

**Findings of the Board of Game
2003-145-BOG**

**Authorization of Airborne or Same Day Airborne Shooting
in Unit 19D East Predation Control Program
December 15, 2003**

Purpose

The purpose of this action of the Board of Game is to reconfirm and clarify previous actions of the Board authorizing a predator control program that involves airborne or same day airborne shooting in Unit 19D East in accordance with AS 16.05.783.

Identified big game prey population and wolf predation control area

The Board of Game identified moose in Game Management Unit 19D East as important for providing high levels of harvest for human consumptive use in accordance with AS 16.05.255(e)-(g). The initial Intensive Management Objectives for moose, set by the Board in 1999 in accordance with 5 AAC 92.106 and 5 AAC 92.108, were 300-400 and 6000-8000 for the harvest and population objectives, respectively. These objectives were reduced to 130-150 and 3000-3500 in 2001 at the recommendation of the Adaptive Wildlife Management Team as part of a compromise to reach consensus on a predator management program for this area. The Board established a Wolf Predation Control Implementation Plan for Unit 19D East in accordance with 5 AAC 92.110 and 5 AAC 92.125.

Failure to meet moose harvest objective

The current level of moose harvest in Unit 19D East is not meeting the Intensive Management Harvest Objective of 130-150. This conclusion is based on assessment of harvest data from the most recent hunting season, fall 2003 (regulatory year 2003-04), for registration permit hunt RM650. These data indicate a harvest of 75. Two hundred and fifty-six permits were issued; 189 individuals hunted; 53 did not hunt; and there are 14 delinquent reports as of December 12, 2003. Based on past experience with registration permit reports, it is likely that most of the delinquent reports were not used.

The Department is confident that most of the harvest was reported under the current registration permit system. McGrath, where most of the households in Unit 19D East are located, likely reported at least 95% of its actual harvest. The surrounding communities of Takotna, Nikolai, Medfra, and Telida may have a lower reporting of actual harvest, but it is doubtful the net effect on total harvest exceeded 5-10% of the reported value. Illegal take tends to be accidental and incidental, and was documented in the research on moose in the 528 square mile Experimental Micro-Management Area surrounding McGrath. However, this area contains the highest density of moose and human activity in Unit 19D East, and it is not characteristic of the remaining 7,985 square miles in the unit. Illegal harvest outside of the EMMA is subjectively estimated to be less than 5% of the actual harvest.

Even when applying the most liberal expansion factor (unreported harvest, illegal take) to the reported harvest, all available information indicates that the number of moose being taken is well below the harvest objective.

Status of moose population

Analysis of the November 2003 moose population estimation survey is in progress as of December 15, 2003 and the results are not yet available. A fall 2001 survey conducted in a 5,204 square mile portion of Unit 19D East yielded estimates that were extrapolated to the remaining 3,309 square miles of the unit to arrive at a total estimate of about 2,800 moose (range 2,200-3,300). The lower and upper values in the range have equal probabilities of being correct. The actual number of moose may or may not fall within the population objective of 3,000-3,500.

The 2001 estimated density of moose in the 5,204 square mile survey area was 0.43 moose per square mile. This is considered a relatively low population level, well below 1.0 moose per square mile which is the upper limit of the "Low Density Dynamic Equilibrium" phenomenon common throughout much of interior Alaska. As is characteristic of this phenomenon, it appears that predation, not lack of forage, is preventing the moose population in 19D East from increasing to a higher level.

Intensive field studies during the past 4 years indicate that a population of 3,000-3,500 moose in Unit 19D East is insufficient to meet the intensive management harvest objective of 130-150. Although a population of this size can, in theory, support this level of harvest, much of this moose population is not accessible to hunters largely confined to river corridors.

Predation an important cause for failure to achieve harvest objective

Intensive field studies initiated in 2000 and continuing to the present demonstrate that predation by wolves, black bears, and grizzly bears is an important cause for the failure to achieve the moose harvest objective of 130-150. The results of these studies were presented to the Board of Game at the March 2003 and November 2003 meetings in Anchorage, Alaska.

Reduction of predation provides reasonable expectation of achieving harvest objective

Analyses of biological data collected in Unit 19D East studies indicate there is a reasonable expectation of achieving the harvest objective of 130-150 if predation is reduced. Removal of bears in late May and early June 2003 substantially improved survival of calf moose through November as reflected in fall 2003 sex and age composition surveys indicating calf-to-cow ratios of 53:100 in the bear removal area compared to 25-30:100 in other areas of Unit 19D East. This means that about 79 more calf moose survived through November in the EMMA compared to the 2 years previous to bear removal. Removal of wolves can reasonably be expected to further increase the survival of calf moose, as well as older moose. Removal of both predators in concert can reasonably be expected to accelerate accomplishment of management objectives.

The Board establishes the following:

1) Removal of wolves will be confined to a portion of Unit 19D East designated by the Department, and total take of wolves in the designated area will not exceed the limits set forth in 5 AAC 92.125(1)(B)(i);

- 2) Methods and means to take wolves will be designated by the Department in accordance with 5 AAC 92.039;
- 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.

Vote: _____
December 15, 2003
Fairbanks, Alaska (teleconference)

Mike Fleagle, Chair
Alaska Board of Game