data for the 1995-96 season are preliminary; we are still processing sealing certificates for spring 1996. The harvest included 2 (67%) males and 1 (33%) females. Nonlocal Alaska residents killed all 3 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 suggested 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 1995-96 hunting season indicated hunters took 53 black bears. Harvest data for the entire 1995-96 season were preliminary because hunting season is open year-round and sealing certificates were still being processed. There were 35 bears (66% males) taken during the fall of 1995 and 18 (67% males) taken to date in spring 1996. Males composed 66% of the overall harvest. Unit residents took 11 bears (21%), other Alaska residents killed 28 (53%),

and nonresidents 14 (26%) bears. During fall aircraft were the most popular method of transport, while spring hunters used 3- and 4-wheelers and highway vehicles more frequently.

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 57% and 28% of the unitwide take, respectively. Guided hunting increased this year with 13 bears taken on guided hunts compared with only 2 last year.

Progress Meeting Project Objectives: The preliminary harvest of 53 black bears was 47% below the previous year's take of 100 and 28% below the 5-year average of 74. 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 1995-96 season indicated the proportion of males in the harvest was well above the 60% management guideline for Unit 13. No changes in season dates and bag limits were proposed as current guidelines are being met.

Project Location: Unit 14 (6,600 mi^2)
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 68 black bears for all of Unit 14. Hunters killed 50 bears; 32 in Unit 14A, 14 in 14B, and 4 in 14C. Of the hunter-killed bears, 72% were males. One female was killed illegally in 14A. Seventeen bears (4 in 14A and 13 in 14C) were killed in defense of life or property (DLP); 13 were males. Females composed 28% of the total harvest.

A minimum of 118 hunters registered at least 1 black bear bait station for the spring season in Unit 14A; 31 persons registered bait stations in Unit 14B. A minimum of 18 bears (including 12 males) were reported killed over bait.

Progress Meeting Project Objectives: Black bear hunter harvest declined from 1994-95, when 86 bears were killed. The 3-year average harvest (61 bears) in Unit 14 has fulfilled the harvest objective (less than 80 bears). The percent of females in the average harvest was 28%; considered a safe level. However, 50% of the females taken in Units 14A and 14B were taken over bait.

The number of bears killed in DLP has increased greatly during the past 2 years. At present, the number of DLP killings has not raised the total harvest above the objective level. 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 the low estimate (750). With relatively long seasons and spring baiting opportunity, both the population and human-use objectives were being met.

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 99 black bears for Unit 16. This included 34 bears taken in Unit 16A and 64 taken in Unit 16B. Sex was identified for all bears; 74% were males. No bears were reported killed in defense of life or property. A minimum of 73 and 48 hunters registered at least 1 baiting station in Units 16A and 16B, respectively. Thirty-two percent of total harvest and 26% of female harvest occurred over bait. This included 26 males and 6 females.

Progress Meeting Project Objectives: The density of the bear population in Unit 16 was moderate to high. Harvest increased from 1994-95 (85 bears), but the unitwide harvest was well below the sustainable level. In 1994-95 female harvest (12) in 16A caused some concern but declined to 9 in 1995-96. We will continue to monitor trends in female harvest carefully. The 3-year average harvest was 99 bears. All human-use objectives were met.

While the number of bait stations increased, the percent of female bears killed over bait declined significantly from 1994-95. While the total harvest was within objective levels, there may have been significant unreported harvest, primarily during summer, as many local residents reported problems with black bears at their fish camps. Some people admitted killing bears for meat but claimed they were unable to have them sealed.

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 11 black bears, including 7 males (64%) and 4 females (36%) during the 1995-96 season. Average total skull size was 17.4" for males and 16.2" for females. Nonresident hunters reported killing 7 bears (64%), nonlocal residents killed 3 bears (27%), and unit residents killed 1 bear (9%). Most successful hunters used aircraft (82%) or boats (18%) for access. Successful hunters spent an average of 4.3 days afield. No hunters killed more than 1 bear.

All 11 black bears were killed during the fall 1995 season, 10 in Unit 17B and 1 in Unit 17C. Most bears (55%) were harvested in the upper Nushagak River drainages. Five bears (4 males, 1 female) were killed in August, and 6 (3 males, 3 females) in September. At least some meat was salvaged from 5 bears (45%).

Progress Meeting Project Objectives: No objective data are available on the population density of black bears in the unit. During moose and caribou surveys incidental observations and anecdotal reports by local residents suggest the black bear population along upper Nushagak River drainages continues to decline. 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 in Unit 17 before this year. The 1995-96 reported harvest is comparable to the 1994-95 harvest (13 bears).

Segment Period Project Costs:

	Personnel	Operating	Total
Planned	53.7	2.3	56.0
Actual	53.7	2.3	56.0
Difference	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 mi^2)

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 21 June 1996, the FY96 reported black bear harvest was 20 black bears (15 males and 5 females) which is below the 5-year average of 28 bears. Males composed 75% of the known FY96 harvest. Sixty percent (12) of the bears were harvested during spring, and 50% (6) of these were taken at bait stations. Meat was salvaged from 65% of the bears. Historically, the meat has been salvaged from most black bears harvested in Unit 12.

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 28 bears is well below sustainable harvest and will not limit the unit's black bear population. Harvest was lower during FY96 due to less people participating in bear baiting and possibly due to cold spring weather and late breakup of trails and rivers.

Project Location: Units 20A, 20B, 20C, and 20F (34,0790 mi^2)

Project Objectives and Activities:

1. *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.
   - Seal bear hides and skull, age teeth, analyze data.
2. *Unit 20B* – Manage for a sustained annual harvest of ≤150 black bears, of which at least 55% are males.
   - Seal bear hides and skull, age teeth, analyze data.
   - Determine the sustainable harvest for Unit 20B based on harvest data and research findings.
   - Use registration permits to monitor the harvest of black bears at bait stations.
   - Cooperate with the research project to study the population dynamics of black bears on the Tanana Flats.
3. *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.
   - Seal bear hides and skull, age teeth, analyze data.
4. 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 1995 and spring 1996 we sealed 218 black bears harvested in Units 20A (46), 20B (130), 20C (11), and 20F (28). Preliminary harvest data indicate bear harvest has decreased this spring. We sent bear premolars to Matson's Laboratory for age determination.

The 1995-96 preliminary data indicate a decrease in harvest in Units 20B, 20C, and 20F. This decrease could be explained in several ways, (1) some bears from the spring harvest could still be unsealed as of the time of this report, (2) winter kill, because of the cold, snowless winter, could have reduced the black bear population, (3) the population could have been reduced as a result of high harvest during the three previous years, and (4) based on a recent analysis of long-term black bear harvest data, the harvest could be experiencing a low point in a cyclic trend. We plan to monitor this situation closely.

We also issued 981 bait station permits to 561 hunters during spring 1996. Fifty-nine percent (332/561 of hunters registering baits were military personnel. We gave hunters who registered bait stations leaflets 1) encouraging them to hunt males rather than females, 2) summarizing baiting regulations, and 3) listing some commonly asked questions and their answers.

In Unit 20A, 68% (91/133) of the known sex black bears harvested during the last 3 years combined have been males. In Unit 20B, 74% (96/130) of the bears harvested in 1995-96 were males. In Units 20C and 20F combined, 72% (119/166) of the known sex bears harvested during the last 3 years have been males.

The Board of Game, during their winter and spring 1996 meeting, made several changes to black bear baiting regulations. Hunters will now need an approved education course to bait bears in Unit 20B. All hunters will be required to salvage all of the meat from their bears during the spring season.

Progress Meeting Project Objectives: In Unit 20A the 1993-94 through 1995-96 harvest of 133 known sex bears included 68% (91) males. Therefore, we met our objective to maintain at least 55% males in the 3-year harvest.

In Unit 20B the 1995-96 harvest included 130 bears; 74% (96) were males. We met our objectives for an annual harvest ≤150 and at least 55% percent males in the harvest. We made progress with our objective of estimating sustainable harvests. To estimate these harvests, we need to first estimate density. We have set an objective to investigate possible techniques and hopefully begin a density estimation project by July 1997. We met our objective of monitoring baiting activities with registration permits. We also met our objective to cooperate with the black bear population dynamics study in Tanana Flats; this project ended spring 1996.

In Unit 20C and 20F combined, 72% (119/166) 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 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 recommend the following changes to the Project objectives and activities to replace the current 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 in order 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.

Project Location: Unit 20D (5637 mi^2)

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 14 black bears during the 1995-96 regulatory year. Twelve bears were taken south of the Tanana River and consisted of 8 males and 4 females. Two male bears 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)

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: The Unit 20E reported black bear harvest during FY96 was 21 black bears (15 males and 6 females), exceeding the 5-year average harvest of 16 bears. Nine (43%) were taken during the spring, 1 of which was taken at a bait station (11%). Males represented 71% of the harvest. Meat was salvaged from 81% of the harvested bears.

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 male in the harvest (76% average last 3 years), the black bear population in Unit 20E is healthy and harvest is not limiting population growth.

Segment Period Project Costs:

	Personnel	Operating	Total
Planned	57.9	2.0	59.9
Actual	47.9	3.0	50.9
Difference	10.0	-1.0	9.0

Explanation: Personnel expenditures were less than planned because permanent seasonal time was switched from bear sealing activities to wolf survey and inventory duties. Operating expenditures were more than planned because funds were provided for additional black bear work in Unit 21.

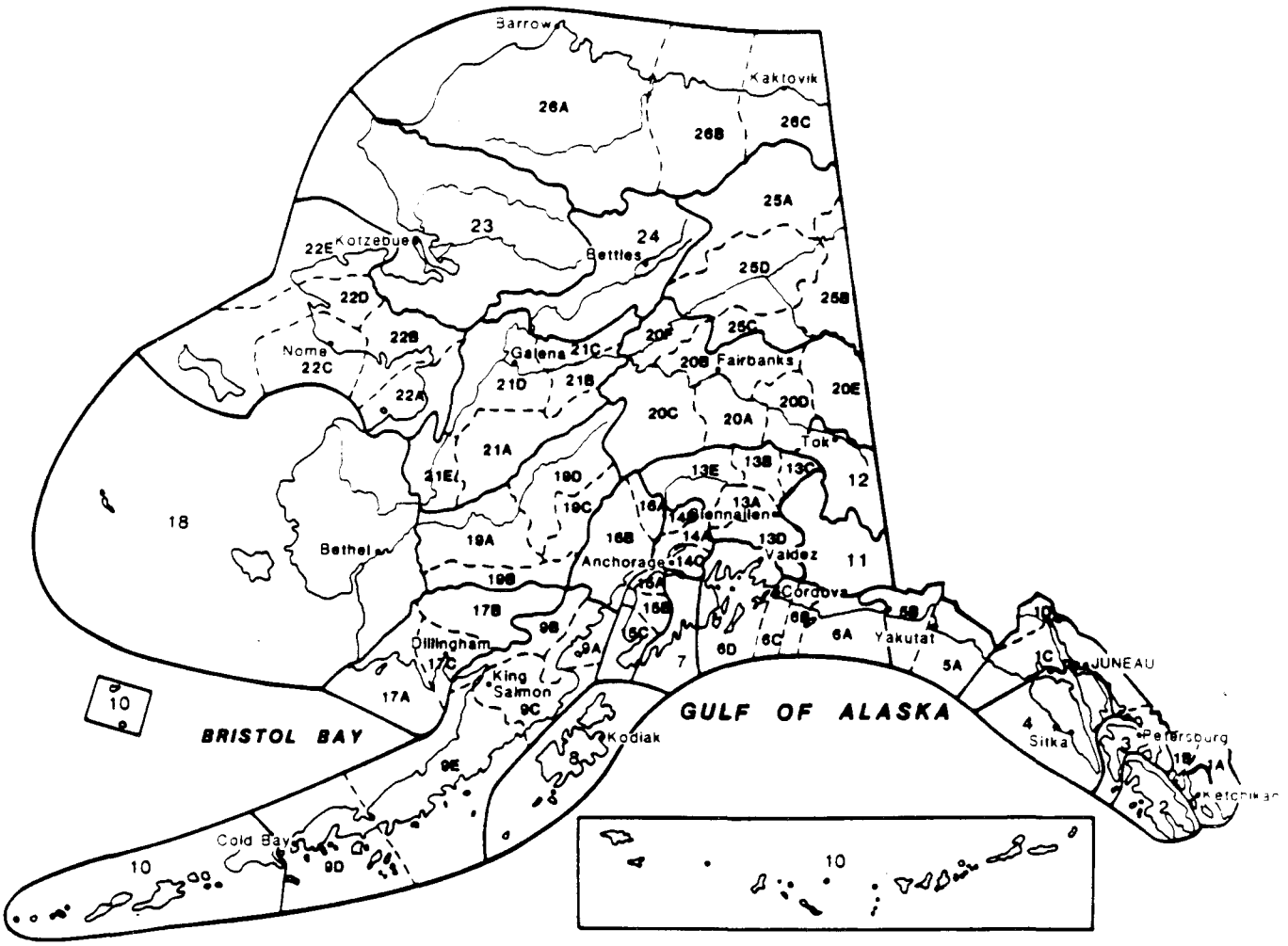
Submitted by:

David James
Management Coordinator

NOTES

NOTES

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