Alaska Department of Fish and Game
Division of Wildlife Conservation

Federal Aid in Wildlife Restoration
Annual Performance Report
Survey-Inventory Activities
1 July 1999 - 30 June 2000

BLACK BEAR

Mary V. Hicks, Editor

Grow

Grant W-27-3
Study 17.0
September 2000

STATE OF ALASKA
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DEPARTMENT OF FISH AND GAME
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DIVISION OF WILDLIFE CONSERVATION
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Project Title: **Southeast Black Bear Population Management**

Project Location: Unit 1A (5000 mi^2)
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: 102 black bears were reported harvested in regulatory year 1999–00. Males and females composed 92 and 8% of the harvest, respectively. We measured skulls, determined sex, and pulled a tooth from bears presented for sealing. We sent teeth from harvested bears to Matson's Montana laboratory for aging, and we will send letters to successful hunters informing them of their bears' ages when data are available. Age data from the previous season (1998–99) showed an average of 6 years for males (n = 53) and 10 years for females (n = 15). We collected skeletal muscle from hunter-harvested bears during the sealing process for DNA analysis.

Progress Meeting Project Objectives: Again we met the skull size objective. Skulls from 94 males averaged 17.9 inches, similar to last season. Average skull size for 8 females was 16.2 inches, identical to last season. Average male spring skull size (18.1 inches) was well above our management objective. We believe bear numbers remained stable during this report period.

Project Location: Unit 1B (3000 mi^2)
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: Thirteen black bears (12 males and 1 female) were sealed from Unit 1B. Skulls were measured, sex determined, and a tooth extracted for aging in the sealing procedure. We sent letters to successful hunters of the previous (1998–99) season, informing them of their bears' ages.

Progress Meeting Project Objectives: Ninety-two percent (n = 12) of the bears killed were males, which met the project objective. The average male skull size was 18.4 (n = 12) inches, meeting the project objective.

Nine (69%) of the successful hunters were nonresidents. Seven (54%) successful nonresident hunters used guides.

The average age for harvested black bears in the previous (1998–99) season was 9.8 years (n = 23). The oldest bear was 21 years old.

Project Location: Unit 1C (7600 mi^2)
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 kill. 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 method, etc.) were collected at the time of sealing. We solicited additional anecdotal information from hunters and other observers.

Educational efforts to reduce garbage availability and subsequent habituation of black bears to human foods was conducted by a radio call-in show, numerous other radio spots, several newspaper articles addressing these concerns, and daily phone conversations with concerned members of the public. Cooperative efforts with the city and borough of Juneau were continued most notably with the BEARS (Bear Education And Refuse Solutions) program. Enforcement of the city and borough ordinance regarding garbage containment is still haphazard due to budget constraints. Responses 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 were met, but bears continue to be attracted to human garbage in Juneau residential areas. Hunters harvested 139 black bears during the 1999 regulatory year compared to the 1998 harvest of 147 bears. The fall harvest (23 males and 4 females) was followed by a larger spring harvest (94 males and 15 females). Total skull sizes for males averaged 17.8 inches for the spring hunt

and 17.7 inches for the entire year, surpassing the management objective of 17.5 inches. Males composed 84% of the hunter harvest, easily meeting the harvest sex ratio objective of 3 males to 1 female. Four black bears were killed by other than hunters during this regulatory year, 2 of these were by vehicles, 1 was found dead in Peterson Creek, and 1 was killed in defense of life or property. Bear activity associated with Juneau urban areas was at moderate levels during the summer of 1999, but during fall bear activity and subsequent complaints reached record levels. Most of the calls were associated with bears accessing dumpsters or garbage cans. We must continue efforts to educate the public about bear behavior and making refuse unavailable to bears. Additionally, we should work with the City and Borough of Juneau to adopt stricter ordinances for residents regarding garbage handling.

Project Location: Unit 1D (2700 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 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 Palmer. Harvest-related data including biological characteristics of the bears (skull measurements, sex, etc.) and aspects of the hunt (date and location of kill, transportation method, etc.) were collected at the time of sealing. We also gathered anecdotal information from hunters and other observers.

Progress Meeting Project Objectives: The first management objective for hunter harvest was not met, although the second one was. The average total skull size for male bears was 16.9 inches, close to the objective of 17.0 inches. Male black bears harvested in spring had slightly larger skulls (16.9 inches) than males harvested in the fall season (16.8 inches). Males continued to make up most of the harvest (78%), slightly over the sex ratio objective of 3 males to 1 female. A total of 45 bears (34 males and 11 females) were reported taken by hunters. Thirty-two bears (27 males, 6 females) were harvested in the spring, with the remaining 12 (9 males, 3 females) taken in the fall. One female bear was shot when it entered a cabin.

Project Location: 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 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 322 black bears were reported harvested from Unit 2. Males and females composed 53% and 47% 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 laboratory for aging, and when data are available, we will send letters to successful hunters, informing them of their bears' ages. Unit 2 age data from last season (1998–99) showed that harvested males were 4 years old (n = 171) and females were 6 years (n = 151). 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 met. Skulls from 171 males averaged 18.8 inches, which is similar to last season but below our management objective of 19.1. Average skull size for 151 females was 16.7 inches, similar to last season's size. We believe bear numbers in Unit 2 were stable during this report period.

Project Location: Unit 3 (3000 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 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: During the 1999–00 season we sealed 278 black bears (217 males and 61 females) harvested in Unit 3. Under public safety permit provisions, the Petersburg Police Department killed an additional 7 black bears (4 females and 3 unknown), including 3 cubs. Skulls of adult black bears were measured, sex determined, and a tooth extracted for aging in the sealing procedure. We sent letters to successful hunters from the previous (1998–99) season, informing them of their bears' ages. The average age for harvested black bears in 1998–99 was 7.5 years (n = 269).

Progress Meeting Project Objectives: Seventy-eight percent (n = 217) of harvested Unit 3 bears were males, which met the sex ratio objective. The average male skull size was 18.5 inches (n = 209), also meeting the project objective. Hunters on Kuiu Island harvested 163 black bears, and hunters on Kupreanof Island harvested 100 bears. Hunters in the remainder of Unit 3 harvested 15 bears.

Two hundred twenty-six (81%) successful black bear hunters were nonresidents. Ninety-four nonresident hunters and 3 resident hunters used guides; 60 nonresident hunters and 4 resident hunters used transporters.

Project Location: Unit 5 (5800 mi^2)
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: 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 kill. Black bears were sealed in Yakutat, Juneau, and Anchorage. Harvest-related data including biological characteristics of the bears (e.g., skull measurements, sex, etc.) and aspects of the hunt (e.g., date and location of kill, transportation method, etc.) were collected at the time of sealing. In addition, we collected anecdotal information at this time.

Progress Meeting Project Objectives: Both management objectives were met during this report period. Male black bears that were harvested by hunters had an average skull size of 17.7 inches, meeting the 17.0-inch management objective. Fourteen of the 17 bears were male, exceeding the desired sex ratio objective of 3 males to 1 female. Three of these bears were glacier bears, 2 males and 1 female.

Segment Period Project Costs:

	Personnel	Operating	Total
Planned	40.2	5.0	45.2
Actual	70.8	8.0	78.8
Difference	-30.6	-3.0	-33.6

Explanation: The differences are due to more time spent in urban bear management in Juneau, Ketchikan, and Petersburg (exacerbated by vacant area biologist position). Management staff spent time and budget helping to start the Kuiu project.

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 comprising at least 75% males with a minimum average skull size of 17 inches.

Work Accomplished During the Project Segment Period: Sixty-two black bears (48 males and 14 females) were harvested during fall 1999. Two hundred fourteen bears (178 males, 35 females, and 1 of unknown sex) were taken during spring 1999.

Progress Meeting Project Objectives: The harvest (276 bears) was higher than the average harvest for the previous 3 years (256). The percentage of males in the take (82%) was consistent with the previous 3 years. The population has been increasing and can sustain the current harvest.

Project Location: Units 7 and 15 (8400 mi^2)
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 are not collected, it is suspected that bear hunter numbers are similarly ranked. Preliminary harvest reports indicated harvest decreased during this regulatory year from the record harvest in 1998–99 yet remained above management objectives. Final harvest data will be available during the fall of 2000.

The 1999 fall harvest was lower than normal ranges. We sealed 71 bears and 32% were females. Three bears were killed in defense of life or property (DLP). 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 the highest ever reported. Hunters reported harvesting at least 199 bears, and approximately 19% were females. In Unit 7, 43 (52%) of the bears were harvested over bait. In Unit 15A, 29 (78%) of the bears were harvested over bait. No bears were harvested over bait in 15B but in 15C 4 males were taken over bait. Thirty-eight percent (n = 76) of all bears harvested in spring were taken over bait.

Progress Meeting Project Objectives: The fall harvest of 1999 was only slightly lower than average. However, the spring harvest of 2000 was the highest reported since black bear sealing began in 1973 and was higher than the record harvest in spring of 1999. 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 excellent hunting success rates and large numbers of bears.

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.

Some management objectives were not met in this reporting period or during the previous 2 years. The 3-year average annual harvest for black bears was 302 (17% above the objective of 250 bears set in 1993). However, the average number of female bears is still within management objectives (3-year average of 82 females). There seems an increasing trend in the harvest of black bears on the Kenai. We will further analyze harvest statistics and present information to the local advisory committees for possible recommended regulatory action.

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 9 black bears in Unit 11 during the 1999–2000 season, 3 in the fall and 6 in the spring. The current hunter harvest is below last year's take of 12 bears and below the 5-year (1992–98) average of 13 bears. Harvest data for the 1999–2000 season are preliminary; we are still processing sealing certificates for spring 2000. Sex ratio of the harvest included 5 males and 4 females. Nonlocal Alaska residents took 5 bears; local rural residents took 4.

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. 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.

Harvest data for the entire 1999–2000 season are preliminary because hunting season is open year-round and sealing certificates are still being processed. Preliminary harvest data for the 1999–2000 hunting season indicated that hunters have harvested 76 black bears. There were 61 bears (61% males) taken during the fall of 1999 and 15 (80% males) taken to date in spring 2000. Males composed 64% of the overall harvest. 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. This year's harvest is substantially lower than last year's record take of 141 black bears. There is no apparent reason for this large annual variation in harvest.

Project Location: Unit 14 (6600 mi^2)
Upper Cook Inlet

Project Objectives: The population objective is to maintain a black bear population of a size that is largely unaffected by human harvest. The human-use objective is to provide liberal opportunities to hunt black bears with a 3-year average harvest of less than 80 bears.

Work Accomplished During the Project Segment Period: During this reporting period we sealed 89 black bears for all of Unit 14. Hunters killed 78 bears; 37 in Subunit 14A, 16 in 14B, and 25 in 14C. Of the hunter-killed bears, 76% were males. Ten bears (6 in 14A and 4 in 14C) were killed in defense of life or property (DLP); 5 of 10 were males. In 14A, 1 male was killed in a vehicle collision. In 14C 1 female was killed illegally. Females composed 23% of the hunter harvest and 27% of the total harvest.

A minimum of 108 hunters registered at least 1 black bear bait station for the spring season in Unit 14A, and 26 hunters registered bait stations in Unit 14B. Twenty-seven bears, including 6 females (22%), were reported killed over bait.

Progress Meeting Project Objectives: Black bear hunter harvest and total harvest continued an increasing trend through 1999–2000. The 3-year (1997–1999) average harvest (108 bears) in Unit 14 has far exceeded the harvest objective (less than 80 bears). Increasing bear abundance and the number of DLP killings have helped raise the total harvest beyond our objectives. The number of females in the average total harvest (27%) is considered 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 illegally and in DLP, influenced by expanding human settlement, has been increasing in recent years. Most DLP bears are subadults, indicating that young animals are seeking unoccupied habitat. This in turn suggests a healthy density of black bears in unsettled areas of Unit 14. We estimate Unit 14 contains 750–1350 black bears; therefore, the 3-year average harvest was near 10% of the midrange estimate of 1050.

Project Location: Unit 16 (12,300 mi^2)
West Side of Cook Inlet

Project Objectives: Maintain a black bear population that is largely unaffected by human harvest. The human-use objective is to provide liberal opportunities to hunt black bears with a 3-year average annual harvest of less than 160 bears, including fewer than 12 females from Subunit 16A and fewer than 50 females from Subunit 16B.

Work Accomplished During the Project Segment Period: During this period we sealed 97 black bears for Unit 16. This included 51 bears taken in Unit 16A and 46 taken in Subunit 16B. Seventy-seven percent were males. A minimum of 48 and 29 hunters registered at least 1 baiting station in Units 16A and 16B, respectively. Thirty-nine percent of the total harvest and 36% of the female harvest occurred over bait. This included 30 males and 8 females.

Progress Meeting Project Objectives: The density of the bear population in Unit 16 was moderate to high. Total harvest decreased from 1998–99 (215 bears), but the 3-year average annual harvest (149) was below the level thought to be sustainable (160). Female harvest in 16A reached 16 bears, which exceeds the projected sustainable level for the third consecutive year. The percent composition of female bears killed over bait was 21%, which was comparable to the 31% female harvest by all other hunters. Trends in female harvest will be monitored carefully. All other human-use objectives were met.

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 comprising at least 60% males.

Work Accomplished During the Project Segment: Preliminary data indicate a reported harvest of 19 black bears, including 15 males (79%) and 4 females (21%) during FY2000. Average total skull size was 17.16" for males and 14.98" for females. Nonresident hunters reported harvesting all 19 bears. Seventeen (89%) successful hunters reported using aircraft for access, 1 hunter (5%) reported using a boat, and 1 hunter (5%) reported using a 4-wheeler. Successful hunters spent an average of 6.3 days afield.

All successful hunters reported taking black bears during the fall 1999 season, 17 in Unit 17B and 2 in Unit 17C. Three bears (16%) were killed in August, and 16 (84%) were taken in September. Meat was reported salvaged from 9 bears (47%).

Progress Meeting Project Objectives: No objective data are available on the population density of black bears in Unit 17. Anecdotal reports by local residents and incidental observations by department staff during moose and caribou surveys suggest that the black bear population along upper Nushagak River drainages may have 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.

LITERATURE CITED

HOLDERMANN, D. A. 1986. Black Bear, Units 7 and 15, Kenai Peninsula. Pages 24–28 *in* B. Townsend ed. Alaska Department of Fish and Game Federal Aid in Wildlife Restoration Annual Report of Survey-Inventory Activities. Project W-22-4 and W-22-5. Job 17.0. Juneau. 41pp

Segment Period Project Costs

	Personnel	Operating	Total
Planned	45.1	1.4	46.5
Actual	45.1	1.4	46.5
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 mi^2)
Upper Tanana and White River drainages, including the northern Alaska Range east of the Robertson River, and the Mentasta, Nutzotin, and northern Wrangell Mountains

Objectives: 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. Seal bears and analyze harvest data.

2. Administer and monitor black bear bait station permit distribution.

Activities Accomplished

1. Reviewed population management objective using harvest statistics, hunter surveys, and departmental sightings. Based on this information, no revisions to the current objective were necessary.

2. Analyzed harvest data collected during the sealing process and updated harvest tables that will be included in the next Unit 12 black bear management report.

3. Administered black bear bait station permits. During the permitting process each hunter precisely mapped the location of his/her bait sites. In cooperation with Division of Wildlife Protection, we visited almost all of the bait sites during the season and all of the sites following the season to ensure regulatory compliance.

4. Established 4 permanent transects (4 to 5 1-m^2 plots/transect) to measure annual blueberry abundance in portions of Unit 12. A rain gauge was placed along each transect to measure moisture throughout the growing season. Monitoring blueberry abundance in relation to bear harvest, number of bear incidents, and bear movements will become an annual activity.

Project Location: Units 20A, 20B, 20C, and 20F (34,079 mi^2)
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. Seal bears and analyze harvest data (objective 1).
2. Administer and monitor black bear bait station permit distribution (objective 1).
3. Submit teeth from bears harvested in Units 20A and 20B for age analysis (objective 1).

Activities Accomplished

1. Sealed bears, summarized harvest data, and submitted teeth for age analysis (objective 1).
2. Participated in an interagency Bear/Human Conflict Workshop, answered questions from the public, and responded to several nuisance bear incidents (objective 2).

Project Location: Unit 20D (5,637 mi^2)
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. Seal bears and analyze harvest data.
2. Administer and monitor black bear bait station permit distribution.

Activities Accomplished

1. Sealed bears killed by hunters and analyzed harvest data.
2. Permitted and monitored black bear bait stations.

Project Location: Unit 20E (10,681 mi^2)
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. Seal bears and analyze harvest data.

2. Administer and monitor black bear bait station permit distribution.

Activities Accomplished

1. Reviewed population management objective using harvest statistics and hunter surveys. Based on this information, no revisions to the current objective were necessary.

2. Analyzed harvest data collected during the sealing process and updated harvest tables to be included in the next Unit 20E black bear management report.

3. Administered black bear bait station permits. During the permitting process we asked each hunter to precisely map the location of his/her bait sites. In cooperation with Division of Wildlife Protection, we visited almost all of the bait sites during and following the season to ensure regulatory compliance.

4. Established 4 permanent transects (4–5 1-m^2 plots/transect) to estimate annual blueberry abundance in portions of Unit 20E. A rain gauge was placed along each transect to measure moisture throughout the growing season. Monitoring blueberry abundance in relation to bear harvest, number of bear incidents, and bear movements will become an annual activity.

Segment Period Costs

	Personnel	Operating	Total
Planned	20.0	1.2	21.2
Actual	18.2	1.4	19.6
Difference	1.8	-0.2	1.6

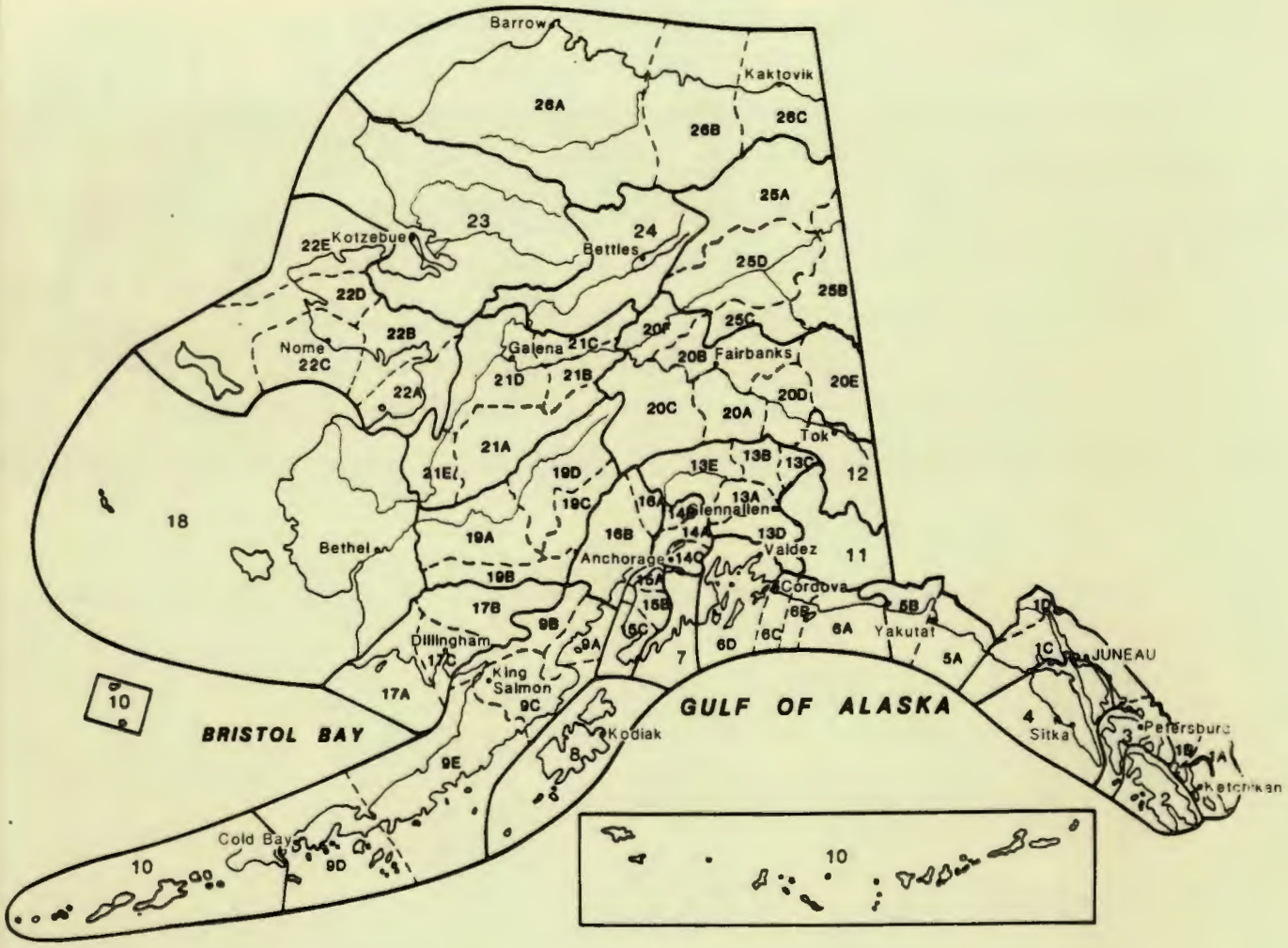
Explanation: The 0.2 overexpenditure in operating funds resulted from staff attendance at an interagency conference. The underexpenditure in personnel funds resulted from some short-term staff position vacancies.

Submitted by

Roy Nowlin
Regional Management Assistant

David James
Management Coordinator

Alaska's Game Management Units



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Grow