BLACK BEAR MANAGEMENT PLAN

1999-2010

Status and Objectives of Idaho's
Black Bear Resource

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FOREWORD

Preserving Idaho's wildlife resources and hunting heritage will require cooperation from the citizens that are interested in black bears. This plan will provide the framework for the Department's management efforts for black bear and a solid foundation for ensuring the continued existence of viable black bear populations.

Many persons provided invaluable input to the Department during the development of this plan. A 9-member steering committee was formed early in 1998. Their charge was to propose a process for developing this plan that would involve a diversity of viewpoints regarding black bear management in Idaho. As a result of their efforts, a 20-member black bear planning team, composed of representatives from sporting interests and the general public, was convened on June 4, 1998. The planning team identified issues and strategies relevant to this plan and the decision criteria that would be used to evaluate the various management alternatives available to the Department.

The planning team identified several issues they believed the Department should address in this plan. Major issues included:

1. Methods of take
2. Management based on biological and/or sociological considerations
3. Management should be in the best interest of black bears
4. Provide for more flexibility to manage at the local or data analysis unit (DAU) level
5. Consider the impact of black bears on deer/elk populations
6. Develop criteria to indicate when black bears are abundant
7. Methods of gathering public input on black bear management program

General, recurring themes focused on customizing management to fit goals and objectives at the DAU level, using sound biology to establish those goals, improving public education and involvement, and evaluating biological and sociological implications of our management decisions. Decision criteria suggested by the planning team emphasized three general areas. They included:

1. Will the action have the desired effect?
2. Is the action feasible from a cost-effective and logistical standpoint?
3. What are the social implications?

Where appropriate, the Department has attempted to incorporate these suggestions into this plan.

1999-2010 BLACK BEAR MANAGEMENT

INTRODUCTION

Wildlife managers juggle many diverse issues in attempting to integrate the needs and desires of humans with the biological needs of black bears. The Idaho Department of Fish and Game periodically develops management plans that establish the Department's philosophy and management direction for black bears and serve as guidelines for setting black bear hunting seasons. This plan is the fourth plan written since 1980. Each plan represents a step forward in the development of a management program that will ensure the long-term viability of black bear populations and provide recreational opportunity for hunting and non-hunting resource users. Specific objectives are included in this plan to identify management direction for each DAU, which reflects the ecosystem management principle that predator and prey management should be linked to ensure a reasonable balance among species. The specifics regarding how the department will attempt to reach those objectives will be dealt with annually in the regular season setting process.

The Department is currently undergoing a transition in terms of responding to its constituency - the people of Idaho. As a result of current sociological trends, decisions about how the Department manages black bears have become very controversial. Many of Idaho's citizens disagree on issues such as spring black bear hunting seasons and using bait or hounds to hunt black bears. Although these issues have significant potential for influencing the general public's perception of the acceptability of hunting, in most cases they have only minimal biological impact on black bear populations. Habitat fragmentation and loss is far more important to the long-term survival of black bear populations and is, unfortunately, often lost in the debate over hunting methods.

The popularity of black bear as a big game animal to hunters using a variety of hunting techniques, and the concerns of some citizens about the use of those methods of take have combined to generate some controversy in the management of this species. This plan represents an attempt by the Department to consider the viewpoints of all Idahoans on how black bears should be managed in the state.

MANAGEMENT HISTORY

Although the black bear was classified as a game animal in 1943, with a bag limit of 1 per year, few protective laws were passed until 1973. Beginning in 1973, resident hunters were required to have a tag in their possession while hunting black bears in those Game Management Units (GMU) in northern Idaho that had summer hunting closures. Resident black bear hunters in much of southern Idaho, where seasons remained open to year-round hunting, did not need a tag. Non-resident black bear hunters were required to have a tag in all GMUs in the state.

In 1975, the Department allowed hunters to take 2 bears in 3 GMUs. The bag limit was increased to 2 bears in 21 additional GMUs in 1977. Females accompanied by cubs were protected during the spring season from 1973 through 1982. In 1983, females accompanied by

cubs were protected during the spring and fall seasons. Year round hunting seasons and 2 bear bag limits were eliminated in 1986.

The Department has relied on two primary methods to collect black bear harvest data: 1) the mandatory check and report program implemented in 1983, and 2) the annual telephone harvest survey. The mandatory check-in report program requires the hunter to bring the skull and hide (1992) of their harvested black bear to an official check point within 10 days of the kill date and to fill out a harvest report form. In most cases a premolar tooth is extracted from the skull for aging. Pertinent data including kill date, location of kill, and method of take are recorded on the harvest form. Compliance with the mandatory report program is unknown.

The telephone survey of hunting license holders provided a second estimate of the black bear harvest. This survey contacted approximately three percent of the black bear tag holders and it provided information from successful and unsuccessful hunters. A statewide harvest estimate, recreation days, and hunter success rates were estimated. The black bear portion of the harvest survey was discontinued in 1996 due to funding cutbacks.

POPULATION BIOLOGY

In 1972 the Department initiated a black bear research project to collect biological data for a comprehensive management program. Six black bear populations were studied. These studies were designed to determine the status of each population, although data were also collected on food habits, physical condition, denning requirements, activity patterns, and habitat use patterns. Research information collected from black bear populations in lightly hunted and heavily hunted areas was used by Department biologists to develop harvest criteria and to interpret harvest data collected through the mandatory check program.

Detailed information about black bear biology in Idaho can be found in a book authored by John Beecham and Jeff Rohlman titled: “A Shadow in the Forest - Idaho’s Black Bear.” The University of Idaho Press published this book in 1994.

HABITAT MANAGEMENT

Black bear distribution in Idaho corresponds closely to the distribution of coniferous forests. North of the Snake River plain they are found throughout the forested mountains and foothills. Few black bears occur south of the Snake River, except in southeastern Idaho. About 75% of black bear habitat in Idaho is administered by the US Forest Service; 20% is controlled by private interests; and the rest is administered by other agencies, such as the Bureau of Land Management, Idaho Department of Lands, and Idaho Department of Fish and Game.

Idaho has approximately 30,000 square miles of black bear habitat. Although it is difficult to estimate the size of black bear populations, Department research has shown that black bear densities vary among areas in Idaho. The black bear social system limits density to 1.5 to 2 black bears per square mile in the best habitats. However, even in good quality habitats, many factors can influence the size of the black bear population in any given year. Several years of

poor berry crops can result in reduced cub production and increased mortality of sub-adult black bears. Heavy hunting pressure can also reduce the population below the carrying capacity of the habitat.

Forest management practices, wildfires, and plant succession influence black bear habitat quality. The black bear's diet is primarily grasses and forbs during the spring and early summer. By mid-July, they begin adding fruits such as huckleberries, wild cherries, buffalo berries, hawthorn, and mountain ash to their diet. Approximately 10% of the black bear's annual diet is animal matter: insects comprise about 9% and vertebrates make up the remaining 1 percent. In many situations partial removal of the forest overstory helps black bear because it opens up the forest canopy and allows for increased plant production on the forest floor. However, increased human access into black bear habitats makes black bears more vulnerable to hunters. This factor partially offsets the benefits of logging activity.

Department-sponsored research on black bear habitat use patterns suggests that the following actions will maintain or enhance black bear habitat in areas where logging has been proposed.

Recommendations:

1. Minimize soil disturbance in areas where berry-producing shrubs are abundant by using rubber tired vehicles or logging over snow cover.
2. Use selection cuts to maintain black bear security cover. Retain 40-70% canopy coverage when huckleberry (Vaccinium sp.) is abundant in the understory.
3. Maintain relatively dense pole-sized timber stands in the overall vegetative mosaic on north and east aspects for use as bedding areas.
4. Retain some mature trees in logged areas to enhance their use by female black bears with cubs.
5. Maintain aspen stands in the overall vegetative mosaic.
6. Broadcast-burn slash or leave it untreated and minimize soil scarification to prevent damage to rhizomatous food plants.
7. Create leave patches or leave strips within cutting units for security cover. Clear-cuts should be small and have irregular borders to provide security cover.
8. Maintain a mix of different-aged cutting units to influence black bear density and distribution in an area.
9. Logging roads should be located out of creek/river bottoms where significant black bear foods occur.
10. Area closures to motorized vehicles should be implemented to reduce black bear mortality rates and increase habitat effectiveness.

Habitat loss and fragmentation due to human encroachment also has a subtle, yet permanent, impact on the long-term viability of black bear populations. Ultimately, the accelerating pace of habitat fragmentation and loss will dictate how long we can maintain black bear populations in some areas of the state. However, the prognosis for the future of black bears in much of the state

remains positive because a majority of the land base is publicly owned. As long as we continue to consider the wellbeing of Idaho's wildlife resources when making habitat management decisions, those habitats will continue to support viable black bear populations.

POPULATION MANAGEMENT

The vulnerability of black bear to harvest varies greatly because of differences in habitat and access. Bears are less vulnerable where cover is dense and expansive. They are particularly vulnerable in highly roaded areas and habitats that provide only patches of security cover. This often results in populations with fewer adult black bears, especially males.

The sex and age of a black bear also affects its vulnerability to harvest. Adult males are typically most vulnerable because they are bold (often use open areas) and have larger home ranges. Consequently, the adult male segment of a population is the first to be reduced under hunter pressure. Sub-adult males are slightly less vulnerable. Females are least vulnerable, especially if accompanied by cubs. A low percentage of adult males (≥5 years old) in the harvest may be an indication of over-harvest.

Hunting pressure affects harvest rate, which affects age structure, sex ratios, and densities of black bear populations. As harvest rates increase, the proportion of sub-adult black bears (those less than 4 years old) in the harvest typically increases, whereas the proportion of adult males declines. At higher harvest levels, the proportion of females in the harvest increases, and harvest may result in a population decline if a large area is affected or if there are no reservoir areas nearby to produce dispersing sub-adult black bears. In reservoir areas, black bear populations are limited by the capacity of the habitat to support black bears and their social structure. Some species compensate for excessive adult mortality by producing more young. However, black bears do not respond in this manner. In fact, high adult mortality results in a younger age population and lower productivity (average number of young per litter). Young male black bears disperse from their mother's home range when they are 1.5 to 2.5 years old and often travel long distances to occupy vacant habitat. However, young female black bears rarely disperse far. As a result, black bear populations far from reservoir areas are slow to recover from over-harvest.

The ages of black bear captured during Department-sponsored research projects indicated that lightly hunted populations had a high ratio of adults to sub-adults (70:30), a high percentage of adult males (35%), and a median age of 7.5 years. Data collected from heavily hunted populations showed adult:sub-adult ratios favoring sub-adults (40:60), fewer adult males (21%), and a median age of 2.5-3.5 years. Studies of black bear populations in Alaska, Virginia, and Arizona showed similar relationships between lightly and heavily hunted populations.

Department research demonstrated that age and sex data derived from trapping was closely correlated with that from the harvest. It follows, therefore, that harvest criteria have potential for monitoring population status.

HARVEST CHARACTERISTICS

Black bears in Idaho are long-lived, they mature late (4-7 years old), and they have low reproductive rates. Short-term changes in the size of black bear populations are related to changes in birth rates associated with the availability of nutritious foods, especially late summer and fall berry production. Long-term trends are directly related to changes in habitat quantity and quality.

The reproductive characteristics of Idaho black bears suggest that harvest rates must remain low to ensure sustainable harvest goals. Unfortunately, no easy or inexpensive methods exist for assessing the status of black bear populations. Therefore, Department biologists must rely on indirect measurements (harvest data) to evaluate the effectiveness of management actions. These limitations re-emphasize the need to implement conservative management strategies for black bear.

During the past planning cycle, black bear tag sales have increased slightly for resident black bear hunters and decreased for non-resident hunters (Figure 1). At least part of the increase observed for resident hunters can be attributed to increased sales of Sportsmen Pak and Deer, Elk, Bear Pak licenses which include a black bear tag. The decrease in non-resident black bear tag sales (75% since 1987) is probably associated with increased costs for those black bear tags ($40.50 in 1987 and $226.50 in 1998). The sale of baiting permits ($1.50) was initiated in 1993. Sales of these permits increased from 1,195 in 1993 to 1,349 in 1995 and have since declined to about 1,200 in 1998. The sale of hound hunter permits has increased from 988 in 1993 to 1,257 in 1998 (Figure 2).

Black bear harvest during the last 12 years shows a cyclic pattern that is relatively stable or slightly increasing (Figures 3 and 4). During the 1986-1992 planning period, hunters took an average of 1,277 black bears. During 1993-1997, an average of 1,355 black bears was harvested. The Panhandle Region accounted for 34% of the harvest in the last planning period; 28% came from the Clearwater Region; 22% from the Southwest Region; 10% from the Salmon Region; and the remaining 7% came from the Magic Valley, Southeast, and Upper Snake Regions.

The emphasis of the 1992-2000 bear plan was to stabilize total harvest and reduce the harvest of female black bears. Management actions implemented by the Department resulted in a short-term reduction in total harvest and a shift in the seasonal harvest of bears, but did not influence the sex ratio in the harvest (Figures 5 and 6). Analysis of the harvest data suggests that shortening the spring hunting season did reduce the female harvest. However, eliminating hunting opportunity in early September (September 1-14) was ineffective in reducing total female harvest during September. Female black bears appear to be more vulnerable to harvest in the fall hunting season because many females are no longer accompanied by the previous years cubs and they have high energy demands.

The average number of days hunters used to successfully harvest a bear was less than 7 days for those using bait, hounds, incidental, or still hunting methods. Shortening long, 2-3 month spring and fall hunting seasons by 1-3 weeks would not affect the length of time that most hunters spend in the field pursuing bears. Analysis of harvest data suggest that shortening seasons

results in short-term reductions in harvest, but hunters quickly learn to adapt and harvest levels increase.

Black bear tag holders use 4 primary methods for harvesting a black bear: spot and stalk (still hunting), hound hunting, hunting over bait, and incidental hunting (hunting black bears while primarily engaged in some other activity like deer or elk hunting, wood gathering, fishing, or camping). During the 1986-1991 planning cycle and the 1992-2000 cycle, still hunters took slightly more black bears than hunters using other methods (Figure 7) did. However, bait and hound hunters experienced the highest success rates. No differences were observed in the percentage of female bears taken by hunters using bait (28%), hounds (35%), incidental (36%), or still (35%) hunting methods.

1999-2010 GOALS AND OBJECTIVES

Goal: To ensure the long-term viability of black bear populations in Idaho and to provide recreational opportunity for the hunting and non-hunting public.

Objectives:

1. To establish harvest objectives and management approaches for each DAU that reflects the unique characteristics of that area.

2. To distribute recreational opportunity throughout black bear habitat in a manner that is consistent with population objectives for each DAU.

3. To improve harvest information by improving compliance with the mandatory check and report program and by implementing a telephone or mail survey to generate information on hunter numbers, hunter success rates, hunter effort. Improving compliance level with the mandatory check program will provide insight into the non-reporting bias.

4. To use an adaptive management approach in developing harvest goals and objectives in select DAUs as a means to further evaluate management descriptors. In some DAUs, harvest objectives will be set to significantly increase harvest. In other DAUs, harvest pressure will be significantly reduced to serve as a comparison of the sensitivity of the harvest descriptors.

5. To monitor the response to changes in the black bear harvest using our biological criteria and take steps to increase or reduce harvest when data indicate the opportunity or need.

6. To manage black bears to reduce conflicts among competing user groups.

7. To consider initiating research to:

    a. Develop a long-term population monitoring technique.

    b. Establish the link between harvest criteria and the characteristics of the standing population by determining age- and sex-specific vulnerability to different harvest techniques.

    c. Determine black bear mortality patterns and reproductive potential.

8. To work with the Outfitters and Guides Licensing Board to set outfitter quotas in DAUs where a harvest reduction is needed. This will include evaluating new license and renewal applications.

DECISION ELEMENTS

TELEPHONE SURVEY

Harvest data are the primary source of information used to make management decisions. Harvest trends derived from the mandatory check and report system are difficult to interpret without supporting data such as changes in hunter numbers or effort.

Therefore, the Department will develop an enhanced telephone survey that specifically targets black bear tag holders. Sampling effort will be focused on obtaining reliable harvest estimates at the DAU level, estimates of hunter numbers and effort expended by successful and non-successful hunters, and an estimate of compliance with the mandatory check and report requirement.

DAUs selected for intensive monitoring during this planning period will be sampled at a higher rate in an effort to evaluate the sensitivity of our harvest criteria.

MANDATORY CHECK AND REPORT

This program continues to provide most of the data that are collected on black bear in Idaho. Although compliance is unknown, we will continue to rely on this program to provide the data we need to evaluate harvest trends.

HARVEST CRITERIA

No economically feasible methods are available to monitor the abundance of black bears in Idaho. As a result, Department biologists have relied on a variety of indirect measures of harvest data to assess population trends. Management decisions are based upon harvest data collected through the mandatory check and report program. Although population trends are difficult to ascertain from harvest data, it is the only information available to biologists that can be collected in a systematic manner designed to minimize confounding variables such as hunter numbers, hunter effort, and season structure and length. When these variables are standardized or at least measured, harvest trends may have value in determining the effects of management actions.

During the last planning period (1992-2000), the Department used the percent females in the harvest, median age of harvested females and males, and, in limited areas, bait station survey results to monitor population trends. Specific criteria were established to indicate over-harvest and a desired level of harvest.

Further analysis of our harvest data suggest that median age is a useful tool to distinguish lightly hunted or unhunted populations from those that are hunted at moderate to heavy levels. However, median age does not appear to be very sensitive to population changes on a year-to-year basis. As a result, the Department is eliminating median age as a harvest criterion and will monitor the percent of males ≥5 years old in the harvest on a 3-year running average (Table 1).

This indicator appears to be a more sensitive measure of population harvest levels and is supported by data collected by the Department during 12 years of research on black bear ecology. The Department's bear team also recommended that the minimum threshold for adult males ≥5 years old in the harvest should not drop below 20% on a 3-year running average. However, the Department will try to evaluate the usefulness of this criterion in describing the status of a population, during this planning cycle, by attempting to push this threshold below 20% on an experimental basis in one or more DAUs. Harvest trends will be manipulated in other DAUs to further evaluate these population descriptors.

Table 1. Harvest statistics for black bears in Idaho, 1993-1997.

All DAUs	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	1,126	35	39	
1994	1,304	34	34	
1995	1,331	34	34	35%
1996	1,522	33	32	33%
1997	1,552	34	29	32%
Total	6,835	34	33	

The Department will implement a 3-tiered set of criteria to evaluate population trend in various DAUs (Table 2). The Department will continue to monitor trends in percent females in the harvest, calculated on a 3-year running average.

Table 2. Harvest descriptors for black bear in Idaho.

Criteria	Light Harvest	Moderate Harvest	Heavy Harvest
Percent Females	<30%	30-40%	>40%
Percent Males ≥5	>35%	25-35%	<25%
Bait Station Survey	Increasing	Stable	Decreasing

We also recognize that certain areas in Idaho provide extensive secure habitat (reservoirs) for black bears. Unroaded and/or wilderness areas are prime examples. Hunting pressure is light in these core areas, resulting in relatively high percent males ≥5 years old and low percent females in the harvest. Because population turnover is low, there is little vacant habitat and young black bears, especially males, are forced to disperse into surrounding less secure habitats where harvest rates are often high. These young dispersing males will dominate the harvest statistics in the surrounding areas. Age criteria for the DAU may be violated in these areas, even though the core or reservoir population is secure and will continue to supply a surplus of dispersing black bears. Current harvest criteria may not apply in these situations. The key is to ensure that the

harvest remains focused on the dispersing black bears and does not compromise the reservoir population. In such cases, management direction will be based on the Department's discretion and interpretation of a variety of factors including perceived black bear population status, social considerations, and other factors (i.e., weather patterns, changing road access, etc).

In some DAUs, black bear harvest is consistently low, resulting in small samples from which to monitor harvest parameters. This may lead to inaccurate conclusions. Hence, harvest criteria will be applied only to DAUs in which average annual harvest is at least 30 black bears. When harvest is <30 black bears, the criteria do not apply, and management decisions will be based on professional judgment.

SEASON FRAMEWORK

A variety of factors may influence black bear seasons locally. Increasing urbanization in black bear habitat, habitat characteristics, predation on deer and/or elk, and road densities are factors that will be considered on a local basis in the season setting process.

Black bear seasons will be structured to meet the management goals and objectives for each specific DAU. The Department recognizes that too much variation among DAUs in season length and timing, or in allowable methods of take, can create confusing, complex rules. It is the intent of the Department to minimize this complexity by standardizing seasons statewide in a manner consistent with the goals and objectives of the various DAUs.

BLACK BEAR - HUMAN CONFLICTS

The Department recognizes that black bears will occasionally damage private property, prey on domestic livestock, and jeopardize public safety. The improper storage of human foods and garbage is often the primary factor leading to bear-human conflicts. Other factors include inadequate supplies of natural foods, injuries, and, in the case of sub-adult bears, inexperience in locating natural foods. Human encroachment into black bear habitat is a major cause of many depredation problems. The Department has the responsibility for controlling black bears in nuisance and human safety situations. The U.S. Department of Agriculture's Wildlife Services program (Wildlife Services) may handle these complaints at the request of the Department, if mutually agreed upon by both parties. Wildlife Services has the responsibility for handling black bears involved in livestock depredation problems, including apiaries. The Department may handle these complaints at the request of Wildlife Services, if mutually agreed upon by both parties. Guidelines for handling bear-human conflicts can be found in Appendix I.

BLACK BEAR - DEER\ELK RELATIONSHIPS

Extensive studies of black bear food habits throughout their range clearly show that vertebrates (primarily deer and elk) make up a very small part of the bear's yearly diet (<2%). Black bears rarely prey on adult deer or elk. However, black bears do prey on deer and elk neonates (fawns and calves) in some localities where favorable conditions exist for taking these animals.

The *fact* of predation (black bears do kill and consume deer fawns and elk calves) has never been disputed in discussions about black bear predation on other big game species. The major area of debate has involved the ***effect*** of that predation on populations of deer and elk.

Predator-prey interactions are extremely complex and involve many factors such as weather conditions, status of the prey population, availability of alternate prey, presence and density of other predators, and habitat conditions. As a result, it is difficult to determine what the effect of predation may be in any specific situation. In situations where the prey population is at or near the carrying capacity of its habitat, predation on deer or elk neonates probably has very little effect on prey population size or growth rate, and efforts to regulate predator numbers will not result in a larger prey base. However, when adverse weather or habitat deterioration results in a prey population decline, predation may increase the rate of decline and even result in a lower population level than would occur in the absence of predation. If issues of scale, logistics, and economics allow, reducing predator numbers in this situation may decrease the rate of decline and provide some benefit to the prey population.

The Wildlife Manager must evaluate all of these factors and the prevailing social environment before determining a course of action that serves the best interests of both the predator and its prey.

CONFLICTS WITH GRIZZLY BEARS

The U.S. Fish and Wildlife Service classified the grizzly bear as a "threatened" species in 1975. The Department currently restricts use of dogs and bait to hunt black bears in grizzly bear recovery areas (Units 1, 62, 62A, and part of 61). This approach, in conjunction with intensive public relations work and selected road closures, seems to be effectively reducing grizzly bear mortality. This strategy will be continued and its effectiveness monitored. Additional steps that could be taken if deemed necessary include:

1. Separating black bear season from general big game seasons in grizzly bear recovery areas.
2. Require hunters hunting in grizzly bear recovery areas to view a bear identification video.
3. Implementing controlled black bear hunts in grizzly bear recovery areas to limit the number of black bear hunters.
4. Changing or eliminating black bear seasons to reduce grizzly bear mortalities in grizzly bear recovery areas.

At this point in time, we do not recommend incorporating these steps in our black bear management program because the current approach seems to be effective. If the current program proves inadequate, we will consider the actions listed above. Additionally, controlled hunts similar to the one implemented in DAU 1A will be considered in seasonally unoccupied areas currently designated as grizzly bear recovery areas.

HOUND HUNTING

Approximately 1,100 hunters in Idaho practice hound hunting and they harvested about 16% of the bears taken during 1993-1997.

Hound hunting permits will be required for every member of a hound hunting party during take seasons. This permit requirement applies to residents and non-residents, but does not apply to the clients of licensed outfitters or up to 4 immediate family members of a permit holder. Immediate family is defined exclusively as the parents, spouse, children, and grandchildren of the hound hunting permit holder.
A quota on non-resident hound hunters will be maintained during this planning period for the black bear take season. In those areas where the Department's management objective is to increase the harvest, the Department may consider liberalizing or removing the quota. The Department will also consider removing the quota during the dog-training season. The Department will continue to prohibit hound hunting in designated grizzly bear recovery areas.

HABITAT MANAGEMENT

Because black bears are an important wildlife resource, the Department desires to elevate their profile among wildlife biologists, land managers, and the public. Bears and their habitat will play a more significant role in land management decisions, and good black bear habitats will be managed as such. Biologists will use specific knowledge of black bear habitats to develop interim guidelines and will provide technical support to public land management agencies and private corporations to identify and manage important black bear habitats.

The Department recognizes that valuable black bear habitat has been inundated, and associated wildlife populations have been lost, because of hydroelectric projects in Idaho. The Department will seek funding for full compensation for the loss of this habitat and associated wildlife from the Bonneville Power Administration under the Columbia Basin Fish and Wildlife Program, and from Idaho Power Company and other hydropower developers and responsible project operators under other programs.

PUBLIC OPINION SURVEYS

Current information on the public's perception of our black bear management program can be obtained from periodic surveys of public attitudes. The Department will sponsor or conduct surveys, designed by professional social scientists, to gather pertinent information that will enhance the Department's ability to manage black bears.

LAW ENFORCEMENT

During the public review process, the Department documented a strong desire by the public for the aggressive prosecution of all fish and game violators and for stiffer penalties. The Department will continue to encourage the public to use the Citizens Against Poaching (CAP)

program to report violations. We will continue to work with legislators, prosecutors, and judges to achieve significant penalties for those individuals convicted in the courts. The Department will also use undercover (covert) operations to address this problem.

PUBLIC EDUCATION

It is apparent that the public was eager to have more information about black bear biology and wildlife management principles in general. The Department will continue to provide information on the consumptive and non-consumptive values of black bears to the public. In 1994, the Department published a book based on Department-sponsored research on black bear ecology. That book, titled "A Shadow in the Forest - Idaho's Black Bear," is available at local bookstores. The Department also published a teacher's guide in 1995 that provides information on the biology of black bears and activities to help students learn important concepts about ecological factors affecting Idaho black bear populations.

WATCHABLE WILDLIFE

There is some public demand to view black bears in their natural environment. Therefore, the Department will provide opportunity in portions of some Units for viewing black bears. The Department may select areas for non-consumptive use where: 1) area closures on black bear hunting currently exist to protect threatened grizzly bear populations or to accommodate research; 2) road access exists into relatively open habitats where black bears can easily be seen; and, 3) where conflicts with other resource users in the area are minimal.

BAITING

About 1,250 hunters in Idaho used baiting as a method of take, and they were responsible for approximately 18% of the bears harvested during 1993-1997. Over 90% of the harvest by hunters using bait occurred during the spring season.

The Department will continue to allow hunters to use bait in those DAUs where the practice is consistent with the management objectives for that area. However, the Department will continue to prohibit baiting in designated grizzly bear recovery areas. The Department will also consider changes in the baiting rules that will reduce or alleviate conflicts between hunters using baits and campers and hikers, and in areas with nearby summer home developments. IDFG-recommended standards for baiting can be found in Appendix II.

STATEWIDE MANAGEMENT PROGRAM

Idaho is divided into 5 areas for purposes of managing black bear populations (Figure 8). Area 1 includes habitats that vary from dense, semi-coastal forests to patchy forest habitats along dry river breaks. Abundant road access and proximity to human population centers characterize Area 1 GMUs. Area 2 includes habitats similar to Area 1, but not as accessible by road and not as close to major population centers. Area 3 has limited access and much of it is officially designated as Wilderness. Area 4 includes a variety of habitats that are generally dry shrub and grass types with few berry-producing plants. The livestock industry is a major resource user of public lands in Area 4. Area 5 includes most of the irrigated lands in southern Idaho and the drier, desert portions of the state. Habitat quality in Area 5 is marginal for black bear and few black bears occur there. Based on similarities in habitat, road access, and proximity to urban population centers, 3 of the 5 black bear management areas (Area 1, 2, and 4) are divided into smaller groups, DAUs, to facilitate analysis of harvest information (Figure 1). The DAU concept was developed in 1985 to enhance the Department's ability to interpret harvest data and to simplify the rules regulating black bear harvest.

MANAGEMENT ACTIONS

The Department has two basic options available to influence harvest rates: adjusting 1) hunting opportunity (season length and timing), and 2) methods of take. Each approach has advantages and disadvantages and the preferred choice should be dictated by current conditions in the DAU and management objectives. First and foremost, management objectives must address the biological requirements of black bears. Once those are satisfied, harvest regulations are developed that reflects differences in vulnerability, hunting pressure, and road access among areas.

Season length and timing are ineffective approaches for regulating the total harvest of black bears. However, adjusting season length and timing can be an effective means of regulating harvest sex-ratios and in some cases, age structure. The vulnerability of black bears to hunting is influenced by extrinsic (weather, etc.) and intrinsic (seasonal behavior) factors. Adult males are the first bears to leave their winter dens, followed by sub-adult males and single females. Closing spring hunting seasons in early to mid-May focuses most hunting pressure on males and females unaccompanied by cubs or yearlings. It also provides additional protection for female bears accompanied by cubs-of-the-year because they are often the last bears to leave their winter dens. Adult males are the last bears to enter dens in the fall; females generally enter their dens in early to mid-October. As a result, late fall hunting seasons also focus hunting pressure on male black bears.

Regulating the methods of take that are used by hunters can be effective in adjusting total harvest, and potentially the sex and age composition of the harvest. Options available to the manager using this approach include: 1) unrestricted opportunity; 2) taking actions to reduce the efficiency of hunters using bait, hounds, or still hunting methods; and, 3) eliminating the activity as a legal method of take.

The Department will use one or more o(the following management options as needed for regulating black bear harvest.

To increase harvest in a DAU:

- Maximize hunting opportunity.
- Increase bag limit to two black bears per year.
- Increase bag limit to one black bear in spring season and one black bear in fall season.
- Increase/eliminate non-resident hound quota.
- Increase spring season length - maximum allowed 4/1 - 6/30.
- Increase fall season length - maximum allowed 9/1 - 11/15.
- Reduce tag cost.
- Contract with the U.S. Department of Agriculture, Wildlife Services Division to kill black bears in areas where sport hunting is not effective in reaching management goals.

To reduce harvest in a DAU:

- Eliminate baiting as a legal method of take.
- Eliminate hound hunting as a legal method of take.
- Eliminate black bear hunting during D/E seasons.
- Eliminate spring season.
- Eliminate fall season.
- Allow baiting in fall only.
- Allow hound hunting 4/1 - 5/15 and 9/1 - 9/30.
- Close spring season on 5/15.
- Implement controlled hunts.

Harvest management objectives for each of the 21 DAUs is summarized in Table 3.

Table 3. Harvest characteristics and management objectives for 21 DAUs in Idaho based on the percent males ≥5 years old in the harvest.

DAU	CURRENT STATUS	MANAGEMENT OBJECTIVE
1A	Light	Light
1B	Moderate	Heavy
1C	Heavy	Heavy
1D	Heavy	Heavy
1E	Heavy	Heavy
1F	Heavy	Heavy
1G	Light	Moderate
1H	Moderate	Light
1I	Light	Heavy
1J	Light	Moderate
1K	Moderate	Moderate
1L	Moderate	Light
2A	Light	Heavy
2B	Light	Moderate
3A	Light	Moderate
3B	Moderate	Moderate
4A	Heavy	Moderate
4B	Light	Moderate
4C	Light	Moderate
4D	Moderate	Moderate
4E	Light	Moderate

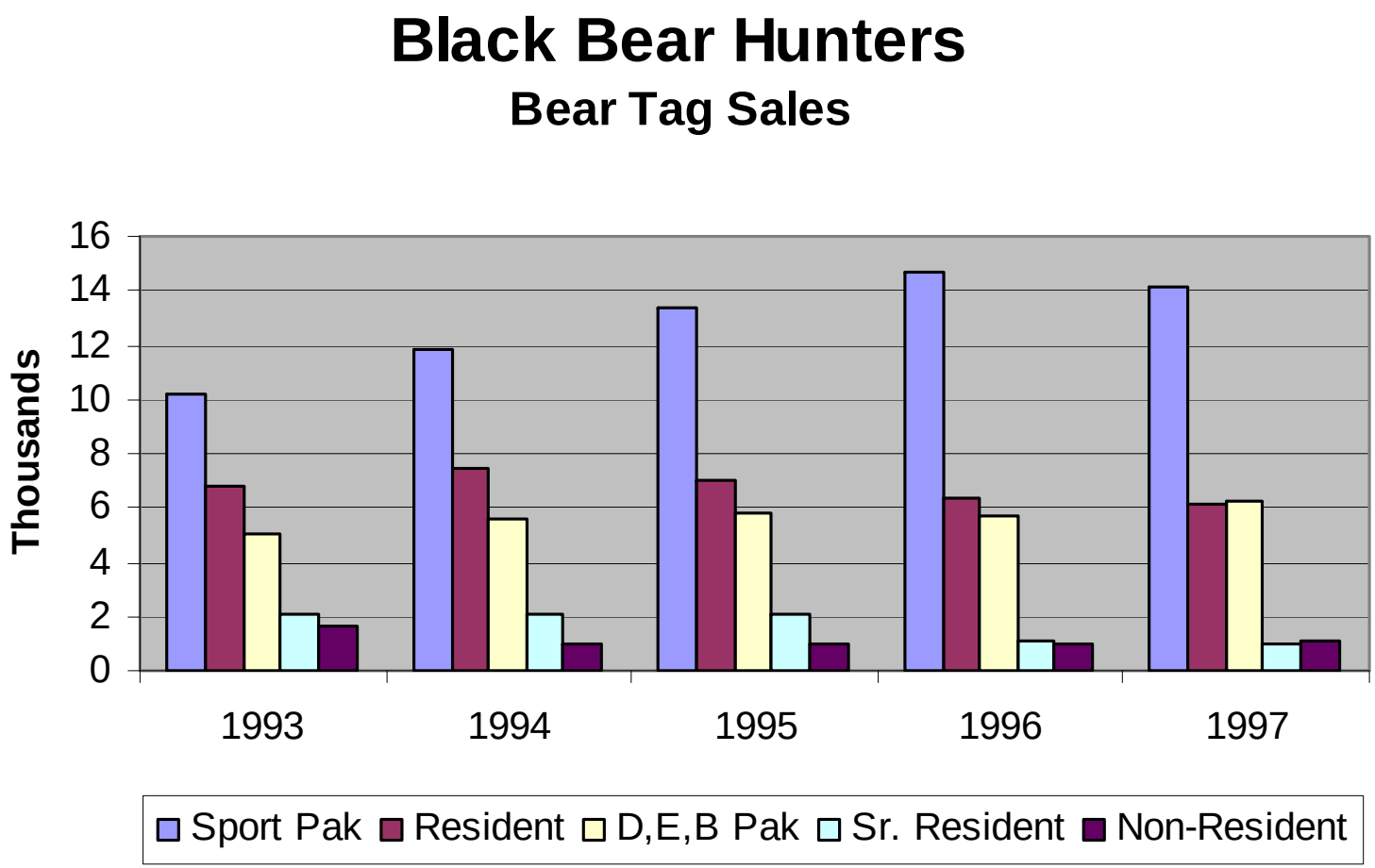


Figure 1. Black bear tag sales in Idaho, 1993-1997.

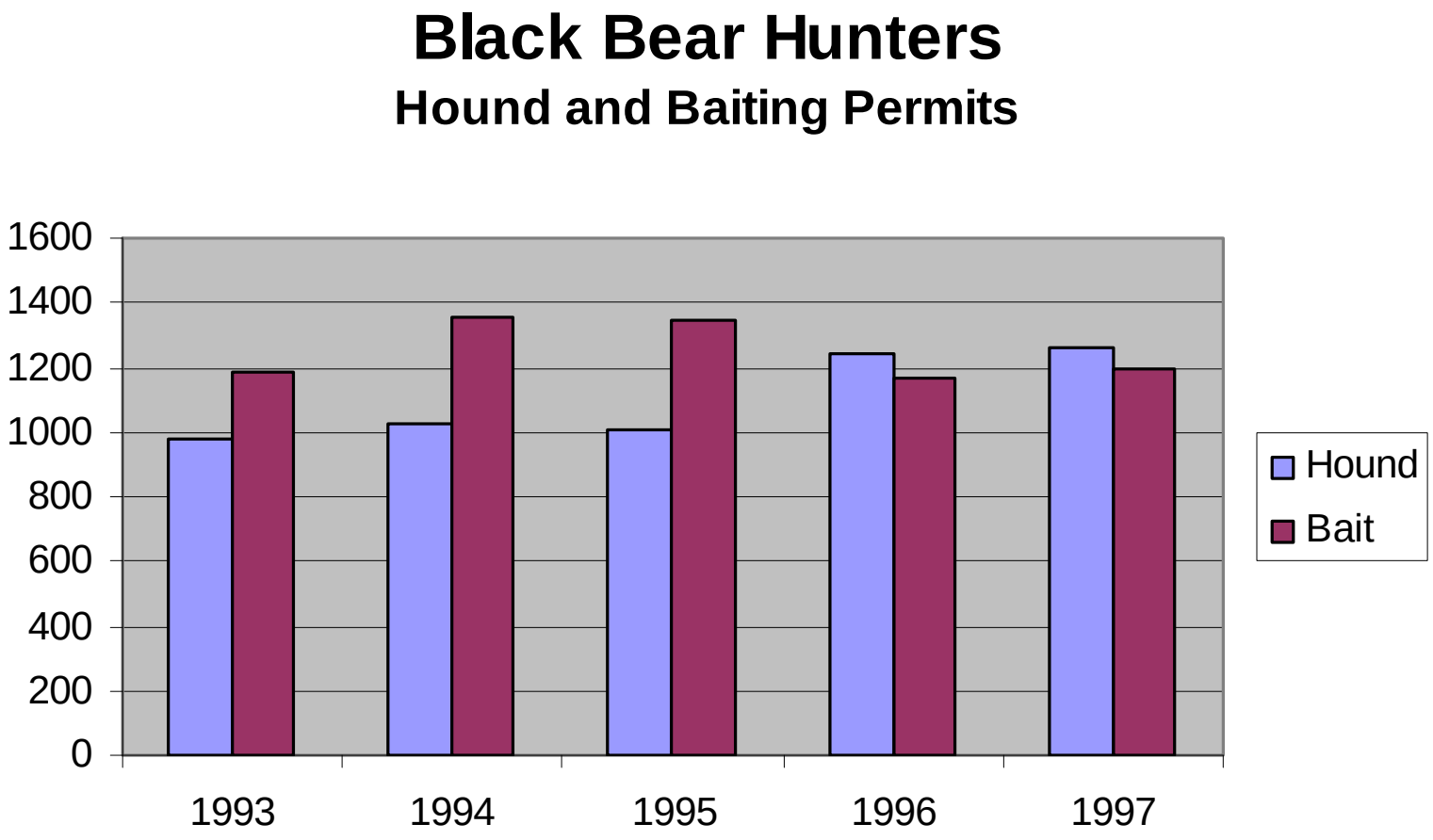


Figure 2. Hound hunter and baiting permits issued in Idaho, 1993-1997.

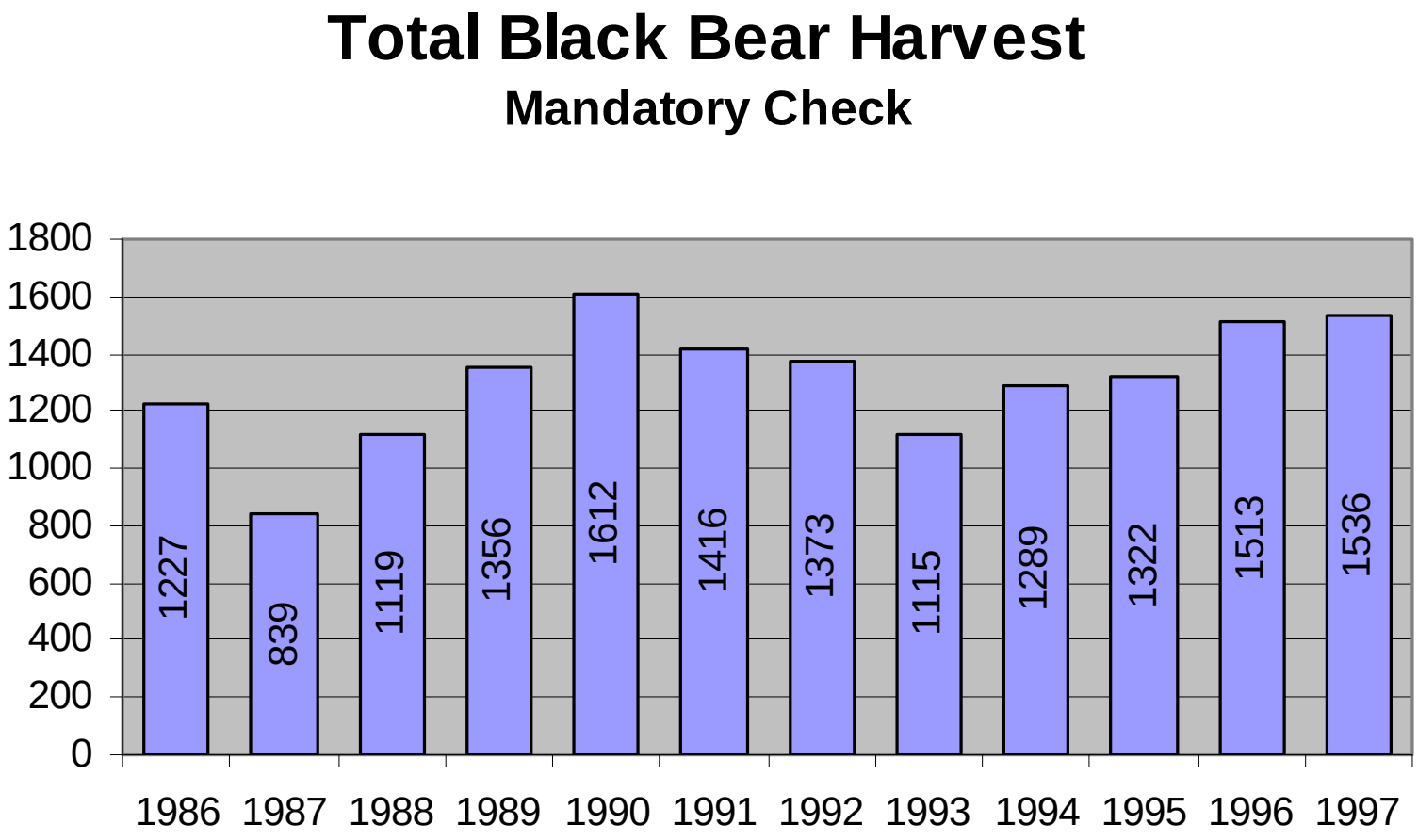


Figure 3. Number of black bears checked by hunters, 1986-1997.

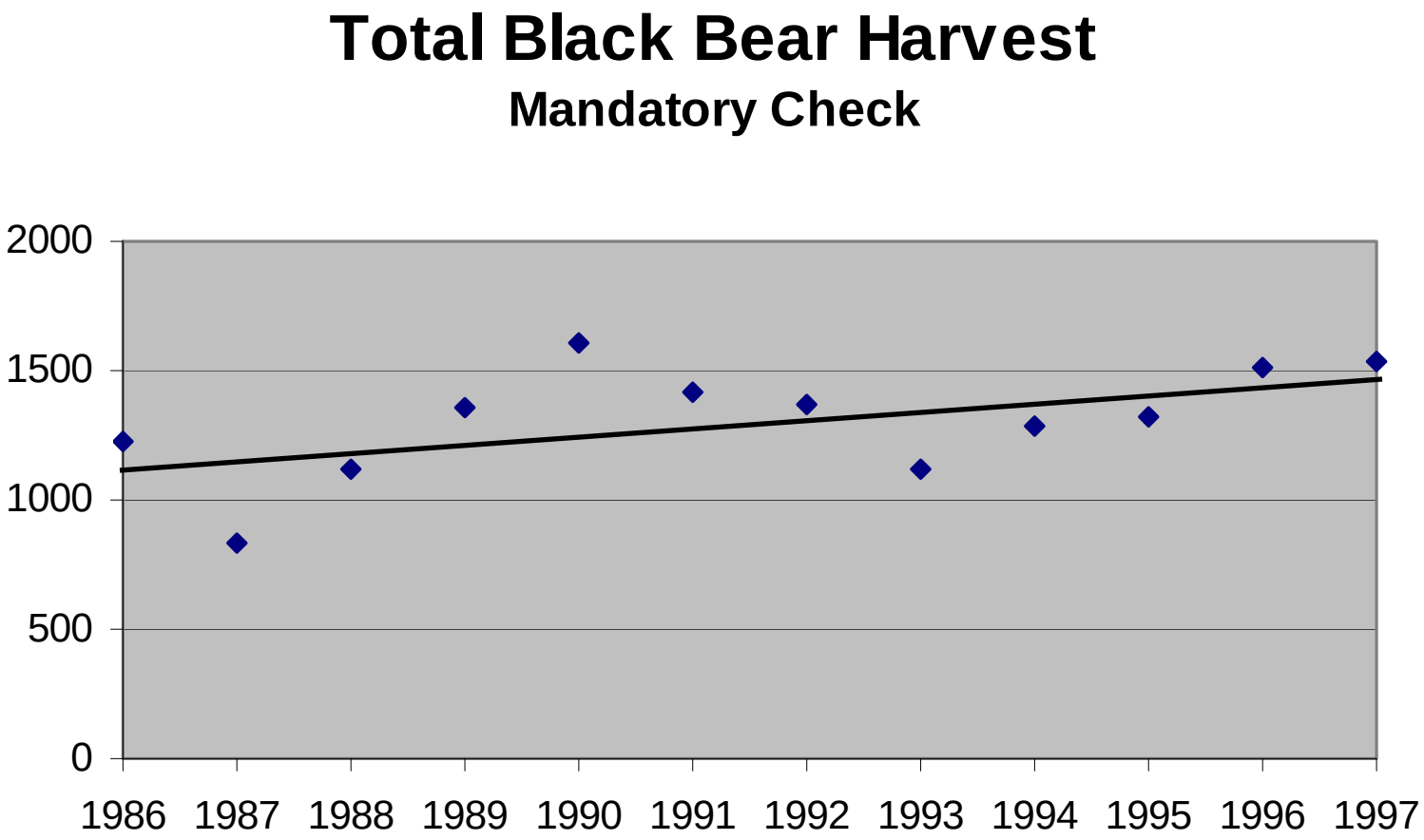
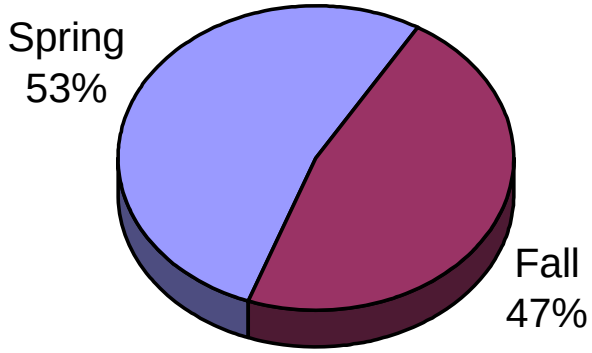
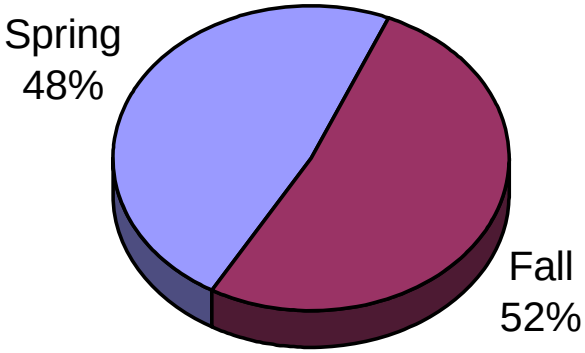


Figure 4. Trend in number of black bears checked by hunters, 1986-1997.

Black Bear Harvest
Season



1986-1992



1993-1997

Figure 5. Comparison of black bear harvest, by season, between the 1986-1992 and 1993-1997 planning periods.

Black Bear Harvest
Sex

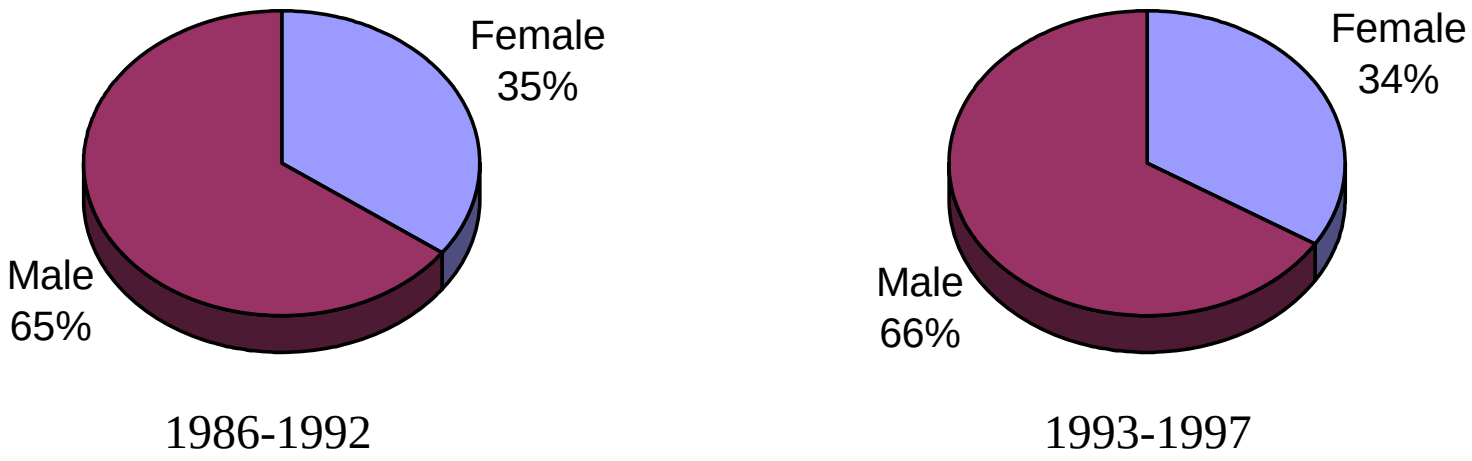
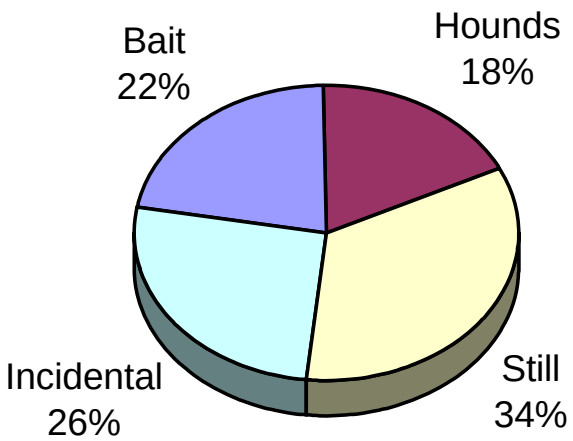
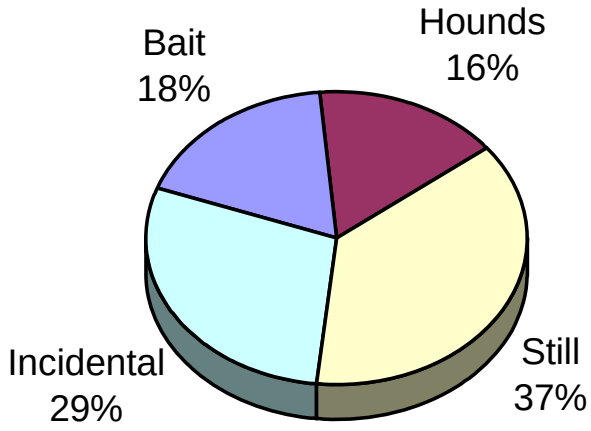


Figure 6. Comparison of black bear harvest, by sex, between the 1986-1992 and 1993-1997 planning periods.

Black Bear Harvest
Method



1986-1992



1993-1997

Figure 7. Comparison of black bear harvest, by method of take, between the 1986-1992 and 1993-1997 planning periods.

DATA ANALYSIS UNITS

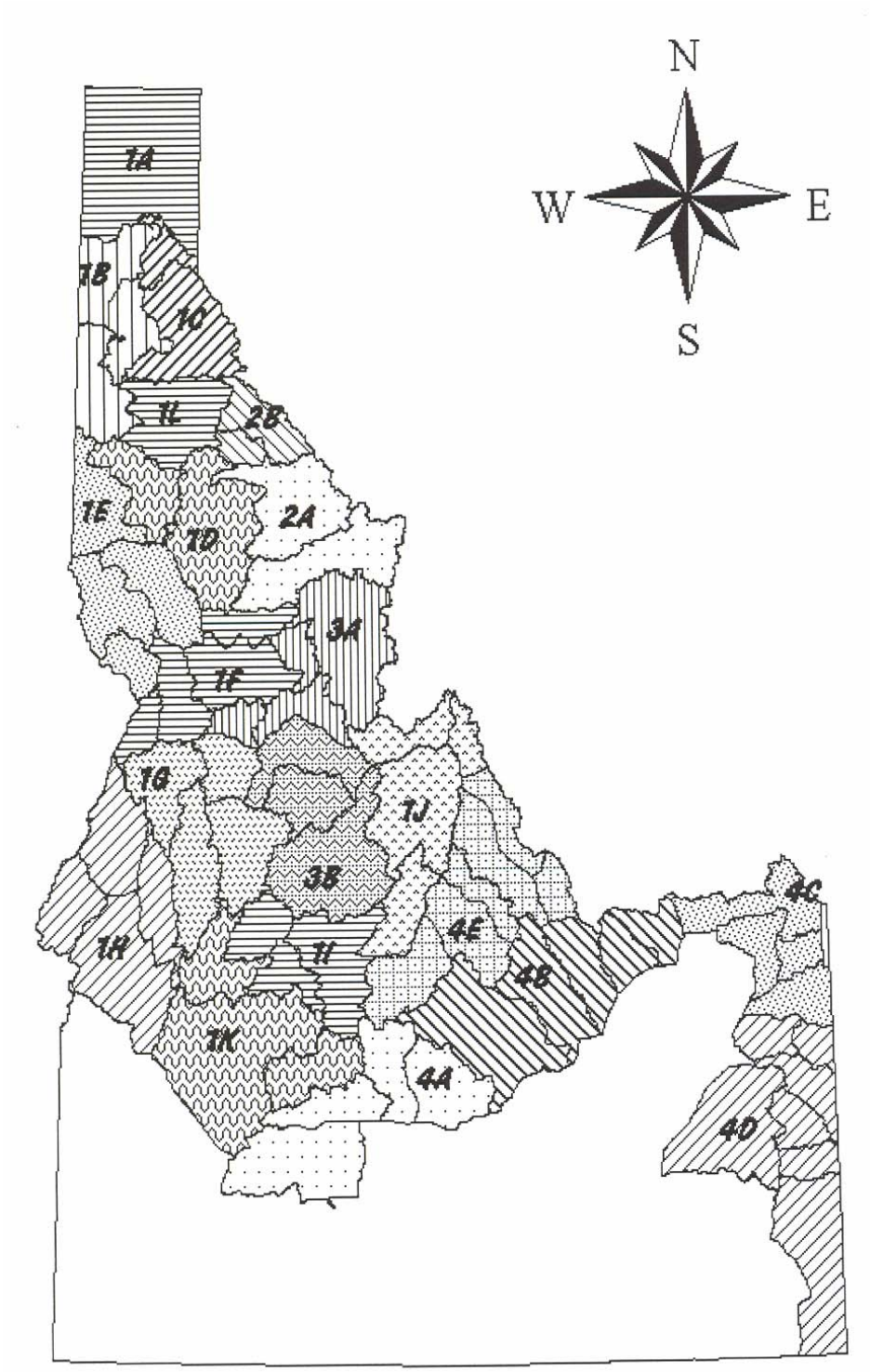


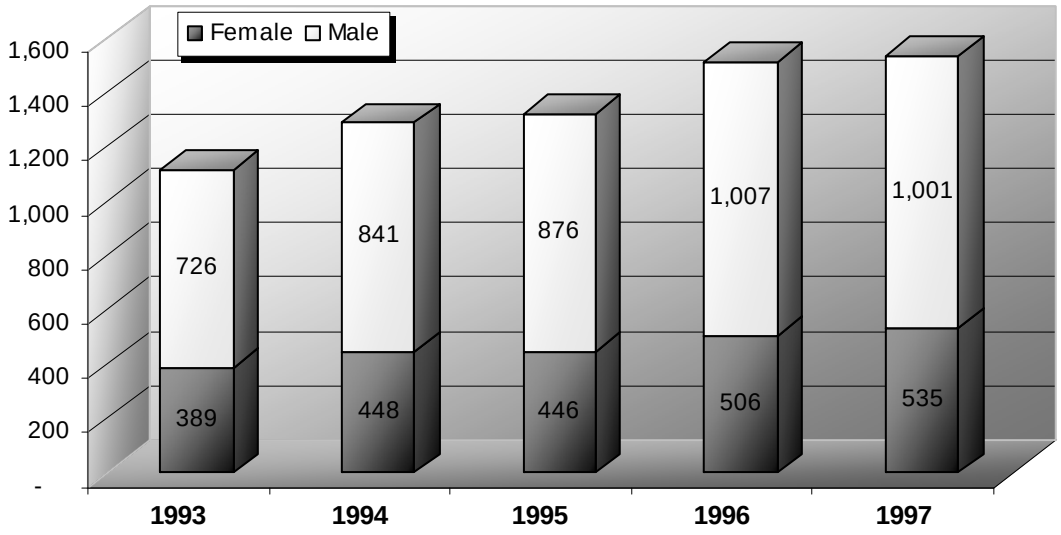
Figure 8. Twenty-one (21) data analysis units (DAUs) for black bear management in Idaho.

ALL DAUs

Harvest Statistics

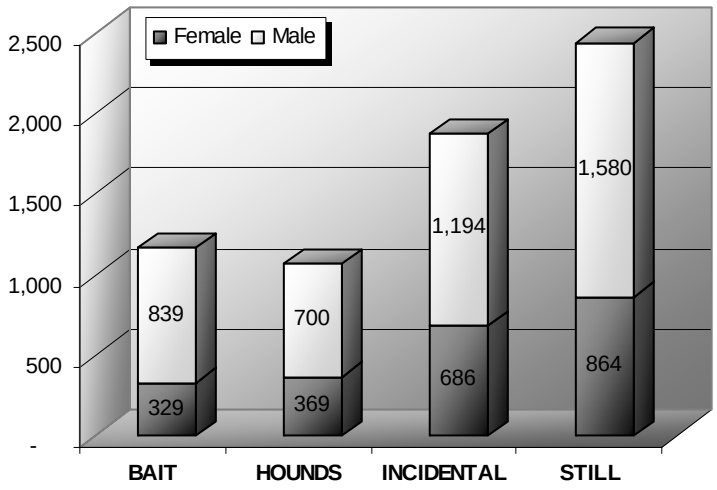
All DAUs	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	1,126	35	39	
1994	1,304	34	34	
1995	1,331	34	34	35%
1996	1,522	33	32	33%
1997	1,552	34	29	32%
Total	**6,835**	**34**	**33**	

TOTAL HARVEST



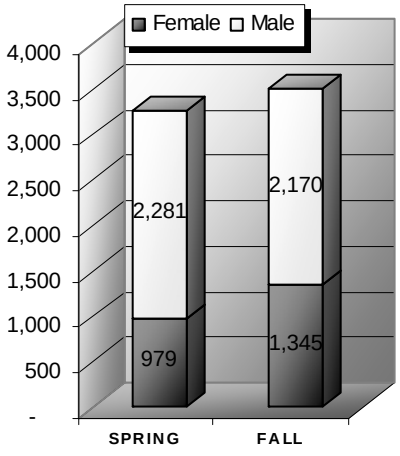
METHOD OF TAKE

1993 - 1997



SEASON

1993 -1997



DAU 1A

Game Management Unit 1

DESCRIPTION

Black bear management is heavily influenced by grizzly bear management needs in this DAU as it includes parts of the Selkirk and Cabinet-Yaak Grizzly Bear Recovery areas. Consequently, this DAU has been closed to use of bait since 1984 and to the use of hounds since 1988. Since 1991, a small controlled hunt allowing use of hounds has been allowed in a portion of DAU 1A outside of these recovery areas. During 1993 the season was shortened from 108 to 80 days and has since been increased to the current 96 days.

In general, this DAU is characterized by dense conifer habitat types. Portions of the Selkirk, Cabinet, and Purcell mountain ranges are included in this DAU, with the broad Kootenai River Valley providing the only substantial agriculture area. Overall, DAU 1A contains some of the highest quality black bear habitat in Idaho.

Total harvest in DAU 1A has averaged 173 bears from 1993 to 1997. Mature males (≥5 years old) make up over 35% of the harvest. Harvest has increased significantly in the past 2 years. However, the percent of mature males and percent of females in the harvest has not changed and indicate a moderately harvested population.

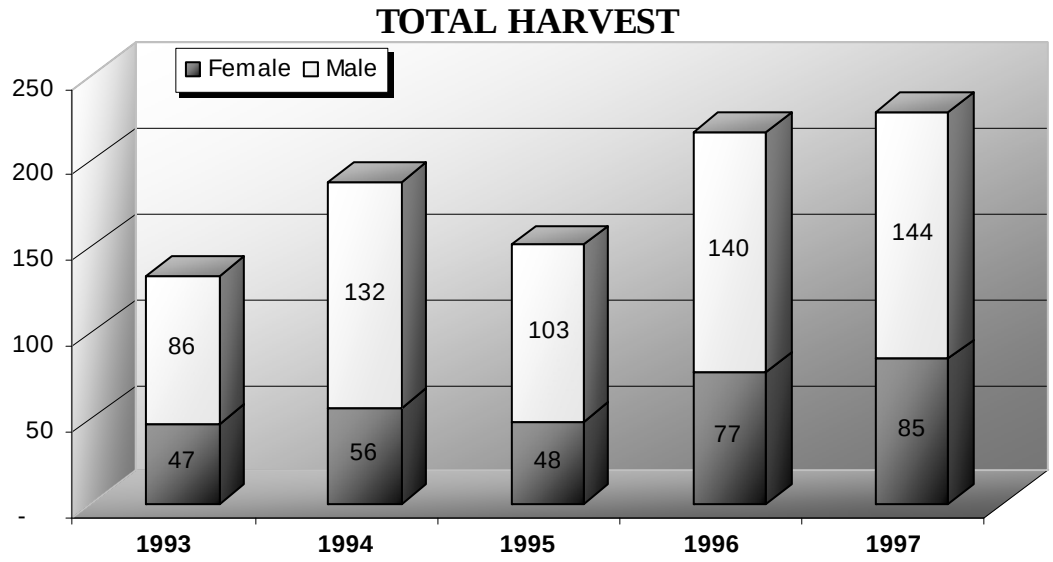
MANAGEMENT OBJECTIVES

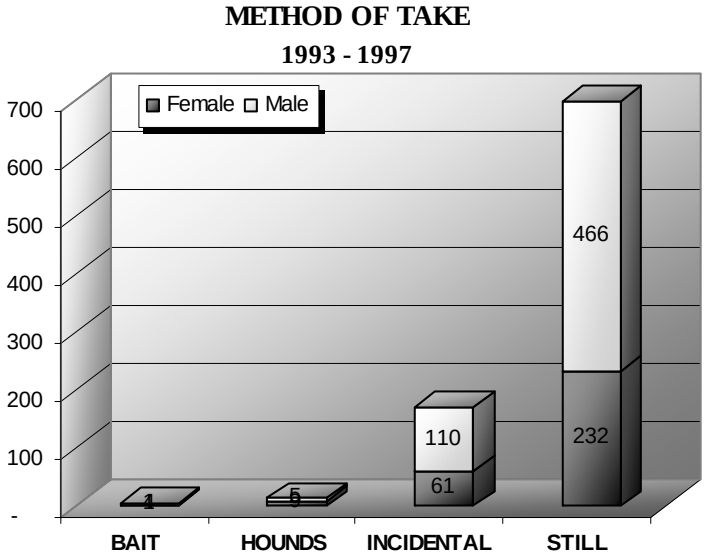
DAU 1A will be managed to maintain the light harvest targets of >35% age 5+ bears in the male harvest and <30% females in the total harvest.

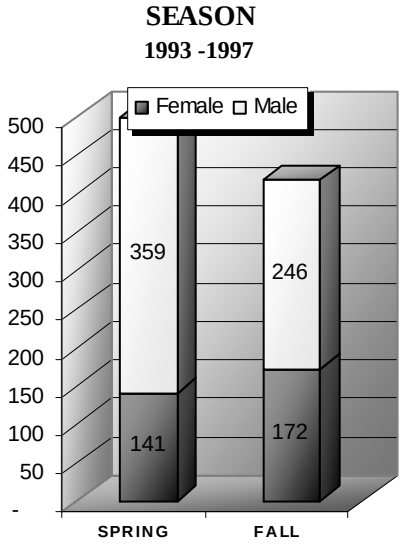
DAU 1A

Harvest Statistics

DAU 1A	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	134	35	46	
1994	190	29	29	
1995	151	32	41	37%
1996	220	35	39	36%
1997	229	37	37	39%
Total	**924**	**34**	**38**	







DAU 1B

Game Management Units
2, 3, and 5

DESCRIPTION

DAU 1B consists largely of developed and highly accessible areas. Mountains in this DAU are not particularly high or rugged. Depredations have been a substantial problem in this DAU, particularly in Unit 2, which consists largely of second-growth coniferous forest under private ownership. Unit 3 is typified by publicly owned coniferous forest with high road densities in close proximity to Coeur d'Alene. Unit 5 is similar to Unit 2 in the northern third, but the remainder consists largely of open agricultural land with stringers of coniferous forest. Much of Unit 5 is within the boundaries of the Coeur d'Alene Indian Reservation.

Use of baiting and hounds is substantial in DAU 1B. Thirty-five percent of the black bears harvested in this DAU are taken with one of these aids. Still hunting and incidental harvest accounted for 32% and 29% of the harvest, respectively.

Harvest in DAU 1B has averaged 83 bears from 1993 to 1997. The lower harvest associated with new season restrictions that began in 1993 has since returned to previous highs. Harvest increased significantly in 1996 and 1997, but the percent of mature males and mature females in the harvest has remained constant. Harvest statistics indicate a moderate to highly harvested population.

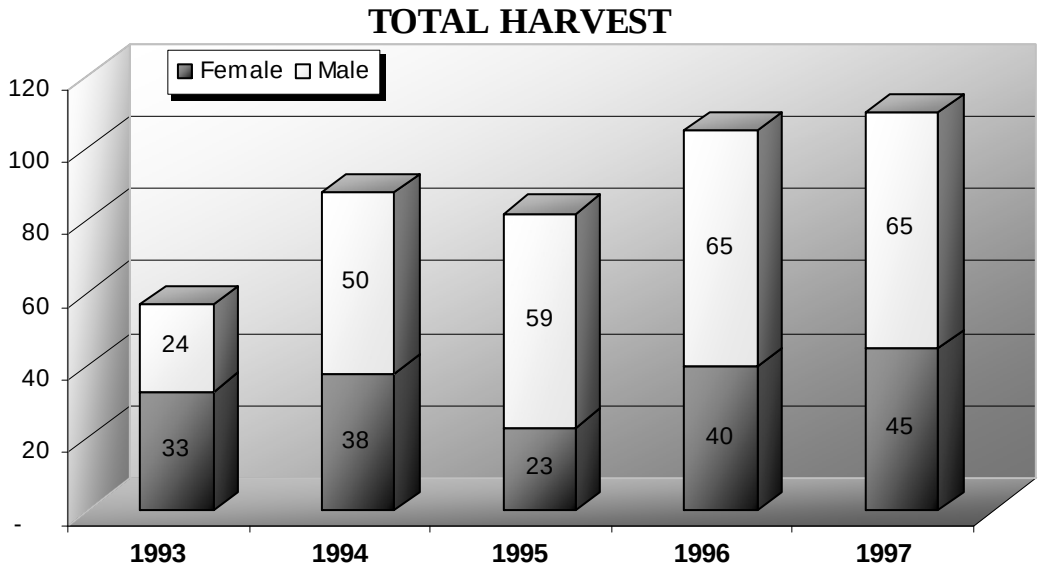
MANAGEMENT OBJECTIVES

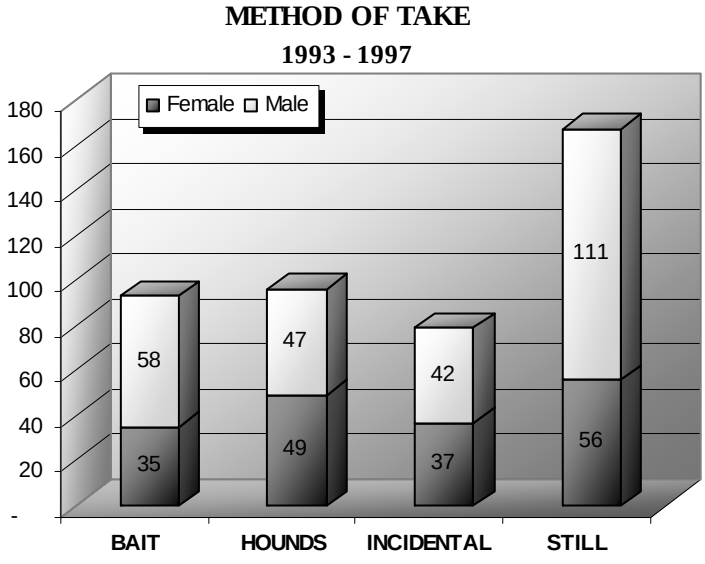
To address depredation concerns, DAU 1B will be managed to maintain the heavy harvest targets of <25% age 5+ bears in the male harvest and >40% females in the total harvest.

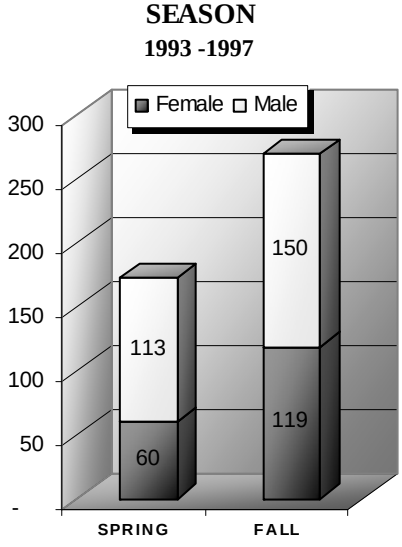
DAU 1B

Harvest Statistics

DAU 1B	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	57	58	25	
1994	88	43	29	
1995	85	27	25	27%
1996	107	37	25	26%
1997	112	40	24	25%
Total	**449**	**40**	**26**	







DAU 1C

Game Management Units
4 and 4A

DESCRIPTION

DAU 1C consists mainly of US Forest Service property and a belt of private property in Silver Valley. Much of this DAU has been burned by wildfires since the early 1900s. It is a popular hunting area for Coeur d'Alene and Silver Valley big game hunters. Road densities are moderate to very high.

This DAU has traditionally supported a substantial harvest for hunters using hounds. This type of use declined abruptly during 1992, concurrent with an increase in other categories. Only 11% of the black bears harvested in this DAU are now taken with the aid of hounds and/or bait. Still hunting and incidental kills made up 54% and 42% of the 1997 harvest, respectively.

Total harvest in DAU 1C has averaged 75 bears from 1993 to 1997. Mature males (≥5 years old) have shown a decline over the past 5 years and in 1997 the 3-year average was 20%. Mature females also have shown declines. Harvest has increased moderately in the past two years. Harvest statistics indicate a moderate to heavily hunted population.

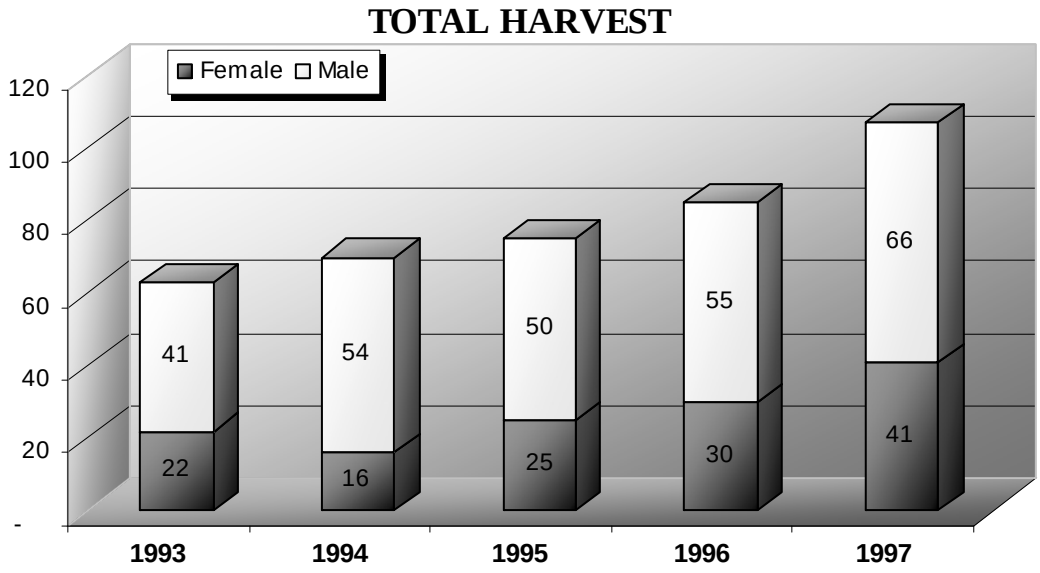
MANAGEMENT OBJECTIVES

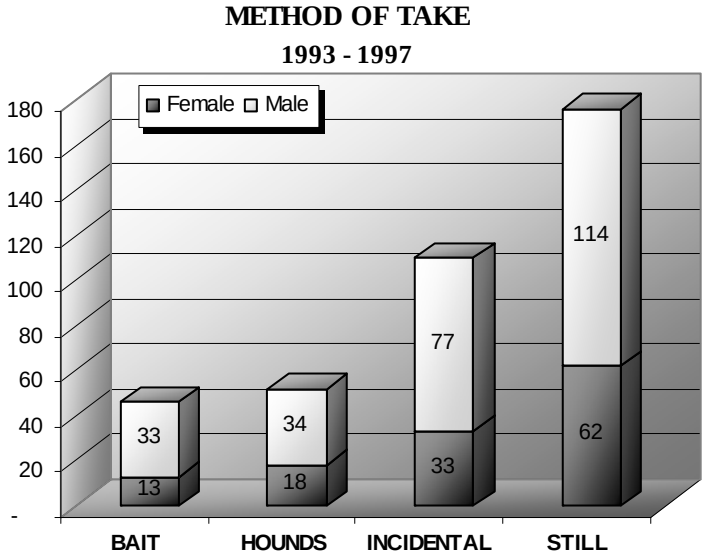
To test the validity of the bear harvest indicators, DAU 1C will be managed to maintain the heavy harvest targets of <25% age 5+ bears in the male harvest and >40% females in the total harvest.

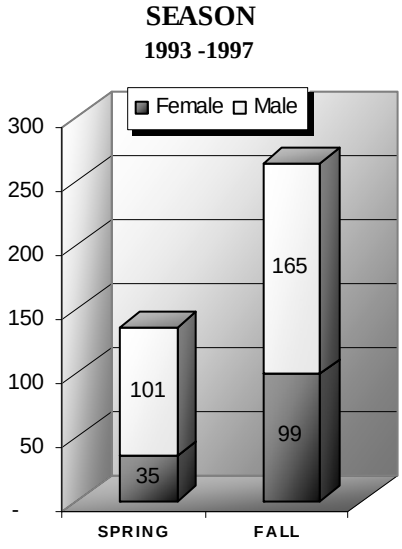
DAU 1C

Harvest Statistics

DAU 1C	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	63	35	42	
1994	70	23	35	
1995	75	33	33	36%
1996	86	35	11	26%
1997	108	38	16	20%
Total	**402**	**33**	**26**	







DAU 1D

Game Management Units
8A and 10A

DESCRIPTION

The first wave of timber harvest in this DAU occurred during the early 1900s and consisted mostly of removing the most commercially valuable timber species and largest trees. During the 1970s, timber harvest increased fairly dramatically, and new roads provided access to previously inaccessible areas. In 1971, Dworshak Reservoir flooded approximately 45 miles of North Fork Clearwater River corridor with slack water, permanently removing thousands of acres of prime low elevation winter range for big game and spring range for bears.

DAU 1D is three-quarters timberland and one-fourth open or agricultural lands and is bisected by canyons leading to the Clearwater River. The timberland is owned predominantly by Potlatch Corporation, IDL, and the USFS. Access is very good throughout the DAU and timber harvest occurs on most available timber ground. High open and closed road densities contribute to high vulnerability for big game species. During the 1980s and 1990s, timber harvest occurred on almost all available state and private land as demand and management of these lands intensified. Despite the reservoir, extensive logging along the river corridor improved winter range in this unit. South aspect forests were cleared to provide timber products and inadvertently provided quality berry brush fields and spring range for bears. The warm and moist maritime climate contributes to rapid plant growth and decay, providing optimal habitat conditions for bears.

Bears occasionally cause damage to fruit trees and apiaries throughout the agricultural lands of this DAU.

MANAGEMENT OBJECTIVES

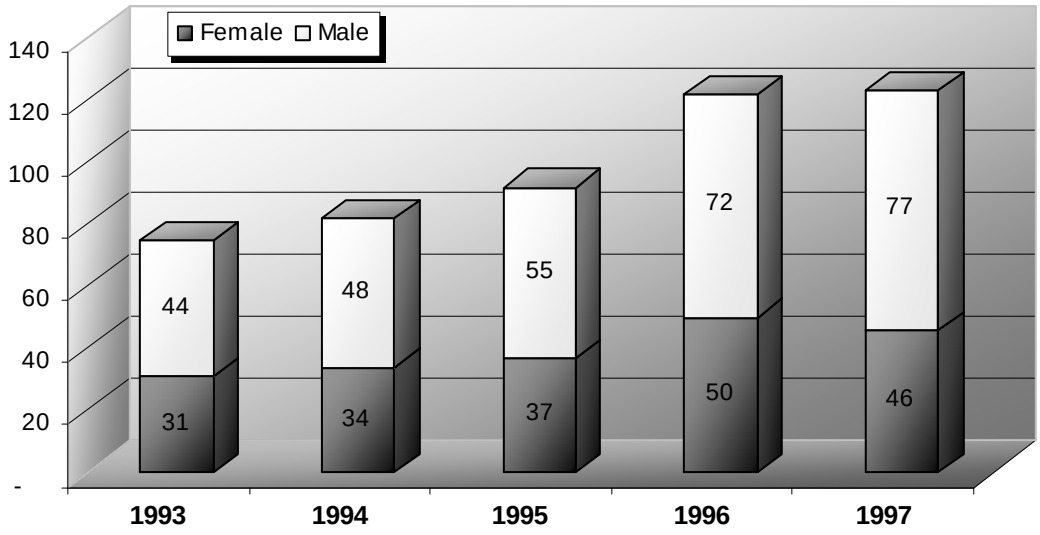
DAU 1D will be managed to maintain the heavy harvest targets of <25% age 5+ bears in the male harvest and >40% females in the total harvest.

DAU 1D

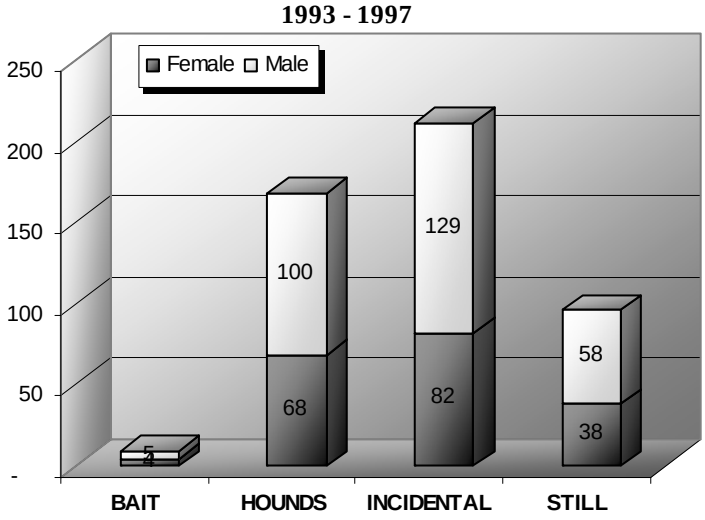
Harvest Statistics

DAU 1D	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	77	40	22	
1994	82	41	21	
1995	92	40	24	22%
1996	122	41	24	23%
1997	124	37	15	20%
Total	**497**	**40**	**21**	

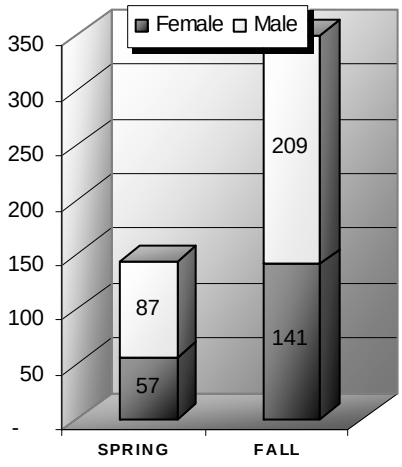
TOTAL HARVEST



METHOD OF TAKE
1993 - 1997



SEASON
1993 -1997



DAU 1E

Game Management Units
8, 11, 11A, and 13

DESCRIPTION

This DAU contains portions of the highly productive Palouse and Camas prairies, as well as the canyon lands along the Snake and Salmon rivers. Currently, virtually all non-forested land in Units 8 and 11A is either tilled or grazed, and only small, isolated patches of perennial vegetation remain. Cattle grazing occurs on almost all of the available timber ground.

This DAU contains mostly private and some publicly owned land. Unit 11 is mostly private land except for the Craig Mountain Wildlife Management Area (CMWMA) along the Snake and Salmon rivers. Unit 13 has been mostly under private ownership since settlement, and is managed mostly for agriculture and livestock.

Habitat productivity varies widely throughout the DAU with steep, dry, river canyon grasslands having low annual precipitation, to higher elevation forests having good habitat productivity and greater precipitation. Late successional forest cover types have become fragmented within the DAU. Various berry species occur in canyon draws and hillsides providing a diversity of fall foods for bears. Road density is moderate, and access is restricted in many areas.

Bears occasionally cause damage to fruit trees and apiaries located near canyon draws and forest stringers.

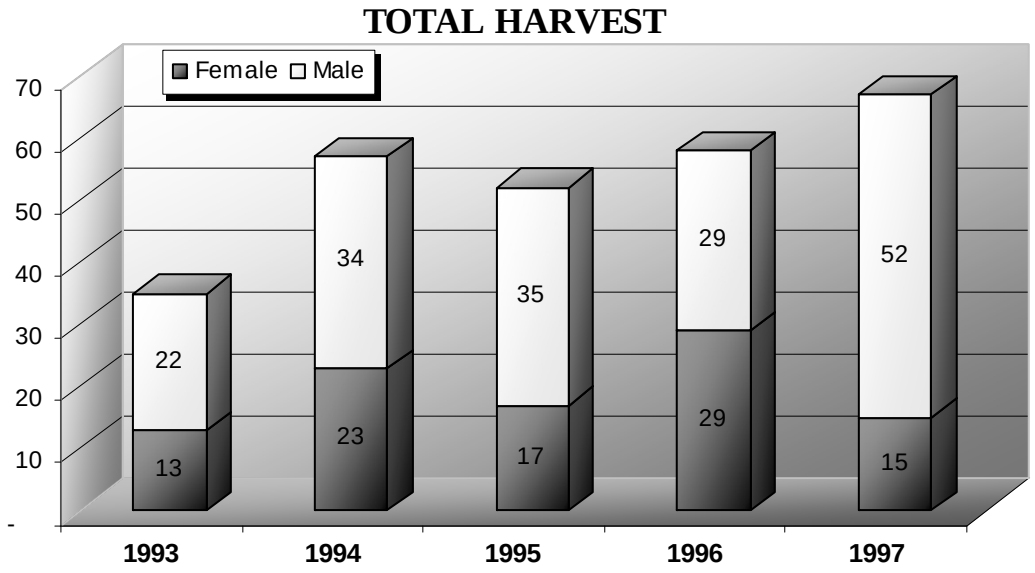
MANAGEMENT OBJECTIVES

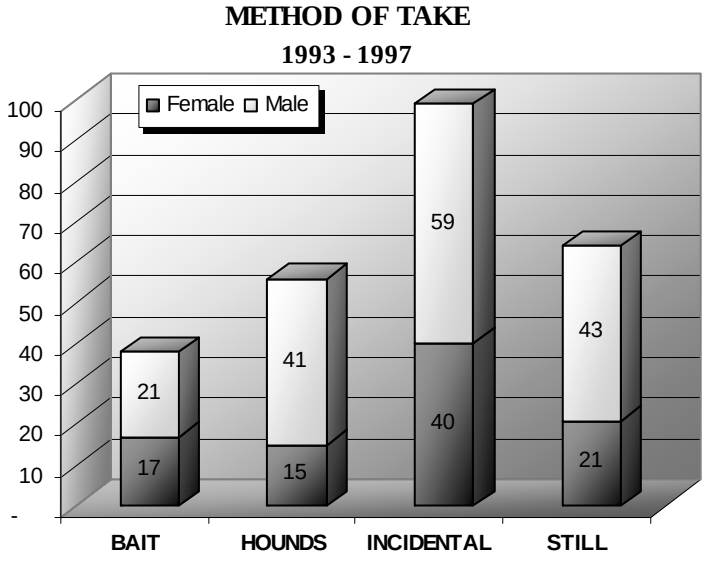
DAU 1E will be managed to maintain the heavy harvest targets of <25% age 5+ bears in the male harvest and >40% females in the total harvest.

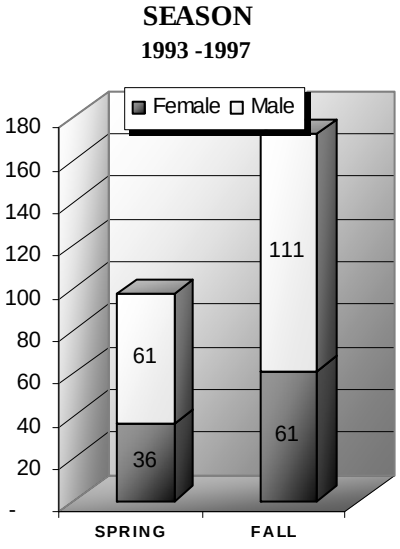
DAU 1E

Harvest Statistics

DAU 1E	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	36	36	26	
1994	59	39	24	
1995	52	33	27	26%
1996	59	49	17	23%
1997	68	22	20	21%
Total	**274**	**35**	**22**	







DAU 1F

Game Management Units
14, 15, 16 and 18

DESCRIPTION

The prairie regions of this DAU were converted to agriculture & ranching by early settlers. In 1862, gold was discovered near the current location of Elk City in Unit 15. After the readily available gold was depleted, miners turned to dredging activities where rivers ran through meadows. Crooked, American, and Red rivers were channelized and rerouted several times during the extraction processes, which continued commercially until the 1950s. Logging began with mining activities to supply wood for the mines, but in the 1940s, logging activities became commercial and resulted in an extensive network of roads throughout a large portion of this DAU. In 1964, with the passage of the Wilderness Act, a small portion of Unit 16 was designated as a part of the Selway-Bitterroot Wilderness. In 1978, portions of Units 14 and 15 were included in the Gospel Hump Wilderness. Unit 18 is two-thirds public land with the remaining private land located at lower elevations along the Salmon River. The majority of the Hells Canyon Recreation Area and Wilderness, which was designated in 1975, is in Unit 18.

Land ownership in this DAU is approximately 80% publicly owned with the remaining 20% private. The privately owned portions are at lower elevations along the Clearwater and Salmon rivers. Approximately 10% of this DAU is Wilderness. Habitat productivity for bears is moderate in comparison to most other Clearwater Region big game units. The majority of this DAU is characterized by productive conifer forests with intermixed grasslands. Many forested areas have become overgrown with lodgepole pine and fir due to fire suppression during the past 40 years. Both open and closed road density is high within the DAU contributing to significant big game vulnerability during hunting season.

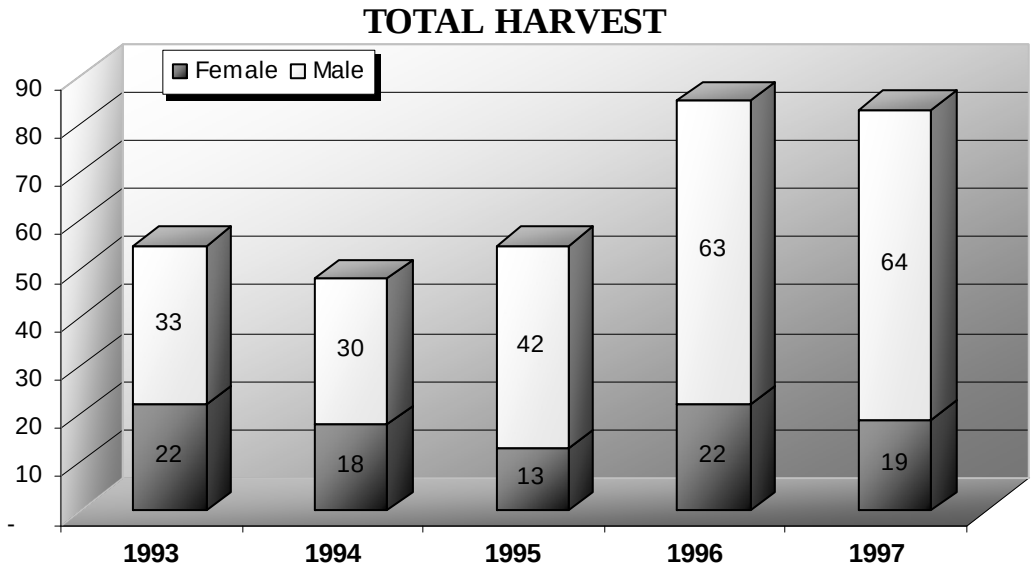
MANAGEMENT OBJECTIVES

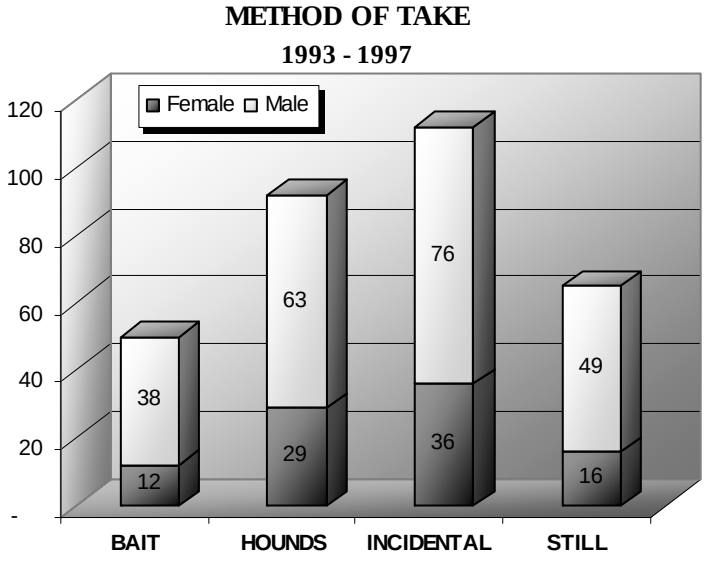
DAU 1F will be managed to maintain the heavy harvest targets of <25% age 5+ bears in the male harvest and >40% females in the total harvest.

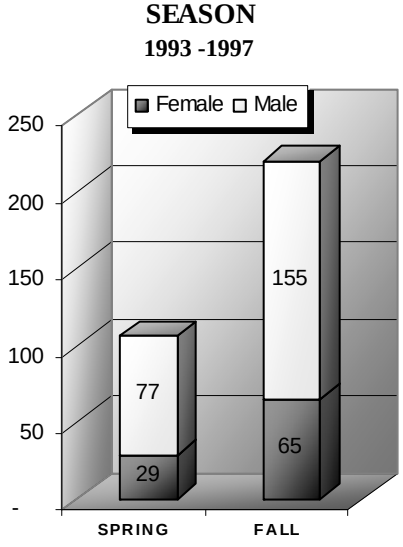
DAU 1F

Harvest Statistics

DAU 1F	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	55	40	22	
1994	48	38	32	
1995	55	24	21	24%
1996	85	26	17	22%
1997	84	23	29	23%
Total	**327**	**29**	**24**	







DAU 1G

Game Management Units
19A, 23, 24, and 25

DESCRIPTION

Extra bear tags and liberal seasons were common in this DAU until the mid-1980s. More restrictive seasons and a one bear limit were implemented with the 1986-90 Black Bear Species Management Plan. Since then, bear harvest has been stable.

Approximately 70% of DAU 1G is in public ownership. Most land is managed by the USFS. Open, scattered shrub communities at lower elevations and mixed-conifer forests at mid to upper elevations characterize habitat. The wide valley bottoms of the upper Little Salmon River and North Fork Payette River are dominated by agri-business and housing developments. Bear habitat is considered good in this DAU.

High road densities exist in the western half of the DAU. Few roads (less than .25 mile per square mile) are found in the rest of the DAU. The Rapid River, Patrick Butte, French Creek, and Needles roadless areas occur in this area.

Livestock depredations and bear nuisance complaints are common in DAU 1G. Bear kills by Wildlife Services in response to sheep depredations average about 5 bears a year. Bear nuisance complaints are mostly related to poor garbage disposal practices and have been numerous during years with poor berry crops.

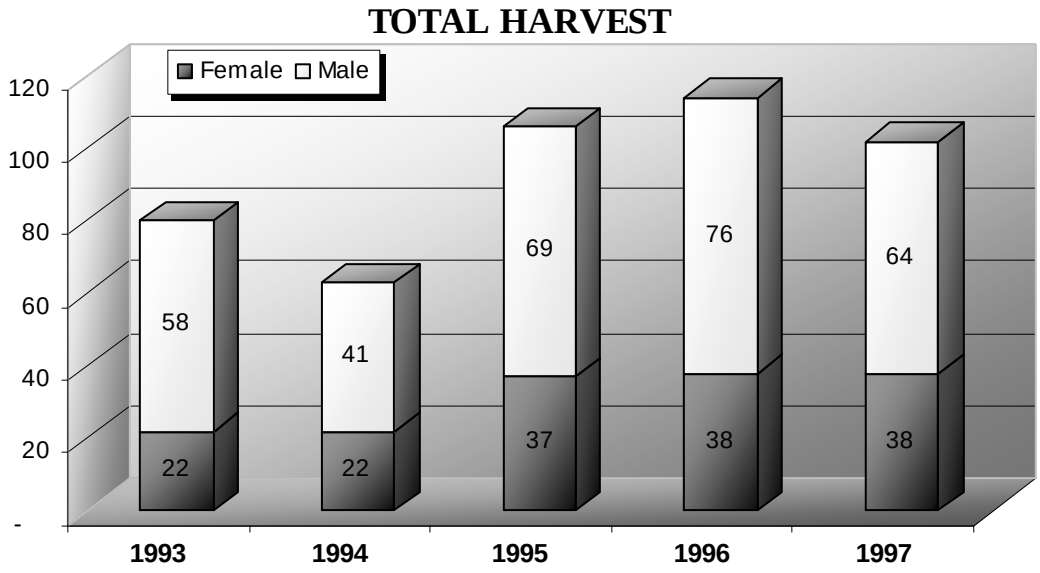
MANAGEMENT OBJECTIVES

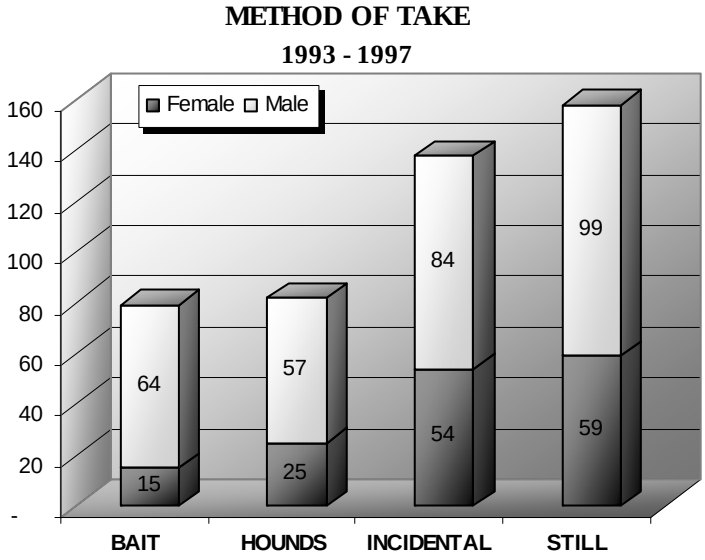
DAU 1G will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

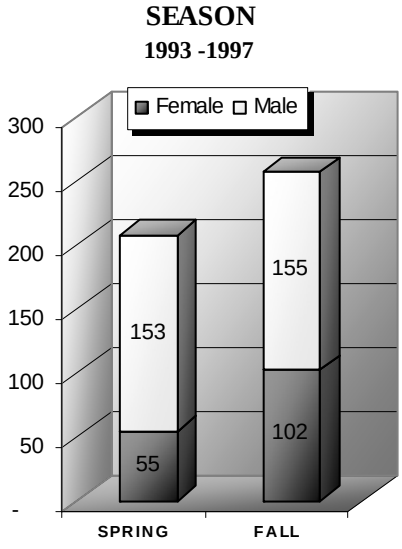
DAU 1G

Harvest Statistics

DAU 1G	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	80	28	40	
1994	66	33	28	
1995	107	35	42	38%
1996	114	33	33	35%
1997	102	37	38	38%
Total	**469**	**33**	**37**	







DAU 1H

Game Management Units
22, 31, 32, and 32A

DESCRIPTION

High vulnerability of bears to hunting in this DAU has been a continual concern to sportsmen. Historically, baiting and hunting bears with the use of hounds have been restricted in DAU 1H. Bear seasons became increasingly more conservative with the implementation of each of the last three black bear species management plans. In 1993, general seasons were eliminated in favor of controlled hunts.

Approximately 60% of DAU 1H is not productive bear habitat, consisting of desert and irrigated agricultural lands. Over 90% of the bear habitat in this DAU is publicly owned and managed by the U.S. Forest Service. Road densities often exceed 3.0 miles per square mile. Bear habitat is characterized by open, scattered shrub communities at lower elevations and mixed-conifer forests and scattered onion beds and shrubfields at mid to upper elevations. Where present, bear habitat is considered excellent in this DAU.

Livestock depredations by bears are rare in this DAU, as cattle occupy most grazing allotments. Depredations on apiaries were infrequent in the past, but have been increasing recently as a result of apiary businesses expanding into bear habitat. Education of apiary owners and installation of electric fences is reducing this concern.

MANAGEMENT OBJECTIVES

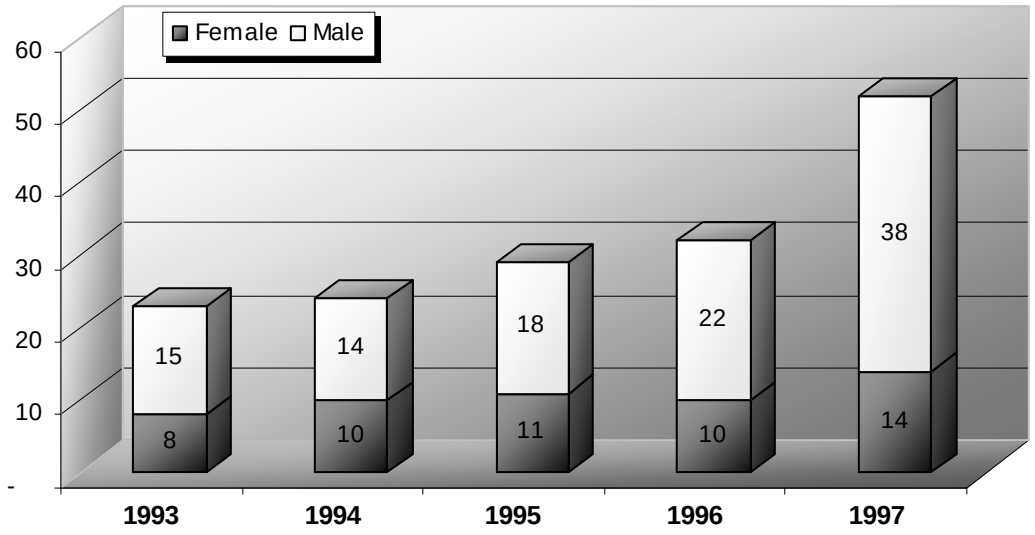
DAU 1H will continue to be managed as a controlled hunt area because of the popularity of this area for bear hunting. Baiting and the use of hounds will continue to be restricted in this DAU. DAU 1H will be managed to maintain the light harvest targets of >35% age 5+ bears in the male harvest and <30% females in the total harvest.

DAU 1H

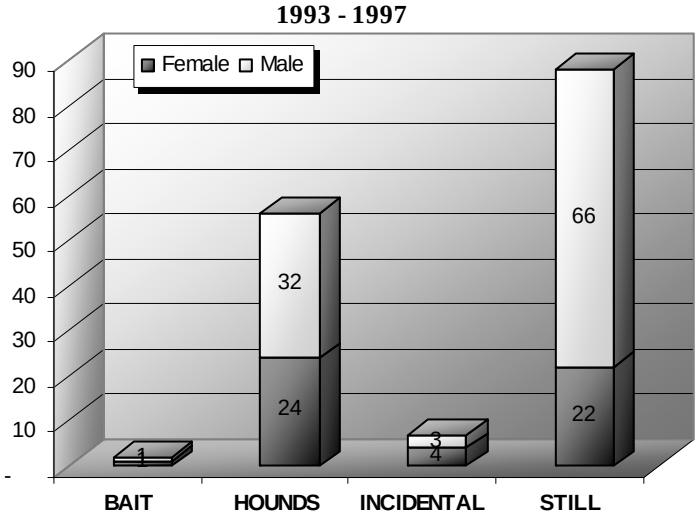
Harvest Statistics

DAU 1H	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	23	35	9	
1994	25	40	31	
1995	30	37	31	24%
1996	32	31	22	27%
1997	53	26	32	29%
Total	**163**	**33**	**27**	

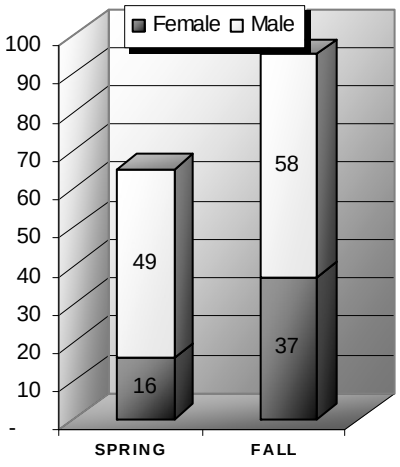
TOTAL HARVEST



METHOD OF TAKE
1993 - 1997



SEASON
1993 -1997



DAU 1I

Game Management Units
34, 35, and 36

DESCRIPTION

These units contain almost continuous, good quality bear habitat; most of which is forested public land. Topography varies from large areas of flat to gently rolling terrain to the extremely rugged and rocky Sawtooth Mountains. Much of the area is lightly roaded or roadless; some is designated Wilderness, and the large Frank Church River of No Return Wilderness is adjacent to the north and east.

Over the past decade, DAU 1I has averaged about 33 bears harvested per year, or about 1.8 bears per 100 square miles. Relatively short spring seasons, limited road access, and distance to major human populations (2-3 hours driving time) have combined to produce a lightly harvested bear population. Age five and older bears consistently comprise over 40% of the male harvest, averaging 53% over the past decade. Similarly, females average 33% of the total harvest.

DAU 1I, particularly Unit 36, attracts considerable human recreational activity through most of the year. During the peak summer and early fall months, bear depredations are an almost constant concern at campgrounds and summer homes. Unit 36 also experiences an occasional bear attack on domestic sheep. Depredation problems multiply during dry summers when range forage cures early and/or when berry production is low.

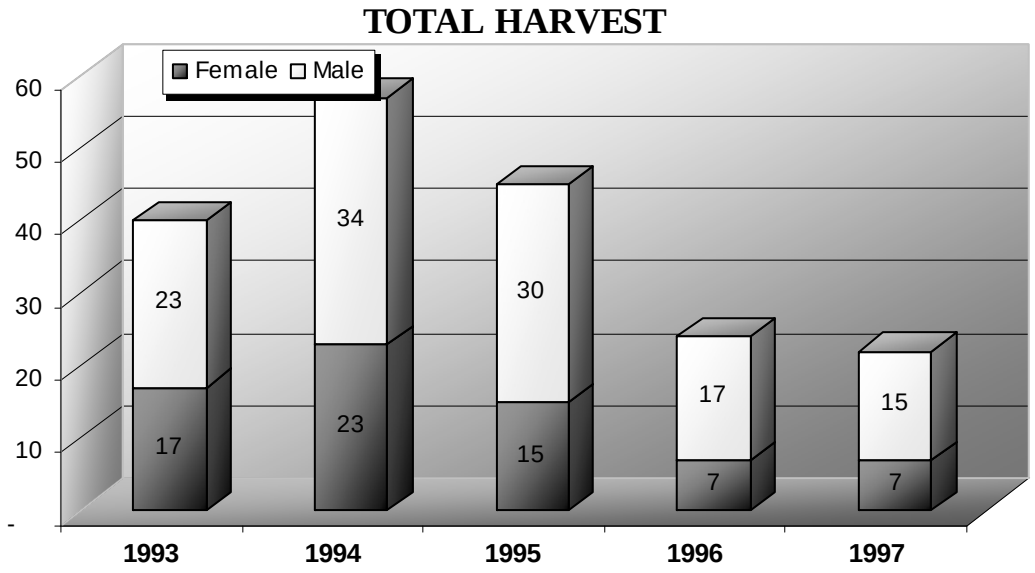
MANAGEMENT OBJECTIVES

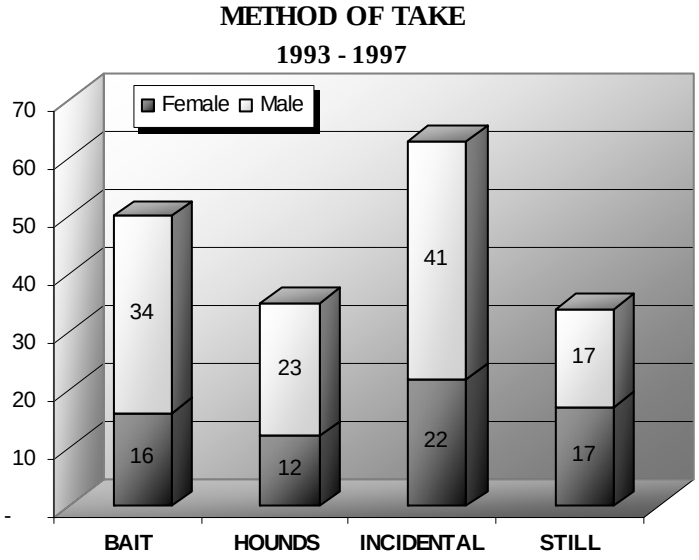
To address depredation concerns and to test the validity of bear harvest rate indicators. DAU 1I will be managed to meet the heavy harvest targets of <25% of the male harvest comprised of age 5+ bears and females comprising >40% of the total harvest.

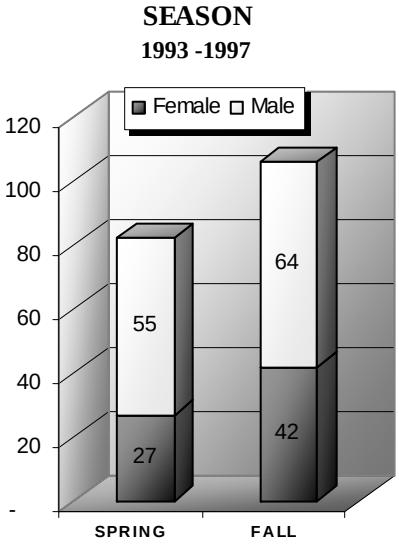
DAU 1I

Harvest Statistics

DAU 1I	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	41	41	62	
1994	57	40	43	
1995	45	33	48	50%
1996	24	29	40	44%
1997	22	32	29	41%
Total	**189**	**37**	**46**	







DAU 1J

Game Management Units
21, 21A, 28, and 36B

DESCRIPTION

The vegetation in DAU 1J varies from dry river breaks and sagebrush grasslands to subalpine, with most of the area in dry to moderately moist coniferous forests. Berry-producing habitats occur as isolated stringers along lower elevation riparian zones; where *Ribes* sp, serviceberry, chokecherry, and elderberry are common; or more generally widespread huckleberry stands at higher elevations in the north end of the DAU. Overall, the topography is steep and rugged, although more gently rolling terrain does exist in some areas. Access is somewhat limited, but varies from unroaded Wilderness to a few logged areas with high road densities. Bear densities are low to moderate, reflecting habitat capacity, and probably could not substantially increase.

Over the past decade, DAU 1J has averaged about 64 bears harvested per year, or about 2.4 bears per 100 square miles. Rugged terrain, limited access, and distance to major human populations (3+ hours driving time) tend to moderate bear harvest. Age five and older bears consistently comprise 35-45% of the male harvest, averaging 40% over the past decade. Similarly, females average 36% of the total harvest. During years with a dry summer and fall, bear harvest significantly increases as bears more actively forage for food in the fall, particularly along streamsides where roads and hunters often occur.

Depredations regularly occur in this DAU every year, typically involving campgrounds, garbage, pet food, beehives, and fruit orchards. Depredation problems multiply during dry summers when range forage cures early and/or when berry production is low.

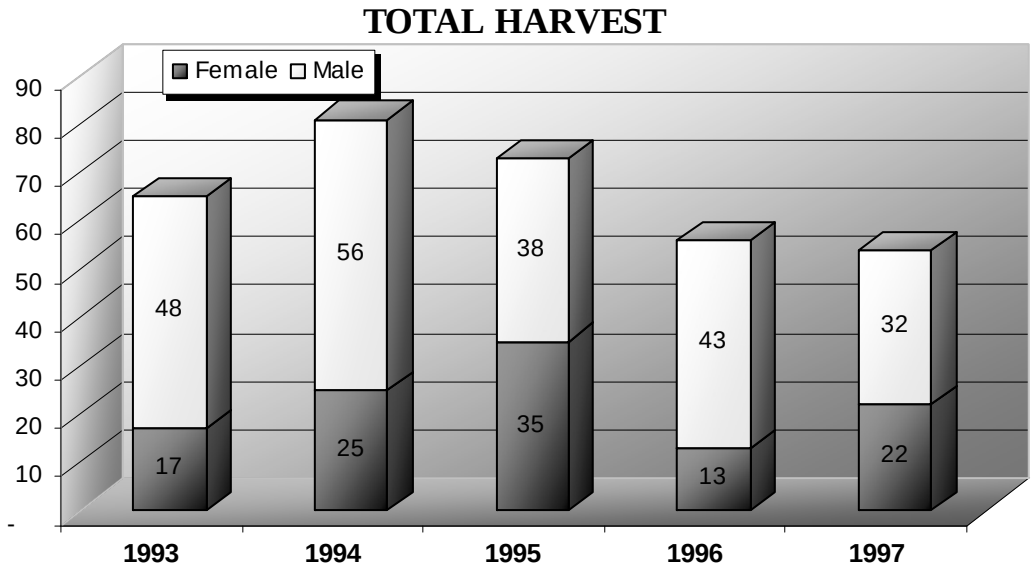
MANAGEMENT OBJECTIVES

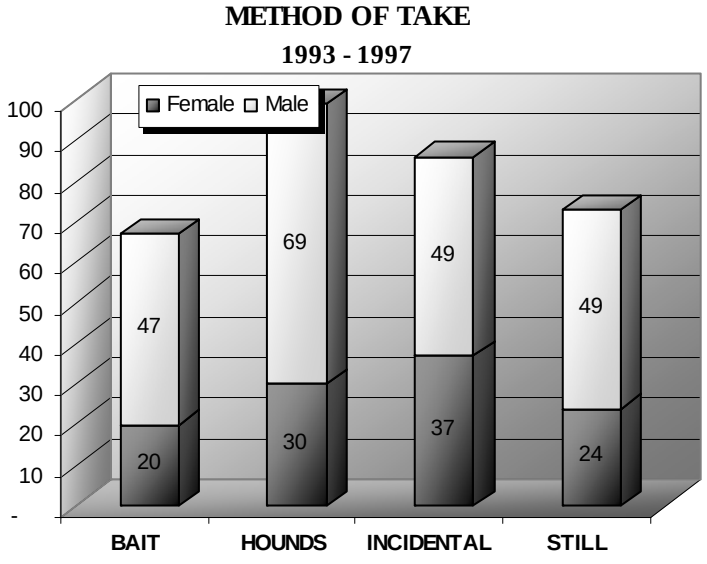
DAU 1J will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

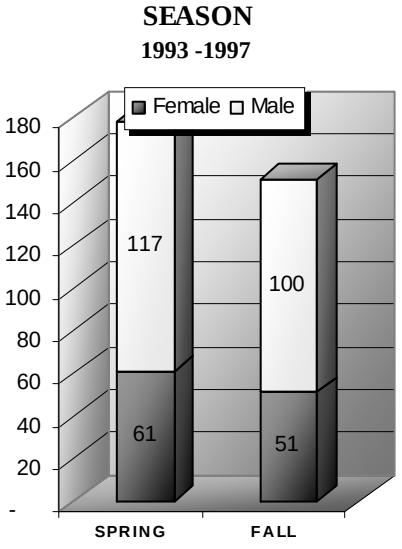
DAU 1J

Harvest Statistics

DAU 1J	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	65	26	28	
1994	82	30	31	
1995	73	48	41	33%
1996	56	23	39	36%
1997	54	41	43	41%
Total	**330**	**34**	**35**	







DAU 1K

Game Management Units
33, 39, and 43

DESCRIPTION

These units are made up of drainage that runs to the south and west. The topography is mainly ridges that run southwest. There is the south side mainly dry and covered with grass-shrub communities. The north sides are treed with conifers and have wetter communities. There are plant communities that have berry producers, there is not a constant supply since drought conditions significantly influence the production levels. All three units have areas that are highly roaded. They all have areas that can be considered reserve areas that hunters do not get into. The units are within easy distance of the Boise metropolitan area and the large number of hunters that are located there. In all units there are some level of depredations. They range from livestock depredations to campground raiders. Another major problem is the movement of bears into the urban areas such as Boise.

Over the past decade, DAU 1K has averaged 133 bears harvested per year. Seasons have gone from long with multiple bear tags to shorter seasons.

MANAGEMENT OBJECTIVES

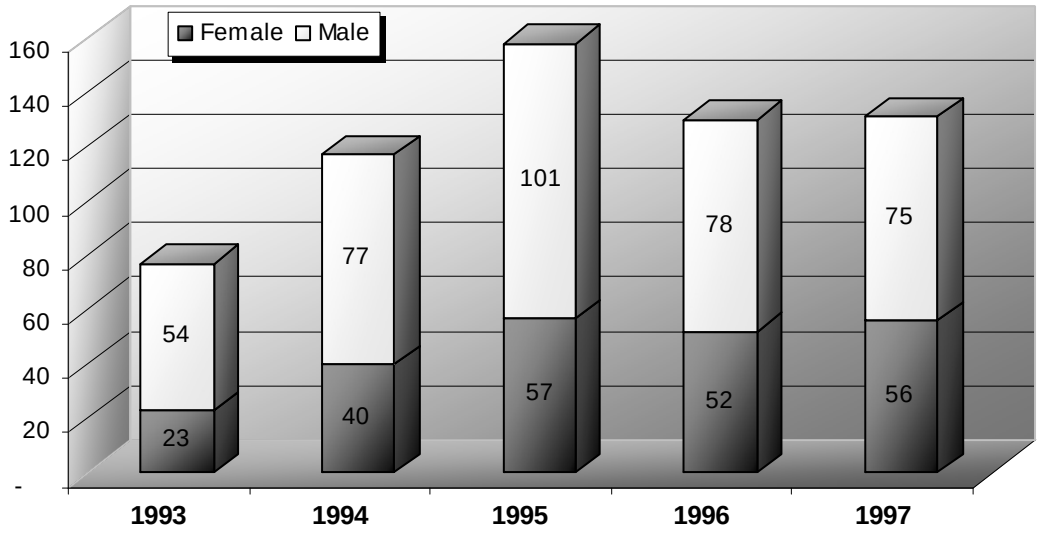
DAU 1K will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

DAU 1K

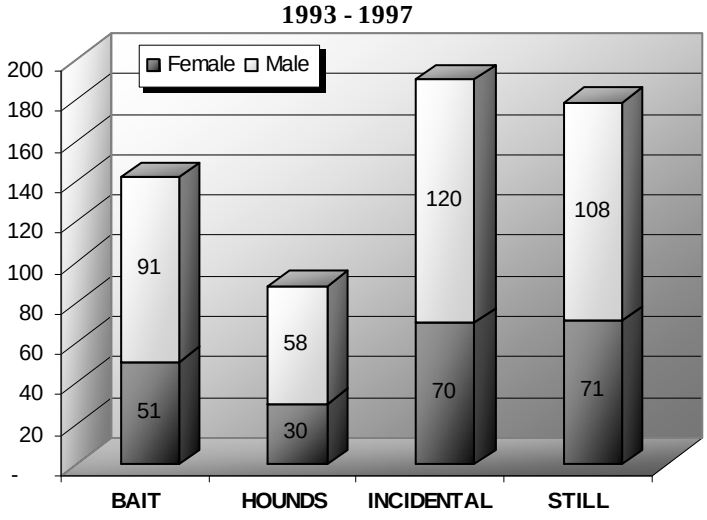
Harvest Statistics

DAU 1K	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	77	30	36	
1994	119	34	39	
1995	161	35	28	33%
1996	130	40	24	30%
1997	134	42	35	29%
Total	**621**	**37**	**32**	

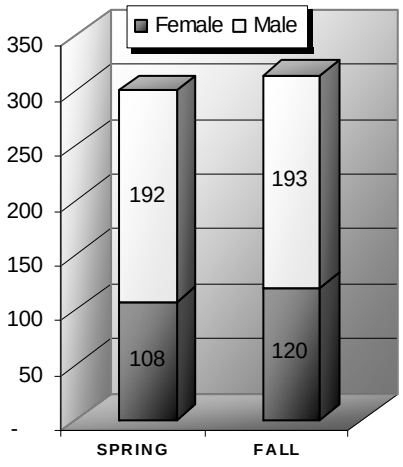
TOTAL HARVEST



METHOD OF TAKE
1993 - 1997



SEASON
1993 -1997



DAU 1L

Game Management Unit 6

DESCRIPTION

This DAU is a mix of private property, mainly timber company lands, with a mix of US Forest Service, Bureau of Land Management, and Idaho Department of Lands property. This area has been influenced heavily by logging and, to a lesser extent, by the large fires of the early 1900s.

Road densities range from moderate to high. Black bear densities are low, and baiting of black bears has not been allowed since 1983 because of low densities.

Total harvest in DAU 1L has averaged 54 bears from 1993 to 1997. Mature males ($\geq$5 years old) make up 25% to 45% of the harvest and in 1997 the 3 year average was 31%. The harvest has increasingly been made up of females and the percent of mature females in the harvest is fairly high. Harvest statistics indicate a fairly heavily hunted population.

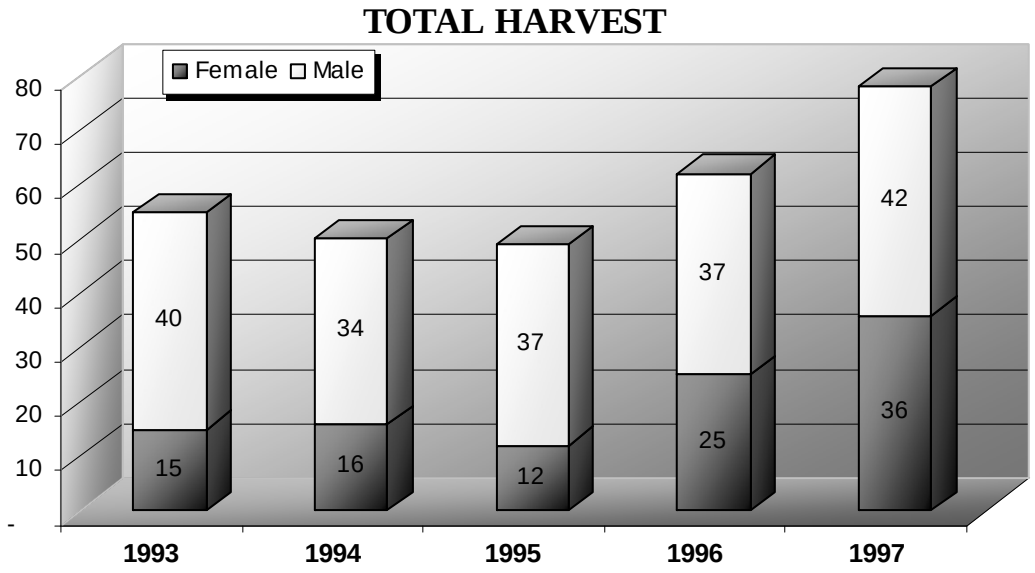
MANAGEMENT OBJECTIVES

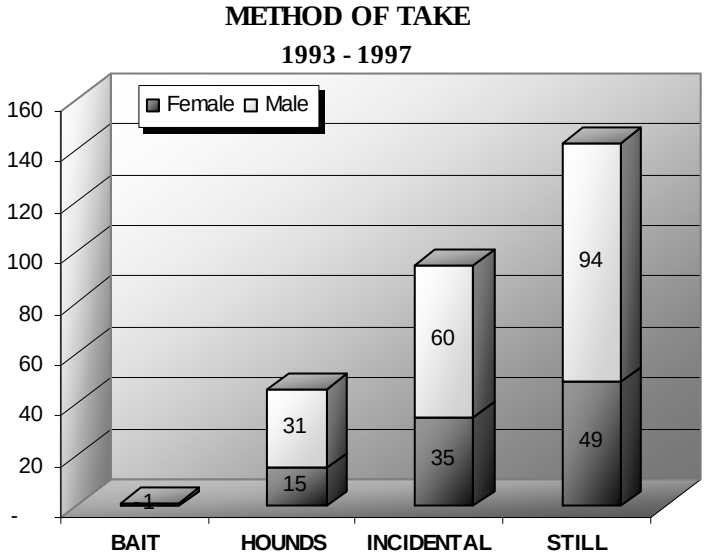
DAU 1L will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

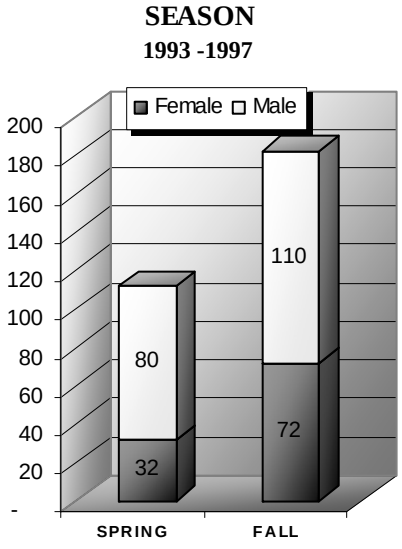
DAU 1L

Harvest Statistics

DAU 1L	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	56	27	26	
1994	50	32	22	
1995	49	24	27	25%
1996	62	40	45	32%
1997	78	46	22	31%
Total	**295**	**35**	**28**	







DAU 2A

Game Management Units
10 and 12

DESCRIPTION

Until the 1930s, wildfires were the primary habitat disturbance mechanism in this DAU. Between 1900 and 1934, approximately 70% of the Lochsa River drainage was burned by wildfires creating a diversity of habitat and shrub species. Between 1926 and 1990, over 1,900 km of roads were built in this area to access marketable timber. State Highway 12 along the Lochsa River was completed in 1962 and became the primary travel corridor. In 1964, most of the southern portion of Unit 12 was designated as part of the Selway-Bitterroot Wilderness.

Land ownership within this DAU is almost entirely publicly owned forest. The southern portion of the DAU is within the Selway-Bitterroot Wilderness Area. Historically, habitat productivity was high in this DAU and remains so in the western portion due mainly to publicly logged forest creating early successional forest with intermixed brush. The remaining portion of the unit has decreased in habitat productivity mainly due to fire suppression. Approximately one-third of the DAU has good access for motorized vehicles with medium road densities. The remaining portion has low road densities with good trails contributing to medium to low big game vulnerability.

The warm maritime climate provides the most productive bear habitat in the Clearwater Region. High precipitation levels, dense forests, and roadless areas allow for relatively dense bear populations.

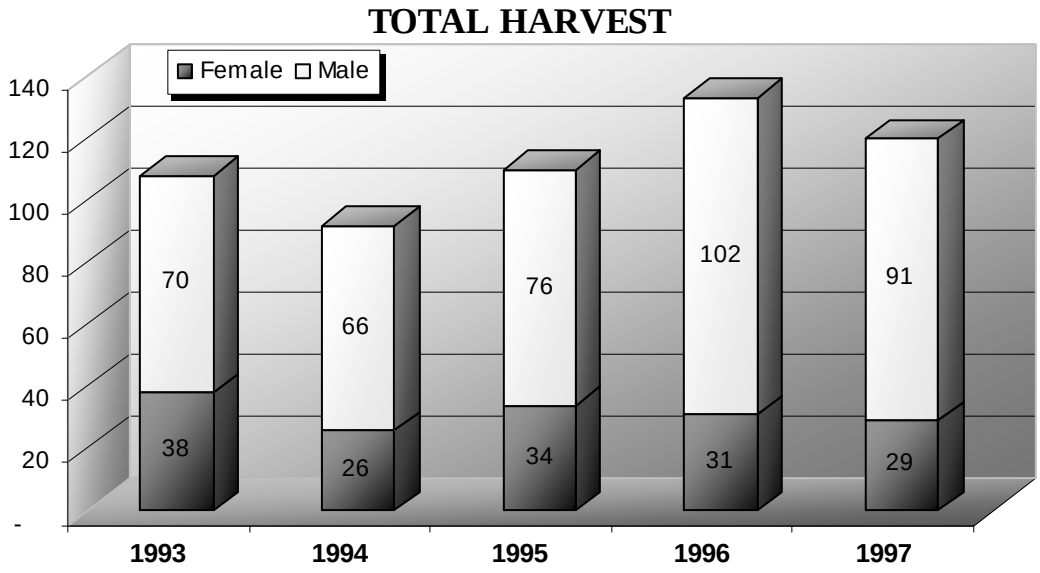
MANAGEMENT OBJECTIVES

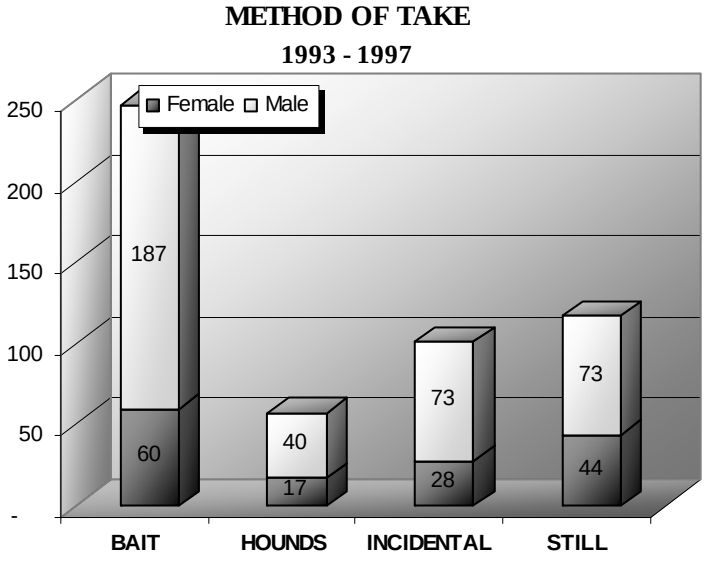
DAU 2A will be managed to maintain the heavy harvest targets of <25% age 5+ bears in the male harvest and >40% females in the total harvest.

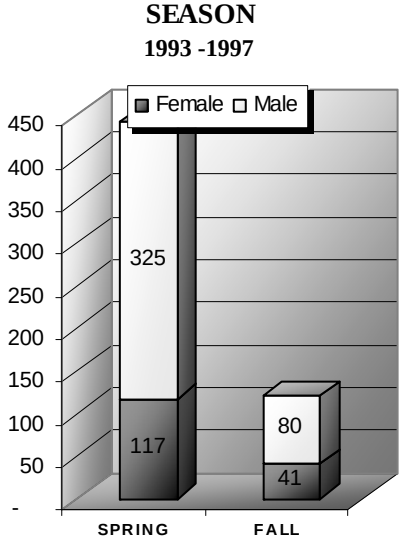
DAU 2A

Harvest Statistics

DAU 2A	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	111	34	57	
1994	93	28	42	
1995	110	31	42	47%
1996	133	23	43	42%
1997	122	24	33	39%
Total	**569**	**28**	**43**	







DAU 2B

Game Management Units
7 and 9

DESCRIPTION

This DAU is the most remote from human population centers of any DAU in the Panhandle Region. In addition, persistent snowdrifts make spring travel difficult, and substantial roadless areas preclude high levels of use. The US Forest Service manages most of the habitat in this DAU.

Total harvest in DAU 2B has averaged 41 bears from 1993 to 1997. Mature males (≥5 years old) make up nearly 40% of the population but have shown a decline in the past 5 years. However, small sample sizes in this DAU can lead to variable results. Females make up a small percent of the harvest and mature females do not appear to be heavily harvested. Harvest statistics indicate a light to moderate harvest level in this DAU.

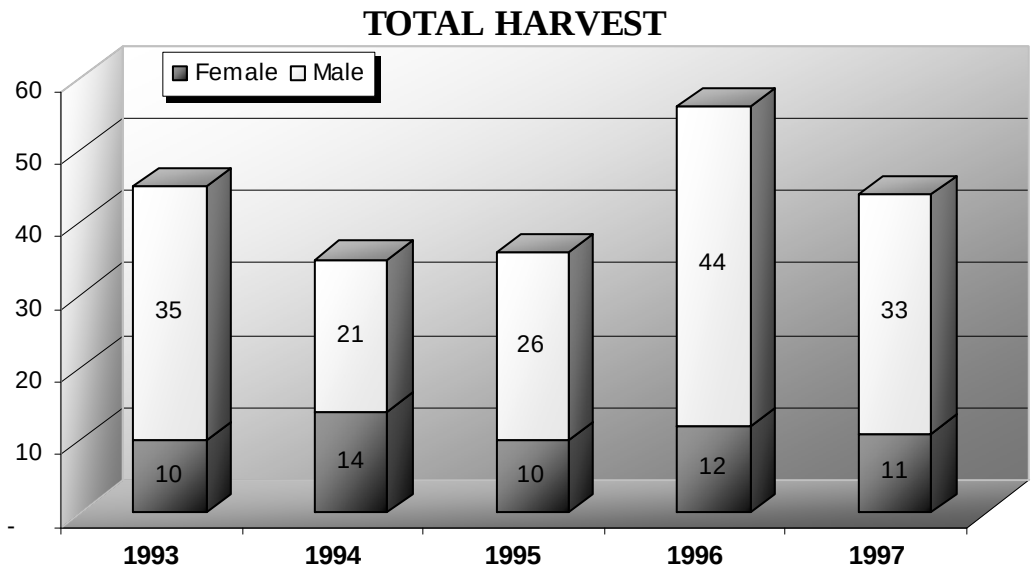
MANAGEMENT OBJECTIVE

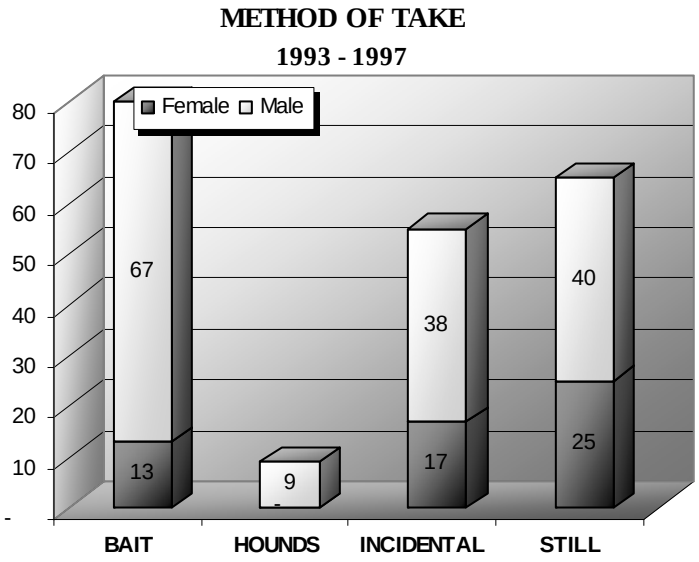
DAU 2B will be managed to increase harvest to the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

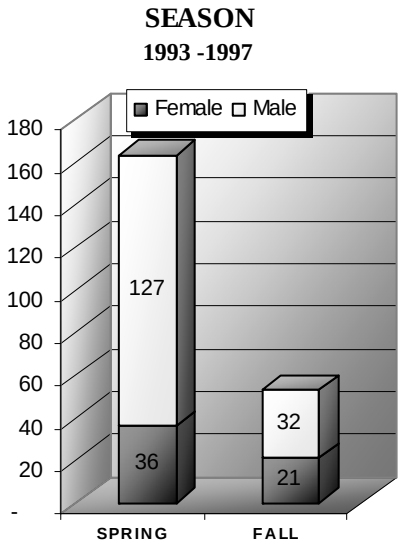
DAU 2B

Harvest Statistics

DAU 2B	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	46	22	63	
1994	35	40	71	
1995	36	28	35	56%
1996	57	21	48	49%
1997	45	24	26	38%
Total	**219**	**26**	**47**	







DAU 3A

Game Management Units
16A, 17, 19, and 20

DESCRIPTION

Due to the rugged and remote nature of this DAU, human impacts have been very limited. In 1964, almost all of Unit 17 and a small portion of Unit 16A were included in the Selway-Bitterroot Wilderness. Most of Unit 19 became part of the Gospel Hump Wilderness in 1978, and in 1980, part of Unit 20 was included in the Frank Church River of No Return Wilderness.

Habitat productivity varies throughout the DAU from high precipitation forested areas along the Lower Selway River to dry, steep, south-facing ponderosa pine and grassland habitat along the Salmon River. High elevation habitats in the southern portion are dominated by Whitebark Pine, an important bear food. Many areas along the Salmon River have a good mix of successional stages due to frequent fires within the Wilderness. Fire suppression within portions of the Selway River drainage has led to decreasing forage production for big game. Road densities are low, contributing to low vulnerability for big game. Large proportions of hunters in this DAU are nonresident.

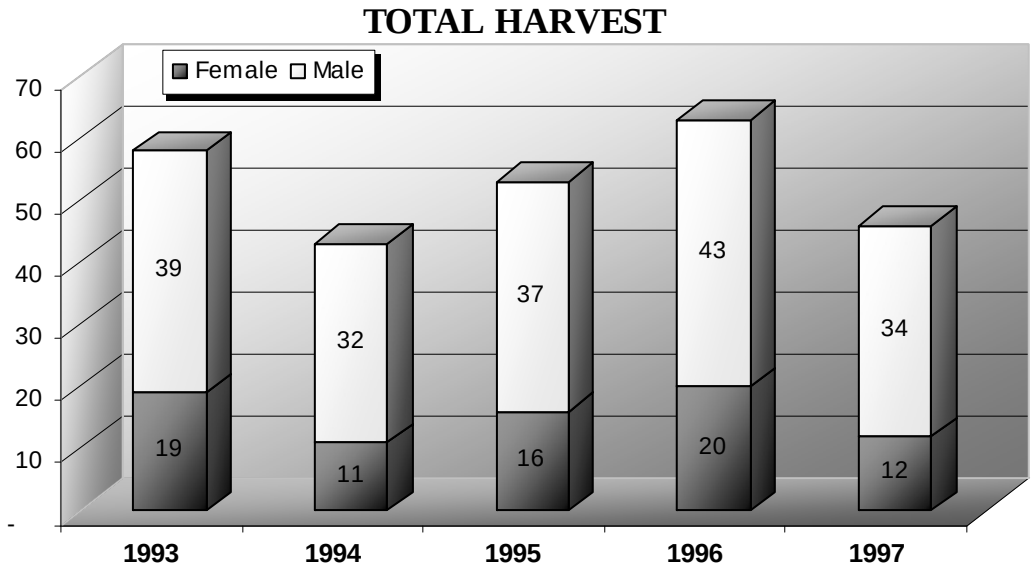
MANAGEMENT OBJECTIVES

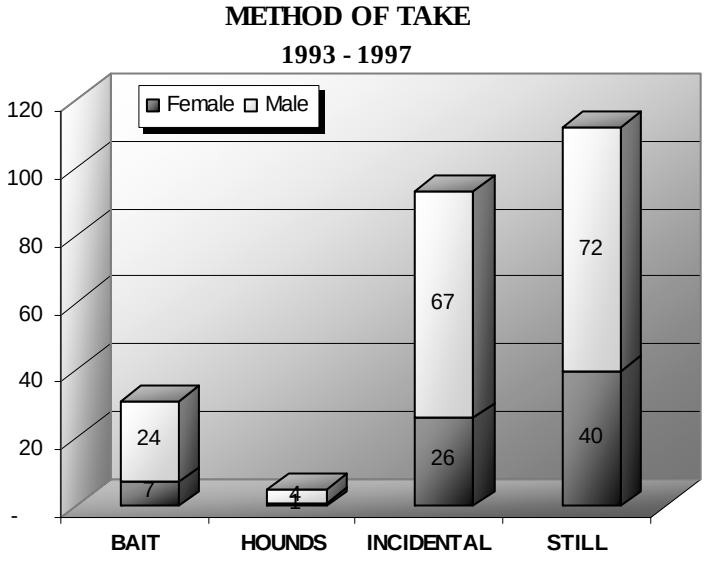
DAU 3A will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

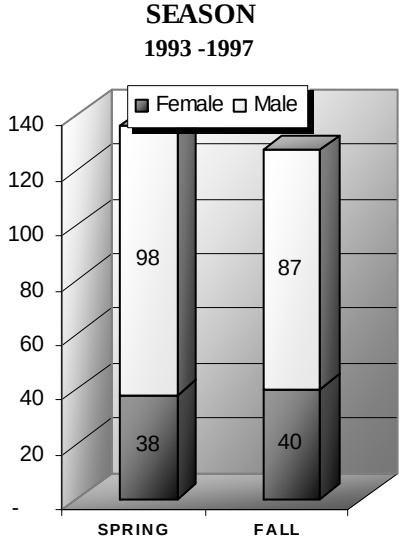
DAU 3A

Harvest Statistics

DAU 3A	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	58	33	53	
1994	44	25	50	
1995	53	30	53	52%
1996	63	32	34	45%
1997	46	26	45	44%
Total	**264**	**30**	**47**	







DAU 3B

Game Management Units
20A, 26, and 27

DESCRIPTION

Extra bear tags and liberal seasons were common in this DAU until the mid-1980s. More restrictive seasons and a one bear limit were implemented with the 1986-90 Black Bear Species Management Plan. Season lengths still remain the most liberal in Idaho. Bear harvest has been light, dominated by young, dispersing bears or occasional older bears, and occurs mostly along river corridors and backcountry landing strips.

Most of DAU 3B is in public ownership, roadless, and lying within wilderness boundaries. Except for a few mining roads penetrating the periphery, access in these units is restricted to airplane, packstring, or foot travel. The steep canyon breaks of the Middle Fork Salmon and main Salmon rivers characterize the lower elevations of this DAU. Mid to upper elevations are dominated by mixed conifer forests. Bear habitat is of moderate productivity in this area.

Livestock depredations and human/bear conflicts generally do not occur in this DAU.

MANAGEMENT OBJECTIVES

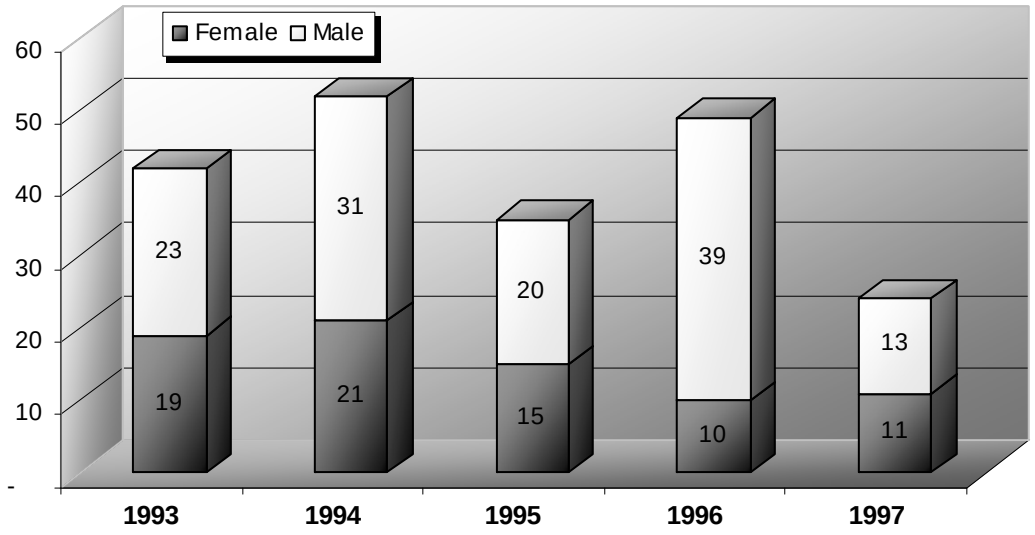
DAU 3B will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

DAU 3B

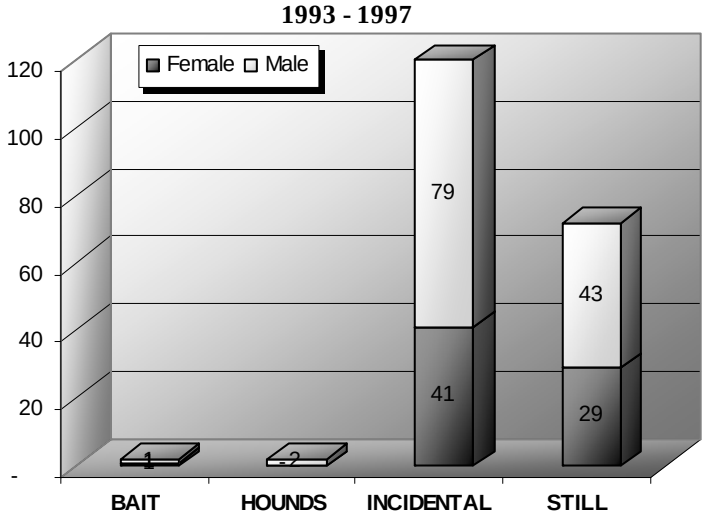
Harvest Statistics

DAU 3B	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	42	45	55	
1994	53	40	55	
1995	36	42	21	48%
1996	49	20	34	40%
1997	24	46	18	28%
Total	**204**	**37**	**40**	

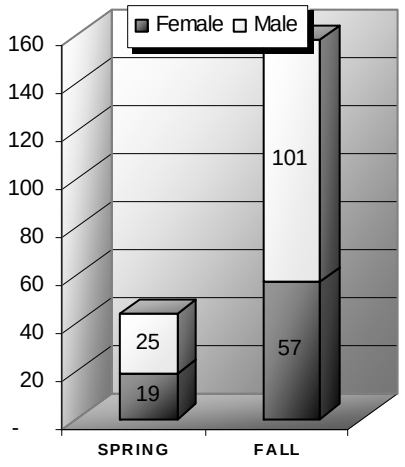
TOTAL HARVEST



METHOD OF TAKE
1993 - 1997



SEASON
1993 -1997



DAU 4A

Game Management Units
44, 45, 48, and 49

DESCRIPTION

Units comprising DAU 4A are located in the Magic Valley Region in south central Idaho, north of the Snake River. The population centers of Boise, Twin Falls, Sun Valley-Ketchum and Burley are within 100 miles of this area. Elevations range from 2,800 feet in the Bennett Mountains (Unit 45) to over 12,000 feet in the Pioneer Mountains (Unit 49).

The area has moderately long, cold winters and hot, dry summers. Annual precipitation ranges from 10 inches in the lower elevations to 32 inches in the higher elevations and occurs primarily as snow from November to February.

At lower elevations, vegetative communities are composed mostly of sagebrush, aspen, hawthorn, and chokecherry in riparian areas, and some sparse stands of Douglas fir. Middle and high elevation areas are characterized by open, mountain sagebrush on south and west slopes, and ponderosa pine and Douglas fir on north and east slopes. Berry-producing plants are very limited throughout area.

Major land uses affecting this DAU are livestock grazing and year-round recreational activities. Logging was a predominate use in the 1960s and 1970s but is uncommon now because most merchantable timber has been removed. Access throughout most of the DAU is good, except the upper Little Wood River drainage, which is roadless.

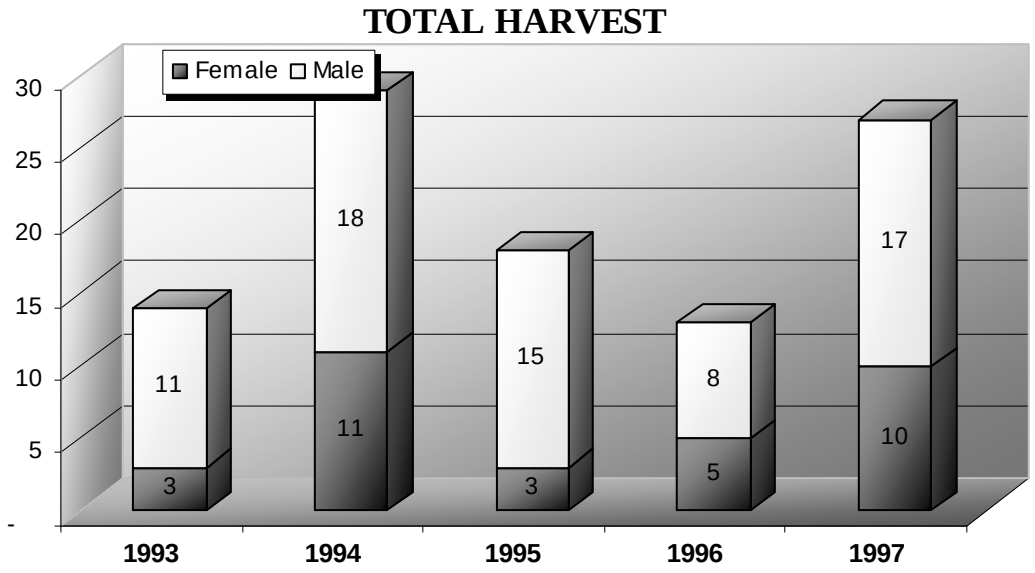
MANAGEMENT OBJECTIVES

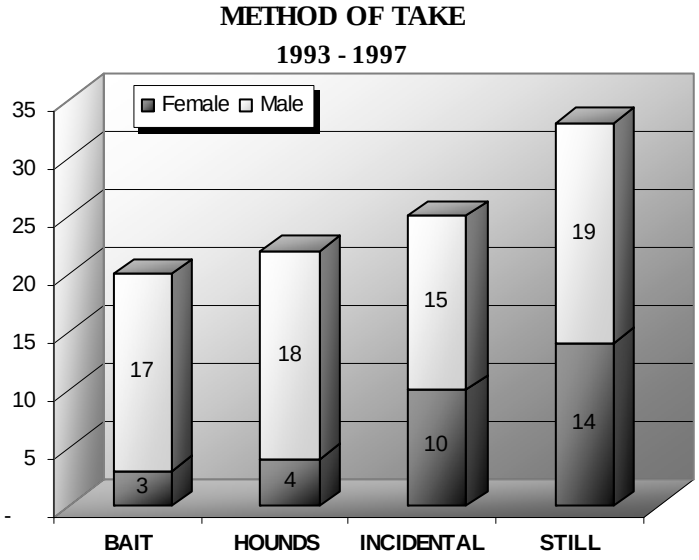
DAU 4A will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

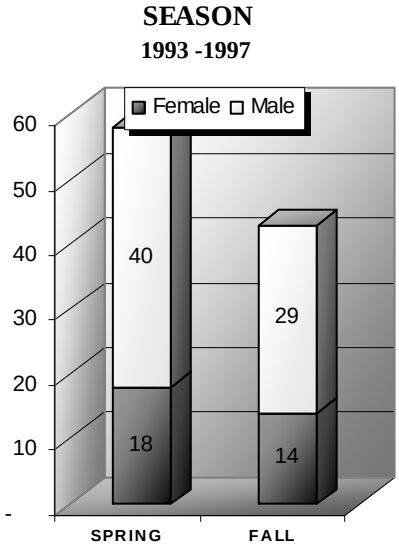
DAU 4A

Harvest Statistics

DAU 4A	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	14	21	22	
1994	30	37	29	
1995	18	17	14	23%
1996	13	38	43	26%
1997	27	37	24	24%
Total	**102**	**31**	**25**	







DAU 4B

Game Management Units
50, 51, 58, 59, and 59A

DESCRIPTION

Data Analysis in Unit 4B is comprised of Big Game Management Units 50, 51, 58, 59, and 59A in eastern/east central Idaho. These mountain and valley units are bisected by the Pioneer, White Knob, Lost River, Lemhi, and Beaverhead mountain ranges.

Elevations range from 4,824' at Howe to 12,662' on Mount Borah. The higher elevations are glacial cirque basins and lakes are surrounded by rocky mountain peaks. These peaks give way to alpine basins, flats and benches, and finally more gently sloping hills at lower elevations. Numerous canyons with steep, rocky slopes dissect these mountain ranges.

DAU 4B contains relatively dry bear habitats where timber stands are generally distributed on moister north and east aspects. The majority of this timber is over-mature Douglas fir and lodgepole pine scattered within a sagebrush/grass community. Engelmann spruce and subalpine fir are the most abundant of the secondary species, in addition to quaking aspen, mountain mahogany and some whitebark pine. Wet sedge meadows are common in some portions of the DAU. These habitats are marginal for black bear because they grow few berry-producing shrubs.

Approximately 85 percent of the DAU is publicly owned. Most of the bear habitat occurs on lands administered by the US Forest Service. Some lower elevation habitat occurs on BLM and privately owned lands. Both cattle and sheep allotments occur throughout the area.

There is a sparse human population living within the DAU, and the area receives fairly heavy recreational use on a year-around basis. However, the relatively long distance to major population centers probably keeps bear hunting activity at low to moderate levels.

Although much of the topography in the DAU is rugged and largely unroaded, concern has developed regarding ever increasing ORV use throughout all management units.

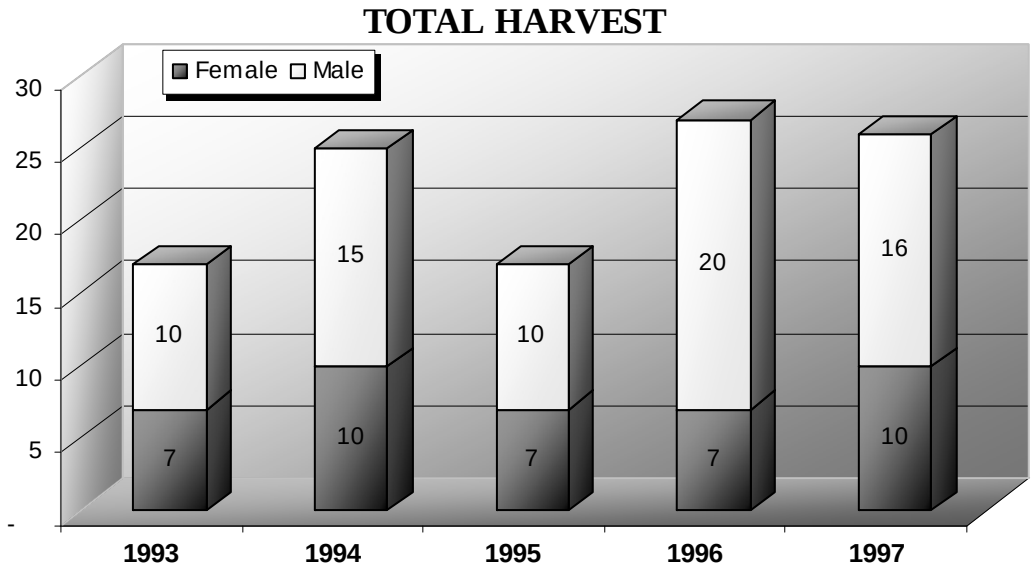
MANAGEMENT OBJECTIVES

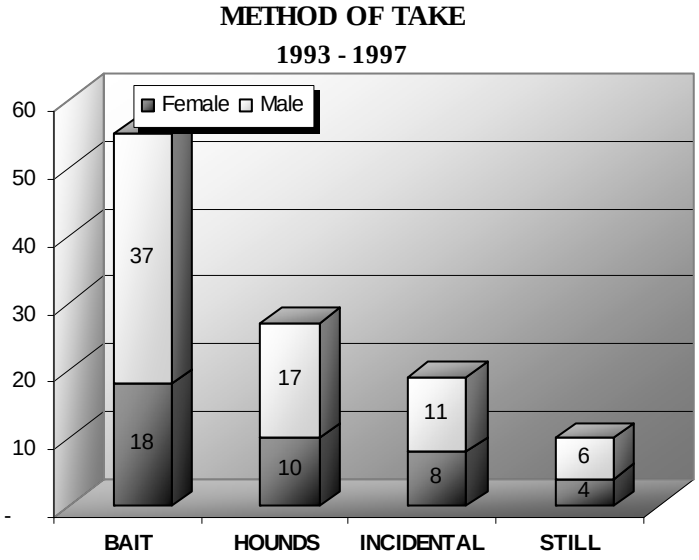
Maintain harvest levels consistent with the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

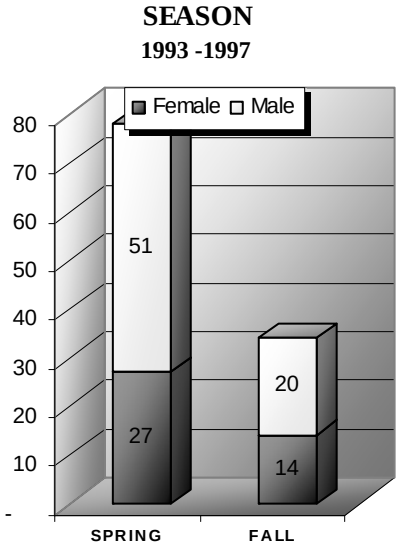
DAU 4B

Harvest Statistics

DAU 4B	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	17	41	20	
1994	25	40	33	
1995	17	41	40	31%
1996	27	26	39	37%
1997	26	38	29	36%
Total	**112**	**37**	**33**	







DAU 4C

Game Management Units
60, 61, 62, and 62A

DESCRIPTION

Data Analysis Unit 4C consists of Big Game Management Units 60, 61, 62, and 62A in eastern Idaho. The most prominent geographical features in DAU 4C include the Centennial Mountain Range, the Island Park Caldera, and the Fall River Ridge. Elevations range from below 5,000' in the southwestern portion of the DAU to many peaks in the 9,000-10,000' range along the Idaho-Montana border.

A large percentage of the black bear habitat in DAU 4C occurs on public land administered by the US Forest Service. DAU 4C contains relatively dry bear habitats that grow few berry-producing plants. Lodgepole pine and Douglas fir communities are common in lower elevation sites. Spruce and subalpine fir communities are prevalent along drainage bottoms. Subalpine fir and whitebark pine communities occur at higher elevations.

DAU 4C has an extensive network of roads and clearcuts throughout the eastern portion of the DAU. Recent implementation of road and area closures in some areas should help to offset some of these affects in the future.

The livestock industry is a major resource user in DAU 4C. Both sheep and cattle allotments occur in the area.

There is a sparse human population living within the DAU on a permanent basis. However, cabins and summer homes are plentiful on the private inholdings in the Island Park area and tourist traffic is heavy. The DAU is readily accessible from the nearest population centers of Rexburg, Idaho Falls, Blackfoot, and Pocatello. However, the distances from population centers keeps bear hunting activity at relatively low to moderate levels.

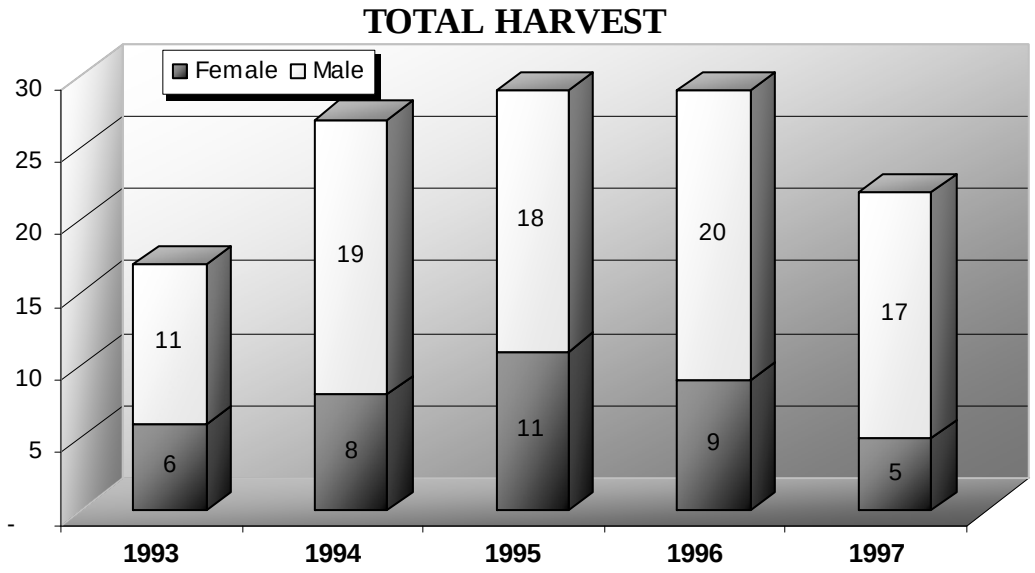
MANAGEMENT OBJECTIVES

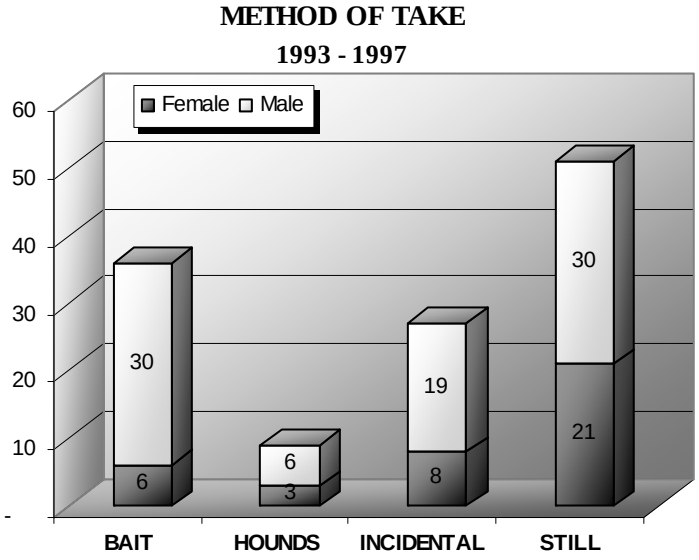
Management options are somewhat limited in DAU 4C due to the existence of an established grizzly bear population in the Greater Yellowstone Ecosystem. This area will continue to be managed to protect this threatened grizzly population by prohibiting baiting and the use of hounds to hunt black bear. Maintain harvest levels consistent with the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

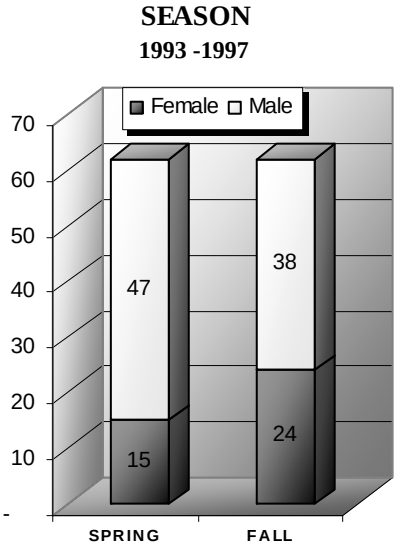
DAU 4C

Harvest Statistics

DAU 4C	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	17	35	64	
1994	27	30	29	
1995	29	38	38	41%
1996	29	31	42	37%
1997	22	23	41	40%
Total	**124**	**31**	**41**	







DAU 4D

Game Management Units
64, 65, 66, 66A, 67, 69, and 76

DESCRIPTION

Data Analysis Unit 4D is comprised of Big Game Management Units 64, 65, 66, 66A, 67, 69, and 76 on the Targhee and Caribou National Forests in eastern and southeastern Idaho.

Elevations range from approximately 4,500' at Blackfoot to 10,025' on Mt. Baird in the Snake River Range. The Big Hole Mountains and Snake River Range comprise the northern portion of the DAU. The Big Holes are characterized by steep mountains, rocky slopes, and lush subalpine meadows. The Snake River Range consists of high elevation alpine glaciated mountain peaks, cirques, talus slopes and moraines that connect through numerous steep, parallel canyons, ridges and slopes. The foothills consist of glacial outwash terraces and extensive areas of colluvial deposition. Vegetation varies with elevation and exposure. Scattered stands of subalpine fir, Engelmann spruce and timber pine are interspersed through the alpine meadows in the higher elevations. Intermediate elevations contain grasses, forbs, low growing shrubs and aspen on south and west exposures while dense stands of aspen, spruce, Douglas fir, and lodgepole pine grow on north and east aspects. Lower elevations consist of sagebrush/grass communities. The Caribou Range comprises the southern portion of the DAU. Major vegetation cover types consist of lodgepole pine, Douglas fir, aspen, mountain brush, and sagebrush/grass. DAU 4D provides only marginal bear habitat because it is relatively dry and grows few berry producing plants.

Most of the bear habitat in DAU 4D is found on public land administered by the US Forest Service. Some lower elevation habitat occurs on BLM and privately owned lands. Both cattle and sheep allotments occur throughout the area.

A relatively large human population resides in and immediately adjacent to DAU 4D. Major population centers include Rexburg, Idaho Falls, Blackfoot and Pocatello. The area is characterized by plentiful road access. The combination of easy access and proximity to human population centers results in at least moderate bear hunting activity levels, especially in the northern portion of the DAU.

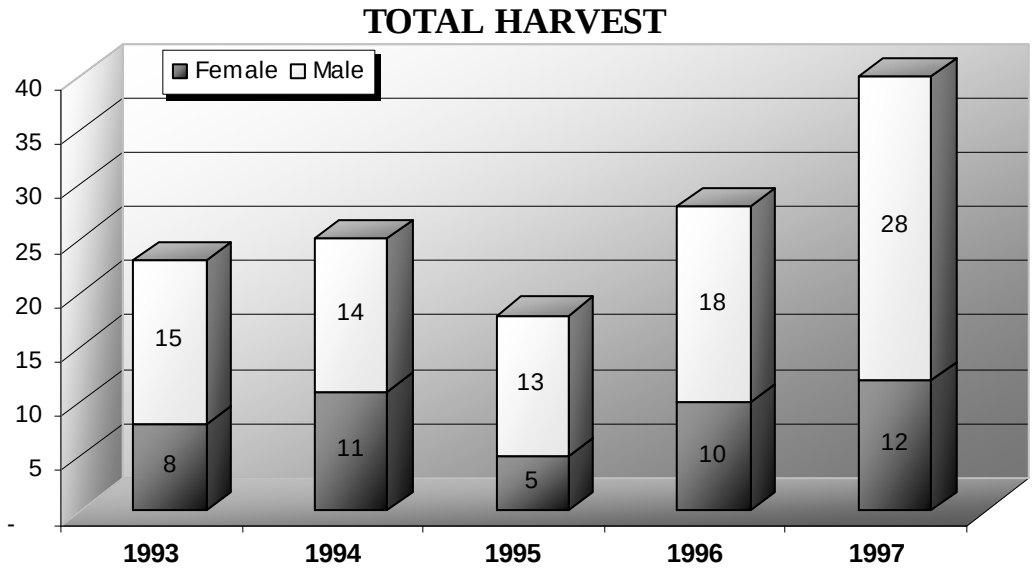
MANAGEMENT OBJECTIVES

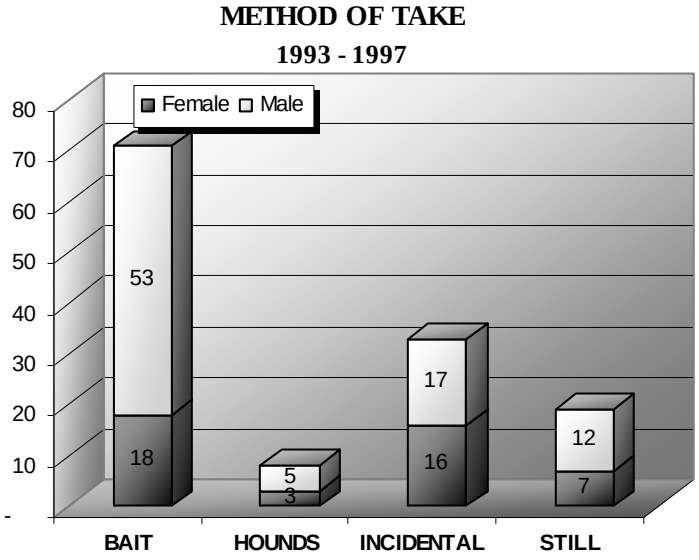
Maintain harvest levels consistent with the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

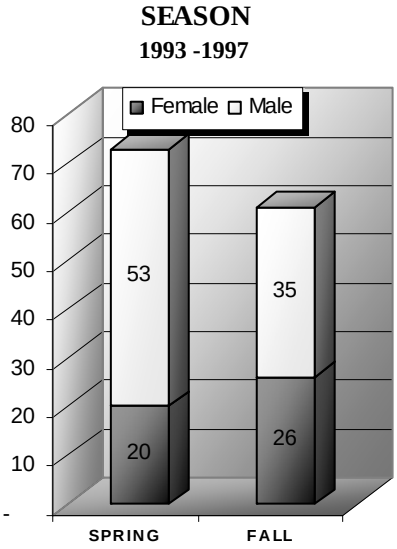
DAU 4D

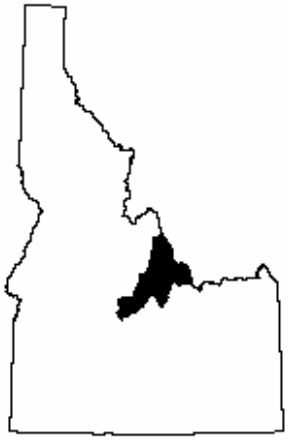
Harvest Statistics

DAU 4D	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	23	35	46	
1994	25	44	0	
1995	18	28	27	24%
1996	29	34	28	19%
1997	42	29	30	29%
Total	**137**	**34**	**27**	









DAU 4E

Game Management Units
29, 30, 30A, 36A, 37, and 37A

DESCRIPTION

DAU 4E is in general a low precipitation zone with broad, treeless valleys and scattered pockets of bear habitat in the mountains. Much of the DAU is in marginal sagebrush-grassland habitats or agricultural ground. Good quality bear habitat is limited. Consequently, bear populations tend to be low density and isolated. Although the highest elevations in the mountains are extremely rugged and rocky (too much so to be good bear habitat), much of the area is flat to moderately rugged. Most canyon bottoms are roaded, and much of the rest of the relatively gentle topography is accessible to all-terrain vehicles.

Over the past decade, DAU 4E has averaged about 30 bears harvested per year, or about 0.9 bears per 100 square miles. Although moderately distant from major human populations (2-3 hours of driving time), bear populations in these units can be vulnerable to over-harvest because of the limited, isolated habitats and relative ease of motorized access. However, age five and older bears consistently comprise 30-40% of the male harvest, averaging 36% over the past decade. Similarly, females average 35% of the total harvest

Depredations occasionally occur in this DAU, typically involving campgrounds or beehives. Depredation problems multiply during dry summers when range forage cures early and/or when berry production is low.

MANAGEMENT OBJECTIVES

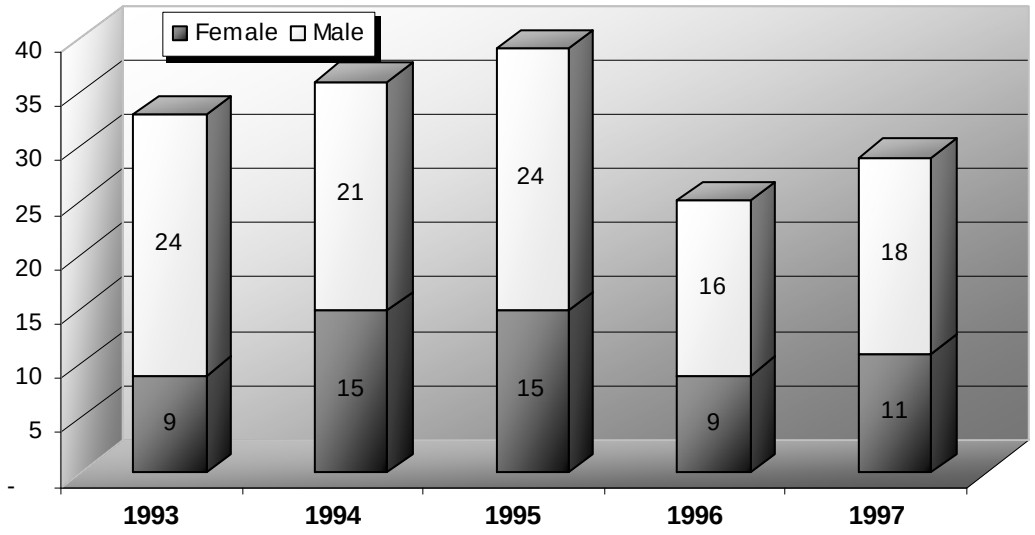
DAU 4E will be managed to maintain the moderate harvest targets of 25-35% age 5+ bears in the male harvest and 30-40% females in the total harvest.

DAU 4E

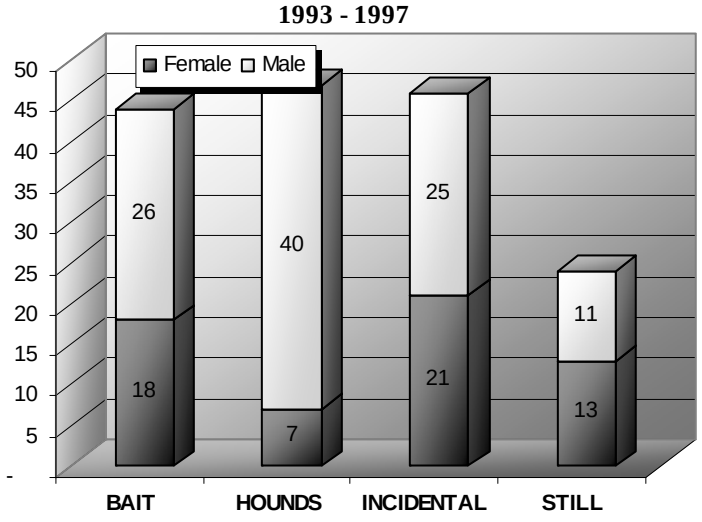
Harvest Statistics

DAU 4E	Total Harvest	Percent Female	Percent Males ≥5	3-Year Average Males ≥5
1993	34	26	24	
1994	36	42	24	
1995	39	38	33	24%
1996	25	36	38	31%
1997	30	37	39	38%
Total	**164**	**36**	**31**	

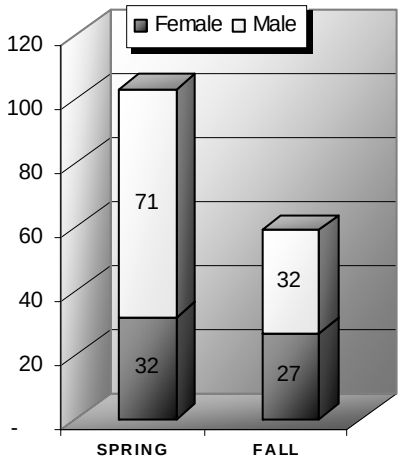
TOTAL HARVEST



METHOD OF TAKE
1993 - 1997



SEASON
1993 -1997



APPENDIX I

GUIDELINES FOR HANDLING BLACK BEAR - HUMAN CONFLICTS:

The Department recognizes that black bears occasionally damage private property, prey on domestic livestock, and jeopardize public safety. The improper storage of human foods and garbage is often the primary factor leading to bear-human conflicts. Other factors include inadequate supplies of natural foods, injuries, and, in the case of sub-adult bears, inexperience in locating natural foods. Human encroachment into black bear habitat is a major cause of many depredation problems. The purpose of this section is to establish guidelines for minimizing damage to private real property and livestock, reducing the potential for public safety concerns regarding black bears, and to provide guidance to Department employees on how to handle situations in which black bears become nuisance or public safety problems.

Areas of Responsibility:

By Memorandum of Understanding, the Department (IDFG) and the U. S. Department of Agriculture's Wildlife Services Program have agreed to share the responsibility for handling depredation situations using the following guidelines:

1. IDFG has the responsibility for controlling black bears in nuisance and human safety situations. Wildlife Services may handle these complaints at the request of IDFG if mutually agreed upon by both parties.
2. Wildlife Services has the responsibility for controlling black bears that commit livestock (including apiaries) depredation problems. IDFG may handle these complaints at the request of Wildlife Services, if mutually agreed upon by both parties.
3. Wildlife Services has the responsibility to investigate all black bear depredation payment claims involving domestic sheep, cattle, apiaries, and berries.
4. In areas where public safety is a concern and in non-livestock agricultural complaints, Wildlife Services and IDFG will use non-lethal methods, preferably culvert traps or trailing dogs, whenever practical.
5. IDFG and Wildlife Services will use culvert traps in classified grizzly bear habitat unless determined to be impractical. Snares used in classified grizzly bear habitat must be sufficient to hold any grizzly bear caught.
6. Any black bear killed in a depredation situation by IDFG or Wildlife Services must be reported to an IDFG Regional office within 14 days of the date of the kill. The skull and a completed Big Game Mortality Report form must be submitted to the Department. All salvageable parts remain the property of the Department and must be submitted to the Regional Office for disposal. Where practical, the meat from any black bear killed in a depredation situation should be salvaged and handled according to Policy E-24.00 in the Department's policy manual.

7. The Regional Supervisor is responsible for assigning personnel to handle black bear depredations and to ensure that they are properly trained and equipped, including training in the use of appropriate immobilization drugs. The responsible employee has the ultimate responsibility for deciding how to handle each depredation situation.

Response and Reporting Requirements:

1. IDFG regional personnel will respond to all reported black bear depredation incidents **within 24 hours**, either by phone or in person. The type and level of response will depend upon the nature of the complaint. Incidents involving human safety or significant property damage will receive high priority and the personal attention of the responsible employee. Those incidents involving low risk situations may be handled by phone, if an obvious solution is available.
2. The responsible employee, under authority of the Regional Supervisor, will verify the validity of each complaint, determine the appropriate action, and, if necessary, initiate control actions.
3. The responsible employee should provide the complainant with specific recommendations on how to prevent depredation problems, document any actions taken, and convey to the complainant that they may be held liable if someone is injured or incurs damage as a result of their providing attractants to nuisance bears.
4. Within seven (7) days of the conclusion of the problem, a report, using form D-3, will be submitted to the Regional Landowner Sportsman Coordinator or Regional Wildlife Manager by the person handling each depredation complaint.

Response Categories and Remedial Actions:

The **prevention** of black bear depredations is the primary goal of these guidelines. To that end, Department personnel are encouraged to work with state and federal land management agencies and the public to eliminate attractants for bears. In situations where chronic bear depredation problems are occurring, Department personnel should be prepared to recommend permanent solutions that will eliminate the attractants.

Category 1 Situations: These situations involve black bears that have caused minimal or no damage and appear to be first time offenders. These situations are characterized by bears involved in **nocturnal** visits around occupied homes to feed in garbage cans or dumpsters, eating pet foods (or the pets themselves), or climbing domestic fruit trees in or adjacent to good habitat or travel corridors. In these situations, attractants should be removed or secured by the landowner (picking fruit and feeding pets indoors) and the bear allowed to resume its natural feeding habits. Hazing and other non-lethal techniques (using hounds, etc.) are appropriate methods to use on bears in these situations. If the bear is located in an area that is not suitable habitat, the bear should be removed from the area using appropriate capture methods and released in suitable habitat.

Category 2 Situations: These situations involve black bears that have become conditioned to human foods or habituated to humans and are nuisance problems. These bears are often involved in repeated **nocturnal** incidents involving garbage cans and dumpsters, feeding on dog or horse food near residences, disturbing campsites, or damaging commercial fruit trees or apiaries. Black bears that have been previously captured and have returned to areas of human habitation are included in this category. **In these situations, increased emphasis should be placed on eliminating attractants from the area.**

Category 2 bears should be trapped, ear-tagged (when practical), removed from the area, and released in areas where they are not expected to return to the original capture site.

Category 3 Situations: These situations involve black bears that have caused significant real property damage to a dwelling, structure, vehicle, are a threat to human safety (the bear is demonstrating aggressive behavior towards humans, is showing little fear of humans, or is causing depredation problems during daylight hours), or are chronic offenders (involved in 3 or more depredation situations). Corrective action in these situations requires that the offending animal be destroyed (euthanized) using the most expedient means. The Regional Supervisor or immediate supervisor should be consulted and concur with the recommendation to destroy any problem bears.

Category 4 Situations: These situations involve black bears that meet the criteria described in Category 3, but involve unique circumstances where the use of culvert traps and snares is not practical or has been ineffective. In these situations, Depredation Kill Permits may be issued to private landowners to assist the Department in solving a depredation problem. In all instances, the Regional Supervisor or his\her designee shall inspect the site prior to issuing the permit to insure there are no obvious human safety concerns in issuing the permit. Depredation Kill permits shall be issued only during the closed season for black bear and should not be issued to landowners if they cannot be safely administered. Depredation Kill permits should not be issued in situations involving female bears accompanied by young. These situations should be handled by trapping and removing the offending animals. If circumstances require the female to be euthanized, the cubs should be taken to a rehabilitation facility and released when their body condition is good and sufficient natural foods are available or, denned in a natural or artificial den. Black bears killed under Depredation Kill Permits remain the property of the state.

GUIDELINES FOR TRAPPING, HANDLING AND RELEASING DEPREDATING BEARS:

1. Only IDFG personnel are authorized to capture and relocate nuisance black bears, except that Wildlife Services personnel may capture bears involved in livestock depredations (including apiaries) as indicated in the MOD between IDFG and Wildlife Services.
2. Any black bear that is trapped and handled by IDFG in a depredation situation should be ear-tagged or otherwise marked (i.e. paint) prior to release.
3. All black bears captured and immobilized during or less than 2 days before an open bear season should be held in a culvert trap or other suitable facility for 24 hours before being released to allow the animal to metabolize any residual drugs from its system. Black bears should be held in captivity in a secure area with adequate water. The person responsible for trapping or caring for the bear should provide shelter from extremes in weather. Biologists using Capture all-5 or Ketamine hydrochloride, alone or in conjunction with a tranquilizer to immobilize captured bears, should administer Yohimbine hydrochloride (antaganil) to reverse the effects of the tranquilizer on the animal.
4. Culvert traps and snares set for black bear should be checked by the person that is responsible for handling the complaint or his\her designee prior to 1000 hours each day the trap is set. Drop-door culvert traps and snares should not be left unattended or set in or adjacent to campgrounds or private residences if there is any concern for human safety in the area.
5. Snares should be anchored to fixed objects (live trees) using a car hood spring or tire (with back-up safety configuration) to minimize the potential for injury to the bear during the period between capture and immobilization.
6. Adequate signs should be posted around all culvert traps and snares to warn people that nuisance bears are in the area and that traps have been set to capture these animals. These signs should be posted near the trap sites and along trails and roads entering the area.
7. As a guideline, black bears should be released not less than 30 (sub-adults) to 50 airline miles (adults) from the capture site in suitable habitat.
8. Release sites for captured nuisance black bears should be selected in advance and must be coordinated with the appropriate land management agency (Idaho Code 36-1109a) and be approved by the Regional Supervisor.
9. To address potential human safety concerns, Department employees are encouraged to request that land management agencies close or restrict the use of campgrounds where nuisance black bears are active until the source of the problem (attractant) has been removed and the offending bear has moved on or is trapped.
10. Black bears that are captured in depredation situations that have serious injuries or disease conditions should be euthanized in a humane manner rather than released.
11. Orphaned cubs of the year should be placed in an approved rehabilitation facility. These cubs should be released only when their body condition has improved to the

point where they have a reasonable probability of surviving on their own and natural food supplies are abundant. If natural foods are scarce, black bear cubs should be retained in a rehabilitation facility until they can be placed in a natural or artificial den or until adequate spring foods are available.

12. Any black bear that has bitten a person will be euthanized and tested for exposure to rabies. Any bear that has injured a person will be euthanized in a humane manner.
13. Black bears involved in killing livestock will be killed in a humane manner. If the offending animal is a female accompanied by young of the year, the young should be captured and relocated or turned over to a wildlife rehabilitator, if it is unlikely that they would survive on their own.

APPENDIX II

BAITING STANDARDS

The following standards are recommended for implementation in this planning period.

1. Timing of the baiting season:

    a. No baits may be placed for the purposes of attracting or taking black bear prior to the opening of the black bear take season.

    b. All structures, bait containers and materials must be removed and excavations refilled when the site is abandoned or within seven (7) days of the close of the black bear take season.

2. Location of bait sites:

    a. No bait site may be located within 200 yards of any free water (lake, pond, reservoir, spring, and stream); maintained trail; or any road.

    b. No bait site may be located within one mile of any designated campground or picnic area, administrative site, or dwelling.

3. Types of bait:

    a. No parts of or whole game animals, game birds, or game fish may be used to attract black bear.

    b. The skin must be removed from any mammal parts or carcasses used as bait.

4. Bait containers:

    a. No bait may be contained within paper, plastic, metal, wood, or other non-biodegradable materials, except that a single, metal container with a maximum size of 55 gallons may be used if securely attached at the bait site.

    b. Baits may be contained in excavated holes if the diameter of the hole does not exceed 4 feet.

5. Establishment of bait sites:

    a. Any structures constructed at bait sites using nails, spikes, ropes, screws, or other materials must be removed when the site is abandoned by the permit holder or within seven (7) days of the close of the black bear take season.

    b. All bait sites must be visibly marked at the nearest tree or on the bait container using a tag supplied by the Department.

6. Baiting permit administration:

    a. All persons placing or hunting over bait must possess a baiting permit issued by the Idaho Department of Fish and Game.

    b. Each hunter (except licensed guides and clients of outfitters) may possess only one Idaho Department of Fish and Game baiting permit each year and may maintain up to three (3) bait sites.

    c. No person may hunt over an unlawful bait site.

    d. Limits on the number of bait sites that can be established by outfitters operating on public lands must be specified in their operating plans. Licensed outfitters operating on private lands must have a letter authorizing a specified number of bait sites from the owner of those lands.

    e. Guides and clients of outfitters are not required to obtain a baiting permit, but they must have a copy of the outfitter's permit in their possession while hunting over a bait site.

    f. Baiting permits will be issued by mail or in person at Idaho Department of Fish and Game regional and sub-regional offices beginning March 1 each year.

    g. Permits will be valid for the calendar year in which they were issued.

    h. Possession of an Idaho Department of Fish and Game baiting permit does not exempt the permit holder from any restrictions placed on users of federal, state, or private lands.