

**Findings of the Alaska Board of Game  
2006-164-BOG**

**BOARD OF GAME BEAR CONSERVATION AND MANAGEMENT POLICY  
MAY 14, 2006**

**GENERAL BEAR MANAGEMENT**

**Purposes of Policy**

1. To assure all management actions provide for the conservation of Alaska's bear species, their habitat and food sources, and are consistent with the Alaska Constitution, and applicable statutes.
2. To encourage review and comment and interagency coordination for bear management activities.

**Goals**

1. To ensure the long-term conservation of bears throughout their historic range in Alaska.
2. To increase public awareness and understanding of the uses, conservation, and management of bears and their habitat in Alaska.

**Background**

Brown/grizzly bears (*Ursus arctos*) are large omnivores found throughout most of Alaska. Although they are considered the same species, brown and grizzly bears occupy different habitats and have somewhat different lifestyles and body configurations. Grizzlies are typically found in interior and northern areas. They are generally smaller than brown bears and more predatory. Brown bears live in coastal areas of southern Alaska where they have access to productive salmon streams.

Brown/grizzly bears are found throughout their historic range in Alaska, and unlike populations in the contiguous 48 states, they are not considered a threatened or endangered species. Estimating precise population numbers is difficult because of the bears' secretive habits and often densely vegetated habitat, but in most places in the state, populations are considered stable or increasing. Throughout most coastal habitats where salmon are abundant, bear densities typically exceed 175 bears/1,000 km<sup>2</sup> (450 bears/1,000 mi<sup>2</sup>). A population in Katmai National Park on the Alaska Peninsula was measured at 550 bears/1,000 km<sup>2</sup> (1,420 bears/1,000 mi<sup>2</sup>). In most interior and northern coastal areas, densities do not exceed 40 bears/1,000 km<sup>2</sup> (100 bears/1,000 mi<sup>2</sup>).

Densities as low as 7 bears/1,000 km<sup>2</sup> (20 bears/1,000 mi<sup>2</sup>) have been measured in the eastern Brooks Range. Extrapolations from existing density estimates yielded an estimate

of 31,700 brown bears in 1993. All indications are that the population has increased in the past decade.

American black bears (*Ursus americanus*) are generally found in forested habitats throughout the state. Black bears also occupy their historic range in Alaska, often overlapping distribution with brown/grizzly bears. Because they live in forested habitats it is very difficult to estimate population size or density. Where estimates have been conducted in interior Alaska, densities ranged from 67 bears/1,000 km<sup>2</sup> (175 bears/1,000 mi<sup>2</sup>) on the Yukon Flats to 289 bears/1,000 km<sup>2</sup> (750 bears/1,000 mi<sup>2</sup>) on the Kenai Peninsula. In coastal forest habitats of Southeast Alaska's Alexander Archipelago black bear densities are considered high. A 2000 estimate for Kuiu Island was 1,560 black bears/1,000 km<sup>2</sup> (4,000 black bears/1,000 mi<sup>2</sup>). A statewide black bear population estimate is not available because, unlike the many brown/grizzly bear and wolf estimates that are available across the state, very few black bear population estimates have been conducted.

Brown/grizzly bears have relatively low reproductive rates and require abundant resources. Black bears exhibit higher reproductive rates than brown/grizzly bears; however, rates are still lower than for other big game animals with the exception of brown/grizzly bears. Population stability can be threatened by human-caused mortality and from fragmentation or destruction of habitat. This combination is present to a sufficient extent on the Kenai Peninsula that brown/grizzly bears there have been designated by the State as a "population of special concern". To address situations where bear populations have declined because of human activities, the Department has implemented remedial management actions. In the Kenai situation, a conservation strategy has been developed through a public stakeholder process.

In most areas of the state black bear populations are healthy and can sustain current or increased harvest levels. However, in some areas such as Unit 20B and 20D in the interior, the Kenai Peninsula, and Southeast Alaska, hunter demand for black bears is high, harvest is high, and these populations require closer monitoring. Bears are intelligent animals that learn to adapt to new situations. This ability, coupled with their enduring drive to rebuild fat reserves prior to denning, makes bears experts in finding ways to get a meal. Garbage is often a source of food from people. If this happens, bears learn to exploit human-related food resources and lose their natural tendencies to avoid people. Frequently, such bears become classified as "nuisance" bears and often are killed in defense of live or property (DLP).

Respected by most, and feared by many, bears can pose a threat in certain situations. Statewide, there are an average of about six encounters a year in which a human is injured. About half of those involve hunters in search of other quarry. About every two or three years, one of the attacks results in a human fatality.

Whenever bears and people interact with each other there are potential benefits and dangers. Displacing bears from feeding sites has serious consequences for them. Human behavior around bears not only impacts their own personal safety and viewing experience,

it also impacts the health and safety of the bears and the people who come to the area later. When bears and people meet, it is important that bears never get food from them and that people are trained how to react to bear encounters. Comprehensive education is recognized as a vital component in all aspects of any bear viewing program.

Public interest in bears has increased dramatically in Alaska during the past decade. Some of this interest is incidental to other pursuits such as sport fishing, hiking, flight seeing, eco-tours, or marine water cruises but some of it is specifically targeted at bear viewing. Bear viewing is a rapidly growing industry in selected areas of the state. The interest exceeds the opportunities provided now by such established and controlled sites as McNeil River, Pack Creek, Anan Creek, Wolverine Creek and Brooks Camp. As a result, private entrepreneur businesses are providing viewing opportunities in some high-density bear areas. Many of these sites and programs involve highly habituated bears that most frequently result in mutually exclusive conflicts with other uses of bears. Habituation of bears should be discouraged and maximum public benefits pursued by providing management programs designed to provide for public viewing opportunities in areas where other uses are already excluded or to carefully integrate uses on a time and area basis.

Alaska is world-renowned as a brown/grizzly bear hunting area. Alaska is the only place in the United States where they are hunted in large numbers, and the vast majority of record book bears come from the state. An average of about 1,500 brown/grizzly bears are harvested each year. The trend has been increasing. Many of the hunters are nonresidents and their economic impact is significant to Alaska. Hunters have traditionally been the strongest advocates for bears and their habitat, providing consistent financial and political support for research and management programs.

Because bears can be both prey and predator, their relationship with people is complex. In areas where a population of large ungulates has been reduced to low levels, bears may have a significant influence on the decline of species such as moose, caribou and deer. This is especially true when bears are found in combination with thriving wolf populations. Alaskan studies of bear interactions with moose, for instance, indicate that bears may contribute significantly to calf mortality. Coupled with wolf predation, the combined mortality rates can far exceed human induced mortality and contribute to major moose population declines, depressed populations and delayed recoveries. The role of bears in these situations greatly exacerbates the debate over predator control and complicates evaluation of potential and initiated management actions.

### **Guiding Principles**

1. Manage bear populations to allow a wide range of human uses, while providing for long-term bear population sustainability.
2. Establish minimum population goals that ensure the long-term viability of bears recognizing the reproductive capacity of each bear species.
3. Manage bears at the scale of subunits or units to achieve appropriate overall predator-prey relationships rather than pursue single species management.
4. Protect the genetic diversity of bears.
5. Continue and, if appropriate, accelerate research for the management of bears.

6. Consider short-term and long-term effects of habitat loss and fragmentation on bear populations.
7. Provide for consumptive and non-consumptive uses of bears in management plans and encourage economic benefit to the state and its citizens while maintaining sustainable bear populations.
8. Do not allow identified prey populations to decline to a point where predation keeps them at low levels.
9. Avoid, where possible, activities that encourage the habituation of bears and manage bear viewing opportunities that are not mutually exclusive of other uses.
10. Encourage wildlife viewing of bears and other species in their natural settings as part of a broader outdoor experience.
11. Implement this policy in such a manner that the Department and the Board can respond promptly to unforeseen situations.
12. Pursue informational and educational efforts to help the public understand more about bears and their management.
13. Work with enforcement agencies to identify priorities and to assist with and encourage adequate enforcement activities.
14. Review and recommend revision to this policy as needed.

## **Conservation and Management**

### *A. Management Strategies*

The Department will manage both bear species differently according to their population and human use characteristics in different parts of the state. In some areas, such as the Kodiak Archipelago, portions of Southeast Alaska and the Alaska Peninsula, bears are managed for trophy-hunting and viewing opportunities. In many other areas of the state, bear populations are largely unaffected by human harvest. Bears are an important big game species sought by resident and nonresident hunters and are managed for a variety of objectives.

Generally, bear hunting will be conducted on a sustained yield basis, except in areas where a bear predation control program is authorized. Harvests will not be allowed to threaten the long-term population survival of bears. In most areas of the state, sustained brown/grizzly bear harvests will generally be 4-8 percent of the estimated total population and up to 12 percent for black bears. Some bear populations may be able to sustain a harvest above these guidelines and these will be evaluated for more liberal harvest programs. Lacking precise population data, managers will continue applying indirect parameter to assess the status of bear populations.

All brown/grizzly bears harvested under the general hunting regulations must be inspected and sealed by a Department representative. Black bears must be sealed in some units but not all. Non-resident hunters of brown/grizzly bears must be accompanied in the field by a registered big game guide or a resident relative. For both species, sows accompanied by cubs, and the cubs, are protected, but cubs are defined as bears in their first year of life for

black bears and for the first two years of life for brown/grizzly bears. The Department will continue to maintain these strategies and regulations for most of the state, unless it is necessary to consider methods to increase bear harvests as part of a bear predator control program.

The effect of management actions on the economic contribution of bears to Alaska's users of bears should be considered. Maintaining a regulatory structure that assures reasonable standards of data integrity with responsible management strategies and population sustainability will help avoid threats of international sanctions. Large areas of the state have subsistence brown/grizzly bear hunts with liberal seasons and bag limits, mandatory meat salvage, and relaxed sealing requirements. The Department will continue to accommodate subsistence needs and will consider the impacts on subsistence activities.

Bear viewing and bear/human interactions are also important aspects of bear management in Alaska. Increasing interest in watching bears at concentrated feeding areas such as salmon streams and sedge flats is challenging managers to find appropriate levels and types of human and bear interactions without jeopardizing human safety or bears or other legitimate uses of bears. Bear hunting and viewing are compatible in many situations. However, there are areas where the two uses are potentially mutually exclusive. Land and wildlife managers are faced with tough decisions that could either minimize those conflicts or promote single use regulations at the expense of other uses. For instance, federal withdrawals totaling over 40 million acres are managed to protect large segments of Alaska's big game resources habitat and major portions of these areas provide park-like observation opportunities. Logically these areas could first be utilized for habituated wildlife viewing opportunities before traditional uses of bears and other wildlife are unnecessarily impacted in other areas. Bear management programs on state and private lands should be designed to achieve maximum benefits to Alaskans. Specifically, state management programs should avoid habituating bears wherever possible. Conflicts between user groups can frequently be reduced if viewing programs adopt "best viewing practices."

In areas where bear management plans have been developed, the Department will adhere to the recommendations included in those plans as long as they are consistent with the newest policies and regulations adopted by the Board.

Nothing in this policy affects the authority under state or federal laws for an individual to protect human life or property from bears (5 AAC 92.410). All reasonable steps must be taken to protect life and property by non-lethal means before a bear is killed.

### *B. Research Strategies*

Developing and implementing precise, cost-effective methods for determining bear populations will continue to be a research priority for the Department. Work to date suggests that no single population estimation method will work across the state given the vast areas, varied topography, differing vegetation communities and great differences in bear density. Some methods work well in one area but not in another. Aerial stream

surveys, line-transect surveys, capture-mark-recapture, intensive aerial surveys, and DNA analysis are some of the tools that can be utilized to provide population estimates.

Predator-prey relationships between bears and large ungulates have not been thoroughly examined in most of the state. Bears use a wide variety of foods seasonally including vegetation, fish, mammals, birds, and carrion and they are exceptionally adaptable in their ability to capitalize on available food resources. Consequently, the impact of ungulate prey abundance on bears is difficult to ascertain. Similarly, the impact of bears on prey populations is multifaceted and can be further compounded by the presence of other predators such as wolves.

Where appropriate, the Department will cooperate in research efforts with other agencies. Research findings will be reported in a timely fashion and presented in a form that is easily understood by the public.

### *C. Information and Education Strategies*

Public education is critical in any bear management program. Perhaps as much as any species in Alaska, bears elicit a wide variety of emotions, have myriad uses, and directly impact peoples' lives both in the field and near settlements. Clear, objective information is necessary for citizens and managers alike to make wise decisions when dealing with bears. As the agency primarily responsible for bear management, the Department must take a lead role in producing and disseminating this information.

Bear information will be developed for a wide range of audiences and be delivered in a variety of media. A principal focus of bear education will be to promote a better understanding of life history, behavior, and habitat associations. Specific messages will include discussions of bear/human interactions, bear hunting, bear viewing, and bear predation on moose, caribou, and sheep. To assure consistent and accurate presentation of bear information, the Department will continue to work with the Alaska Interagency Bear Safety Education Committee.

The Department will strive to include the public in all bear management decisions. The primary method of public involvement will be through existing local Fish and Game Advisory Committee and Board processes. Citizen-driven bear management plans will be sponsored and supported by the Department. To date, such plans have been developed for Game Management Unit 4, the Kenai Peninsula, and the Kodiak Archipelago. The Department is committed to implementing as many of the recommendations from bear management plans as possible.

Because of the economic importance of guiding and other commercial enterprises associated with the varied uses of bear, it is recommended that extra efforts are made to notify all concerned parties that area specific predator control activities are being considered.

## **BEAR PREDATION MANAGEMENT**

### **Purpose of Policy**

1. To guide the Board of Game (Board) and the Alaska Department of Fish and Game (Department) in implementing any bear predation management actions pursuant to AS 16.05.255(e) and 5 AAC 92.106, when the Board determines ungulate populations important for human consumption are being kept at low levels because of bear predation.

### **Goals**

1. To provide guidelines for developing, implementing, and evaluating bear management actions designed to reduce bear specific predation in precise areas for specific time periods required by predator control implementation plans.

### **Background**

In areas where the Board has authorized for intensive management (IM) activities, set IM population and harvest objectives and those objectives are not being met and bear predation has been found to be a major factor in the decline in prey populations or in keeping prey populations from recovering, the Board can authorize bears to be included in predator control planning. Whenever bears are considered and authorized for predator control activities, the implementation control plan must specify whether one or both bear species are to be considered in the control plan.

Based on careful consideration of scientific information and public comment, the Department and the Board believe that in some limited circumstances it may be beneficial and appropriate to control predation by bears to achieve population and human use objectives.

### **Guiding Principles**

1. Where bear reductions are authorized, the first step should be to reduce bear numbers through general hunting provisions such as liberalized seasons, bag limits, hunting methods and means and tag wavers.
2. Where predation regulates prey populations, identify to the extent possible, the relative contribution by each primary predator species so that management response can be focused and effective.
3. Implement measures to reduce black and/or brown bear numbers to allow prey species to increase population management objectives in areas managed for high consumptive use where predation by bears itself or in combination with other predators is keeping prey at low levels.
4. Manage bears at the appropriate scale that may vary from an entire Game Management Unit to a specifically defined area (e.g. key calving sites).
5. If liberalization of general hunting provisions does not adequately reduce the target bear population, an additional control program may be authorized. This program should be conducted for the minimum time necessary to achieve the stated

management objectives and may utilize methods and means not approved for general hunting.

6. Consider the management goals and objectives of state, federal, and private land owners and work cooperatively with them to design, implement, and evaluate bear control activities.
7. Encourage federal and private land owners, where possible, to work cooperatively in any management and/or species control programs.
8. If reduction in bear numbers fail to result in reasonable increases in availability of prey populations for human use, management practices intended to reduce bear populations should be reconsidered.

### **Management Strategies**

In areas where bears have been identified as an important component in reducing and/or holding prey populations well below objectives, higher harvest levels than those listed under general management strategies will be allowed. In these areas, specific harvest reporting conditions will be imposed which may include additional requirements for permits, sealing, and/or reporting. In addition, the Department will closely monitor the effects of higher harvest on the bear and prey populations.

### **Research Strategies**

In areas where bear predation control programs are considered, the Department may conduct research to quantify the contributions of each bear species and of wolves to the causes of decline in the ungulate population important for human use. Alternatively, the Department may use standard survey and inventory data and interpretation of other research results to guide the decision-making process. Monitoring activities designed to determine the effects of high levels of bear harvest on recovery of depressed ungulate populations would help focus management efforts in the most cost-effective manner.

### **Information and Education Strategies**

In any situation where the Board or Department believes bear predation control may become necessary, the public will be informed as soon as possible. Detailed information on the specific location, the predator, prey and habitat concerns, and the proposed management action and its anticipated costs and duration will be widely disseminated. Public meetings may be held in the affected area and in major Alaska communities, in addition to regularly scheduled Board and Advisory Committee meetings. Once implemented, the Department will provide the Board and the public with an annual report and evaluation of the management action.

### **Board Consideration**

The Board may consider bear control on a bear species when:

1. Bear predation has been determined to be an important factor in the decline of a prey population or is preventing recovery of a low density prey population.

2. Bear predation is an important factor preventing attainment of approved prey population of human-use objectives.
3. Efforts to control bear predation can be reasonably expected to achieve improvement in sustainable human use of ungulates.

If the Department or the Board determines that one or more of these conditions exist in a given IM area, at the Board's direction, an implementation plan will be prepared for public review.

It is the intent of the Board of Game that bear control programs authorized under this policy shall be directed at only specified target areas and is not intended for implementation under general hunting regulations.

Under methods and means the Board may selectively consider:

- Relocation
- Sterilization
- Use of communications equipment between hunters or trappers
- Sale of hides and skulls as incentive
- Use of bears for handicraft items for sale
- Trapping
- Bear baiting
- Changing the definition of a legal bear
- Same day airborne taking, except aerial shooting
- Diversionary feeding

Vote: 7/0  
May 14, 2006  
Anchorage, Alaska



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Mike Fleagle, Chair  
Alaska Board of Game