Findings of the Alaska Board of Game
2004-148-BOG

Authorizing Predator Control in the Western Cook Inlet Area in Unit 16B with Airborne or Same Day Airborne Shooting
March 10, 2004

Purpose

This action of the Board of Game is to authorize a predator control program that involves airborne or same-day airborne shooting of wolves in the Game Management Unit 16B (mainland) portion of Western Cook Inlet, in accordance with AS 16.05.783.

These findings are based on the best information available, and include data gathered from Departmental oral reports and presentations at Board of Game meetings.

Identified big game prey population and wolf predation control area

The Board of Game identified moose in GMU 16B as important for providing high levels of harvest for human consumptive use in accordance with AS 16.05.255 (e)-(g). The Board established Intensive Management Objectives for a harvest of 310 – 600 moose and for a population of 6,500 – 7,500 in accordance with 5 AAC 92.106 and 5 AAC 92.108. The Board established a Wolf Predation Control Implementation Plan for Unit 16B in accordance with 5 AAC 92.110 and 5 AAC 92.125.

Failure to meet moose harvest objective

It is clear the current level of moose harvest in Unit 16B is not meeting the Intensive Management Harvest Objective of 310 - 600 moose. This conclusion is based on harvest data from the mid-1980s and from 1998 through 2003.

From 1983 through 1988, an average of 1,315 hunters reported harvesting 485 moose annually, with 1984 showing a high harvest of 581. More recent years show a dramatic downturn as follows:

Year	General Season and Subsistence Hunters	Harvest
1998	1,037	290
1999	1,024	271
2000	1,050	242
2001	400*	122
2002	400*	69

*general hunting seasons were closed; 400 subsistence permits were issued each year.

Amount necessary for subsistence

There must be a minimum of 199 – 227 moose available for harvest in order to meet the amount necessary for subsistence. The Department estimates that there will be 214 moose available for harvest during the 2004 – 2005 hunting season.

Status of Moose Population

The estimated moose population for Unit 16B during fall 2001 was 3,423 – 4,321, compared to 3,387 moose after the fall 2003 surveys.

Since 1996, most of the Unit 16B composition surveys have shown less than 20 calves per 100 cows annually. The minimum fall calf to cow ratio should be 20 – 30 calves per 100 cows; thus, this is a very low ratio if the intent is to maintain the population or provide for population growth.

Bull:cow ratios in the area have generally been above the management objective of 20 bulls per 100 cows.

The minimum moose density objective is 1.0 moose per square mile for Unit 16B based on the intensive management objective of 6,500 – 7,500 moose. Presently, population estimates place the moose density at .52 moose per square mile.

Status of wolf population

Predation by wolves was not considered an important factor until the mid-1990s. During March 1993, an aerial survey was conducted to estimate wolf numbers in Unit 16. The minimum population was estimated to be 48 – 62 wolves, which was assumed to be an increase from the previous five to ten years. A second aerial survey in 1999 revealed a minimum of 119 wolves in 13 packs in Unit 16B alone. The moose to wolf ratio had declined from 160 – 250:1 in 1993 to nearly 40:1 by 1999.

The wolf population in mainland Unit 16B for fall 2002 was estimated to be 140 – 200 wolves, based on aerial surveys, incidental pilot observations, sealing records, and interviews with knowledgeable trappers; harvest by hunters and trappers has increased annually from 15 in 1997 – 1998 to a record 48 in 2001 – 2002. Available moose and wolf population estimates suggested the fall 2001 moose-to-wolf ratio could be as low as 17:1. At that ratio, the combination of wolves, a relatively high bear density, and frequent deep snow winters were expected to continue to depress moose numbers.

In 2003, the spring wolf population estimate for 16B was 88 – 137 wolves in 16 packs. The spring population in 2004 is likely to be higher, as prior year trends suggest. The population objective for wolves in Unit 16B is 22 – 45 wolves in 3 – 5 packs in the spring.

Even though wolf harvests have been at record levels, averaging 45 wolves over the past three years, high productivity has resulted in an increasing wolf population.

Status of black bear population

The black bear population in Unit 16B was previously estimated at 1,300 to 1,600 bears but recent line transect surveys provided an estimate of 2,100 black bears.

The intent of the Board of Game in 1999 and 2001 was to reduce the black bear numbers to aid in the moose population recovery. The human use objective is a three-year average harvest of more than 225 bears with more than 30 percent being females. During the last ten years, harvests ranged from 62 – 158 bears, and harvests from 2000 through 2002 averaged 118 bears. These numbers are well below the harvest objectives. Two of the last three years were below the 30 percent female objective.

Based on a population estimate of 2,100 black bears, the goal of the harvest objective for Unit 16B is to reduce the population by maintaining a three-year average harvest of more than 225 bears, of which more than 30 percent are females.

Status of brown bear population

The brown population estimate for Unit 16B is 530 – 1,050 bears. The goal of the brown bear harvest objective is to reduce the population by maintaining a minimum three-year average harvest of 28 females over two years old. The last three years have averaged 26 legal females. During the last ten years, the total brown bear harvest of males and females ranged from 34 – 80.

The goal of recent Board actions has been to reduce brown bear population in order to enhance moose population recovery.

Predation is an important cause for failure to achieve harvest and population objectives

In 2002 and 2003, the Department indicated that, in the absence of high predator mortality, the current habitat is adequate to allow for moose population recruitment and growth to exceed the minimum population objective level. While rejuvenating some areas of winter range could increase moose productivity, the primary cause of low moose populations appears to be predators.

Although weather has been a contributing factor in moose population fluctuation in Unit 16B, the drastic and continued decline in moose numbers appears to be attributed mainly to high predator mortality. Because the reported human harvest in this subunit is well below acceptable levels, the main mortality factor appears to be predation. Management studies completed in adjacent units suggest that this mortality factor can be attributed to high numbers of wolves, brown bears, and black bears.

Previous actions of the Board of Game

In 2003, the Board actions included:

- adopting the Wolf Predation Control Implementation Plan for Unit 16B
- liberalizing the wolf bag limit from 5 to 10
- providing more liberal methods and means, including using snowmachines, for harvesting wolves
- extending the brown bear season
- eliminating the brown bear tag fee
- adjusting the brown bear bag limit to one ever year and not counting it against the one bear every four year bag limit in other units
- adjusting the black bear baiting boundaries

Reducing predation provides reasonable expectation of achieving harvest and population objectives

Despite Board actions via standard hunting and trapping regulations to liberalize wolf and bear hunting in Unit 16B, those predator populations remain high. Meanwhile, the moose population remains below population objective levels, despite Board actions that have curtailed human harvest.

It is clear, based on information provided by the Department, that reducing predators will help the moose population to recover so that human harvest objectives for moose can be achieved.

While it is Board policy to manage wolf populations and predation to the extent possible through routine hunting and trapping, other methods not generally approved for hunting and trapping may be implemented. One such method is the use of aircraft.

Because predator populations in Unit 16B have not responded to the liberalizations noted in the paragraph above, and given recent experience in Game Management Units 13 and 19D East, it is clear to the Board that wolf numbers can be reduced by implementing a control program using aircraft. It is reasonable to expect that the moose population can be restored to desired population and harvest objectives by implementing an aerial program to reduce wolf predation. Removing wolves can reasonably be expected to increase the survival of calf moose as well as older moose, thus accelerating the ability to accomplish management objectives.

The Board establishes the following:

1. The removal of wolves will occur in Game Management Unit 16B, and will not exceed the limits set forth in 5 AAC 92.125 (6); wolves should not be reduced to less than 20 wolves.
2. Methods and means to take wolves will be designated by the Department in accordance with 5 AAC 92.039; these may include public aerial shooting or public land and shoot activities.
3. Permits shall be issued to members of the public qualified to operate within the constraints of the program, and able to accomplish the objectives of the program,

as designated by the Department. Multiple permits sufficient to accomplish the objectives in an efficient and effective manner should be issued.

4. The GMU 16B wolf control program shall continue through June 30, 2009, or until such time as moose population and harvest objectives are reached and have stabilized. The Board may also reauthorize the wolf control program.

The Board of Game hereby authorizes a Predator Control Program using aircraft for the Wolf Predation Control Implementation Plan for Unit 16B in accordance with 5 AAC 92.125(6).

Vote: __6/1__
Date: March 10, 2004
Meeting Location: Fairbanks, Alaska

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Mike Fleagle
Chair, Alaska Board of Game