Findings of the Alaska Board of Game
2003-144-BOG

Authorizing Wolf Control in Portions of Unit 13
December 15, 2003

Background
Unit 13 long has been an important hunting area for resident subsistence users as well as for the bulk of the state’s population in Anchorage, the Matanuska-Susitna valley, and Fairbanks. It is recognized under the state’s intensive management law as an area where moose and caribou are to be managed for high levels of human consumptive use.

For the past decade, the Board of Game has heard persistent concern from local residents, hunters and wildlife managers about a continuous and steep decline in the moose population across most of Unit 13.

The Board has concurrently heard the equally persistent concern that predation is causing the moose decline. Researchers and public testimony identify the primary causes of poor calf survival and dwindling population:

- Year-round predation by wolves, and
- Late spring/early summer brown bear predation on calves.

Under the Wolf Conservation and Management Policy adopted by the Board in 1991, and revised in 1993, “in areas managed for high consumptive use where predation is keeping prey at low levels, ADF&G may implement wolf population regulation or reduction to allow prey species to increase to population management objectives.” Under this policy, the Board will consider wolf control when:

- Wolf predation is a factor in an unacceptable decline in prey population size or productivity, or
- Wolf predation is a factor preventing attainment of approved population or human use objectives.

Both situations clearly apply to Unit 13.

In an effort to initiate predation control activity, the Board established in 1999 a wolf predation control area covering much of Unit 13 under 5 AAC 92.125(5). While this wolf predation control area has been in place since 1999, the state has taken no action. The Board hereby incorporates 5 AAC 92.125(5) by reference, and reaffirms its ongoing validity, with updates noted herein, based on the most current information from the department.

Under AS 16.05.783, the Board of Game may authorize a predator control program involving airborne or same day airborne shooting as part of a game management program if the Board determines, based on information provided by the department, certain steps are met:
Objectives set by the Board for the big game prey population and human harvest have not been achieved,
\* Predation is an important cause for failure to achieve the set objectives, and
\* Reducing predation can reasonably be expected to help achieve those objectives.

**Board Objectives for the Big Game Prey Population Have Not Been Achieved**

For the purposes of implementing AS 16.05.255(e) – (g), the Board of Game identified the moose populations in Units 13A, 13B, and 13E as important for providing high levels of harvest for human consumptive use and has established the following population and harvest objectives (5AAC 92.108):

- **Unit 13A,** 3,500 – 4,200 moose with harvest objective of 210 – 420.
- **Unit 13B,** 5,300 – 6,300 moose with harvest objective of 310 – 620.
- **Unit 13E,** 5,000 – 6,000 moose with harvest objective of 300 – 600.

Additionally, the Board adopted a Wolf Predation Control Implementation Plan for Unit 13 (5 AAC 92.125(1)) with program objectives designed to stop the decline of the moose population within the wolf predation control area and maintain the following moose population composition and density objectives during fall surveys:

- **Unit 13A,** 1.0 cows per square mile and 25 calves per 100 cows.
- **Unit 13B,** 1.2 cows per square mile and 30 calves per 100 cows.
- **Unit 13E,** 0.9 cows per square mile and 30 calves per 100 cows.

The fall 2003 moose population, composition and density estimates are:

- **Unit 13A,** 2,200 moose with 1.0 cows per square mile and 19 calves per 100 cows.
- **Unit 13B,** 4,200 moose with 0.9 cows per square mile and 17 calves per 100 cows.
- **Unit 13E,** 4,100 moose with 0.6 cows per square mile and 15 calves per 100 cows.

The moose population in each unit is below intensive management population objectives and below the population composition and density objectives contained in the Wolf Predation Control Implementation Plan.

The human harvest for the past 5 years has averaged:

- **Unit 13A,** 169 moose.
- **Unit 13B,** 223 moose.
- **Unit 13E,** 154 moose.

Based on information provided by the department, the Board determines that the intensive management moose population and human harvest objectives as well as the
Wolf Predation Control Implementation Plan, moose population objectives are not being met in Units 13A, 13B, and 13E.

**Predation is an Important Cause for Failure to Achieve Objectives Set by the Board**

Through a series of incremental steps over time, the Board has moved to reduce wolf and bear numbers in Unit 13 in order to meet the objectives set by the Board under the state’s intensive management law. Longer seasons, more liberal bag limits and additional methods and means are now in place. These actions have not stemmed the moose decline, nor have they provided the hoped-for predator reduction.

Concurrent with its efforts to ease predation, the Board reduced human harvests of moose by shortening resident hunting seasons, eliminating nonresident hunters, and adopting more selective antler restrictions. Fewer people are hunting and human harvest is declining.

The moose population in Units 13A, 13B, and 13E has declined 52% between 1988 – 2002 and it continues to decline. Pregnancy rates for adult cow moose haven’t declined and productivity has remained constant. Calves are being born but are not surviving.

Moose and caribou make up the bulk of a wolf’s diet in Unit 13. It is estimated one wolf kills 12 moose or 36 caribou, or some combination thereof, each year to support itself. Wolves take moose of all ages and both sexes, mostly during early winter through late spring.

The Board has already established wolf hunting and trapping seasons that are as long as reasonably practical. Any further liberalization would have little impact on overall wolf numbers. Few additional wolves would be taken due to poor access and poor pelt quality.

Wolf harvests are at record levels, averaging 211 over the past 3 years. Nevertheless, due to high productivity, the spring 2003 wolf population estimate was 253. Even with another high harvest, the wolf population will probably remain well above the Board-established spring objective of 135-165.

Several studies have shown that brown bears take more than half of the moose calves born each spring. The predation rate remains high until calves are about six weeks old. After that, brown bears can and do kill moose of all ages and both sexes, but the rate at which they do so is greatly diminished.

In actions similar to liberalizing wolf seasons, the Board has gone as far as possible to reduce the number of brown bears given current hunting regulations, including establishing a year-round season for most of Unit 13. A series of record brown bear harvests averaging 141 bears per season over the past 6 years resulted. Although recent high harvest rates exceed estimates of sustainable levels, the Board has no evidence the bear population is being – or even will be – reduced. Based on information provided by
the department, the Board determines that predation is an important cause for failure to achieve the set objectives.

**Reducing Predation Can Reasonably Be Expected to Help Achieve Objectives Set by the Board**

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

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

While it is Board policy to manage wolf populations and predation through routine hunting and trapping, predation control programs using methods not generally approved for hunting and trapping may be implemented. One such method is the use of aircraft. Given the experience over the past decade, it is clear to the Board that the moose population cannot be restored, and wolf numbers cannot be reduced enough, to meet management objectives without the use of aircraft to control wolves.

It should be emphasized that under the Board’s wolf management policy, such control programs “are not expected to be permanent, on-going activities” and control of wolves must be done in such a way as to “assure continued viability of wolves in the ecosystem.” The use of aircraft will not jeopardize the long-term viability of wolves in Unit 13 or the state as a whole, where the wolf population is estimated at 7,700 to 11,200.

Once the objectives of the wolf predation control program are achieved, the program should cease. However, any future increase in wolf population with a commensurate decrease in moose population should trigger another predator control activity.

The Board of Game hereby authorizes a Predator Control Program using aircraft for the Wolf Predation Control Implementation Plan for Unit 13 in accordance with 5 AAC 92.125(5).

Vote: __________________
December 15, 2003
Anchorage, Alaska

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Mike Fleagle, Chair
Alaska Board of Game